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Essay on International Trade

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Introduction

Since World War II, the value of trade flows has increasingly expanded. This is a consequence of the increased volume of manufactured goods traded and the increasing number of countries, especially developing and underdeveloped countries, that have opened their markets to international trade. As a result, in 2020, the global production in the manufacturing sector reached USD 43.0 trillion, out of which USD 9.9 trillion was traded internationally and the remaining USD 33.1 trillion was traded domestically. The increasing countries' involvement in the World Trade Network makes the latter an interesting case study. Moreover, understanding the dynamics underlying the World Trade Network is of utmost importance nowadays, given the onset of wars and the willingness of countries to revert to protectionist policies.

Over the past decades, international economists have extensively studied the evolution of trade flows and the impact trade-related policies have had on shaping the World Trade Network. Most research projects either use network analysis tools to investigate the structural and topological features of the World Trade Network or apply the structural gravity equation to assess the impact of given trade policies, e.g., RTAs. Actually, the gravity model is the workhorse model of trade (Head and Mayer, 2014; Yotov, 2022, 2024; Yotov et al., 2016). Since its first application by Tinbergen (1962), it has been extensively adjusted and improved so that, today, it is theoretically grounded and allows the analysis of the determinants of trade flows and trade policies' impacts in Computable General Equilibrium (CGE) frameworks (Head and Mayer, 2014; Yotov, 2022, 2024; Yotov et al., 2016). Among the others, a limitation of the model is that it treats trade interdependencies, which are at the core of the World Trade Network, as a nuisance (Hoang et al., 2023*a*; Koch and LeSage, 2015; Ward et al., 2013).

Against such background, this thesis aims to extend and enrich the literature on international trade, in particular, providing new evidence on the evolution of the World Trade Network, the linkages between network indices and multilateral resistance terms, and the costs of EU disintegration. By exploiting the recent data release on international and domestic trade data by the CEPII (2024 Version of the TradeProd Database), in-depth analyses of bilateral trade flows between 1993 and 2020 across 154 countries are performed. As far as possible, the analyses are disaggregated at the sectoral level, accounting for the potential sectoral heterogeneity due to the features of each sector, such as its underlying global value chains (GVCs).

The first chapter, *The Evolution of the World Trade Network*, provides insights into the evolution of domestic trade vis-à-vis international trade and reveals how countries have started relying more and more on international partners, also following the creation of GVCs. Focusing on international trade, the World Trade Network is analysed employing network analysis tools to evaluate the degree of connectivity and the role of each country in the World Trade Network using different centrality measures such as in-degree, out-degree, in-strength, out-strength, in-closeness, out-closeness, betweenness, and eigenvector centrality. Being aware that each sector has different global value chains that may affect its trading structure, the analysis is disaggregated at the sectoral level to investigate the extent to which different patterns characterise the various sectors. The findings suggest that the network has become increasingly interconnected over time. Each country has started importing from and exporting to an increasing number of countries, making the network almost fully connected. Whereas in the early 1990s, countries with many trade relationships usually traded with poorly connected countries, and vice versa, over time, countries have generally been more and more keen to trade with countries that were similar in terms of relevance within the network. The analysis at the sectoral level reveals that each sectoral trade network has the same features and evolves as the overall network, except for a few exceptions.

The second chapter, *The Role of the Trade Network in Shaping Multilateral Resistance Terms*, studies to what extent the structure of the World Trade Network and countries' interdependencies have an impact on bilateral trade flows. The analyses carried out constitute an attempt to build a

bridge between the network analysis tools and the multilateral resistance terms estimated by applying the structural gravity model. The evidence shows that these variables are highly correlated with one another, and the sign and magnitude of the correlation depend on existing trade policies and trade barriers. Different sectors exhibit distinct patterns in the correlation between multilateral resistance and centrality metrics. For instance, sectors like Food, Metals, and Wood-Paper have seen increasing correlations in recent years, possibly due to stringent regulatory standards. In contrast, sectors integral to global value chains, such as Vehicles and Machines, have benefited from trade liberalisation, showing decreasing correlations.

The third chapter, *The Cost of the European Disintegration: A Counterfactual Analysis*, aims to quantify the cost and benefits of undoing Europe, digging into the effects at the country level within and beyond Europe and comparing winners and losers at the global level. Adopting a counterfactual approach, four scenarios of EU disintegrations are analysed, namely: *(i)* the removal of the Eurozone, *(ii)* the removal of the Schengen Area, *(iii)* the removal of the European Economic Area, *(iv)* the removal of the European Customs Union together with the removal of the Eurozone and the Schengen Area. Evidence suggests that undoing Europe while increasing exports worldwide would harm EU members' welfare. Conversely, non-EU countries would benefit in terms of increased GDP. Among non-EU countries, those that would experience the largest gains are Libya, Liberia, and Tunisia. The main novelty as compared to existing studies (e.g., Felbermayr et al. (2022); Felbermayr, Gröschl and Heiland (2018); Jackson and Shepotylo (2020, 2021); Mayer et al. (2019)) is the focus not only on the benefits and costs for EU Member States but also on benefits and costs for third countries, e.g., developing countries. It provides new insights into the process of EU integration in general.

Overall, this study provides an extensive framework of analysis on international trade flows and a snapshot of the complex underlying network. Building on the existing literature and offering new evidence, this work is intended as an attempt to contribute to the ongoing debate on trade patterns.

Chapter 1

The Evolution of the World Trade Network

1.1 Introduction

Over the past few decades, several trade research projects have studied trade flows by applying the tools of network analysis (De Benedictis et al., 2005, 2014). This was possible thanks to the increasing availability of trade data at the bilateral level, often disaggregated by sector or product. A key aspect that makes the network analysis suitable for studying trade flows is the underlying dyadic element. Any pair of countries that are linked via a trade relationship, in fact, form a dyad. The dyadic element of trade is also of utmost importance for other methodologies that aim at analysing trade flows, such as the gravity model.

Actually, the gravity model is usually considered the workhorse model of trade (Head and Mayer, 2014; Yotov, 2022, 2024; Yotov et al., 2016). The gravity model was first developed by Tinbergen (1962) building on Newton's gravity equation. This model is very useful and powerful as it enables the analysis of the determinants of bilateral trade as well as trade policies' impacts in Computable General Equilibrium (CGE) frameworks (Head and Mayer, 2014; Yotov, 2022, 2024; Yotov et al., 2016). However, this model does not fully capture trade interdependencies (Hoang et al., 2023*a*; Koch and LeSage, 2015; Ward et al., 2013), which are instead treated as a nuisance. Within the gravity model, interdependencies between countries are modelled via the so-called multilateral resistance terms (Anderson, 1979; Anderson and van Wincoop, 2003; Head and Mayer, 2014; Yotov et al.,

2016), but are not the centrepiece of the model. This implies that the gravity model does not fully account for the complexity that characterises the global economy.

The gravity model indeed considers the trade relationships between each pair of countries in isolation, without explicitly considering the spillover effects (or indirect effects) that third countries might have (Aller et al., 2015). An illustrative example of potential indirect effects that might occur in the World Trade Network is provided by changes in trade following the Ukraine war in 2014. At the time, the European Union imposed economic sanctions on Russia, and the latter banned importing agricultural products from the European Union, the United States, and Canada. These reactions had significant implications for the global agricultural trade network. As a direct effect, the trade relationships between Russia and the banned countries ended, resulting in Russia decreasing its centrality in the World Trade Network, but there were also indirect effects. Countries like Israel, Argentina, and the former Soviet Union started exporting more and more agricultural products to Russia. In contrast, countries such as Kazakhstan decreased their imports from Russia and increased their domestic production. This underlines the importance of the intricate web of interdependence among countries in the world trade system.

To understand the world trade structure and detect structural changes in international trade, it is crucial to observe, for each country, not only its direct bilateral trade relationships but also how it is embedded in the overall World Trade Network (De Benedictis et al., 2014; Hoang et al., 2023*a*), i.e. the interconnectedness. Indeed, the increased international trade is shaping the global economy, contributing to developing the so-called "global village" (Fan et al., 2014). Among the others, this is one reason why international trade flows have increasingly been studied by means of network analysis. This tool allows the analysis of international trade, taking into due account that it could be represented as a complex network and could behave as such. Indeed, within the network theoretical framework, the focus is on the trade relationships, i.e., the dyad ij, and their structural dimension, rather than on a single country, i.e., the monads i or j (De Benedictis et al., 2014). Such a theoretical approach moves the focus of the analysis from the monad i, to the dyad ij, and so captures the existing interdependencies among countries, i.e., the effect of others. While

earliest contributions focused on a binary and undirected version of the World Trade Network, an increasing number of studies have progressively modelled it as a weighted and directed network.

This chapter analyses the interconnectedness of countries in the World Trade Network. First, a descriptive analysis of domestic production and domestic and international trade flows is performed using data on bilateral trade from 1966 to 2020. This provides insights into the evolution of domestic trade vis-à-vis international trade and reveals how countries have started relying more and more on international partners following the creation of GVCs. Second, a network analysis of existing trade relationships between all countries is performed over the period spanning from 1993 to 2020. This analysis entails evaluating the degree of connectivity and role of each country in the World Trade Network using different centrality measures such as in-degree, out-degree, in-strength, out-strength, in-closeness, out-closeness, betweenness, and eigenvector centrality. The larger the centrality index a country is associated with, the more crucial position it plays in the World Trade Network. Then, the analysis is disaggregated at the sectoral level to investigate how different patterns characterise the various sectors.

Unlike most studies, we use trade data at the industry level and compare the network features over time and across sectors. The rationale behind this is that focusing on disaggregated data is of utmost importance because it cannot be neglected that countries trade several products in different sectors. Most often, they use the imported goods as inputs to their production process or as final consumption goods (Barigozzi et al., 2011). Moreover, it potentially allows to link network analysis with the literature on comparative advantage. As an illustrative example, the analysis of the evolution of the network by sector enables distinguishing countries that play a key role in all sectors from those that, while not relevant in the overall network, are critical only in specific sectors. Based on the findings, it could be possible to predict which economies and which industries would be mostly exposed to a negative shock since shocks hitting more central countries are more likely to be transferred to many other countries (Fagiolo et al., 2010). Therefore, the present chapter contributes to the literature on international trade as a relational network. As compared to the existing studies, the analyses presented in the present chapter add in terms of time

coverage and country coverage and provide a horizontal comparison across multiple sectors.

The structure of the present chapter is the following: Section 1.2 provides basic concepts of network analysis and defines the centrality measures used; Section 1.3 briefly summarises the existing literature on network analysis applied to international trade; Section 1.4 describes the data used; Section 1.5 provides an overview of trends in the manufacturing industry; Section 1.6 discusses the evolution of the network over time and across industries; Section 1.7 concludes.

1.2 Methodology

Network analysis tools are used to analyse the World Trade Network. The following describes basic network analysis concepts and centrality measures used in the present chapter.

1.2.1 Network analysis: basic concepts

Network analysis studies the relationships among and between a set of entities (Wasserman and Faust, 1994). Networks are usually referred to as graphs composed of two fundamental units: vertices (or nodes) and links. A link between two vertices (or nodes) is usually also referred to as an "edge" or "arc" based on whether the link is directed or undirected, respectively. Depending on the field of application, vertices might be several entities, from persons to organisations, products to patents, industries to countries, and so on. Accordingly, links, i.e., the lines connecting each pair of vertices, may represent a wide range of relationships between entities, from friendships to agreements, from bundles to citations, collaborations to trade, etc. As an illustrative example, in the case of a trade relationship between two countries, the two countries are the vertices, and they would be connected by a line, signalling that they are linked because they trade together. Formally, a graph, G, is defined as $G = (V(G), E(G))$, where $V(G)$ is a (non-empty) set of vertices and $E(G)$ is a set of edges. Depending if the edges have weights, networks are classified as binary networks and weighted networks.

Let n be the number of nodes. A binary network is represented by its

adjacency matrix $A_{n\times n} = [a_{ij}]$, where $a_{ij} = 1$ if there exists an edge connecting node i with node j, and $a_{ij} = 0$ otherwise. Adjacency matrices are thus binary and non-negative matrices. In the absence of self-loops, the main diagonal of the adjacency matrix is null, i.e., $a_{ii} = 0$, $\forall\ i = 1, ..., n$. Instead, in the case of weighted networks, the weighted matrix is defined as $W_{n\times n} = [w_{ij}]$, where $w \in \mathbb{R}_0^+$ and $w_{ij} > 0$ if and only if an edge links the two nodes. In weighted networks, it can be argued that the weight associated with each edge, w_{ij}, represents the strength of the connection of the pair of vertices the edge is joining.

Moreover, depending on the type of the relationships under analysis, edges, and thus networks, may be undirected or directed. A binary network is defined as undirected if and only if its underlying adjacency matrix is symmetric. Thus, in the case of undirected binary networks, each edge connects concomitantly two vertices, i.e., $a_{ij} = a_{ji}$, $\forall i = 1, ..., n-1$ and $\forall j = 1, ..., n-1$. If the network is weighted and undirected, it would imply that $w_{ij} = w_{ji}$, $\forall i = 1, ..., n-1$ and $\forall j = 1, ..., n-1$. An illustrative example of a binary undirected graph is the network representing Regional Trade Agreements (RTAs), where if country i is connected with country j by an RTA, the vice-versa must hold because the signed RTA is mutual, or reciprocal. An example of a weighted undirected graph is the network representing the total trade flows between countries, summing both imports and exports, where the total value of goods that country i is simultaneously importing from and exporting to country j, w_{ij} corresponds to the total value of goods that country j is simultaneously exporting to and importing from country j, w_{ji}.

Conversely, in the case of directed networks, the relationships between entities are not necessarily mutual or reciprocal, meaning that $a_{ij} = 1$ does not necessarily imply that $a_{ji} = 1$. As a result, in directed graphs, all edges have an orientation assigned (also called arcs), which is graphically depicted by an arrow that indicates the direction of the linkage. An illustrative example of a directed graph is the network of exports, where exports from country i to country j do not necessarily lead to exports from country j to country i. Directed networks can be further classified into cyclic networks, i.e., graphs containing closed loops of edges or "ring" structures or acyclic networks, e.g., trees.

In the World Trade Network, the nodes are the countries, and the edges are bilateral trade flows (import or export) from one country to another. Therefore, if n is the number of countries in the network (i.e., nodes), the structure of the overall World Trade Network in a given year is defined by a "$n \times n$" adjacency matrix $A = [a_{ij}]$, with $a_{ij} = 1$ if a trade relationship connects countries i and j, and $a_{ij} = 0$ otherwise. On top of this, the World Trade Network can also be defined by a weighted matrix $W = [w_{ij}]$, with $w_{ij} > 0$ if and only if country i and country j trade together. In this setting, W includes the value of export trade flow from country i to country j. Missing edges correspond to zero weights in the weighted matrix, meaning that country i is not exporting any good to country j. The World Trade Network is directed since the fact that country i exports to country j does not necessarily imply that country i would also import from country j. Despite the possibility of domestic trade, it is excluded from the analysis so that the resulting World Trade Network does not contain self-edges (or self-loops).

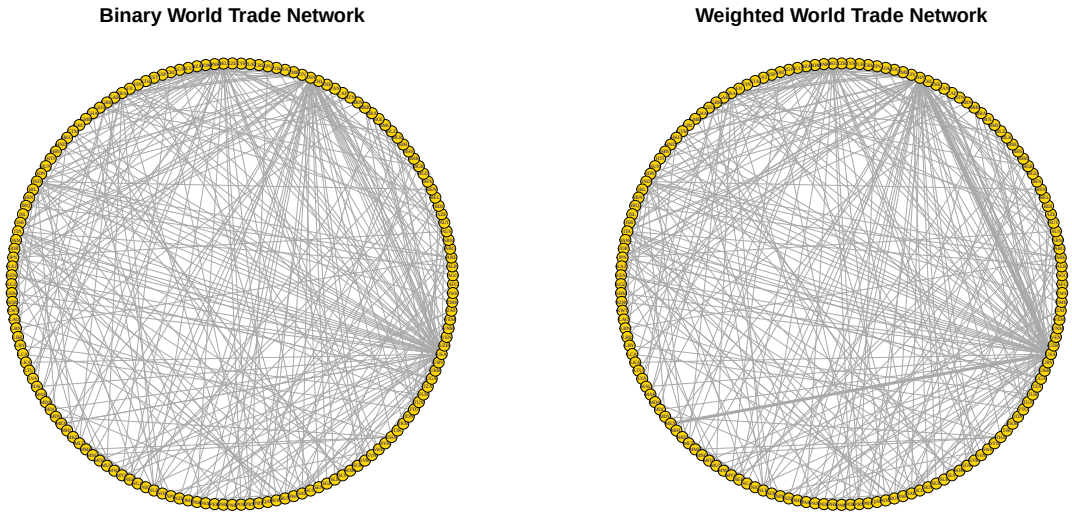
1.2.2 Network visualisation: layout

The most immediate way to analyse a network is through graph visualisation. Graph visualisation provides a graphical representation of the network and so allows to have insights into the underlying structure. It is worth mentioning that to visualise a graph effectively, researchers have first to make several decisions that imply drawing conventions, aesthetics, and constraints (Kolaczyk and Csárdi, 2014). The most crucial choice concerns the graph layout, i.e., the positioning of vertices and edges with the graph area. To date, there are several graph layouts and depending on the goal of the graph visualisation, one might be preferred to the other, but in principle, more than one might fit the purpose.

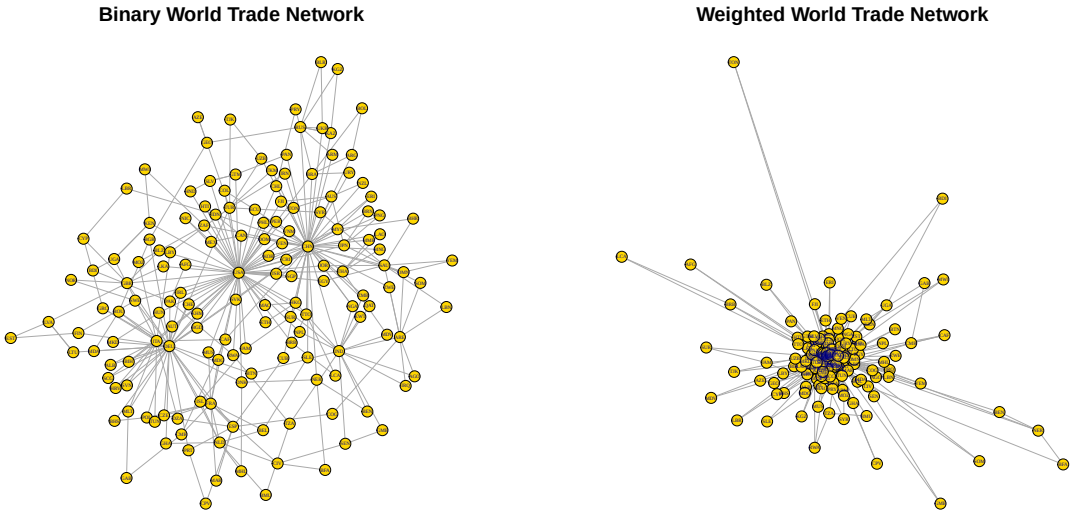
The most basic layout is a *circle layout*, where vertices are randomly positioned along the circumference of a circle and edges are drawn across the circle. The extent to which this graph layout may result appropriately depends on the focus of the analysis as well as on the number of vertices and edges in the graph under analysis. Other commonly used graph layouts are the *Fruchterman and Reingold layout* and the *Kamada and Kawai layout*. The former places vertices on the plane based on a force-directed layout

algorithm that considers nodes as steel rings and edges as springs between them and iteratively repositions vertices until the energy of the system is minimised, i.e., the vector of net forces across vertices converges. This method uses an attractive force between vertices directly connected with an edge, which is proportional to the edge's weight, and a repulsive force between all vertex pairs, whether connected or not. Therefore, graphically, vertices linked by edges with large weights will be closer in the graph. The main limitation of this method is that the algorithm may not reach an equilibrium state. The *Kamada and Kawai layout* also places vertices on the plane based on a force-directed layout algorithm. Still, differently from the *Fruchterman and Reingold layout*, it inserts a spring between all pairs of vertices whose length is the same as the graph distance between vertices. It implies that vertices linked by edges with large weights will be far in the graph.

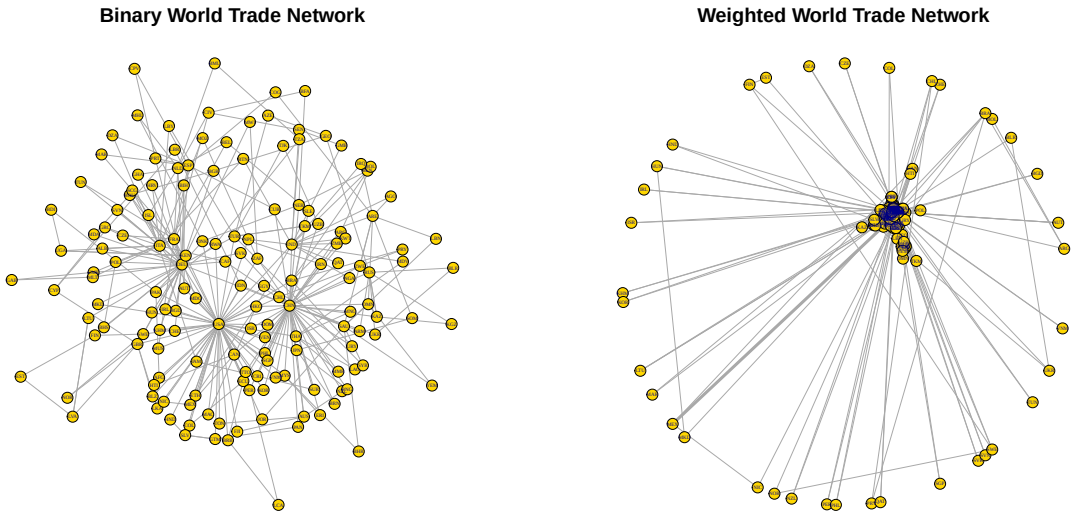
Figure **??** provides some illustrative examples of graph visualisation, using data on bilateral trade flows in 2020. Each node in the graph is a country, and the existence of the edge implies that country i is exporting to country j. For graphical purposes, only the two main destination countries are displayed, i.e., each vertex has only two outgoing edges. In the case of a weighted network, the width of edges is proportional to the value of the trade flows. The comparison of the various sub-figures included in Figure **??** demonstrates that graph visualisation enables grasping insights into the relationship between countries and the structure of the network itself. Moreover, it also makes evident that each layout may serve a different purpose and be more or less suitable on a case-by-case basis. Generally speaking, as demonstrated by Brandes et al. (2006), to produce effective graph visualisation, it is of utmost importance to have clearly identified the relevant information to be displayed without introducing artefacts.



(a) Circle layout



(b) Fruchterman and Reingold layout



(c) Kamada and Kawai layout

Figure 1.1: Network graph layouts: examples

Note: The networks above show the export flows in 2020. For each country, only the top two trade partners are displayed. The width of the edges in the weighted network is proportional to the value of trade flows.

1.2.3 Centrality indices

Besides the graphical representation of the network, network analysis envisages the measurement of centrality indices. Centrality measures may be computed at the node level to analyse countries' position in the overall graph and identify the key players as well as at the whole network level to assess the overall structure of the World Trade Network, grasping insights about trade patterns. Actually, centrality measures provide a quantification of the country heterogeneity in the network and can be computed using several indices that capture different aspects, e.g., interdependence (De Benedictis et al., 2014). The most widely used are degree, closeness, eigenvector, and betweenness centrality (Bloch et al., 2023). In what follows, further details on the centrality measures used are provided.

Degree centrality

The degree centrality measures the connectivity of a node in the network by counting (or summing) the number of edges (or weights) incident on it. It is a measure of the local centrality of a node since it takes into account

only the direct links each node has without considering the position of the node in the overall network structure. To analyse the World Trade Network, the following centrality metrics have been computed:

- *In-degree centrality.* It counts the total number of ingoing arcs for a given node, namely $C_{D_i^{in}} = \sum_{j \neq i}^{N} a_{ji}$. Thus, the in-degree centrality equals the number of different trade partners a country i is importing goods from in a given year. Since the number of nodes in the network varies over time, to make comparisons possible, the degree centrality is either normalised by the maximum number of possible neighbours, $N-1$, or expressed in%age terms of the total number of arcs, M. The normalised in-degree centrality and in-degree centrality in%age terms are thus defined as

$$C_{D_i^{N-in}} = \frac{\sum_{j \neq i}^{N} a_{ji}}{N-1} \qquad C_{P_i^{N-in}} = \frac{\sum_{j \neq i}^{N} a_{ji}}{M} \tag{1.1}$$

- *Out-degree centrality.* It counts the total number of outgoing arcs originating from country i towards its trading partners, namely $C_{D_i^{out}} = \sum_{j \neq i}^{N} a_{ij} = A1$, where 1 is a vector with all components equal to unity. Thus, the out-degree centrality is equal to the number of different trade partners a country i is exporting goods to in a given year. The normalised out-degree centrality and out-degree centrality in%age terms are then defined as

$$C_{D_i^{N-out}} = \frac{\sum_{j \neq i}^{N} a_{ij}}{N-1} \qquad C_{P_i^{N-out}} = \frac{\sum_{j \neq i}^{N} a_{ij}}{M} \tag{1.2}$$

- *Weighted in-degree centrality (or in-strength centrality.* It sums the weights associated with the ingoing arcs for a given node, namely $C_{S_i^{in}} = \sum_{j \neq i}^{N} w_{ji} = 1W$, where 1 is a vector with all components equal to unity. Thus, the weighted in-degree centrality equals the total value of goods a country is importing from the rest of the world in a given year. As for the unweighted degree centrality, to allow comparability across networks over time, this measure is normalised as follows

$$C_{S_i^{N-in}} = \frac{\sum_{j \neq i}^{N} w_{ji}}{N-1} \qquad C_{S_i^{N-in}} = \frac{\sum_{j \neq i}^{N} w_{ji}}{\sum_i \sum_j w_{ij}} \tag{1.3}$$

- *Weighted out-degree centrality (or out-strength centrality.* It sums the weights associated with the outgoing arcs for a given node, namely

$C_{S_i^{out}} = \sum_{j \neq i}^{N} w_{ji} = W1$, where 1 is a vector with all components equal to unity. Thus, the weighted out-degree centrality equals the total value of goods a country is exporting to the rest of the world in a given year. The normalised out-strength centrality and out-strength centrality in%age terms are then defined as

$$C_{S_i^{N-out}} = \frac{\sum_{j \neq i}^{N} w_{ij}}{N-1} \qquad C_{S_i^{N-out}} = \frac{\sum_{j \neq i}^{N} w_{ij}}{\sum_i \sum_j w_{ij}} \tag{1.4}$$

The greater the degree centrality index, the more connected the country is within the World Trade Network. A comparison of these indices may also be informative. As an illustrative example, if the weighted out-degree centrality is greater than the weighted in-degree centrality, it means that a node is characterised by an overall trade surplus, i.e., on average, the value of its exports is greater than the value of its imports. Moreover, the combined analysis of unweighted and weighted degree centrality measures allows investigating to what extent there are intensive margins of trade, extensive margins of trade, or both (De Benedictis and Salvatici, 2011; De Benedictis and Taglioni, 2011). Over time, a country's centrality may increase because either a node is trading with an increasing number of trading partners (i.e., extensive margin of trade), or a node is increasingly trading with other countries (i.e., intensive margin of trade)

Closeness centrality

Closeness centrality is the most commonly used global centrality measure. It measures the average geodesic distance from a node to another node[1]. In other words, the closeness centrality of a node measures how close it is with respect to all other nodes in terms of topological distance. As for the degree centrality, to analyse the World Trade Network, the following closeness centrality metrics were computed:

- *Closeness centrality.* It measures the total distance in the network of a given node from all other nodes. Mathematically, let D_{ij} be the number of steps in the shortest path between i and j, the closeness

[1]In network analysis, the geodesic distance refers to the length of the shortest path between any two countries i and j, i.e., the number of steps needed separating a given node to another in the network.

centrality is defined as

$$C_{C_i} = \frac{N-1}{\sum_{j \neq i}^{N} D_{ij}} \tag{1.5}$$

Notice that if a node is directly connected with all other nodes in the network, $D_{ij} = 1 \ \forall j$, then $\sum_{j \neq i}^{N} D_{ij} = N - 1$, and so the closeness centrality is maximum and equal to 1. On the opposite, if a country is not trading with any other countries, i.e., it is isolated, $\sum_{j \neq i}^{N} D_{ji} = 0$, and so $C_{C_i} = 0$.

- *In-closeness centrality.* It is defined as the sum of the geodesic distance of country i, normalised by the maximum number of possible import partners, namely

$$C_{C_i^{in}} = \frac{N-1}{\sum_{j \neq i}^{N} D_{ij}} \tag{1.6}$$

- *Out-closeness centrality.* It is defined as the sum of the geodesic distance of country i, normalised by the maximum number of possible export partners, namely

$$C_{C_i^{out}} = \frac{N-1}{\sum_{j \neq i}^{N} D_{ji}} \tag{1.7}$$

The more a country is directly linked with others in terms of bilateral trade flows, the higher its closeness centrality. Thus, in-closeness and out-closeness may differ because a country may be closer to its trading partners as an importer than it is as an exporter (De Benedictis and Tajoli, 2011).

Betweenness centrality

The betweenness centrality measures the criticality of a node based on the extent to which it lies on paths between other nodes. In other words, it captures the role of a node as a hub (or bridge) in the network by counting the number of shortest paths among all pairs of nodes that pass through that given node. A high value of betweenness centrality implies that the country may have a significant influence within a network because most trade relationships pass over itself. Thus, if a country with a high betweenness centrality is removed from the network, large disruptions are likely to affect the other countries.

Mathematically, let $n^i_{j,k}$ be the number of shortest paths from j to k that pass through i and $n_{j,k}$ the total number of shortest paths from j to k, the betweenness centrality of i is defined as

$$C_{B_i} = \sum_{j,k} a^i_{j,k} = \sum_{j,k} \frac{n^i_{j,k}}{n_{j,k}} \tag{1.8}$$

Hence, the betweenness centrality may widely differ from the other centrality measures. A node may have a relatively low weighted degree centrality but a high betweenness centrality in case it does not trade with many countries but is a key intermediary. A country that is an intermediary between several other countries will have a high betweenness centrality index, signalling its large market power and bargaining power in trade negotiations (Aller et al., 2015). An increase in the index over time would thus highlight that the country is becoming more important in connecting the trade of other countries in the network. Countries with a high betweenness centrality are less keen to increase their market power since they are already part of a large number of trade agreements and so the increase in their bargaining power in trade negotiations would be limited.

Eigenvector centrality

The eigenvector centrality is another global centrality measure. It captures to what extent a node is connected to the most important nodes in the network. In other words, a node has a high eigenvector centrality if it is linked to other central nodes. This implies that the eigenvector centrality of a node depends on the eigenvector centrality of the nodes it is directly linked with, i.e., its neighbours. Moreover, since the index is proportional to the importance of other countries, it may be the case that a node with a high degree centrality has a very low eigenvector centrality as long as most of its trading partners have a low relevance in the network, i.e., they have a low or null eigenvector centrality. Likewise, a country may not be linked to many other nodes but still have a high eigenvector centrality if it trades with those countries that are the most relevant in the network.

Mathematically, the eigenvector centrality is represented by the *i-th* component of the principal eigenvector of the adjacency matrix (Bonacich, 1972). Thus, starting from the binary adjacency matrix, $A_{n\times n}$, the eigenvector centrality of country i is defined as the sum of the eigenvector cen-

trality of all its trading partners associated with the largest eigenvalue (λ), namely,

$$C_{E_i} = A_{i1}C_{E_1} + A_{i2}C_{E_2} + ... + A_{i(n-1)}C_{E_{n-1}} + A_{in}C_{E_n} \tag{1.9}$$

Reciprocity coefficient

The reciprocity coefficient is a network measure that captures to what extent networks are interconnected. The reciprocity measures the probability that an edge from i to j is complemented by the reciprocal edge, from j to i. In directed networks, as the World Trade Network, a relationship between two nodes is reciprocal (or mutual) if they are connected by a two-way link (i.e., the edges are in both directions). Thus, it reflects the proportion of symmetrical edges, i.e., the proportion of outgoing links that also have an ingoing link. From an operational point of view, it is computed as

$$r = \frac{\sum_{ij} A_{ij}A'_{ij}}{\sum_{ij} A_{ij}} \tag{1.10}$$

where $A_{ij}A'_{ij}$ is the element-wise product of matrix A and its transpose, A'. The resulting coefficient ranges between 0 and 1, where 0 indicates that the network is purely unidirectional and 1 that the network is purely bidirectional (i.e. reciprocal). In the context of the World Trade Network, high reciprocity implies that most countries both export to and import from most of their trade partners.

Assortativity coefficient

The assortativity coefficient is a network measure that captures the tendency of a node to be linked with other nodes given some node-specific features, e.g., centrality measures, and thus measures the level of homophyly of the graph. It is usually measured with respect to the nodes' degree or strength. Thus, in these cases, it measures the correlation between the degree (strength) of exporting countries and the degree (strength) of importing countries. In other words, it allows to conclude whether well-connected nodes are generally linked with countries that are themselves well-connected or instead with poorly-connected countries. In the latter case, evidence would suggest a core-periphery structure of the network.

Therefore, let X and Y be the two quantitative features for all the countries in a weighted World Trade Network, and (X_i, Y_i) the two features for each country i, then the weighted and directed assortativity measure based on the sample Pearson correlation coefficient is defined as

$$\rho_{X,Y}(G) = \frac{\sum_{ij} w_{ij} \left(X_i - \frac{\sum_{ik} w_{ik} X_i}{\sum_{ij} w_{ij}}\right) \left(Y_i - \frac{\sum_{ik} w_{ik} Y_i}{\sum_{ij} w_{ij}}\right)}{\sum_{ij} w_{ij} \sigma_X \sigma_Y} \tag{1.11}$$

where σ_X and σ_Y are the standard deviations of X and Y, respectively.

Density

The density of a network is a network measures that capture the density of edges between nodes in a graph. It is calculated as the share of existing links in the network over the total number of potential links, namely

$$D = \frac{2E}{N(N-1)} \tag{1.12}$$

Thus, the density of the World Trade Network is defined as the number of existing trade relationships in the network divided by the number of possible trade relationships except their own. The density ranges between 0 and 1, and the higher its level, the more dense the trade relationships between countries in the network.

1.3 Literature review on network analysis applied to trade

The conceptualisation of international trade as a network dates back to 1950 (Gönçer-Demiral and İnce Yenilmez, 2022). Since the Second World War, Social Network Analysis (SNA) has been applied to international trade data to study and test the so-called *world system theory*, or *dependency theory* (Fagiolo et al., 2010; Sacks et al., 2001). As an illustrative example, in their seminal paper, Snyder and Kick (1979) show that the position of a country in the World Trade Network correlates with the GNP growth, confirming the dependency theories, using aggregate trade data on 118 countries in 1965. However, while there is a longstanding literature

strand that has extensively applied Social Network Analysis to international trade in the field of economic sociology and political science, only recently network analysis has been employed to analyse the World Trade Network quantitatively (Fan et al., 2014; Hoang et al., 2023*b*). Over the past years, authors have devoted substantial efforts to analyse the World Trade Network (WTN), also known as the International Trade Network (ITN) or World Trade Web (WTW), which is defined as the network of trade linkages (import or export) between all countries in the world in a given year (and sector).[2] Overall, these studies aimed to uncover the topological properties of the World Trade Network, both at the aggregate level and the product-specific level (Barigozzi et al., 2011; Fagiolo et al., 2010).

Studies on unweighted trade networks have allowed authors to explore the structure of the network in terms of density (i.e., level of integration) and degree distribution (i.e., number of trade relationships). Findings are converging and show that the trade network has a high dimensionality and is strongly heterogeneous (De Benedictis et al., 2014). The degree distribution is right-skewed, with many countries trading with few partners and only a few with many partners (De Benedictis et al., 2014; Fagiolo et al., 2010; Serrano and Boguná, 2003). Among the others, Garlaschelli and Loffredo (2005); Serrano and Boguná (2003) studied the World Trade Network using binary undirected and directed graphs and found that it is characterised by a disassortative pattern: when countries have trade relationships with many other countries (i.e., high degree centrality), their trade partners are in turn connected with few other countries (i.e., low degree centrality) regardless of the geographical distance. Moreover, well-connected countries are less interconnected than those of poorly connected ones, suggesting the existence of some hierarchical arrangements (Garlaschelli and Loffredo, 2005). These results, especially the extremely heterogeneous distribution of trade linkages, reveal that the World Trade Network is a scale-free network. Moreover, Serrano and Boguná (2003) found that the network is reciprocal and has a rather clustered structure. In other words, if a country is exporting to another country, it is likely also importing from it, and if two countries are trading with a third country, they are likely to also trade together.

[2] As other networks (see Section 1.2), the World Trade Network might be modelled as a binary or weighted network, directed or undirected network, and aggregated or disaggregated by industry/commodity across the years (Fan et al., 2014).

Building on the results obtained by authors using unweighted trade networks, a number of studies have then focused on weighted trade networks motivated by the fact that if the intensity of trade relationships is disregarded, the role of heterogeneity in trade relationships could be significantly underestimated (Fagiolo et al., 2010). Actually, the results obtained using binary networks do not fully hold if the weighted World Trade Network is considered (Duenas and Fagiolo, 2013; Fagiolo et al., 2008, 2009, 2010). Authors found that the weighted degree distribution is highly left-skewed while countries' total trade intensity distribution is right-skewed. These results indicate that low-intensity trade linkages dominate the network and only a few are instead significantly intense, implying a core-periphery structure of the World Trade Network (Bhattacharya et al., 2007; Cingolani et al., 2015; De Benedictis et al., 2014; Fagiolo, 2010; Fagiolo et al., 2008, 2009, 2010; Fan et al., 2014; Hoang et al., 2023*a*; Kali and Reyes, 2007). Moreover, the dissortative pattern detected in binary networks is weaker than in weighted networks. All countries, both those poorly connected and those well-connected tend to trade with countries that are relatively well-connected (Fagiolo et al., 2010; Kali and Reyes, 2007). Abbate et al. (2018) found that, actually, dissortative patterns depend on the geographical distance among countries: the network is assortative as long as the geographical distance is below 9,000 km while it is increasingly dissortative above this threshold. Likewise, geographical distance is also a key determinant of the clustering level of the network. The probability that any two trade partners of a country are themselves trade partners increases as long as the geographical distance decreases, i.e., negative correlation (Abbate et al., 2018).

At the country level, countries widely differ in their choice of trade partners, hindering the conceptualisation of an "average country" (De Benedictis and Tajoli, 2011). This difficulty is further prominent given the scale-free structure of the network (Cepeda-López et al., 2019). Trade flows from a given country are, in fact, heterogeneously distributed across trade partners (Bernard et al., 1995, 2007; Bhattacharya et al., 2007; Fagiolo et al., 2010; Serrano et al., 2007). Cross-country differences play a key role in determining trade linkages and country positioning in the core rather than the periphery of the World Trade Network. Interestingly, despite this heterogeneity across trade relationships, the World Trade Network is

highly symmetric, i.e., trade linkages tend to be reciprocated with similar intensities (Fagiolo et al., 2010).

At the product or sectoral level, the sectoral trade networks have different characteristics such that the overall network cannot be considered as the simple sum or average of its sectoral sub-networks (Barigozzi et al., 2010; Cepeda-López et al., 2019; Cingolani et al., 2018; De Benedictis et al., 2014; De Benedictis and Tajoli, 2010; de Sousa et al., 2012). Indeed, the World Trade Network features differ from those of the underlying commodity networks in terms of density and trade linkages distribution (Barigozzi et al., 2010; Cepeda-López et al., 2019; De Benedictis et al., 2014). Depending on the type of commodities traded, their international organisation of production, and their demand and supply features, industries may show a relatively higher or lower density as well as a more or less clustered structure (Cingolani et al., 2018; De Benedictis and Tajoli, 2010). As a result, while homogeneous and less complex industries are associated with less dense trade networks, more complex industries give rise to denser and more complex networks (De Benedictis and Tajoli, 2010; Piccardi and Tajoli, 2018). The core countries in each sector vary, but they are generally advanced economies (De Benedictis et al., 2014; Tajoli et al., 2021). Unlike the goods sectors, emerging and developing countries rarely occupy a relatively strong central position in the service networks (Tajoli et al., 2021). Overall, the composition and structure of communities in the network are very heterogeneous across commodities and usually diverge from the overall World Trade Network (Barigozzi et al., 2011). The similarity across sectoral sub-networks and the World Trade Network is very heterogeneous, with some industries, such as Chemicals, being more able to shape the World Trade Network. As pointed out by Barigozzi et al. (2010), the roles played by industries in shaping the network have more and more diverged, which might be a consequence of the increased trade specialisation. Nevertheless, Kostoska et al. (2020) found that the core-periphery structure which characterises the overall trade network holds also in sub-sectoral networks.

The analysis of the evolution of the World Trade Network over time has revealed additional features of the network. First, the authors found that the structural properties of the network are relatively stationary (Cepeda-López et al., 2019; Fagiolo et al., 2010; Garlaschelli and Loffredo, 2005).

Over time, in parallel with the increase of heterogeneity among countries, the World Trade Network has become more and more interconnected (Barigozzi et al., 2010; Bhattacharya et al., 2007; De Benedictis et al., 2014; Fagiolo et al., 2010; Hoang et al., 2023*a*; Kali and Reyes, 2007; Serrano and Boguná, 2003). As noticed by Cepeda-López et al. (2019), the fact that structural network properties are stable despite the increase in density and reciprocity suggests that globalisation has led to an increase in the number of trade linkages but it has no significant effect on the intensity of new and existing linkages. Bhattacharya et al. (2008) found that the number of countries responsible for half of the world's trade has decreased over time. However, De Benedictis and Tajoli (2011) found that trade density has increased in some continents (e.g., America, Africa, and Oceania) but it has decreased in others (e.g., Europe and Asia). Moreover, De Benedictis and Tajoli (2011) also found that the distribution of trade linkages has become bimodal and homogeneous, suggesting that the characterisation of the World Trade Network as a core-periphery network may not hold anymore.

Since network analysis allows both to study direct and indirect relationships between countries and to isolate the role of each country in the World Trade Network, it has been applied to investigate various phenomena from economic globalisation and regionalisation to crises and disease diffusion to the transmission of economic shocks, and so on. De Benedictis and Tajoli (2011) analysed the evolution of the World Trade Network to investigate the effectiveness of the WTO in increasing the density of the trade network, discussing problems of the extensive and intensive margins of trade[3]. They found that actually the WTO members have better connections and are more interconnected than non-members, highlighting the key role trade policy may have in shaping the trade network.

Kali and Reyes (2007); Serrano et al. (2007) demonstrated that the analysis of the World Trade Network enables studying the propagation of financial and economic crises by highlighting global interdependencies. The underlying rationale is that a shock affecting a given country can be easily transmitted to its direct and indirect neighbours via trade linkages (Abeysinghe and Forbes, 2005; Chaney, 2014). Kali and Reyes (2007)

[3]Intensive margin of trade are defined in terms of change over time in existing bilateral trade relationships. Extensive margins of trade are defined in terms of newly established trading bilateral relationships.

found that the more integrated the country first hit by the crisis is, the more amplified will be the propagation effect. Focusing on the impact of the 2008 financial crisis, the authors showed that it caused a change in preferential trading partners and disruption in the overall network. As a direct effect on the world network, the 2008 financial crisis weakened the leadership of the United States, being the first hit by the crisis (Fan et al., 2014). Then, although the main connective properties of the World Trade Network remained almost unchanged, after the crisis, the World Trade Network moved from a two-group (led by the United States and Germany) to a three-group (led by the United States, Germany, and China) hierarchical structure (Cepeda-López et al., 2019; Hoang et al., 2023*a*). Recently, Coquidé et al. (2020) presented a model of worldwide crisis contagion exploiting the fact that the Google matrix analysis of the World Trade Network allows to capture both the direct and indirect trade partner interdependencies.

In recent years, the World Trade Network has also been analysed to investigate to what extent trade relationships could explain the diffusion of diseases, such as COVID-19 (Antonietti et al., 2021, 2022; Bontempi and Coccia, 2021). Results showed that the number of COVID-19 infections and fatalities were positively correlated with centrality measures in the global trade network (Antonietti et al., 2022; Bontempi and Coccia, 2021). Bontempi et al. (2021) provide a straightforward justification of the observed positive correlation: the more a region trades, the more it is likely to be in contact with a foreign population, the more it is likely to be exposed to the virus and that it spreads internally.

In a similar vein, World Trade Networks have also been studied to investigate their role in propagating positive spillover effects. As an illustrative example, Fagiolo and Luzzati (2023) found that when a country has a key role in the network and is itself connected with other critical countries, a positive impact on its GDP per capita can be observed. They interpret the results arguing that the global network centrality measures may be used as a good proxy for a country's exposure to technological spillovers. However, since global and local centrality measures do not necessarily positively correlate one with the other if a country is intensively and extensively locally connected in the network, it does not necessarily imply that it will be able to absorb more technological spillovers.

Additional studies have compared the World Trade Network with other social and economic networks to find correlations and similarities. Fagiolo and Mastrorillo (2014) looked at the relationship between the World Trade Network and the world immigration network and found a significant correlation between the two. Cingolani et al. (2018) investigate to what extent international production networks (IPNs) have an impact on the structure and patterns of international trade. Pan (2018) shows how membership in economic, socio-cultural and general-purpose intergovernmental organizations (IGOs) is generally correlated with well-established trade linkages and more relevant roles in the trade network.

It is worth highlighting that the authors have looked at the World Trade Network to investigate the impacts of trade on socioeconomic aspects but also to assess the impact of shocks and policies on trade. As an illustrative example, on the one hand, Aller et al. (2015) analysed the role of the World Trade Network to investigate the indirect impact of trade on the environmental quality of a country. On the other hand, Gruszczynski (2020); Kiyota (2022); Kurbucz et al. (2023) studied the impact of the COVID-19 diffusion on the World Trade Network. Finally, a very recent strand of the literature has started focusing on networks among firms. In this context, Bernard et al. (2022) explore firm size heterogeneity in production networks, whereas Bernard and Moxnes (2018) review the firm-to-firm connections in trade.

1.4 Data

Data on trade are extracted from the 2024 version of The Trade and Production Database (TradeProd) recently developed by Mayer et al. (2023). The TradeProd database provides data on international and domestic trade flows for 165 countries and nine industrial sectors based on 2-digit ISIC (International Standard Industrial Classification, Rev. 3)[4] over the period 1966-2020. Building on the database developed by de Sousa et al. (2012), it combines trade data from UN COMTRADE with production data from UNIDO (INDSTAT). Domestic trade flows (or self-imports) are

[4]The nine industrial sectors covered are: Food (ISIC rev.3 15-16), Textiles (ISIC rev.3 17-19), Wood-Paper (ISIC rev.3 20-22), Chemicals (ISIC rev.3 23-25), Minerals (ISIC rev.3 26), Metals (ISIC rev.3 27-28), Machines (29-33), Vehicles (34-35), Other (36).

estimated as the difference between gross production and total exports. The database includes raw and extrapolated data as separate variables intended for, respectively, estimation purposes and counterfactual exercises using new quantitative trade models. Indeed, to minimise the number of missing values in domestic trade flows time series and so allow counterfactual exercises, Mayer et al. (2023) implemented an extrapolation process.[5]

As compared to other existing databases, including both international and domestic trade flows (Borchert et al., 2021, 2022), the TradeProd has the advantage of covering almost the entire total manufacturing output (e.g., 98% over the period 2010-2020). Although the level of disaggregation at the sectoral level is far below the one in Borchert et al. (2021, 2022), where 118 distinct manufacturing industries are covered, the TradeProd provides full-time series for a much larger number of countries. Indeed, the lower level of disaggregation is because, in the INDSTAT dataset, a non-negligible number of countries declare a combination of two or more 2-digit ISIC categories.

To categorise countries across the geographical areas, the list of geographic regions used by the UN Statistics Division in its publications and databases, where each country is univocally attributed to one region only, was used.[6] Overall, geographic regions are defined at different levels. First, they are based on continental regions (Africa, Americas, Antarctica, Asia, Europe, and Oceania), then they are further subdivided into sub-regions and intermediary regions constructed by the UN Statistics Division to obtain greater homogeneity in sizes of population, demographic circumstances and accuracy of demographic statistics. To this end of the analysis, we will explore the different geographical area levels to see geographical patterns in trade (See Appendix A for the full list of countries and their categorisation).

Although the TradeProd database provides data on trade from 1966 until 2020, the evidence presented in the present chapter covers different

[5]The authors computed the gross output to total export ratio at the country-industry-year level and imputed missing domestic trade flows using the nearest in time observation adjusted for the average growth rate of $\frac{GDP_{it}}{Export_{it}}$ and $\frac{Prod_{it}}{Export_{it}}$ to account for globalization trends at the country and industry level. Additionally, they imputed the gross production multiplying the estimated output to total export ratio by the observed total exports for a given country-industry-year. Finally, using this approach, they extrapolated the gross production for the "Rest of the World (ROW)".

[6]`https://unstats.un.org/unsd/methodology/m49/`

time horizons depending on the level of disaggregation of the underlying analysis. Analyses aggregated at the world level as well as those at the sectoral level cover the entire period 1966-2020, whereas analyses at the region or country level cover a narrowed time horizon which spans from 1993 until 2020. In the latter case, the choice of the time horizon reflects the trade-off between having longer time-series analyses allowing to better investigate the evolution of the trade network since its dawn and having a sufficiently large set of countries that reported trade flows for at least one international partner in all years under analysis to fully depict ongoing patterns. Thus, shortening the time horizon has two main practical advantages. First, it allows to extensively overcome the issues related to newborn and dissolved countries. Indeed, between 1966 and 1993, various structural geographic changes significantly modified the structure of the network in terms of existing countries.[7] Second, starting from 1993, it is observed that the number of missing trade linkages due to reporting issues is minimised. Actually, in the past, many countries (especially the smallest and poorest ones) were not reporting trade data, not because they were not trading but either because of the lack of official statistics or because they belonged to an isolated political bloc.

Moreover, for the analyses at the country or region level, out of the 165 countries covered by TradeProd, the analyses consider 151 distinct countries. The sample of countries included in the trade network resulted from different cleaning procedure stages. First, countries that disappeared before 1993 were excluded from the analysis. This step entails excluding 5 countries, namely Czechoslovakia, the aggregate Ethiopia and Eritrea, the aggregate Pakistan and Bangladesh, the URSS, and Yugoslavia. Second, the countries that came into being between 1993 and 2020 were consolidated. This implied considering as a single country Serbia and Montenegro even after 2006 when Montenegro got independence from Serbia, Sudan and South Sudan even after the South Sudan secession in 2011. Moreover, Belgium and Luxembourg are also considered as a single country because international trade statistics were available for these two countries only as

[7] Among the others, in 1971 there was the dismemberment of Pakistan which resulted in the creation of Bangladesh, in 1990, there was the official reunification of West and East Germany into Germany and of North and South Yemen into Yemen, in 1991 there was the dissolution of Czechoslovakia leading to the rise of the Check Republic and Slovakia, and dissolution of the Soviet Union after which 15 post-Soviet states emerged, in 1993 Eritrea got its independence from Ethiopia, between 1990 and 1992, the fall of the Yugoslavia led to the emergence of six distinct countries.

a single entity until 1999 when European Community rules required split information. Lastly, countries that did not report trade flows for any international partner in any year between 1993 and 2020 were excluded. This step implied excluding four countries, namely Botswana, Namibia, State of Palestine, and Eswatini, for which the trade data were available only starting from 2000.

Following De Benedictis and Tajoli (2011), in our world manufacturing trade network, two nodes (countries) have a weighted link, $w_{ij,t} = W_{ij,t}$, in which $w_{ij,t}$ is equal to the exported value from each pair of countries. The network is directed since the value of export from i to j does not necessarily correspond to the value of export from j to i, i.e., $w_{ij,t} \neq w_{ji,t}$. Therefore, for every time period from 1993 to 2020, t, and each industry, i, we construct the directed World Trade Network that summarises the total bilateral exports. The network includes, for each country the export flows towards all export markets, and so they represent the full World Trade Network. Following previous studies, e.g., Hoang et al. (2023*a*), we do include in the network all possible countries that reported trade flows for at least one international partner in all years, without filtering out trade flows based on their value nor weighting them by the size of the exporter or importer. The network does not include domestic trade as self-loops, which means that the main diagonal is 0.

1.5 Trends in the manufacturing industry

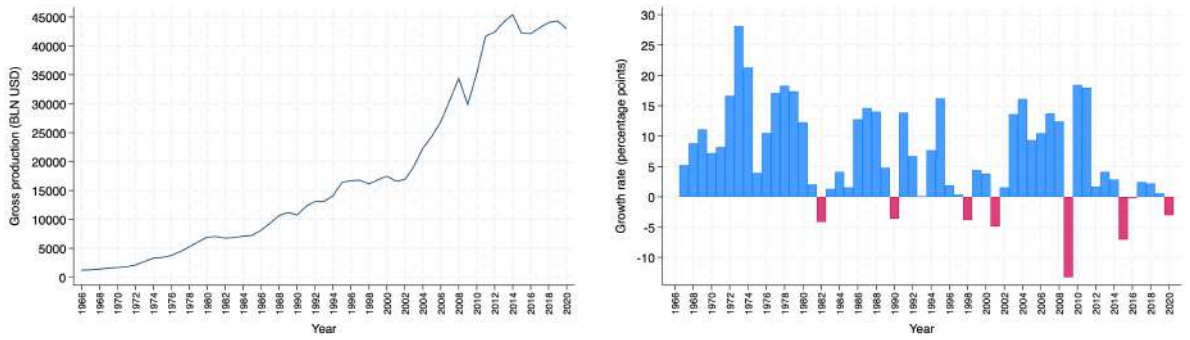
In this section, we analyse trends in production, international trade, and domestic trade at the global level, by industrial sector, and by geographical area.

1.5.1 The manufacturing production

Since 1966, the gross manufacturing production has steadily increased over time. It increased from USD 1.2 trillion in 1966 to USD 43.0 trillion in 2020.[8] The analysis of its historical evolution shows that the gross production in the manufacturing sector has usually increased at an almost

[8]To ensure data comparability, we calculate the gross manufacturing production as the sum of international and domestic trade reported in the 2024 Version of the TradeProd database. This implies that the figures provided might underestimate the actual gross production.

constant speed for years and then stagnated before increasing again at higher growth rates (see Figure 1.2a). Between 1966 and 2020, six global manufacturing output slowdowns occurred (see Figure 1.2b).



(a) Gross output value

(b) Growth rate

Figure 1.2: Evolution of the world manufacturing output

The first slowdown in manufacturing output occurred between 1981 and 1982, i.e., during the economic recession caused by the oil shock of the 1970s and the subsequent inflationary pressures. The 1979 Second Oil Crisis led to an increase in the cost of energy, and so, in the production costs. The higher production costs translated into higher prices for goods and services that, in turn, put upward pressure on wages. This created a cycle of rising prices, which became embedded in the economy, leading to sustained inflation for several years. To combat inflation, governments and central banks in many countries responded by raising interest rates, which made borrowing more expensive and reduced the amount of money available for consumer spending and business investment. This led to a decline in economic activity, which contributed to the recession of the early 1980s.

Since 1983 the economy recovered, and the manufacturing output started increasing again until 1997, when a second slowdown was observed. Between 1997 and 1998, the global manufacturing output declined mainly due to the Asian financial crisis and the Russian financial crisis. Both crises led to a decline in global manufacturing output by reducing demand for goods, affecting currency exchange rates, disrupting supply chains, and reducing investment in the manufacturing sector.

In 2001, the global manufacturing output dropped again because of the

early 2000s recession triggered by the dot-com bubble burst and the September 11 attacks. On the one hand, the dot-com bubble was fueled by speculative investment in internet-related companies, many of which were not profitable. When the bubble burst, investors lost confidence and withdrew their investments, many internet-related companies went bankrupt or downsized, and consumers became more cautious about their spending and were less likely to invest in new technology products. In other words, when the bubble burst, the economy experienced a decline in investment, job losses, and decreased consumer confidence which led to reduced economic growth. Although the dot-com bubble burst per se primarily affected the technology and financial sectors, the resulting recession had an indirect impact on the manufacturing sector. More specifically, as other recessions earlier in time, it led to a decrease in consumer spending and business investment, which reduced the demand for manufactured goods. On the other hand, the September 11 attacks further weakened an already fragile economy by heightening uncertainty about economic prospects and badly shaking consumers' and producers' confidence.

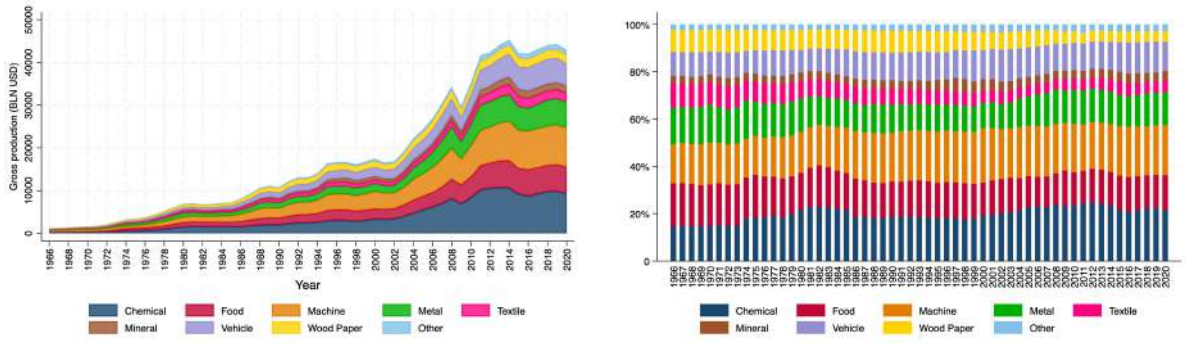
Eight years later, in 2009, an unprecedented fall in manufacturing output was recorded. Following the 2008 financial crisis, the gross production in the manufacturing sector registered a negative growth rate equal to -10.3%: the sharpest decline ever observed over the time period analysed. Such a sharp decline in manufacturing output was the result of a more and more integrated world. Indeed, different from previous crises that took more time before affecting the global economy, the 2008 financial crisis originated in the United States housing market and quickly spread to the rest of the world, affecting demand for goods and services worldwide. Manufacturers in many countries could not obtain the necessary capital to invest in equipment, hire workers, and expand production because of the contraction in credit markets and reduced access to financing for businesses caused by the crisis.

The global manufacturing output fell again in 2015 because of a combination of factors. Indeed, the overall global economy faced a number of challenges, including significant changes in the value of major currencies, a decline in oil prices, a continued slowdown in China and geopolitical instabilities (UNIDO, 2015). This was further exacerbated by the oil production shocks that decreased oil prices, and so, oil producers' demand for

manufactured goods.

Finally, the global manufacturing output dropped again in 2020 as a consequence of the spread of COVID-19, which caused a global economic recession, known as the COVID-19 recession or also the Great Lockdown. Starting from February 2020, countries implemented lockdowns and other precautions to limit the spread of the virus as far as possible, but this resulted in the collapse of many industries and consumerism that, in turn, led to a stagnation of economic growth and consumer activity. The negative economic impacts of the COVID-19 recession were further worsened by the 2020 Russia–Saudi Arabia oil price war, which led to a drop in oil prices, the collapse of tourism, the hospitality industry, and the energy industry, and a downturn in consumer activity.

When disaggregating the analysis of the global manufacturing output by industrial sectoral, it is observed that overall each industrial sector has followed almost the same path as the total manufacturing sector (see Figure 1.3). On average, between 1966 and 2020, the Chemical, Machine, and Food industries accounted for roughly 55% of the yearly gross manufacturing production. Although these three industries have always covered half of the manufacturing production, their relative relevance has changed over time. More specifically, over the time period analysed, the relative weight of the Chemical, Machine, and Vehicle industries has increased, and in spite, the relative weight of the Food, Textile, and Wood Paper industries has decreased (see Figure 1.3b).



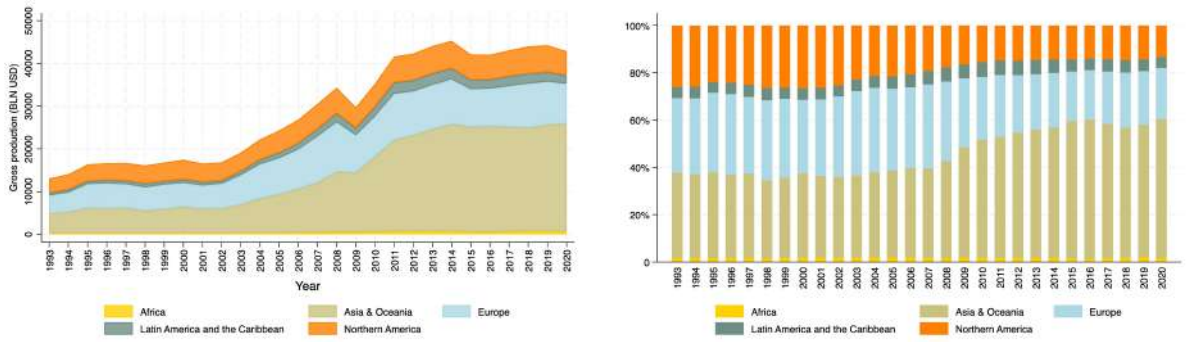
(a) Gross production value

(b) Composition

Figure 1.3: Evolution of the world manufacturing output by sector

Likewise, when disaggregating the analysis of the global manufacturing

output by geographic area, it is observed that overall each geographic area has followed almost the same path as the total manufacturing sector (see Figure 1.4a). Nevertheless, the relative importance of each geographic area has slightly changed over time. More specifically, Asia and Oceania have increased their relative importance over the total market, whereas Europe and Northern America have gradually lost their prominent role, and Latin America and the Caribbean, as well as Africa, have kept their contribution to the global manufacturing output relatively constant (see Figure 1.4b). The sharp increase in global manufacturing output in Asia and Oceania is mainly driven by China, which has been recently recognised as the "*world's sole manufacturing superpower*" by Baldwin (2024).



(a) Gross production value

(b) Composition

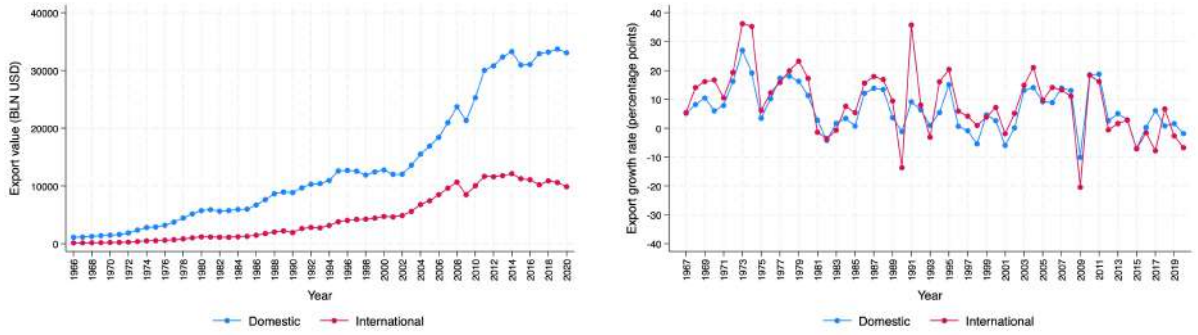
Figure 1.4: Evolution of the world manufacturing output by geographic area

1.5.2 Trade of manufacturing

Trade in the manufacturing sector has tremendously increased over the last decades, both domestically and internationally. In 2020, the global production in the manufacturing sector reached USD 43.0 trillion, out of which USD 9.9 trillion was traded internationally and the remaining USD 33.1 trillion was traded domestically. Since 1966, the trade of manufacturing has steadily increased, apart from a few well-known trade slowdowns (see Figure 1.5a). More specifically, as shown in Figure 1.5b, negative growth rates in international trade were registered between 1981 and 1983 due to the inflation-defeating recession, in 1998 due to the Asian financial crisis, in 2009 due to global financial crisis, between 2015 and 2017 due to import restrictions implemented by WTO members, and more recently in 2020 due to the COVID-19 recession. After the 2008 financial crisis, the contraction

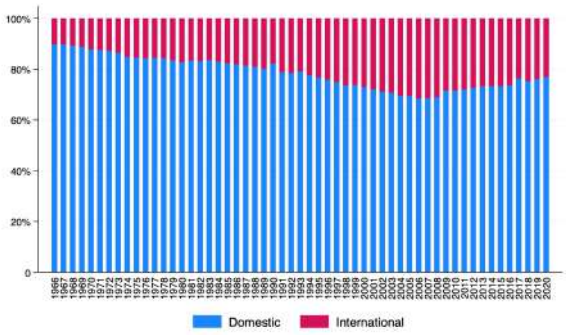
in exports hit especially small open economies.

In 2017, the decline in trade was further exacerbated by the increased tensions between the USA and China. Surprisingly, the evolution of domestic trade has historically followed the same path as international trade, except between 2017 and 2018 when the observed growth rates are of the opposite sign (see Figure 1.5a and Figure 1.5b). This suggests that while financial-related crises affecting international trade have had the same type of impact also on domestic trade, following the tensions between the USA and China, a different mechanism has taken place. In other words, in most cases, we can conclude in favour of a substitution effect between international and domestic trade at the country level. Finally, the analysis of the (import) penetration rate in the manufacturing sector shows that regardless of the crisis, the share of international export over the total gross production has steadily increased until the global financial crisis (see Figure 1.5c). It increased from 10% in 1966 to 28% in 2007. Starting from 2008, it has then started decreasing, reaching 23% in 2020. The trends observed support Baldwin's (2024) discussion that from the mid-1990s to the mid-2000s, there was a rapid increase in parts and components trade that occurred during the globalisation phase, also known as "second unbundling". After the 2008 financial crisis, the drop in manufacturing may be ascribed to various factors, from cyclical factors to structural factors (Baldwin et al., 2024).



(a) Total trade values

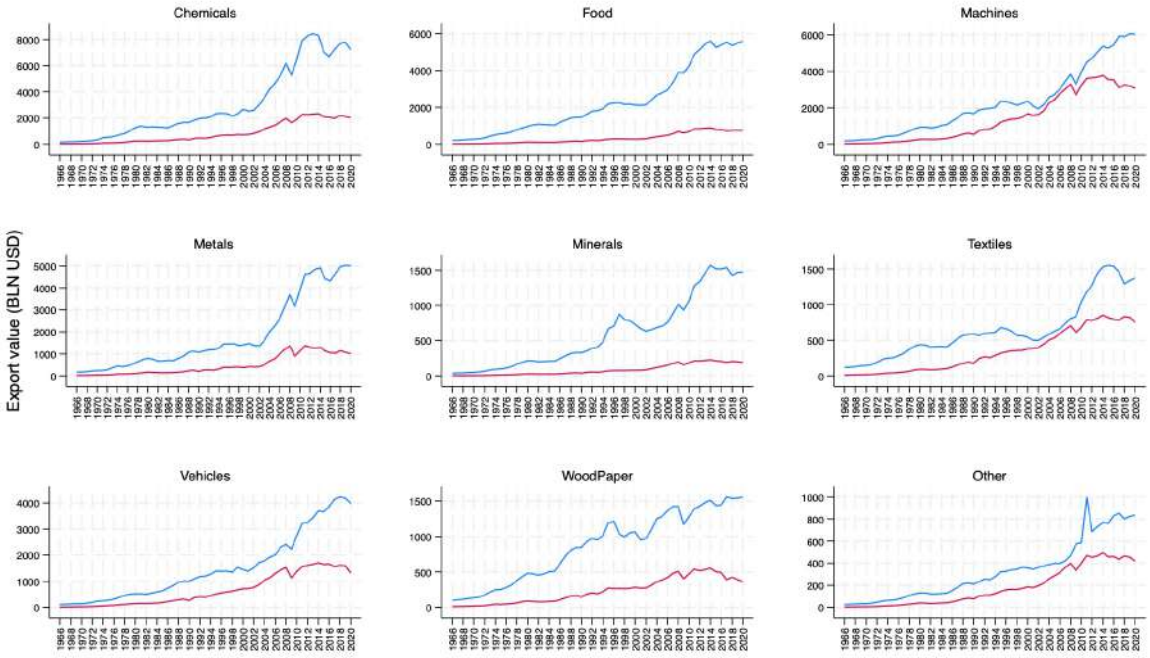
(b) Growth rates in total trade



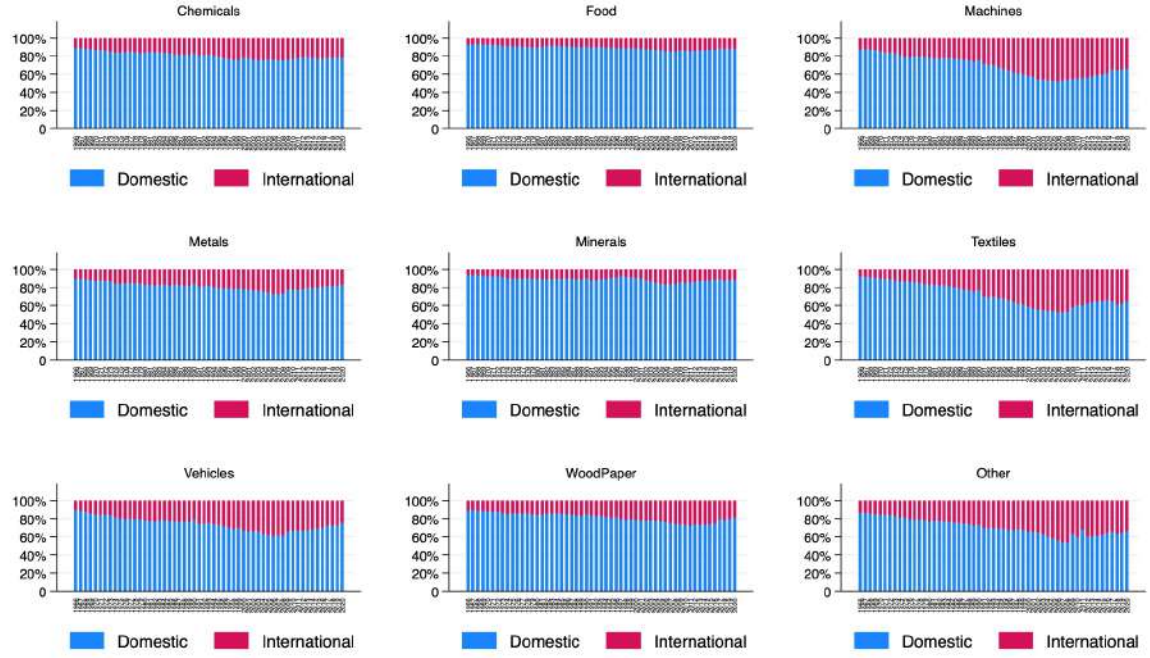
(c) Penetration rate

Figure 1.5: Evolution of trade flows in manufacturing at the global level

Interestingly, different patterns emerge when the analysis is disaggregated at the sectoral level. The evolution of total trade values in the various sectors reveals that, regardless of the sector, the total value of domestic trade is always higher than the total value of international trade. However, there are sectors, such as Machines and Textiles, where the difference in value between domestic and international trade has dramatically reduced during the first decade of the 21^{st} century and then increased after the global financial crisis (see Figure 1.6a). The evolution of the penetration rates by sector also provides additional interesting insights. As discussed above, at the global level the share of international export over the total gross production has steadily increased until the global financial crisis and then started declining. Such overall trend is mainly driven by the Machines, Textile, and Vehicle sectors (see Figure 1.6b). Conversely, in sectors like Chemicals, Food, and Minerals the share of international export over the total gross production has remained pretty stable.



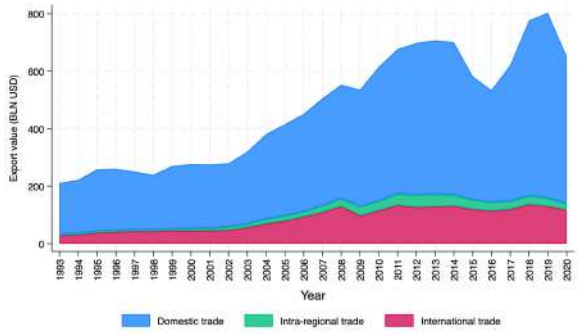
(a) Total trade values



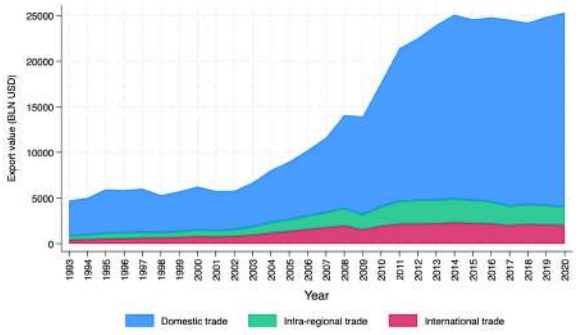
(b) Penetration rate

Figure 1.6: Evolution of trade flows in manufacturing at the global level by sector

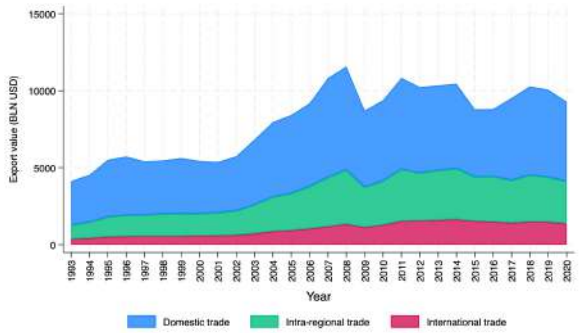
At the geographical level, domestic trade is always larger than international trade and intra-regional trade in each geographical region, but different patterns are observed. In most geographic areas, domestic trade increased at the same path as international exports until the beginning of the 2000s, then domestic trade increased at the largest growth rates as compared to international exports. A different pattern characterises instead European trade. Indeed, in Europe, domestic, intra-regional, and international trade have followed parallel trends at the beginning of the period under analysis. Following the financial crisis, there has been a shrinkage in European trade both domestically and internationally. From 2017 while domestic trade has widely increased, international trade has remained stable. Moreover, Europe is also the region characterised by the largest intra-regional trade, which is always above the value of international trade. In other words, European countries tend to trade domestically, and when going on the international market, they usually tend to export within Europe rather than abroad. Among the others, this peculiarity of European trade is due to the tremendous efforts the European Commission has put into the creation of the European Single Market (see Section 3.2 for further details on the history of European integration). The boom in international exports observed among Asian and Pacific countries is driven by China. China has indeed increased its role as a leading supplier of manufactured goods and raw materials.



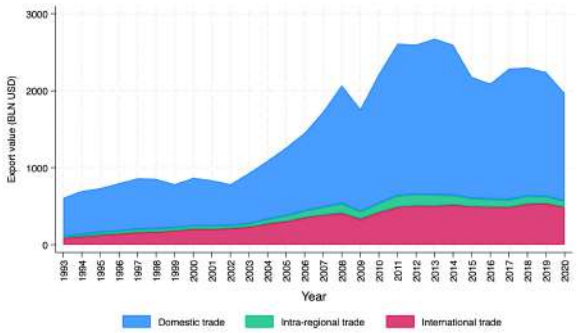
(a) Africa



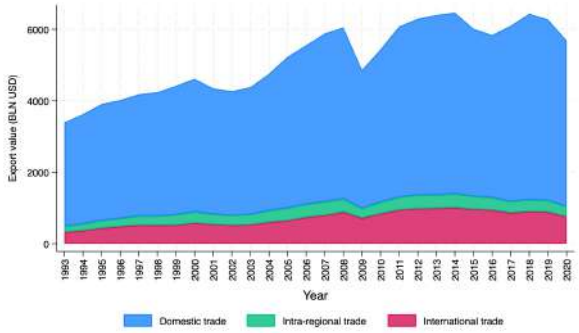
(b) Asia and Pacific



(c) Europe



(d) LAC



(e) North America

Figure 1.7: Evolution of trade flows in manufacturing at the global level by region

1.6 Results

The growing role of global value chains (GVCs) has shaped global trade, increasing cross-country linkages and making them more complex. In what follows, the results of the network analysis carried out on the full network and the sectoral sub-networks are described.

1.6.1 The overall World Trade Network

Overall, the results obtained on the whole World Trade Network confirm the findings highlighted by previous studies (see Section 1.3). Between 1993 and 2020, the network has become more and more dense (see Figure 1.8a).[9] In 2020, the density of the network equalled 0.77, meaning that taking two countries at random, the probability that they were directly

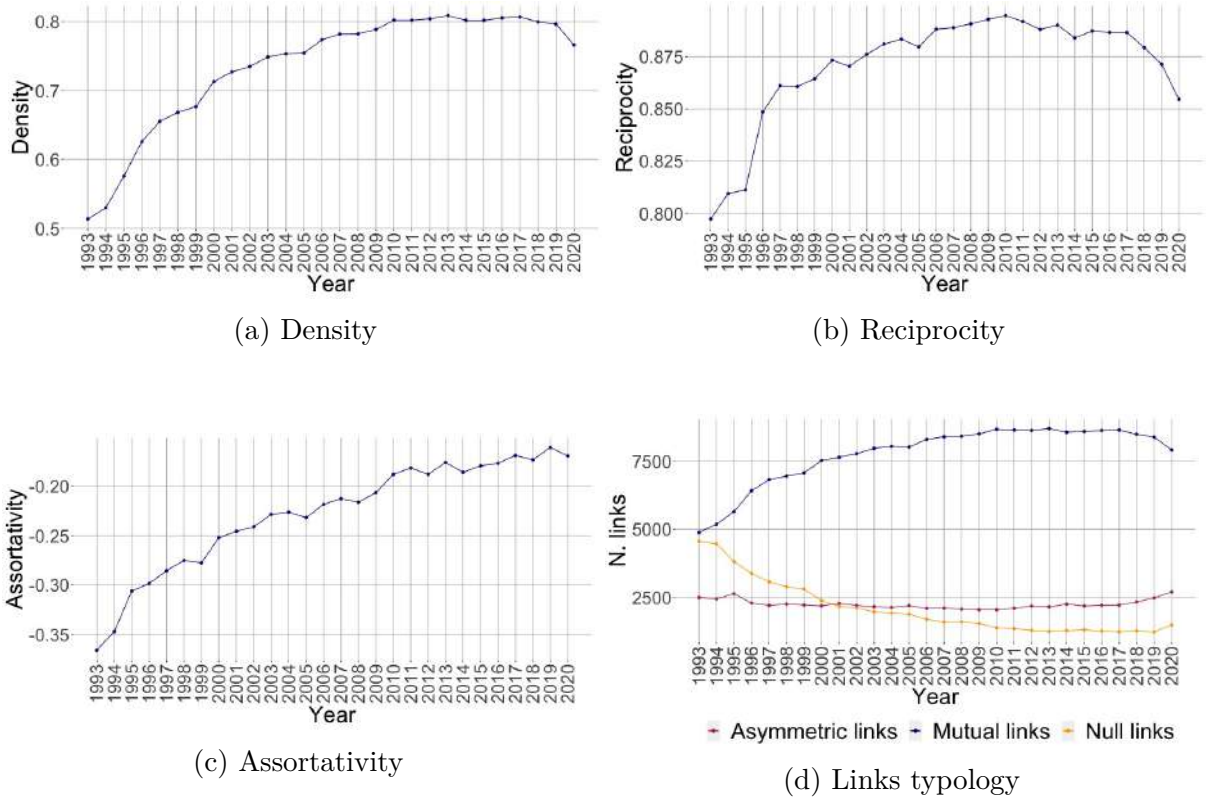
[9]The density of the network is computed as the ratio between the number of existing arcs and the number of maximum possible arcs, $d = \frac{M}{N(N-1)}$.

linked via a trade flow was 77%. Over time, it increased from 0.51 in 1993 to 0.77 in 2020. This finding implies that new trade relationships have been born, and, so, that each country has traded with an increasing number of partners, making the entire world's manufacturing trade network more intensely connected. Actually, the number of trade linkages (i.e., arcs) has risen from 12,264 in 1993 to 18,521 in 2020. Countries strategically decide to increase the number of trading partners to diversify their exports, and so avoid depending on concentrated trading relationships. As a result, the significant increase in trade flows among all countries has translated into a more integrated and globalised international market (De Benedictis and Tajoli, 2011).

As pointed out in previous studies, the network is highly interconnected. Since 1993, the number of mutual trade linkages has steadily increased, indicating that the probability that a country is importing manufacturing goods from a trade partner it is exporting to is increasing. As shown in Figure 1.8b, the reciprocity coefficient has increased from 0.80 in 1993 to 0.85 in 2020. This indicates that the World Trade Network is extremely symmetric, i.e., most countries both export to and import from most of their trade partners. Interestingly, following the financial crisis in 2008, the reciprocity coefficient has slightly decreased since the increase in trade linkages has not been proportionally counterbalanced by an increase in the number of mutual links. Indeed, while the number of mutual links has remained almost stable, the number of asymmetric trade linkages has slightly increased (see Figure 1.8d). Nevertheless, it is noted that the number of null links has steadily decreased over time.

Moreover, evidence shows that the network is characterised by a negative assortative mixing by degree, indicating that countries trade with partners that have a dissimilar number of connections. In other words, countries with many trade linkages (i.e., well-connected) are usually trading with poorly-connected countries, and vice versa, countries that are poorly connected tend to trade with well-connected countries. As suggested by authors, e.g., Fagiolo et al. (2010), the fact that the network is weakly dissortative highlights that it has a core-periphery structure. However, the average dissortativeness of the overall network is weak and has decreased from -0.37 in 1993 to -0.17 in 2020 (see Figure 1.8c). This implies that over time there has been an increasing tendency in trading with

similar partners.



(a) Density

(b) Reciprocity

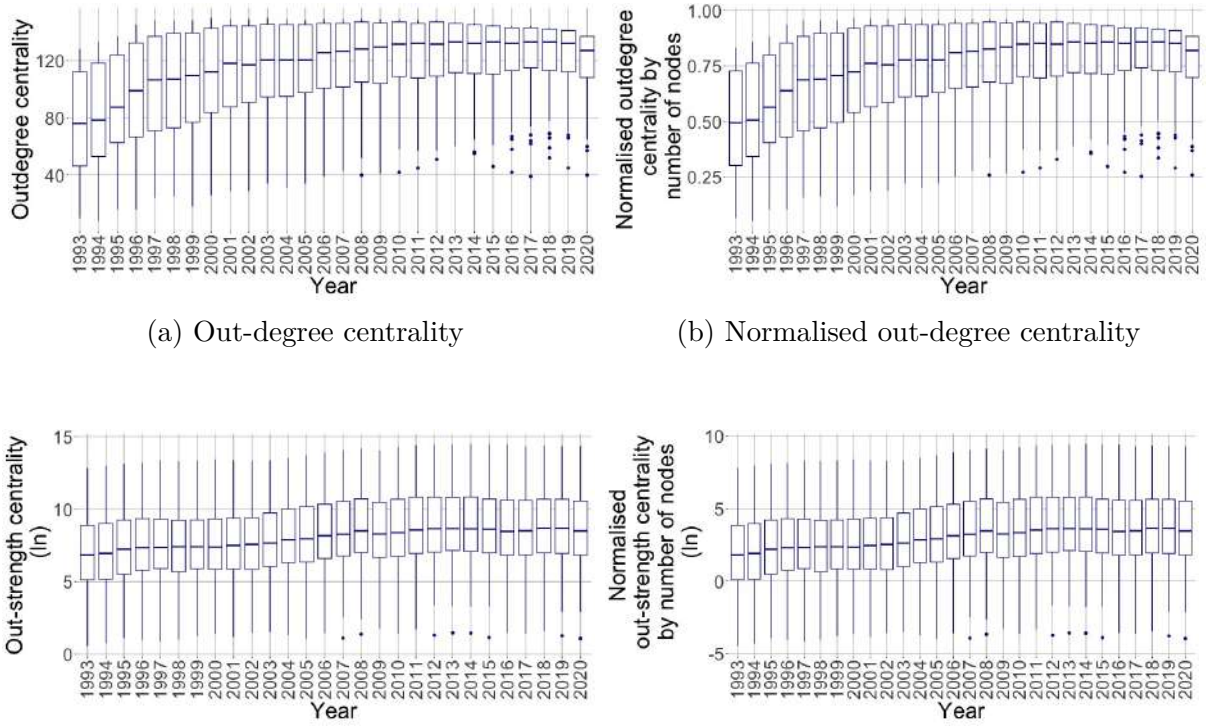
(c) Assortativity

(d) Links typology

Figure 1.8: Manufacturing trade network size over time

Over time, the indegree (and so the outdegree) centrality has increased (see Figure 1.9a). This implies that each country has started importing from and exporting to more and more countries. The average degree centrality, i.e., the average number of distinct trade partners each has, increased asymptotically from 79 in 1993 to 118 in 2020. Moreover, evidence shows that the interquartile range has decreased over time, signalling a drop in the variance across countries. When normalising the indegree centrality by the maximum number of potential trade partners, evidence shows that the network was almost fully connected in 2020, i.e., each country was linked with almost all the other countries (see Figure 1.9b). While in 1993, the average normalised indegree centrality was 51%, it raised up to 77% in 2020. However, it is worth noting that while all countries are exporting to at least one country, not all countries are also importing from at least one country. Not only the average number of trade relations per country has increased, but also its average value has increased over time (see Figure 1.9c and Figure 1.9d). The average value of manufactured goods each

country exported equalled roughly USD 18 thousand in 1993, and it raised up to USD 63 thousand in 2020.



(a) Out-degree centrality

(b) Normalised out-degree centrality

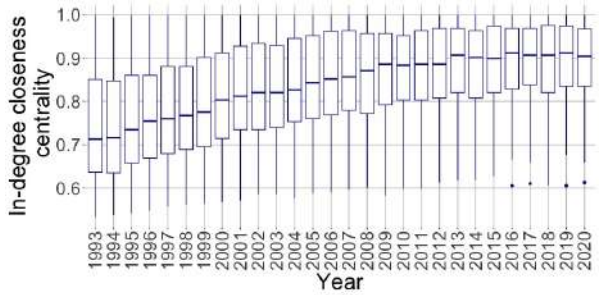
(c) Out-strength centrality

(d) Normalised out-strength centrality

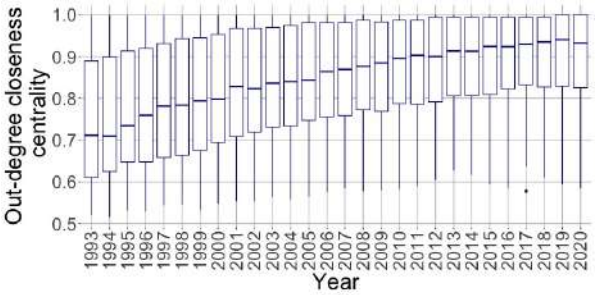
Figure 1.9: Manufacturing trade network: degree centrality over time

As a consequence of the fact that each country has started trading with almost all the other countries, the average in-closeness centrality has increased from 0.74 in 1993 to 0.89 in 2020. Likewise, over the same time period, the out-closeness centrality has also increased from 0.75 to 0.90. This confirms that countries have strengthened their trade relationships and started trading directly with almost all the other countries so that in 2020, the overall World Trade Network is almost fully connected. Each country is near to the others and trades with them directly without relying on many intermediary countries. The average out-closeness centrality is slightly higher than the average in-closeness centrality in each year, highlighting that, on average, countries are, to some extent, closer to their trade partners as exporters than they are as importers. Interestingly, a different pattern is observed when considering the weighted in-closeness and weighted out-closeness centrality. On the one hand, the average weighted in-degree closeness centrality has increased between 1993 and the early

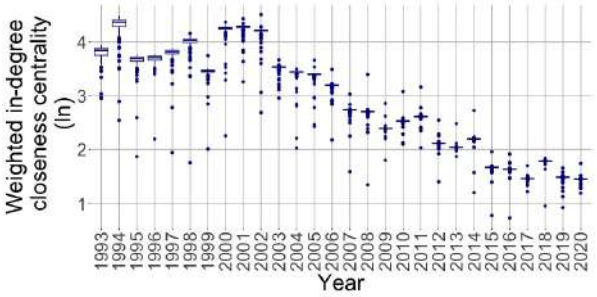
2000s, and then it has started steadily decreasing. On the other hand, the weighted out-degree closeness centrality remained stable between 1993 and 2000, when it suddenly increased and then fluctuated until 2020. This implies that the average number of steps each country is away from the rest of the world, measured in terms of average bilateral trade flows, has followed different patterns.



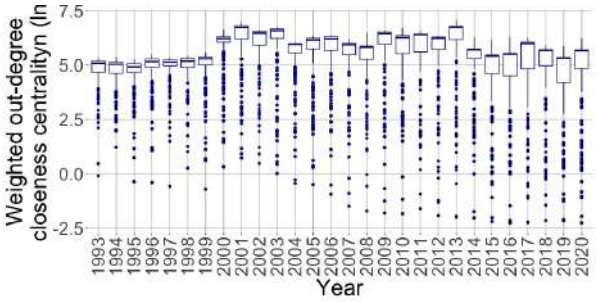
(a) In-closeness centrality



(b) Out-closeness centrality



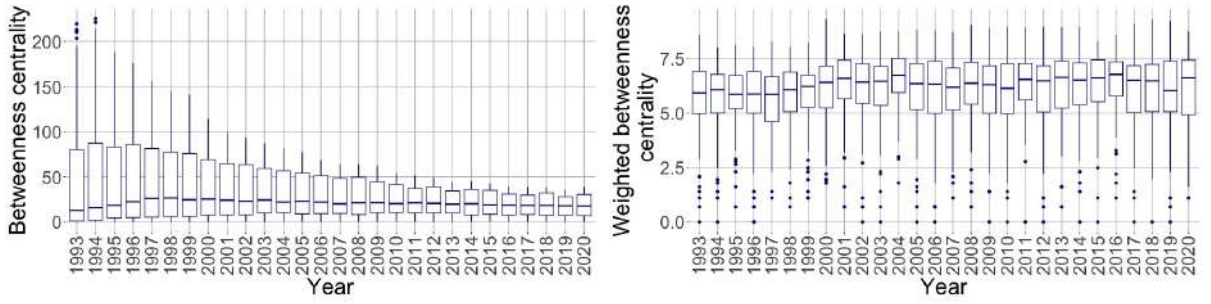
(c) Weighted in-closeness centrality



(d) Weighted out-closeness centrality

Figure 1.10: Manufacturing trade network: closeness centrality over time

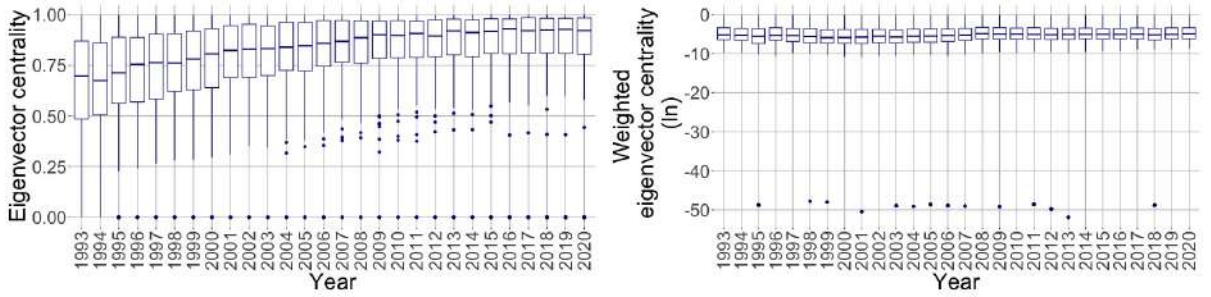
Moreover, the average betweenness centrality has steadily declined over time. As shown in Figure 1.11a, the average betweenness centrality has dropped from 49 in 1993 to 18 in 2020. The decline in the betweenness centrality implies that the increase in the number of trade linkages has affected almost all countries, and this has reduced the average network distance between countries and the role of hubs in the network. In other words, since the network has become more and more interconnected, the role the key countries play as a bridge between other countries has loosened.



(a) Betweenness centrality (b) Weighted betweenness centrality

Figure 1.11: Manufacturing trade network: betweenness centrality over time

Finally, the average eigenvector centrality has slightly increased between 1993 and 2020. Actually, since countries are more and more trading with new trade partners, it results that overall each country is directly connected with the key nodes in the network. In other words, the share of countries that are connected with many other countries, which are, in turn, connected to many others, has increased over time.



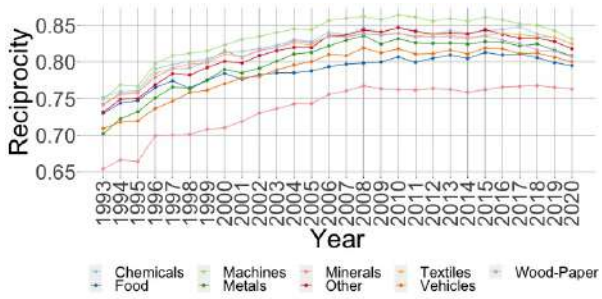
(a) Eigenvector centrality (b) Weighted eigenvector centrality

Figure 1.12: Manufacturing trade network: eigenvector centrality over time

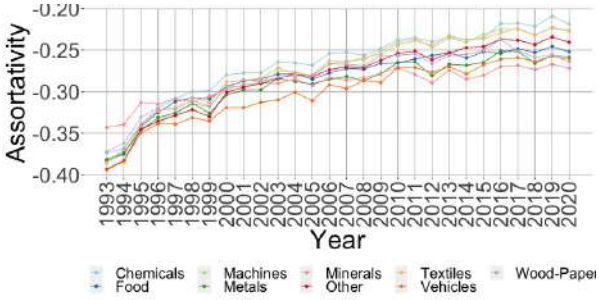
1.6.2 The world sectoral trade networks

At the sectoral level, the main findings observed at the overall World Trade Network level hold, i.e., the interconnectedness has steadily increased over time. Nevertheless, there is heterogeneity across sectors. More specifically, the nine sectors under analysis, namely Chemicals, Foods, Machinery, Metals, Minerals, Textiles, Vehicles, Wood-paper, and Other, follow the same pattern but at different levels. Since 1993, the reciprocity coefficient has increased for all sectors. However, it is noted that the reciprocity characterising the minerals sector is below the other sectors because, among the

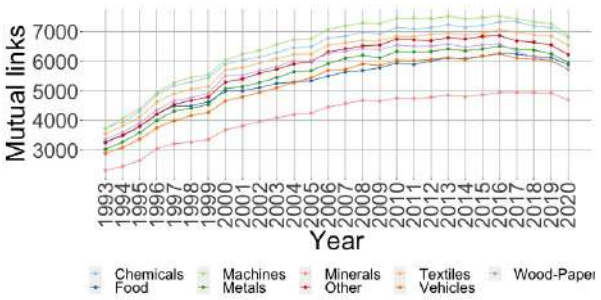
others, the number of exporting countries is bounded by their endowments. In other words, not all countries are in a position to export minerals because they may not have the resources. Conversely, the Machinery sector is the sectoral trade network characterised by the highest symmetry, most countries both export to and import from most of their trade partners. As observed for the overall World Trade Network, after the financial crisis in 2008, the reciprocity coefficient has slightly decreased since the increase in trade linkages has not been proportionally counterbalanced by an increase in the number of mutual links.



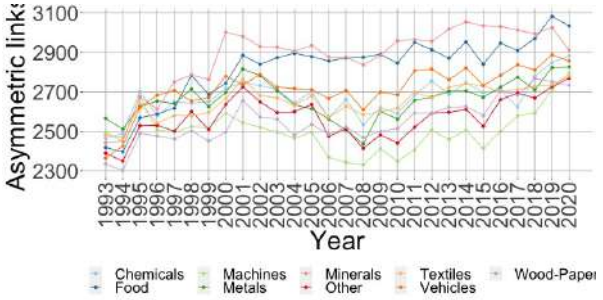
(a) Reciprocity



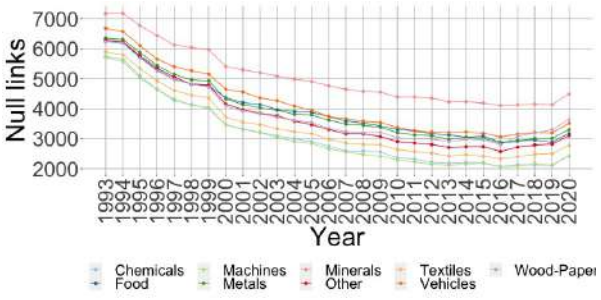
(b) Assortativity



(c) Mutual links



(d) Asymmetric links



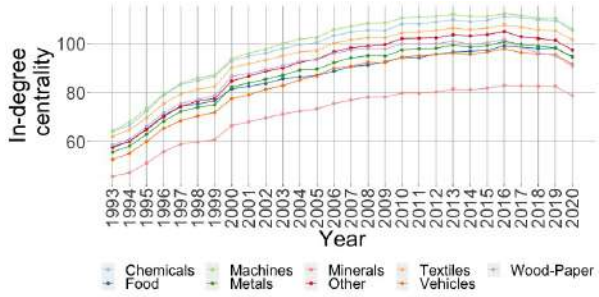
(e) Null links

Figure 1.13: Manufacturing trade network size over time by sector

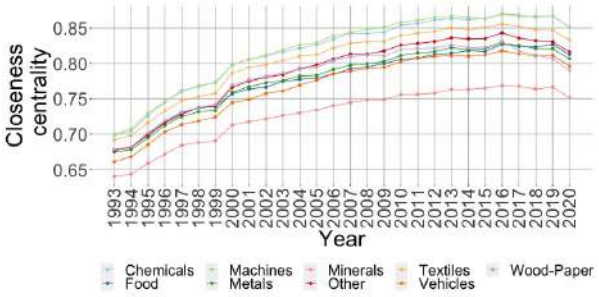
As far as the centrality indices are concerned, evidence shows that across all sectors, the in-degree, closeness, and eigenvector centrality has increased while the betweenness centrality has decreased (see Figure 1.14). These findings suggest that, as observed at the overall World Trade Network level, countries have started importing from and exporting to an increasing number of countries which has reduced the overall distance among them. Actually, countries are generally more and more directly linked through trade relationships, one with the other in all sectors.

Although the increased interconnectedness characterises all sectors under analysis, the horizontal analysis of the main centrality indices among the nine sectors highlights some sectoral specificities. Evidence shows that the Chemicals and the Machine sectors are the most interconnected ones. Over the entire time horizon, these two sectors display the highest values of in-degree, closeness, and eigenvector centrality and the lowest values of betweenness centrality. The high level of interconnectedness characterising the Chemicals and the Machine sector is due, among the others, to their underlying global value chain.

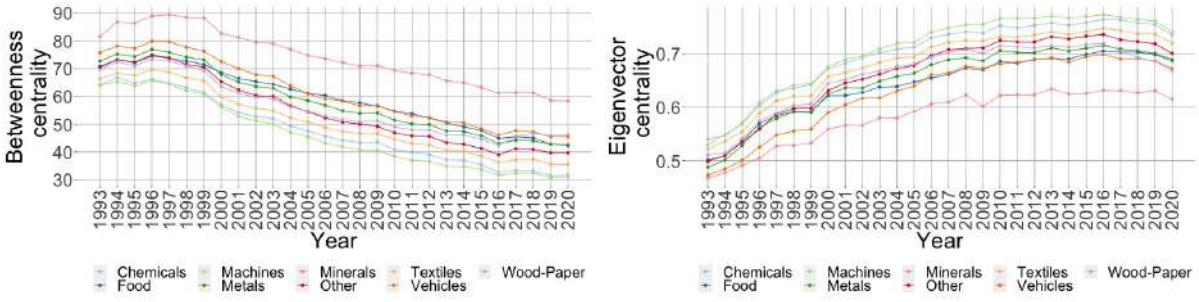
On the contrary, the Minerals sector displays the lowest values of in-degree, closeness, and eigenvector centrality and the highest values of betweenness centrality. The relative low interconnectedness of the Minerals sector is due to the fact that, as explained above the number of exporting countries is somehow limited by the natural endowments each country has.



(a) Sectoral indegree centrality



(b) Sectoral closeness centrality



(c) Sectoral betweenness centrality

(d) Sectoral eigenvector centrality

Figure 1.14: Manufacturing trade network: main centrality indices over time by sector

1.7 Conclusions

This chapter aimed to analyse the manufacturing World Trade Network employing a network analysis to investigate the level of interconnectedness. While international trade data are usually analysed through gravity models to investigate either the determinants of trade or the direct and indirect impact of trade and non-trade policies, and other shocks such as natural disasters on bilateral trade and the countries' welfare, the network analysis allows to investigate the structure of the World Trade Network and its features. Network analysis entails the estimation of a set of centrality measures to study the trade relationships among and between countries and assess the overall structure of the World Trade Network, grasping insights about trade patterns. Indeed, by performing the analysis over multiple periods, it is also possible to observe the evolution of the World Trade Network and so to depict whether any structural change has taken place.

In recent years an increasing number of authors have analysed the world trade data by means of network analysis (e.g., Barigozzi et al. (2010); De Benedictis et al. (2014); De Benedictis and Tajoli (2010); Fagiolo et al. (2008); Tajoli et al. (2021), and so on) and the present chapter aims to contribute to this existing strand of the literature. To this end, it analyses the evolution of the overall manufacturing trade network over a wider time horizon, i.e., 1993-2020, and assesses whether different patterns are characterising the manufacturing sub-sectors. The centrality measures used to assess the World Trade Network are the degree centrality, the closeness centrality, the betweenness centrality, the eigenvector centrality, the reci-

procity and the assortativity index. Moreover, to exploit the availability of data on domestic trade allowing to estimate the gross manufacturing production, the network analysis is complemented by descriptive analysis on the evolution of manufacturing production and trade at the geographical and sectoral level.

Since the beginning of the 1960s, the value and the volume of manufactured goods that have been produced and traded worldwide have increased exponentially. The gross manufacturing production increased from USD 1.2 trillion in 1966 to USD 43.0 trillion in 2020. Interestingly, the share of international exports over the total gross production steadily increased until 2020, when the financial crisis hit the world economy. The reason underlying the increase in international exports is twofold. On the one hand, since the gross production value increased in all world regions, countries have increased their exports. On the other hand, the number of countries exporting manufactured goods has increased, i.e., over time, countries have started exporting manufactured goods for the first time. As a consequence of the fact that an increased number of countries are involved in the World Trade Network both as exporters and importers led to a more dense network. This finding aligns with the existing literature that highlights the fact that the World Trade Network has become more and more interconnected (Barigozzi et al., 2010; Bhattacharya et al., 2007; De Benedictis et al., 2014; Fagiolo, 2010; Hoang et al., 2023*a*; Kali and Reyes, 2007; Serrano and Boguná, 2003).

In 2020, almost all countries were directly linked one with another by a trade relationship. As highlighted by the average in-degree (and so out-degree) centrality, each country has started importing from and exporting to an increasing number of countries, making the network almost fully connected. Likely, countries have strategically decided to increase the number of their trading partners to diversify their exports and so avoid depending on concentrated trading relationships. This phenomenon affected both the imports and the exports, i.e., most countries both export to and import from most of their trade partners. In choosing the countries to trade with, evidence shows that while at the beginning, countries with many trade linkages are usually trading with poorly connected countries, and vice versa, over time, countries have usually been more and more keen to trade with countries that were similar in terms of relevance within the

network. As a matter of fact, whilst in 1993, the World Trade Network was relatively highly disassortative, as also noted by Fagiolo (2010); Kali and Reyes (2007), over time, such a disassortative pattern has gradually decreased. The increased number of trade relationships has reduced the average network distance between and led to a situation where each country is near to the others and trades with them directly without relying on many intermediary countries.

At the sectoral level, evidence shows that the World Trade Network of the nine sectors under analysis, namely Chemicals, Food, Machine, Metal, Textile, Mineral, Vehicle, Wood Paper and Other, have generally followed the same patterns as the overall network. Indeed, all the sectoral World Trade Networks have become more and more interconnected even though at different levels. Actually, while the Machinery and the Chemicals sectors are the most interconnected ones, the Minerals sector lags behind in terms of interconnectedness. Such heterogeneity across sectors is mainly due to the peculiarities of each sector, especially their global value chains. The relative low interconnectedness of the Minerals sectors makes this sector more vulnerable as compared to the others to potential shocks. This overall finding aligns with Cingolani et al. (2018); De Benedictis and Tajoli (2010) that found that the density and the structure of sectoral trade networks depend on the type of commodity, their international organisation of production, and their demand and supply feature, implying that homogeneous and less complex industries are associated with less dense trade network, whereas more complex industries with denser and more complex networks (De Benedictis and Tajoli, 2010; Piccardi and Tajoli, 2018).

Chapter 2

The Role of the Trade Network in Shaping the Multilateral Resistance Terms

2.1 Introduction

Over the last 60 years, the gravity model has been the workhorse model to study international trade flows. Building on Newton's law of universal gravitation, the trade gravity equation reveals that trade flows (i.e. the gravitational force) between two countries (two objects) are directly proportional to their sizes (masses) and inversely proportional to the trade frictions (the square of distance) between them. In other words, the larger and the closer two countries are, the more they will trade. Since its early stage of development, the trade gravity equation proved not only to be very intuitive and flexible (i.e. adaptable to study different settings), but also able to predict bilateral trade flows very well. Since its first application in the field of international in 1962, the gravity model has evolved and improved. Overall, the gravity model has been widely used to infer the effects of institutions such as customs unions, exchange rate mechanisms, ethnic ties, linguistic identity and international borders on trade flows (Anderson and van Wincoop, 2003).

Although very powerful in analysing the determinants of trade flows and predicting future bilateral trade flows, the gravity model does not explicitly account for the interdependencies existing among countries Ward et al. (2013). All potential dependencies, such as the countries' relationships

with third countries, are summarised in the so-called multilateral resistance terms (MRTs). MRTs were firstly defined theoretically by Anderson and van Wincoop (2003), who decomposed the trade resistance into three components: (i) the bilateral trade barrier between country i and country j, (ii) i's resistance to trade with all country, and (iii) j's resistance to trade with all country. Generally speaking, MRTs can be interpreted as general equilibrium trade costs that consistently aggregate the bilateral trade costs and decompose their incidence on the producers and the consumers in each country, as if they buy from and sell to a single world market. From an empirical point of view, Feenstra (2004) recommends estimating the structural gravity developed by (Anderson and van Wincoop, 2003) using importer and exporter fixed effects to account for the country-specific multilateral resistance term. The main advantage of using fixed effect specifications lies in the fact that they represent a very simple solution to testing a gravity equation: they allow using OLS econometrics and do not require imposing ad-hoc structural assumptions on the underlying model.

As a consequence, MRTs are well-define from a theoretical point of view, but from an estimation perspective, they constitute a black box. They capture all determinants of trade besides the variables commonly included in the gravity equation, such as GDP, distance, colony, language, RTAs, and so on. Hence, the issue of whether countries' interdependencies are relevant in shaping trade flows is formally omitted in the estimation of gravity models and potentially captured by MRTs. More generally, any relationship in the World Trade Network that might also affect trade flows is included in the MRTs. This implies that when estimating the gravity equation, it is not possible to draw any conclusion on the extent to which network relationships have an impact on trade flows and, if so, the magnitude since it is incorporated in the MRTs. De Benedictis and Tajoli (2011) highlights that network analysis would enable addressing the issue of multilateral effects, i.e., interdependencies, on bilateral trade flows.

Acknowledging the importance of studying the structure of the World Trade Network, more and more scholars have analysed it by means of network analysis to investigate how network interdependencies shape trade patterns. However, the existing literature has, by and large, focused on the identification of trade patterns, disregarding the extent to which trade depends on such patterns. As an illustrative example, De Benedictis et al.

(2014); De Benedictis and Tajoli (2011); Fagiolo et al. (2010); Serrano and Boguná (2003) study the World Trade Network by identifying typical network features of world trade such as density, assortativity, and other typical centrality measures (see Section 1.3 for further details on the application of network analysis to trade data). These measures have then been correlated with trade policies and other aspects to investigate the impact of the latter on the network formation. Among the others, De Benedictis and Tajoli (2011) found that the WTO has effectively increased the number of countries that are trading together, and so the density of the World Trade Network. De Benedictis et al. (2014) found that the degree centrality of a country, which reflects how well-connected the country is in the network, is correlated with trade surplus and deficit. Hence, based on recent studies, much has been studied concerning the structure of the World Trade Network and its determinants, but the linkage between MRTs and the network structure is still under-investigated.

Against this background, the present chapter aims to contribute to the literature on international trade by studying to what extent the structure of the network and countries' interdependencies have an impact on bilateral trade flows. To this end, the methodology applied combines the estimation of the gravity equation together with the network analysis. Using sectoral data at the bilateral trade level between 1993 and 2020, we first calculate the MRTs by estimating the gravity equation and describe their evolution over time in the various sectors under analysis. Interestingly, we observe that similar patterns characterise the sectors, but the top countries in terms of inward and outward multilateral resistance vary over time and across sectors, reflecting the dynamics in the underlying global value chains. Then, we perform a correlation analysis between the MRTs and a set of network indices, namely the (weighted) in-degree, (weighted) out-degree, (weighted) in-closeness, (weighted) out-closeness, (weighted) betweenness, and (weighted) eigenvector centrality. The evidence shows that these variables are highly correlated with one another, and the sign and magnitude of the correlation depend on existing trade policies and trade barriers.

The structure of the present chapter is the following: Section 2.2 briefly summarises the existing literature on the gravity model; Section 2.3 describes the methodological framework applied; Section 2.4 describes the

data used; Section 2.5 discusses the results obtained; Section 2.6 concludes.

2.2 Literature Review

The early empirical gravity models build on the analogy with Newton's Universal Law of Gravitation. According to Newton's Law, the force of attraction between two bodies is proportional to the product of their masses and inversely proportional to their distance squared.[1] Likewise, international trade economists pointed out that bilateral trade flows between country i and country j could be explained by the product of the economic size of the two countries, proxied by the GDP ($GDP_i * GDP_j$), divided by the distance between the two countries ($DIST_{ij}$). In other words, bilateral trade flows are proportional to the economic size of the trading partners and inversely related to their distance. Building on this intuition, starting from Tinbergen (1962), bilateral trade flows have been historically estimated using minor variations of the following equation:

$$X_{ij} = \beta_0 (GDP_i)^{\beta_1} (GDP_j)^{\beta_2} (DIST_{ij})^{\beta_3} \epsilon_{ij} \tag{2.1}$$

where X_{ij} is the value (in current prices) of trade flows from country i (exporter) to country j (importer), $GDP_i(GDP_j)$ is the level of nominal gross domestic product in the country $i(j)$, $DIST_{ij}$ is the bilateral physical distance between the economic centres of countries i and j, and ϵ_{ij} is assumed to be a log-normally distributed error term. Given the multiplicative structure of the equation (2.1) and the assumption on the log-normal distribution of the error term, equation (2.1) can be transformed into its linear-log specification, namely:

$$lnX_{ij} = ln\beta_0 + \beta_1 lnGDP_i + \beta_2 lnGDP_j + \beta_3 lnDIST_{ij} + ln\epsilon_{ij} \tag{2.2}$$

The first application of the gravity equation to study international trade flows dates back to Tinbergen (1962), who investigated the impact of early

[1] The Newton's law is $F_{ij} = G\frac{M_i M_j}{D_{ij}^2}$, where F_{ij} is the gravitational force between objects i and j, G is the gravitational constant in physics, M_i is the mass of object i, M_j is the mass of object j, and D_{ij} is the bilateral distance between objects i and j.

European integration on bilateral trade flows. More specifically, he used the gravity equation "*to determine the normal or standard pattern of international trade that would prevail in the absence of discriminatory trade impediments*" (Tinbergen, 1962). To do so, Tinbergen (1962) augmented equation (2.2) as follows:

$$\begin{aligned} lnX_{ij} = ln\beta_0 + \beta_1 lnGDP_i + \beta_2 lnGDP_j + \beta_3 lnDIST_{ij} + \\ \beta_4 ADJ_{ij} + \beta_5 EIA1_{ij} + \beta_6 EIA2_{ij} + ln\epsilon_{ij} \end{aligned} \tag{2.3}$$

where $ADJ_{ij}, EIA1_{ij}, EIA2_{ij}$ are three dummy variables with values equal to 1 if the two countries, i and j, share, respectively, a common land border (ADJ_{ij}), are members of the British Commonwealth ($EIA1_{ij}$), and are members of the BENELUX free trade agreements ($EIA2_{ij}$), and zero otherwise.

Since the first estimation of the gravity equation by Tinbergen (1962), other scholars (Linnemann, 1966; Pöyhönen, 1963; Pulliainen, 1963) applied the gravity equation to explain aggregate gross bilateral trade flows for cross-sections using OLS estimators (Bergstrand and Egger, 2013). However, these applications were not formally linked to a rigorous theoretical framework until 1979 (Bergstrand, 1985; De Benedictis and Salvatici, 2011; De Benedictis and Taglioni, 2011; Yotov, 2022, 2024). Indeed, Ricardo's theory of comparative advantage and the Heckscher-Ohlin model proved not to be adequate to analyse aggregate gross bilateral trade flows (Bergstrand and Egger, 2013). Linnemann stated that *"comparative advantages are not an autonomous or exogenous variable but rather an endogenous factor. They hardly contribute, therefore, to an understanding of the size of trade flows or the potential magnitude of potential foreign supply"*. Therefore, Linnemann (1966) extended Tinbergen's analysis of the gravity equation using the Walrasian model as a benchmark (De Benedictis and Salvatici, 2011; De Benedictis and Taglioni, 2011). In its survey of the gravity equation, Bergstrand and Egger (2013) highlights three main limitations of Linnemann's model: (*i*) the model does not explain the multiplicative form of the gravity equation; (*ii*) the *"general world price level"* assumption; (*iii*) the absence of a microeconomic foundation for including countries' GDP as a proxy of the economic size. Nevertheless, Bergstrand

and Egger (2013) acknowledged that Linnemann (1966) has widely contributed to the development of the gravity model. Indeed, Linnemann (1966) not only led other researchers to focus on the topic but also pointed out important issues that have then been solved by the literature, such as the fact that half of world trade flows are measured as zeros as well as the potential effects of heteroskedasticity (Bergstrand and Egger, 2013).

As mentioned above, despite the intuitive idea beyond the gravity model of trade, the underlying gravity equation has been applied and estimated without having a theoretical background up until 1979 (Baier and Standaert, 2020; Bergstrand and Egger, 2013; Larch and Yotov, 2016; Yotov, 2022, 2024), when Anderson (1979) built the foundation of the Gravity Theory of Trade. Generally speaking, the resulting gravity model relies on two conditions: *i)* the spatial allocation of the expenditure for the importer; *ii)* the market-clearing condition for the exporter. Another important contribution to the development of the theory of trade was made by Bergstrand (1985), who focused on the role of prices in the gravity equation. Building on Anderson (1979), Bergstrand (1985) included a "nested" CES utility function in an endowment economy. By doing so, Bergstrand (1985) derived an import demand function for goods from i to j, allowing the elasticity of substitution among imported goods to be potentially different from that between imported and domestic goods, (i.e., two-stage allocation process). This implies that preferences towards domestic and international goods might differ and there might be countries that prefer to consume domestic goods rather than international goods, e.g., a protectionistic approach. Additionally, motivated by the assumption that goods might be tailored to foreign markets, Bergstrand (1985) assumed that the output produced by the exporter is not costlessly substituted among foreign markets. While in Anderson (1979), goods are costlessly substitutable across destination markets, the model proposed by Bergstrand (1985) builds on the assumption that there are costs associated with distributing the products to each potential market, meaning that the output to one destination cannot be costlessly transformed into output for a different destination. In other words, redistributing the exports among the countries comes with a cost for the exporter.

Up until 2003, most empirical gravity applications cited the models of Anderson (1979) and Bergstrand (1985) as theoretical foundations for the

gravity equation. However, in these models, the role of multilateral prices was either ignored or, if not completely ignored, they were proxied by readily-available price indexes (Bergstrand and Egger, 2013). This made the estimates on the impact of trade borders on trade by and large unreliable because of, among other things, omitted variables bias (i.e. the multilateral resistance term). As an illustrative example, by using an *ad hoc* remoteness index to proxy multilateral prices, McCallum (1995) estimated that, due to the national border between Canada and the USA, trade between provinces in Canada was 22 times (2100%) higher than cross-border trade between Canadian provinces and US states. In the early 2000s, the contributions of Eaton and Kortum (2002) and Anderson and van Wincoop (2003) were such that the gravity model has become the workhorse model in trade. Indeed, building on their contributions, the gravity model evolved from the structural gravity equation to a theoretical gravity system that includes the structural gravity equation and can be used to quantify general equilibrium trade diversion effects and first-order (nominal) general equilibrium size effects.

On the one hand, Anderson and van Wincoop (2003) revised the structural gravity model to solve the so-called "border puzzle" and so to explain the results of McCallum (1995). Specifically, Anderson and van Wincoop (2003) model, also known as the Armington model, builds on the intuition that after having controlled for the size of each pair of countries, the lower the bilateral trade barrier as compared to the trade barrier with all other countries, the higher the bilateral trade. In other words, a country will trade more with countries with whom the bilateral trade barriers are lower as compared to the other countries. Building on this intuition, Anderson and van Wincoop (2003) defined theoretically the multilateral resistance term. While McCallum (1995) did not include any multilateral resistance term in its model, other scholars before Anderson and van Wincoop (2003) had included a sort of multilateral resistance term proxied by an atheoretical remoteness index related to distance from all bilateral partners. Anderson and van Wincoop (2003) decompose the trade resistance into three components: *(i)* the bilateral trade barrier between country i and country j, *(ii)* i's resistance to trade with all countries, and *(iii)* j's resistance to trade with all countries. Anderson and van Wincoop (2003) referred to the consumer price index as multilateral trade resistance as it

depends positively on trade barriers with all trading partners.

On the other hand, following Ricardo's Law of Comparative Advantage, Eaton and Kortum (2002) focused more on the production side. In contrast to the model developed by Anderson (1979), Eaton and Kortum (2002) built upon the Dornbusch et al. (1977) model of Ricardian trade with a continuum of goods that are homogeneous across countries. In contrast to the CES monopolistic competition model developed by Krugman (1979, 1980), there is perfect competition. Countries are assumed to have differential access to technology, so that efficiency varies across commodities and countries, treating the cost of a bundle of inputs identically across commodities in each country. Eaton and Kortum (2002) used the model to compute several general equilibrium statistics. Despite the CES structure for the intermediate goods demand, in equilibrium, the share of goods demanded from i by country j is determined only on the supply side.

Starting from 2013, authors have moved forward and have integrated the structural gravity equation into production models from different fields (Yotov, 2022, 2024). As an illustrative example, Caliendo and Parro (2015) nested the gravity model in more complex models with input-output linkages. They combine the multi-country, multi-sector Ricardian model with the interactions across tradable and non-tradable sectors observed in the input-output (I–O) tables. Specifically, they built on the Eaton and Kortum (2002) model to develop a model for tariff policy evaluation that allows to decompose and quantify the different roles that intermediate goods and sectoral linkages have as amplifiers of the gains from tariff reductions. While Caliendo and Parro (2015) took into account the potential intersectoral dependencies in their model, but for few exceptions, no studies applying the gravity model have taken into account the interdependencies among countries and countries' role in the World Trade Network (Baier and Bergstrand, 2009; De Bruyne et al., 2013).

Such interdependency aspect is instead formally captured when employing network analyses. De Benedictis and Tajoli (2011) highlighted that network analysis would enable addressing the issue of multilateral effects of bilateral flow. More specifically, De Benedictis and Tajoli (2011) proposed introducing time-varying network indices in a gravity equation to estimate bilateral trade flows. The use of centrality measures that capture

the position of a country relative to all the others in the trade network and with respect to the entire world trading system would allow to consider the assumption of interdependence between bilateral trade flows appropriately and to investigate the extent to which a bilateral trade link between country i and country j can be affected by the links the two countries have with all the other partners. Overall, it can be easily expected that considering the expenditure function of an importing country i, given its economic size, there is an optimal overall amount of imports that its domestic demand can absorb. Thus, given its economic size, a large number of sources of imports (indegree) implies on average a lower amount of imports per source. Conversely, the relation between the number of destination countries (outdegree) and the average value of export depends on the technological interplay between the import of intermediate goods and the export of finite products (and vice versa). De Benedictis and Tajoli (2010) noted that such a relationship shall be positive for countries heavily involved in the international fragmentation of production, i.e., global value chains (GVCs), as well as for complex goods.

2.3 Methodology

The methodology employed in the present chapter aims to study the impact, if any, that the position a country occupies in the World Trade Network has on the multilateral resistance terms. To this end, the underlying empirical strategy is structured into three steps, namely: *(i)* estimation of the inward and outward multilateral resistance terms, *(ii)* calculation of network indices, *(iii)* correlation analysis between the estimated multilateral resistance terms and the network indices. Further details on each empirical step are provided in what follows.

2.3.1 Step 1: Estimation of the multilateral resistance terms

The first step entails the estimation of the multilateral resistance terms. To this end, the underlying theoretical model is the structural gravity model proposed by Anderson (1979) while the estimation strategy follows Yotov et al. (2016). Therefore, to estimate the inward and outward multilateral resistance terms for each country in each sector and each year, the structural gravity equation is estimated using the PPML estimator separately

for each sector and year.

More specifically, we estimate the structural gravity equation with importer and exporter fixed effects, as recommended by Feenstra (2004) and subsequent literature. Thus, in line with the recent literature, the empirical model takes the following form:

$$X_{ij} = exp(T_{ij}\beta + \pi_i + \chi_j) + \epsilon_{ij} \tag{2.4}$$

where X_{ij} denotes the trade flows from country i to country j, T_{ij} is the vector of trade cost variables such as the language, β is a vector of coefficients, ϵ_{ij} is an error term, π_i is an exporter fixed effect accounting for outward multilateral resistance and outputs, and χ_j is an importer fixed effect accounting for inward multilateral resistance and expenditures. To avoid perfect collinearity with the constant term, we drop one exporter fixed effect and one importer fixed effect, namely the ones referring to the United States of America.

As demonstrated by Fally (2015), the PPML estimates of the fixed effects from equation 2.4 are consistent with the structural gravity terms, even when trade flows do not follow a Poisson distribution. For the fixed effects to be consistent with the theoretical framework, the only assumption that has to hold is that the conditional mean of trade flows is positive.[2] Therefore, the outward multilateral resistance terms and the inward multilateral resistance terms can be calculated starting from the estimated fixed effects as follows

$$\widehat{\Pi_i^{1-\sigma}} = E_0 Y_i exp(-\widehat{\pi_i}) \tag{2.5}$$

$$\widehat{P_j^{1-\sigma}} = \frac{E_j}{E_0} exp(-\widehat{\chi_j}) \tag{2.6}$$

where $\widehat{\pi_i}$ and $\widehat{\chi_j}$ are the fixed effects obtained when estimating equation 2.4, and Y_i, E_j and E_0 are given in the data.

[2]Notice that the conditional mean of trade flows does not need to be strictly positive because the PPML estimator allows for zero trade flows.

2.3.2 Step 2: Computation of the network indices

Once the outward and inward multilateral resistance terms are recovered, the second step of the methodology entails computing network indices. More specifically, we compute various centrality measures at the node level that capture the position and relevance of each country in the World Trade Network. As for the multilateral resistance terms, centrality measures are calculated separately for each sector and each year. Among the several existing centrality measures, we focus on degree centrality, closeness centrality, betweenness centrality, and eigenvector centrality.

Degree centrality. This is a measure of the local centrality a country has in the World Trade Network. It measures the connectivity of a node in the network. Depending on whether the underlying trade network is binary or weighted, the degree centrality counts the number of trade relationships each country has with the rest of the world or sums the total value of trade flows involving the country, respectively. As described in Chapter 1, the degree centrality can be further distinguished into (weighted) in-degree centrality and (weighted) out-degree centrality. The greater the degree centrality index, the more connected the country is within the World Trade Network. See Section 1.2.3 for details.

Closeness centrality. This is a measure of the global centrality a country has in the World Trade Network. It measures the average geodesic distance from one country to another country, i.e., how close a country is with respect to the rest of the world in terms of topological distance. As described in Chapter 1, the closeness centrality can be further distinguished into (weighted) in-closeness centrality and (weighted) out-closeness centrality. The greater the closeness centrality index, the more a country is connected with the rest of the world through direct trade relationships. See Section 1.2.3 for details.

Betweenness centrality. This is another measure of the global centrality a country has in the World Trade Network. It capture the role a country has in the World Trade Network as a hub (or bridge), by counting the number of shortest paths among all pairs of countries that pass through that given country. A high value of betweenness centrality implies that the country may have a significant influence within the World Trade Network because most trade relationships pass over itself. Thus, if

a country with a high betweenness centrality is removed from the World Trade Network (e.g., it stops exporting and importing), large disruptions are likely to affect all the other countries. See Section 1.2.3 for details.

Eigenvector centrality. This is another measure of the global centrality a country has in the World Trade Network. It captures to what extent a country has trade relationships with countries that are crucial in the World Trade Network. Hence, the eigenvector centrality of a country depends on the eigenvector centrality of the countries it trades with, and it is not dependent on the number of trade partners or the size of its trade flows. In other words, a country with few trade relationships may still be relevant in the World Trade Network as long as the few countries it trades with play a key role. See Section 1.2.3 for details.

2.3.3 Step 3: Correlation analysis

The final step of the analyses presented in this chapter entails performing a correlation analysis between the outward multilateral resistance terms and the various network indices, as well as between the inward multilateral resistance terms and the network indices. The aim of the correlation analysis between the above-mentioned indices is to understand whether and to what extent countries that play a key role in the World Trade Network are, on average, characterised by larger (positive correlation) or smaller (negative correlation) multilateral resistance terms. In other words, this analysis explores the extent to which the interdependences among countries in the World Trade Network play a role in shaping countries' multilateral resistance terms.

To this end, we use the Pearson Correlation coefficient that measures the linear dependence between two variables, X and Y, and determines the strength of the relationship. It is expressed as

$$r = \frac{\sum_{i=1}^{n}(x_i - \overline{x})(y_i - \overline{y})}{\sqrt{\sum_{i=1}^{n}(x_i - \overline{x})^2(y_i - \overline{y})^2}} \tag{2.7}$$

where $\overline{x}$ and $\overline{y}$ are the mean of the X and Y variables, respectively. By construction, the Pearson Correlation Coefficient (PCC) ranges between -1, meaning a strong negative correlation, and 1, meaning a strong positive

correlation.

In the present setting, X will be either the inward multilateral resistance term or the outward multilateral resistance term, and Y will be each of the centrality indexes described in Step 2. Since both the multilateral resistance terms and the network indices are calculated separately for each sector and year, the correlation analysis will also be carried out separately for each sector and year. This will allow observing the evolution of the relationship between each pair of variables over time and investigating whether it has strengthened or instead loosened over the last years. Moreover, the disaggregation at the sectoral level enables the depiction of different patterns characterising the various sectors under analysis.

2.4 Data

Data on trade are extracted from the 2024 version of The Trade and Production Database (TradeProd) recently developed by Mayer et al. (2023). The TradeProd database provides data on international and domestic trade flows for 165 countries and nine industrial sectors based on 2-digit ISIC (International Standard Industrial Classification, Rev. 3)[3] over the period 1966-2020. Building on the database developed by de Sousa et al. (2012), it combines trade data from UN COMTRADE with production data from UNIDO (INDSTAT). Domestic trade flows (or self-imports) are estimated as the difference between gross production and total exports. The database includes raw and extrapolated data as separate variables intended for, respectively, estimation purposes and counterfactual exercises using new quantitative trade models. Indeed, to minimise the number of missing values in domestic trade flows time series and so allow counterfactual exercises, Mayer et al. (2023) implemented an extrapolation process.[4]

As compared to other existing databases, including both international

[3]The nine industrial sectors covered are: Food (ISIC rev.3 15-16), Textiles (ISIC rev.3 17-19), Wood-Paper (ISIC rev.3 20-22), Chemicals (ISIC rev.3 23-25), Minerals (ISIC rev.3 26), Metals (ISIC rev.3 27-28), Machines (29-33), Vehicles (34-35), Other (36).

[4]The authors computed the gross output to total export ratio at the country-industry-year level and imputed missing domestic trade flows using the nearest in time observation adjusted for the average growth rate of $\frac{GDP_{it}}{Export_{it}}$ and $\frac{Prod_{it}}{Export_{it}}$ to account for globalization trends at the country and industry level. Additionally, they imputed the gross production multiplying the estimated output to total export ratio by the observed total exports for a given country-industry-year. Finally, using this approach, they extrapolated the gross production for the "Rest of the World (ROW)".

and domestic trade flows (Borchert et al., 2021, 2022), the TradeProd has the advantage of covering almost the entire total manufacturing output (e.g., 98% over the period 2010-2020). Although the level of disaggregation at the sectoral level is far below the one in Borchert et al. (2021, 2022), where 118 distinct manufacturing industries are covered, the TradeProd provides full-time series for a much larger number of countries. Indeed, the lower level of disaggregation is because, in the INDSTAT dataset, a non-negligible number of countries declare a combination of two or more 2-digit ISIC categories.

Although the TradeProd database provides data on trade from 1966 until 2020, the analyses presented in the present chapter cover a narrowed time horizon which spans from 1993 until 2020. The choice of a shorter time horizon than the one available reflects the willingness to have a balanced panel. Moreover, shortening the time horizon has two main practical advantages. First, it allows to extensively overcome the issues related to newborn and dissolved countries. Indeed, between 1966 and 1993, various structural geographic changes significantly modified the structure of the network in terms of existing countries.[5] Second, starting from 1993, it is observed that the number of missing trade linkages due to reporting issues is minimised. Actually, in the past, many countries (especially the smallest and poorest ones) were not reporting trade data, not because they were not trading but either because of the lack of official statistics or because they belonged to an isolated political bloc.

Moreover, for the analyses at the country or region level, out of the 165 countries covered by TradeProd, the analyses consider 154 distinct countries. The sample of countries included in the trade network resulted from different cleaning procedure stages. First, countries that disappeared before 1993 were excluded from the analysis. This step entails excluding 5 countries, namely Czechoslovakia, the aggregate Ethiopia and Eritrea, the aggregate Pakistan and Bangladesh, the URSS, and Yugoslavia. Second, the countries that came into being between 1993 and 2020 were consoli-

[5] Among the others, in 1971 there was the dismemberment of Pakistan which resulted in the creation of Bangladesh, in 1990, there was the official reunification of West and East Germany into Germany and of North and South Yemen into Yemen, in 1991 there was the dissolution of Czechoslovakia leading to the rise of the Check Republic and Slovakia, and dissolution of the Soviet Union after which 15 post-Soviet states emerged, in 1993 Eritrea got its independence from Ethiopia, between 1990 and 1992, the fall of the Yugoslavia led to the emergence of six distinct countries.

dated. This implied considering as a single country Serbia and Montenegro even after 2006 when Montenegro got independence from Serbia, Sudan and South Sudan even after the South Sudan secession in 2011. Moreover, Belgium and Luxembourg are also considered as a single country because international trade statistics were available for these two countries only as a single entity until 1999 when European Community rules required split information. Lastly, countries that did not report trade flows for any international partner in at least one year between 1993 and 2020 were excluded. This step implied excluding seven additional countries, namely Botswana, Namibia, the State of Palestine, and Eswatini, for which the trade data were available only starting from 2000, and the Republic of the Marshall Islands, for which data were unavailable in 1993.

To estimate the gravity equation, data on bilateral trade flows are complemented with data on bilateral trade costs, drawn from the CEPII gravity dataset developed by Conte et al. (2022). It includes data at the exporter-importer-year level from 1948 onwards for 252 countries. For each pair of countries, it includes a set of dummy variables indicating whether countries share a common official or primary language (*comlang_off)*, share a common colonizer post-1945 *(comcol)*, share common borders *(contig)*, have an RTA (*rta*), and so on. It also provides information on the bilateral distance between countries. The database provides various specifications of the bilateral distance between countries, from simple distances, e.g., the distance between the most populated cities (*dist*), the distance between the capital cities (*distcap*), to weighted distances, e.g., the distance is corrected for the geographic distribution of population within each country (*distw_harmonic* and *distw_arithmetic*), to distances computed by Julian Hinz (*distw_harmonic_jh* and *distw_arithmetic_jh*). Moreover, it includes data at the country and year level indicating, among the others, the GDP of the country in each year, whether the country is a GATT member (*gatt*), a WTO member (*wto*), an EU member (*eu*), and so on.

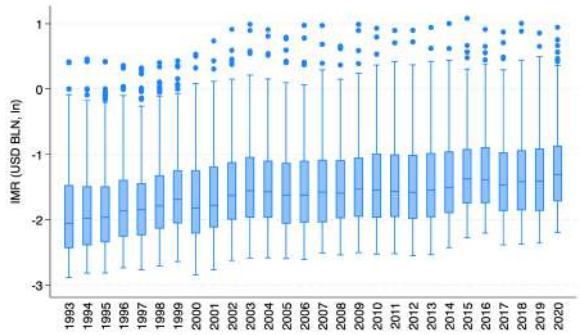
2.5 Results

This section describes the results obtained by applying the methodology outlined in section 2.3.

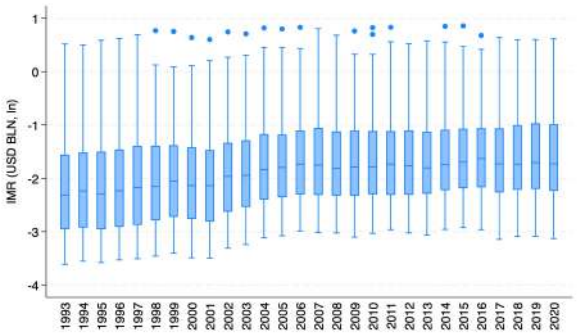
2.5.1 The multilateral resistance terms over time

Multilateral resistance terms capture the fact that a change in bilateral trade costs between any two trade partners will lead to direct and indirect effects for the involved countries but will also have an impact on third countries with possible feedback effects on the original liberalising partners (Yotov et al., 2016). Multilateral resistance terms are classified into inward multilateral resistances, capturing the importer's ease of market access, and outward multilateral resistances, representing the exporter's ease of market access. In other words, the inward multilateral resistances and outward multilateral resistances capture the resistance a country face to import and export, respectively. As discussed by Anderson and van Wincoop (2003), inward multilateral resistance terms can also be expressed as a weighted average of all bilateral trade costs that fall on the consumers in each country, whereas outward multilateral resistance terms as a weighted average aggregate of all bilateral trade costs for the producers of goods in each country.

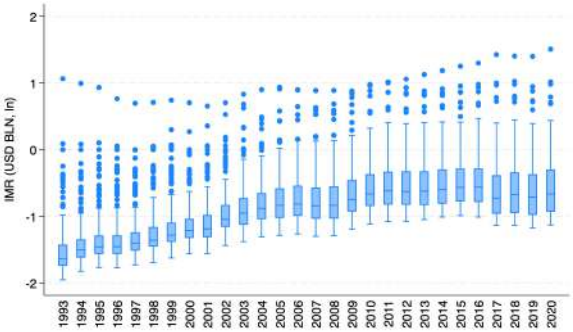
Figure 2.1 shows the evolution of inward multilateral resistances in the World Trade Network between 1993 and 2020 by sector. Evidence shows that, apart few exceptions, the average inward multilateral resistance has increased over time in all sectors under analysis. Such an increase in the average inward multilateral resistance term over time signals an increase in the weighted average bilateral trade costs. This may partly be due to the increased number of trade relationships, which has made all countries as they were more and more remote from each other. Whilst this is the case for almost all sectors under analysis, the average inward multilateral resistance characterising the Minerals sector has remained pretty stable over the entire time period. This is likely due to the peculiarities of the sector and its global value chain.



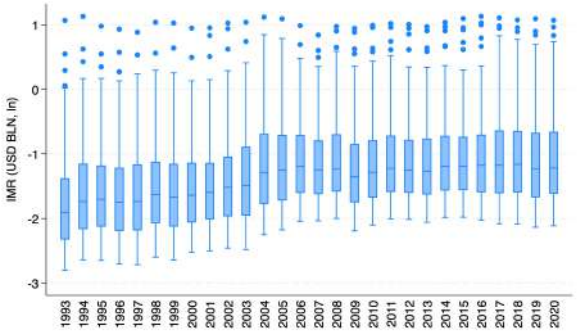
(a) IMR Chemicals



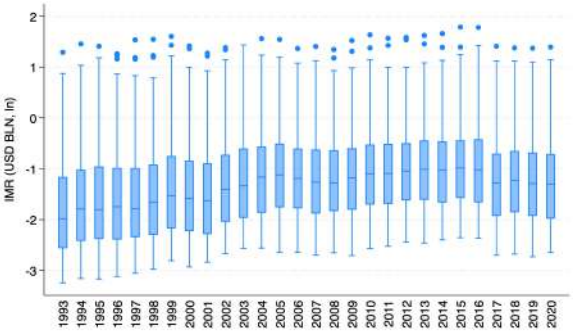
(b) IMR Food



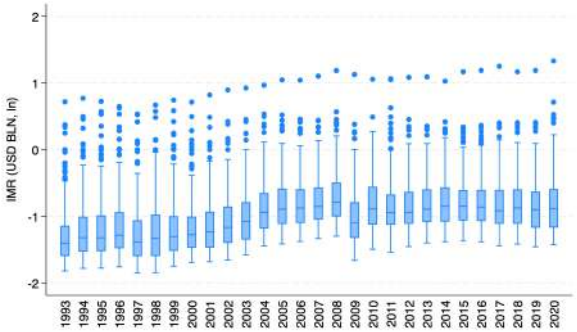
(c) IMR Machines



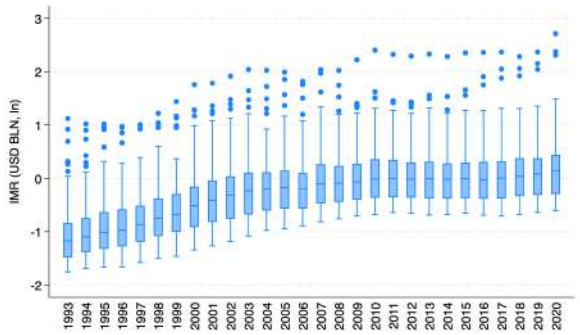
(d) IMR Metals



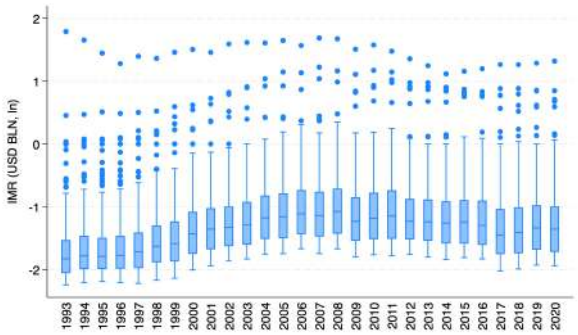
(e) IMR Minerals



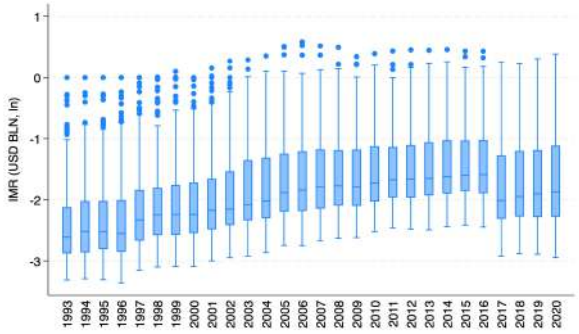
(f) IMR Other



(g) IMR Textiles



(h) IMR Vehicles



(i) IMR Wood-Paper

Figure 2.1: Evolution of inward multilateral resistances (IMR) over time

Overall, the countries whose inward multilateral resistance has increased the most between 1993 and 2020 are Vietnam and Bangladesh. However, focusing on the top three countries in terms of inward multilateral resistance at the sectoral level, evidence shows that whereas some countries rank in the first positions in almost all sectors and years (e.g., Japan, Germany, China), others have emerged in the latest years but only in few sectors (e.g., Vietnam and Bangladesh). As shown in Table 2.1, the top three country in Chemical sector have completely changed over time, while in 1993 they were Japan, Germany, and the USA, in 2020, they were Belgium, Singapore, and China. Likewise, in the Machines sector, apart from Japan, which has held its predominance, the other two top countries in 1993 were Germany and the USA, while in 2020, they were China and Korea. Another interesting case is the Textile sector, which has seen the emergence of Vietnam and Bangladesh in terms of inward multilateral resistance. Conversely, other sectors, such as the Food sector, are more stable

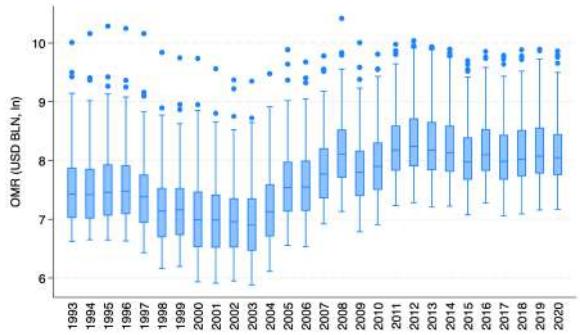
in terms of geographical ranking. A final remark concerns Italy that at the beginning of the period under analysis was characterised by relatively high inward multilateral resistance, but it has decreased after the 2008 financial crisis in favour of Asian countries.

Sector	**1993**	**2000**	**2007**	**2014**	**2020**
Chemicals	JPN	IRL	SGP	BEL	BEL
	DEU	JPN	IRL	SGP	SGP
	USA	DEU	DEU	DEU	CHN
Food	NLD	NLD	NLD	BEL	NLD
	USA	NZL	NZL	NLD	NZL
	NZL	USA	DEU	NZL	BRA
Machines	JPN	JPN	JPN	CHN	CHN
	DEU	BEL	KOR	KOR	JPN
	USA	USA	CHN	BEL	KOR
Metals	JPN	JPN	JPN	CHN	CHN
	DEU	DEU	DEU	BEL	BEL
	BEL	ITA	CHN	JPN	JPN
Minerals	JPN	IRQ	JPN	CHN	CHN
	ITA	JPN	CHN	JPN	JPN
	DEU	ITA	ITA	KOR	DEU
Other	JPN	CHN	CHN	CHN	CHN
	CHN	JPN	ITA	BEL	VNM
	ITA	ITA	JPN	DEU	JPN
Textiles	CHN	MAC	CHN	CHN	CHN
	KOR	CHN	MAC	BGD	BGD
	ITA	KOR	HKG	VNM	VNM
Vehicles	JPN	JPN	JPN	JPN	JPN
	DEU	DEU	KOR	DEU	DEU
	FRA	KOR	DEU	KOR	CHN
Wood-Paper	USA	USA	BEL	BEL	BEL
	JPN	DEU	DEU	CHN	DEU
	DEU	JPN	SGP	DEU	SGP

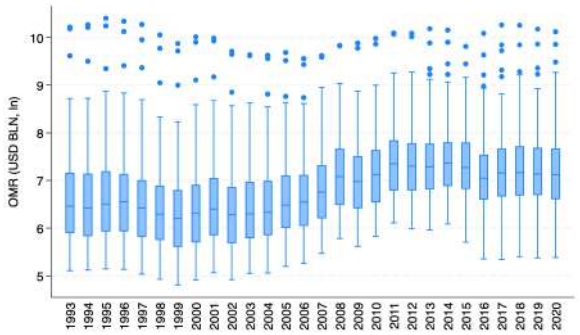
Table 2.1: Top 3 country in terms of inward multilateral resistances by sector and year

Figure 2.2 shows the evolution of outward multilateral resistance in the World Trade Network between 1993 and 2020 by sector. Evidence shows that the Machines sector is the one characterised by the highest average outward multilateral resistance in all years, which ranges over values far above the other sectors. In terms of evolution, different patterns emerge. On the one hand, the average outward multilateral resistance characteris-

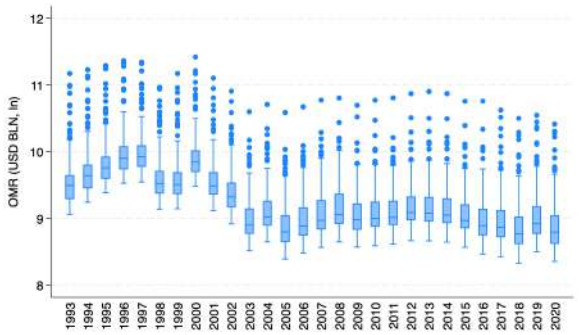
ing the Machines and the Textiles has gradually decreased over time. This implies that, on average, the exporters' access to the market in these sectors has become more and more complex, likely due to the presence of a multitude of trade partners in the market. Conversely, the average outward multilateral resistance characterising the Chemicals, Food, Metals, and Vehicles sectors has slowly increased over time, suggesting that exporters' access to the market in these sectors has improved. In between, the Minerals and Wood-Paper sectors where the average outward multilateral resistances decreased at the beginning of the century but then started increasing again after 2017.



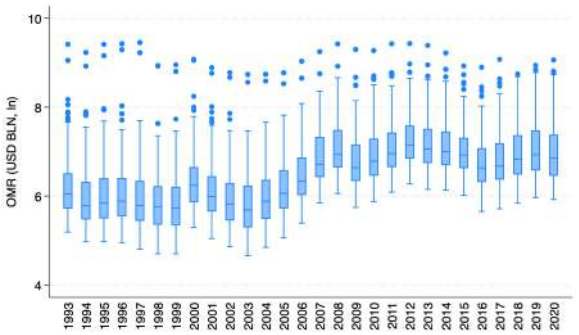
(a) OMR Chemicals



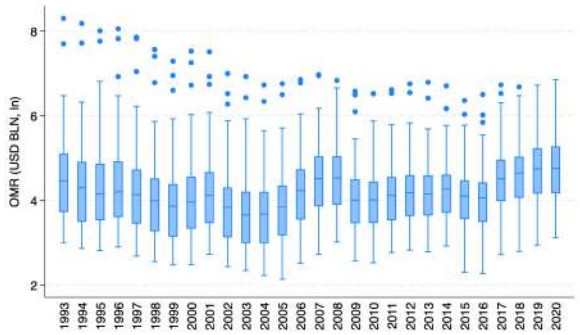
(b) OMR Food



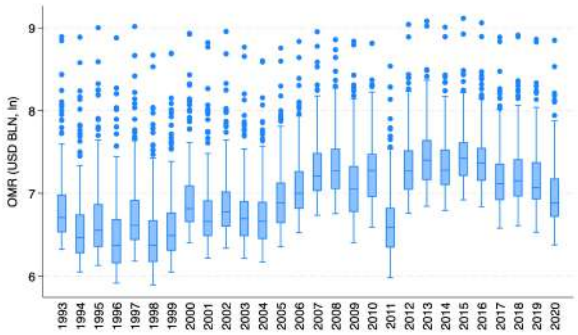
(c) OMR Machines



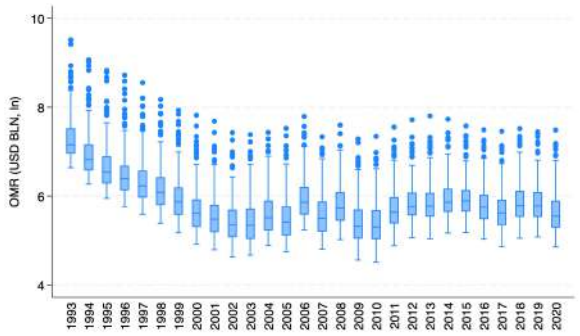
(d) OMR Metals



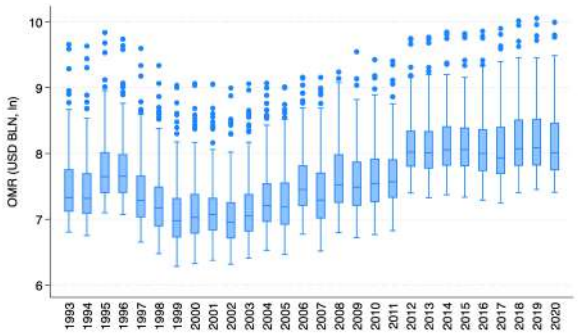
(e) OMR Minerals



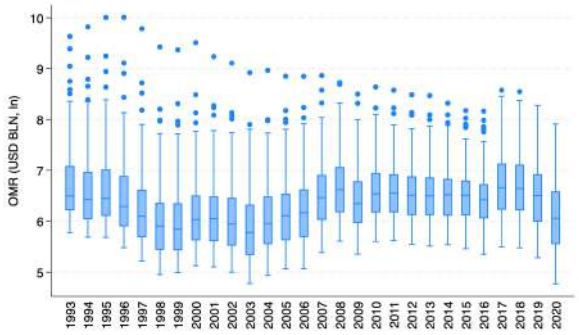
(f) OMR Other



(g) OMR Textiles



(h) OMR Vehicles



(i) OMR Wood-Paper

Figure 2.2: Evolution of outward multilateral resistance (OMR) over time

At the country level, it is interesting to observe that the top countries, in terms of outward multilateral resistance, are more stable as compared to the inward multilateral resistances. Moreover, the rankings are not only more stable, but they also differ in terms of countries, i.e., in many cases, the top three countries in terms of inward multilateral resistance do

not coincide with the top three countries in terms of outward multilateral resistance. As shown in Table 2.2, the country that the most emerges is the Special Administrative Region of Hong Kong in China, which ranks among the first three in all sectors and almost all years. Likewise, although not so present in all sectoral rankings, the USA and Singapore are two countries that rank among the firsts in many sectors, from Chemicals to Vehicles. An emerging country is instead China, which, over the last decades, has gained many positions, especially in the Chemicals, Food, Metals, and Vehicles sectors. A final remark concerns Bahrain that, starting from the early 2000s, it is among the top countries in terms of outward multilateral resistance.

Sector	**1993**	**2000**	**2007**	**2014**	**2020**
Chemicals	HKG	HKG	HKG	CHN	CHN
	JPN	SGP	USA	USA	USA
	USA	USA	BEL	BEL	BEL
Food	JPN	HKG	JPN	HKG	HKG
	HKG	JPN	HKG	JPN	JPN
	SGP	SGP	SGP	CHN	CHN
Machines	USA	BEL	HKG	HKG	HKG
	HKG	USA	SGP	BEL	BEL
	SGP	HKG	USA	SGP	USA
Metals	SGP	SGP	SGP	SGP	CHN
	HKG	HKG	HKG	CHN	HKG
	JPN	USA	ITA	BEL	SGP
Minerals	SGP	HKG	SGP	HKG	HKG
	HKG	SGP	HKG	SGP	BHR
	KOR	IRQ	BHR	BHR	CHN
Other	HKG	USA	USA	HKG	USA
	USA	HKG	HKG	USA	HKG
	JPN	BEL	BEL	SGP	DEU
Textiles	USA	HKG	HKG	HKG	USA
	DEU	USA	USA	BEL	DEU
	JPN	JPN	GBR	GBR	BEL
Vehicles	HKG	HKG	SGP	BEL	USA
	USA	USA	HKG	HKG	CHN
	SGP	SGP	USA	USA	BEL
Wood-Paper	HKG	HKG	HKG	HKG	HKG
	JPN	JPN	BEL	BEL	CHN
	SGP	GBR	GBR	JPN	JPN

Table 2.2: Top 3 country in terms of outward multilateral resistances by sector and year

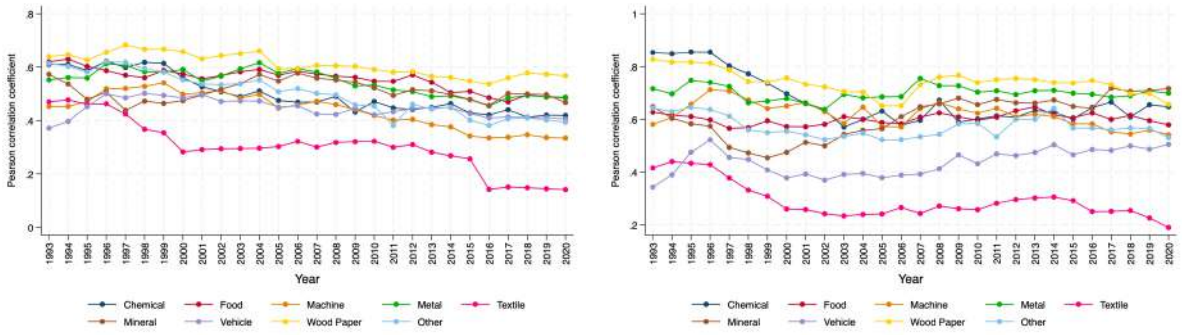
2.5.2 Multilateral resistance terms and network indices

This section presents the results of the correlation analysis between the inward multilateral resistance terms and the centrality measures computed at the node level. Findings are presented separately for each centrality measure.

Degree centrality

The correlation analysis between the inward multilateral resistance terms and the (weighted) in-degree centrality shows that the variables are statistically and positively correlated. At the sectoral level, the correlation coefficient is positive for all sectors but differs in magnitude: whereas relatively high correlation coefficients are associated with the Wood-Paper sector, the Textile sector is associated with the lowest coefficients in each year starting from the end of the 1990s (see Figure 2.3). Overall, even though decreasing over time, the positive correlation implies that countries that have a higher number of trade relationships as exporters usually have larger inward multilateral resistances. In other words, countries that trade with a relatively large number of countries are generally facing significant barriers and costs associated with importing goods. The same conclusion holds when analysing the correlation between inward multilateral resistance and the weighted in-degree centrality.

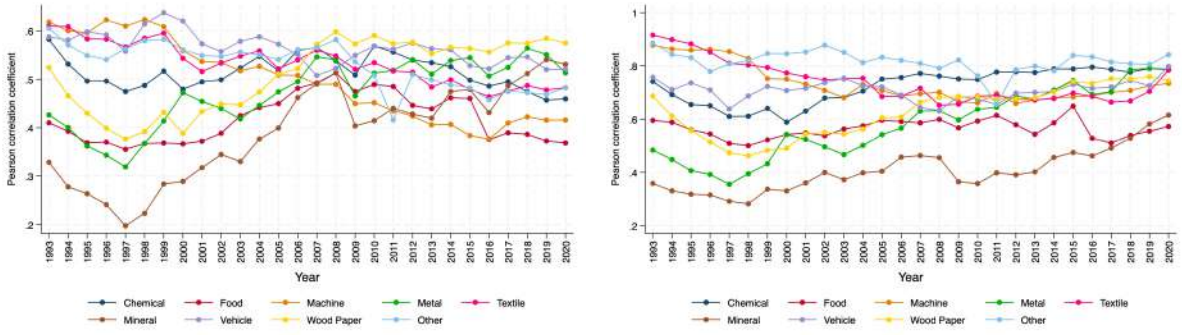
From an economic point of view, despite surprise, the positive correlation between inward multilateral resistance and (weighted) in-degree centrality reflects countries' role as key import hubs in the World Trade Network. Hub countries might face significant trade costs due to various factors, such as complex logistics and infrastructure needs to manage large volumes of imports. Moreover, protective trade policies, regulatory frameworks, non-tariff barriers, and congestion at ports and borders may further increase trade costs, especially for highly connected countries. All these potential factors increase the costs of managing extensive trade networks, and so raise the inward multilateral resistance.



(a) IMR and in-degree centrality (b) IMR and weighted in-degree centrality

Figure 2.3: Pearson correlation coefficient between IMR and in-degree centrality

As for inward multilateral resistance, Figure 2.4 shows that also outward multilateral resistance is positively correlated both with the in-degree centrality and the weighted in-degree centrality. Even though the trends of the two correlation coefficients are slightly different, the positive correlation reflects, by and large, the evolving trade dynamics. As mentioned above, countries with high in-degree centrality, indicating numerous import relationships, face increasing complexity in managing diverse trade regulations, and this results in higher outward multilateral resistance. Actually, trade agreements and trade harmonisation facilitate imports but, at the same time, impose stringent standards for exports. Moreover, other factors such as technological developments (e.g., the rise of digital trade and e-commerce) impose further standard requirements on exporters, and when countries are well-connected hub importers, this increases the costs associated with exporting to diverse markets, and so outward multilateral resistance.

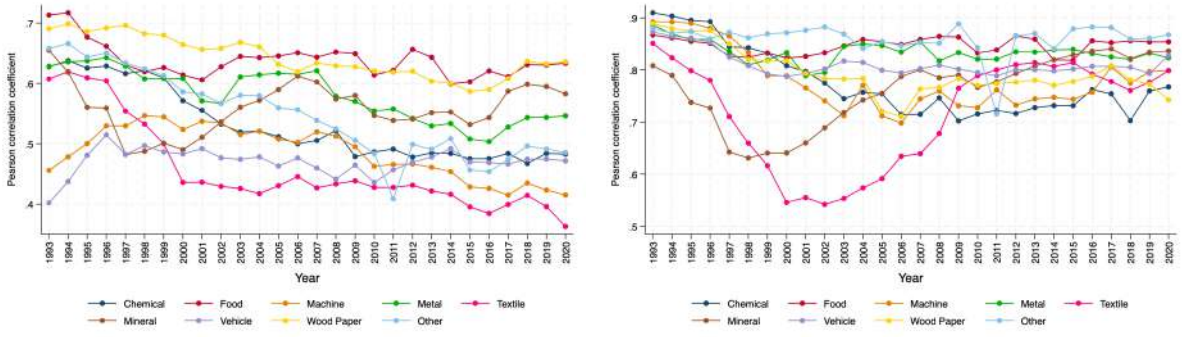


(a) OMR and in-degree centrality (b) OMR and weighted in-degree centrality

Figure 2.4: Pearson correlation coefficient between OMR and in-degree centrality

Evidence shows that inward multilateral resistance is positively correlated not only with the in-degree centrality but also with out-degree centrality (see Figure 2.5). Such a positive correlation likely reflects the initial high trade costs faced by major exporting countries. Indeed, major exporters face significant trade barriers, such as tariffs and non-tariff barriers, to protect domestic industries. This protectionism, together with the regulatory frameworks and infrastructure needs for exports, increases importing goods' costs. Moreover, complying with international standards for their exports may also translate into additional requirements for imports, further increasing inward multilateral resistance.

However, this correlation has slightly decreased over time. the underlying reasons may be various, from trade liberalisation to economic integration, to technological development and so on. Trade liberalisation through bilateral and multilateral agreements results in reduced tariffs and streamlined customs procedures, lowering inward multilateral resistance also for major exporters. By promoting the harmonisation of trade regulations, economic integration eases good imports and makes them cheaper. Technological advancements, e.g., in logistics and supply chain management, also enable a reduction in trade costs. For these reasons and others, countries with high out-degree centrality may be experiencing reduced inward multilateral resistance, reflecting the broader global trend towards lower trade barriers and enhanced economic interconnectedness.



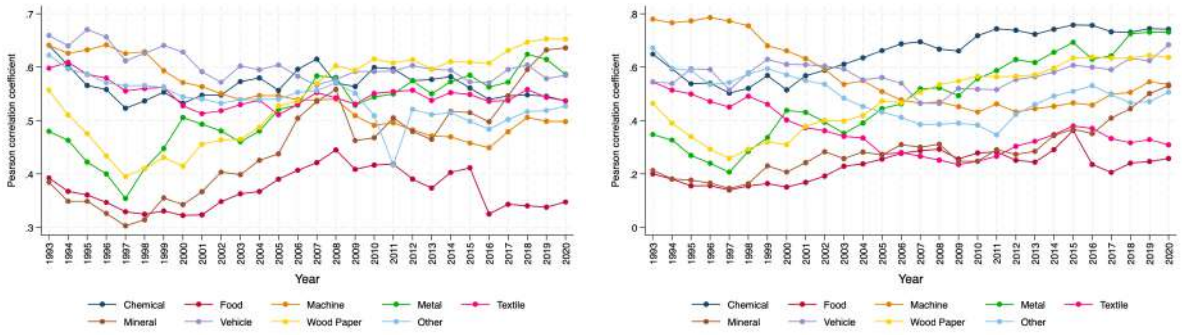
(a) IMR and out-degree centrality (b) IMR and weighted out-degree centrality

Figure 2.5: Pearson correlation coefficient between IMR and out-degree centrality

Finally, evidence shows that also outward multilateral resistance is positively correlated with out-degree centrality (see Figure 2.6). This positive correlation is perhaps more straightforward as it might be due to the

costs associated with maintaining extensive export networks that major exporters have to face. Countries that export to a large number of destination markets deal with various trade barriers and regulatory requirements imposed by their numerous trading partners. Indeed, each destination market is likely characterised by its own set of standards, tariffs, and non-tariff barriers, which collectively increase the overall costs of exporting. Additionally, the logistics and administrative costs associated with managing a diverse set of export routes and complying with multiple regulatory regimes contribute to higher outward multilateral resistance.

Interestingly, different patterns characterise the none sectors under analysis. Whereas the correlation coefficient decreased in almost all sectors between 1993 and 1997, from 1997 until 2008, the correlation coefficient increased in sectors such as Food, Metals, Minerals, and Wood-Paper and instead further decreased in sectors such as Vehicle, Machine, and Textile. This diverging trend is likely due to sector-specific factors related to trade barriers, regulatory frameworks, and global dynamics. Whereas Food, Metals, Minerals, and Wood-Paper are characterised by significant regulatory and safety standards, protective measures related to resource management (e.g., quotas), high-quality standards and sustainability certifications to access certain markets, sectors like Vehicles, Machines, and Textiles are integral to global value chains (GVCs) and have significantly benefited from trade liberalisation and regional trade agreements.



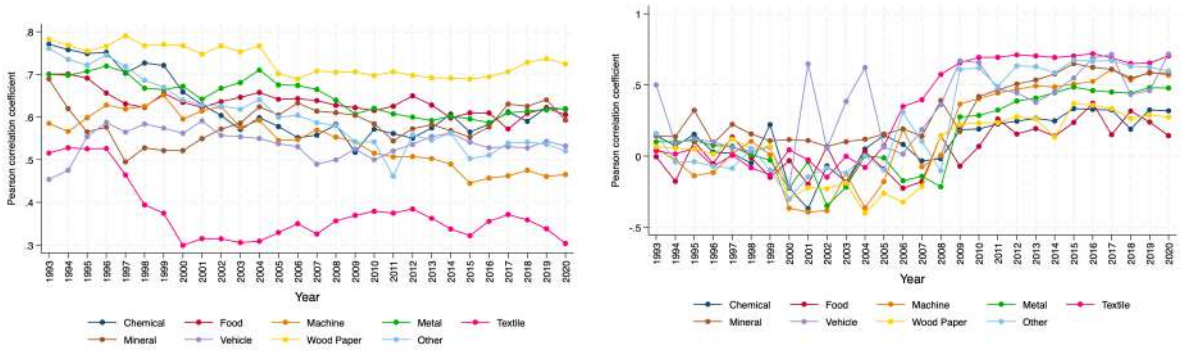
(a) OMR and out-degree centrality (b) OMR and weighted out-degree centrality

Figure 2.6: Pearson correlation coefficient between OMR and out-degree centrality

Closeness centrality

The correlation analysis between the inward multilateral resistance terms and the in-closeness centrality shows that the variables are statistically and positively correlated (see Figure 2.7a). Such a positive correlation implies that countries that are closer to other countries in terms of trade relationships usually have larger inward multilateral resistances, i.e., face major costs associated with importing goods. Over time, the correlation between the inwards multilateral resistance and the in-closeness centrality has slightly decreased, especially in the Textile sector. Countries with high in-closeness centrality have benefited from reduced costs associated with importing thanks to the ongoing trade liberalisation processes that have also lowered inward multilateral resistance. Hence, as trade barriers were reduced, the correlation between inward multilateral resistance and in-closeness centrality weakened.

Conversely, the correlation between inward multilateral resistance and the weighted in-closeness centrality was negative for almost all sectors until the early 2000s and turned positive only after the 2008 crisis (see Figure 2.7b). Until the early 2000s, most countries were involved in trade liberalisation and economic integration processes that, by reducing trade barriers, lowered the inward multilateral resistance. In these years, key import hubs benefitted from these reduced barriers. Actually, as trade barriers fell, countries with extensive trade networks saw lower inward multilateral resistance, and so a negative correlation emerged. Following the 2008 crisis, trade barriers increased again as countries sought to protect their domestic economies, which led to an increase in inward multilateral resistance. Hence, the costs associated with managing imports for countries with high weighted in-closeness centrality increased so much that the correlation turned positive.



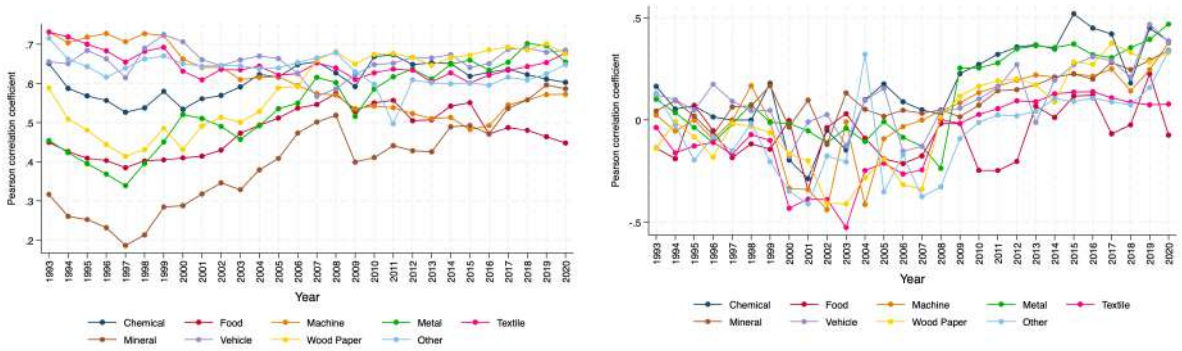
(a) PPC IMR and in-closeness centrality

(b) PPC IMR and weighted in-closeness centrality

Figure 2.7: Pearson correlation coefficient between IMR and in-closeness centrality

As for the inward multilateral resistance, also the correlation between the outward multilateral resistance and in-closeness centrality varies based on whether the World Trade Network is considered as a binary network or a weighted network. In the former case, the correlation between outward multilateral resistance and in-closeness centrality is positive in each sector and year and has remained relatively stable starting from 2008 onwards (see Figure 2.8a). This implies that the closer a country is to other countries in terms of importing trade relationships, the higher trade costs or trade barriers it faces when exporting goods. As a matter of fact, countries that are central import hubs tend to impose diverse trade barriers, which increase the costs of exporting to these central markets.

As far as the correlation between the outward multilateral resistance and weighted in-closeness centrality is concerned, evidence shows results analogous to the correlation between inward multilateral resistance and weighted in-closeness centrality: the correlation was negative for almost all sectors until the early 2000s and turned positive only after the 2008 crisis (see Figure 2.8b). As discussed above, before the early 2000s, many countries started trade liberalisation processes and reduced barriers, which lowered export costs for central import hubs. However, following the 2008 financial crisis, increased protectionism and trade barriers led to higher outward multilateral resistance, particularly for countries with significant import values. The cost of exporting to these central hubs increased, resulting in a positive correlation between outward multilateral resistance and weighted in-closeness centrality.



(a) PPC OMR and in-closeness centrality

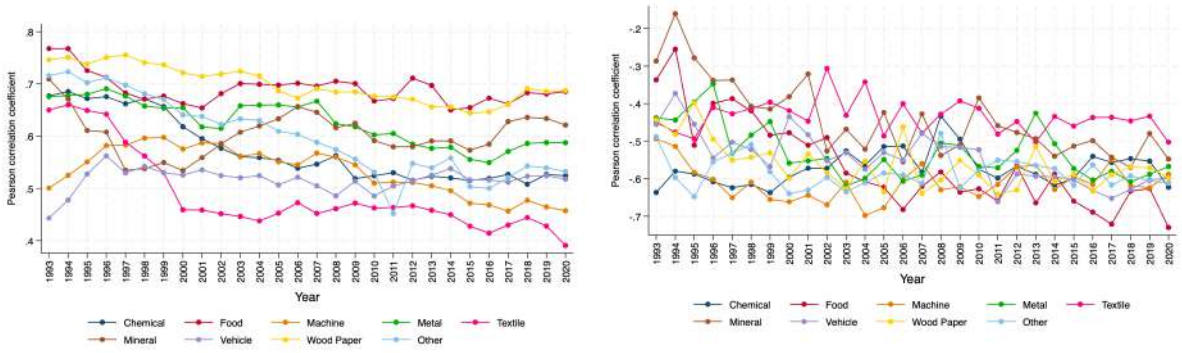
(b) PPC OMR and weighted in-closeness centrality

Figure 2.8: Pearson correlation coefficient between OMR and in-closeness centrality

The correlation analysis between the inward multilateral resistance and the out-closeness centrality shows that the variables are statistically and positively correlated, but the strength of the correlation has decreased over time (see Figure 2.9a). This positive correlation indicated that countries that are closer to the others in terms of exporting flows were dealing with significant trade barriers when importing. Over time, however, this correlation has slightly decreased as a consequence of the trade liberalisation processes undergone in various countries and the harmonisation of trade policies. Trade agreements and standardisation make it easier for central export hubs to import goods. Hence, while countries with high out-closeness centrality still face some degree of trade resistance, the overall impact has diminished, leading to a decrease in the correlation between inward multilateral resistance and out-closeness centrality.

Conversely, the correlation analysis between the inward multilateral resistance and the weighted out-closeness centrality shows that the variables are statistically and negatively correlated, and the strength of the correlation has increased over time (see Figure 2.9b). This negative correlation indicates that as a country's accessibility and centrality in terms of exporting (weighted out-closeness centrality) increases, the trade barriers and costs it faces when importing (inward multilateral resistance) decrease. In other words, countries that are highly central in the global export network tend to experience lower import resistance. Among the others, this might be due to established trade relationships, economic influence, and negotiating power, which enable them to secure more favourable trade terms and re-

duce barriers imposed by their trading partners. Moreover, the evolution over time suggests that as countries become more integrated into the global trade network, those with high weighted out-closeness centrality are those benefiting the most from reduced trade costs, and so being characterised by lower inward multilateral resistance terms. Moreover, the growing influence of global value chains has allowed countries central in the global export networks to leverage their positions and negotiate better terms for imports.

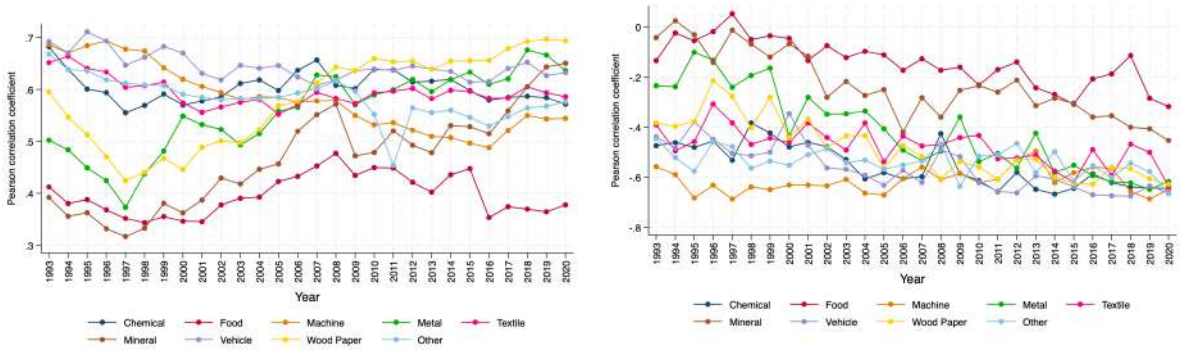


(a) PPC IMR and out-closeness centrality

(b) PPC IMR and weighted out-closeness centrality

Figure 2.9: Pearson correlation coefficient between IMR and out-closeness centrality

The correlation between outward multilateral resistance and out-closeness centrality is positive (see Figure 2.10a), indicating that countries that are more central and accessible in the global export network tend to face higher trade barriers and costs when exporting. Such a positive correlation implies that as long as a country becomes more integrated into the export network, it faces greater resistance, such as tariffs, non-tariff barriers, and regulatory complexities imposed by its trading partners. In other words, the more central an exporter is in the World Trade Network, the more likely it is to face significant trade resistance as it deals with various and often stringent import requirements of its numerous trading partners. Major exporters, due to their extensive trade networks, often have to comply with various import regulations and standards.



(a) PPC OMR and out-closeness centrality

(b) PPC OMR and weighted out-closeness centrality

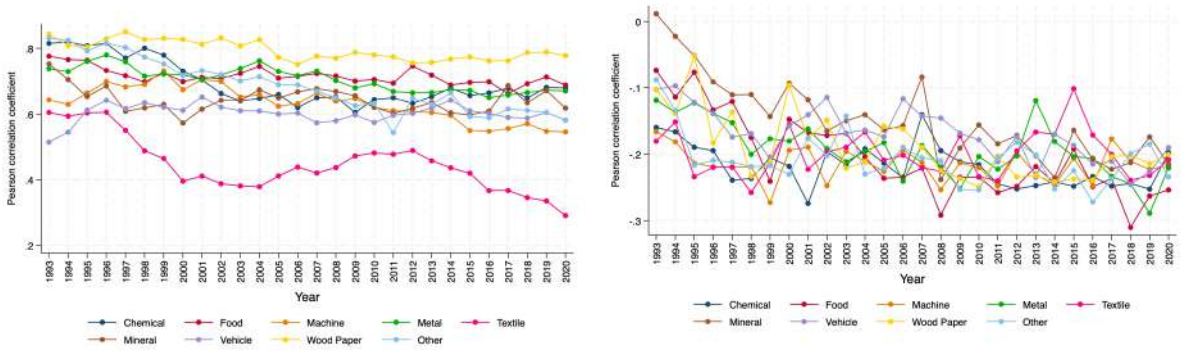
Figure 2.10: Pearson correlation coefficient between OMR and out-closeness centrality

Betweenness centrality

The correlation analysis between inward multilateral resistance and betweenness centrality is positive in all sectors under analysis (see Figure 2.11a). Over time, the correlation coefficient has remained pretty stable apart in the Food sector, where it has dramatically decreased. Such a positive correlation suggests that countries with higher inward multilateral resistance often hold central positions in the World Trade Network by occupying key trade routes. This might be due to the fact that these countries, despite facing higher trade barriers, play pivotal roles in connecting different markets. In other words, they may be critical hubs or gateways in the World Trade Network, facilitating trade flows between other countries even if their own market is, to some extent, resistant to external trade. The decreasing trend observed in the Food sector might be due to increased efficiency in direct trade routes, or the development of new trade hubs.

Conversely, the correlation between inward multilateral resistance and weighted betweenness centrality is negative (see Figure 2.11b). The negative correlation implies that countries with higher inward multilateral resistance tend to have lower values of trade passing through them as intermediaries. This might be due to the higher barriers they impose, which disincentives large trade values from routing through them. Whilst central in terms of network structure, the actual trade flows these countries handle are less significant. Countries with high inward multilateral resistance might be strategically located and essential for network connectivity, but the burdens they impose on trade reduce their attractiveness for large-scale

trade routing, leading to lower weighted betweenness centrality.

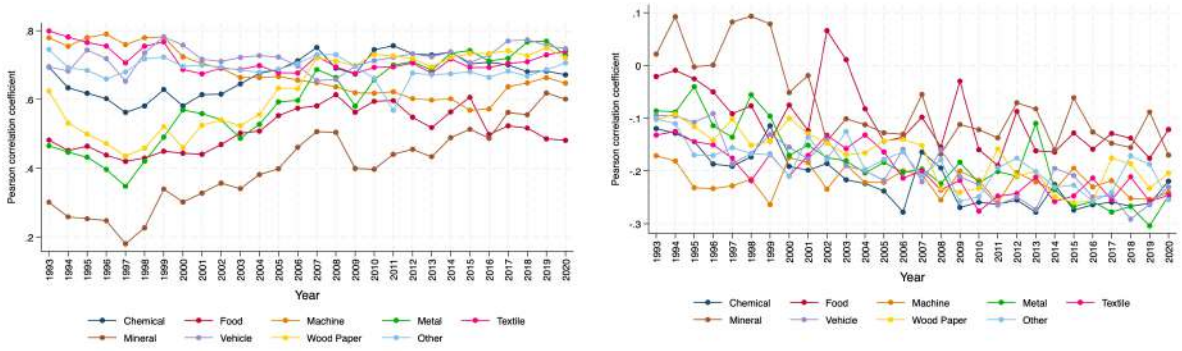


(a) PPC IMR and betweenneess centrality

(b) PPC IMR and weighted betweenneess centrality

Figure 2.11: Pearson correlation coefficient between IMR and betweenneess centrality

As for inward multilateral resistance, evidence shows that outward multilateral resistance is positively correlated with the betweenness centrality but negatively correlated with the weighted betweenness centrality (see Figure 2.12). This implies that countries that are characterised by more significant resistance to their export in the destination markets are generally key players in the network as a large number of trade flows pass through them, but at the same time, the value of trade that passes through them is not substantial. Despite the high trade barriers to export they face, they are crucial intermediates in world trade routes, i.e., they are strategically positioned in the World Trade Network, but the substantial barriers they face in exporting limit the value of trade they can effectively manage.



(a) PPC OMR and betweenneess centrality

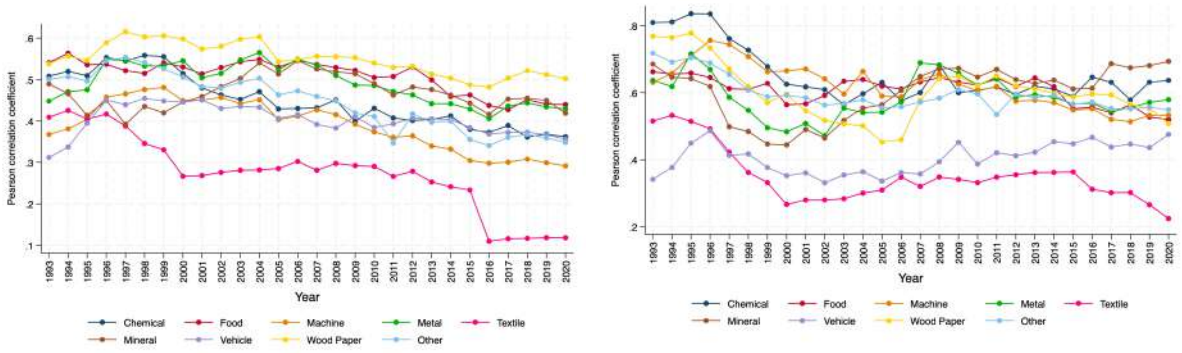
(b) PPC OMR and weighted betweenneess centrality

Figure 2.12: Pearson correlation coefficient between OMR and betweenneess centrality

Eigenvector centrality

The correlation analysis shows that inward multilateral resistance and eigenvector centrality are positively correlated (see Figure 2.13a). This positive correlation suggests that countries with higher inward multilateral resistance tend to be more influential within the World Trade Network. Despite facing higher trade barriers, these countries often have trade relationships with other central and influential countries. Their significance in the World Trade Network is boosted by their strategic relationships, allowing them to remain pivotal players even when trade barriers are substantial.

Similarly, the correlation between inward multilateral resistance and weighted eigenvector centrality is also positive (see Figure 2.13b). This suggests that countries with higher inward multilateral resistance not only have influential positions within the World Trade Network but are also able to manage significant trade flows in their connections. Their high inward multilateral resistance might reflect large domestic markets or critical regional roles, which attract and sustain significant trade activity. Thus, both their central positioning and the trade value they manage are enhanced.



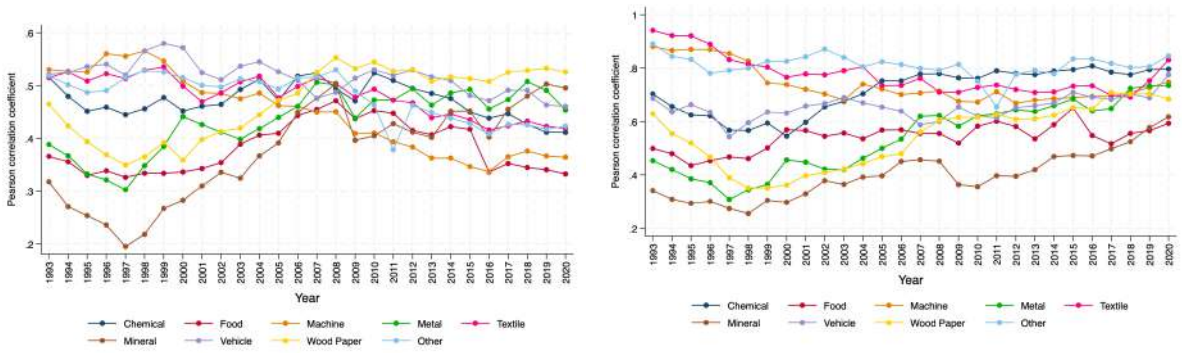
(a) PPC IMR and eigenvector centrality

(b) PPC IMR and weighted eigenvector centrality

Figure 2.13: Pearson correlation coefficient between IMR and eigenvector centrality

As for inward multilateral resistance, evidence shows that outward multilateral resistance is positively correlated with both the eigenvector centrality and the weighted eigenvector centrality (see Figure 2.14). This implies that countries with higher outward multilateral resistance usually have significant positions in the World Trade Network. Despite facing substantial

barriers to exporting, these countries are linked through trade relationships with other central and influential countries. Their importance in the World Trade Network is widened by their strategic relationships, allowing them to remain key players, even when their exports encounter high resistance. Moreover, the positive correlation between outward multilateral resistance and weighted eigenvector centrality suggests that countries with higher outward multilateral resistance not only occupy influential positions within the World Trade Network but also manage significant trade value through their connections. A potential explanation is that their high outward multilateral resistance reflects the competitive nature of their exports or critical strategic roles in the World Trade Network.



(a) PPC OMR and eigenvector centrality

(b) PPC OMR and weighted eigenvector centrality

Figure 2.14: Pearson correlation coefficient between OMR and eigenvector centrality

2.6 Conclusions

This chapter aimed to analyse the extent to which the structure of the network and countries' interdependencies have an impact on bilateral trade flows, and in particular on multilateral resistance terms. The analyses carried out contribute to the literature on international trade by constituting an attempt to build a bridge between the literature on network analysis applied to trade and the one on the trade gravity model. To this end, using data at the bilateral trade flow level between 1993 and 2020, we first analyse the evolution of the MRTs by sector and country and then perform a correlation analysis between the MRTs and a set of network indices. Overall, the findings provide significant insights into the evolving dynamics of trade costs and network centrality, underscoring the complexity of trade

relationships and the varied impacts across different sectors.

Inward multilateral resistance followed an increasing trend across most sectors, signalling a rise in weighted average bilateral trade costs, or, put differently, increased resistance to import by countries. This phenomenon is largely attributed to the expanding number of trade relationships, making countries more interconnected yet more remote from each other. Differently from inward multilateral resistance, outward multilateral resistance exhibits sector-specific trends. While sectors like Machines and Textiles have seen a decrease in outward resistance over time, other sectors such as Chemicals, Food, Metals, and Vehicles have experienced a gradual increase. Minerals and Wood-Paper sectors display a mixed trend, with initial decreases followed by increases post-2017, highlighting the nuanced nature of trade dynamics in these areas.

The correlation analysis between multilateral resistance and network centrality metrics provides deeper insights into the role of interdependencies in shaping countries' resistance to trade. Different sectors exhibit distinct patterns in the correlation between multilateral resistance and centrality metrics. For instance, sectors like Food, Metals, and Wood-Paper have seen increasing correlations in recent years, possibly due to stringent regulatory standards. In contrast, sectors integral to global value chains, such as Vehicles and Machines, have benefited from trade liberalisation, showing decreasing correlations.

There is a positive correlation between inward multilateral resistance and in-degree centrality, indicating that countries with numerous trade relationships as exporters face higher import barriers. This reflects their roles as key import hubs, dealing with significant trade costs due to complex logistics, protective trade policies, and regulatory frameworks. Additionally, a positive correlation exists between inward multilateral resistance and out-degree centrality, though this has decreased over time. This trend suggests that trade liberalisation, economic integration, and technological advancements have reduced import barriers for major exporters.

The positive correlation between inward multilateral resistance and in-closeness centrality implies that countries closer in terms of trade relationships face higher import costs. However, this correlation has weakened over time due to ongoing trade liberalisation. Initially negative, the correlation

between inward multilateral resistance and weighted in-closeness centrality turned positive post-2008 crisis, indicating that increased protectionism led to higher inward multilateral resistance for central import hubs. Furthermore, the positive correlation between inward multilateral resistance and out-closeness centrality has decreased over time, reflecting easier import conditions for central export hubs due to trade agreements and standardisation. Conversely, the negative correlation with weighted out-closeness centrality has strengthened, showing that highly central export countries enjoy lower import resistance.

The positive correlation between inward multilateral resistance and betweenness centrality suggests that central countries in trade networks face higher import barriers but remain pivotal for trade routes. The negative correlation with weighted betweenness centrality indicates that while these countries are central, their trade flow values are not substantial due to high barriers. Additionally, positive correlations between inward multilateral resistance and both eigenvector centrality and weighted eigenvector centrality highlight that influential countries within the trade network face significant barriers but maintain pivotal roles due to strategic trade relationships.

The findings highlight the existence of a correlation between multilateral resistance terms and network centrality indices. Countries central in the World Trade Network often face higher multilateral resistance, reflecting the complex trade dynamics and barriers they face. The sector-specific trends and evolving correlations underscore the importance of tailored trade policies that consider the unique features and challenges of each sector. Future research could explore the impact of emerging trade policies, technological advancements, and geopolitical shifts on multilateral resistance and trade network centrality. Understanding these dynamics will be crucial for policymakers and businesses aiming to affect the global trade landscape effectively.

Chapter 3

The Cost of the European Disintegration: a Counterfactual Analysis

3.1 Introduction

On 1 May 2024, the European Union celebrated the 20^{th} anniversary of the 2004 enlargement, when Cyprus, Czechia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia joined the EU. As noted by President von der Leyen in her speech in celebration of the 20^{th} anniversary, the 2004 enlargement *"was not just the birth of a larger Union, it was the birth of a new era"*.[1] Moreover, it has not even been the only enlargement that EU has experienced over the past 20 years, as three additional countries joined the EU, namely Bulgaria and Romania in 2007, and Croatia in 2013. Throughout only two decades the number of EU Member States raised from 12 to 28. Since 2004, about 450 million Europeans have benefited from freedom of movement across the Union. EU Member States have seen their economies booming, their agricultural production tripling, and their unemployment rates halving.[2]

The ten post-socialist countries started having preferential trade agreements with the EU far before their accession in 2004. As a matter of fact, in 1993, the European Commission approved the removal of customs

[1]The full speech of President von der Leyen is available online at `https://ec.europa.eu/commission/presscorner/detail/en/speech_24_2282`

[2]`https://neighbourhood-enlargement.ec.europa.eu/news/20-years-together-eu-celebrates-2004-enlargement-2024-04-30_en`

duties on industrial products from Central and Eastern European (CEE) countries and free trade agreements with Estonia, Latvia and Lithuania entered into force. However, the accession in 2004 led to the removal of the remaining trade barriers (e.g., those in the agri-food sector), the adoption of the EU's common external tariffs, and the elimination of the internal tariffs, the simplifications of customs procedures, technical regulations and harmonisation of product standards. These additional liberalisation steps have further enhanced trade between EU Member States and new Member States.

Actually, as argued by Viner (1950) and Byé (1950), a customs union causes a reduction of trade barriers that leads to a shift of different sources of supply. Viner (1950) distinguished two customs union's effects, namely trade creation and trade diversion. On the one hand, trade creation reflects the fact that members of the customs union will import one from the other goods and commodities that they were not previously trading at all because the price of the product domestically was lower than any price at any foreign source plus duty. In other words, they replace domestic production at a high cost with lower-cost sources from new trade partners. On the other hand, trade diversion reflects the fact that there will be other goods and commodities that members were before importing from third countries because they were offering the cheapest solution and start then importing from members of the customs union. In other words, they substitute the source of imports because preferential trade liberalisation makes countries prefer higher-cost production from the member to low-cost sources from the rest of the world.

Over the past decades, the European Union integration process has been an interesting case study for economists, likely because it is one of the most successful free trade areas worldwide (Nagengast et al., 2024). The first study dates back to Cecchini et al. (1988) that investigated the costs and benefits of the Single Market using an ex-ante perspective and estimated the gain of Europe to be between 4.5 and 6.5% of GDP. Since then, an increasing number of authors have examined the benefits of different steps of the European integration on trade and welfare. Overall, they found that the EU integration boosted trade with the old member states of the EU15 as well as among each other, stimulated competition and trade, improved efficiency, raised quality and reduced prices. At the EU level, EU11

members are those that benefited the most from the EU integration.

The United Kingdom European Union (EU) membership referendum has renewed the interest in the benefits of the EU. Almost sixty years after the signature of the Treaty of Rome, an EU Member State voted a referendum to exit the EU. This event has led authors to question the cost of undoing Europe. Mayer et al. (2019) and Felbermayr et al. (2022) concluded that the disappearance of the EU's single market would be the largest contributor to the fall in trade in a non-EU scenario. Following the EU breakdown, EU MS would experience income losses which will be larger for smaller, poorer, more central, and more open EU MS (Felbermayr, Gröschl and Heiland, 2018).

Nevertheless, the existing studies look at the costs of undoing Europe only from the point of view of European Member States but do not analyse the potential consequences on third countries. This chapter aims to analyse the cost of undoing Europe, i.e. complete EU disintegration, digging into the effects at the country level within and beyond Europe and comparing winners and losers at the global level. The main novelty, as compared to existing studies, is the disaggregation of the effect not only at the EU Member States but also at the third country level. Similarly to previous studies, we analyse the scenario of European disintegration, supposing the undoing of various integration steps.

Using the 2024 version of the TradeProd database provided by Mayer et al. (2023), we apply the structural gravity framework, using the approach suggested in Yotov et al. (2016), which is termed the "full endowment general equilibrium effects" model. This approach allows capturing the general equilibrium effects, meaning both direct and indirect effects of the dissolution of the European Union. A major limitation is the fact that the impacts under analysis are restricted to trade in goods and disregard impacts on trade in service, capital attraction, and people movements. Moreover, it is worth mentioning that the removal of the EU is modelled as a sudden shock.

Despite the above-mentioned limitations, this chapter aims to contribute to different strands of the literature. First, it provides new insights into the process of EU integration in general and EU enlargement in particular. Second, it contributes to the literature that estimates the trade effects of

integration policies and RTAs using gravity models (see Head and Mayer (2014) for a critical review). Finally, it contributes to the literature on trade policy analysis in computational general equilibrium models.

The structure of the present chapter is the following: Section 3.2 provides a brief overview of the EU integration process; Section 3.3 briefly summarises the existing literature on the impacts of EU integration; Section 3.4 describes the methodological framework applied; Section 3.5 describes the data used; Section 3.6 discusses the results obtained; Section 3.7 concludes.

3.2 History of European integration since WWII: a snapshot

At the end of World War II, the project of European integration was not so unexpected. In the nineteenth century, the unification of Germany and Italy, together with the signature of an increasing number of commercial treaties, were already anticipating the intention of reducing policy barriers to trade, which culminated in the plan for a "United States of Europe" proposed by the French Minister of Foreign Affairs, Aristide Briand, in his speech to the Assembly of the League of Nations on 5 September 1929. In practical terms, the formation of the United States of Europe would have entailed the establishment of a 'Common Market', which would have brought Europe's economies closer through a 'Customs Union'. However, the Briand Plan encountered strong nationalist resistance and was then disregarded when the economic depression hit Europe.

The lack of foreign exchange was hindering intra-EU trade and this required the creation of an international authority responsible for trade worldwide. Motivated by economic and political reasons, the United States decided to support Europe with a large-scale structural recovery programme. As a result, in 1947, the US Secretary of State, George C. Marshall, illustrated its plan, the so-called Marshall Plan or European Recovery Program (ERP), to grant economic and financial assistance to the EU, subject to closer European cooperation. Hence, 16 countries signed to the Marshall Plan and established a Committee of European Economic Cooperation (CEEC), which set a permanent agency responsible for managing and dis-

tributing the funds among its members.[3]

In April 1948, the 16 members of the CEEC established the Organisation for European Economic Cooperation (OEEC), which West Germany and the territory of Trieste joined in 1949. Although they did not belong to the OEEC, the United States and Canada were involved in its work, making the OEEC a worldwide organisation.[4] The OEEC negotiated a multilateral agreement on intra-European payments (which was followed by a trade liberalisation scheme in 1949) and enhanced European economic productivity via the European Agency for Productivity (set up in 1953). Although an important predecessor of the European Union, the OEEC was an organisation for intergovernmental cooperation and failed to create a customs union.

In September 1950, the OEEC created the European Payments Union (EPU). Since, at the time, there was an issue of convertibility of European currencies and dollar shortage, the main objective underlying the creation of the EPU was to replace the existing bilateral payment agreements between various European countries with a multilateral system capable of revitalising the European economy. To this end, the EPU provided a multilateral clearing system supplemented by a credit line for countries temporarily in an overall deficit and acted as an international clearing house. Despite its capability to secure the stability of exchange rates and promote free trade among its Member States, opponents complained about price fluctuations and the fact that the convertibility of European currencies was between issuing banks but not between individuals. Moreover, there were concerns that the EPU would have competed with the International Monetary Fund (IMF). Against this background, the EPU was dismissed in 1958 and replaced with the European Monetary Agreement (EMA).

With the aim to increase their economic integration, Belgium, France, Italy, Luxembourg, Netherlands and West Germany established the European Coal and Steel Community (ECSC) and the European Economic

[3]The countries that signed the Marshall Plan and constituted the CEEC were Austria, Belgium, Denmark (with the Faroe Islands and Greenland), France, Greece, Iceland, Ireland, Italy (and San Marino), Luxembourg, the Netherlands, Norway, Portugal (with Madeira and the Azores), Sweden, Switzerland (with Liechtenstein), Turkey and the United Kingdom.

[4]In 1960, when the United States and Canada joined, the OEEC became the Organisation for Economic Cooperation and Development (OECD). To date, the OECD has gradually expanded, including more and more countries.

Community (EEC), respectively in 1951 and 1952. The formation of the ECSC and EEC marked a key step in the creation of the European Single Market. The EEC aimed to create of a common market offering the free movement of goods, services, people and capital within its borders. A further step towards EU integration was the Treaty of Rome in 1957 as well as the completion of the Customs Union in 1968. However, the lack of centralised decision-making made it difficult to reduce (intangible) barriers with mutual recognition of standards and common regulations, leading to a failure to complete the European common market.

Following this, the EU founding members signed the Single European Act (SEA) in 1987, which foresaw the creation of a common market by January 1993.[5] The EU Single Market Programme (SMP) was launched by the European Commission in 1985 in response to the so-called 'Eurosclerosis' period with the ultimate goal of enhancing efficiency and welfare, by increasing competition in European Markets and improving the EU's international competitiveness. Guidelines on how to achieve the completion of the Single Market were included in the European Commission's White Paper on Completing the Single Market, which consisted of a list of requirements to achieve further integration, including over 300 harmonisation measures by and large on goods. From an operational point of view, the EU Single Market enhanced competition within EU MS by reducing non-tariff trade barriers, since tariffs had already been removed at that time.

Another crucial step in the EU integration process was marked by the Maastricht Treaty in 1993, which paved the floor for the completion of the Single Market, the creation of a single currency, and fostered common political values. EU integration was then further enhanced by the EEA in 1994, the removal of formal border controls through the Schengen Agreement in 1995,[6] and the creation of the monetary union in 1999.

[5]At the beginning of 1993, the countries constituting the common market were Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain and the United Kingdom. Later in 1995, Austria, Finland, Liechtenstein and Sweden joined the Single Market. In addition, other countries, such as Switzerland and Turkey, have entered into special arrangements with the EU and participate in the Single Market, at least to some extent.

[6]The Schengen Agreement started in 1995 with seven countries. Then, the agreement was joined by Italy and Austria in 1997, Greece in 2000, Denmark, Finland, and Sweden in 2001, and the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia in 2007. The EU members Bulgaria, Croatia, Ireland, and Romania do not participate in Schengen, while the non-EU

In 1993, while the European Single Market was arising, the European Council declared its intention to eventually enlarge the EU eastward. The promise was extended to any Central and Eastern European country (CEEC) with a 'European Agreement'. Although the formal beginning of negotiations for eastward EU enlargement dates back to the early 2000s, the Central and Eastern European (CEE) countries' accession process started far earlier. As a matter of fact, after 1989, the EU granted Generalised System of Preference (GSP) status to various CEE countries (Hungary and Poland in 1990, Bulgaria and former Czechoslovakia in 1991, and Estonia, Latvia, and Lithuania in 1992). Against this background, Slovenia kept preferential status for its exports under the so-called autonomous trade preferences granted by the EU to Yugoslavia in the 1980 Cooperation Agreement. The GSP status enhanced access of exporters from CEE countries to EU markets, especially for industrial products.

Another key liberalisation step towards EU integration is represented by the bilateral trade agreements between the CEE countries and EU15, e.g., Interim Agreements and Europe Agreements (EAs), that were signed starting from the early 1990s. The EU15 signed EAs with Hungary and Poland in 1994, with Bulgaria, Czech Republic, Romania, and Slovak Republic in 1995, with Estonia, Latvia, and Lithuania in 1998, and finally with Slovenia in 1999. These agreements aimed at (partially) eliminating bilateral tariffs among EU15 and CEE countries in order to facilitate goods market integration.

Moreover, several CEE countries also signed free trade agreements among themselves. In 1992, the Czech Republic, Slovakia, Hungary, and Poland signed the Central European Free Trade Agreement (CEFTA), which entered into force in 1993 and whose membership geographically expanded over time. Slovenia joined the CEFTA in 1996, Romania in 1997, Bulgaria in 1998, and Croatia in 2002.[7] The CEFTA covered all goods, except for a few agricultural products, and was characterised by two components, namely, a multilateral component consisting of commonly agreed preferences, and a bilateral component consisting of preferences negotiated bi-

countries Iceland, Norway, and Switzerland do.

[7]Currently, CEFTA members include Albania (since 2007), Bosnia and Herzegovina (since 2007), Kosovo (since 2007), Moldavia (since 2007), Montenegro (since 2007), North Macedonia (since 2006), and Serbia (since 2007).

laterally among pairs of members and not applicable to the others. Since its establishment, the CEFTA aimed at eliminating duties on industrial goods and agricultural products to speed up their integration process with Western European countries.

Likewise, the Baltic states (Estonia, Latvia, and Lithuania) signed the Baltic Free Trade Area (BFTA) in 1993, which entered into force in 1994. Since its signature, the BFTA did not enlarge in terms of members but rather in terms of product coverage. By January 1997, its coverage was extended to agricultural products, allowing the complete removal of tariffs on all agricultural and food products of Baltic origin. As for the CEFTA, the BFTA was signed to support countries preparing for their accession to the EU. Nevertheless, it is worth mentioning that the BFTA was the first free-trade area that provided Baltic countries with the opportunity of completely liberalised trade.

Starting from 1998, the EU started negotiating accession with Poland, Czech Republic, Cyprus, Estonia, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia, and Slovakia. Negotiations ended in December 2002, and, in May 2004, there was the first EU enlargement. The accession to the EU determined for the new EU member states a reduction in trade barriers as compared with EAs, a full liberalisation to trade of agricultural products, the elimination of technical barriers to trade (TBT) and Sanitary and Phytosanitary (SPS) measures, the removal of border controls and other barriers, which enhanced the expansion of trade flows between EU15 and new member states. Further enlargements occurred in 2007 when Bulgaria and Romania joined the EU, and in 2013, when Croatia joined.

Table 3.1: The history of the economic integration of EU markets

Year	**Event**
1950	European Payments Union starts
1951	Signature of the Treaty establishing the European Coal and Steel Community
1952	European Coal and Steel Community established
1957	Signature of the Treaty of Rome

Table 3.1: Continued on next page

Table 3.1: continued from previous page

Year	Event
1958	European Economic Community starts (Belgium, France, Italy, Luxembourg, Netherlands, West Germany)
	European Payments Union discontinued
1960	European Free Trade Association starts (Austria, Denmark, Norway, Portugal, Sweden, Switzerland and, UK)
1962	Common Agricultural Policy begins
1965	Signature of the Treaty of Brussels
1968	EEC Customs Union completed and Common External Tariff established
1970	Iceland joins EFTA
1972	EEC-EFTA free trade agreements signed
1973	1^{st} Enlargement: Denmark, Ireland, and UK join EEC
	Denmark and UK leave EFTA
1981	2^{nd} Enlargement: Greece joins EEC
1986	3^{rd} Enlargement: Portugal and Spain join EEC
	Portugal leaves EFTA
	Finland joins EFTA
1986	Signature of the Single European Act
1987	Single European Act comes into effect
1990	German unification: former East German lands join EEC
1991	Liechtenstein joins EFTA
1992	Signature of the Treaty of Maastricht
	EEC and EFTA establish European Economic Area
1993	Maastricht Treaty establishing European Union comes into effect
1995	4^{th} Enlargement: Austria, Finland and Sweden join EU and leave EFTA
1997	Signature of the Treaty of Amsterdam
1999	Eurozone established with 11 member countries (Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain)
2001	Signature of the Treaty of Nice

Table 3.1: Continued on next page

Table 3.1: continued from previous page

Year	Event
	Greece joins Eurozone
2004	5^{th} Enlargement: 10 countries join EU (Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia)
2007	6^{th} Enlargement: Bulgaria and Romania join EU
	Signature of the Treaty of Lisbon
	Slovenia joins Eurozone
2008	Cyprus and Malta join Eurozone
2009	Slovakia joins Eurozone
2011	Estonia joins Eurozone
2013	7^{th} Enlargement: Croatia joins EU
2014	Latvia joins Eurozone
2015	Lithuania joins Eurozone
2016	UK votes to leave the EU
2020	UK exits the EU
2023	Croatia joins Eurozone

3.3 Literature Review

Since the late 1980s, many economists have studied the benefits and costs of several steps of EU integration by means of ex-ante and ex-post evaluations. The first assessment of the cost of non-EU dates back to 1988, when the EC commissioned a study on the gains that the creation of the Single Market Programme would have entailed (Cecchini et al., 1988). At the time, the European Commission proposed to the Head of State and Government and to the European Parliament to create a *"truely unified economic area in Europe by 1992"* to increase MS' growth and improve competitiveness (Cecchini et al., 1988). It was against this background that Cecchini et al. (1988) made a first attempt in estimating the ex-ante the potential impacts of a complete elimination of trade barriers. Combining microeconomic and macroeconomic analyses, they forecasted an increase in member states' GDP of 4.5-6.5% and a decrease in price 6% due to the increased competition between firms.

Following Cecchini et al. (1988), other economists, such as Baldwin (1995); Baldwin et al. (1997); Brenton and Gros (1995); Hamilton and Winters (1992); Martin and Turrion (2001); Wang and Winters (1992), focused on the impacts on trade of a potential EU enlargement in the form of ex-ante studies. Using average trade flows among 76 countries between 1984 and 1986, Wang and Winters (1992) applied the gravity framework to investigate the potential volume and direction of Eastern-bloc trade. Baldwin et al. (1997) analysed, for the first time in a Computable General Equilibrium (CGE) model, multiple steps of the CEE-EU trade liberalisation, from the elimination of tariffs to the removal of border controls to capture all the economic implications of the accession. Assuming that the entrance to the Single Market would decrease the trade costs by 10%, they found a consequential increase in the real income of the acceding countries equal to 1.5%. Despite the different methodological frameworks applied and resulting estimates, the ex-ante studies agreed that the accession of Central and Eastern European (CEE) countries[8] to the EU would have had a strong potential on trade and welfare for both the EU incumbents and the New Member States.

Starting from the early 2000s, an increasing number of ex-post studies on the impact of EU integration on trade and welfare have been published. Different steps of the EU integration process have been analysed, from the establishment of Free Trade Agreements (FTAs), such as the association agreements, or European Agreements (EAs), and others, to the creation of the Single Market Programme, to the EU enlargements, and so on. Although most studies have focused on the benefits of EU integration, taking into account all EU Member States and all sectors, a number of studies have also narrowed their perspective at the country level (e.g., Breuss (2020)) and at the sectoral level (e.g., Warlouzet (2021)). Most economists have studied the effects of the EU integration processes applying the gravity model framework, and only a few have used the Synthetic Control Method (SCM) approach, exploiting the recent methodological developments. Overall, the existing literature found that the EU integration process has had positive effects on trade and welfare for the European Member States, especially for smaller, less developed, and less integrated

[8]The acronym CEE countries is used hereafter to refer to the ten Central and Eastern European countries that joined the EU starting from May 2004: Bulgaria, Romania, Hungary, Poland, the Czech Republic, the Slovak Republic, Slovenia, Lithuania, Latvia and Estonia.

countries such as the New Member States.

In the field of preferential trade liberalisation, economists have widely focused on the impact of various FTAs among CEE countries (e.g., CEFTA, BFTA) and between CEE countries and EU15 (i.e., EAs) (Adam et al., 2003; Cieślik and Hagemejer, 2011; De Benedictis et al., 2005; Egger and Larch, 2011; Herderschee and Qiao, 2007; Spies and Marques, 2009). Overall, the existing literature agrees that EU-sponsored trade liberalisation in the CEE countries and preferential trade liberalisation between CEE countries had a positive but heterogeneous effect on trade between CEE countries and EU15. Generally speaking, evidence shows that trade liberalisation is relatively more effective in raising trade of small countries towards larger trade partners (Cieślik and Hagemejer, 2011).

Using a fixed effects-within estimator, Adam et al. (2003) found that the two sub-regional trade agreements, namely CEFTA and BFTA, had a positive impact on trade, with the latter having a greater impact than the former. They also found that EAs stimulated trade between CEE countries and EU15, even if the effect was considerably lower than for CEFTA and BFTA. Using a slightly different methodological approach, De Benedictis et al. (2005) also analysed the effectiveness of various FTAs in shaping the intra-EU trade system and drew a different conclusion.[9]. They estimated the gravity equation using a system GMM dynamic panel data approach to assess the impact of CEFTA and BFTA on intra-EU trade and the extent to which the establishment of these sub-regional trade agreements has limited the influence of EAs in shaping the European trade structure as a hub-and-spoke system. Using data on bilateral trade flows from 1994 and 2002, they found that CEFTA and BFTA increased trade flows among CEE countries by about 16% and, conversely, that EAs had no impact on export flows from CEE countries to the EU. They explain that this finding aligns with other contributions, highlighting that following the reduction of trade barriers since the end of the 1980s, trade relationships between EU15 and CEE countries were already intense and well-established, and there was not much left to liberalise in the early 1990s.

In between these two studies, Cieślik and Hagemejer (2011) found that EAs, BFTA and CEFTA were trade creator agreements, but the impact

[9]The estimates provided by De Benedictis et al. (2005) exclude Bulgaria and Romania

of each FTA was heterogeneous across CEE countries. They used a generalised gravity equation of bilateral trade flows over the period 1993-2004 and showed that EAs stimulated bilateral import and bilateral export of CEE countries to the EU as in Adam et al. (2003), but such positive effect applied only to Bulgaria, Romania, Estonia, Latvia, and Lithuania. As explained by Herderschee and Qiao (2007), the heterogeneous impact of EAs across countries seems uncorrelated to the level of MFN tariffs but rather due to the price competitiveness in the origin country. Using data on nominal bilateral export flows drawn from the United Nations' World Trade Database for 167 countries between 1990 and 2001, Egger and Larch (2011) assessed the impact of EAs on merchandise trade between EU15 and the CEE countries, applying a structural gravity model in a CGE framework. They found that both the EAs led to an increase in trade between EU15 and CEE countries and to a reduction in internal trade. Following the increase in trade between EU15 and CEE countries, the cumulative GDP effect is 7% for CEE countries and 0.2% for EU15 MS. As a consequence, the cumulative welfare effects is greater than 3% of GDP for the involved CEE countries and about 2% in EU15 MS.

More recently, Stojčić et al. (2018) assessed whether EAs had any effect on the export performance, structure and quality from new member states and whether the slower approach of Slovenia and particularly Croatia yielded effects of different magnitude or direction than those in nine progressive NMS, applying a synthetic control method (SCM). Using data from UNIDO over the period 1990-2015, they found that trade liberalisation had a positive effect on the quality and technological intensity of CEE and Baltic countries' export performance. Despite being visible already after the implementation of liberalisation measures, the effects have widened over time, signalling a long-term effect and were dependent on the speed of trade liberalisation, i.e., tinier effects were observed for Slovenia and even less for Croatia.

Another cornerstone of European integration that economists have studied concerns the establishment of the Schengen Area that has led to the abolishment of internal border controls between EU MS. As pointed out by Felbermayr, Gröschl and Steinwachs (2018), the impact of the Schengen Area on bilateral trade costs between any pairs of country depends on whether the transit countries between the pair of countries under analysis

are Schengen members. Davis and Gift (2014) employed a gravity model to investigate the effect of the Schengen agreement on trade. They found that Schengen increased European trade substantially. Being a member of a Schengen agreement increases trade between the parties by about 0.10% every year. Similarly, Felbermayr, Gröschl and Steinwachs (2018) used bilateral data on goods and services trade flows, sectoral output, and expenditure data from the WIOD database for 40 countries over the period 1995-2011 and found that depending on their geographical location, Schengen affects countries differently. Peripheral countries, which typically trade across several internal EU borders, such as Finland, Estonia, and Latvia, had the largest gains. Conversely, central economies such as Germany or France had smaller gains. The country that benefitted the least from the Schengen agreement is Ireland because it trades a lot with non-Schengen countries. Non-EU countries such as Russia and Turkey also display a positive effect.

Economists have not only focused on the effectiveness of FTAs between EU15 and CEE countries but also on the economic benefits of the Single Market Programme. As mentioned above, Cecchini et al. (1988) was the first that focused on this aspect in an *ex-ante* perspective, over the last decade, a number of studies have assessed the actual economic benefits in an *ex-post* perspective. Overall, evidence shows that the Single Market Programme has contributed to an increase in trade and welfare for its members (Felbermayr et al., 2022; Felbermayr, Gröschl and Heiland, 2018; Fontagné et al., 2024; Lehtimäki and Sondermann, 2022; Mayer et al., 2019; Roeger and 't Veld, 2021) and that its disintegration would increase domestic aggregate mark-ups in EU countries by 2 to 6% (Heid and Stähler, 2024). Felbermayr, Gröschl and Heiland (2018) assess the economic benefits of the Single Market Programme by means of a computable general equilibrium (CGE) framework, using the WIOD database that provides trade data for 50 sectors in 43 countries. They found that membership in the Single Market Programme increased trade of goods and services by about 36% and 82%, respectively. Slightly different estimates were obtained by Felbermayr et al. (2022), which found that membership in the Single Market increased goods trade by about 46%, which corresponds to an average reduction of non-tariff trade costs of about 13 pp, and boosted services trade by 64%, corresponding to a 28 pp trade cost saving. Simi-

larly, Wolfmayr et al. (2019) used a structural gravity model in a general equilibrium setting focusing on the manufacturing goods market and found that the existence of the Single Market, as compared to the counterfactual situation, led to an increase in the volume of intra-EU imports of goods by 9% on average, which amounts to 47.5% for accession countries and 6.5% for EU15 economies.

As for FTAs, evidence shows that also the economic impact of the Single Market is heterogeneous across EU Member States (Fontagné et al., 2024). Mayer et al. (2019) found that the Single Market had a partial trade impact three times larger than a regular RTA, increasing trade between EU Member States by 109% for goods and by 58% for tradable services, but the resulting welfare gains differ across countries. Whilst welfare gains equal 4.4% for the average European country, they are larger for small, open economies like Eastern European countries. Lehtimäki and Sondermann (2022) drew a similar conclusion even using a different methodological approach. Actually, Lehtimäki and Sondermann (2022) investigated the growth impact of the European Single Market using the synthetic control method (SMC) and found that the Single Market has had a significant but heterogeneous growth impact for its Member States. Overall, the Single Market has increased the real GDP per capita of its founding countries by roughly 12-22%. In line with Mayer et al. (2019), the results suggest that smaller Member States have benefited more from the creation of the Single Market. Among the larger European countries, Spain stands out as having realised a significant growth premium, followed by the UK. In contrast, the three largest EU countries, Germany, France and Italy, did not benefit on a similar scale.

Roeger and 't Veld (2021) quantify the gains EU11 MS have from the Single market compared to the euro area and EU averages, allowing elastic labour supply, trade-induced investment response, and productivity effects, but disregarding endogeneous migration responses. Their counterfactual scenario consists of a world where the Single Market does not exist for any of the EU countries. Hence, they compare how EU11 MS are affected relative to EU15 MS. They estimate the impact using a multi-country version of the QUEST model, which is a structural macroeconomic model derived from micro-principals of dynamic inter-temporal optimisation. Looking at the period 1995-2018, Roeger and 't Veld (2021) found that EU11 MS are,

on average, more open to trade than EU15 and have strongly increased their export and import shares since their accession. Being strongly integrated into the EU value chain, EU11 MS tend also to trade relatively more with EU countries. This finding aligns with Anderson and Yotov (2022) that found that EU membership has stimulated trade on the extensive margin of trade, especially among old EU members. The stronger impact of EU membership on the number of products exported from old EU members to new EU members than vice versa is likely a consequence that new members have not successfully placed their products on the more competitive Western European market.

More recently, Nagengast et al. (2024) combined the structural gravity model with more recent heterogeneity-robust difference-in-differences (DiD) methods to study the impact of membership in the Single Market on international trade. Despite the different methodological approach, as compared to earlier studies, they found that the EU membership has increased bilateral trade flows between its Member States by roughly 52%. In line with the other studies analysed, Nagengast et al. (2024) found that being a member of the Single Market has benefits that are heterogeneous across countries. As a matter of fact, countries that joined the Single Market earlier (i.e., 1957, 1973, and 1986) had larger effects as compared to those that joined later (1995, 2004, 2007, and 2013).

Yet on the effects of European integration, a strand of the literature focused on the various economic impacts of EU enlargements, especially on the 2004 EU enlargement, when ten countries joined the EU (namely, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia). Overall, evidence showed that the EU enlargement had a positive effect on trade (i.e., trade creation), especially among new EU Member States (Antimiani and Costantini, 2013; Grančay, 2013; Hornok et al., 2010; Pochmara and Michałek, 2023), where the export prices and the quality of exported goods increased significantly (Benkovskis and Wörz, 2012). Interestingly, the EU enlargement did not lead to any form of intra-EU 'peripherality' since intra-core trade grew less than intra-periphery trade and its core-periphery counterpart (Egger and Pfaffermayr, 2013; Pochmara and Michałek, 2023). Whilst trade between Eastern and Western EU members had usually mainly consisted of final goods before the EU enlargements, since 2004, trade in intermediate goods has more

and more increased, leading to the formation of cross-border supply chains (Curran and Zignago, 2012; Kaminski and Ng, 2005; Kaplan et al., 2018; Martinez-Zarzoso et al., 2015). The structure and composition of exports from CEE countries towards the EU have modified and converged towards the average EU export structure depending on various forms of integration, e.g., fragmentation of production (De Benedictis and Tajoli, 2007; Grančay, 2013; Grančay et al., 2015).

Focusing on four CEE countries, namely Poland, Hungary, Romania, and Bulgaria, De Benedictis and Tajoli (2007) analysed their structure and composition of exports towards EU15 between 1989 and 2001 to investigate whether they became more similar to the EU15 ones and if it was due to the increased relevance of processing trade. Evidence showed that trade patterns changed after the 2004 EU enlargement for the four CEE countries under analysis due to the delocalisation of production and increased processed trade, but only in Poland and Hungary did the trade structure mimic EU patterns. Conversely, Romania and Bulgaria showed opposite tendencies. The observed diverging tendencies among the four CEE countries rely on different structures of production and processed trade. On the one hand, Poland and Hungary increased their exports in high and medium-high technology industries. On the other hand, Bulgaria and Romania, which were not ready for accession, kept specialising in traditional labour-intensive industries. These findings align with Antimiani and Costantini (2013); Hornok et al. (2010) that showed how, following the enlargement, trade of more technology-intensive industries grew at higher growth rates than low-tech industries, and this reduced the technological gap between the EU and the CEE countries.

Moreover, trade economists have focused on the impact of the EU accession on trade and welfare for old and new EU members by means of the structural gravity model in CGE, finding that the EU enlargements acted as trade creator, but the impacts were heterogeneous across countries and sectors. Focusing on the manufacturing sector, Wolfmayr et al. (2019) found that EU accession had an accelerating effect on trade which reached its maximum between 2013 and 2014 for most industries. They used the structural gravity model in a general equilibrium setting using the WIOD data on bilateral trade at the industry and country levels between 1995 and 2014 and observed that the EU15 economies fostered their trade rela-

tionships with new Member States following the 2004 EU enlargement and this positive effect was such to counterbalance the weak and partly dampening membership effects for intra-EU15 trade. Using the same bilateral trade data and a slightly different methodological approach, Spornberger (2022) found that the eastward expansion increased trade shares in the manufactured goods sector among EU15 by 70% and welfare by 3.1% and deepened integration with the EU15. Focusing on a much larger time horizon, Hagemejer and Matuszczak (2024) found an analogous result. They used sectoral trade data from 1988 to 2020 from UN Comtrade and found that bilateral merchandise trade in the EU increased trade, especially in medium-low and low-tech industries.

As mentioned above, the effects of EU enlargements on trade were heterogeneous across industries and countries. Martínez-Zarzoso et al. (2020) assessed the effects of the CEE countries' accession to EU in 2004 on bilateral trade of final and intermediate products separately, employing a difference-in-differences (DiD) strategy and estimating a generalized gravity model of trade. Regardless of the approach used, they found that the 2004 EU enlargement had a positive impact on intermediate and final goods trade, being the impact larger for final goods. Their findings revealed that the effects were heterogeneous across sub-sectors: major trade gains affected non-durable consumer goods and food and beverages primary and processed products. Focusing on the heterogeneity across countries, Baas (2020) estimated a sectorally disaggregated static CGE model, which allows for the simultaneous impact of migration, trade, and capital movements. He found that if the EU13 countries hadn't joined the EU, EU15 would have had a significant decrease in welfare. Overall, most countries benefitted from an increase either in trade or in migration or both, but the countries that benefitted the most from the EU13 accession were those geographically closer to EU15 and with a healthy economy.

Exploiting the methodological developments on the topic of GVCs, Hagemejer and Muck (2022) employed a structural gravity framework to investigate the effects of European integration, basing their estimates on the value-added flows. They argued that part of the increase in gross trade is due to the increased fragmentation in the production process. At the country level, smaller and less advanced economies benefitted the most from European integration, confirming the role of regional value chains.

At the industry level, the largest gains were observed for the agriculture sector and industries that use unprocessed food, likely because these industries were characterised by a high degree of protectionism within the EU and high trade barriers before the enlargement. Also, the services had relatively large gains, especially transportation, which relates to freedom of movement and residence for citizens within the EU. Surprisingly, industries such as the manufacturing of computers, electric equipment, and other transport equipment exhibit a negative effect since these industries are extremely specialised and fragmented over many countries, even beyond the EU.

More recently, economists have started assessing the impact of EU enlargements using the synthetic control method (SCM). Hagemejer et al. (2021) showed that the impact of EU accession on the level of economic development widely varies and depends, among the others, on the initial level of economic development. As an illustrative example, countries with high levels of economic development already prior to the accession, such as the Czech Republic and Slovenia, have relatively small gains. However, the gains are long-lasting and tend to increase over time. Yet, by means of SCM, Pochmara and Michałek (2023) assessed the trade implications of accession to the EU for the Czech Republic, Hungary, Poland, and Slovakia. They focused on the years from 2004 to 2019 and compared the actual trade flows to the counterfactual "synthetic" trade flows[10] to estimate the change in trade flows with EU15, new member states from the CEE countries and with the third countries. Their findings show that joining the EU doubled the four countries' exports and increased their imports by 50% after 15 years.

Finally, it is worth mentioning that over the last decade, likely inspired by the Brexit event, economists have started assessing the cost of "un-doing Europe", i.e., simulating the removal of one or more integration steps that have occurred since the early 1990s'. Felbermayr, Gröschl and Heiland (2018) showed that eliminating all European integration steps (i.e., EU Customs Union, the Single Market, the Common Currency, the Schengen Agreement, and the network of RTAs with third parties) would reduce intra-EU trade by about 40%. Trade with extra-EU countries may increase

[10]The selection of control variables of "donor countries", necessary to construct counterfactual trade flows of "synthetic" countries, is based on the gravity model.

due to substitution effects, but such effects would be dampened by negative income effects. Following the EU breakdown, EU MS would experience income losses which will be larger for smaller, poorer, more central, and more open EU MS. The latter finding aligns with Jackson and Shepotylo (2020, 2021) that found that in case of a complete disintegration of the EU, Eastern European countries and Luxembourg will experience the largest losses and will divert their trade flows to nearby non-EU members, whereas Germany, France, Italy, and Spain will be the least impacted. Analogously, Felbermayr et al. (2022) found that a complete elimination of all European integration steps would lower trade within the EU by some 25%. In case of a partial dissolution of the EU, i.e., elimination of individual agreements, the resulting trade effects are much smaller. Overall, output losses would be substantially more important for new EU members than for old ones and value-added contracts less than output in EU countries.

3.4 Methodology

The methodology employed in the present chapter builds on the structural gravity model developed by Anderson et al. (2015). The gravity model is the workhorse model in international trade economics as it has solid theoretical foundations and allows for investigating the determinants of international trade (Allen et al., 2020; Head and Mayer, 2014). Most researchers usually apply such a framework to quantify the partial or direct effects of economic integration agreements on bilateral trade flows.[11] However, the gravity model also allows the estimation of the general equilibrium (GE) effects, i.e., the estimation of the impacts of EU integration on EU members as well as on other countries, by translating direct EU integration impacts into redirection effects involving indirectly affected trade flows of non-EU countries and domestic trade flows. To this end, the approach used entails a multiple-step estimation. As further described in what follows, we first compute the baseline scenario and estimate the structural parameters of the gravity model, and then calculate the counterfactual changes in trade and welfare relative to the baseline scenario.

This approach has been extensively used in the literature to estimate the effects of trade-related policies. The current methodology follows all

[11] See Larch and Yotov (2024) for a survey of the methods and data developments in the RTA literature.

econometric best practices for estimating the gravity equation of international trade described by Yotov et al. (2016). Among the different options described by Yotov et al. (2016), we adopt the structural gravity equation form proposed by Santos-Silva and Tenreyro (2006), which allows the estimation of the general equilibrium (GE) effects. In other words, it enables the estimation of the impacts of EU disintegration on EU members as well as on third countries, by translating direct EU disintegration impacts into redirection effects involving indirectly affected trade flows of non-EU countries and domestic trade flows. Moreover, the Poisson pseudo maximum likelihood model proposed by Santos-Silva and Tenreyro (2006) overcomes the selection problem in gravity estimation, which arises because of the zero trade flows between selected pairs of countries and the treatment of heteroskedasticity in the trade data as it has a multiplicative form.

3.4.1 Theoretical model

The model proposed by Anderson et al. (2015) builds on Anderson (1979), which derived the first structural gravity model of trade under three main assumptions: *(i)* each country specializes completely in the production of its own good, and there is one good for each country produced exogenously (i.e., an "endowment economy"), *(ii)* preferences are identical and homothetic, *(iii)* the world is frictionless.[12]

Hence, let N be the number of countries in the world, each country manufactures a variety of goods that is traded with the other countries.[13] As in Armington (1969), goods are differentiated by place of origin. Since the supply of each good is limited to Q_i, and the factory-gate price for each variety is p_i, the value of domestic output in country i equals $Y_i = p_i Q_i$, where Y_i corresponds also to the nominal income in country i. The aggregate expenditure in the country i is instead denoted by E_i, and it can be expressed in terms of nominal income, $E_i = \phi_i Y_i$, where if $\phi > 1$, country i is experiencing a trade deficit, and if $1 > \phi_i > 0$, a trade surplus.

Consumers maximise their utility function under a standard budget constraint ($\sum_i p_{ij} c_{ij} = E_j$. According to the model, consumers' preferences are

[12]The assumption of a world with no frictions allows to normalise all prices to unity, with zero transport costs, tariffs, and distribution costs

[13]To simplify the notation, the time dimension is omitted.

homothetic, identical across the N countries, and given by a CES-utility function for country j, expressed as

$$\left(\sum_i \alpha_i^{\frac{1-\sigma}{\sigma}} c_{ij}^{\frac{\sigma-1}{\sigma}})\right)^{\frac{\sigma}{\sigma-1}} \tag{3.1}$$

where σ is the elasticity of substitution among different varieties, $\alpha_i > 0$ is the CES preference parameter, and c_{ij} denotes consumption of varieties from country i in country j. Starting from the solution of the consumer's optimisation problem, Anderson (1979) proposed a model that included the following system of equations:

$$X_{ij} = \left(\frac{t_{ij}}{\Pi_i P_j}\right)^{1-\sigma} Y_i E_j \tag{3.2}$$

$$P_j^{1-\sigma} = \sum_i \left(\frac{t_{ij}}{\Pi_i}\right)^{1-\sigma} Y_i \tag{3.3}$$

$$\Pi_i^{1-\sigma} = \sum_j \left(\frac{t_{ij}}{P_j}\right)^{1-\sigma} E_j \tag{3.4}$$

$$p_j = \frac{Y_j^{\frac{1}{1-\sigma}}}{\gamma_j \Pi_j} \tag{3.5}$$

where X_{ij} denotes the value of international and intra-national trade flows, E_j the expenditure in the destination country j from all origin countries, Y_i the sales from i to all destinations, $t_{ij} \geq 1$ the trade costs of exporting goods from i to j, and σ the elasticity of substitution across varieties. P_j and Π_i denote the inward multilateral resistance (IMR) and the outward multilateral resistance (OMR), respectively. The IMR consists of the sum of the incidence of trade costs on consumers in each country and also the CES price index of the demand system, while the OMR consists of the sum of the outward trade costs relative to destination price indexes.[14] Equation 3.5 is derived from the market clearance:

[14] Anderson and Yotov (2010) provide a detailed discussion on multilateral resistances.

$$
\begin{aligned}
Y_i &= \sum_j X_{ij} \\
&= \sum_j \left(\frac{\gamma_i p_i t_{ij}}{P_j} \right)^{1-\sigma} E_j \\
&= (\gamma_i p_i)^{1-\sigma} \sum_j \left(\frac{t_{ij}}{P_j} \right)^{1-\sigma} E_j
\end{aligned}
\tag{3.6}
$$

where p_i is the exporter's supply price of country i and γ_i is a positive distribution parameter of the CES utility function.

3.4.2 Empirical strategy

From an empirical point of view, we estimate the gravity equation with time-importer, time-exporter, and importer-exporter fixed effects, as recommended by Feenstra (2004) and subsequent literature. Thus, in line with the recent literature, the empirical model takes the following form:

$$
\begin{aligned}
X_{ij,t} = exp(\pi_{i,t} + \chi_{j,t} + \mu_{ij} + \beta_1 RTA_{ij,t} + \beta_2 EU_{ij,t} + \\
+ \beta_3 EURO_{ij,t} + \beta_4 Schengen_{ij,t} + \beta_5 EEA_{ij,t}) \times \epsilon_{ij,t}
\end{aligned}
\tag{3.7}
$$

where $RTA_{ij,t}$ is a dummy variable equal to 1 if country i and country j are members of the same RTA at time t, and 0 otherwise, $EU_{ij,t}$ is a dummy variable equal to 1 if country i and country j are EU members at time t, and 0 otherwise, $EURO_{ij,t}$ is a dummy variable equal to 1 if country i and country j are members of the Eurozone at time t, and 0 otherwise, $Schengen_{ij,t}$ is a dummy variable equal to 1 if country i and country j are members of the Schengen area at time t, and 0 otherwise, $EEA_{ij,t}$ is a dummy variable equal to 1 if country i and country j are members of the European Economic Area (EEA) at time t, and 0 otherwise, $\epsilon_{ij,t}$ is an error term, π_{it} is time- exporter fixed effect accounting for outward multilateral resistance and outputs, χ_{jt} is time-importer fixed effect accounting for inward multilateral resistance and expenditures, μ_{ij} it the exporter-importer fixed effect. Equation 3.7 is estimated with the PPML estimator using panel data from 1993 to 2020, which includes consistent international and domestic trade flows. The RTA dummy variable is exclusive, meaning that it does not include intra-EU RTAs.

Following Anderson et al. (2015), the estimates of the general equilibrium effects of trade policy with the PPML estimator are obtained by employing a multi-step strategy. First, the baseline scenario is estimated. This step entails the estimation of equation 3.7 using the PPML estimator. As noted by Yotov et al. (2016), the PPML estimator proves able to calculate theory-consistent GE effects of trade policies. Under the PPML method, the time-importer(exporter) fixed effects in equation 3.7 are consistent estimates of inward multilateral resistance and outward multilateral resistance, as demonstrated by Fally (2015). Estimating the baseline scenario implies obtaining estimates of the effect of RTAs, EU membership, and importer-exporter fixed effects that are needed to construct the bilateral trade costs matrix, and so the baseline indexes (Yotov et al., 2016).

Second, the counterfactual scenario is defined. In the current setting, where the goal is the quantification of the losses and gains in case of the disintegration of the European Union, defining the counterfactual scenario implies the reintroduction of the trade barriers that have been removed throughout the European integration process. Since the EU integration process has entailed various steps, we test different scenarios that capture different levels of EU disintegration. More specifically, we test the following scenarios: *(i)* removal of the Eurozone, *(ii)* removal of the Schengen Area, *(iii)* removal of the European Economic Area, *(iv)* removal of the European Customs Union together with the Eurozone and the Schengen Area. Each counterfactual scenario is defined by setting the original correspondent dummy variable equal to 0 for all i, j and t.

Third, the general equilibrium effects of each scenario of EU disintegration are obtained using the estimated trade elasticities and other parameters (first step) and the counterfactual trade costs (second step). More specifically, the conditional general equilibrium effects and the full endowment general equilibrium effects are estimated separately and sequentially for each scenario. To estimate the conditional gravity model, equation 3.7 is re-estimated with the PPML estimator using the counterfactual parameters defined in the second step. In particular, the econometric gravity specification is re-estimated for the year 2020, the latest year available. At this stage, the conditional general equilibrium values of the multilateral resistance are obtained together with the counterfactual trade costs. The full endowment general equilibrium effects are instead obtained by employ-

ing an iterative procedure that allows for endogenous factory-gate prices, income, expenditure and trade to adjust to the counterfactual shock.

Finally, the impacts of each scenario of EU disintegration are obtained as the%age difference between the baseline indexes (first step) and the counterfactual indexes (third step). For each impact, the correspondent confidence interval is then obtained. Among the others, a key advantage of this empirical strategy is that it allows for the estimation of country-specific impacts. In other words, it is possible to identify the countries that would benefit the most and those that would lose the most in terms of trade and welfare, in each scenario.

3.5 Data

Data on trade are extracted from the 2024 version of The Trade and Production Database (TradeProd) recently developed by Mayer et al. (2023). The TradeProd database provides data on international and domestic trade flows for 165 countries and nine industrial sectors based on 2-digit ISIC (International Standard Industrial Classification, Rev. 3)[15] over the period 1966-2020. Building on the database developed by de Sousa et al. (2012), it combines trade data from UN COMTRADE with production data from UNIDO (INDSTAT). Domestic trade flows (or self-imports) are estimated as the difference between gross production and total exports. The database includes raw and extrapolated data as separate variables intended for, respectively, estimation purposes and counterfactual exercises using new quantitative trade models. Indeed, to minimise the number of missing values in domestic trade flows time series and so allow counterfactual exercises, Mayer et al. (2023) implemented an extrapolation process.[16]

As compared to other existing databases, including both international and domestic trade flows (Borchert et al., 2021, 2022), the TradeProd has

[15]The nine industrial sectors covered are: Food (ISIC rev.3 15-16), Textiles (ISIC rev.3 17-19), Wood-Paper (ISIC rev.3 20-22), Chemicals (ISIC rev.3 23-25), Minerals (ISIC rev.3 26), Metals (ISIC rev.3 27-28), Machines (29-33), Vehicles (34-35), Other (36).

[16]The authors computed the gross output to total export ratio at the country-industry-year level and imputed missing domestic trade flows using the nearest in time observation adjusted for the average growth rate of $\frac{GDP_{it}}{Export_{it}}$ and $\frac{Prod_{it}}{Export_{it}}$ to account for globalization trends at the country and industry level. Additionally, they imputed the gross production multiplying the estimated output to total export ratio by the observed total exports for a given country-industry-year. Finally, using this approach, they extrapolated the gross production for the "Rest of the World (ROW)".

the advantage of covering almost the entire total manufacturing output (e.g., 98% over the period 2010-2020). Although the level of disaggregation at the sectoral level is far below the one in Borchert et al. (2021, 2022), where 118 distinct manufacturing industries are covered, the TradeProd provides full-time series for a much larger number of countries. Indeed, the lower level of disaggregation is because, in the INDSTAT dataset, a non-negligible number of countries declare a combination of two or more 2-digit ISIC categories.

Although the TradeProd database provides data on trade from 1966 until 2020, the analyses presented in the present chapter cover a narrowed time horizon which spans from 1996 until 2020. The choice of a shorter time horizon than the one available reflects the willingness to have a balanced panel. Moreover, shortening the time horizon has two main practical advantages. First, it allows to extensively overcome the issues related to newborn and dissolved countries. Indeed, between 1966 and 1993, various structural geographic changes significantly modified the structure of the network in terms of existing countries.[17] Second, starting from 1993, it is observed that the number of missing trade linkages due to reporting issues is minimised. Actually, in the past, many countries (especially the smallest and poorest ones) were not reporting trade data, not because they were not trading but either because of the lack of official statistics or because they belonged to an isolated political bloc.

Moreover, for the analyses at the country or region level, out of the 165 countries covered by TradeProd, the analyses consider 154 distinct countries. The sample of countries included in the trade network resulted from different cleaning procedure stages. First, countries that disappeared before 1993 were excluded from the analysis. This step entails excluding 5 countries, namely Czechoslovakia, the aggregate Ethiopia and Eritrea, the aggregate Pakistan and Bangladesh, the URSS, and Yugoslavia. Second, the countries that came into being between 1993 and 2020 were consolidated. This implied considering as a single country Serbia and Montenegro

[17] Among the others, in 1971 there was the dismemberment of Pakistan which resulted in the creation of Bangladesh, in 1990, there was the official reunification of West and East Germany into Germany and of North and South Yemen into Yemen, in 1991 there was the dissolution of Czechoslovakia leading to the rise of the Check Republic and Slovakia, and dissolution of the Soviet Union after which 15 post-Soviet states emerged, in 1993 Eritrea got its independence from Ethiopia, between 1990 and 1992, the fall of the Yugoslavia led to the emergence of six distinct countries.

even after 2006 when Montenegro got independence from Serbia, Sudan and South Sudan even after the South Sudan secession in 2011. Moreover, Belgium and Luxembourg are also considered as a single country because international trade statistics were available for these two countries only as a single entity until 1999 when European Community rules required split information. Lastly, countries that did not report trade flows for any international partner in at least one year between 1993 and 2020 were excluded. This step implied excluding seven additional countries, namely Botswana, Namibia, the State of Palestine, and Eswatini, for which the trade data were available only starting from 2000, and the Republic of the Marshall Islands, for which data were unavailable in 1993.

To estimate the gravity equation, data on bilateral trade flows are complemented with data on bilateral trade costs, drawn from the CEPII gravity dataset developed by Conte et al. (2022). It includes data at the exporter-importer-year level from 1948 onwards for 252 countries. For each pair of countries, it includes a set of dummy variables indicating whether countries share a common official or primary language (*comlang_off)*, share a common colonizer post-1945 *(comcol)*, share common borders *(contig)*, have an RTA (*rta*), and so on. It also provides information on the bilateral distance between countries. The database provides various specifications of the bilateral distance between countries, from simple distances, e.g., the distance between the most populated cities (*dist*), the distance between the capital cities (*distcap*), to weighted distances, e.g., the distance is corrected for the geographic distribution of population within each country (*distw_harmonic* and *distw_arithmetic*), to distances computed by Julian Hinz (*distw_harmonic_jh* and *distw_arithmetic_jh*). Moreover, it includes data at the country and year level indicating, among the others, the GDP of the country in each year, whether the country is a GATT member (*gatt*), a WTO member (*wto*), an EU member (*eu*), and so on.

3.6 Results

This section describes the results obtained by applying the methodology outlined in section 3.4.2. More specifically, it first provides the long-term impacts of the EU integration process on trade and then digs into the effects on trade and welfare of the different scenarios of EU disintegration.

3.6.1 Partial equilibrium results

Table 3.2 presents the results obtained by estimating equation 3.7, with and without the fixed effects. Without including any fixed effect, nor the usual time-invariant bilateral variables such as distance nor time-varying country variables such as GDP, the findings suggest a highly positive impact of EU integration on trade and a null effect of RTA and EEA on trade. Using this specification, being a member of the Eurozone increases the value of exports by 85.7%. As soon as importer-year and exporter-year fixed effects are introduced, Column (2), the estimated coefficients vary, in particular the RTA and EEA are found to have on average a positive and statistically significant effect on trade. Finally, when also the country-pair fixed effects are included, and standard errors are clustered for intra-group correlation at the country-pair level, the estimated coefficients vary again. More specifically, RTAs are found not to have an effect on trade, probably because the related variability is, by and large, captured by country-pair fixed effects. As far as EU integration is concerned, evidence shows that being a member of the EU customs union and being a member of the European Economic Area increases exports by 21.7% and 8.02%, respectively. Conversely, being a member of the Eurozone and being a member of the Schengen Area decrease exports by 45.5% and 12.1%, respectively. The estimated negative impact of the Eurozone is in line with literature that found that a common currency, and especially the Euro, has a trade effect that is very sensitive to the set of fixed effects introduced in the regression (Baldwin and Taglioni, 2006; Mayer et al., 2019).

Our preferred estimates of the EU effects on exports are those reported in Column (3).

Table 3.2: Gravity partial effects of European integration in goods

	(1)	(2)	(3)
RTA	0.0717	-0.730***	-0.0553
	(0.0886)	(0.0988)	(0.0355)
EU	1.402***	2.087***	0.217***
	(0.132)	(0.187)	(0.0398)
EURO	0.857***	0.689***	-0.455***
	(0.0832)	(0.0806)	(0.0456)
SCHENGEN	0.729***	1.781***	-0.121***
	(0.0871)	(0.0749)	(0.0387)
EEA	0.242	1.406***	0.0802*
	(0.148)	(0.199)	(0.0445)
Constant	6.902***	10.42***	12.87***
	(0.0816)	(0.0347)	(0.0156)
Observations	664,048	664,048	640,416
Dropped observations	0	0	23,632
Importer-Year and Exporter-Year FE	NO	YES	YES
Country pair FE	NO	NO	YES
Pseudo R-Square	.06	.76	.99

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Note: The dependent variable is exports. All models are estimated by PPML using the STATA module ppmlhdfe developed by Correia et al. (2023). To ensure convergence, *ppmlhdfe* eliminates singletons and observations separated by fixed effects, in a way that does not change the consistency of the estimation. As a result, 23,632 singleton observations are dropped when we estimate our structural gravity in columns (3). In column (3), standard errors are clustered for intra-group correlation at the country pair level. The RTA membership is "exclusive", i.e., it equals zero when EU28, Schengen, or EEA is equal to one.

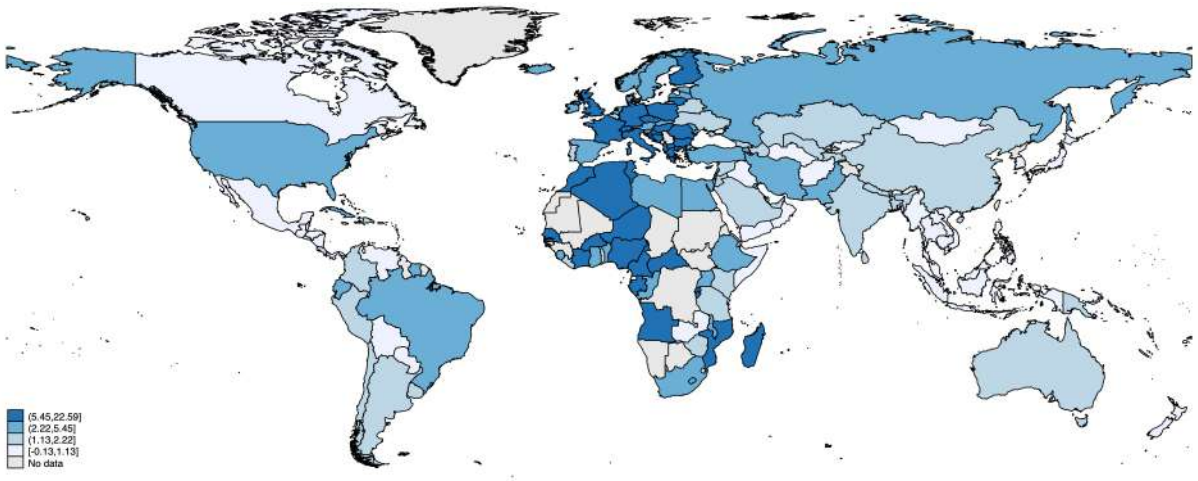
3.6.2 General equilibrium results

Using the parameters estimated in the partial equilibrium and summarised in Column (3) of Table 3.2, the conditional and full endowment general equilibrium effects are simulated under each scenario using 2020 as the reference year. Whereas this section only discusses the full endowment general equilibrium effects on trade and welfare, Table E.1 presents the results for each of the four scenarios, for the conditional and full endowment general equilibrium cases. Figure 3.1 shows the full endowment general equilibrium effects on trade for each of the four scenarios, namely *(i)* the removal of the Eurozone, *(ii)* the removal of the Schengen Area, *(iii)* the removal of the European Economic Area, *(iv)* the removal of the European

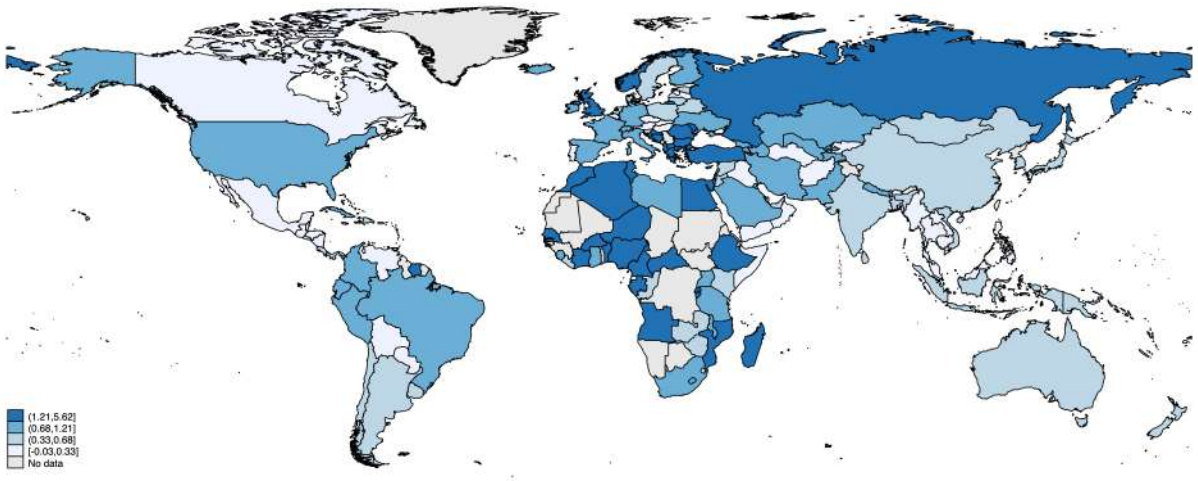
Customs Union together with the removal of Eurozone and the Schengen Area.

Overall, apart from the removal of the European Economic Area, the removal of the EU integration steps would lead to an increase in exports almost for all countries, both members EU and non-EU members. Although it would be reasonable to expect that undoing Europe would have detrimental effects, at least on EU trade, evidence suggests that such detrimental effects are more than counterbalanced by trade diversion effects. In other words, following the removal of the Eurozone, the Schengen Area, and the EU customs union, non-EU members would increase their imports from EU members to such an extent that European exports would overall increase despite the fall in intra-EU trade. Among the countries that would gain the most from the EU disintegration, there are Albania and Central African Republic.

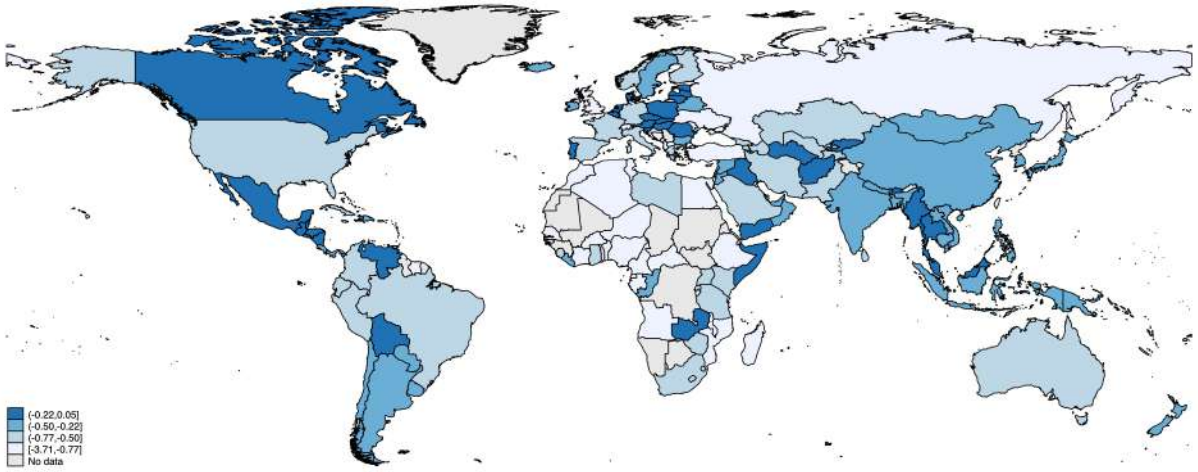
Conversely, the removal of the European Economic Area would lead to a decrease in exports worldwide, except in Hungary, the Czech Republic, Iraq, and Slovakia, where exports would increase. Across countries, the extent to which exports decrease is quite heterogeneous. The countries that would experience more significant export drops are surprisingly African countries, even though these are not members of the European Economic Area. Among the others, an explanation could be that since, in this scenario, the European Union would remain in place, the abolishment of the European Economic Area would not have large detrimental effects on intra-EU trade.



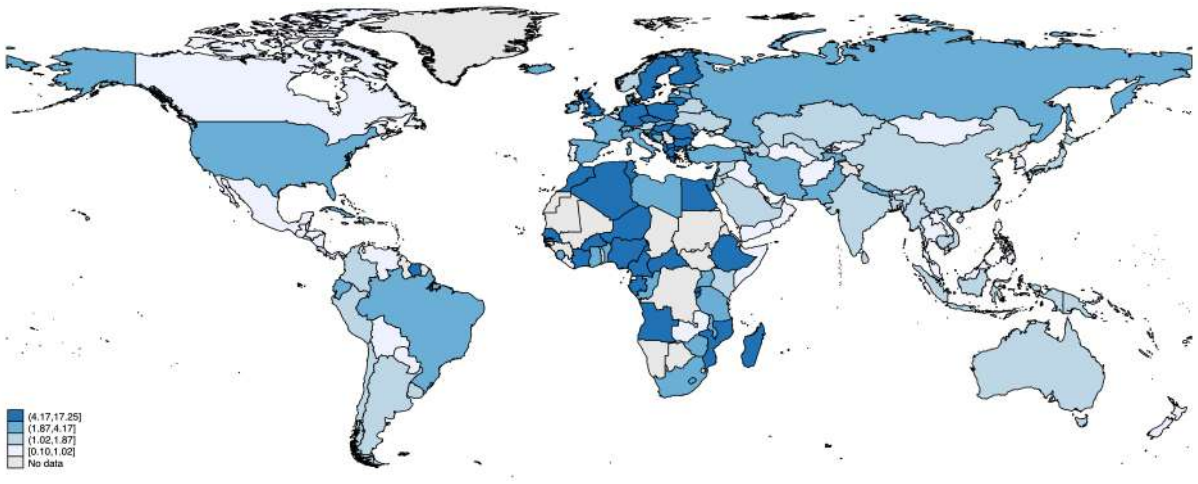
(a) Scenario 1: no Eurozone



(b) Scenario 2: no Schengen Area



(c) Scenario 3: no European Economic Area



(d) Scenario 4: no EU customs union, Eurozone, Schengen Area

Note: each category corresponds to a quartile. The shades of blues are proportional to the magnitude of the effect. Countries filled in light grey were not included in the analysis because of missing bilateral trade flow data.

Figure 3.1: The trade effects of EU disintegration

Figure 3.2 shows the full endowment general equilibrium effects on welfare for each of the four scenarios, namely *(i)* the removal of the Eurozone, *(ii)* the removal of the Schengen Area, *(iii)* the removal of the European Economic Area, *(iv)* the removal of the European Customs Union together with the of Eurozone and the Schengen Area. Evidence shows that depending on the scenario under analysis, different welfare effects materialise, which also differ across countries.

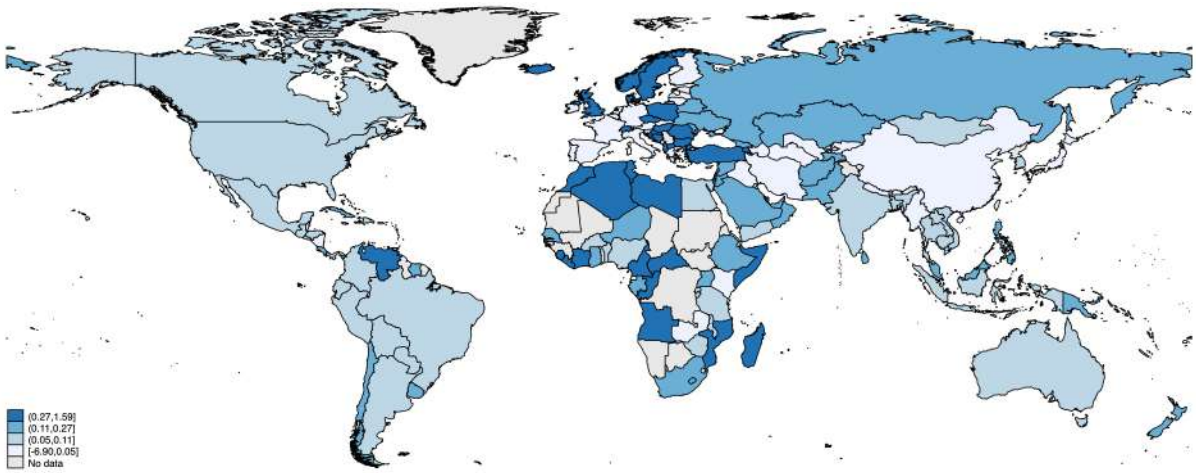
In the first scenario, the removal of the Eurozone, a decrease in welfare would be experienced only by the members of the Eurozone. The magnitude of this decrease ranges from -6.9% in Portugal to -5.5% in Malta. In the rest of the world, countries would instead gain from the removal of the Eurozone in terms of increased welfare. Interestingly, among the countries that would gain the most in terms of welfare there are all the EU members that have not adopted the Euro. As an illustrative example, Hungary would increase its GDP by 1.28% and the Czech Republic by 1,19%. Other countries in the world that also would gain from the removal of the Eurozone are especially located in Africa, e.g., Libya, Liberia, and Tunisia, which would increase their GDP by 1.59%, 1.34%, and 1.16%, respectively.

In case of removal of the Schengen area, all its members would experience losses in welfare. The magnitude of the GDP decrease ranges from

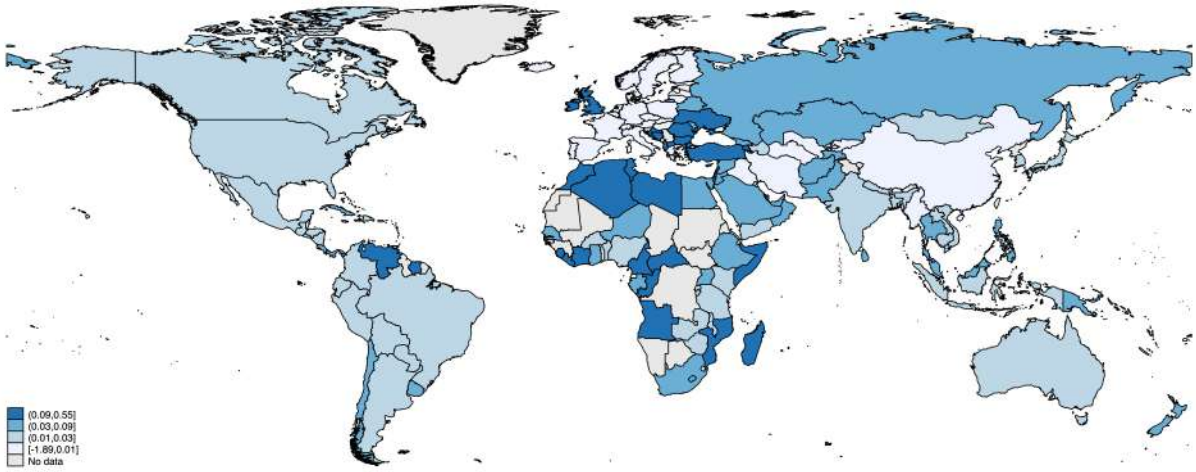
-1.89% in Portugal to -1.49% in Malta. None of the other countries would have drops in welfare, but neither would they have large gains. Actually, countries such as Belize, Iraq, Myanmar, Turkmenistan, and Uzbekistan would be completely unaffected by the abolishment of the Schengen area. In the rest of the world, the welfare gains would be moderate, ranging from a 0.1% increase in GDP to a maximum of 0.55. As in the case of the removal of the Eurozone, the countries that would benefit the most from the removal of the Schengen area would be Libya, Liberia, and Tunisia, where the GDP would increase by 0.55%, 0.47%, and 0.36%, respectively.

In the case of the removal of the European Economic Area, the findings reveal that whereas the welfare of its members would increase, the one of third countries would either decrease or remain unchanged. Among the members of the European Economic Area, the national GDP would increase by more than 1% in all countries. More specifically, the countries where it would increase the most are Portugal (+1.29%), Romania and Poland (+1.28%), Greece and Spain (+1.26). In the rest of the world, Iraq, Myanmar, Turkmenistan, and Uzbekistan would not experience any gain or loss, whereas the other countries would have a tiny decrease in GDP.

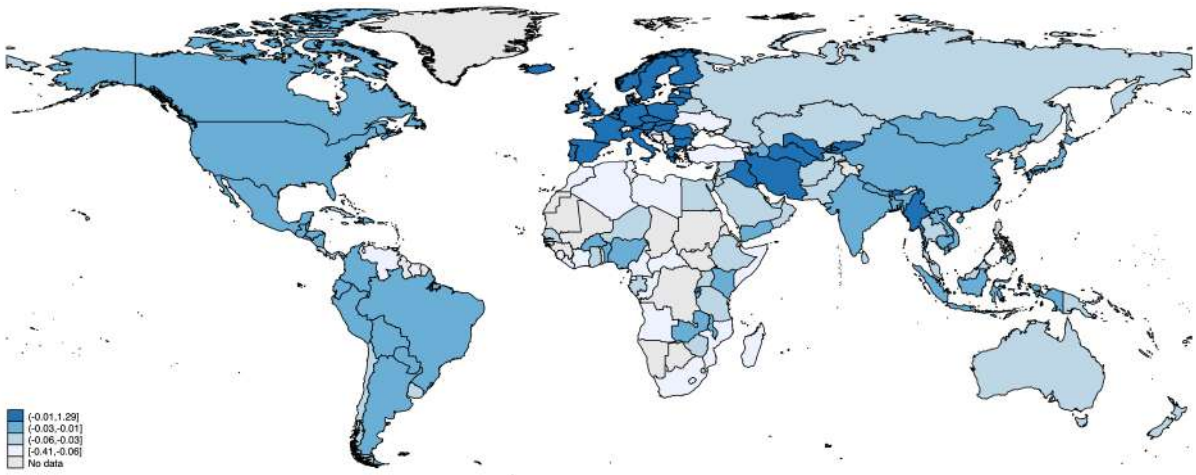
Finally, in case of the removal of the European Customs Union together with the removal of the Eurozone and the Schengen Area, the vast majority of European member states would experience welfare losses. The most negatively affected countries would be Portugal, Spain, Italy, Greece, and France, whose GDP would decrease by more than 5%. Interestingly, also the GDP of Norway, Iceland, and Switzerland would decrease as they would no longer be part of the Schengen Area. Conversely, other EU members such as Bulgaria, Croatia, Czech Republic, Denmark, Hungary, Poland, Romania, and Sweden would have welfare gains. Bulgaria and Croatia are the countries that would experience the largest increase in GDP, which would equal 4.4% and 4.64%, respectively. The rest of the world, which is not part of the European customs union nor the Eurozone or the Schengen Area, would have welfare gains. This is especially true for Libya, Liberia, and Tunisia, which would increase their GDP by 1.27%, 0.97%, and 0.89%, respectively.



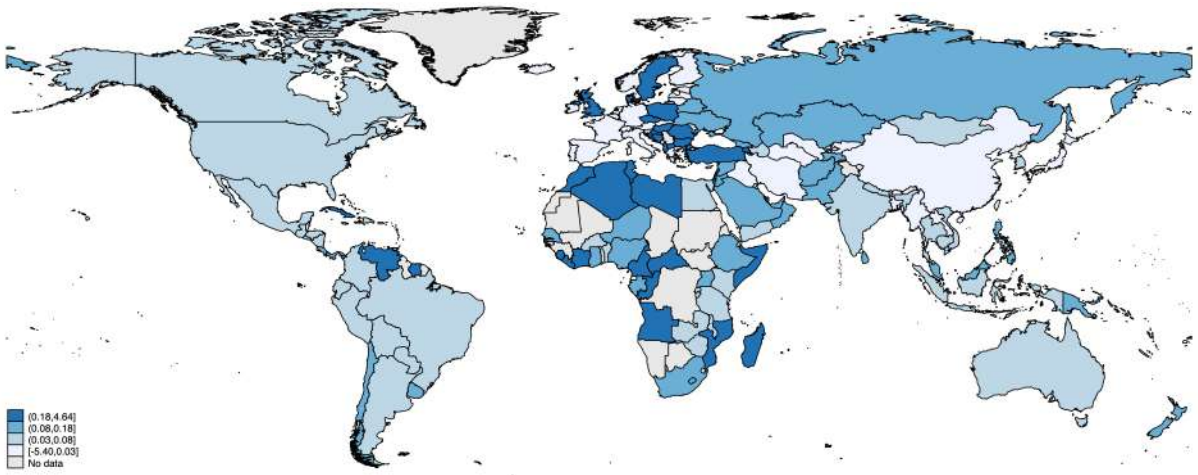
(a) Scenario 1: no Eurozone



(b) Scenario 2: no Schengen Area



(c) Scenario 3: no European Economic Area



(d) Scenario 4: no EU customs union, no Eurozone, no Schengen Area

Note: each category corresponds to a quartile. The shades of blues are proportional to the magnitude of the effect. Countries filled in light grey were not included in the analysis because of missing bilateral trade flow data.

Figure 3.2: The welfare effects of EU disintegration

3.7 Conclusions

This chapter aimed to quantify the gains and losses in terms of trade and welfare of undoing Europe, i.e., undoing the various EU integration steps that have taken place since the early 1950s'. Following the literature on international trade, the methodology entails the estimation of the structural gravity model in a general equilibrium framework. The model is estimated using data at the bilateral trade level between 1993 and 2020, which are drawn from the 2024 version of the TradeProd database.

Despite the large number of existing studies on the benefits of the European Union on trade and welfare, over the last few years, the interest in quantifying the costs and benefits of the European Union has been revamped, especially after Brexit. Moreover, such a research question is also important given the current socioeconomic and political background, which is characterised by conflicts and countries willing to implement more protectionist trade policies, at the same time by countries keen to become EU members.

The present chapter has investigated four different counterfactual scenarios to simulate the EU disintegration, namely *(i)* the removal of the Eurozone, *(ii)* the removal of the Schengen Area, *(iii)* the removal of the

European Economic Area, *(iv)* the removal of the European Customs Union together with the removal of the Eurozone and the Schengen Area. Evidence shows that, except in the case of the removal of the European Economic Area, undoing Europe while increasing exports worldwide would have detrimental effects on EU members' welfare. Conversely, non-EU countries would benefit in terms of increased GDP. Among, non-EU countries, those that would experience the largest gains are Libya, Liberia, and Tunisia.

These findings align with Felbermayr et al. (2022); Felbermayr, Gröschl and Heiland (2018); Jackson and Shepotylo (2020, 2021); Mayer et al. (2019), who found that eliminating the European integration steps would lead to income losses for EU members. However, whereas the literature focusing on undoing Europe has found that losses would be larger for smaller, poorer, more central, and more open EU MS, we found that larger losses would affect Portugal. Yet, in contrast with the existing literature stating that output losses would be substantially more important for new EU members than for old ones, we found that in the most severe disintegration scenario, the countries most severely affected would be Portugal, Spain, Italy, Greece, and France, i.e., old EU members.

Conclusions

The ongoing socioeconomic and political events and governments' declarations concerning their willingness to shorten global value chains to avoid being over-dependent on imports require to keep understanding the structure of the World Trade Network and its evolution. Likewise, the recent COVID-19 pandemic has revealed the importance of being able to produce domestically strategic goods and also to predict any diffusion effect that might occur in case of a disruption. Moreover, the increasing interest in further enlarging the European Union makes it an interesting case study for understanding its potential.

Against this background, this thesis provides new evidence on the structure and the evolution of the World Trade Network, the extent to which the role a country plays in the network is correlated with countries' resistance to import and export, as well as on the benefits of RTAs, in particular the EU Single Market. By analysing international trade using different methodological approaches and disaggregating the analyses at the sectoral level, this thesis shows how complex the World Trade Network is. Combining the network analysis indices with the multilateral resistance terms derived from the structural gravity model paves the floor for new methodological approaches that may integrate the interconnectedness captured by network centrality measures together with countries' resistance to import and trade.

The main limitation of the analyses carried out is that the data used were available only until 2020, thus not covering the post-pandemic situation. It is likely that following the spread of COVID-19 and the onset of the Ukraine war, the structure of the World Trade Network has further evolved. As a response to these events, many countries have, in fact, implemented trade-related policies that might have changed their export/import composition

and so their importance within the World Trade Network. Therefore, future analyses could replicate the analyses carried out within this thesis with more recent data to have an updated snapshot of the World Trade Network and countries' resistance to trade.

Moreover, the availability of more up-to-date data would also enable capturing the gains and losses of European (dis)integration taking into account the more recent integration steps, such as the adoption of the Euro by Croatia in 2023, the accession to the Schengen Area by Croatia in 2023 and by Bulgaria and Romania in 2024. The analyses carried out using the 2020 as a reference year showed that the removal of Eurozone as well as the removal of the Schengen Area would have a positive welfare effect for these countries, however, a negative effect might be expected in the future.

Bibliography

Abbate, A., De Benedictis, L., Fagiolo, G. and Tajoli, L. (2018), 'Distance-varying assortativity and clustering of the international trade network', *Network Science* **6**(4), 517–544.

Abeysinghe, T. and Forbes, K. (2005), 'Trade linkages and output-multiplier effects: A structural VAR approach with a focus on Asia', *Review of International Economics* **13**(2), 356–375.

Adam, A., McHugh, J. and Kosma, T. (2003), Trade Liberalization Strategies: What Could South Eastern Europe Learn From Cefta and Bfta?, Technical report, International Monetary Fund.

Allen, T., Arkolakis, C. and Takahashi, Y. (2020), 'Universal gravity', *Journal of Political Economy* **128**(2), 393–433.

Aller, C., Ductor, L. and Herrerias, M. J. (2015), 'The world trade network and the environment', *Energy Economics* **52**, 55–68.

Anderson, J. E. (1979), 'A theoretical foundation for the gravity equation', *The American Economic Review* **69**(1), 106–116.

Anderson, J. E., Larch, M. and Yotov, Y. V. (2015), Estimating General Equilibrium Trade Policy E ects: GE PPML, Technical report, CESifo Working Papers, 1-25.

Anderson, J. E. and van Wincoop, E. (2003), 'Gravity with gravitas: A solution to the border puzzle', *American Economic Review* **93**(1), 170–192.

Anderson, J. E. and Yotov, Y. V. (2010), 'The changing incidence of geography', *American Economic Review* **100**(5), 2157–2186.

Anderson, J. E. and Yotov, Y. V. (2022), Quantifying the Extensive Margin (s) of Trade: The Case of Uneven European Integration, Technical report, CESifo Working Paper.

Antimiani, A. and Costantini, V. (2013), 'Trade performances and technology in the enlarged European Union', *Journal of Economic Studies* **40**(3), 355–389.

Antonietti, R., Falbo, P. and Fontini, F. (2021), 'Assessing the relationship between air quality, wealth, and the first wave of COVID-19 diffusion and mortality', *Energy Transition, Climate Change, and COVID-19: Economic Impacts of the Pandemic* pp. 1–14.

Antonietti, R., Falbo, P., Fontini, F., Grassi, R. and Rizzini, G. (2022), 'The world trade network: country centrality and the COVID-19 pandemic', *Applied Network Science* **7**(1), 18.

Armington, P. S. (1969), 'A theory of demand for products distinguished by place of production', *Staff Papers* **16**(1), 159–178.

Baas, T. (2020), 'The economic benefits of EU-13 membership', *DHBW Stuttgart: Stuttgart, Germany* .

Baier, S. L. and Bergstrand, J. H. (2009), 'Bonus vetus OLS: A simple method for approximating international trade-cost effects using the gravity equation', *Journal of International Economics* **77**(1), 77–85.

Baier, S. and Standaert, S. (2020), 'Gravity Models and Empirical Trade', *Oxford Research Encyclopedia of Economics and Finance* .

Baldwin, R. (2024), 'China is the World's Sole Manufacturing Superpower: A Line Sketch of the Rise'', *CEPR Publication* .
URL: *https://cepr. org/voxeu/columns/china-worlds-sole-manufacturing-superpower-line-sketch-rise*

Baldwin, R. E. (1995), 'The Eastern Enlargement of the European Union', *European Economic Review* **39**(3-4), 474–481.

Baldwin, R. E., Francois, J. F. and Portes, R. (1997), 'The costs and benefits of eastern enlargement: the impact on the EU and central Europe', *Economic policy* **12**(24), 125–176.

Baldwin, R. E. and Taglioni, D. (2006), 'Gravity for Dummies and Dummies for Gravity Equations', *NBER Working Paper* (w12516).

Baldwin, R., Freeman, R. and Theodorakopoulos, A. (2024), 'Deconstructing Deglobalization: The Future of Trade is in Intermediate Services', *Asian Economic Policy Review* **19**(1), 18–37.
URL: *https://onlinelibrary.wiley.com/doi/abs/10.1111/aepr.12440*

Barigozzi, M., Fagiolo, G. and Garlaschelli, D. (2010), 'Multinetwork of international trade: A commodity-specific analysis', *Physical Review E* **81**(4), 046104.

Barigozzi, M., Fagiolo, G. and Mangioni, G. (2011), 'Identifying the community structure of the international-trade multi-network', *Physica A: statistical mechanics and its applications* **390**(11), 2051–2066.

Benkovskis, K. and Wörz, J. (2012), 'Non-price competitiveness gains of Central, Eastern and Southeastern European countries in the EU market', *Focus on European Economic Integration Q* **3**, 27–47.

Bergstrand, J. H. (1985), 'The gravity equation in international trade: some microeconomic foundations and empirical evidence', *The review of economics and statistics* pp. 474–481.

Bergstrand, J. H. and Egger, P. (2013), Gravity equations and economic frictions in the world economy, *in* 'Palgrave handbook of international trade', Springer, pp. 532–570.

Bernard, A. B., Dhyne, E., Magerman, G., Manova, K. and Moxnes, A. (2022), 'The origins of firm heterogeneity: A production network approach', *Journal of Political Economy* **130**(7), 1765–1804.

Bernard, A. B., Jensen, J. B. and Lawrence, R. Z. (1995), 'Exporters, jobs, and wages in US manufacturing: 1976-1987', *Brookings papers on economic activity. Microeconomics* **1995**, 67–119.

Bernard, A. B., Jensen, J. B., Redding, S. J. and Schott, P. K. (2007), 'Firms in international trade', *Journal of Economic perspectives* **21**(3), 105–130.

Bernard, A. B. and Moxnes, A. (2018), 'Networks and trade', *Annual Review of Economics* **10**(1), 65–85.

Bhattacharya, K., Mukherjee, G. and Manna, S. (2007), The international trade network, *in* 'Econophysics of Markets and Business Networks: Proceedings of the Econophys-Kolkata III', Springer, pp. 139–147.

Bhattacharya, K., Mukherjee, G., Saramäki, J., Kaski, K. and Manna, S. S. (2008), 'The international trade network: weighted network analysis and modelling', *Journal of Statistical Mechanics: Theory and Experiment* **2008**(02), P02002.

Bloch, F., Jackson, M. O. and Tebaldi, P. (2023), 'Centrality measures in networks', *Social Choice and Welfare* pp. 1–41.

Bonacich, P. (1972), 'Factoring and weighting approaches to status scores and clique identification', *Journal of mathematical sociology* **2**(1), 113–120.

Bontempi, E. and Coccia, M. (2021), 'International trade as critical parameter of COVID-19 spread that outclasses demographic, economic, environmental, and pollution factors', *Environmental Research* **201**, 111514.

Bontempi, E., Coccia, M., Vergalli, S. and Zanoletti, A. (2021), 'Can commercial trade represent the main indicator of the COVID-19 diffusion due to human-to-human interactions? A comparative analysis between Italy, France, and Spain', *Environmental research* **201**, 111529.

Borchert, I., Larch, M., Shikher, S. and Yotov, Y. V. (2021), 'The international trade and production database for estimation (ITPD-E)', *International Economics* **166**, 140–166.

Borchert, I., Larch, M., Shikher, S. and Yotov, Y. V. (2022), 'The International Trade and Production Database for Estimation-Release 2 (ITPD-E-R02)', *USITC Working Paper 2022–07–A* .

Brandes, U., Kenis, P. and Raab, J. (2006), 'Explanation through network visualization', *Methodology* **2**(1), 16–23.

Brenton, P. A. and Gros, D. (1995), *Trade between the European Union and Central Europe: An economic and policy analysis*, CEPS. Centre for European Policy Studies.

Breuss, F. (2020), 25 years of Austria's EU membership: Quantifying the economic benefits with a DSGE model, Technical report, WIFO Working Papers.

Byé, M. (1950), 'Unions douanières et données nationales', *Economie appliquée* **3**(1), 121–157.

Caliendo, L. and Parro, F. (2015), 'Estimates of the Trade and Welfare Effects of NAFTA', *The Review of Economic Studies* **82**(1), 1–44.

Cecchini, P. et al. (1988), 'The European Challenge', *Commission of the European Communities, Gower Press, Brookfield* .

Cepeda-López, F., Gamboa-Estrada, F., León, C. and Rincón-Castro, H. (2019), 'The evolution of world trade from 1995 to 2014: A network approach', *The Journal of International Trade & Economic Development* **28**(4), 452–485.

Chaney, T. (2014), 'The network structure of international trade', *American Economic Review* **104**(11), 3600–3634.

Cieślik, A. and Hagemejer, J. (2011), 'The effectiveness of preferential trade liberalization in Central and Eastern Europe', *The International Trade Journal* **25**(5), 516–538.

Cingolani, I., Iapadre, L. and Tajoli, L. (2018), 'International production networks and the world trade structure', *International Economics* **153**, 11–33.

Cingolani, I., Piccardi, C. and Tajoli, L. (2015), 'Discovering preferential patterns in sectoral trade networks', *PloS one* **10**(10), e0140951.

Conte, M., Cotterlaz, P., Mayer, T. et al. (2022), The CEPII gravity database, Working papers, CEPII.

Coquidé, C., Lages, J. and Shepelyansky, D. L. (2020), 'Crisis contagion in the world trade network', *Applied Network Science* **5**, 1–20.

Correia, S., Guimaraes, P. and Zylkin, T. (2023), PPMLHDFE: Stata module for Poisson pseudo-likelihood regression with multiple levels of fixed effects, Technical report, Boston College Department of Economics.

Curran, L. and Zignago, S. (2012), 'EU enlargement and the evolution of European production networks', *Research in International Business and Finance* **26**(2), 240–257.

Davis, D. and Gift, T. (2014), 'The positive effects of the Schengen Agreement on European trade', *The World Economy* **37**(11), 1541–1557.

De Benedictis, L., De Santis, R., Vicarelli, C. et al. (2005), 'Hub-and-Spoke or else? Free trade agreements in the "enlarged" European Union', *The European Journal of Comparative Economics* **2**(2), 245–260.

De Benedictis, L., Nenci, S., Santoni, G., Tajoli, L. and Vicarelli, C. (2014), 'Network analysis of world trade using the BACI-CEPII dataset', *Global Economy Journal* **14**(3-4), 287–343.

De Benedictis, L. and Salvatici, L. (2011), *The Trade Impact of European Union Preferential Policies: An Analysis Through Gravity Models*, Springer Science & Business Media.

De Benedictis, L. and Taglioni, D. (2011), The gravity model in international trade, *in* 'The trade impact of European Union preferential policies', Springer, pp. 55–89.

De Benedictis, L. and Tajoli, L. (2007), 'Economic integration and similarity in trade structures', *Empirica* **34**, 117–137.

De Benedictis, L. and Tajoli, L. (2010), 'Comparing sectoral international trade networks', *Aussenwirtschaft* .

De Benedictis, L. and Tajoli, L. (2011), 'The world trade network', *The World Economy* **34**(8), 1417–1454.

De Bruyne, K., Magerman, G. and Van Hove, J. (2013), Revealed multilateral trade resistance in gravity models: a network approach, *in* 'Proceedings of the ETSG Fifteenth Annual Conference, Birmingham'.

de Sousa, J., Mayer, T. and Zignago, S. (2012), 'Market access in global and regional trade', *Regional Science and Urban Economics* **42**(6), 1037–1052.

Dornbusch, R., Fischer, S. and Samuelson, P. A. (1977), 'Comparative advantage, trade, and payments in a Ricardian model with a continuum of goods', *The American Economic Review* **67**(5), 823–839.

Duenas, M. and Fagiolo, G. (2013), 'Modeling the international-trade network: a gravity approach', *Journal of Economic Interaction and Coordination* **8**, 155–178.

Eaton, J. and Kortum, S. (2002), 'Technology, Geography, and Trade', *Econometrica* **70**(5), 1741–1779.
URL: *http://www.jstor.org/stable/3082019*

Egger, P. H. and Pfaffermayr, M. (2013), 'The Pure Effects of European Integration on Intra-EU Core and Periphery Trade', *The World Economy* **36**(6), 701–712.

Egger, P. and Larch, M. (2011), 'An assessment of the Europe agreements' effects on bilateral trade, GDP, and welfare', *European Economic Review* **55**(2), 263–279.

Fagiolo, G. (2010), 'The international-trade network: gravity equations and topological properties', *Journal of Economic Interaction and Coordination* **5**, 1–25.

Fagiolo, G. and Luzzati, D. S. (2023), 'Centrality in the macroeconomic multi-network explains the spatiotemporal distribution of country per-capita income', *Applied Network Science* **8**(1), 59.

Fagiolo, G. and Mastrorillo, M. (2014), 'Does human migration affect international trade? A complex-network perspective', *PloS one* **9**(5), e97331.

Fagiolo, G., Reyes, J. and Schiavo, S. (2008), 'On the topological properties of the world trade web: A weighted network analysis', *Physica A: Statistical Mechanics and its Applications* **387**(15), 3868–3873.

Fagiolo, G., Reyes, J. and Schiavo, S. (2009), 'World-trade web: Topological properties, dynamics, and evolution', *Physical Review E* **79**(3), 036115.

Fagiolo, G., Reyes, J. and Schiavo, S. (2010), 'The evolution of the world trade web: a weighted-network analysis', *Journal of Evolutionary Economics* **20**, 479–514.

Fally, T. (2015), 'Structural gravity and fixed effects', *Journal of International Economics* **97**(1), 76–85.

Fan, Y., Ren, S., Cai, H. and Cui, X. (2014), 'The state's role and position in international trade: A complex network perspective', *Economic Modelling* **39**, 71–81.

Feenstra, R. C. (2004), *Advanced international trade: theory and evidence*, Princeton University Press.

Felbermayr, G., Groeschl, J. and Heiland, I. (2022), 'Complex Europe: Quantifying the cost of disintegration', *Journal of International Economics* **138**, 103647.

Felbermayr, G., Gröschl, J. K. and Heiland, I. (2018), Undoing Europe in a new quantitative trade model, Technical report, Ifo working paper.

Felbermayr, G., Gröschl, J. and Steinwachs, T. (2018), 'The trade effects of border controls: Evidence from the European Schengen Agreement', *JCMS: Journal of Common Market Studies* **56**(2), 335–351.

Fontagné, L., Yotov, Y. V. et al. (2024), Reassessing the impact of the Single Market and its ability to help build strategic autonomy, Technical report, LeBow College of Business, Drexel University.

Garlaschelli, D. and Loffredo, M. I. (2005), 'Structure and evolution of the world trade network', *Physica A: Statistical Mechanics and its Applications* **355**(1), 138–144.

Grančay, M. (2013), 'Eastern enlargement of the European Union: Changes in trade structure and its instability', *Academic Review of Economics & Administrative Sciences* **6**(2).

Grančay, M., Šumilo, Ē. and Vveinhardt, J. (2015), 'Trade in Central and Eastern European countries ten years after their EU accession—Is there convergence?', *Society and Economy* **37**(4), 443–460.

Gruszczynski, L. (2020), 'The COVID-19 pandemic and international trade: Temporary turbulence or paradigm shift?', *European Journal of Risk Regulation* **11**(2), 337–342.

Göngçer-Demiral, D. and İnce Yenilmez, M. (2022), 'Network analysis of international export pattern', *Social Network Analysis and Mining* **12**(1), 156.
URL: *https://doi.org/10.1007/s13278-022-00984-8*

Hagemejer, J. and Matuszczak, Ł. (2024), 'Single Market Enlargement and Technical Barriers to Trade: Revisiting the Evidence', *Central European Economic Journal* **11**(58), 79–96.

Hagemejer, J., Michałek, J. J. and Svatko, P. (2021), 'Economic impact of the EU Eastern enlargement on New Member States revisited: The role of economic institutions', *Central European Economic Journal* **8**(55), 126–143.

Hagemejer, J. and Muck, J. (2022), European integration and Central and Eastern Europe's value-added exports. What does it say about Brexit?, Technical report, CASE Center for Social and Economic Research.

Hamilton, C. B. and Winters, L. A. (1992), 'Opening up international trade with Eastern Europe', *Economic Policy* **7**(14), 77–116.

Head, K. and Mayer, T. (2014), Gravity equations: Workhorse, toolkit, and cookbook, *in* 'Handbook of international economics', Vol. 4, Elsevier, pp. 131–195.

Heid, B. and Stähler, F. (2024), 'Structural gravity and the gains from trade under imperfect competition: Quantifying the effects of the European Single Market', *Economic Modelling* **131**, 106604.

Herderschee, J. and Qiao, Z. (2007), Impact on Intra-European Trade Agreements, 1990-2005: Policy Implications for the Western Balkans and Ukraine, Technical report, International Monetary Fund.

Hoang, V. P., Piccardi, C. and Tajoli, L. (2023*a*), A Network Analysis of World Trade Structural Changes (1996–2019), *in* H. Cherifi, R. N. Mantegna, L. M. Rocha, C. Cherifi and S. Micciché, eds, 'Complex Networks and Their Applications XI', Studies in Computational Intelligence, Springer International Publishing, Cham, pp. 490–501.

Hoang, V. P., Piccardi, C. and Tajoli, L. (2023*b*), 'Reshaping the structure of the World Trade Network: a pivotal role for China?', *Applied Network Science* **8**(1), 1–24.

Hornok, C. et al. (2010), 'Trade-enhancing EU enlargement and the resurgence of East-East trade', *Focus on European Economic Integration* **3**, 79–94.

Jackson, K. and Shepotylo, O. (2020), 'The collapse of EU trade relations: A worst case scenario?', *Available at SSRN 3351108* .

Jackson, K. and Shepotylo, O. (2021), 'An examination of EU trade disintegration scenarios', *The World Economy* **44**(1), 2–20.

Kali, R. and Reyes, J. (2007), 'The architecture of globalization: a network approach to international economic integration', *Journal of International Business Studies* **38**, 595–620.

Kaminski, B. and Ng, F. (2005), 'Production disintegration and integration of Central Europe into global markets', *International Review of Economics & Finance* **14**(3), 377–390.

Kaplan, L. C., Kohl, T. and Martínez-Zarzoso, I. (2018), 'Supply-chain trade and labor market outcomes: The case of the 2004 European Union enlargement', *Review of International Economics* **26**(2), 481–506.

Kiyota, K. (2022), 'The COVID-19 pandemic and the world trade network', *Journal of Asian Economics* **78**, 101419.

Koch, W. and LeSage, J. P. (2015), 'Latent Multilateral Trade Resistance Indices: Theory and Evidence', *Scottish Journal of Political Economy* **62**(3), 264–290. _eprint: https://onlinelibrary.wiley.com/doi/pdf/10.1111/sjpe.12074.
URL: *https://onlinelibrary.wiley.com/doi/abs/10.1111/sjpe.12074*

Kolaczyk, E. D. and Csárdi, G. (2014), *Statistical analysis of network data with R*, Vol. 65, Springer.

Kostoska, O., Mitikj, S., Jovanovski, P. and Kocarev, L. (2020), 'Core-periphery structure in sectoral international trade networks: A new approach to an old theory', *PloS one* **15**(4), e0229547.

Krugman, P. R. (1979), 'Increasing returns, monopolistic competition, and international trade', *Journal of International Economics* **9**(4), 469–479.

Krugman, P. R. (1980), 'Scale Economies, Product Differentiation, and the Pattern of Trade', *The American Economic Review* **70**(5), 950–959.
URL: *http://www.jstor.org/stable/1805774*

Kurbucz, M. T., Sugár, A. and Keresztély, T. (2023), 'Analysis of the international trade networks of COVID-19 medical products', *Applied Network Science* **8**(1), 58.

Larch, M. and Yotov, Y. V. (2016), General equilibrium trade policy analysis with structural gravity, Technical report, WTO Staff Working Paper.

Larch, M. and Yotov, Y. V. (2024), 'Estimating the effects of trade agreements: Lessons from 60 years of methods and data', *The World Economy* **47**(5), 1771–1799.

Lehtimäki, J. and Sondermann, D. (2022), 'Baldwin versus Cecchini revisited: the growth impact of the European Single Market', *Empirical Economics* **63**(2), 603–635.

Linnemann, H. (1966), *An econometric study of international trade flows*, number 42, Amsterdam, North-Holland.

Martin, C. and Turrion, J. (2001), 'The trade impact of the integration of the CEECs on EU', *European Economy Group* **11**, 1–26.

Martinez-Zarzoso, I., Voicu, A. M. and Vidovic, M. (2015), 'Central East European Countries' accession into the European Union: role of extensive margin for trade in intermediate and final goods', *Empirica* **42**, 825–844.

Martínez-Zarzoso, I., Voicu, A. M. and Vidovic, M. (2020), 'Production networks in Europe: A natural experiment of the European Union enlargement to the east', *Review of International Economics* **28**(5), 1143–1163.

Mayer, T., Santoni, G. and Vicard, V. (2023), The CEPII Trade and Production Database, Working Papers 2023-01, CEPII.

Mayer, T., Vicard, V. and Zignago, S. (2019), 'The cost of non-Europe, revisited', *Economic Policy* **34**(98), 145–199.

McCallum, J. (1995), 'National borders matter: Canada-US regional trade patterns', *The American Economic Review* **85**(3), 615–623.

Nagengast, A., Rios-Avila, F. and Yotov, Y. (2024), The European Single Market and Intra-EU Trade: An Assessment with Heterogeneity-Robust Difference-in-Differences Methods, Technical report, LeBow College of Business, Drexel University.

Pan, Z. (2018), 'Varieties of intergovernmental organization memberships and structural effects in the world trade network', *Advances in Complex Systems* **21**(02), 1850001.

Piccardi, C. and Tajoli, L. (2018), 'Complexity, centralization, and fragility in economic networks', *PloS one* **13**(11), e0208265.

Pochmara, A. and Michałek, J. J. (2023), *The Impact of the Accession to the EU on Trade Flows of the Visegrad Countries: Analysis Based on the Synthetic Control Method*, University of Warsaw, Faculty of Economic Sciences.

Pöyhönen, P. (1963), 'A tentative model for the volume of trade between countries', *Weltwirtschaftliches Archiv* pp. 93–100.

Pulliainen, K. (1963), 'A world trade study: An econometric model of the pattern of the commodity flows in International Trade in 1948-1960', *Ekonomiska Samfundets Tidskrift* **16**(2), 78–91.

Roeger, W. and 't Veld, J. i. (2021), 'The economic impact of single market membership on the EU enlargement countries', *Does EU Membership Facilitate Convergence? The Experience of the EU's Eastern Enlargement-Volume II: Channels of Interaction* pp. 17–35.

Sacks, M., Ventresca, M. and Uzzi, B. (2001), 'Global Institutions and Networks: Contingent Change in the Structure of World Trade Advantage, 1965-1980', *American Behavioral Scientist* **44**, 1579–1601.
URL: *https://journals.sagepub.com/doi/10.1177/00027640121958069*

Santos-Silva, J. and Tenreyro, S. (2006), 'The log of gravity', *The Review of Economics and statistics* **88**(4), 641–658.

Serrano, M. A. and Boguná, M. (2003), 'Topology of the world trade web', *Physical Review E* **68**(1), 015101.

Serrano, M. Á., Boguñá, M. and Vespignani, A. (2007), 'Patterns of dominant flows in the world trade web', *Journal of Economic Interaction and Coordination* **2**(2), 111–124.

Snyder, D. and Kick, E. L. (1979), 'Structural position in the world system and economic growth, 1955-1970: A multiple-network analysis of transnational interactions', *American journal of Sociology* **84**(5), 1096–1126.

Spies, J. and Marques, H. (2009), 'Trade effects of the Europe agreements: A theory-based gravity approach', *The Journal of International Trade & Economic Development* **18**(1), 11–35.

Spornberger, J. (2022), 'EU integration and structural gravity: A comprehensive quantification of the border effect on trade', *Review of International Economics* **30**(4), 915–938.

Stojčić, N., Vojinić, P. and Aralica, Z. (2018), 'Trade liberalization and export transformation in new EU member states', *Structural Change and Economic Dynamics* **47**, 114–126.

Tajoli, L., Airoldi, F. and Piccardi, C. (2021), 'The network of international trade in services', *Applied Network Science* **6**(1), 1–25.

Tinbergen, J. (1962), 'Shaping the world economy: Suggestions for an international economic policy', *The Twentieth Century Fund* .

UNIDO (2015), World Manufacturing Production: Statistics for Quarter II, 2015, Technical report, UNIDO.

Viner, J. (1950), 'The Customs Union Issue (New York: Carnegie Endowment)', *The classic work on the economic theory of customs union* .

Wang, Z. K. and Winters, L. A. (1992), 'The trading potential of Eastern Europe', *Journal of Economic Integration* pp. 113–136.

Ward, M. D., Ahlquist, J. S. and Rozenas, A. (2013), 'Gravity's Rainbow: A dynamic latent space model for the world trade network', *Network Science* **1**(1), 95–118. Publisher: Cambridge University Press.
URL: *https://www.cambridge.org/core/journals/network-science/article/abs/gravitys-rainbow-a-dynamic-latent-space-model-for-the-world-trade-network/A452C408399F331A19B59B2D7D8FA031*

Warlouzet, L. (2021), 'The Role of the European Parliament in the Single Market Programme: The Cost of Non-Europe and the Car Emission Directive (1983-89)', *JEIH Journal of European Integration History* **27**(1), 21–36.

Wasserman, S. and Faust, K. (1994), *Social network analysis: Methods and applications*, Cambridge University Press.

Wolfmayr, Y., Friesenbichler, K., Oberhofer, H., Pfaffermayr, M., Siedschlag, I., Di Ubaldo, M., Tong Koeckling, M. and Yang, W. (2019), 'The performance of the Single Market for goods after 25 years', *Available at SSRN 3462650* .

Yotov, Y. (2022), Gravity at Sixty: The Bijou of Trade, Technical report, LeBow College of Business, Drexel University.

Yotov, Y. (2024), The Evolution of Structural Gravity: The Workhorse Model of Trade, Technical report, LeBow College of Business, Drexel University.

Yotov, Y., Piermartini, R. and Larch, M. (2016), *An Advanced Guide to Trade Policy Analysis: The Structural Gravity Model*, WTO iLibrary.

Appendices

Appendix A

Country categorisation

Table A.1: Country categorisation

ISO code	M49 code	Country name	Intermediate region name	Sub-region name	Region name
AFG	4	Afghanistan	Southern Asia	Southern Asia	Asia
AGO	24	Angola	Middle Africa	Sub-Saharan Africa	Africa
ALB	8	Albania	Southern Europe	Southern Europe	Europe
ARE	784	United Arab Emirates	Western Asia	Western Asia	Asia
ARG	32	Argentina	South America	Latin America and Caribbean	Americas
ARM	51	Armenia	Western Asia	Western Asia	Asia
AUS	36	Australia	Australia and New Zealand	Australia and New Zealand	Oceania
AUT	40	Austria	Western Europe	Western Europe	Europe
AZE	31	Azerbaijan	Western Asia	Western Asia	Asia
BDI	108	Burundi	Eastern Africa	Sub-Saharan Africa	Africa
BEL	56	Belgium and Luxembourg	Western Europe	Western Europe	Europe
BEN	204	Benin	Western Africa	Sub-Saharan Africa	Africa
BFA	854	Burkina Faso	Western Africa	Sub-Saharan Africa	Africa
BGD	50	Bangladesh	Southern Asia	Southern Asia	Asia
BGR	100	Bulgaria	Eastern Europe	Eastern Europe	Europe
BHR	48	Bahrain	Western Asia	Western Asia	Asia
BHS	44	Bahamas	Caribbean	Latin America and Caribbean	Americas
BIH	70	Bosnia and Herzegovina	Southern Europe	Southern Europe	Europe
BLM	652	Saint Barthélemy	Caribbean	Latin America and Caribbean	Americas
BLR	112	Belarus	Eastern Europe	Eastern Europe	Europe
BLZ	84	Belize	Central America	Latin America and Caribbean	Americas
BMU	60	Bermuda	Northern America	Northern America	Americas
BOL	68	Bolivia (Plurinational State of)	South America	Latin America and Caribbean	Americas
BRA	76	Brazil	South America	Latin America and Caribbean	Americas
BRB	52	Barbados	Caribbean	Latin America and Caribbean	Americas
BRN	96	Brunei Darussalam	South-eastern Asia	South-eastern Asia	Asia
BTN	64	Bhutan	Southern Asia	Southern Asia	Asia

Table A.1: Continued on next page

Table A.1: continued from previous page

ISO code	M49 code	Country name	Intermediate region name	Sub-region name	Region name
CAF	140	Central African Republic	Middle Africa	Sub-Saharan Africa	Africa
CAN	124	Canada	Northern America	Northern America	Americas
CHE	756	Switzerland	Western Europe	Western Europe	Europe
CHL	152	Chile	South America	Latin America and Caribbean	Americas
CHN	156	China	Eastern Asia	Eastern Asia	Asia
CIV	384	Côte d'Ivoire	Western Africa	Sub-Saharan Africa	Africa
CMR	120	Cameroon	Middle Africa	Sub-Saharan Africa	Africa
COG	178	Congo	Middle Africa	Sub-Saharan Africa	Africa
COL	170	Colombia	South America	Latin America and Caribbean	Americas
CPV	132	Cabo Verde	Western Africa	Sub-Saharan Africa	Africa
CRI	188	Costa Rica	Central America	Latin America and Caribbean	Americas
CUB	192	Cuba	Caribbean	Latin America and Caribbean	Americas
CYP	196	Cyprus	Western Asia	Western Asia	Asia
CZE	203	Czechia	Eastern Europe	Eastern Europe	Europe
DEU	276	Germany	Western Europe	Western Europe	Europe
DNK	208	Denmark	Northern Europe	Northern Europe	Europe
DOM	214	Dominican Republic	Caribbean	Latin America and Caribbean	Americas
DZA	12	Algeria	Northern Africa	Northern Africa	Africa
ECU	218	Ecuador	South America	Latin America and Caribbean	Americas
EGY	818	Egypt	Northern Africa	Northern Africa	Africa
ESP	724	Spain	Southern Europe	Southern Europe	Europe
EST	233	Estonia	Northern Europe	Northern Europe	Europe
ETH	231	Ethiopia	Eastern Africa	Sub-Saharan Africa	Africa
FIN	246	Finland	Northern Europe	Northern Europe	Europe
FJI	242	Fiji	Melanesia	Melanesia	Oceania
FRA	250	France	Western Europe	Western Europe	Europe
GAB	266	Gabon	Middle Africa	Sub-Saharan Africa	Africa
GBR	826	United Kingdom of Great Britain and Northern Ireland	Northern Europe	Northern Europe	Europe
GEO	268	Georgia	Western Asia	Western Asia	Asia
GHA	288	Ghana	Western Africa	Sub-Saharan Africa	Africa
GMB	270	Gambia	Western Africa	Sub-Saharan Africa	Africa
GRC	300	Greece	Southern Europe	Southern Europe	Europe
GTM	320	Guatemala	Central America	Latin America and Caribbean	Americas
HKG	344	China, Hong Kong Special Administrative Region	Eastern Asia	Eastern Asia	Asia
HND	340	Honduras	Central America	Latin America and Caribbean	Americas
HRV	191	Croatia	Southern Europe	Southern Europe	Europe
HTI	332	Haiti	Caribbean	Latin America and Caribbean	Americas
HUN	348	Hungary	Eastern Europe	Eastern Europe	Europe
IDN	360	Indonesia	South-eastern Asia	South-eastern Asia	Asia
IND	356	India	Southern Asia	Southern Asia	Asia
IRL	372	Ireland	Northern Europe	Northern Europe	Europe
IRN	364	Iran (Islamic Republic of)	Southern Asia	Southern Asia	Asia
IRQ	368	Iraq	Western Asia	Western Asia	Asia
ISL	352	Iceland	Northern Europe	Northern Europe	Europe
ISR	376	Israel	Western Asia	Western Asia	Asia
ITA	380	Italy	Southern Europe	Southern Europe	Europe
JAM	388	Jamaica	Caribbean	Latin America and Caribbean	Americas
JOR	400	Jordan	Western Asia	Western Asia	Asia
JPN	392	Japan	Eastern Asia	Eastern Asia	Asia
KAZ	398	Kazakhstan	Central Asia	Central Asia	Asia
KEN	404	Kenya	Eastern Africa	Sub-Saharan Africa	Africa
KGZ	417	Kyrgyzstan	Central Asia	Central Asia	Asia
KHM	116	Cambodia	South-eastern Asia	South-eastern Asia	Asia
KOR	410	Republic of Korea	Eastern Asia	Eastern Asia	Asia
KWT	414	Kuwait	Western Asia	Western Asia	Asia
LAO	418	Lao People's Democratic Republic	South-eastern Asia	South-eastern Asia	Asia
LBN	422	Lebanon	Western Asia	Western Asia	Asia
LBR	430	Liberia	Western Africa	Sub-Saharan Africa	Africa
LBY	434	Libya	Northern Africa	Northern Africa	Africa

Table A.1: Continued on next page

Table A.1: continued from previous page

ISO code	M49 code	Country name	Intermediate region name	Sub-region name	Region name
LCA	662	Saint Lucia	Caribbean	Latin America and Caribbean	Americas
LKA	144	Sri Lanka	Southern Asia	Southern Asia	Asia
LTU	440	Lithuania	Northern Europe	Northern Europe	Europe
LVA	428	Latvia	Northern Europe	Northern Europe	Europe
MAC	446	China, Macao Special Administrative Region	Eastern Asia	Eastern Asia	Asia
MAR	504	Morocco	Northern Africa	Northern Africa	Africa
MDA	498	Republic of Moldova	Eastern Europe	Eastern Europe	Europe
MDG	450	Madagascar	Eastern Africa	Sub-Saharan Africa	Africa
MDV	462	Maldives	Southern Asia	Southern Asia	Asia
MEX	484	Mexico	Central America	Latin America and Caribbean	Americas
MKD	807	North Macedonia	Southern Europe	Southern Europe	Europe
MLT	470	Malta	Southern Europe	Southern Europe	Europe
MMR	104	Myanmar	South-eastern Asia	South-eastern Asia	Asia
MNG	496	Mongolia	Eastern Asia	Eastern Asia	Asia
MOZ	508	Mozambique	Eastern Africa	Sub-Saharan Africa	Africa
MUS	480	Mauritius	Eastern Africa	Sub-Saharan Africa	Africa
MWI	454	Malawi	Eastern Africa	Sub-Saharan Africa	Africa
MYS	458	Malaysia	South-eastern Asia	South-eastern Asia	Asia
NER	562	Niger	Western Africa	Sub-Saharan Africa	Africa
NGA	566	Nigeria	Western Africa	Sub-Saharan Africa	Africa
NIC	558	Nicaragua	Central America	Latin America and Caribbean	Americas
NLD	528	Netherlands (Kingdom of the)	Western Europe	Western Europe	Europe
NOR	578	Norway	Northern Europe	Northern Europe	Europe
NPL	524	Nepal	Southern Asia	Southern Asia	Asia
NZL	554	New Zealand	Australia and New Zealand	Australia and New Zealand	Oceania
OMN	512	Oman	Western Asia	Western Asia	Asia
PAK	586	Pakistan	Southern Asia	Southern Asia	Asia
PAN	591	Panama	Central America	Latin America and Caribbean	Americas
PER	604	Peru	South America	Latin America and Caribbean	Americas
PHL	608	Philippines	South-eastern Asia	South-eastern Asia	Asia
PNG	598	Papua New Guinea	Melanesia	Melanesia	Oceania
POL	616	Poland	Eastern Europe	Eastern Europe	Europe
PRT	620	Portugal	Southern Europe	Southern Europe	Europe
PRY	600	Paraguay	South America	Latin America and Caribbean	Americas
QAT	634	Qatar	Western Asia	Western Asia	Asia
ROU	642	Romania	Eastern Europe	Eastern Europe	Europe
RUS	643	Russian Federation	Eastern Europe	Eastern Europe	Europe
RWA	646	Rwanda	Eastern Africa	Sub-Saharan Africa	Africa
SAU	682	Saudi Arabia	Western Asia	Western Asia	Asia
SCG	688	Serbia and Montenegro	Southern Europe	Southern Europe	Europe
SEN	686	Senegal	Western Africa	Sub-Saharan Africa	Africa
SGP	702	Singapore	South-eastern Asia	South-eastern Asia	Asia
SLE	694	Sierra Leone	Western Africa	Sub-Saharan Africa	Africa
SLV	222	El Salvador	Central America	Latin America and Caribbean	Americas
SOM	706	Somalia	Eastern Africa	Sub-Saharan Africa	Africa
SUR	740	Suriname	South America	Latin America and Caribbean	Americas
SVK	703	Slovakia	Eastern Europe	Eastern Europe	Europe
SVN	705	Slovenia	Southern Europe	Southern Europe	Europe
SWE	752	Sweden	Northern Europe	Northern Europe	Europe
SYR	760	Syrian Arab Republic	Western Asia	Western Asia	Asia
THA	764	Thailand	South-eastern Asia	South-eastern Asia	Asia
TJK	762	Tajikistan	Central Asia	Central Asia	Asia
TKM	795	Turkmenistan	Central Asia	Central Asia	Asia
TON	776	Tonga	Polynesia	Polynesia	Oceania
TTO	780	Trinidad and Tobago	Caribbean	Latin America and Caribbean	Americas
TUN	788	Tunisia	Northern Africa	Northern Africa	Africa
TUR	792	Türkiye	Western Asia	Western Asia	Asia
TZA	834	United Republic of Tanzania	Eastern Africa	Sub-Saharan Africa	Africa
UGA	800	Uganda	Eastern Africa	Sub-Saharan Africa	Africa

Table A.1: Continued on next page

Table A.1: continued from previous page

ISO code	M49 code	Country name	Intermediate region name	Sub-region name	Region name
UKR	804	Ukraine	Eastern Europe	Eastern Europe	Europe
USA	840	United States of America	Northern America	Northern America	Americas
UZB	860	Uzbekistan	Central Asia	Central Asia	Asia
VEN	862	Venezuela (Bolivarian Republic of)	South America	Latin America and Caribbean	Americas
VNM	704	Viet Nam	South-eastern Asia	South-eastern Asia	Asia
YEM	887	Yemen	Western Asia	Western Asia	Asia
ZAF	710	South Africa	Southern Africa	Sub-Saharan Africa	Africa
ZMB	894	Zambia	Eastern Africa	Sub-Saharan Africa	Africa
ZWE	716	Zimbabwe	Eastern Africa	Sub-Saharan Africa	Africa

Appendix B

The World Trade Network: centrality measures

Table B.1: World Trade Network indices at the network level (1993-2020)

Year	Density	Reciprocity	Assortativity	Mutual links	Asymmetric links	Null links
1993	0.514	0.797	-0.366	4,889	2,486	4,560
1994	0.530	0.809	-0.347	5,185	2,441	4,464
1995	0.576	0.811	-0.306	5,648	2,629	3,813
1996	0.626	0.849	-0.298	6,419	2,292	3,379
1997	0.655	0.861	-0.286	6,823	2,201	3,066
1998	0.668	0.861	-0.275	6,954	2,251	2,885
1999	0.677	0.864	-0.278	7,071	2,217	2,802
2000	0.713	0.873	-0.252	7,527	2,185	2,378
2001	0.727	0.870	-0.246	7,649	2,277	2,164
2002	0.735	0.876	-0.241	7,783	2,200	2,107
2003	0.749	0.881	-0.229	7,974	2,152	1,964
2004	0.753	0.883	-0.227	8,046	2,125	1,919
2005	0.754	0.880	-0.232	8,024	2,194	1,872
2006	0.773	0.888	-0.219	8,305	2,091	1,694
2007	0.782	0.889	-0.213	8,401	2,100	1,589
2008	0.782	0.891	-0.217	8,422	2,066	1,602
2009	0.788	0.893	-0.207	8,511	2,042	1,537
2010	0.802	0.895	-0.188	8,674	2,042	1,374
2011	0.802	0.892	-0.182	8,647	2,096	1,347
2012	0.804	0.888	-0.188	8,632	2,176	1,282
2013	0.809	0.890	-0.176	8,702	2,148	1,240
2014	0.802	0.884	-0.186	8,569	2,249	1,272
2015	0.802	0.887	-0.180	8,600	2,184	1,306
2016	0.805	0.887	-0.177	8,632	2,207	1,251
2017	0.807	0.887	-0.169	8,647	2,212	1,231
2018	0.799	0.879	-0.174	8,499	2,333	1,258
2019	0.796	0.871	-0.161	8,389	2,476	1,225
2020	0.766	0.855	-0.17	7,914	2,693	1,483

Table B.2: Average world trade binary network indices at the node level (1993-2020)

Year	Outdegree Centrality	Eigenvector Centrality	In-closeness Centrality	Out-closeness Centrality	Betweenness Centrality
1993	79.123	0.610	0.743	0.752	49.045
1994	82.122	0.623	0.743	0.751	51.019
1995	89.263	0.653	0.760	0.768	47.853
1996	96.987	0.696	0.770	0.778	48.077
1997	101.583	0.720	0.779	0.787	46.462
1998	103.583	0.729	0.786	0.795	44.462
1999	104.865	0.737	0.792	0.800	43.179
2000	110.506	0.762	0.809	0.814	39.526
2001	112.660	0.774	0.821	0.826	36.378
2002	113.885	0.780	0.826	0.830	35.154
2003	116.026	0.791	0.831	0.836	34.006
2004	116.776	0.796	0.837	0.843	32.263
2005	116.936	0.796	0.842	0.846	31.109

Table B.2: Continued on next page

Table B.2: continued from previous page

Year	Outdegree Centrality	Eigenvector Centrality	In-closeness Centrality	Out-closeness Centrality	Betweenness Centrality
2006	119.878	0.812	0.852	0.855	29.160
2007	121.167	0.817	0.858	0.860	27.872
2008	121.218	0.819	0.858	0.860	27.821
2009	122.205	0.824	0.862	0.865	26.833
2010	124.295	0.834	0.870	0.874	24.744
2011	124.295	0.832	0.874	0.878	23.750
2012	124.615	0.833	0.875	0.879	23.429
2013	125.333	0.838	0.883	0.886	21.718
2014	124.276	0.832	0.882	0.886	21.782
2015	124.256	0.833	0.886	0.889	20.808
2016	124.814	0.835	0.892	0.897	19.256
2017	125.038	0.837	0.893	0.898	19.032
2018	123.917	0.830	0.892	0.896	19.160
2019	123.423	0.825	0.898	0.902	17.667
2020	118.724	0.801	0.891	0.897	18.391

Table B.3: Average world trade weighted network indices at the node level (1993-2020)

Year	Weighted Outdegree Centrality	Weighted Eigenvector Centrality	Weighted In-closeness Centrality	Weighted Out-closeness Centrality	Weighted Betweenness Centrality
1993	17,545.587	0.043	44.753	135.386	455.832
1994	20,250.590	0.042	74.356	132.772	448.705
1995	24,349.934	0.046	38.697	123.406	444.949
1996	25,780.169	0.046	39.716	153.580	450.558
1997	26,858.204	0.043	44.052	149.190	466.801
1998	27,143.251	0.041	54.584	158.759	449.923
1999	28,171.067	0.038	31.296	171.479	465.391
2000	30,170.682	0.036	68.093	420.768	767.840
2001	29,579.520	0.038	70.612	670.729	732.833
2002	31,087.515	0.038	65.868	513.687	652.968
2003	35,697.367	0.040	33.814	583.989	642.301
2004	43,202.596	0.042	30.508	305.431	730.609
2005	47,392.389	0.041	29.329	376.881	590.462
2006	54,088.423	0.043	24.063	399.558	721.045
2007	61,243.433	0.047	15.285	306.158	624.603
2008	68,030.071	0.052	14.793	272.601	725.397
2009	54,084.838	0.052	10.907	491.846	610.737
2010	63,971.236	0.049	12.476	412.949	614.423
2011	74,358.512	0.050	13.586	455.901	624.859
2012	73,918.143	0.047	8.261	401.214	631.032
2013	75,087.673	0.046	7.695	644.328	615.256
2014	77,174.881	0.045	8.946	236.044	608.436
2015	71,609.138	0.042	5.279	174.120	573.013
2016	70,491.657	0.043	5.116	185.173	598.199
2017	64,974.063	0.043	4.309	296.063	614.468
2018	69,278.778	0.043	5.932	218.868	572.603
2019	67,477.538	0.043	4.390	152.206	737.853
2020	62,963.943	0.044	4.261	216.654	598.974

Table B.4: Chemical World Trade Network indices at the network level (1993-2020)

Year	Reciprocity	Assortativity	Mutual links	Asymmetric links	Null links
1993	0.752	-0.372	3,731	2,465	5,739
1994	0.760	-0.362	3,941	2,490	5,659
1995	0.761	-0.331	4,293	2,703	5,094
1996	0.791	-0.319	4,867	2,579	4,644
1997	0.796	-0.309	5,172	2,649	4,269
1998	0.800	-0.300	5,302	2,643	4,145
1999	0.804	-0.299	5,436	2,651	4,003
2000	0.813	-0.280	5,902	2,717	3,471
2001	0.814	-0.277	6,028	2,750	3,312
2002	0.818	-0.277	6,144	2,732	3,214
2003	0.823	-0.264	6,290	2,713	3,087
2004	0.830	-0.265	6,452	2,643	2,995
2005	0.828	-0.268	6,489	2,703	2,898
2006	0.841	-0.254	6,778	2,568	2,744
2007	0.837	-0.253	6,847	2,663	2,580
2008	0.846	-0.256	6,972	2,534	2,584
2009	0.841	-0.248	6,918	2,622	2,550
2010	0.846	-0.238	7,144	2,591	2,355
2011	0.841	-0.235	7,094	2,683	2,313
2012	0.838	-0.240	7,126	2,755	2,209
2013	0.843	-0.234	7,228	2,687	2,175
2014	0.839	-0.237	7,138	2,746	2,206
2015	0.842	-0.235	7,208	2,697	2,185
2016	0.844	-0.218	7,326	2,706	2,058

Table B.4: Continued on next page

Table B.4: continued from previous page

Year	Reciprocity	Assortativity	Mutual links	Asymmetric links	Null links
2017	0.848	-0.217	7,330	2,624	2,136
2018	0.838	-0.221	7,186	2,780	2,124
2019	0.833	-0.209	7,125	2,849	2,116
2020	0.825	-0.219	6,787	2,883	2,420

Table B.5: Food World Trade Network indices at the network level (1993-2020)

Year	Reciprocity	Assortativity	Mutual links	Asymmetric links	Null links
1993	0.730	-0.383	3,267	2,419	6,249
1994	0.744	-0.375	3,478	2,396	6,216
1995	0.747	-0.342	3,793	2,569	5,728
1996	0.765	-0.325	4,209	2,588	5,293
1997	0.774	-0.312	4,490	2,618	4,982
1998	0.763	-0.307	4,486	2,784	4,820
1999	0.775	-0.309	4,629	2,688	4,773
2000	0.784	-0.293	4,985	2,744	4,361
2001	0.776	-0.287	5,002	2,885	4,203
2002	0.783	-0.285	5,109	2,840	4,141
2003	0.785	-0.279	5,249	2,874	3,967
2004	0.785	-0.278	5,291	2,896	3,903
2005	0.788	-0.285	5,339	2,879	3,872
2006	0.794	-0.277	5,493	2,857	3,740
2007	0.797	-0.272	5,633	2,872	3,585
2008	0.798	-0.273	5,689	2,876	3,525
2009	0.800	-0.266	5,775	2,891	3,424
2010	0.807	-0.265	5,938	2,846	3,306
2011	0.799	-0.261	5,883	2,951	3,256
2012	0.805	-0.256	6,014	2,914	3,162
2013	0.810	-0.253	6,103	2,871	3,116
2014	0.805	-0.259	6,088	2,953	3,049
2015	0.813	-0.252	6,172	2,840	3,078
2016	0.810	-0.254	6,265	2,947	2,878
2017	0.811	-0.248	6,240	2,910	2,940
2018	0.806	-0.253	6,165	2,970	2,955
2019	0.799	-0.246	6,123	3,084	2,883
2020	0.795	-0.252	5,880	3,034	3,176

Table B.6: Machines World Trade Network indices at the network level (1993-2020)

Year	Reciprocity	Assortativity	Mutual links	Asymmetric links	Null links
1993	0.749	-0.385	3,725	2,497	5,713
1994	0.769	-0.373	4,069	2,448	5,573
1995	0.766	-0.343	4,390	2,676	5,024
1996	0.798	-0.336	4,939	2,507	4,644
1997	0.809	-0.325	5,274	2,498	4,318
1998	0.812	-0.315	5,446	2,525	4,119
1999	0.815	-0.318	5,540	2,517	4,033
2000	0.823	-0.293	6,026	2,592	3,472
2001	0.831	-0.294	6,236	2,544	3,310
2002	0.835	-0.289	6,364	2,521	3,205
2003	0.840	-0.276	6,563	2,497	3,030
2004	0.845	-0.276	6,720	2,466	2,904
2005	0.844	-0.281	6,753	2,496	2,841
2006	0.856	-0.267	7,071	2,370	2,649
2007	0.860	-0.263	7,191	2,343	2,556
2008	0.862	-0.262	7,292	2,331	2,467
2009	0.858	-0.250	7,268	2,412	2,410
2010	0.864	-0.241	7,454	2,349	2,287
2011	0.861	-0.236	7,461	2,407	2,222
2012	0.856	-0.247	7,436	2,506	2,148
2013	0.859	-0.236	7,517	2,460	2,113
2014	0.856	-0.240	7,433	2,506	2,151
2015	0.861	-0.231	7,477	2,415	2,198
2016	0.857	-0.225	7,522	2,501	2,067
2017	0.852	-0.225	7,429	2,579	2,082
2018	0.850	-0.231	7,335	2,593	2,162
2019	0.843	-0.223	7,260	2,711	2,119
2020	0.831	-0.227	6,873	2,796	2,421

Table B.7: Metals World Trade Network indices at the network level (1993-2020)

Year	Reciprocity	Assortativity	Mutual links	Asymmetric links	Null links
1993	0.702	-0.381	3,020	2,566	6,349
1994	0.722	-0.374	3,268	2,512	6,310
1995	0.732	-0.347	3,586	2,627	5,877
1996	0.751	-0.331	3,998	2,653	5,439
1997	0.766	-0.326	4,311	2,641	5,138
1998	0.765	-0.314	4,409	2,715	4,966
1999	0.775	-0.326	4,534	2,626	4,930
2000	0.790	-0.304	5,070	2,698	4,322
2001	0.785	-0.298	5,136	2,816	4,138
2002	0.791	-0.298	5,278	2,783	4,029
2003	0.801	-0.284	5,440	2,707	3,943
2004	0.811	-0.288	5,643	2,635	3,812
2005	0.813	-0.291	5,684	2,615	3,791
2006	0.822	-0.285	5,914	2,563	3,613
2007	0.829	-0.282	6,097	2,507	3,486
2008	0.836	-0.287	6,204	2,437	3,449
2009	0.824	-0.278	6,110	2,602	3,378
2010	0.832	-0.265	6,326	2,563	3,201
2011	0.826	-0.264	6,313	2,657	3,120
2012	0.825	-0.281	6,324	2,674	3,092
2013	0.826	-0.267	6,410	2,704	2,976
2014	0.824	-0.268	6,347	2,706	3,037
2015	0.827	-0.265	6,409	2,673	3,008
2016	0.827	-0.251	6,515	2,725	2,850
2017	0.822	-0.251	6,403	2,774	2,913
2018	0.825	-0.266	6,372	2,711	3,007
2019	0.816	-0.257	6,257	2,824	3,009
2020	0.808	-0.258	5,961	2,827	3,302

Table B.8: Minerals World Trade Network indices at the network level (1993-2020)

Year	Reciprocity	Assortativity	Mutual links	Asymmetric links	Null links
1993	0.654	-0.343	2,310	2,443	7,182
1994	0.666	-0.339	2,446	2,451	7,193
1995	0.664	-0.313	2,643	2,675	6,772
1996	0.699	-0.315	3,038	2,613	6,439
1997	0.700	-0.308	3,211	2,751	6,128
1998	0.701	-0.312	3,266	2,786	6,038
1999	0.708	-0.305	3,353	2,763	5,974
2000	0.710	-0.297	3,681	3,003	5,406
2001	0.719	-0.291	3,808	2,981	5,301
2002	0.730	-0.289	3,962	2,930	5,198
2003	0.736	-0.290	4,084	2,927	5,079
2004	0.743	-0.285	4,191	2,906	4,993
2005	0.743	-0.293	4,248	2,936	4,906
2006	0.756	-0.283	4,451	2,878	4,761
2007	0.760	-0.286	4,564	2,876	4,650
2008	0.767	-0.283	4,674	2,837	4,579
2009	0.763	-0.278	4,652	2,885	4,553
2010	0.762	-0.271	4,744	2,959	4,387
2011	0.762	-0.279	4,738	2,965	4,387
2012	0.764	-0.289	4,780	2,956	4,354
2013	0.763	-0.274	4,846	3,018	4,226
2014	0.759	-0.285	4,803	3,055	4,232
2015	0.762	-0.280	4,866	3,035	4,189
2016	0.766	-0.270	4,950	3,031	4,109
2017	0.767	-0.269	4,946	3,013	4,131
2018	0.768	-0.273	4,944	2,995	4,151
2019	0.765	-0.267	4,928	3,026	4,136
2020	0.763	-0.272	4,689	2,912	4,489

Table B.9: Other World Trade Network indices at the network level (1993-2020)

Year	Reciprocity	Assortativity	Mutual links	Asymmetric links	Null links
1993	0.731	-0.393	3,253	2,390	6,292
1994	0.749	-0.383	3,505	2,350	6,235
1995	0.750	-0.345	3,791	2,529	5,770
1996	0.769	-0.336	4,207	2,531	5,352
1997	0.784	-0.329	4,537	2,502	5,051
1998	0.782	-0.321	4,671	2,601	4,818
1999	0.792	-0.330	4,793	2,511	4,786
2000	0.801	-0.301	5,295	2,637	4,158
2001	0.798	-0.295	5,398	2,727	3,965
2002	0.809	-0.290	5,598	2,650	3,842

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Year	Reciprocity	Assortativity	Mutual links	Asymmetric links	Null links
2003	0.815	-0.284	5,728	2,595	3,767
2004	0.820	-0.279	5,908	2,600	3,582
2005	0.819	-0.282	5,985	2,637	3,468
2006	0.836	-0.274	6,312	2,475	3,303
2007	0.836	-0.270	6,414	2,514	3,162
2008	0.844	-0.271	6,517	2,415	3,158
2009	0.841	-0.262	6,543	2,482	3,065
2010	0.847	-0.254	6,746	2,442	2,902
2011	0.842	-0.251	6,717	2,522	2,851
2012	0.838	-0.261	6,694	2,592	2,804
2013	0.839	-0.253	6,789	2,597	2,704
2014	0.838	-0.247	6,750	2,611	2,729
2015	0.844	-0.246	6,835	2,526	2,729
2016	0.838	-0.237	6,864	2,661	2,565
2017	0.832	-0.238	6,681	2,695	2,714
2018	0.833	-0.243	6,637	2,669	2,784
2019	0.828	-0.234	6,549	2,727	2,814
2020	0.818	-0.241	6,221	2,769	3,100

Table B.10: Textile World Trade Network indices at the network level (1993-2020)

Year	Reciprocity	Assortativity	Mutual links	Asymmetric links	Null links
1993	0.741	-0.386	3,552	2,482	5,901
1994	0.756	-0.369	3,817	2,469	5,804
1995	0.757	-0.340	4,107	2,640	5,343
1996	0.784	-0.323	4,618	2,543	4,929
1997	0.792	-0.319	4,902	2,580	4,608
1998	0.797	-0.306	5,059	2,578	4,453
1999	0.798	-0.313	5,135	2,596	4,359
2000	0.811	-0.288	5,704	2,666	3,720
2001	0.807	-0.286	5,781	2,763	3,546
2002	0.816	-0.284	5,938	2,682	3,470
2003	0.820	-0.271	6,087	2,670	3,333
2004	0.826	-0.278	6,231	2,633	3,226
2005	0.823	-0.280	6,244	2,681	3,165
2006	0.836	-0.263	6,536	2,569	2,985
2007	0.834	-0.264	6,616	2,628	2,846
2008	0.838	-0.259	6,701	2,584	2,805
2009	0.837	-0.254	6,696	2,600	2,794
2010	0.839	-0.244	6,840	2,617	2,633
2011	0.835	-0.238	6,829	2,700	2,561
2012	0.838	-0.244	6,902	2,670	2,518
2013	0.836	-0.232	6,949	2,724	2,417
2014	0.834	-0.238	6,886	2,743	2,461
2015	0.836	-0.236	6,948	2,729	2,413
2016	0.839	-0.229	7,058	2,705	2,327
2017	0.837	-0.224	6,983	2,712	2,395
2018	0.835	-0.232	6,886	2,727	2,477
2019	0.834	-0.223	6,855	2,737	2,498
2020	0.825	-0.226	6,536	2,780	2,774

Table B.11: Vehicles World Trade Network indices at the network level (1993-2020)

Year	Reciprocity	Assortativity	Mutual links	Asymmetric links	Null links
1993	0.709	-0.394	2,884	2,365	6,686
1994	0.718	-0.384	3,084	2,426	6,580
1995	0.719	-0.349	3,361	2,621	6,108
1996	0.737	-0.339	3,752	2,684	5,654
1997	0.746	-0.339	3,983	2,708	5,399
1998	0.758	-0.331	4,166	2,654	5,270
1999	0.761	-0.335	4,265	2,672	5,153
2000	0.770	-0.319	4,657	2,780	4,653
2001	0.778	-0.319	4,795	2,737	4,558
2002	0.780	-0.313	4,947	2,788	4,355
2003	0.789	-0.310	5,099	2,724	4,267
2004	0.796	-0.301	5,288	2,717	4,085
2005	0.800	-0.311	5,434	2,711	3,945
2006	0.810	-0.292	5,687	2,667	3,736
2007	0.809	-0.296	5,723	2,708	3,659
2008	0.819	-0.287	5,903	2,610	3,577
2009	0.813	-0.289	5,850	2,700	3,540
2010	0.818	-0.271	6,030	2,686	3,374
2011	0.811	-0.271	6,015	2,808	3,267
2012	0.811	-0.277	6,056	2,816	3,218
2013	0.816	-0.270	6,128	2,761	3,201
2014	0.811	-0.279	6,050	2,822	3,218

Table B.11: Continued on next page

Table B.11: continued from previous page

Year	Reciprocity	Assortativity	Mutual links	Asymmetric links	Null links
2015	0.819	-0.268	6,178	2,733	3,179
2016	0.818	-0.261	6,251	2,784	3,055
2017	0.811	-0.259	6,103	2,838	3,149
2018	0.812	-0.264	6,074	2,811	3,205
2019	0.806	-0.257	6,012	2,888	3,190
2020	0.800	-0.261	5,722	2,857	3,511

Table B.12: Wood-Paper World Trade Network indices at the network level (1993-2020)

Year	Reciprocity	Assortativity	Mutual links	Asymmetric links	Null links
1993	0.742	-0.374	3,364	2,335	6,236
1994	0.757	-0.368	3,595	2,303	6,192
1995	0.759	-0.339	3,912	2,490	5,688
1996	0.779	-0.321	4,356	2,477	5,257
1997	0.791	-0.321	4,655	2,462	4,973
1998	0.792	-0.311	4,761	2,503	4,826
1999	0.801	-0.317	4,919	2,451	4,720
2000	0.815	-0.296	5,508	2,496	4,086
2001	0.806	-0.286	5,518	2,657	3,915
2002	0.816	-0.288	5,690	2,573	3,827
2003	0.819	-0.283	5,818	2,563	3,709
2004	0.829	-0.282	6,001	2,481	3,608
2005	0.826	-0.280	6,019	2,536	3,535
2006	0.834	-0.267	6,257	2,486	3,347
2007	0.834	-0.267	6,339	2,522	3,229
2008	0.839	-0.269	6,424	2,469	3,197
2009	0.836	-0.256	6,384	2,501	3,205
2010	0.839	-0.256	6,543	2,516	3,031
2011	0.834	-0.254	6,505	2,593	2,992
2012	0.834	-0.266	6,513	2,593	2,984
2013	0.834	-0.256	6,571	2,623	2,896
2014	0.832	-0.255	6,484	2,627	2,979
2015	0.835	-0.250	6,549	2,580	2,961
2016	0.830	-0.237	6,586	2,707	2,797
2017	0.825	-0.251	6,335	2,683	3,072
2018	0.816	-0.258	6,134	2,768	3,188
2019	0.815	-0.255	6,042	2,752	3,296
2020	0.807	-0.265	5,718	2,734	3,638

Table B.13: Average chemical world trade binary network indices at the node level (1993-2020)

Year	Outdegree Centrality	Eigenvector Centrality	Closeness Centrality	Betweenness Centrality
1993	64.045	0.540	0.699	64.123
1994	66.487	0.547	0.704	66.654
1995	72.365	0.571	0.726	64.750
1996	78.929	0.608	0.746	66.135
1997	83.288	0.631	0.762	64.756
1998	84.917	0.635	0.767	63.128
1999	86.686	0.642	0.774	61.359
2000	93.083	0.672	0.798	56.949
2001	94.910	0.682	0.806	54.128
2002	96.282	0.693	0.811	52.756
2003	98.032	0.701	0.817	52.000
2004	99.660	0.708	0.821	49.378
2005	100.519	0.712	0.826	47.526
2006	103.359	0.729	0.834	45.679
2007	104.853	0.736	0.842	44.186
2008	105.628	0.741	0.842	43.410
2009	105.500	0.738	0.844	43.538
2010	108.199	0.752	0.854	40.840
2011	108.147	0.748	0.856	39.897
2012	109.019	0.753	0.861	39.026
2013	109.891	0.757	0.863	37.160
2014	109.115	0.753	0.862	36.942
2015	109.699	0.758	0.863	35.365
2016	111.269	0.764	0.870	32.801
2017	110.795	0.763	0.866	33.276
2018	109.949	0.757	0.867	33.128
2019	109.609	0.755	0.867	31.481
2020	105.494	0.735	0.851	31.622

Table B.14: Average food world trade binary network indices at the node level (1993-2020)

Year	Outdegree Centrality	Eigenvector Centrality	Closeness Centrality	Betweenness Centrality
1993	57.761	0.502	0.678	70.406
1994	59.949	0.509	0.682	73.199
1995	65.096	0.537	0.700	72.019
1996	70.551	0.570	0.717	74.513
1997	74.346	0.584	0.730	73.705
1998	75.359	0.591	0.737	72.686
1999	76.577	0.591	0.739	71.468
2000	81.500	0.622	0.757	68.532
2001	82.622	0.622	0.764	66.417
2002	83.705	0.628	0.767	65.333
2003	85.718	0.638	0.774	64.314
2004	86.397	0.639	0.778	62.641
2005	86.904	0.647	0.779	61.141
2006	88.737	0.654	0.785	60.301
2007	90.628	0.661	0.792	58.410
2008	91.372	0.673	0.795	57.667
2009	92.571	0.670	0.800	56.468
2010	94.372	0.686	0.806	54.667
2011	94.340	0.682	0.808	53.705
2012	95.782	0.689	0.812	52.263
2013	96.647	0.691	0.815	50.404
2014	96.981	0.690	0.818	49.077
2015	97.333	0.699	0.817	47.731
2016	99.212	0.705	0.827	44.859
2017	98.654	0.703	0.824	45.417
2018	98.077	0.703	0.823	45.000
2019	98.269	0.698	0.827	42.821
2020	94.833	0.687	0.812	42.282

Table B.15: Average food world trade binary network indices at the node level (1993-2020)

Year	Outdegree Centrality	Eigenvector Centrality	Closeness Centrality	Betweenness Centrality
1993	57.761	0.502	0.678	70.406
1994	59.949	0.509	0.682	73.199
1995	65.096	0.537	0.700	72.019
1996	70.551	0.570	0.717	74.513
1997	74.346	0.584	0.730	73.705
1998	75.359	0.591	0.737	72.686
1999	76.577	0.591	0.739	71.468
2000	81.500	0.622	0.757	68.532
2001	82.622	0.622	0.764	66.417
2002	83.705	0.628	0.767	65.333
2003	85.718	0.638	0.774	64.314
2004	86.397	0.639	0.778	62.641
2005	86.904	0.647	0.779	61.141
2006	88.737	0.654	0.785	60.301
2007	90.628	0.661	0.792	58.410
2008	91.372	0.673	0.795	57.667
2009	92.571	0.670	0.800	56.468
2010	94.372	0.686	0.806	54.667
2011	94.340	0.682	0.808	53.705
2012	95.782	0.689	0.812	52.263
2013	96.647	0.691	0.815	50.404
2014	96.981	0.690	0.818	49.077
2015	97.333	0.699	0.817	47.731
2016	99.212	0.705	0.827	44.859
2017	98.654	0.703	0.824	45.417
2018	98.077	0.703	0.823	45.000
2019	98.269	0.698	0.827	42.821
2020	94.833	0.687	0.812	42.282

Table B.16: Average machines world trade binary network indices at the node level (1993-2020)

Year	Outdegree Centrality	Eigenvector Centrality	Closeness Centrality	Betweenness Centrality
1993	64.174	0.530	0.700	63.994
1994	67.859	0.549	0.708	65.282
1995	73.436	0.569	0.730	63.679
1996	79.391	0.603	0.746	65.673
1997	83.628	0.626	0.760	64.417
1998	86.006	0.641	0.768	62.038
1999	87.160	0.644	0.772	60.885
2000	93.872	0.675	0.798	56.160

Table B.16: Continued on next page

Table B.16: continued from previous page

Year	Outdegree Centrality	Eigenvector Centrality	Closeness Centrality	Betweenness Centrality
2001	96.256	0.689	0.806	52.782
2002	97.750	0.696	0.811	51.288
2003	100.147	0.708	0.819	49.885
2004	101.962	0.719	0.826	47.077
2005	102.577	0.721	0.829	45.468
2006	105.846	0.740	0.839	43.192
2007	107.212	0.748	0.844	41.827
2008	108.429	0.754	0.848	40.609
2009	108.641	0.755	0.851	40.397
2010	110.622	0.766	0.858	38.417
2011	111.083	0.766	0.861	36.962
2012	111.397	0.766	0.865	36.647
2013	112.141	0.771	0.867	34.910
2014	111.359	0.767	0.865	34.699
2015	111.340	0.769	0.863	33.724
2016	112.468	0.773	0.870	31.603
2017	111.776	0.769	0.869	32.295
2018	110.660	0.764	0.865	32.417
2019	110.455	0.761	0.867	30.635
2020	106.038	0.741	0.851	31.077

Table B.17: Average metals world trade binary network indices at the node level (1993-2020)

Year	Outdegree Centrality	Eigenvector Centrality	Closeness Centrality	Betweenness Centrality
1993	55.523	0.488	0.675	72.671
1994	58.000	0.501	0.678	75.218
1995	62.814	0.528	0.695	74.301
1996	68.263	0.563	0.713	76.859
1997	72.199	0.579	0.725	75.846
1998	73.929	0.591	0.732	74.115
1999	74.962	0.590	0.733	73.103
2000	82.295	0.625	0.759	67.737
2001	83.897	0.636	0.767	65.141
2002	85.506	0.636	0.772	63.532
2003	87.096	0.649	0.776	62.936
2004	89.237	0.657	0.782	59.801
2005	89.635	0.663	0.783	58.410
2006	92.250	0.679	0.792	56.788
2007	94.237	0.689	0.798	54.801
2008	95.160	0.692	0.800	53.878
2009	95.013	0.686	0.803	54.026
2010	97.532	0.706	0.811	51.506
2011	97.968	0.702	0.815	50.077
2012	98.218	0.702	0.817	49.827
2013	99.513	0.710	0.822	47.538
2014	98.718	0.705	0.819	47.340
2015	99.301	0.710	0.821	45.763
2016	100.994	0.715	0.829	43.077
2017	99.872	0.709	0.825	44.199
2018	99.071	0.705	0.821	44.006
2019	98.321	0.701	0.821	42.769
2020	94.545	0.689	0.807	42.571

Table B.18: Average minerals world trade binary network indices at the node level (1993-2020)

Year	Outdegree Centrality	Eigenvector Centrality	Closeness Centrality	Betweenness Centrality
1993	45.568	0.468	0.640	81.497
1994	47.071	0.477	0.643	86.795
1995	51.032	0.491	0.659	86.288
1996	55.699	0.505	0.672	88.878
1997	58.801	0.527	0.684	89.404
1998	59.731	0.529	0.688	88.455
1999	60.699	0.533	0.691	88.205
2000	66.442	0.559	0.713	82.647
2001	67.929	0.566	0.717	81.154
2002	69.577	0.566	0.722	79.506
2003	71.122	0.580	0.727	79.006
2004	72.359	0.580	0.730	76.878
2005	73.282	0.592	0.734	74.776
2006	75.513	0.606	0.740	73.532
2007	76.949	0.609	0.745	72.103
2008	78.109	0.623	0.748	70.929

Table B.18: Continued on next page

Table B.18: continued from previous page

Year	Outdegree Centrality	Eigenvector Centrality	Closeness Centrality	Betweenness Centrality
2009	78.135	0.602	0.749	71.083
2010	79.788	0.622	0.756	69.269
2011	79.750	0.623	0.756	68.308
2012	80.231	0.623	0.758	67.814
2013	81.474	0.634	0.763	65.635
2014	81.160	0.625	0.763	64.897
2015	81.840	0.626	0.765	63.224
2016	82.891	0.632	0.769	61.179
2017	82.724	0.631	0.768	61.346
2018	82.583	0.627	0.764	61.256
2019	82.577	0.631	0.767	58.513
2020	78.782	0.615	0.752	58.333

Table B.19: Average other world trade binary network indices at the node level (1993-2020)

Year	Outdegree Centrality	Eigenvector Centrality	Closeness Centrality	Betweenness Centrality
1993	57.394	0.498	0.677	70.774
1994	60.000	0.510	0.682	73.147
1995	64.814	0.535	0.699	72.301
1996	70.160	0.559	0.716	74.904
1997	74.205	0.587	0.728	73.840
1998	76.558	0.597	0.738	71.487
1999	77.545	0.598	0.740	70.500
2000	84.788	0.631	0.766	65.244
2001	86.686	0.645	0.775	62.353
2002	88.756	0.652	0.781	60.282
2003	90.071	0.661	0.784	59.962
2004	92.410	0.672	0.793	56.628
2005	93.635	0.678	0.798	54.410
2006	96.788	0.696	0.806	52.250
2007	98.346	0.707	0.813	50.692
2008	99.032	0.709	0.813	50.006
2009	99.795	0.710	0.818	49.244
2010	102.141	0.725	0.826	46.897
2011	102.282	0.722	0.828	45.763
2012	102.436	0.722	0.831	45.609
2013	103.686	0.731	0.836	43.365
2014	103.276	0.727	0.835	42.782
2015	103.821	0.733	0.835	41.244
2016	105.058	0.736	0.843	39.013
2017	102.929	0.726	0.836	41.141
2018	102.199	0.722	0.832	40.878
2019	101.442	0.718	0.830	39.647
2020	97.506	0.700	0.816	39.609

Table B.20: Average textile world trade binary network indices at the node level (1993-2020)

Year	Outdegree Centrality	Eigenvector Centrality	Closeness Centrality	Betweenness Centrality
1993	61.845	0.522	0.692	66.323
1994	64.763	0.536	0.698	68.378
1995	69.577	0.554	0.716	67.538
1996	75.506	0.588	0.733	69.558
1997	79.385	0.612	0.747	68.660
1998	81.385	0.620	0.753	66.660
1999	82.474	0.621	0.758	65.571
2000	90.218	0.657	0.786	59.814
2001	91.827	0.664	0.794	57.212
2002	93.321	0.673	0.798	55.718
2003	95.154	0.684	0.804	54.878
2004	96.763	0.692	0.810	52.276
2005	97.237	0.694	0.813	50.808
2006	100.263	0.713	0.822	48.776
2007	101.667	0.721	0.829	47.372
2008	102.474	0.724	0.831	46.564
2009	102.513	0.724	0.831	46.526
2010	104.468	0.732	0.839	44.571
2011	104.859	0.731	0.843	43.186
2012	105.603	0.735	0.845	42.442
2013	106.551	0.741	0.851	40.500
2014	105.865	0.736	0.848	40.192
2015	106.571	0.741	0.851	38.494
2016	107.827	0.747	0.856	36.244

Table B.20: Continued on next page

Table B.20: continued from previous page

Year	Outdegree Centrality	Eigenvector Centrality	Closeness Centrality	Betweenness Centrality
2017	106.910	0.743	0.852	37.160
2018	105.763	0.737	0.848	37.314
2019	105.429	0.737	0.847	35.660
2020	101.615	0.720	0.833	35.500

Table B.21: Average vehicles world trade binary network indices at the node level (1993-2020)

Year	Outdegree Centrality	Eigenvector Centrality	Closeness Centrality	Betweenness Centrality
1993	52.471	0.473	0.661	75.703
1994	55.090	0.485	0.668	78.051
1995	59.891	0.501	0.685	77.224
1996	65.308	0.525	0.703	79.756
1997	68.423	0.548	0.714	79.622
1998	70.423	0.556	0.719	77.622
1999	71.808	0.559	0.724	76.237
2000	77.526	0.590	0.745	72.506
2001	79.019	0.605	0.749	70.019
2002	81.295	0.617	0.758	67.744
2003	82.833	0.617	0.761	67.199
2004	85.212	0.630	0.769	63.827
2005	87.045	0.640	0.776	61.000
2006	90.006	0.660	0.785	59.032
2007	90.731	0.664	0.789	58.308
2008	92.410	0.677	0.793	56.628
2009	92.308	0.673	0.795	56.731
2010	94.526	0.681	0.802	54.513
2011	95.115	0.684	0.807	52.929
2012	95.692	0.689	0.810	52.353
2013	96.263	0.692	0.811	50.788
2014	95.654	0.684	0.810	50.404
2015	96.724	0.694	0.812	48.340
2016	97.987	0.699	0.818	46.083
2017	96.436	0.690	0.813	47.635
2018	95.891	0.691	0.811	47.186
2019	95.590	0.686	0.811	45.500
2020	91.673	0.672	0.796	45.442

Table B.22: Average wood-paper world trade binary network indices at the node level (1993-2020)

Year	Outdegree Centrality	Eigenvector Centrality	Closeness Centrality	Betweenness Centrality
1993	58.471	0.511	0.679	69.697
1994	60.853	0.514	0.682	72.378
1995	66.115	0.541	0.702	71.000
1996	71.724	0.575	0.719	73.340
1997	75.462	0.589	0.731	72.590
1998	77.083	0.604	0.737	70.962
1999	78.776	0.606	0.742	69.269
2000	86.615	0.645	0.770	63.417
2001	87.776	0.651	0.777	61.269
2002	89.442	0.662	0.781	59.596
2003	91.019	0.668	0.787	59.013
2004	92.840	0.676	0.792	56.199
2005	93.423	0.681	0.795	54.622
2006	96.154	0.694	0.804	52.885
2007	97.436	0.703	0.810	51.603
2008	98.186	0.707	0.811	50.853
2009	97.878	0.701	0.811	51.160
2010	100.013	0.715	0.819	49.026
2011	100.019	0.713	0.821	48.026
2012	100.122	0.711	0.822	47.923
2013	101.058	0.715	0.826	45.994
2014	99.968	0.712	0.822	46.090
2015	100.500	0.717	0.823	44.564
2016	101.788	0.719	0.831	42.282
2017	98.417	0.705	0.818	45.654
2018	96.385	0.693	0.812	46.692
2019	95.103	0.686	0.806	45.987
2020	90.833	0.668	0.790	46.282

Appendix C

Inward and outwards multilateral resistance terms

Table C.1: IMR in the chemical sector by country and year (BLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	0.08	0.09	0.09	0.10	0.11	0.12	0.13	0.11	0.13	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.17	0.17	0.17	0.17	0.17	0.19	0.21	0.22	0.19	0.20	0.20	0.24
AGO	0.09	0.10	0.10	0.10	0.10	0.11	0.11	0.08	0.09	0.10	0.10	0.10	0.10	0.11	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.13	0.14	0.12	0.13	0.13	0.15
ALB	0.11	0.13	0.13	0.14	0.15	0.17	0.18	0.16	0.17	0.20	0.21	0.21	0.19	0.19	0.19	0.19	0.22	0.19	0.19	0.19	0.19	0.21	0.23	0.23	0.21	0.22	0.21	0.24
ARE	0.46	0.43	0.42	0.45	0.47	0.50	0.58	0.51	0.54	0.55	0.56	0.52	0.48	0.44	0.44	0.41	0.43	0.44	0.42	0.42	0.47	0.51	0.49	0.48	0.42	0.50	0.50	0.53
ARG	0.23	0.23	0.21	0.22	0.21	0.22	0.24	0.22	0.23	0.21	0.24	0.25	0.23	0.23	0.23	0.23	0.25	0.25	0.24	0.25	0.25	0.26	0.30	0.30	0.29	0.27	0.27	0.30
ARM	0.09	0.10	0.11	0.12	0.12	0.13	0.15	0.13	0.14	0.15	0.16	0.16	0.16	0.16	0.17	0.16	0.17	0.17	0.17	0.17	0.17	0.18	0.20	0.21	0.18	0.20	0.20	0.23
AUS	0.15	0.16	0.15	0.17	0.17	0.17	0.18	0.15	0.16	0.22	0.24	0.23	0.23	0.24	0.23	0.22	0.25	0.23	0.23	0.24	0.24	0.24	0.25	0.25	0.23	0.24	0.27	0.29
AUT	0.42	0.44	0.40	0.41	0.40	0.45	0.46	0.46	0.43	0.50	0.54	0.52	0.53	0.48	0.47	0.47	0.50	0.54	0.51	0.55	0.58	0.62	0.65	0.65	0.61	0.62	0.63	0.68
AZE	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.16	0.17	0.18	0.19	0.19	0.18	0.20	0.21	0.21	0.22	0.22	0.22	0.21	0.22	0.24	0.26	0.24	0.22	0.23	0.24	0.27
BDI	0.07	0.08	0.08	0.08	0.08	0.09	0.10	0.08	0.09	0.10	0.11	0.11	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.14	0.15	0.13	0.13	0.13	0.15
BEL	0.66	0.72	0.88	0.91	0.87	0.90	0.92	0.89	0.89	1.81	1.00	0.96	1.81	0.94	0.94	1.89	1.80	2.54	2.45	2.46	2.57	2.73	2.95	2.49	2.39	2.42	2.35	2.57
BEN	0.08	0.08	0.10	0.11	0.10	0.11	0.13	0.10	0.11	0.12	0.13	0.13	0.12	0.13	0.13	0.14	0.13	0.14	0.14	0.14	0.14	0.14	0.15	0.17	0.17	0.15	0.15	0.17
BFA	0.08	0.09	0.09	0.11	0.10	0.11	0.12	0.10	0.11	0.12	0.12	0.12	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.15	0.16	0.14	0.14	0.14	0.16
BGD	0.11	0.11	0.12	0.13	0.12	0.14	0.16	0.14	0.15	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.19	0.22	0.26	0.32	0.32	0.33	0.35	0.40
BGR	0.18	0.20	0.21	0.22	0.21	0.22	0.23	0.20	0.22	0.25	0.27	0.27	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.25	0.26	0.28	0.31	0.32	0.30	0.31	0.27	0.31
BHR	0.24	0.19	0.20	0.35	0.23	0.27	0.32	0.38	0.40	0.43	0.45	0.45	0.42	0.47	0.47	0.48	0.45	0.50	0.51	0.51	0.52	0.53	0.48	0.61	0.59	0.60	0.26	0.29
BHS	0.18	0.14	0.13	0.13	0.13	0.13	0.14	0.12	0.13	0.14	0.15	0.14	0.14	0.14	0.13	0.14	0.15	0.16	0.14	0.14	0.14	0.16	0.17	0.18	0.14	0.14	0.15	0.16
BIH	0.12	0.13	0.14	0.15	0.16	0.18	0.20	0.17	0.19	0.21	0.22	0.23	0.21	0.21	0.21	0.22	0.22	0.23	0.23	0.22	0.22	0.24	0.27	0.27	0.25	0.27	0.26	0.28
BLR	0.17	0.20	0.22	0.22	0.21	0.29	0.28	0.25	0.27	0.29	0.32	0.33	0.32	0.33	0.34	0.35	0.34	0.35	0.37	0.36	0.34	0.36	0.39	0.35	0.34	0.36	0.36	0.38
BLZ	0.09	0.10	0.10	0.10	0.10	0.11	0.12	0.10	0.11	0.12	0.13	0.13	0.13	0.12	0.12	0.14	0.15	0.13	0.13	0.12	0.13	0.14	0.16	0.17	0.14	0.14	0.14	0.16
BMU	0.20	0.18	0.25	0.25	0.24	0.28	0.28	0.28	0.28	0.26	0.23	0.17	0.20	0.16	0.16	0.17	0.29	0.22	0.26	0.34	0.23	0.17	0.19	0.19	0.17	0.17	0.16	0.18
BOL	0.09	0.10	0.10	0.10	0.10	0.11	0.12	0.10	0.11	0.12	0.12	0.12	0.11	0.11	0.11	0.12	0.12	0.14	0.15	0.15	0.17	0.17	0.17	0.15	0.14	0.14	0.14	0.15
BRA	0.32	0.32	0.28	0.29	0.27	0.29	0.28	0.28	0.28	0.29	0.33	0.33	0.33	0.35	0.34	0.36	0.38	0.38	0.37	0.36	0.35	0.37	0.38	0.39	0.40	0.38	0.40	0.42
BRB	0.11	0.11	0.11	0.12	0.12	0.13	0.17	0.34	0.14	0.14	0.15	0.16	0.18	0.19	0.21	0.16	0.18	0.18	0.16	0.15	0.13	0.14	0.17	0.18	0.16	0.16	0.15	0.18
BRN	0.25	0.22	0.23	0.22	0.23	0.24	0.26	0.32	0.34	0.34	0.38	0.33	0.29	0.31	0.28	0.36	0.37	0.37	0.39	0.40	0.38	0.35	0.32	0.29	0.30	0.31	0.32	0.42
BTN	0.08	0.09	0.09	0.10	0.10	0.12	0.13	0.11	0.12	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.19	0.22	0.23	0.20	0.21	0.20	0.24
CAF	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.09	0.09	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.11	0.11	0.13	0.14	0.15	0.13	0.13	0.13	0.16
CAN	0.37	0.38	0.38	0.40	0.40	0.41	0.42	0.40	0.41	0.43	0.44	0.45	0.45	0.44	0.43	0.45	0.44	0.43	0.43	0.41	0.42	0.43	0.45	0.45	0.41	0.42	0.42	0.44

Table C.1: Continued on next page

Table C.1: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
CHE	0.76	0.80	0.81	0.82	0.77	0.86	0.82	0.77	0.81	0.90	0.99	0.94	0.86	0.91	0.88	0.85	1.06	1.07	1.01	1.01	1.08	1.15	1.33	1.32	1.26	1.27	1.39	1.59
CHL	0.16	0.16	0.15	0.16	0.16	0.16	0.18	0.17	0.17	0.19	0.22	0.22	0.11	0.18	0.21	0.22	0.23	0.19	0.18	0.18	0.16	0.16	0.17	0.18	0.22	0.21	0.21	0.24
CHN	0.48	0.43	0.43	0.45	0.46	0.52	0.54	0.56	0.60	0.64	0.72	0.77	0.79	0.88	0.94	1.02	1.12	1.20	1.25	1.32	1.39	1.51	1.76	1.74	1.63	1.56	1.64	1.94
CIV	0.10	0.10	0.11	0.12	0.12	0.12	0.14	0.11	0.11	0.13	0.13	0.14	0.13	0.13	0.13	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.18	0.18	0.17	0.17	0.18	0.20
CMR	0.10	0.10	0.11	0.11	0.11	0.12	0.13	0.11	0.12	0.14	0.14	0.14	0.13	0.15	0.14	0.16	0.16	0.16	0.17	0.15	0.16	0.15	0.19	0.19	0.16	0.19	0.21	0.23
COG	0.08	0.09	0.09	0.09	0.09	0.10	0.11	0.08	0.09	0.10	0.11	0.11	0.10	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.11	0.12	0.14	0.15	0.13	0.13	0.13	0.15
COL	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.17	0.18	0.19	0.20	0.21	0.20	0.21	0.21	0.21	0.21	0.19	0.24	0.24	0.24	0.25	0.25	0.26	0.25	0.26	0.26	0.27
CPV	0.07	0.08	0.08	0.09	0.09	0.10	0.11	0.09	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.14	0.14	0.13	0.13	0.13	0.14
CRI	0.11	0.11	0.12	0.12	0.13	0.13	0.14	0.13	0.14	0.15	0.16	0.16	0.15	0.16	0.16	0.16	0.16	0.16	0.15	0.14	0.14	0.15	0.17	0.18	0.16	0.16	0.16	0.20
CUB	0.13	0.13	0.14	0.14	0.14	0.16	0.16	0.14	0.15	0.16	0.16	0.16	0.15	0.15	0.14	0.15	0.18	0.17	0.17	0.17	0.17	0.16	0.18	0.19	0.16	0.15	0.15	0.18
CYP	0.12	0.13	0.13	0.14	0.15	0.16	0.17	0.16	0.17	0.18	0.19	0.18	0.16	0.19	0.21	0.20	0.21	0.22	0.22	0.21	0.22	0.23	0.24	0.24	0.19	0.22	0.23	0.23
CZE	0.27	0.31	0.33	0.36	0.36	0.39	0.41	0.36	0.41	0.46	0.52	0.52	0.48	0.51	0.46	0.48	0.48	0.49	0.47	0.47	0.48	0.52	0.52	0.51	0.50	0.53	0.53	0.56
DEU	1.49	1.52	1.52	1.44	1.38	1.40	1.40	1.38	1.36	1.52	1.79	1.72	1.53	1.50	1.48	1.44	1.47	1.44	1.40	1.44	1.51	1.55	1.61	1.56	1.59	1.52	1.59	1.76
DNK	0.37	0.40	0.39	0.41	0.41	0.45	0.49	0.44	0.49	0.54	0.61	0.57	0.51	0.51	0.49	0.45	0.52	0.51	0.50	0.49	0.52	0.56	0.63	0.62	0.59	0.61	0.66	0.77
DOM	0.17	0.18	0.20	0.21	0.21	0.23	0.24	0.23	0.22	0.24	0.26	0.26	0.22	0.23	0.24	0.22	0.19	0.19	0.20	0.21	0.21	0.22	0.24	0.25	0.24	0.24	0.25	0.27
DZA	0.40	0.41	0.39	0.41	0.42	0.45	0.48	0.43	0.46	0.48	0.50	0.47	0.43	0.43	0.40	0.39	0.43	0.44	0.41	0.39	0.39	0.40	0.39	0.39	0.36	0.37	0.37	0.39
ECU	0.12	0.15	0.12	0.13	0.13	0.16	0.13	0.13	0.14	0.14	0.16	0.16	0.15	0.14	0.15	0.14	0.16	0.17	0.12	0.15	0.15	0.16	0.19	0.19	0.17	0.18	0.18	0.20
EGY	0.18	0.20	0.20	0.20	0.21	0.23	0.24	0.22	0.23	0.24	0.23	0.25	0.25	0.26	0.27	0.26	0.29	0.29	0.29	0.29	0.28	0.32	0.31	0.31	0.30	0.36	0.39	0.39
ESP	0.41	0.43	0.45	0.48	0.46	0.50	0.52	0.50	0.54	0.56	0.61	0.61	0.57	0.57	0.56	0.55	0.54	0.57	0.55	0.55	0.55	0.57	0.59	0.58	0.58	0.51	0.52	0.58
EST	0.12	0.14	0.18	0.21	0.23	0.23	0.26	0.17	0.19	0.22	0.24	0.24	0.22	0.23	0.22	0.22	0.23	0.23	0.22	0.22	0.22	0.24	0.27	0.27	0.24	0.25	0.25	0.28
ETH	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.10	0.11	0.12	0.13	0.13	0.12	0.12	0.12	0.13	0.14	0.14	0.14	0.13	0.14	0.15	0.18	0.18	0.15	0.15	0.15	0.18
FIN	0.24	0.26	0.28	0.28	0.27	0.30	0.32	0.30	0.31	0.35	0.38	0.38	0.35	0.36	0.36	0.31	0.31	0.30	0.29	0.28	0.29	0.32	0.36	0.35	0.33	0.34	0.33	0.37
FJI	0.06	0.06	0.06	0.07	0.07	0.08	0.08	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.08	0.08	0.09	0.11	0.12	0.10	0.10	0.10	0.12
FRA	0.92	0.91	0.91	0.99	0.96	1.03	1.07	1.00	1.05	1.09	1.19	1.15	1.01	1.02	0.95	0.89	0.91	0.99	0.92	0.87	0.88	0.93	0.99	0.96	0.88	0.88	1.00	1.07
GAB	0.08	0.08	0.09	0.09	0.09	0.10	0.11	0.08	0.09	0.10	0.11	0.11	0.10	0.10	0.11	0.11	0.11	0.11	0.12	0.11	0.11	0.12	0.14	0.15	0.13	0.13	0.13	0.15
GBR	1.00	0.99	0.96	1.04	1.01	1.11	1.17	1.08	1.12	1.17	1.24	1.17	1.07	1.07	0.96	0.92	0.97	0.89	0.83	0.79	0.77	0.75	0.81	0.79	0.77	0.80	0.83	0.95
GEO	0.10	0.11	0.11	0.12	0.12	0.14	0.16	0.13	0.14	0.16	0.17	0.18	0.17	0.17	0.17	0.18	0.17	0.19	0.19	0.18	0.19	0.19	0.22	0.22	0.19	0.20	0.21	0.23
GHA	0.09	0.09	0.09	0.10	0.10	0.11	0.12	0.09	0.10	0.11	0.15	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.13	0.16	0.16	0.18	0.20	0.18	0.18	0.18	0.17
GMB	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.09	0.10	0.12	0.12	0.12	0.12	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.15	0.16	0.13	0.13	0.14	0.16
GRC	0.21	0.22	0.22	0.24	0.23	0.24	0.26	0.23	0.23	0.26	0.31	0.31	0.29	0.31	0.31	0.32	0.31	0.33	0.33	0.33	0.35	0.36	0.37	0.36	0.35	0.39	0.38	0.40
GTM	0.10	0.11	0.12	0.12	0.13	0.14	0.15	0.14	0.14	0.16	0.17	0.16	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.17	0.20	0.21	0.19	0.19	0.19	0.22
HKG	0.17	0.16	0.15	0.17	0.17	0.19	0.21	0.18	0.20	0.23	0.24	0.24	0.25	0.25	0.25	0.27	0.29	0.28	0.28	0.27	0.29	0.34	0.43	0.41	0.34	0.33	0.34	0.41
HND	0.08	0.09	0.09	0.10	0.11	0.14	0.15	0.15	0.15	0.16	0.17	0.16	0.15	0.12	0.12	0.12	0.13	0.13	0.13	0.12	0.13	0.14	0.16	0.16	0.15	0.15	0.15	0.17
HRV	0.20	0.22	0.22	0.23	0.23	0.27	0.27	0.24	0.27	0.30	0.32	0.31	0.26	0.27	0.27	0.26	0.27	0.27	0.26	0.25	0.25	0.28	0.31	0.31	0.29	0.29	0.29	0.33
HTI	0.08	0.08	0.09	0.10	0.10	0.11	0.12	0.10	0.11	0.12	0.12	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.15	0.16	0.14	0.14	0.14	0.15
HUN	0.25	0.26	0.27	0.28	0.28	0.30	0.32	0.27	0.35	0.40	0.42	0.42	0.39	0.40	0.40	0.39	0.40	0.41	0.40	0.39	0.40	0.43	0.47	0.46	0.45	0.46	0.46	0.50
IDN	0.19	0.19	0.19	0.22	0.21	0.22	0.24	0.25	0.25	0.28	0.34	0.32	0.30	0.34	0.34	0.33	0.37	0.41	0.43	0.39	0.38	0.39	0.44	0.47	0.46	0.45	0.49	0.57
IND	0.30	0.31	0.31	0.32	0.33	0.36	0.39	0.38	0.41	0.45	0.50	0.51	0.49	0.52	0.54	0.52	0.57	0.62	0.62	0.61	0.61	0.63	0.70	0.71	0.70	0.72	0.74	0.83
IRL	0.45	0.47	0.50	0.54	0.59	1.09	1.43	1.70	2.09	2.49	2.70	2.48	2.21	2.18	1.98	1.85	2.45	1.70	1.53	1.42	1.05	1.06	1.36	1.45	1.13	1.27	1.33	1.52
IRN	0.13	0.17	0.16	0.19	0.20	0.24	0.29	0.29	0.32	0.22	0.24	0.24	0.23	0.26	0.26	0.28	0.40	0.42	0.45	0.47	0.50	0.43	0.42	0.44	0.44	0.53	0.65	0.87
IRQ	0.21	0.21	0.20	0.21	0.20	0.22	0.23	0.20	0.20	0.21	0.21	0.20	0.19	0.17	0.18	0.19	0.21	0.21	0.21	0.20	0.21	0.22	0.25	0.25	0.23	0.25	0.25	0.28
ISL	0.09	0.10	0.11	0.11	0.12	0.13	0.14	0.12	0.13	0.15	0.16	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.14	0.15	0.16	0.19	0.19	0.17	0.17	0.17	0.19
ISR	0.28	0.30	0.31	0.33	0.34	0.37	0.40	0.39	0.42	0.45	0.50	0.49	0.48	0.50	0.50	0.53	0.55	0.60	0.58	0.58	0.57	0.55	0.59	0.55	0.53	0.53	0.51	0.53
ITA	0.66	0.80	0.77	0.88	0.85	0.95	0.94	0.89	0.92	0.92	0.98	0.95	0.86	0.88	0.84	0.81	0.73	0.75	0.72	0.72	0.76	0.79	0.85	0.85	0.92	0.94	0.98	1.01
JAM	0.13	0.14	0.14	0.15	0.15	0.17	0.17	0.15	0.17	0.18	0.18	0.19	0.17	0.18	0.17	0.17	0.15	0.14	0.14	0.13	0.13	0.14	0.16	0.17	0.15	0.15	0.15	0.16
JOR	0.16	0.17	0.17	0.19	0.19	0.21	0.22	0.19	0.21	0.23	0.24	0.23	0.22	0.23	0.23	0.24	0.24	0.26	0.26	0.26	0.27	0.29	0.31	0.29	0.28	0.28	0.29	0.30
JPN	1.52	1.58	1.51	1.38	1.33	1.50	1.54	1.65	1.54	1.58	1.72	1.68	1.50	1.45	1.34	1.16	1.27	1.34	1.18	1.12	1.07	1.06	1.18	1.25	1.27	1.23	1.29	1.43
KAZ	0.11	0.12	0.11	0.12	0.12	0.13	0.14	0.12	0.13	0.15	0.16	0.16	0.16	0.16	0.17	0.19	0.20	0.20	0.21	0.20	0.21	0.22	0.25	0.24	0.22	0.23	0.22	0.26
KEN	0.11	0.12	0.12	0.13	0.13	0.13	0.12	0.11	0.11	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.14	0.14	0.15	0.14	0.14	0.14	0.17	0.17	0.15	0.15	0.16	0.18
KGZ	0.09	0.09	0.10	0.11	0.11	0.12	0.13	0.11	0.12	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.16	0.17	0.16	0.16	0.16	0.18	0.21	0.21	0.19	0.19	0.19	0.22
KHM	0.07	0.08	0.08	0.09	0.10	0.11	0.13	0.12	0.13	0.16	0.16	0.17	0.16	0.17	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.21	0.25	0.26	0.25	0.26	0.27	0.30
KOR	0.50	0.58	0.59	0.64	0.71	0.86	0.82	0.81	0.81	0.84	0.96	0.98	0.96	1.02	0.98	0.90	0.93	1.03	1.06	1.08	1.11	1.17	1.28	1.29	1.34	1.37	1.34	1.42
KWT	0.28	0.33	0.35	0.42	0.43	0.38	0.54	0.47	0.44	0.51	0.53	0.56	0.54	0.54	0.58	0.54	0.56	0.63	0.65	0.66	0.66	0.64	0.60	0.57	0.56	0.62	0.57	0.54
LAO	0.08	0.09	0.09	0.10	0.11	0.12	0.13	0.11	0.12	0.15	0.15	0.16	0.15	0.15	0.16	0.16	0.17	0.17	0.17	0.17	0.18	0.20	0.23	0.24	0.21	0.21	0.21	0.25
LBN	0.12	0.13	0.14	0.14	0.15	0.17	0.19	0.17	0.19	0.21	0.22	0.22	0.21	0.20	0.20	0.20	0.21	0.22	0.21	0.20	0.21	0.23	0.26	0.26	0.23	0.24	0.24	0.27
LBR	0.08	0.09	0.09	0.09	0.10	0.10	0.11	0.10	0.11	0.12	0.13	0.13	0.12	0.13	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.16	0.16	0.14	0.14	0.14	0.16
LBY	0.14	0.15	0.16	0.16	0.16	0.17	0.19	0.15	0.17	0.20	0.21	0.20	0.19	0.20	0.19	0.20	0.23	0.23	0.18	0.18	0.18	0.20	0.22	0.23	0.20	0.21	0.21	0.23
LCA	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.09	0.10	0.11	0.12	0.12	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.11	0.11	0.12	0.14	0.15	0.13	0.13	0.13	0.15
LKA	0.11	0.11	0.12	0.13	0.13	0.14	0.15	0.14	0.16	0.20	0.23	0.24	0.22	0.24	0.17	0.16	0.17	0.15	0.17	0.16	0.18	0.19	0.21	0.22	0.21	0.20	0.20	0.23

Table C.1: Continued on next page

Table C.1: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
LTU	0.16	0.17	0.18	0.20	0.20	0.23	0.23	0.22	0.24	0.27	0.30	0.32	0.31	0.31	0.30	0.33	0.31	0.33	0.33	0.32	0.33	0.28	0.32	0.30	0.28	0.30	0.29	0.34
LVA	0.15	0.16	0.17	0.21	0.23	0.23	0.25	0.17	0.18	0.21	0.23	0.23	0.21	0.22	0.22	0.22	0.23	0.22	0.22	0.21	0.22	0.24	0.27	0.27	0.24	0.25	0.25	0.28
MAC	0.18	0.19	0.19	0.20	0.22	0.26	0.27	0.31	0.32	0.35	0.37	0.35	0.31	0.32	0.31	0.29	0.27	0.26	0.25	0.24	0.26	0.30	0.37	0.37	0.30	0.30	0.30	0.35
MAR	0.17	0.18	0.19	0.20	0.20	0.21	0.23	0.20	0.21	0.24	0.24	0.24	0.23	0.23	0.23	0.25	0.23	0.26	0.26	0.25	0.24	0.25	0.28	0.27	0.26	0.27	0.28	0.32
MDA	0.11	0.12	0.13	0.14	0.14	0.16	0.17	0.15	0.16	0.19	0.20	0.20	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.18	0.19	0.21	0.24	0.24	0.21	0.22	0.22	0.25
MDG	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.07	0.08	0.09	0.10	0.10	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.13	0.13	0.12	0.12	0.12	0.14
MDV	0.07	0.07	0.08	0.09	0.08	0.09	0.11	0.09	0.10	0.12	0.12	0.12	0.10	0.09	0.10	0.10	0.10	0.11	0.10	0.10	0.10	0.11	0.13	0.15	0.14	0.12	0.13	0.15
MEX	0.20	0.24	0.22	0.22	0.22	0.23	0.25	0.22	0.23	0.25	0.35	0.33	0.32	0.32	0.31	0.31	0.34	0.34	0.34	0.33	0.34	0.36	0.36	0.34	0.31	0.31	0.31	0.32
MKD	0.13	0.14	0.15	0.16	0.16	0.18	0.19	0.17	0.18	0.21	0.22	0.22	0.21	0.21	0.21	0.21	0.22	0.22	0.21	0.20	0.20	0.22	0.25	0.26	0.23	0.24	0.24	0.27
MLT	0.13	0.14	0.15	0.17	0.17	0.19	0.20	0.17	0.19	0.21	0.22	0.22	0.21	0.21	0.22	0.22	0.23	0.24	0.22	0.22	0.24	0.25	0.29	0.40	0.26	0.26	0.25	0.30
MMR	0.10	0.10	0.11	0.13	0.16	0.20	0.22	0.18	0.19	0.24	0.26	0.30	0.30	0.33	0.34	0.34	0.39	0.39	0.37	0.39	0.41	0.46	0.55	0.58	0.57	0.58	0.62	0.73
MNG	0.08	0.09	0.09	0.10	0.10	0.12	0.13	0.11	0.12	0.14	0.14	0.15	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.17	0.18	0.21	0.22	0.19	0.19	0.19	0.22
MOZ	0.06	0.07	0.07	0.07	0.07	0.08	0.09	0.08	0.09	0.10	0.11	0.11	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.14	0.14	0.12	0.13	0.13	0.14
MUS	0.13	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.12	0.13	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.12	0.13	0.15	0.16	0.13	0.14	0.14	0.16
MWI	0.07	0.08	0.08	0.09	0.09	0.09	0.10	0.08	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.10	0.11	0.12	0.14	0.14	0.12	0.13	0.13	0.15
MYS	0.25	0.27	0.29	0.32	0.32	0.35	0.37	0.41	0.43	0.49	0.59	0.57	0.53	0.58	0.57	0.59	0.58	0.62	0.62	0.64	0.63	0.63	0.66	0.63	0.65	0.66	0.68	0.82
NER	0.11	0.11	0.12	0.12	0.12	0.13	0.14	0.11	0.12	0.13	0.13	0.14	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.15	0.17	0.17	0.15	0.16	0.15	0.17
NGA	0.09	0.10	0.18	0.18	0.16	0.17	0.21	0.15	0.17	0.16	0.19	0.19	0.19	0.22	0.22	0.26	0.22	0.25	0.27	0.29	0.29	0.32	0.32	0.28	0.27	0.29	0.30	0.30
NIC	0.08	0.09	0.09	0.09	0.09	0.10	0.11	0.09	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.11	0.11	0.11	0.12	0.14	0.14	0.12	0.12	0.12	0.14
NLD	0.78	0.84	0.93	1.02	0.96	0.98	1.06	1.07	1.06	1.11	1.18	1.16	1.10	0.91	1.08	0.95	1.08	1.28	1.20	1.20	1.22	1.29	1.29	1.16	1.09	1.13	1.08	1.13
NOR	0.25	0.26	0.27	0.27	0.26	0.27	0.30	0.28	0.28	0.32	0.33	0.33	0.33	0.31	0.42	0.51	0.33	0.33	0.32	0.32	0.31	0.33	0.35	0.34	0.33	0.36	0.33	0.35
NPL	0.09	0.09	0.10	0.10	0.11	0.12	0.13	0.12	0.13	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.18	0.18	0.18	0.17	0.18	0.19	0.23	0.24	0.21	0.22	0.21	0.25
NZL	0.13	0.13	0.14	0.14	0.13	0.13	0.16	0.14	0.16	0.18	0.17	0.17	0.18	0.18	0.18	0.17	0.18	0.17	0.16	0.18	0.18	0.19	0.21	0.21	0.19	0.19	0.20	0.23
OMN	0.12	0.13	0.13	0.14	0.14	0.16	0.18	0.17	0.19	0.21	0.22	0.22	0.22	0.22	0.23	0.26	0.26	0.27	0.25	0.27	0.28	0.32	0.30	0.30	0.27	0.31	0.32	0.35
PAK	0.15	0.16	0.16	0.17	0.16	0.18	0.20	0.17	0.18	0.20	0.22	0.23	0.22	0.23	0.23	0.23	0.25	0.25	0.24	0.24	0.25	0.27	0.32	0.33	0.31	0.30	0.31	0.35
PAN	0.10	0.11	0.10	0.11	0.12	0.12	0.13	0.12	0.13	0.14	0.14	0.14	0.13	0.12	0.12	0.14	0.12	0.14	0.16	0.14	0.15	0.15	0.17	0.17	0.16	0.15	0.15	0.17
PER	0.13	0.14	0.14	0.15	0.15	0.16	0.15	0.14	0.15	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.18	0.19	0.18	0.19	0.19	0.19	0.21	0.21	0.20	0.21	0.21	0.21
PHL	0.18	0.19	0.20	0.22	0.21	0.22	0.24	0.21	0.22	0.23	0.26	0.25	0.24	0.25	0.25	0.25	0.25	0.26	0.25	0.26	0.26	0.28	0.32	0.31	0.27	0.28	0.29	0.31
PNG	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.08	0.08	0.10	0.11	0.10	0.10	0.10	0.10	0.11	0.12	0.11	0.12	0.11	0.11	0.15	0.19	0.19	0.18	0.18	0.19	0.20
POL	0.32	0.33	0.36	0.36	0.36	0.39	0.42	0.39	0.41	0.47	0.53	0.53	0.49	0.51	0.51	0.51	0.50	0.53	0.53	0.53	0.54	0.57	0.61	0.59	0.59	0.58	0.53	0.56
PRT	0.25	0.26	0.23	0.29	0.28	0.31	0.32	0.29	0.31	0.34	0.37	0.32	0.26	0.27	0.26	0.26	0.31	0.32	0.32	0.32	0.33	0.34	0.37	0.36	0.35	0.35	0.36	0.38
PRY	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.09	0.10	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.12	0.12	0.12	0.13	0.15	0.16	0.14	0.14	0.14	0.16
QAT	0.17	0.18	0.18	0.19	0.20	0.22	0.25	0.32	0.37	0.40	0.47	0.49	0.45	0.51	0.50	0.72	0.86	1.06	1.37	1.45	1.53	1.45	1.18	0.67	0.76	0.90	0.81	0.69
ROU	0.21	0.23	0.23	0.23	0.23	0.25	0.25	0.23	0.24	0.27	0.29	0.29	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.29	0.31	0.34	0.33	0.32	0.33	0.33	0.36
RUS	0.27	0.28	0.30	0.30	0.28	0.25	0.26	0.23	0.25	0.26	0.36	0.38	0.40	0.43	0.45	0.47	0.44	0.47	0.48	0.49	0.50	0.50	0.51	0.50	0.49	0.52	0.53	0.55
RWA	0.08	0.08	0.08	0.09	0.09	0.10	0.11	0.09	0.10	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.12	0.13	0.14	0.16	0.17	0.14	0.15	0.15	0.18
SAU	0.27	0.29	0.28	0.31	0.30	0.31	0.35	0.30	0.32	0.33	0.34	0.33	0.30	0.30	0.32	0.32	0.35	0.39	0.39	0.39	0.40	0.43	0.46	0.46	0.46	0.49	0.59	0.62
SCG	0.13	0.19	0.18	0.20	0.21	0.23	0.23	0.23	0.22	0.25	0.28	0.29	0.27	0.55	0.54	0.58	0.60	0.55	0.53	0.51	0.56	0.58	0.40	0.40	0.65	0.71	0.69	0.76
SEN	0.10	0.10	0.10	0.11	0.11	0.12	0.13	0.11	0.12	0.13	0.13	0.14	0.13	0.12	0.13	0.14	0.14	0.14	0.14	0.13	0.14	0.15	0.17	0.17	0.16	0.16	0.16	0.18
SGP	0.50	0.63	0.85	0.70	1.26	0.80	0.82	0.69	0.98	1.45	2.45	2.25	2.16	2.65	2.65	1.93	2.69	2.21	2.03	2.06	1.86	1.86	1.95	1.92	2.04	2.73	1.92	2.12
SLE	0.08	0.09	0.09	0.10	0.09	0.10	0.11	0.09	0.10	0.11	0.12	0.12	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.11	0.11	0.12	0.14	0.15	0.13	0.13	0.13	0.15
SLV	0.10	0.10	0.10	0.12	0.13	0.14	0.15	0.14	0.15	0.16	0.16	0.16	0.15	0.14	0.14	0.14	0.15	0.15	0.14	0.14	0.14	0.15	0.18	0.18	0.16	0.16	0.16	0.18
SOM	0.08	0.09	0.09	0.11	0.09	0.10	0.11	0.09	0.10	0.11	0.12	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.13	0.12	0.12	0.13	0.15	0.16	0.13	0.14	0.14	0.17
SUR	0.08	0.08	0.09	0.09	0.09	0.10	0.11	0.09	0.10	0.11	0.11	0.12	0.11	0.11	0.11	0.12	0.12	0.11	0.11	0.11	0.11	0.12	0.13	0.14	0.12	0.12	0.12	0.13
SVK	0.22	0.23	0.24	0.25	0.25	0.28	0.30	0.27	0.29	0.33	0.35	0.34	0.31	0.30	0.31	0.31	0.32	0.34	0.33	0.32	0.39	0.47	0.51	0.51	0.37	0.43	0.46	0.50
SVN	0.21	0.25	0.27	0.28	0.28	0.32	0.33	0.29	0.31	0.35	0.39	0.38	0.33	0.34	0.33	0.32	0.34	0.34	0.32	0.31	0.33	0.36	0.38	0.38	0.37	0.38	0.36	0.42
SWE	0.29	0.30	0.33	0.35	0.33	0.37	0.39	0.35	0.37	0.41	0.46	0.44	0.40	0.40	0.39	0.37	0.41	0.38	0.35	0.34	0.35	0.39	0.46	0.41	0.38	0.39	0.42	0.50
SYR	0.18	0.19	0.19	0.22	0.23	0.27	0.31	0.28	0.29	0.31	0.35	0.34	0.34	0.18	0.17	0.18	0.21	0.21	0.19	0.18	0.18	0.19	0.23	0.23	0.20	0.21	0.21	0.24
THA	0.28	0.23	0.23	0.25	0.27	0.24	0.26	0.30	0.31	0.41	0.44	0.42	0.37	0.39	0.39	0.37	0.39	0.41	0.40	0.42	0.45	0.46	0.52	0.52	0.53	0.54	0.55	0.60
TJK	0.08	0.09	0.09	0.10	0.10	0.12	0.13	0.11	0.12	0.14	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.16	0.15	0.16	0.17	0.20	0.20	0.18	0.18	0.18	0.21
TKM	0.08	0.09	0.10	0.16	0.14	0.12	0.15	0.14	0.16	0.17	0.18	0.18	0.18	0.19	0.19	0.20	0.16	0.17	0.20	0.21	0.22	0.24	0.25	0.25	0.23	0.25	0.26	0.31
TON	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.06	0.06	0.07	0.08	0.08	0.07	0.07	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.10	0.11	0.09	0.09	0.09	0.11
TTO	0.18	0.21	0.22	0.23	0.22	0.24	0.31	0.31	0.33	0.35	0.52	0.51	0.51	0.56	0.54	0.55	0.51	0.53	0.53	0.53	0.56	0.56	0.52	0.42	0.41	0.46	0.45	0.42
TUN	0.21	0.22	0.21	0.23	0.23	0.25	0.26	0.22	0.24	0.25	0.26	0.25	0.23	0.23	0.23	0.23	0.25	0.25	0.23	0.24	0.24	0.26	0.28	0.29	0.25	0.25	0.25	0.29
TUR	0.28	0.27	0.29	0.28	0.29	0.31	0.33	0.30	0.32	0.33	0.37	0.37	0.34	0.35	0.34	0.35	0.35	0.37	0.37	0.38	0.38	0.39	0.42	0.42	0.40	0.42	0.44	0.49
TZA	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.08	0.09	0.10	0.11	0.11	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.14	0.15	0.13	0.13	0.13	0.16
UGA	0.08	0.08	0.09	0.10	0.09	0.10	0.10	0.09	0.09	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.11	0.12	0.11	0.11	0.11	0.13	0.15	0.15	0.13	0.13	0.14	0.16
UKR	0.22	0.23	0.22	0.21	0.21	0.22	0.22	0.20	0.23	0.27	0.30	0.32	0.31	0.31	0.31	0.31	0.29	0.30	0.30	0.29	0.29	0.29	0.32	0.30	0.28	0.29	0.29	0.33
URY	0.12	0.12	0.14	0.14	0.14	0.16	0.16	0.15	0.15	0.16	0.17	0.17	0.17	0.17	0.16	0.16	0.18	0.17	0.17	0.17	0.17	0.18	0.21	0.21	0.19	0.19	0.18	0.20

Table C.1: Continued on next page

Table C.1: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
USA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
UZB	0.08	0.09	0.10	0.12	0.12	0.13	0.14	0.13	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.19	0.19	0.17	0.17	0.16	0.18	0.19	0.23	0.23	0.20	0.20	0.20	0.23
VEN	0.23	0.22	0.24	0.24	0.26	0.26	0.29	0.14	0.16	0.16	0.16	0.17	0.16	0.17	0.17	0.17	0.14	0.15	0.14	0.13	0.13	0.15	0.15	0.16	0.13	0.13	0.13	0.15
VNM	0.10	0.11	0.12	0.12	0.12	0.14	0.15	0.14	0.15	0.18	0.19	0.21	0.20	0.22	0.22	0.23	0.27	0.29	0.28	0.29	0.29	0.32	0.38	0.42	0.40	0.41	0.43	0.51
YEM	0.11	0.11	0.11	0.12	0.12	0.12	0.14	0.13	0.14	0.15	0.16	0.17	0.17	0.18	0.18	0.18	0.18	0.19	0.18	0.17	0.18	0.19	0.17	0.17	0.15	0.16	0.16	0.19
ZAF	0.21	0.21	0.21	0.21	0.18	0.15	0.26	0.26	0.27	0.27	0.32	0.33	0.30	0.29	0.28	0.27	0.30	0.29	0.26	0.26	0.28	0.29	0.31	0.30	0.29	0.29	0.29	0.30
ZMB	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.08	0.09	0.10	0.10	0.10	0.10	0.13	0.10	0.11	0.11	0.13	0.12	0.12	0.12	0.11	0.19	0.17	0.15	0.18	0.18	0.19
ZWE	0.09	0.09	0.10	0.10	0.10	0.10	0.11	0.10	0.10	0.11	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.12	0.11	0.11	0.11	0.12	0.14	0.15	0.13	0.13	0.13	0.15

Table C.2: IMR in the food sector by country and year (BLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	0.08	0.09	0.09	0.10	0.11	0.12	0.13	0.11	0.13	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.17	0.17	0.17	0.17	0.17	0.19	0.21	0.22	0.19	0.20	0.20	0.24
AGO	0.09	0.10	0.10	0.10	0.10	0.11	0.11	0.08	0.09	0.10	0.10	0.10	0.10	0.11	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.13	0.14	0.12	0.13	0.13	0.15
ALB	0.11	0.13	0.13	0.14	0.15	0.17	0.18	0.16	0.17	0.20	0.21	0.21	0.19	0.19	0.19	0.19	0.22	0.19	0.19	0.19	0.19	0.21	0.23	0.23	0.21	0.22	0.21	0.24
ARE	0.46	0.43	0.42	0.45	0.47	0.50	0.58	0.51	0.54	0.55	0.56	0.52	0.48	0.44	0.44	0.41	0.43	0.44	0.42	0.42	0.47	0.51	0.49	0.48	0.42	0.50	0.50	0.53
ARG	0.23	0.23	0.21	0.22	0.21	0.22	0.24	0.22	0.23	0.21	0.24	0.25	0.23	0.23	0.23	0.23	0.25	0.25	0.24	0.25	0.25	0.26	0.30	0.30	0.29	0.27	0.27	0.30
ARM	0.09	0.10	0.11	0.12	0.12	0.13	0.15	0.13	0.14	0.15	0.16	0.16	0.16	0.16	0.17	0.16	0.17	0.17	0.17	0.17	0.17	0.18	0.20	0.21	0.18	0.20	0.20	0.23
AUS	0.15	0.16	0.15	0.17	0.17	0.17	0.18	0.15	0.16	0.22	0.24	0.23	0.23	0.24	0.23	0.22	0.25	0.23	0.23	0.24	0.24	0.24	0.25	0.25	0.23	0.24	0.27	0.29
AUT	0.42	0.44	0.40	0.41	0.40	0.45	0.46	0.46	0.43	0.50	0.54	0.52	0.53	0.48	0.47	0.47	0.50	0.54	0.51	0.55	0.58	0.62	0.65	0.65	0.61	0.62	0.63	0.68
AZE	0.11	0.12	0.13	0.15	0.16	0.17	0.18	0.16	0.17	0.18	0.19	0.19	0.18	0.20	0.21	0.21	0.22	0.22	0.22	0.21	0.22	0.24	0.26	0.24	0.22	0.23	0.24	0.27
BDI	0.07	0.08	0.08	0.08	0.08	0.09	0.10	0.08	0.09	0.10	0.11	0.11	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.14	0.15	0.13	0.13	0.13	0.15
BEL	0.66	0.72	0.88	0.91	0.87	0.90	0.92	0.89	0.89	1.81	1.00	0.96	1.81	0.94	0.94	1.89	1.80	2.54	2.45	2.46	2.57	2.73	2.95	2.49	2.39	2.42	2.35	2.57
BEN	0.08	0.08	0.10	0.11	0.10	0.11	0.13	0.10	0.11	0.12	0.13	0.13	0.12	0.13	0.13	0.14	0.13	0.14	0.14	0.14	0.14	0.15	0.17	0.17	0.15	0.15	0.15	0.17
BFA	0.08	0.09	0.09	0.11	0.10	0.11	0.12	0.10	0.11	0.12	0.12	0.12	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.15	0.16	0.14	0.14	0.14	0.16
BGD	0.11	0.11	0.12	0.13	0.12	0.14	0.16	0.14	0.15	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.19	0.22	0.26	0.32	0.32	0.33	0.35	0.40
BGR	0.18	0.20	0.21	0.22	0.21	0.22	0.23	0.20	0.22	0.25	0.27	0.27	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.25	0.26	0.28	0.31	0.32	0.30	0.31	0.27	0.31
BHR	0.24	0.19	0.20	0.35	0.23	0.27	0.32	0.38	0.40	0.43	0.45	0.45	0.42	0.47	0.47	0.48	0.45	0.50	0.51	0.51	0.52	0.53	0.48	0.61	0.59	0.60	0.26	0.29
BHS	0.18	0.14	0.13	0.13	0.13	0.13	0.14	0.12	0.13	0.14	0.15	0.14	0.14	0.14	0.13	0.14	0.15	0.16	0.14	0.14	0.14	0.16	0.17	0.18	0.14	0.14	0.15	0.16
BIH	0.12	0.13	0.14	0.15	0.16	0.18	0.20	0.17	0.19	0.21	0.22	0.23	0.21	0.21	0.21	0.22	0.22	0.23	0.23	0.22	0.22	0.24	0.27	0.27	0.25	0.27	0.26	0.28
BLR	0.17	0.20	0.22	0.22	0.21	0.29	0.28	0.25	0.27	0.29	0.32	0.33	0.32	0.33	0.34	0.35	0.34	0.35	0.37	0.36	0.34	0.36	0.39	0.35	0.34	0.36	0.36	0.38
BLZ	0.09	0.10	0.10	0.10	0.10	0.11	0.12	0.10	0.11	0.12	0.13	0.13	0.13	0.12	0.12	0.14	0.15	0.13	0.13	0.12	0.13	0.14	0.16	0.17	0.14	0.14	0.14	0.16
BMU	0.20	0.18	0.25	0.25	0.24	0.28	0.28	0.28	0.28	0.26	0.23	0.17	0.20	0.16	0.16	0.17	0.29	0.22	0.26	0.34	0.23	0.17	0.19	0.19	0.17	0.17	0.16	0.18
BOL	0.09	0.10	0.10	0.10	0.10	0.11	0.12	0.10	0.11	0.12	0.12	0.12	0.11	0.11	0.11	0.12	0.12	0.14	0.15	0.15	0.17	0.17	0.17	0.15	0.14	0.14	0.14	0.15
BRA	0.32	0.32	0.28	0.29	0.27	0.29	0.28	0.28	0.28	0.29	0.33	0.33	0.33	0.35	0.34	0.36	0.38	0.38	0.37	0.36	0.35	0.37	0.38	0.39	0.40	0.38	0.40	0.42
BRB	0.11	0.11	0.11	0.12	0.12	0.13	0.17	0.34	0.14	0.14	0.15	0.16	0.18	0.19	0.21	0.16	0.18	0.18	0.16	0.15	0.13	0.14	0.17	0.18	0.16	0.16	0.15	0.18
BRN	0.25	0.22	0.23	0.22	0.23	0.24	0.26	0.32	0.34	0.34	0.38	0.33	0.29	0.31	0.28	0.36	0.37	0.37	0.39	0.40	0.38	0.35	0.32	0.29	0.30	0.31	0.32	0.42
BTN	0.08	0.09	0.09	0.10	0.10	0.12	0.13	0.11	0.12	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.19	0.22	0.23	0.20	0.21	0.20	0.24
CAF	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.09	0.09	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.11	0.11	0.13	0.14	0.15	0.13	0.13	0.13	0.16
CAN	0.37	0.38	0.38	0.40	0.40	0.41	0.42	0.40	0.41	0.43	0.44	0.45	0.45	0.44	0.43	0.45	0.44	0.43	0.43	0.41	0.42	0.43	0.45	0.45	0.41	0.42	0.42	0.44
CHE	0.76	0.80	0.81	0.82	0.77	0.86	0.82	0.77	0.81	0.90	0.99	0.94	0.86	0.91	0.88	0.85	1.06	1.07	1.01	1.01	1.08	1.15	1.33	1.32	1.26	1.27	1.39	1.59
CHL	0.16	0.16	0.15	0.16	0.16	0.16	0.18	0.17	0.17	0.19	0.22	0.22	0.11	0.18	0.21	0.22	0.23	0.19	0.18	0.18	0.16	0.16	0.17	0.18	0.22	0.21	0.21	0.24
CHN	0.48	0.43	0.43	0.45	0.46	0.52	0.54	0.56	0.60	0.64	0.72	0.77	0.79	0.88	0.94	1.02	1.12	1.20	1.25	1.32	1.39	1.51	1.76	1.74	1.63	1.56	1.64	1.94
CIV	0.10	0.10	0.11	0.12	0.12	0.12	0.14	0.11	0.11	0.13	0.13	0.14	0.13	0.13	0.13	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.18	0.18	0.17	0.17	0.18	0.20
CMR	0.10	0.10	0.11	0.11	0.11	0.12	0.13	0.11	0.12	0.14	0.14	0.14	0.13	0.15	0.14	0.16	0.16	0.16	0.17	0.15	0.16	0.15	0.19	0.19	0.16	0.19	0.21	0.23
COG	0.08	0.09	0.09	0.09	0.09	0.10	0.11	0.08	0.09	0.10	0.11	0.11	0.10	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.11	0.12	0.14	0.15	0.13	0.13	0.13	0.15
COL	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.17	0.18	0.19	0.20	0.21	0.20	0.21	0.21	0.21	0.21	0.19	0.24	0.24	0.24	0.25	0.25	0.26	0.25	0.26	0.26	0.27
CPV	0.07	0.08	0.08	0.09	0.09	0.10	0.11	0.09	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.14	0.14	0.13	0.13	0.13	0.14
CRI	0.11	0.11	0.12	0.12	0.13	0.13	0.14	0.13	0.14	0.15	0.16	0.16	0.15	0.16	0.16	0.16	0.16	0.16	0.15	0.14	0.14	0.15	0.17	0.18	0.16	0.16	0.16	0.20
CUB	0.13	0.13	0.14	0.14	0.14	0.16	0.16	0.14	0.15	0.16	0.16	0.16	0.15	0.15	0.14	0.15	0.18	0.17	0.17	0.17	0.17	0.16	0.18	0.19	0.16	0.15	0.15	0.18
CYP	0.12	0.13	0.13	0.14	0.15	0.16	0.17	0.16	0.17	0.18	0.19	0.18	0.16	0.19	0.21	0.20	0.21	0.22	0.22	0.21	0.22	0.23	0.24	0.24	0.19	0.22	0.23	0.23
CZE	0.27	0.31	0.33	0.36	0.36	0.39	0.41	0.36	0.41	0.46	0.52	0.52	0.48	0.51	0.46	0.48	0.48	0.49	0.47	0.47	0.48	0.52	0.52	0.51	0.50	0.53	0.53	0.56
DEU	1.49	1.52	1.52	1.44	1.38	1.40	1.40	1.38	1.36	1.52	1.79	1.72	1.53	1.50	1.48	1.44	1.47	1.44	1.40	1.44	1.51	1.55	1.61	1.56	1.59	1.52	1.59	1.76

Table C.2: Continued on next page

Table C.2: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
DNK	0.37	0.40	0.39	0.41	0.41	0.45	0.49	0.44	0.49	0.54	0.61	0.57	0.51	0.51	0.49	0.45	0.52	0.51	0.50	0.49	0.52	0.56	0.63	0.62	0.59	0.61	0.66	0.77
DOM	0.17	0.18	0.20	0.21	0.21	0.23	0.24	0.23	0.22	0.24	0.26	0.26	0.22	0.23	0.24	0.22	0.19	0.19	0.20	0.21	0.21	0.22	0.24	0.25	0.24	0.24	0.25	0.27
DZA	0.40	0.41	0.39	0.41	0.42	0.45	0.48	0.43	0.46	0.48	0.50	0.47	0.43	0.43	0.40	0.39	0.43	0.44	0.41	0.39	0.39	0.40	0.39	0.39	0.36	0.37	0.37	0.39
ECU	0.12	0.15	0.12	0.13	0.13	0.16	0.13	0.13	0.14	0.14	0.16	0.16	0.15	0.14	0.15	0.14	0.16	0.17	0.12	0.15	0.15	0.16	0.19	0.19	0.17	0.18	0.18	0.20
EGY	0.18	0.20	0.20	0.20	0.21	0.23	0.24	0.22	0.23	0.24	0.23	0.25	0.25	0.26	0.27	0.26	0.29	0.29	0.29	0.29	0.28	0.32	0.31	0.31	0.30	0.36	0.39	0.39
ESP	0.41	0.43	0.45	0.48	0.46	0.50	0.52	0.50	0.54	0.56	0.61	0.61	0.57	0.57	0.56	0.55	0.54	0.57	0.55	0.55	0.55	0.57	0.59	0.58	0.58	0.51	0.52	0.58
EST	0.12	0.14	0.18	0.21	0.23	0.23	0.26	0.17	0.19	0.22	0.24	0.24	0.22	0.23	0.22	0.22	0.23	0.23	0.22	0.22	0.22	0.24	0.27	0.27	0.24	0.25	0.25	0.28
ETH	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.10	0.11	0.12	0.13	0.13	0.12	0.12	0.12	0.13	0.14	0.14	0.14	0.13	0.14	0.15	0.18	0.18	0.15	0.15	0.15	0.18
FIN	0.24	0.26	0.28	0.28	0.27	0.30	0.32	0.30	0.31	0.35	0.38	0.38	0.35	0.36	0.36	0.31	0.31	0.30	0.29	0.28	0.29	0.32	0.36	0.35	0.33	0.34	0.33	0.37
FJI	0.06	0.06	0.06	0.07	0.07	0.08	0.08	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.08	0.08	0.09	0.11	0.12	0.10	0.10	0.10	0.12
FRA	0.92	0.91	0.91	0.99	0.96	1.03	1.07	1.00	1.05	1.09	1.19	1.15	1.01	1.02	0.95	0.89	0.91	0.99	0.92	0.87	0.88	0.93	0.99	0.96	0.88	0.88	1.00	1.07
GAB	0.08	0.08	0.09	0.09	0.09	0.10	0.11	0.08	0.09	0.10	0.11	0.11	0.10	0.10	0.11	0.11	0.11	0.11	0.12	0.11	0.11	0.12	0.14	0.15	0.13	0.13	0.13	0.15
GBR	1.00	0.99	0.96	1.04	1.01	1.11	1.17	1.08	1.12	1.17	1.24	1.17	1.07	1.07	0.96	0.92	0.97	0.89	0.83	0.79	0.77	0.75	0.81	0.79	0.77	0.80	0.83	0.95
GEO	0.10	0.11	0.11	0.12	0.12	0.14	0.16	0.13	0.14	0.16	0.17	0.18	0.17	0.17	0.17	0.18	0.17	0.19	0.19	0.18	0.19	0.19	0.22	0.22	0.19	0.20	0.21	0.23
GHA	0.09	0.09	0.09	0.10	0.10	0.11	0.12	0.09	0.10	0.11	0.15	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.13	0.16	0.16	0.18	0.20	0.18	0.18	0.18	0.17
GMB	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.09	0.10	0.12	0.12	0.12	0.12	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.15	0.16	0.13	0.13	0.14	0.16
GRC	0.21	0.22	0.22	0.24	0.23	0.24	0.26	0.23	0.23	0.26	0.31	0.31	0.29	0.31	0.31	0.32	0.31	0.33	0.33	0.33	0.35	0.36	0.37	0.36	0.35	0.39	0.38	0.40
GTM	0.10	0.11	0.12	0.12	0.13	0.14	0.15	0.14	0.14	0.16	0.17	0.16	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.17	0.20	0.21	0.19	0.19	0.19	0.22
HKG	0.17	0.16	0.15	0.17	0.17	0.19	0.21	0.18	0.20	0.23	0.24	0.24	0.25	0.25	0.25	0.27	0.29	0.28	0.28	0.27	0.29	0.34	0.43	0.41	0.34	0.33	0.34	0.41
HND	0.08	0.09	0.09	0.10	0.11	0.14	0.15	0.15	0.15	0.16	0.17	0.16	0.15	0.12	0.12	0.12	0.13	0.13	0.13	0.12	0.13	0.14	0.16	0.16	0.15	0.15	0.15	0.17
HRV	0.20	0.22	0.22	0.23	0.23	0.27	0.27	0.24	0.27	0.30	0.32	0.31	0.26	0.27	0.27	0.26	0.27	0.27	0.26	0.25	0.25	0.28	0.31	0.31	0.29	0.29	0.29	0.33
HTI	0.08	0.08	0.09	0.10	0.10	0.11	0.12	0.10	0.11	0.12	0.12	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.15	0.16	0.14	0.14	0.14	0.15
HUN	0.25	0.26	0.27	0.28	0.28	0.30	0.32	0.27	0.35	0.40	0.42	0.42	0.39	0.40	0.40	0.39	0.40	0.41	0.40	0.39	0.40	0.43	0.47	0.46	0.45	0.46	0.46	0.50
IDN	0.19	0.19	0.19	0.22	0.21	0.22	0.24	0.25	0.25	0.28	0.34	0.32	0.30	0.34	0.34	0.33	0.37	0.41	0.43	0.39	0.38	0.39	0.44	0.47	0.46	0.45	0.49	0.57
IND	0.30	0.31	0.31	0.32	0.33	0.36	0.39	0.38	0.41	0.45	0.50	0.51	0.49	0.52	0.54	0.52	0.57	0.62	0.62	0.61	0.61	0.63	0.70	0.71	0.70	0.72	0.74	0.83
IRL	0.45	0.47	0.50	0.54	0.59	1.09	1.43	1.70	2.09	2.49	2.70	2.48	2.21	2.18	1.98	1.85	2.45	1.70	1.53	1.42	1.05	1.06	1.36	1.45	1.13	1.27	1.33	1.52
IRN	0.13	0.17	0.16	0.19	0.20	0.24	0.29	0.29	0.32	0.22	0.24	0.24	0.23	0.26	0.26	0.28	0.40	0.42	0.45	0.47	0.50	0.43	0.42	0.44	0.44	0.53	0.65	0.87
IRQ	0.21	0.21	0.20	0.21	0.20	0.22	0.23	0.20	0.20	0.21	0.21	0.20	0.19	0.17	0.18	0.19	0.21	0.21	0.21	0.20	0.21	0.22	0.25	0.25	0.23	0.25	0.25	0.28
ISL	0.09	0.10	0.11	0.11	0.12	0.13	0.14	0.12	0.13	0.15	0.16	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.14	0.15	0.16	0.19	0.19	0.17	0.17	0.17	0.19
ISR	0.28	0.30	0.31	0.33	0.34	0.37	0.40	0.39	0.42	0.45	0.50	0.49	0.48	0.50	0.50	0.53	0.55	0.60	0.58	0.58	0.57	0.55	0.59	0.55	0.53	0.53	0.51	0.53
ITA	0.66	0.80	0.77	0.88	0.85	0.95	0.94	0.89	0.92	0.92	0.98	0.95	0.86	0.88	0.84	0.81	0.73	0.75	0.72	0.72	0.76	0.79	0.85	0.85	0.92	0.94	0.98	1.01
JAM	0.13	0.14	0.14	0.15	0.15	0.17	0.17	0.15	0.17	0.18	0.18	0.19	0.17	0.18	0.17	0.17	0.15	0.14	0.14	0.13	0.13	0.14	0.16	0.17	0.15	0.15	0.15	0.16
JOR	0.16	0.17	0.17	0.19	0.19	0.21	0.22	0.19	0.21	0.23	0.24	0.23	0.22	0.23	0.23	0.24	0.24	0.26	0.26	0.26	0.27	0.29	0.31	0.29	0.28	0.28	0.29	0.30
JPN	1.52	1.58	1.51	1.38	1.33	1.50	1.54	1.65	1.54	1.58	1.72	1.68	1.50	1.45	1.34	1.16	1.27	1.34	1.18	1.12	1.07	1.06	1.18	1.25	1.27	1.23	1.29	1.43
KAZ	0.11	0.12	0.11	0.12	0.12	0.13	0.14	0.12	0.13	0.15	0.16	0.16	0.16	0.16	0.17	0.19	0.20	0.20	0.21	0.20	0.21	0.22	0.25	0.24	0.22	0.23	0.22	0.26
KEN	0.11	0.12	0.12	0.13	0.13	0.13	0.12	0.11	0.11	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.14	0.14	0.15	0.14	0.14	0.14	0.17	0.17	0.15	0.15	0.16	0.18
KGZ	0.09	0.09	0.10	0.11	0.11	0.12	0.13	0.11	0.12	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.16	0.17	0.16	0.16	0.16	0.18	0.21	0.21	0.19	0.19	0.19	0.22
KHM	0.07	0.08	0.08	0.09	0.10	0.11	0.13	0.12	0.13	0.16	0.16	0.17	0.16	0.17	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.21	0.25	0.26	0.25	0.26	0.27	0.30
KOR	0.50	0.58	0.59	0.64	0.71	0.86	0.82	0.81	0.81	0.84	0.96	0.98	0.96	1.02	0.98	0.90	0.93	1.03	1.06	1.08	1.11	1.17	1.28	1.29	1.34	1.37	1.34	1.42
KWT	0.28	0.33	0.35	0.42	0.43	0.38	0.54	0.47	0.44	0.51	0.53	0.56	0.54	0.54	0.58	0.54	0.56	0.63	0.65	0.66	0.66	0.64	0.60	0.57	0.56	0.62	0.57	0.54
LAO	0.08	0.09	0.09	0.10	0.11	0.12	0.13	0.11	0.12	0.15	0.15	0.16	0.15	0.15	0.16	0.16	0.17	0.17	0.17	0.17	0.18	0.20	0.23	0.24	0.21	0.21	0.21	0.25
LBN	0.12	0.13	0.14	0.14	0.15	0.17	0.19	0.17	0.19	0.21	0.22	0.22	0.21	0.20	0.20	0.20	0.21	0.22	0.21	0.20	0.21	0.23	0.26	0.26	0.23	0.24	0.24	0.27
LBR	0.08	0.09	0.09	0.09	0.10	0.10	0.11	0.10	0.11	0.12	0.13	0.13	0.12	0.13	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.16	0.16	0.14	0.14	0.14	0.16
LBY	0.14	0.15	0.16	0.16	0.16	0.17	0.19	0.15	0.17	0.20	0.21	0.20	0.19	0.20	0.19	0.20	0.23	0.23	0.18	0.18	0.18	0.20	0.22	0.23	0.20	0.21	0.21	0.23
LCA	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.09	0.10	0.11	0.12	0.12	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.11	0.11	0.12	0.14	0.15	0.13	0.13	0.13	0.15
LKA	0.11	0.11	0.12	0.13	0.13	0.14	0.15	0.14	0.16	0.20	0.23	0.24	0.22	0.24	0.17	0.16	0.17	0.15	0.17	0.16	0.18	0.19	0.21	0.22	0.21	0.20	0.20	0.23
LTU	0.16	0.17	0.18	0.20	0.20	0.23	0.23	0.22	0.24	0.27	0.30	0.32	0.31	0.31	0.30	0.33	0.31	0.33	0.33	0.32	0.33	0.28	0.32	0.30	0.28	0.30	0.29	0.34
LVA	0.15	0.16	0.17	0.21	0.23	0.23	0.25	0.17	0.18	0.21	0.23	0.23	0.21	0.22	0.22	0.22	0.23	0.22	0.22	0.21	0.22	0.24	0.27	0.27	0.24	0.25	0.25	0.28
MAC	0.18	0.19	0.19	0.20	0.22	0.26	0.27	0.31	0.32	0.35	0.37	0.35	0.31	0.32	0.31	0.29	0.27	0.26	0.25	0.24	0.26	0.30	0.37	0.37	0.30	0.30	0.30	0.35
MAR	0.17	0.18	0.19	0.20	0.20	0.21	0.23	0.20	0.21	0.24	0.24	0.24	0.23	0.23	0.23	0.25	0.23	0.26	0.26	0.25	0.24	0.25	0.28	0.27	0.26	0.27	0.28	0.32
MDA	0.11	0.12	0.13	0.14	0.14	0.16	0.17	0.15	0.16	0.19	0.20	0.20	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.18	0.19	0.21	0.24	0.24	0.21	0.22	0.22	0.25
MDG	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.07	0.08	0.09	0.10	0.10	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.13	0.13	0.12	0.12	0.12	0.14
MDV	0.07	0.07	0.08	0.09	0.08	0.09	0.11	0.09	0.10	0.12	0.12	0.12	0.10	0.09	0.10	0.10	0.10	0.11	0.10	0.10	0.10	0.11	0.13	0.15	0.14	0.12	0.13	0.15
MEX	0.20	0.24	0.22	0.22	0.22	0.23	0.25	0.22	0.23	0.25	0.35	0.33	0.32	0.32	0.31	0.31	0.34	0.34	0.34	0.33	0.34	0.36	0.36	0.34	0.31	0.31	0.31	0.32
MKD	0.13	0.14	0.15	0.16	0.16	0.18	0.19	0.17	0.18	0.21	0.22	0.22	0.21	0.21	0.21	0.21	0.22	0.22	0.21	0.20	0.20	0.22	0.25	0.26	0.23	0.24	0.24	0.27
MLT	0.13	0.14	0.15	0.17	0.17	0.19	0.20	0.17	0.19	0.21	0.22	0.22	0.21	0.21	0.22	0.22	0.23	0.24	0.22	0.22	0.24	0.25	0.29	0.40	0.26	0.26	0.25	0.30
MMR	0.10	0.10	0.11	0.13	0.16	0.20	0.22	0.18	0.19	0.24	0.26	0.30	0.30	0.33	0.34	0.34	0.39	0.39	0.37	0.39	0.41	0.46	0.55	0.58	0.57	0.58	0.62	0.73
MNG	0.08	0.09	0.09	0.10	0.10	0.12	0.13	0.11	0.12	0.14	0.14	0.15	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.17	0.18	0.21	0.22	0.19	0.19	0.19	0.22
MOZ	0.06	0.07	0.07	0.07	0.07	0.08	0.09	0.08	0.09	0.10	0.11	0.11	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.14	0.14	0.12	0.13	0.13	0.14

Table C.2: Continued on next page

Table C.2: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MUS	0.13	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.12	0.13	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.12	0.13	0.15	0.16	0.13	0.14	0.14	0.16
MWI	0.07	0.08	0.08	0.09	0.09	0.09	0.10	0.08	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.10	0.11	0.12	0.14	0.14	0.12	0.13	0.13	0.15
MYS	0.25	0.27	0.29	0.32	0.32	0.35	0.37	0.41	0.43	0.49	0.59	0.57	0.53	0.58	0.57	0.59	0.58	0.62	0.62	0.64	0.63	0.63	0.66	0.63	0.65	0.66	0.68	0.82
NER	0.11	0.11	0.12	0.12	0.12	0.13	0.14	0.11	0.12	0.13	0.13	0.14	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.15	0.17	0.17	0.15	0.16	0.15	0.17
NGA	0.09	0.10	0.18	0.18	0.16	0.17	0.21	0.15	0.17	0.16	0.19	0.19	0.19	0.22	0.22	0.26	0.22	0.25	0.27	0.29	0.29	0.32	0.32	0.28	0.27	0.29	0.30	0.30
NIC	0.08	0.09	0.09	0.09	0.09	0.10	0.11	0.09	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.11	0.11	0.11	0.12	0.14	0.14	0.12	0.12	0.12	0.14
NLD	0.78	0.84	0.93	1.02	0.96	0.98	1.06	1.07	1.06	1.11	1.18	1.16	1.10	0.91	1.08	0.95	1.08	1.28	1.20	1.20	1.22	1.29	1.29	1.16	1.09	1.13	1.08	1.13
NOR	0.25	0.26	0.27	0.27	0.26	0.27	0.30	0.28	0.28	0.32	0.33	0.33	0.33	0.31	0.42	0.51	0.33	0.33	0.32	0.32	0.31	0.33	0.35	0.34	0.33	0.36	0.33	0.35
NPL	0.09	0.09	0.10	0.10	0.11	0.12	0.13	0.12	0.13	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.18	0.18	0.18	0.17	0.18	0.19	0.23	0.24	0.21	0.22	0.21	0.25
NZL	0.13	0.13	0.14	0.14	0.13	0.13	0.16	0.14	0.16	0.18	0.17	0.17	0.18	0.18	0.18	0.17	0.18	0.17	0.16	0.18	0.18	0.19	0.21	0.21	0.19	0.19	0.20	0.23
OMN	0.12	0.13	0.13	0.14	0.14	0.16	0.18	0.17	0.19	0.21	0.22	0.22	0.22	0.22	0.23	0.26	0.26	0.27	0.25	0.27	0.28	0.32	0.30	0.30	0.27	0.31	0.32	0.35
PAK	0.15	0.16	0.16	0.17	0.16	0.18	0.20	0.17	0.18	0.20	0.22	0.23	0.22	0.23	0.23	0.23	0.25	0.25	0.24	0.24	0.25	0.27	0.32	0.33	0.31	0.30	0.31	0.35
PAN	0.10	0.11	0.10	0.11	0.12	0.12	0.13	0.12	0.13	0.14	0.14	0.14	0.13	0.12	0.12	0.14	0.12	0.14	0.16	0.14	0.15	0.15	0.17	0.17	0.16	0.15	0.15	0.17
PER	0.13	0.14	0.14	0.15	0.15	0.16	0.15	0.14	0.15	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.18	0.19	0.18	0.19	0.19	0.19	0.21	0.21	0.20	0.21	0.21	0.21
PHL	0.18	0.19	0.20	0.22	0.21	0.22	0.24	0.21	0.22	0.23	0.26	0.25	0.24	0.25	0.25	0.25	0.25	0.26	0.25	0.26	0.26	0.28	0.32	0.31	0.27	0.28	0.29	0.31
PNG	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.08	0.08	0.10	0.11	0.10	0.10	0.10	0.10	0.11	0.12	0.11	0.12	0.11	0.11	0.15	0.19	0.19	0.18	0.18	0.19	0.20
POL	0.32	0.33	0.36	0.36	0.36	0.39	0.42	0.39	0.41	0.47	0.53	0.53	0.49	0.51	0.51	0.51	0.50	0.53	0.53	0.53	0.54	0.57	0.61	0.59	0.59	0.58	0.53	0.56
PRT	0.25	0.26	0.23	0.29	0.28	0.31	0.32	0.29	0.31	0.34	0.37	0.32	0.26	0.27	0.26	0.26	0.31	0.32	0.32	0.32	0.33	0.34	0.37	0.36	0.35	0.35	0.36	0.38
PRY	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.09	0.10	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.12	0.12	0.12	0.13	0.15	0.16	0.14	0.14	0.14	0.16
QAT	0.17	0.18	0.18	0.19	0.20	0.22	0.25	0.32	0.37	0.40	0.47	0.49	0.45	0.51	0.50	0.72	0.86	1.06	1.37	1.45	1.53	1.45	1.18	0.67	0.76	0.90	0.81	0.69
ROU	0.21	0.23	0.23	0.23	0.23	0.25	0.25	0.23	0.24	0.27	0.29	0.29	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.29	0.31	0.34	0.33	0.32	0.33	0.33	0.36
RUS	0.27	0.28	0.30	0.30	0.28	0.25	0.26	0.23	0.25	0.26	0.36	0.38	0.40	0.43	0.45	0.47	0.44	0.47	0.48	0.49	0.50	0.50	0.51	0.50	0.49	0.52	0.53	0.55
RWA	0.08	0.08	0.08	0.09	0.09	0.10	0.11	0.09	0.10	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.12	0.13	0.14	0.16	0.17	0.14	0.15	0.15	0.18
SAU	0.27	0.29	0.28	0.31	0.30	0.31	0.35	0.30	0.32	0.33	0.34	0.33	0.30	0.30	0.32	0.32	0.35	0.39	0.39	0.39	0.40	0.43	0.46	0.46	0.46	0.49	0.59	0.62
SCG	0.13	0.19	0.18	0.20	0.21	0.23	0.23	0.23	0.22	0.25	0.28	0.29	0.27	0.55	0.54	0.58	0.60	0.55	0.53	0.51	0.56	0.58	0.40	0.40	0.65	0.71	0.69	0.76
SEN	0.10	0.10	0.10	0.11	0.11	0.12	0.13	0.11	0.12	0.13	0.13	0.14	0.13	0.12	0.13	0.14	0.14	0.14	0.14	0.13	0.14	0.15	0.17	0.17	0.16	0.16	0.16	0.18
SGP	0.50	0.63	0.85	0.70	1.26	0.80	0.82	0.69	0.98	1.45	2.45	2.25	2.16	2.65	2.65	1.93	2.69	2.21	2.03	2.06	1.86	1.86	1.95	1.92	2.04	2.73	1.92	2.12
SLE	0.08	0.09	0.09	0.10	0.09	0.10	0.11	0.09	0.10	0.11	0.12	0.12	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.11	0.11	0.12	0.14	0.15	0.13	0.13	0.13	0.15
SLV	0.10	0.10	0.10	0.12	0.13	0.14	0.15	0.14	0.15	0.16	0.16	0.16	0.15	0.14	0.14	0.14	0.15	0.15	0.14	0.14	0.14	0.15	0.18	0.18	0.16	0.16	0.16	0.18
SOM	0.08	0.09	0.09	0.11	0.09	0.10	0.11	0.09	0.10	0.11	0.12	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.13	0.12	0.12	0.13	0.15	0.16	0.13	0.14	0.14	0.17
SUR	0.08	0.08	0.09	0.09	0.09	0.10	0.11	0.09	0.10	0.11	0.11	0.12	0.11	0.11	0.11	0.12	0.12	0.11	0.11	0.11	0.11	0.12	0.13	0.14	0.12	0.12	0.12	0.13
SVK	0.22	0.23	0.24	0.25	0.25	0.28	0.30	0.27	0.29	0.33	0.35	0.34	0.31	0.30	0.31	0.31	0.32	0.34	0.33	0.32	0.39	0.47	0.51	0.51	0.37	0.43	0.46	0.50
SVN	0.21	0.25	0.27	0.28	0.28	0.32	0.33	0.29	0.31	0.35	0.39	0.38	0.33	0.34	0.33	0.32	0.34	0.34	0.32	0.31	0.33	0.36	0.38	0.38	0.37	0.38	0.36	0.42
SWE	0.29	0.30	0.33	0.35	0.33	0.37	0.39	0.35	0.37	0.41	0.46	0.44	0.40	0.40	0.39	0.37	0.41	0.38	0.35	0.34	0.35	0.39	0.46	0.41	0.38	0.39	0.42	0.50
SYR	0.18	0.19	0.19	0.22	0.23	0.27	0.31	0.28	0.29	0.31	0.35	0.34	0.34	0.18	0.17	0.18	0.21	0.21	0.19	0.18	0.18	0.19	0.23	0.23	0.20	0.21	0.21	0.24
THA	0.28	0.23	0.23	0.25	0.27	0.24	0.26	0.30	0.31	0.41	0.44	0.42	0.37	0.39	0.39	0.37	0.39	0.41	0.40	0.42	0.45	0.46	0.52	0.52	0.53	0.54	0.55	0.60
TJK	0.08	0.09	0.09	0.10	0.10	0.12	0.13	0.11	0.12	0.14	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.16	0.15	0.16	0.17	0.20	0.20	0.18	0.18	0.18	0.21
TKM	0.08	0.09	0.10	0.16	0.14	0.12	0.15	0.14	0.16	0.17	0.18	0.18	0.18	0.19	0.19	0.20	0.16	0.17	0.20	0.21	0.22	0.24	0.25	0.25	0.23	0.25	0.26	0.31
TON	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.06	0.06	0.07	0.08	0.08	0.07	0.07	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.10	0.11	0.09	0.09	0.09	0.11
TTO	0.18	0.21	0.22	0.23	0.22	0.24	0.31	0.31	0.33	0.35	0.52	0.51	0.51	0.56	0.54	0.55	0.51	0.53	0.53	0.53	0.56	0.56	0.52	0.42	0.41	0.46	0.45	0.42
TUN	0.21	0.22	0.21	0.23	0.23	0.25	0.26	0.22	0.24	0.25	0.26	0.25	0.23	0.23	0.23	0.23	0.25	0.25	0.23	0.24	0.24	0.26	0.28	0.29	0.25	0.25	0.25	0.29
TUR	0.28	0.27	0.29	0.28	0.29	0.31	0.33	0.30	0.32	0.33	0.37	0.37	0.34	0.35	0.34	0.35	0.35	0.37	0.37	0.38	0.38	0.39	0.42	0.42	0.40	0.42	0.44	0.49
TZA	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.08	0.09	0.10	0.11	0.11	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.14	0.15	0.13	0.13	0.13	0.16
UGA	0.08	0.08	0.09	0.10	0.09	0.10	0.10	0.09	0.09	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.11	0.12	0.11	0.11	0.13	0.15	0.15	0.13	0.13	0.14	0.16
UKR	0.22	0.23	0.22	0.21	0.21	0.22	0.22	0.20	0.23	0.27	0.30	0.32	0.31	0.31	0.31	0.31	0.29	0.30	0.30	0.29	0.29	0.29	0.32	0.30	0.28	0.29	0.29	0.33
URY	0.12	0.12	0.14	0.14	0.14	0.16	0.16	0.15	0.15	0.16	0.17	0.17	0.17	0.17	0.16	0.16	0.18	0.17	0.17	0.17	0.17	0.18	0.21	0.21	0.19	0.19	0.18	0.20
USA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
UZB	0.08	0.09	0.10	0.12	0.12	0.13	0.14	0.13	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.19	0.19	0.17	0.17	0.16	0.18	0.19	0.23	0.23	0.20	0.20	0.20	0.23
VEN	0.23	0.22	0.24	0.24	0.26	0.26	0.29	0.14	0.16	0.16	0.16	0.17	0.16	0.17	0.17	0.17	0.14	0.15	0.14	0.13	0.13	0.15	0.15	0.16	0.13	0.13	0.13	0.15
VNM	0.10	0.11	0.12	0.12	0.12	0.14	0.15	0.14	0.15	0.18	0.19	0.21	0.20	0.22	0.22	0.23	0.27	0.29	0.28	0.29	0.29	0.32	0.38	0.42	0.40	0.41	0.43	0.51
YEM	0.11	0.11	0.11	0.12	0.12	0.12	0.14	0.13	0.14	0.15	0.16	0.17	0.17	0.18	0.18	0.18	0.18	0.19	0.18	0.17	0.18	0.19	0.17	0.17	0.15	0.16	0.16	0.19
ZAF	0.21	0.21	0.21	0.21	0.18	0.15	0.26	0.26	0.27	0.27	0.32	0.33	0.30	0.29	0.28	0.27	0.30	0.29	0.26	0.26	0.28	0.29	0.31	0.30	0.29	0.29	0.29	0.30
ZMB	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.08	0.09	0.10	0.10	0.10	0.10	0.13	0.10	0.11	0.11	0.13	0.12	0.12	0.12	0.11	0.19	0.17	0.15	0.18	0.18	0.19
ZWE	0.09	0.09	0.10	0.10	0.10	0.10	0.11	0.10	0.10	0.11	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.12	0.11	0.11	0.11	0.12	0.14	0.15	0.13	0.13	0.13	0.15

Table C.3: IMR in the machines sector by country and year (BLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	0.18	0.21	0.22	0.22	0.23	0.25	0.28	0.30	0.31	0.35	0.39	0.42	0.45	0.47	0.44	0.45	0.50	0.55	0.57	0.58	0.59	0.61	0.65	0.66	0.58	0.61	0.58	0.65
AGO	0.14	0.17	0.18	0.18	0.18	0.19	0.20	0.22	0.22	0.25	0.27	0.29	0.30	0.31	0.30	0.30	0.33	0.35	0.37	0.37	0.37	0.38	0.39	0.39	0.33	0.34	0.33	0.35
ALB	0.19	0.22	0.24	0.24	0.25	0.27	0.29	0.30	0.32	0.38	0.44	0.47	0.50	0.52	0.50	0.50	0.54	0.57	0.60	0.59	0.59	0.61	0.63	0.63	0.54	0.56	0.53	0.56
ARE	0.19	0.22	0.23	0.22	0.24	0.25	0.28	0.29	0.30	0.36	0.38	0.42	0.45	0.44	0.45	0.47	0.47	0.55	0.58	0.65	0.59	0.61	0.63	0.63	0.52	0.56	0.54	0.59
ARG	0.20	0.21	0.21	0.20	0.21	0.22	0.22	0.23	0.23	0.25	0.27	0.30	0.31	0.32	0.31	0.32	0.35	0.39	0.41	0.41	0.42	0.42	0.44	0.42	0.40	0.38	0.35	0.38
ARM	0.18	0.20	0.22	0.21	0.23	0.25	0.27	0.28	0.29	0.34	0.38	0.40	0.43	0.44	0.42	0.43	0.46	0.50	0.53	0.52	0.52	0.54	0.56	0.56	0.47	0.49	0.48	0.51
AUS	0.20	0.22	0.23	0.24	0.24	0.24	0.25	0.26	0.26	0.30	0.32	0.34	0.36	0.36	0.36	0.36	0.40	0.43	0.41	0.41	0.44	0.45	0.46	0.46	0.41	0.42	0.41	0.43
AUT	0.49	0.52	0.54	0.53	0.53	0.59	0.62	0.60	0.65	0.77	0.87	0.91	0.96	0.98	1.00	1.02	1.06	1.11	1.17	1.16	1.17	1.19	1.19	1.21	1.15	1.22	1.14	1.19
AZE	0.18	0.21	0.22	0.22	0.23	0.24	0.26	0.28	0.29	0.33	0.37	0.40	0.42	0.44	0.42	0.43	0.46	0.50	0.53	0.53	0.53	0.55	0.56	0.56	0.48	0.50	0.49	0.53
BDI	0.15	0.17	0.19	0.19	0.19	0.20	0.21	0.23	0.23	0.27	0.29	0.31	0.32	0.33	0.32	0.32	0.35	0.38	0.39	0.39	0.39	0.40	0.42	0.41	0.36	0.36	0.35	0.37
BEL	0.53	0.57	0.59	0.59	0.59	0.66	1.35	1.31	1.43	1.69	1.87	1.07	1.14	1.14	1.14	1.14	2.18	2.24	1.25	2.30	2.31	2.34	2.38	2.38	2.19	2.23	2.09	2.20
BEN	0.16	0.18	0.19	0.19	0.20	0.21	0.23	0.24	0.24	0.28	0.30	0.32	0.33	0.34	0.33	0.33	0.37	0.39	0.41	0.41	0.41	0.42	0.43	0.43	0.37	0.37	0.36	0.38
BFA	0.16	0.19	0.20	0.20	0.21	0.22	0.23	0.24	0.25	0.29	0.31	0.34	0.35	0.35	0.34	0.34	0.37	0.40	0.42	0.41	0.41	0.43	0.44	0.44	0.37	0.38	0.37	0.38
BGD	0.20	0.23	0.23	0.23	0.24	0.26	0.28	0.31	0.32	0.38	0.40	0.44	0.47	0.49	0.48	0.48	0.54	0.61	0.63	0.62	0.62	0.65	0.70	0.70	0.57	0.60	0.58	0.62
BGR	0.21	0.23	0.25	0.25	0.26	0.28	0.30	0.31	0.33	0.39	0.45	0.49	0.52	0.54	0.53	0.53	0.56	0.60	0.63	0.62	0.65	0.67	0.67	0.68	0.60	0.63	0.60	0.63
BHR	0.19	0.22	0.22	0.22	0.23	0.25	0.27	0.29	0.29	0.35	0.37	0.40	0.42	0.43	0.43	0.43	0.47	0.52	0.55	0.55	0.55	0.57	0.59	0.59	0.49	0.51	0.49	0.51
BHS	0.21	0.24	0.25	0.26	0.27	0.28	0.30	0.32	0.33	0.38	0.38	0.41	0.42	0.43	0.41	0.41	0.44	0.47	0.49	0.49	0.48	0.49	0.50	0.49	0.40	0.40	0.39	0.41
BIH	0.20	0.23	0.25	0.25	0.26	0.29	0.31	0.32	0.34	0.41	0.47	0.51	0.54	0.56	0.54	0.55	0.58	0.61	0.65	0.64	0.64	0.66	0.68	0.68	0.59	0.62	0.58	0.62
BLR	0.21	0.24	0.26	0.26	0.27	0.30	0.32	0.33	0.35	0.42	0.48	0.52	0.56	0.58	0.57	0.58	0.60	0.65	0.69	0.69	0.70	0.70	0.70	0.70	0.62	0.65	0.62	0.66
BLZ	0.22	0.25	0.26	0.27	0.29	0.30	0.32	0.34	0.35	0.40	0.40	0.43	0.43	0.44	0.42	0.43	0.47	0.51	0.51	0.52	0.51	0.52	0.54	0.53	0.44	0.45	0.44	0.46
BMU	0.22	0.25	0.27	0.27	0.29	0.31	0.32	0.34	0.35	0.41	0.41	0.45	0.46	0.46	0.45	0.45	0.48	0.51	0.52	0.52	0.51	0.52	0.53	0.52	0.42	0.43	0.42	0.43
BOL	0.15	0.17	0.18	0.18	0.19	0.20	0.21	0.22	0.23	0.25	0.27	0.29	0.29	0.30	0.29	0.29	0.32	0.34	0.36	0.36	0.36	0.36	0.37	0.37	0.32	0.32	0.31	0.33
BRA	0.28	0.29	0.30	0.29	0.29	0.29	0.28	0.30	0.30	0.32	0.34	0.38	0.40	0.42	0.43	0.44	0.48	0.53	0.55	0.53	0.54	0.54	0.51	0.51	0.52	0.51	0.50	0.51
BRB	0.20	0.22	0.23	0.24	0.25	0.26	0.27	0.29	0.29	0.34	0.34	0.36	0.37	0.38	0.37	0.37	0.41	0.44	0.45	0.44	0.43	0.44	0.45	0.44	0.37	0.37	0.36	0.37
BRN	0.23	0.26	0.27	0.28	0.30	0.31	0.34	0.39	0.39	0.47	0.46	0.51	0.51	0.54	0.51	0.51	0.58	0.65	0.67	0.66	0.66	0.70	0.76	0.75	0.55	0.57	0.55	0.59
BTN	0.19	0.21	0.22	0.22	0.24	0.26	0.28	0.31	0.32	0.37	0.42	0.45	0.49	0.51	0.48	0.49	0.55	0.62	0.64	0.64	0.65	0.68	0.74	0.75	0.66	0.69	0.66	0.73
CAF	0.16	0.18	0.19	0.19	0.20	0.21	0.22	0.24	0.24	0.28	0.30	0.32	0.33	0.34	0.33	0.33	0.36	0.39	0.41	0.41	0.41	0.42	0.44	0.43	0.37	0.38	0.36	0.38
CAN	0.43	0.48	0.50	0.52	0.55	0.60	0.62	0.65	0.67	0.72	0.72	0.72	0.74	0.73	0.69	0.69	0.71	0.73	0.74	0.74	0.73	0.72	0.74	0.72	0.63	0.64	0.62	0.64
CHE	0.68	0.71	0.74	0.73	0.71	0.78	0.78	0.74	0.80	0.96	1.02	1.10	1.16	1.17	1.22	1.24	1.34	1.38	1.50	1.48	1.50	1.51	1.51	1.50	1.49	1.56	1.48	1.54
CHL	0.15	0.17	0.18	0.18	0.18	0.19	0.20	0.21	0.21	0.24	0.25	0.27	0.28	0.28	0.27	0.28	0.30	0.33	0.34	0.34	0.35	0.36	0.37	0.36	0.32	0.32	0.31	0.32
CHN	0.57	0.54	0.55	0.57	0.60	0.66	0.70	0.73	0.79	0.96	1.16	1.37	1.54	1.69	1.80	1.98	2.32	2.62	2.76	2.88	3.09	3.28	3.49	3.67	4.16	4.07	4.05	4.51
CIV	0.16	0.18	0.19	0.19	0.20	0.21	0.22	0.23	0.24	0.28	0.29	0.32	0.33	0.34	0.32	0.32	0.35	0.38	0.40	0.39	0.39	0.41	0.42	0.42	0.35	0.36	0.35	0.37
CMR	0.18	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.32	0.33	0.36	0.37	0.37	0.36	0.37	0.40	0.42	0.44	0.44	0.44	0.44	0.46	0.46	0.39	0.39	0.38	0.40
COG	0.15	0.17	0.19	0.19	0.19	0.20	0.22	0.23	0.23	0.27	0.29	0.31	0.32	0.32	0.31	0.31	0.35	0.37	0.39	0.39	0.39	0.40	0.41	0.41	0.35	0.36	0.35	0.36
COL	0.17	0.19	0.20	0.20	0.21	0.22	0.23	0.24	0.25	0.28	0.30	0.32	0.33	0.33	0.32	0.32	0.35	0.39	0.40	0.40	0.40	0.40	0.41	0.40	0.35	0.36	0.34	0.36
CPV	0.15	0.18	0.19	0.19	0.20	0.21	0.22	0.23	0.24	0.27	0.30	0.32	0.33	0.34	0.32	0.32	0.35	0.37	0.39	0.39	0.39	0.40	0.40	0.41	0.35	0.35	0.34	0.36
CRI	0.16	0.18	0.19	0.19	0.20	0.23	0.27	0.27	0.27	0.33	0.40	0.43	0.45	0.46	0.45	0.45	0.55	0.66	0.69	0.75	0.76	0.74	0.50	0.51	0.47	0.48	0.48	0.52
CUB	0.21	0.24	0.25	0.25	0.27	0.29	0.31	0.33	0.33	0.37	0.38	0.39	0.40	0.41	0.38	0.38	0.40	0.44	0.45	0.45	0.45	0.46	0.47	0.46	0.39	0.40	0.39	0.41
CYP	0.19	0.23	0.24	0.23	0.24	0.26	0.28	0.30	0.31	0.37	0.40	0.43	0.45	0.50	0.47	0.47	0.51	0.55	0.58	0.57	0.57	0.59	0.61	0.60	0.50	0.52	0.50	0.52
CZE	0.32	0.36	0.39	0.38	0.40	0.45	0.48	0.48	0.53	0.63	0.75	0.80	0.86	0.89	0.91	0.90	0.92	1.06	1.12	1.11	1.13	1.17	1.09	1.12	1.07	1.12	1.04	1.08
DEU	1.09	1.09	1.11	1.06	0.99	1.03	1.07	0.98	1.05	1.20	1.40	1.48	1.53	1.56	1.70	1.72	1.75	1.78	1.89	1.84	1.91	1.94	1.88	1.94	2.06	2.15	2.05	1.99
DNK	0.36	0.40	0.44	0.42	0.42	0.47	0.50	0.49	0.53	0.62	0.72	0.75	0.81	0.83	0.83	0.85	0.89	0.90	0.96	0.94	0.94	0.97	0.97	0.99	0.92	0.99	0.94	0.98
DOM	0.18	0.20	0.21	0.21	0.22	0.23	0.25	0.26	0.27	0.31	0.33	0.35	0.37	0.37	0.36	0.36	0.39	0.42	0.43	0.43	0.43	0.44	0.45	0.46	0.38	0.39	0.38	0.40
DZA	0.20	0.23	0.25	0.25	0.26	0.28	0.30	0.31	0.33	0.39	0.43	0.46	0.48	0.50	0.48	0.48	0.52	0.55	0.58	0.57	0.57	0.59	0.60	0.60	0.51	0.52	0.50	0.51
ECU	0.15	0.17	0.18	0.18	0.19	0.20	0.21	0.22	0.23	0.26	0.27	0.29	0.30	0.31	0.30	0.30	0.33	0.35	0.37	0.37	0.37	0.38	0.38	0.38	0.33	0.33	0.32	0.34
EGY	0.18	0.21	0.22	0.22	0.23	0.25	0.27	0.28	0.29	0.33	0.37	0.40	0.42	0.43	0.41	0.42	0.46	0.49	0.51	0.51	0.51	0.52	0.54	0.54	0.48	0.57	0.57	0.52
ESP	0.34	0.37	0.39	0.39	0.39	0.42	0.44	0.44	0.47	0.54	0.60	0.63	0.66	0.68	0.68	0.68	0.70	0.72	0.74	0.72	0.72	0.74	0.75	0.76	0.72	0.75	0.72	0.76
EST	0.20	0.24	0.26	0.25	0.27	0.30	0.32	0.33	0.36	0.42	0.49	0.52	0.57	0.59	0.57	0.57	0.59	0.64	0.68	0.67	0.67	0.69	0.69	0.69	0.60	0.63	0.60	0.62
ETH	0.18	0.20	0.22	0.22	0.23	0.24	0.25	0.27	0.27	0.32	0.33	0.36	0.37	0.38	0.37	0.37	0.40	0.44	0.45	0.45	0.45	0.46	0.47	0.47	0.40	0.41	0.40	0.42
FIN	0.30	0.34	0.39	0.38	0.39	0.43	0.46	0.46	0.49	0.56	0.63	0.66	0.72	0.73	0.74	0.76	0.76	0.79	0.81	0.79	0.79	0.79	0.79	0.79	0.74	0.77	0.75	0.74
FJI	0.18	0.20	0.21	0.21	0.22	0.22	0.23	0.26	0.25	0.29	0.29	0.32	0.32	0.33	0.32	0.32	0.36	0.40	0.41	0.40	0.40	0.42	0.43	0.43	0.35	0.36	0.35	0.36
FRA	0.64	0.67	0.68	0.71	0.68	0.74	0.76	0.72	0.77	0.88	0.97	0.99	1.02	1.02	1.04	1.02	1.09	1.09	1.13	1.12	1.14	1.16	1.15	1.17	1.14	1.13	1.13	1.18
GAB	0.16	0.18	0.19	0.19	0.20	0.21	0.22	0.23	0.23	0.27	0.29	0.31	0.32	0.33	0.32	0.32	0.35	0.38	0.39	0.39	0.39	0.40	0.42	0.41	0.35	0.36	0.35	0.37
GBR	0.61	0.64	0.67	0.63	0.67	0.71	0.73	0.69	0.73	0.80	0.86	0.89	0.93	0.93	0.93	0.91	0.95	0.96	1.00	1.00	1.00	1.02	1.04	1.04	0.96	1.01	0.95	1.02
GEO	0.18	0.21	0.22	0.22	0.23	0.24	0.26	0.28	0.29	0.33	0.38	0.41	0.43	0.44	0.42	0.43	0.46	0.50	0.53	0.52	0.53	0.54	0.56	0.56	0.48	0.50	0.48	0.51
GHA	0.19	0.22	0.23	0.24	0.25	0.25	0.27	0.29	0.29	0.33	0.33	0.36	0.37	0.38	0.37	0.37	0.42	0.45	0.46	0.46	0.46	0.47	0.48	0.47	0.40	0.40	0.39	0.41
GMB	0.20	0.23	0.24	0.24	0.25	0.26	0.27	0.29	0.29	0.34	0.34	0.37	0.37	0.38	0.38	0.38	0.42	0.44	0.46	0.45	0.45	0.46	0.47	0.47	0.39	0.40	0.38	0.40

Table C.3: Continued on next page

Table C.3: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
GRC	0.21	0.23	0.24	0.24	0.25	0.27	0.29	0.30	0.32	0.37	0.43	0.46	0.49	0.51	0.49	0.49	0.52	0.56	0.59	0.58	0.58	0.60	0.61	0.61	0.53	0.56	0.53	0.57
GTM	0.17	0.20	0.21	0.21	0.22	0.24	0.26	0.27	0.28	0.32	0.34	0.36	0.37	0.38	0.36	0.36	0.39	0.43	0.44	0.45	0.45	0.46	0.47	0.47	0.40	0.41	0.40	0.42
HKG	0.42	0.45	0.46	0.47	0.51	0.56	0.60	0.62	0.64	0.79	0.83	1.04	1.00	1.04	1.02	1.07	1.20	1.35	1.38	1.41	1.42	1.48	1.64	1.59	1.39	1.45	1.40	1.55
HND	0.16	0.18	0.19	0.19	0.20	0.21	0.23	0.24	0.25	0.29	0.31	0.34	0.35	0.36	0.34	0.34	0.37	0.41	0.42	0.43	0.43	0.44	0.44	0.44	0.38	0.38	0.37	0.39
HRV	0.22	0.26	0.27	0.27	0.29	0.33	0.35	0.36	0.38	0.46	0.54	0.57	0.61	0.63	0.61	0.61	0.64	0.68	0.72	0.70	0.71	0.73	0.75	0.76	0.64	0.68	0.63	0.67
HTI	0.16	0.18	0.20	0.20	0.21	0.22	0.23	0.25	0.25	0.29	0.31	0.33	0.34	0.35	0.33	0.33	0.36	0.38	0.40	0.40	0.39	0.40	0.41	0.41	0.35	0.35	0.34	0.36
HUN	0.24	0.27	0.30	0.31	0.32	0.40	0.45	0.44	0.45	0.53	0.64	0.68	0.74	0.76	0.76	0.77	0.79	0.84	0.89	0.85	0.86	0.89	0.96	1.03	0.86	0.91	0.86	0.91
IDN	0.19	0.22	0.24	0.25	0.25	0.28	0.31	0.36	0.37	0.39	0.44	0.49	0.53	0.54	0.50	0.49	0.50	0.58	0.55	0.55	0.57	0.60	0.64	0.69	0.67	0.67	0.63	0.68
IND	0.30	0.33	0.34	0.34	0.35	0.36	0.39	0.40	0.41	0.48	0.51	0.55	0.62	0.65	0.65	0.67	0.75	0.85	0.85	0.83	0.84	0.87	0.93	0.96	0.94	0.98	0.94	1.02
IRL	0.34	0.38	0.42	0.42	0.45	0.49	0.53	0.53	0.57	0.64	0.72	0.75	0.79	0.80	0.79	0.78	0.80	0.83	0.86	0.84	0.85	0.86	0.90	0.95	0.84	0.87	0.84	0.89
IRN	0.19	0.22	0.23	0.23	0.25	0.27	0.29	0.31	0.32	0.34	0.37	0.40	0.42	0.44	0.42	0.43	0.48	0.52	0.54	0.53	0.53	0.54	0.56	0.58	0.51	0.53	0.54	0.65
IRQ	0.19	0.21	0.23	0.23	0.26	0.27	0.29	0.29	0.30	0.34	0.38	0.40	0.42	0.42	0.41	0.41	0.44	0.48	0.51	0.51	0.51	0.52	0.54	0.54	0.46	0.48	0.47	0.50
ISL	0.18	0.20	0.22	0.21	0.23	0.25	0.26	0.28	0.29	0.33	0.37	0.40	0.42	0.43	0.41	0.41	0.43	0.47	0.49	0.48	0.49	0.50	0.52	0.52	0.44	0.46	0.43	0.45
ISR	0.29	0.32	0.34	0.34	0.36	0.39	0.41	0.43	0.45	0.50	0.54	0.57	0.60	0.63	0.63	0.64	0.70	0.75	0.76	0.76	0.77	0.79	0.82	0.82	0.76	0.81	0.81	0.88
ITA	0.69	0.71	0.76	0.78	0.75	0.79	0.77	0.73	0.78	0.90	1.01	1.08	1.12	1.15	1.21	1.24	1.24	1.26	1.33	1.31	1.34	1.36	1.33	1.35	1.42	1.46	1.39	1.43
JAM	0.20	0.23	0.24	0.24	0.26	0.27	0.28	0.30	0.30	0.35	0.35	0.38	0.39	0.39	0.38	0.38	0.42	0.45	0.46	0.46	0.45	0.46	0.47	0.46	0.38	0.38	0.37	0.38
JOR	0.20	0.24	0.24	0.24	0.26	0.28	0.30	0.33	0.34	0.39	0.41	0.44	0.45	0.47	0.47	0.47	0.52	0.56	0.60	0.59	0.59	0.61	0.63	0.62	0.52	0.55	0.53	0.56
JPN	2.90	2.70	2.54	2.15	2.00	2.03	2.10	2.02	1.92	2.02	2.30	2.46	2.55	2.46	2.43	2.43	2.41	2.66	2.72	2.53	2.26	2.26	2.37	2.54	2.71	2.79	2.57	2.76
KAZ	0.20	0.22	0.23	0.23	0.25	0.26	0.28	0.31	0.32	0.37	0.41	0.44	0.47	0.49	0.47	0.49	0.53	0.59	0.62	0.63	0.63	0.66	0.70	0.70	0.62	0.65	0.63	0.69
KEN	0.20	0.23	0.24	0.24	0.25	0.25	0.26	0.29	0.29	0.33	0.33	0.37	0.37	0.38	0.37	0.38	0.42	0.46	0.47	0.47	0.46	0.48	0.50	0.49	0.40	0.41	0.40	0.42
KGZ	0.19	0.21	0.22	0.22	0.24	0.26	0.28	0.30	0.31	0.36	0.41	0.44	0.47	0.49	0.46	0.48	0.53	0.59	0.61	0.62	0.62	0.65	0.69	0.68	0.60	0.63	0.61	0.66
KHM	0.17	0.20	0.21	0.21	0.23	0.25	0.28	0.30	0.31	0.37	0.42	0.45	0.49	0.51	0.47	0.49	0.53	0.61	0.63	0.65	0.68	0.75	0.83	0.85	0.62	0.66	0.64	0.70
KOR	0.67	0.72	0.81	0.75	0.73	0.75	0.88	0.92	0.94	1.15	1.38	1.58	1.79	1.91	1.88	1.81	1.97	2.42	2.36	2.35	2.41	2.49	2.59	2.66	2.63	2.66	2.41	2.67
KWT	0.19	0.22	0.23	0.22	0.24	0.25	0.27	0.29	0.30	0.35	0.37	0.40	0.42	0.43	0.43	0.43	0.47	0.52	0.55	0.55	0.54	0.56	0.58	0.58	0.48	0.51	0.49	0.51
LAO	0.19	0.22	0.23	0.23	0.25	0.28	0.31	0.34	0.36	0.42	0.48	0.51	0.55	0.58	0.54	0.56	0.61	0.70	0.72	0.73	0.76	0.81	0.89	0.91	0.75	0.80	0.77	0.86
LBN	0.19	0.21	0.23	0.23	0.24	0.26	0.28	0.30	0.31	0.36	0.40	0.43	0.46	0.47	0.45	0.45	0.49	0.53	0.56	0.55	0.55	0.56	0.58	0.58	0.50	0.52	0.51	0.52
LBR	0.17	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.31	0.32	0.34	0.35	0.36	0.34	0.35	0.37	0.40	0.41	0.41	0.41	0.42	0.43	0.42	0.36	0.37	0.36	0.37
LBY	0.18	0.21	0.22	0.22	0.23	0.25	0.27	0.28	0.29	0.34	0.39	0.41	0.44	0.45	0.43	0.43	0.46	0.49	0.52	0.51	0.52	0.53	0.54	0.54	0.46	0.48	0.46	0.48
LCA	0.20	0.22	0.23	0.24	0.25	0.26	0.27	0.29	0.29	0.34	0.34	0.37	0.37	0.38	0.37	0.37	0.40	0.43	0.44	0.44	0.44	0.44	0.45	0.44	0.37	0.37	0.36	0.38
LKA	0.18	0.21	0.21	0.21	0.22	0.23	0.25	0.28	0.28	0.33	0.36	0.39	0.40	0.42	0.40	0.40	0.45	0.50	0.52	0.51	0.51	0.54	0.57	0.57	0.46	0.48	0.46	0.49
LTU	0.21	0.24	0.26	0.26	0.27	0.30	0.32	0.33	0.36	0.42	0.49	0.52	0.56	0.58	0.57	0.57	0.59	0.65	0.69	0.69	0.69	0.72	0.71	0.72	0.61	0.66	0.64	0.68
LVA	0.21	0.24	0.26	0.25	0.27	0.29	0.32	0.33	0.35	0.42	0.48	0.51	0.55	0.57	0.55	0.56	0.58	0.63	0.67	0.66	0.66	0.68	0.68	0.68	0.58	0.61	0.58	0.61
MAC	0.26	0.28	0.30	0.30	0.33	0.38	0.40	0.43	0.46	0.57	0.64	0.73	0.80	0.84	0.81	0.86	0.96	1.11	1.14	1.20	1.23	1.27	1.40	1.39	1.21	1.26	1.19	1.31
MAR	0.20	0.23	0.24	0.24	0.25	0.27	0.29	0.30	0.32	0.37	0.40	0.44	0.45	0.46	0.45	0.45	0.48	0.51	0.53	0.53	0.53	0.54	0.56	0.56	0.49	0.51	0.49	0.51
MDA	0.20	0.23	0.24	0.24	0.26	0.28	0.29	0.31	0.33	0.39	0.44	0.47	0.51	0.52	0.51	0.52	0.54	0.59	0.64	0.63	0.64	0.66	0.67	0.67	0.59	0.63	0.60	0.64
MDG	0.15	0.17	0.18	0.18	0.19	0.19	0.21	0.22	0.22	0.26	0.27	0.30	0.31	0.32	0.30	0.30	0.33	0.36	0.38	0.38	0.38	0.39	0.41	0.41	0.34	0.35	0.34	0.36
MDV	0.17	0.20	0.20	0.20	0.21	0.22	0.24	0.27	0.27	0.32	0.33	0.36	0.37	0.39	0.37	0.37	0.42	0.46	0.49	0.48	0.48	0.50	0.53	0.53	0.42	0.43	0.42	0.44
MEX	0.35	0.39	0.40	0.39	0.41	0.45	0.47	0.48	0.51	0.55	0.57	0.60	0.61	0.62	0.61	0.59	0.65	0.73	0.73	0.76	0.76	0.79	0.84	0.89	0.84	0.89	0.90	0.95
MKD	0.20	0.22	0.24	0.24	0.25	0.28	0.30	0.31	0.32	0.38	0.44	0.47	0.50	0.52	0.50	0.50	0.53	0.57	0.61	0.60	0.61	0.63	0.65	0.66	0.56	0.59	0.56	0.60
MLT	0.26	0.29	0.31	0.30	0.32	0.34	0.37	0.39	0.41	0.49	0.53	0.61	0.59	0.60	0.63	0.62	0.63	0.71	0.75	0.73	0.73	0.74	0.74	0.74	0.59	0.61	0.57	0.60
MMR	0.22	0.25	0.26	0.25	0.28	0.30	0.34	0.37	0.38	0.46	0.49	0.53	0.56	0.59	0.56	0.58	0.65	0.74	0.75	0.73	0.75	0.79	0.86	0.86	0.72	0.77	0.74	0.81
MNG	0.20	0.22	0.24	0.23	0.25	0.27	0.30	0.33	0.34	0.40	0.46	0.49	0.53	0.56	0.52	0.54	0.59	0.67	0.70	0.71	0.72	0.75	0.81	0.82	0.72	0.76	0.72	0.80
MOZ	0.14	0.16	0.17	0.17	0.18	0.18	0.20	0.21	0.22	0.25	0.27	0.29	0.30	0.30	0.29	0.29	0.32	0.35	0.36	0.36	0.36	0.37	0.38	0.38	0.32	0.33	0.32	0.34
MUS	0.19	0.22	0.23	0.23	0.24	0.24	0.26	0.28	0.28	0.33	0.32	0.36	0.36	0.37	0.36	0.37	0.41	0.45	0.46	0.45	0.45	0.47	0.49	0.48	0.40	0.40	0.39	0.41
MWI	0.19	0.21	0.22	0.22	0.23	0.24	0.25	0.27	0.27	0.32	0.31	0.34	0.34	0.36	0.35	0.35	0.39	0.43	0.44	0.44	0.43	0.45	0.47	0.46	0.38	0.38	0.37	0.39
MYS	0.38	0.41	0.51	0.56	0.57	0.64	0.68	0.69	0.74	0.84	0.97	1.06	1.14	1.15	1.06	1.07	1.11	1.27	1.28	1.27	1.28	1.34	1.46	1.55	1.09	1.17	1.13	1.27
NER	0.17	0.19	0.20	0.20	0.21	0.22	0.24	0.25	0.26	0.30	0.32	0.34	0.35	0.36	0.35	0.35	0.38	0.41	0.43	0.43	0.43	0.44	0.45	0.45	0.38	0.39	0.38	0.40
NGA	0.20	0.22	0.24	0.24	0.25	0.25	0.27	0.29	0.29	0.34	0.34	0.37	0.37	0.38	0.38	0.38	0.42	0.45	0.47	0.46	0.46	0.47	0.48	0.48	0.40	0.40	0.39	0.41
NIC	0.16	0.18	0.19	0.19	0.20	0.21	0.23	0.24	0.25	0.29	0.32	0.34	0.36	0.36	0.35	0.34	0.38	0.43	0.44	0.46	0.47	0.48	0.46	0.47	0.40	0.40	0.39	0.41
NLD	0.44	0.48	0.52	0.51	0.52	0.60	0.65	0.63	0.71	0.82	0.92	1.06	1.13	1.14	1.11	1.11	1.11	1.13	1.12	1.16	1.18	1.21	1.24	1.26	1.20	1.26	1.14	1.24
NOR	0.25	0.29	0.31	0.31	0.32	0.35	0.37	0.38	0.40	0.47	0.52	0.56	0.60	0.62	0.61	0.62	0.67	0.69	0.72	0.72	0.72	0.72	0.72	0.71	0.62	0.65	0.61	0.66
NPL	0.18	0.21	0.22	0.22	0.24	0.26	0.28	0.30	0.31	0.37	0.41	0.44	0.48	0.50	0.47	0.49	0.54	0.60	0.63	0.63	0.64	0.67	0.72	0.73	0.64	0.68	0.65	0.72
NZL	0.17	0.19	0.20	0.20	0.21	0.21	0.22	0.23	0.23	0.27	0.29	0.32	0.33	0.33	0.32	0.32	0.35	0.38	0.39	0.39	0.39	0.40	0.42	0.42	0.37	0.38	0.37	0.39
OMN	0.16	0.19	0.20	0.20	0.21	0.23	0.24	0.26	0.26	0.31	0.34	0.37	0.39	0.40	0.38	0.39	0.42	0.46	0.48	0.49	0.49	0.50	0.52	0.53	0.45	0.47	0.45	0.48
PAK	0.26	0.30	0.30	0.30	0.32	0.33	0.36	0.39	0.39	0.47	0.47	0.51	0.52	0.54	0.54	0.55	0.64	0.70	0.72	0.71	0.71	0.74	0.79	0.79	0.68	0.71	0.69	0.74
PAN	0.17	0.18	0.19	0.19	0.20	0.21	0.23	0.24	0.25	0.29	0.31	0.33	0.34	0.35	0.34	0.34	0.37	0.41	0.42	0.44	0.43	0.42	0.41	0.41	0.35	0.36	0.35	0.36
PER	0.16	0.18	0.19	0.18	0.19	0.20	0.21	0.22	0.23	0.26	0.27	0.29	0.29	0.30	0.29	0.29	0.32	0.35	0.36	0.36	0.37	0.37	0.38	0.38	0.33	0.34	0.33	0.34
PHL	0.30	0.33	0.36	0.36	0.40	0.46	0.50	0.52	0.53	0.61	0.71	0.78	0.83	0.84	0.84	0.79	0.80	0.94	0.93	0.93	0.93	0.99	1.03	1.08	0.94	0.94	0.93	0.85
PNG	0.17	0.19	0.21	0.21	0.22	0.23	0.24	0.26	0.26	0.30	0.32	0.35	0.37	0.37	0.35	0.36	0.39	0.43	0.44	0.44	0.44	0.46	0.48	0.48	0.40	0.41	0.39	0.42

Table C.3: Continued on next page

Table C.3: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
POL	0.31	0.35	0.37	0.36	0.37	0.41	0.43	0.44	0.47	0.55	0.64	0.67	0.72	0.75	0.75	0.77	0.80	0.86	0.89	0.88	0.89	0.92	0.93	0.95	0.89	0.95	0.91	0.97
PRT	0.24	0.27	0.28	0.28	0.29	0.31	0.34	0.34	0.36	0.42	0.47	0.50	0.52	0.53	0.52	0.52	0.55	0.57	0.59	0.58	0.58	0.60	0.61	0.62	0.56	0.58	0.55	0.57
PRY	0.16	0.18	0.18	0.18	0.19	0.20	0.21	0.23	0.23	0.25	0.27	0.29	0.30	0.31	0.29	0.30	0.32	0.36	0.37	0.37	0.37	0.37	0.38	0.37	0.33	0.33	0.32	0.34
QAT	0.18	0.21	0.22	0.22	0.23	0.24	0.26	0.28	0.29	0.34	0.36	0.40	0.41	0.42	0.42	0.42	0.46	0.51	0.54	0.55	0.54	0.56	0.58	0.58	0.48	0.51	0.49	0.51
ROU	0.22	0.25	0.26	0.26	0.27	0.29	0.31	0.32	0.34	0.40	0.46	0.49	0.53	0.55	0.54	0.55	0.59	0.63	0.67	0.66	0.67	0.70	0.72	0.74	0.67	0.71	0.68	0.73
RUS	0.26	0.29	0.31	0.31	0.31	0.32	0.33	0.35	0.38	0.44	0.48	0.53	0.56	0.58	0.58	0.60	0.63	0.68	0.72	0.72	0.73	0.74	0.76	0.75	0.73	0.76	0.75	0.80
RWA	0.18	0.20	0.22	0.22	0.23	0.24	0.25	0.26	0.27	0.31	0.32	0.35	0.36	0.37	0.35	0.36	0.39	0.42	0.43	0.43	0.42	0.43	0.45	0.44	0.38	0.39	0.38	0.39
SAU	0.17	0.20	0.21	0.21	0.22	0.24	0.26	0.27	0.28	0.32	0.35	0.38	0.40	0.41	0.39	0.40	0.43	0.47	0.49	0.50	0.50	0.51	0.53	0.54	0.47	0.49	0.48	0.50
SCG	0.20	0.24	0.26	0.26	0.27	0.30	0.33	0.34	0.35	0.42	0.48	0.52	0.55	1.15	1.12	1.12	1.17	1.11	1.19	1.16	1.18	1.22	1.30	1.33	1.20	1.26	1.21	1.31
SEN	0.16	0.19	0.20	0.20	0.21	0.22	0.23	0.24	0.25	0.29	0.31	0.33	0.34	0.35	0.34	0.34	0.37	0.39	0.41	0.41	0.41	0.42	0.43	0.43	0.37	0.37	0.36	0.38
SGP	0.78	0.81	0.90	0.88	0.88	1.05	1.04	0.96	1.06	1.06	1.98	1.63	2.48	2.45	1.69	1.57	1.50	1.73	1.81	1.75	1.76	1.87	2.03	2.01	1.49	2.04	1.82	2.03
SLE	0.19	0.22	0.23	0.24	0.25	0.25	0.27	0.29	0.29	0.33	0.33	0.36	0.36	0.37	0.37	0.37	0.41	0.44	0.45	0.45	0.44	0.45	0.47	0.46	0.38	0.39	0.38	0.39
SLV	0.16	0.18	0.19	0.19	0.20	0.21	0.23	0.24	0.25	0.29	0.31	0.34	0.35	0.35	0.34	0.34	0.36	0.41	0.42	0.43	0.43	0.43	0.43	0.43	0.36	0.37	0.36	0.38
SOM	0.20	0.23	0.24	0.24	0.25	0.25	0.27	0.29	0.29	0.34	0.34	0.38	0.38	0.39	0.39	0.39	0.44	0.48	0.49	0.49	0.48	0.50	0.52	0.51	0.42	0.43	0.42	0.43
SUR	0.15	0.18	0.19	0.19	0.19	0.20	0.22	0.23	0.24	0.27	0.28	0.30	0.31	0.32	0.30	0.30	0.33	0.36	0.37	0.37	0.37	0.37	0.38	0.38	0.33	0.33	0.33	0.34
SVK	0.25	0.28	0.30	0.29	0.31	0.36	0.40	0.41	0.45	0.54	0.64	0.67	0.74	0.75	0.74	0.76	0.79	0.85	0.89	0.87	0.88	0.91	0.93	0.94	0.84	0.88	0.82	0.86
SVN	0.27	0.31	0.34	0.33	0.34	0.39	0.41	0.41	0.44	0.52	0.60	0.63	0.68	0.70	0.68	0.68	0.71	0.75	0.79	0.78	0.81	0.84	0.82	0.83	0.74	0.78	0.73	0.78
SWE	0.34	0.38	0.43	0.44	0.44	0.48	0.51	0.49	0.51	0.58	0.65	0.69	0.73	0.75	0.76	0.76	0.78	0.82	0.80	0.83	0.84	0.84	0.81	0.81	0.76	0.78	0.73	0.78
SYR	0.18	0.21	0.22	0.22	0.24	0.25	0.27	0.29	0.30	0.35	0.39	0.41	0.44	0.45	0.43	0.43	0.47	0.51	0.53	0.53	0.53	0.55	0.57	0.57	0.48	0.51	0.49	0.52
THA	0.28	0.31	0.33	0.35	0.37	0.42	0.46	0.46	0.49	0.57	0.64	0.68	0.73	0.75	0.73	0.83	0.84	1.02	0.90	0.89	0.93	0.96	1.02	1.04	0.98	1.03	1.02	1.12
TJK	0.18	0.21	0.22	0.22	0.23	0.25	0.27	0.30	0.31	0.35	0.39	0.42	0.45	0.47	0.45	0.46	0.50	0.56	0.58	0.58	0.59	0.62	0.65	0.66	0.58	0.61	0.58	0.64
TKM	0.17	0.19	0.21	0.21	0.22	0.23	0.25	0.27	0.28	0.32	0.35	0.38	0.41	0.42	0.40	0.41	0.44	0.48	0.51	0.50	0.50	0.52	0.54	0.55	0.46	0.48	0.46	0.50
TON	0.17	0.20	0.21	0.21	0.22	0.22	0.23	0.25	0.25	0.29	0.28	0.31	0.31	0.32	0.31	0.31	0.35	0.39	0.39	0.39	0.39	0.40	0.42	0.42	0.34	0.35	0.34	0.35
TTO	0.19	0.22	0.23	0.24	0.25	0.25	0.27	0.29	0.29	0.33	0.33	0.36	0.36	0.37	0.36	0.36	0.39	0.42	0.43	0.43	0.43	0.43	0.44	0.44	0.36	0.37	0.36	0.37
TUN	0.21	0.24	0.25	0.26	0.27	0.29	0.31	0.32	0.34	0.40	0.44	0.48	0.51	0.52	0.51	0.51	0.54	0.58	0.62	0.60	0.61	0.62	0.64	0.64	0.55	0.57	0.54	0.57
TUR	0.25	0.26	0.28	0.27	0.28	0.31	0.32	0.33	0.34	0.41	0.47	0.51	0.55	0.57	0.57	0.58	0.61	0.66	0.70	0.70	0.72	0.74	0.75	0.76	0.71	0.74	0.71	0.76
TZA	0.19	0.22	0.23	0.23	0.24	0.24	0.26	0.28	0.28	0.33	0.33	0.36	0.36	0.37	0.36	0.37	0.41	0.45	0.46	0.46	0.45	0.47	0.49	0.48	0.39	0.40	0.39	0.41
UGA	0.20	0.22	0.23	0.23	0.25	0.25	0.26	0.29	0.29	0.33	0.33	0.37	0.37	0.38	0.37	0.38	0.42	0.46	0.48	0.46	0.46	0.48	0.49	0.49	0.40	0.41	0.40	0.42
UKR	0.23	0.25	0.26	0.26	0.27	0.30	0.32	0.33	0.35	0.41	0.47	0.51	0.54	0.56	0.55	0.56	0.58	0.63	0.67	0.67	0.67	0.68	0.68	0.68	0.60	0.63	0.61	0.64
URY	0.16	0.18	0.19	0.19	0.19	0.20	0.21	0.23	0.23	0.25	0.27	0.29	0.30	0.31	0.30	0.30	0.33	0.37	0.38	0.39	0.39	0.39	0.40	0.39	0.34	0.34	0.32	0.34
USA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
UZB	0.17	0.19	0.21	0.21	0.22	0.23	0.25	0.27	0.27	0.32	0.36	0.39	0.41	0.43	0.41	0.41	0.45	0.50	0.52	0.52	0.52	0.54	0.56	0.56	0.48	0.49	0.47	0.50
VEN	0.17	0.19	0.20	0.20	0.21	0.22	0.23	0.25	0.25	0.29	0.30	0.32	0.34	0.34	0.33	0.33	0.35	0.38	0.39	0.39	0.39	0.40	0.40	0.40	0.34	0.35	0.34	0.35
VNM	0.19	0.21	0.22	0.23	0.25	0.27	0.30	0.33	0.34	0.40	0.47	0.51	0.56	0.58	0.55	0.57	0.64	0.72	0.77	0.82	0.92	1.02	1.17	1.27	0.97	1.04	1.02	1.16
YEM	0.17	0.20	0.21	0.20	0.22	0.23	0.25	0.27	0.27	0.32	0.33	0.36	0.37	0.39	0.38	0.38	0.42	0.46	0.48	0.48	0.48	0.50	0.51	0.51	0.42	0.44	0.42	0.44
ZAF	0.22	0.23	0.24	0.23	0.24	0.24	0.26	0.27	0.27	0.30	0.33	0.36	0.37	0.37	0.35	0.36	0.39	0.43	0.42	0.42	0.41	0.42	0.43	0.42	0.37	0.37	0.36	0.41
ZMB	0.19	0.21	0.22	0.22	0.23	0.24	0.25	0.27	0.27	0.31	0.31	0.34	0.34	0.36	0.35	0.35	0.39	0.43	0.44	0.43	0.43	0.44	0.46	0.45	0.37	0.38	0.37	0.39
ZWE	0.19	0.22	0.22	0.23	0.24	0.24	0.25	0.27	0.27	0.32	0.31	0.35	0.35	0.36	0.35	0.35	0.40	0.43	0.44	0.43	0.43	0.45	0.46	0.45	0.37	0.38	0.37	0.39

Table C.4: IMR in the metals sector by country and year (BLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	0.10	0.12	0.12	0.12	0.12	0.14	0.14	0.15	0.15	0.16	0.16	0.20	0.22	0.25	0.24	0.25	0.21	0.23	0.26	0.25	0.25	0.27	0.27	0.28	0.25	0.26	0.24	0.26
AGO	0.08	0.09	0.09	0.09	0.09	0.10	0.09	0.10	0.10	0.11	0.12	0.14	0.15	0.16	0.16	0.16	0.14	0.15	0.16	0.16	0.15	0.17	0.16	0.16	0.16	0.16	0.15	0.15
ALB	0.15	0.19	0.19	0.18	0.19	0.21	0.20	0.20	0.21	0.23	0.25	0.31	0.31	0.33	0.30	0.35	0.34	0.28	0.30	0.29	0.28	0.30	0.30	0.30	0.30	0.30	0.27	0.28
ARE	0.35	0.36	0.36	0.34	0.38	0.43	0.51	0.46	0.47	0.49	0.49	0.53	0.51	0.45	0.38	0.32	0.38	0.48	0.51	0.43	0.53	0.58	0.61	0.65	0.62	0.71	0.73	0.74
ARG	0.28	0.29	0.27	0.27	0.27	0.27	0.27	0.29	0.28	0.28	0.34	0.42	0.43	0.47	0.43	0.42	0.38	0.42	0.45	0.43	0.42	0.42	0.41	0.40	0.43	0.44	0.40	0.40
ARM	0.12	0.14	0.15	0.14	0.16	0.18	0.16	0.17	0.18	0.19	0.21	0.25	0.27	0.28	0.26	0.27	0.22	0.24	0.27	0.26	0.26	0.27	0.27	0.28	0.28	0.29	0.27	0.30
AUS	0.37	0.40	0.36	0.39	0.37	0.39	0.41	0.42	0.41	0.45	0.48	0.54	0.55	0.60	0.58	0.53	0.55	0.56	0.57	0.55	0.52	0.53	0.48	0.52	0.56	0.56	0.55	0.58
AUT	0.75	0.84	0.83	0.82	0.72	0.84	0.83	0.72	0.78	0.89	0.99	1.11	1.14	1.08	0.97	1.01	1.02	0.94	1.01	1.01	1.01	1.04	1.00	1.04	1.02	1.02	0.96	1.01
AZE	0.14	0.16	0.17	0.16	0.16	0.18	0.18	0.21	0.19	0.19	0.21	0.26	0.27	0.30	0.27	0.28	0.22	0.25	0.27	0.27	0.26	0.28	0.27	0.27	0.27	0.28	0.26	0.29
BDI	0.08	0.10	0.10	0.09	0.10	0.11	0.10	0.11	0.11	0.12	0.12	0.15	0.16	0.17	0.16	0.17	0.14	0.15	0.16	0.16	0.16	0.17	0.17	0.16	0.18	0.18	0.16	0.16
BEL	1.34	1.53	1.42	1.32	1.25	1.30	1.25	1.08	2.30	2.56	1.37	1.59	1.59	1.51	1.32	2.65	2.42	2.70	2.77	2.58	2.64	2.64	2.60	2.71	2.68	2.60	2.45	2.62

Table C.4: Continued on next page

Table C.4: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BEN	0.09	0.11	0.12	0.11	0.10	0.11	0.10	0.11	0.11	0.12	0.12	0.15	0.16	0.25	0.22	0.21	0.17	0.20	0.23	0.21	0.20	0.20	0.20	0.21	0.21	0.22	0.22	0.16
BFA	0.09	0.10	0.11	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.13	0.16	0.16	0.18	0.17	0.18	0.15	0.16	0.18	0.17	0.17	0.18	0.18	0.17	0.17	0.17	0.16	0.16
BGD	0.12	0.15	0.15	0.13	0.14	0.16	0.17	0.18	0.20	0.23	0.23	0.28	0.29	0.31	0.32	0.34	0.34	0.36	0.38	0.40	0.38	0.39	0.38	0.42	0.38	0.34	0.33	0.36
BGR	0.24	0.32	0.32	0.28	0.30	0.31	0.29	0.28	0.30	0.33	0.36	0.46	0.47	0.50	0.45	0.49	0.43	0.44	0.49	0.46	0.45	0.49	0.48	0.49	0.53	0.53	0.48	0.52
BHR	0.49	0.63	0.67	0.63	0.64	0.75	0.79	0.49	0.54	0.61	0.62	0.73	0.71	0.90	0.69	0.57	0.66	0.82	0.83	0.71	0.79	0.89	0.86	1.01	1.06	1.21	1.20	1.22
BHS	0.10	0.11	0.12	0.11	0.12	0.13	0.12	0.13	0.14	0.14	0.14	0.17	0.17	0.19	0.19	0.20	0.17	0.18	0.20	0.19	0.19	0.19	0.19	0.19	0.18	0.18	0.16	0.20
BIH	0.16	0.20	0.21	0.21	0.22	0.25	0.25	0.26	0.27	0.30	0.32	0.39	0.40	0.42	0.38	0.40	0.33	0.35	0.38	0.37	0.36	0.38	0.37	0.38	0.38	0.38	0.35	0.35
BLR	0.20	0.26	0.28	0.25	0.26	0.32	0.30	0.32	0.31	0.35	0.39	0.47	0.48	0.49	0.45	0.47	0.38	0.41	0.44	0.43	0.42	0.44	0.41	0.41	0.42	0.43	0.40	0.41
BLZ	0.10	0.11	0.12	0.11	0.11	0.12	0.11	0.12	0.13	0.13	0.13	0.16	0.17	0.19	0.20	0.24	0.20	0.19	0.21	0.20	0.19	0.20	0.20	0.19	0.17	0.17	0.16	0.17
BMU	0.12	0.14	0.14	0.13	0.16	0.19	0.17	0.16	0.15	0.16	0.18	0.20	0.19	0.22	0.22	0.23	0.19	0.20	0.21	0.20	0.20	0.21	0.21	0.20	0.18	0.18	0.17	0.17
BOL	0.11	0.13	0.13	0.12	0.12	0.13	0.13	0.14	0.15	0.16	0.16	0.20	0.21	0.24	0.23	0.24	0.19	0.22	0.24	0.23	0.22	0.22	0.21	0.21	0.22	0.21	0.20	0.21
BRA	0.51	0.54	0.45	0.43	0.39	0.40	0.38	0.42	0.39	0.43	0.48	0.61	0.63	0.63	0.59	0.60	0.53	0.55	0.60	0.56	0.54	0.56	0.52	0.54	0.63	0.62	0.59	0.58
BRB	0.11	0.13	0.14	0.13	0.13	0.14	0.14	0.15	0.15	0.15	0.15	0.17	0.18	0.20	0.20	0.21	0.21	0.33	0.22	0.21	0.18	0.19	0.19	0.18	0.17	0.17	0.16	0.17
BRN	0.07	0.09	0.09	0.08	0.09	0.10	0.10	0.10	0.11	0.11	0.12	0.15	0.16	0.18	0.18	0.18	0.15	0.16	0.18	0.18	0.17	0.20	0.21	0.20	0.18	0.19	0.18	0.17
BTN	0.10	0.12	0.12	0.11	0.11	0.13	0.13	0.14	0.15	0.16	0.17	0.21	0.24	0.27	0.27	0.28	0.23	0.26	0.28	0.28	0.27	0.30	0.31	0.31	0.28	0.28	0.26	0.26
CAF	0.08	0.10	0.10	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.15	0.15	0.17	0.16	0.17	0.14	0.15	0.17	0.16	0.16	0.18	0.17	0.17	0.16	0.17	0.16	0.16
CAN	0.44	0.46	0.48	0.47	0.46	0.47	0.47	0.49	0.51	0.52	0.53	0.56	0.57	0.59	0.59	0.60	0.53	0.56	0.57	0.55	0.54	0.54	0.53	0.53	0.52	0.51	0.50	0.50
CHE	0.80	0.91	0.88	0.86	0.84	0.89	0.87	0.75	0.80	0.89	0.95	1.03	1.00	0.94	0.88	0.90	0.85	0.93	0.99	0.90	0.91	0.97	0.94	0.96	0.97	0.89	0.85	0.93
CHL	0.42	0.46	0.54	0.58	0.60	0.61	0.74	0.82	0.79	0.91	1.01	1.25	1.23	1.53	1.37	1.08	1.19	1.39	1.41	1.31	1.28	1.27	1.14	1.20	1.57	1.59	1.44	1.72
CHN	0.49	0.52	0.49	0.46	0.50	0.59	0.61	0.64	0.67	0.74	0.82	1.16	1.33	1.59	1.64	1.91	1.74	1.89	2.10	2.36	2.49	2.83	3.00	3.10	3.03	2.93	2.99	2.92
CIV	0.09	0.11	0.11	0.11	0.11	0.12	0.14	0.13	0.12	0.13	0.13	0.16	0.16	0.18	0.17	0.17	0.15	0.16	0.18	0.18	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18
CMR	0.11	0.12	0.12	0.12	0.11	0.13	0.12	0.13	0.13	0.13	0.13	0.17	0.17	0.20	0.19	0.21	0.17	0.18	0.20	0.19	0.19	0.21	0.20	0.20	0.19	0.19	0.18	0.19
COG	0.08	0.09	0.09	0.09	0.10	0.11	0.10	0.11	0.11	0.11	0.11	0.14	0.15	0.17	0.19	0.20	0.14	0.17	0.17	0.17	0.24	0.28	0.26	0.24	0.26	0.29	0.30	0.29
COL	0.15	0.18	0.17	0.16	0.16	0.17	0.16	0.17	0.17	0.19	0.20	0.25	0.26	0.28	0.27	0.26	0.24	0.26	0.27	0.27	0.25	0.26	0.25	0.26	0.26	0.25	0.24	0.24
CPV	0.08	0.10	0.10	0.09	0.10	0.11	0.10	0.11	0.11	0.12	0.12	0.14	0.15	0.17	0.16	0.17	0.14	0.15	0.17	0.16	0.15	0.16	0.16	0.16	0.15	0.15	0.14	0.15
CRI	0.11	0.12	0.12	0.12	0.12	0.13	0.12	0.12	0.13	0.14	0.14	0.16	0.18	0.20	0.19	0.19	0.17	0.18	0.19	0.19	0.18	0.19	0.19	0.19	0.19	0.19	0.18	0.19
CUB	0.17	0.19	0.19	0.18	0.19	0.20	0.19	0.19	0.20	0.21	0.21	0.23	0.23	0.24	0.23	0.23	0.19	0.21	0.23	0.21	0.20	0.20	0.20	0.19	0.19	0.19	0.18	0.18
CYP	0.14	0.17	0.18	0.17	0.18	0.20	0.19	0.19	0.19	0.21	0.23	0.28	0.29	0.30	0.28	0.29	0.25	0.26	0.28	0.27	0.26	0.27	0.26	0.27	0.26	0.27	0.26	0.27
CZE	0.57	0.70	0.64	0.64	0.65	0.70	0.66	0.58	0.64	0.74	0.83	0.97	0.94	0.91	0.81	0.85	0.76	0.77	0.81	0.76	0.77	0.80	0.78	0.82	0.83	0.84	0.79	0.82
DEU	1.73	1.87	1.73	1.78	1.71	1.75	1.90	1.64	1.66	1.86	2.10	2.33	2.20	2.00	1.82	1.80	1.87	1.79	1.85	1.85	1.90	1.94	1.85	1.94	2.06	2.06	2.01	2.10
DNK	0.42	0.51	0.57	0.57	0.55	0.60	0.58	0.51	0.55	0.60	0.66	0.73	0.72	0.69	0.63	0.63	0.57	0.56	0.59	0.56	0.56	0.60	0.58	0.61	0.59	0.62	0.59	0.60
DOM	0.13	0.16	0.18	0.17	0.16	0.16	0.14	0.16	0.16	0.17	0.19	0.25	0.23	0.26	0.27	0.25	0.19	0.20	0.24	0.24	0.22	0.22	0.22	0.21	0.23	0.23	0.24	0.24
DZA	0.17	0.20	0.19	0.19	0.19	0.21	0.20	0.20	0.21	0.22	0.23	0.27	0.28	0.29	0.27	0.28	0.24	0.26	0.28	0.27	0.27	0.29	0.28	0.28	0.27	0.30	0.28	0.27
ECU	0.11	0.13	0.12	0.12	0.12	0.13	0.12	0.13	0.13	0.14	0.15	0.19	0.19	0.21	0.20	0.21	0.20	0.20	0.22	0.21	0.20	0.21	0.21	0.21	0.23	0.22	0.20	0.21
EGY	0.17	0.20	0.21	0.19	0.19	0.22	0.21	0.23	0.23	0.23	0.23	0.40	0.34	0.35	0.31	0.29	0.27	0.29	0.32	0.32	0.30	0.32	0.31	0.31	0.32	0.50	0.54	0.37
ESP	0.63	0.70	0.68	0.69	0.65	0.69	0.70	0.66	0.67	0.76	0.81	0.93	0.93	0.94	0.87	0.90	0.83	0.86	0.88	0.84	0.82	0.86	0.82	0.85	0.92	0.92	0.86	0.90
EST	0.19	0.25	0.26	0.24	0.25	0.28	0.27	0.28	0.28	0.31	0.35	0.43	0.42	0.44	0.41	0.41	0.33	0.36	0.39	0.36	0.35	0.39	0.38	0.40	0.39	0.39	0.36	0.37
ETH	0.09	0.11	0.11	0.10	0.10	0.12	0.11	0.12	0.12	0.13	0.13	0.17	0.17	0.19	0.19	0.20	0.16	0.18	0.20	0.19	0.19	0.21	0.21	0.19	0.18	0.18	0.17	0.18
FIN	0.48	0.56	0.54	0.51	0.52	0.54	0.54	0.54	0.53	0.59	0.66	0.78	0.77	0.77	0.69	0.68	0.56	0.60	0.63	0.61	0.60	0.65	0.64	0.66	0.64	0.66	0.61	0.64
FJI	0.07	0.08	0.08	0.07	0.08	0.09	0.08	0.09	0.09	0.10	0.10	0.13	0.13	0.15	0.15	0.15	0.13	0.14	0.15	0.15	0.14	0.15	0.15	0.15	0.14	0.14	0.14	0.14
FRA	1.02	1.12	1.02	1.14	1.08	1.14	1.12	0.98	1.06	1.18	1.21	1.31	1.29	1.21	1.07	1.11	1.03	1.03	1.04	1.01	1.02	1.06	1.01	1.03	1.04	1.02	0.94	0.97
GAB	0.09	0.10	0.10	0.09	0.10	0.11	0.10	0.11	0.12	0.13	0.13	0.15	0.15	0.17	0.17	0.17	0.15	0.16	0.17	0.17	0.18	0.19	0.20	0.20	0.19	0.20	0.18	0.20
GBR	0.94	1.12	1.06	1.02	1.03	1.10	1.07	0.91	0.92	0.97	0.99	1.13	1.11	1.02	0.94	0.94	0.83	0.80	0.82	0.81	0.85	0.91	0.90	0.86	0.84	0.83	0.77	0.84
GEO	0.13	0.16	0.17	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.21	0.27	0.27	0.29	0.27	0.28	0.22	0.26	0.28	0.27	0.26	0.28	0.27	0.28	0.28	0.29	0.26	0.27
GHA	0.11	0.13	0.14	0.13	0.13	0.15	0.13	0.16	0.16	0.14	0.14	0.18	0.19	0.22	0.21	0.21	0.21	0.23	0.25	0.24	0.24	0.24	0.24	0.24	0.26	0.28	0.26	0.27
GMB	0.09	0.10	0.11	0.10	0.10	0.12	0.10	0.11	0.12	0.12	0.12	0.15	0.16	0.18	0.18	0.18	0.15	0.16	0.18	0.17	0.17	0.18	0.18	0.17	0.16	0.17	0.15	0.16
GRC	0.25	0.31	0.31	0.28	0.29	0.32	0.31	0.29	0.32	0.35	0.44	0.55	0.54	0.54	0.50	0.51	0.46	0.47	0.49	0.46	0.44	0.45	0.44	0.44	0.45	0.47	0.44	0.47
GTM	0.10	0.12	0.12	0.12	0.12	0.13	0.12	0.13	0.14	0.14	0.14	0.18	0.18	0.19	0.20	0.21	0.18	0.19	0.22	0.21	0.20	0.22	0.23	0.23	0.21	0.20	0.19	0.21
HKG	0.19	0.21	0.20	0.17	0.17	0.20	0.19	0.21	0.24	0.25	0.25	0.34	0.38	0.48	0.48	0.64	0.51	0.64	0.79	0.78	0.69	0.74	0.86	1.02	0.93	0.86	0.73	0.83
HND	0.09	0.11	0.11	0.10	0.11	0.12	0.11	0.12	0.13	0.14	0.14	0.16	0.17	0.18	0.18	0.19	0.16	0.18	0.20	0.20	0.19	0.21	0.21	0.21	0.21	0.20	0.19	0.20
HRV	0.24	0.31	0.30	0.29	0.29	0.33	0.31	0.28	0.31	0.34	0.45	0.52	0.53	0.53	0.48	0.50	0.38	0.39	0.41	0.39	0.39	0.41	0.40	0.41	0.40	0.41	0.37	0.39
HTI	0.09	0.11	0.11	0.10	0.10	0.11	0.10	0.11	0.11	0.12	0.12	0.15	0.16	0.17	0.17	0.17	0.14	0.15	0.17	0.16	0.15	0.16	0.16	0.16	0.15	0.15	0.14	0.14
HUN	0.32	0.40	0.41	0.38	0.39	0.41	0.39	0.37	0.41	0.46	0.51	0.59	0.61	0.59	0.54	0.57	0.47	0.48	0.52	0.49	0.48	0.52	0.50	0.52	0.53	0.54	0.49	0.50
IDN	0.16	0.20	0.19	0.20	0.20	0.17	0.22	0.22	0.23	0.24	0.29	0.31	0.31	0.36	0.36	0.29	0.31	0.34	0.33	0.32	0.30	0.34	0.33	0.40	0.40	0.44	0.48	0.56
IND	0.33	0.37	0.37	0.33	0.37	0.38	0.41	0.41	0.40	0.47	0.53	0.67	0.67	0.74	0.72	0.72	0.69	0.78	0.84	0.79	0.78	0.83	0.85	0.89	1.00	1.01	0.96	1.05
IRL	0.26	0.31	0.30	0.30	0.30	0.33	0.31	0.30	0.31	0.34	0.35	0.41	0.41	0.42	0.40	0.42	0.37	0.37	0.38	0.37	0.37	0.39	0.39	0.40	0.41	0.40	0.38	0.40
IRN	0.20	0.27	0.25	0.27	0.28	0.31	0.35	0.39	0.40	0.28	0.28	0.34	0.35	0.39	0.36	0.39	0.35	0.39	0.43	0.47	0.48	0.44	0.42	0.48	0.54	0.61	0.70	1.04
IRQ	0.18	0.37	0.57	0.59	0.78	0.82	0.79	0.72	0.66	0.64	0.59	0.56	0.46	0.37	0.24	0.25	0.20	0.23	0.26	0.25	0.24	0.25	0.25	0.27	0.25	0.25	0.24	0.27
ISL	0.14	0.17	0.17	0.17	0.16	0.18	0.19	0.19	0.21	0.23	0.24	0.27	0.27	0.28	0.26	0.26	0.26	0.33	0.34	0.35	0.27	0.29	0.29	0.30	0.32	0.33	0.28	0.30

Table C.4: Continued on next page

Table C.4: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
ISR	0.29	0.36	0.34	0.34	0.36	0.40	0.39	0.39	0.43	0.44	0.45	0.50	0.51	0.50	0.47	0.49	0.44	0.46	0.46	0.46	0.47	0.47	0.47	0.49	0.54	0.55	0.52	0.53
ITA	1.06	1.19	1.19	1.31	1.27	1.34	1.29	1.14	1.16	1.33	1.51	1.70	1.66	1.53	1.42	1.47	1.43	1.33	1.38	1.41	1.41	1.44	1.35	1.43	1.44	1.43	1.39	1.50
JAM	0.19	0.23	0.22	0.23	0.22	0.23	0.22	0.20	0.22	0.23	0.25	0.29	0.29	0.30	0.27	0.27	0.20	0.20	0.22	0.21	0.21	0.22	0.22	0.21	0.21	0.23	0.22	0.20
JOR	0.13	0.18	0.18	0.18	0.19	0.21	0.21	0.21	0.22	0.23	0.23	0.28	0.29	0.30	0.27	0.28	0.24	0.26	0.28	0.27	0.27	0.29	0.30	0.31	0.32	0.31	0.27	0.29
JPN	2.91	3.10	2.66	2.54	2.42	2.83	2.80	2.58	2.59	2.80	2.83	3.06	2.98	2.68	2.32	2.47	2.57	2.61	2.61	2.74	2.48	2.48	2.52	2.80	2.57	2.44	2.32	2.31
KAZ	0.18	0.21	0.20	0.19	0.20	0.21	0.22	0.26	0.24	0.25	0.26	0.33	0.34	0.39	0.38	0.39	0.31	0.39	0.43	0.43	0.40	0.43	0.43	0.45	0.48	0.48	0.46	0.49
KEN	0.10	0.11	0.12	0.11	0.13	0.14	0.11	0.12	0.12	0.13	0.13	0.16	0.17	0.18	0.18	0.19	0.18	0.19	0.20	0.20	0.20	0.22	0.22	0.21	0.21	0.21	0.20	0.21
KGZ	0.12	0.15	0.15	0.15	0.16	0.18	0.17	0.19	0.19	0.21	0.22	0.27	0.28	0.31	0.30	0.32	0.27	0.30	0.34	0.32	0.32	0.35	0.35	0.36	0.35	0.35	0.34	0.36
KHM	0.08	0.09	0.09	0.09	0.10	0.11	0.11	0.11	0.12	0.13	0.13	0.17	0.18	0.21	0.20	0.21	0.18	0.20	0.22	0.22	0.21	0.24	0.25	0.26	0.24	0.27	0.24	0.26
KOR	0.78	0.82	0.76	0.74	0.80	1.27	1.12	1.04	1.07	1.14	1.20	1.44	1.58	1.62	1.42	1.36	1.39	1.55	1.69	1.85	1.80	1.97	2.07	2.22	2.30	2.17	2.00	1.92
KWT	0.13	0.18	0.19	0.18	0.20	0.22	0.21	0.22	0.22	0.24	0.26	0.30	0.28	0.29	0.26	0.27	0.22	0.24	0.27	0.26	0.25	0.28	0.28	0.28	0.28	0.28	0.27	0.27
LAO	0.09	0.11	0.11	0.10	0.11	0.13	0.12	0.13	0.14	0.16	0.16	0.20	0.24	0.30	0.29	0.31	0.27	0.29	0.33	0.33	0.33	0.36	0.38	0.39	0.38	0.38	0.36	0.34
LBN	0.15	0.21	0.22	0.21	0.23	0.24	0.24	0.24	0.25	0.27	0.28	0.32	0.32	0.33	0.30	0.37	0.34	0.36	0.37	0.36	0.36	0.37	0.35	0.37	0.42	0.45	0.36	0.37
LBR	0.09	0.10	0.10	0.10	0.10	0.11	0.10	0.11	0.11	0.12	0.12	0.15	0.15	0.17	0.17	0.18	0.14	0.16	0.18	0.17	0.16	0.17	0.17	0.17	0.16	0.16	0.15	0.16
LBY	0.12	0.16	0.16	0.15	0.15	0.17	0.16	0.16	0.17	0.18	0.19	0.24	0.24	0.26	0.24	0.24	0.20	0.22	0.24	0.23	0.22	0.24	0.23	0.23	0.22	0.23	0.21	0.22
LCA	0.09	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.13	0.13	0.16	0.16	0.18	0.18	0.19	0.15	0.17	0.18	0.17	0.17	0.18	0.17	0.17	0.17	0.16	0.15	0.15
LKA	0.08	0.10	0.10	0.09	0.10	0.11	0.10	0.11	0.11	0.14	0.16	0.20	0.21	0.23	0.20	0.18	0.15	0.16	0.18	0.17	0.19	0.20	0.21	0.21	0.21	0.21	0.19	0.20
LTU	0.20	0.25	0.27	0.24	0.25	0.28	0.26	0.28	0.27	0.30	0.33	0.41	0.42	0.44	0.40	0.41	0.32	0.35	0.38	0.36	0.37	0.43	0.37	0.38	0.38	0.38	0.36	0.37
LVA	0.20	0.25	0.30	0.29	0.30	0.31	0.31	0.28	0.27	0.30	0.33	0.40	0.41	0.42	0.39	0.43	0.32	0.35	0.38	0.36	0.34	0.36	0.36	0.36	0.35	0.35	0.33	0.34
MAC	0.13	0.15	0.15	0.14	0.14	0.17	0.16	0.17	0.18	0.20	0.21	0.31	0.35	0.42	0.44	0.54	0.47	0.45	0.50	0.58	0.60	0.59	0.61	0.62	0.55	0.52	0.46	0.45
MAR	0.17	0.20	0.20	0.19	0.19	0.21	0.20	0.20	0.21	0.22	0.24	0.27	0.29	0.30	0.28	0.30	0.26	0.28	0.30	0.32	0.33	0.35	0.29	0.29	0.37	0.38	0.31	0.45
MDA	0.16	0.21	0.24	0.26	0.25	0.28	0.26	0.26	0.26	0.27	0.31	0.41	0.40	0.39	0.38	0.39	0.29	0.30	0.33	0.32	0.30	0.33	0.32	0.31	0.29	0.29	0.26	0.27
MDG	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.13	0.13	0.15	0.14	0.15	0.12	0.14	0.15	0.15	0.20	0.23	0.25	0.24	0.25	0.24	0.23	0.21
MDV	0.07	0.09	0.09	0.08	0.09	0.10	0.09	0.10	0.11	0.11	0.12	0.15	0.15	0.17	0.16	0.16	0.13	0.15	0.16	0.16	0.31	0.34	0.36	0.17	0.16	0.16	0.15	0.15
MEX	0.22	0.28	0.29	0.28	0.28	0.27	0.26	0.26	0.26	0.28	0.30	0.35	0.35	0.37	0.38	0.40	0.36	0.40	0.44	0.41	0.40	0.42	0.39	0.39	0.38	0.38	0.37	0.39
MKD	0.20	0.23	0.23	0.22	0.24	0.27	0.24	0.30	0.28	0.26	0.29	0.36	0.37	0.40	0.38	0.39	0.31	0.33	0.35	0.33	0.32	0.34	0.33	0.33	0.32	0.33	0.29	0.30
MLT	0.15	0.19	0.20	0.19	0.20	0.22	0.20	0.19	0.21	0.23	0.33	0.29	0.30	0.31	0.29	0.31	0.26	0.27	0.30	0.28	0.27	0.29	0.29	0.29	0.28	0.30	0.27	0.28
MMR	0.10	0.12	0.12	0.11	0.11	0.13	0.13	0.15	0.19	0.20	0.17	0.28	0.33	0.39	0.38	0.40	0.40	0.38	0.44	0.43	0.41	0.44	0.45	0.45	0.41	0.38	0.34	0.32
MNG	0.11	0.13	0.13	0.12	0.13	0.15	0.14	0.15	0.15	0.17	0.17	0.22	0.24	0.28	0.27	0.28	0.23	0.25	0.28	0.28	0.28	0.33	0.34	0.35	0.31	0.31	0.29	0.30
MOZ	0.08	0.10	0.10	0.09	0.09	0.10	0.10	0.14	0.21	0.23	0.23	0.28	0.29	0.29	0.26	0.24	0.22	0.23	0.23	0.22	0.22	0.22	0.23	0.23	0.24	0.26	0.24	0.26
MUS	0.09	0.11	0.10	0.10	0.10	0.12	0.12	0.12	0.12	0.13	0.14	0.17	0.17	0.18	0.19	0.19	0.15	0.16	0.18	0.17	0.17	0.19	0.19	0.18	0.18	0.18	0.17	0.17
MWI	0.09	0.10	0.10	0.09	0.10	0.10	0.10	0.11	0.11	0.12	0.12	0.16	0.17	0.19	0.19	0.20	0.16	0.17	0.19	0.19	0.18	0.19	0.19	0.19	0.19	0.20	0.19	0.20
MYS	0.16	0.19	0.18	0.18	0.19	0.23	0.22	0.24	0.23	0.26	0.30	0.36	0.36	0.39	0.39	0.41	0.39	0.41	0.43	0.41	0.39	0.46	0.49	0.51	0.54	0.55	0.57	0.56
NER	0.09	0.11	0.11	0.11	0.10	0.11	0.11	0.12	0.12	0.13	0.13	0.16	0.16	0.18	0.18	0.18	0.15	0.16	0.18	0.18	0.17	0.18	0.18	0.18	0.17	0.18	0.16	0.17
NGA	0.12	0.15	0.19	0.18	0.10	0.12	0.11	0.12	0.12	0.12	0.13	0.16	0.16	0.19	0.19	0.20	0.16	0.18	0.19	0.19	0.19	0.20	0.20	0.20	0.20	0.20	0.18	0.18
NIC	0.09	0.10	0.10	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.12	0.14	0.15	0.17	0.17	0.17	0.14	0.15	0.17	0.16	0.15	0.17	0.16	0.16	0.15	0.15	0.14	0.15
NLD	0.78	0.92	0.95	0.95	0.93	1.02	0.96	0.85	1.01	1.14	1.12	1.27	1.26	1.15	1.04	1.16	1.08	1.14	1.08	1.00	1.03	1.04	1.04	1.09	1.06	1.03	0.95	0.97
NOR	0.35	0.46	0.47	0.44	0.43	0.46	0.47	0.47	0.46	0.50	0.54	0.59	0.60	0.62	0.58	0.56	0.49	0.55	0.55	0.52	0.48	0.51	0.49	0.50	0.49	0.51	0.48	0.46
NPL	0.10	0.13	0.13	0.12	0.13	0.15	0.14	0.15	0.16	0.18	0.18	0.23	0.26	0.29	0.28	0.29	0.25	0.27	0.30	0.29	0.29	0.32	0.33	0.34	0.32	0.32	0.31	0.31
NZL	0.20	0.22	0.23	0.21	0.22	0.23	0.21	0.21	0.21	0.24	0.25	0.30	0.32	0.32	0.30	0.28	0.28	0.28	0.29	0.29	0.28	0.30	0.30	0.31	0.31	0.30	0.30	0.30
OMN	0.11	0.13	0.13	0.13	0.13	0.15	0.15	0.15	0.16	0.17	0.17	0.21	0.21	0.23	0.21	0.22	0.21	0.24	0.27	0.26	0.27	0.29	0.30	0.32	0.31	0.33	0.34	0.36
PAK	0.15	0.17	0.17	0.16	0.16	0.19	0.19	0.20	0.20	0.22	0.22	0.27	0.27	0.31	0.30	0.31	0.27	0.28	0.31	0.33	0.33	0.36	0.37	0.38	0.37	0.37	0.37	0.39
PAN	0.09	0.11	0.11	0.11	0.11	0.12	0.11	0.12	0.13	0.13	0.13	0.15	0.16	0.18	0.18	0.18	0.15	0.17	0.18	0.18	0.16	0.17	0.17	0.16	0.16	0.16	0.19	0.22
PER	0.20	0.23	0.22	0.21	0.22	0.22	0.23	0.24	0.24	0.26	0.29	0.37	0.39	0.45	0.40	0.36	0.35	0.40	0.41	0.39	0.37	0.37	0.34	0.38	0.64	0.47	0.45	0.49
PHL	0.16	0.19	0.19	0.17	0.17	0.20	0.20	0.19	0.19	0.19	0.22	0.26	0.29	0.35	0.34	0.34	0.30	0.33	0.36	0.35	0.35	0.39	0.38	0.38	0.34	0.34	0.42	0.41
PNG	0.14	0.17	0.16	0.13	0.11	0.13	0.14	0.14	0.15	0.14	0.16	0.18	0.19	0.23	0.21	0.22	0.20	0.22	0.25	0.24	0.23	0.24	0.21	0.22	0.22	0.22	0.22	0.23
POL	0.50	0.61	0.60	0.56	0.56	0.60	0.58	0.57	0.61	0.64	0.70	0.84	0.81	0.83	0.76	0.80	0.68	0.70	0.76	0.74	0.73	0.78	0.77	0.80	0.86	0.86	0.88	0.95
PRT	0.31	0.34	0.34	0.34	0.33	0.35	0.34	0.32	0.34	0.37	0.41	0.47	0.47	0.48	0.44	0.46	0.43	0.43	0.46	0.45	0.44	0.47	0.45	0.48	0.49	0.48	0.46	0.48
PRY	0.11	0.13	0.13	0.12	0.12	0.13	0.12	0.13	0.14	0.15	0.16	0.20	0.20	0.23	0.23	0.23	0.19	0.21	0.23	0.21	0.21	0.22	0.21	0.21	0.22	0.23	0.22	0.24
QAT	0.21	0.26	0.21	0.21	0.17	0.21	0.21	0.21	0.23	0.24	0.25	0.33	0.28	0.30	0.28	0.29	0.30	0.32	0.48	0.40	0.41	0.44	0.44	0.46	0.49	0.51	0.46	0.50
ROU	0.31	0.39	0.37	0.37	0.37	0.38	0.33	0.33	0.34	0.38	0.41	0.53	0.53	0.53	0.49	0.50	0.40	0.43	0.47	0.45	0.43	0.45	0.44	0.45	0.47	0.47	0.44	0.45
RUS	0.43	0.53	0.53	0.47	0.45	0.43	0.46	0.71	0.48	0.49	0.58	0.73	0.73	0.77	0.72	0.75	0.61	0.67	0.71	0.72	0.69	0.73	0.70	0.70	0.84	0.86	0.86	0.93
RWA	0.09	0.10	0.11	0.10	0.10	0.11	0.10	0.12	0.12	0.12	0.13	0.16	0.18	0.18	0.18	0.19	0.17	0.18	0.19	0.19	0.19	0.19	0.19	0.18	0.17	0.18	0.17	0.18
SAU	0.17	0.22	0.21	0.21	0.22	0.25	0.25	0.26	0.26	0.27	0.26	0.30	0.28	0.28	0.25	0.25	0.24	0.27	0.29	0.28	0.28	0.31	0.33	0.35	0.36	0.38	0.36	0.36
SCG	0.17	0.32	0.27	0.30	0.32	0.34	0.31	0.35	0.28	0.33	0.37	0.46	0.49	1.05	0.94	1.00	0.88	0.86	0.90	0.92	0.93	0.85	0.52	0.56	0.94	0.96	0.90	0.96
SEN	0.09	0.11	0.11	0.10	0.10	0.11	0.11	0.11	0.12	0.13	0.13	0.15	0.16	0.18	0.17	0.18	0.15	0.16	0.17	0.17	0.16	0.18	0.17	0.17	0.16	0.17	0.16	0.16
SGP	0.14	0.18	0.17	0.16	0.16	0.20	0.20	0.22	0.21	0.23	0.25	0.29	0.31	0.33	0.33	0.34	0.30	0.33	0.35	0.37	0.36	0.41	0.47	0.41	0.37	0.45	0.41	0.41
SLE	0.09	0.10	0.10	0.10	0.10	0.11	0.10	0.11	0.11	0.12	0.12	0.15	0.16	0.18	0.17	0.18	0.15	0.16	0.17	0.17	0.16	0.18	0.18	0.17	0.16	0.16	0.15	0.16
SLV	0.09	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.13	0.14	0.14	0.17	0.17	0.19	0.19	0.19	0.16	0.18	0.19	0.19	0.18	0.19	0.19	0.19	0.17	0.17	0.16	0.17

Table C.4: Continued on next page

Table C.4: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
SOM	0.08	0.10	0.10	0.09	0.10	0.11	0.10	0.11	0.12	0.12	0.12	0.15	0.16	0.18	0.18	0.18	0.15	0.16	0.18	0.18	0.18	0.19	0.19	0.18	0.18	0.18	0.17	0.17
SUR	0.14	0.15	0.16	0.15	0.15	0.15	0.15	0.14	0.14	0.15	0.16	0.19	0.19	0.20	0.19	0.19	0.16	0.17	0.18	0.17	0.16	0.17	0.16	0.15	0.15	0.15	0.14	0.14
SVK	0.40	0.47	0.46	0.44	0.44	0.48	0.48	0.44	0.49	0.56	0.62	0.68	0.70	0.69	0.64	0.69	0.62	0.65	0.68	0.65	0.64	0.69	0.66	0.69	0.70	0.71	0.64	0.65
SVN	0.40	0.48	0.48	0.46	0.45	0.49	0.47	0.42	0.45	0.51	0.56	0.64	0.64	0.63	0.58	0.60	0.51	0.53	0.56	0.54	0.53	0.57	0.56	0.60	0.59	0.60	0.54	0.55
SWE	0.56	0.65	0.67	0.67	0.63	0.66	0.65	0.62	0.61	0.67	0.76	0.87	0.85	0.83	0.73	0.74	0.64	0.68	0.71	0.69	0.69	0.72	0.69	0.71	0.72	0.71	0.69	0.71
SYR	0.12	0.16	0.17	0.16	0.18	0.20	0.19	0.19	0.20	0.21	0.21	0.26	0.26	0.37	0.32	0.34	0.31	0.34	0.35	0.32	0.33	0.29	0.29	0.26	0.25	0.26	0.23	0.24
THA	0.18	0.17	0.16	0.17	0.18	0.21	0.21	0.21	0.21	0.29	0.29	0.32	0.33	0.37	0.35	0.36	0.37	0.36	0.38	0.42	0.42	0.47	0.49	0.50	0.51	0.51	0.51	0.54
TJK	0.13	0.16	0.15	0.14	0.15	0.17	0.17	0.17	0.18	0.19	0.20	0.25	0.26	0.28	0.27	0.27	0.22	0.27	0.28	0.28	0.27	0.27	0.28	0.28	0.25	0.26	0.25	0.25
TKM	0.10	0.13	0.13	0.12	0.13	0.15	0.14	0.15	0.16	0.16	0.16	0.20	0.21	0.23	0.22	0.22	0.18	0.20	0.22	0.22	0.21	0.23	0.23	0.28	0.25	0.25	0.23	0.25
TON	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.08	0.11	0.11	0.13	0.13	0.14	0.11	0.12	0.13	0.13	0.13	0.14	0.14	0.13	0.12	0.12	0.12	0.12
TTO	0.17	0.24	0.24	0.28	0.31	0.30	0.32	0.29	0.32	0.37	0.46	0.53	0.53	0.46	0.44	0.50	0.40	0.59	0.59	0.55	0.51	0.54	0.45	0.38	0.32	0.39	0.42	0.29
TUN	0.18	0.22	0.22	0.21	0.21	0.23	0.22	0.21	0.23	0.24	0.34	0.39	0.39	0.40	0.31	0.32	0.27	0.28	0.29	0.28	0.27	0.29	0.28	0.28	0.26	0.27	0.25	0.25
TUR	0.36	0.42	0.39	0.35	0.39	0.40	0.39	0.37	0.37	0.42	0.50	0.63	0.62	0.66	0.61	0.69	0.61	0.65	0.72	0.73	0.70	0.72	0.71	0.73	0.77	0.79	0.74	0.78
TZA	0.09	0.10	0.11	0.11	0.10	0.11	0.10	0.11	0.12	0.12	0.13	0.16	0.17	0.18	0.18	0.19	0.16	0.17	0.18	0.18	0.19	0.20	0.19	0.19	0.19	0.22	0.18	0.20
UGA	0.08	0.10	0.10	0.10	0.10	0.11	0.10	0.11	0.12	0.12	0.12	0.15	0.17	0.18	0.18	0.19	0.16	0.17	0.18	0.18	0.17	0.19	0.19	0.18	0.18	0.18	0.17	0.17
UKR	0.42	0.52	0.49	0.49	0.50	0.52	0.48	0.51	0.52	0.56	0.65	0.86	0.82	0.79	0.72	0.78	0.61	0.65	0.69	0.70	0.66	0.65	0.59	0.56	0.60	0.61	0.56	0.59
URY	0.15	0.18	0.18	0.17	0.17	0.17	0.15	0.16	0.17	0.17	0.19	0.24	0.25	0.29	0.28	0.28	0.23	0.26	0.28	0.26	0.25	0.26	0.25	0.25	0.24	0.23	0.21	0.22
USA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
UZB	0.11	0.14	0.15	0.18	0.19	0.20	0.17	0.19	0.19	0.20	0.22	0.26	0.28	0.30	0.28	0.27	0.22	0.27	0.28	0.28	0.28	0.31	0.32	0.33	0.31	0.32	0.34	0.39
VEN	0.25	0.29	0.28	0.27	0.24	0.24	0.24	0.25	0.24	0.28	0.31	0.35	0.36	0.35	0.31	0.30	0.25	0.27	0.26	0.21	0.18	0.20	0.19	0.19	0.19	0.20	0.18	0.19
VNM	0.12	0.13	0.13	0.13	0.13	0.16	0.16	0.15	0.18	0.20	0.22	0.27	0.30	0.34	0.33	0.37	0.34	0.38	0.41	0.44	0.43	0.49	0.51	0.60	0.57	0.57	0.58	0.62
YEM	0.11	0.11	0.12	0.11	0.12	0.13	0.12	0.13	0.13	0.14	0.14	0.18	0.18	0.20	0.19	0.19	0.17	0.18	0.20	0.20	0.19	0.21	0.20	0.20	0.20	0.20	0.18	0.19
ZAF	0.54	0.56	0.48	0.50	0.52	0.58	0.63	0.65	0.60	0.61	0.72	0.87	0.84	0.80	0.73	0.70	0.66	0.68	0.75	0.66	0.66	0.66	0.67	0.69	0.83	0.86	0.87	1.05
ZMB	0.25	0.27	0.24	0.21	0.21	0.19	0.17	0.17	0.14	0.16	0.16	0.27	0.34	0.33	0.31	0.40	0.39	0.37	0.38	0.40	0.39	0.40	0.38	0.45	0.52	0.71	0.63	0.48
ZWE	0.19	0.19	0.19	0.18	0.18	0.18	0.18	0.22	0.21	0.21	0.23	0.27	0.30	0.31	0.29	0.28	0.21	0.22	0.24	0.23	0.21	0.23	0.23	0.23	0.22	0.25	0.23	0.22

Table C.5: IMR in the minerals sector by country and year (BLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	0.07	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.11	0.13	0.14	0.16	0.18	0.17	0.16	0.16	0.17	0.20	0.20	0.20	0.22	0.22	0.25	0.25	0.16	0.18	0.16	0.17
AGO	0.04	0.05	0.05	0.06	0.05	0.06	0.06	0.06	0.06	0.07	0.08	0.09	0.09	0.09	0.08	0.08	0.08	0.09	0.10	0.10	0.11	0.40	0.48	0.44	0.33	0.28	0.23	0.21
ALB	0.12	0.15	0.15	0.14	0.14	0.16	0.19	0.17	0.17	0.23	0.28	0.31	0.32	0.31	0.28	0.28	0.33	0.36	0.36	0.36	0.38	0.38	0.39	0.39	0.31	0.33	0.31	0.31
ARE	0.59	0.54	0.56	0.55	0.58	0.67	0.87	0.73	0.72	0.87	0.88	0.89	0.90	0.70	0.60	0.55	0.70	0.87	0.85	0.93	1.11	1.09	1.12	1.10	0.75	0.71	0.66	0.75
ARG	0.26	0.26	0.25	0.25	0.23	0.23	0.26	0.23	0.21	0.19	0.25	0.30	0.32	0.32	0.30	0.31	0.34	0.36	0.39	0.41	0.40	0.37	0.43	0.41	0.33	0.33	0.30	0.30
ARM	0.08	0.12	0.13	0.13	0.14	0.15	0.17	0.15	0.15	0.18	0.20	0.22	0.24	0.22	0.21	0.22	0.23	0.25	0.25	0.25	0.27	0.26	0.27	0.26	0.19	0.21	0.20	0.21
AUS	0.34	0.34	0.36	0.36	0.32	0.31	0.35	0.34	0.31	0.41	0.45	0.50	0.57	0.52	0.48	0.43	0.45	0.49	0.48	0.55	0.52	0.48	0.50	0.49	0.41	0.44	0.43	0.38
AUT	1.00	1.09	1.12	1.11	0.99	1.04	1.10	0.96	0.88	1.18	1.31	1.44	1.39	1.26	1.16	1.14	1.23	1.22	1.20	1.17	1.23	1.20	1.19	1.20	0.94	1.03	0.95	0.89
AZE	0.11	0.11	0.14	0.13	0.14	0.15	0.16	0.15	0.15	0.19	0.21	0.24	0.25	0.24	0.23	0.25	0.28	0.32	0.28	0.29	0.32	0.35	0.35	0.31	0.23	0.26	0.25	0.25
BDI	0.06	0.06	0.07	0.07	0.07	0.07	0.09	0.08	0.08	0.10	0.11	0.12	0.12	0.11	0.10	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.14	0.13	0.10	0.10	0.09	0.09
BEL	1.34	1.63	2.01	1.94	1.84	1.81	1.82	1.48	1.40	1.83	1.90	2.05	2.02	1.83	1.70	1.62	1.85	1.92	1.87	1.81	1.91	1.80	1.83	1.80	1.48	1.51	1.43	1.33
BEN	0.07	0.09	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.12	0.15	0.16	0.14	0.11	0.09	0.09	0.11	0.11	0.12	0.13	0.17	0.21	0.18	0.15	0.16	0.15	0.14
BFA	0.06	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.10	0.10	0.11	0.11	0.11	0.10	0.10	0.11	0.13	0.11	0.12	0.12	0.12	0.14	0.13	0.09	0.11	0.10	0.10
BGD	0.09	0.13	0.15	0.12	0.14	0.15	0.26	0.24	0.26	0.36	0.41	0.45	0.47	0.44	0.42	0.43	0.54	0.44	0.56	0.60	0.69	0.74	0.88	1.21	0.92	0.98	0.98	1.03
BGR	0.25	0.29	0.33	0.29	0.30	0.32	0.34	0.30	0.29	0.38	0.42	0.49	0.51	0.52	0.49	0.51	0.52	0.51	0.52	0.52	0.54	0.56	0.59	0.59	0.44	0.47	0.49	0.47
BHR	0.14	0.19	0.23	0.21	0.37	0.37	0.43	0.29	0.27	0.34	0.36	0.45	0.42	0.47	0.40	0.41	0.42	0.63	0.64	0.71	0.91	0.89	0.96	0.89	0.63	0.59	0.58	0.55
BHS	0.08	0.10	0.11	0.10	0.10	0.09	0.10	0.11	0.09	0.10	0.11	0.13	0.12	0.11	0.11	0.11	0.11	0.12	0.14	0.13	0.13	0.13	0.13	0.13	0.10	0.12	0.15	0.11
BIH	0.12	0.14	0.14	0.17	0.17	0.19	0.22	0.22	0.19	0.23	0.25	0.34	0.36	0.33	0.27	0.28	0.32	0.36	0.35	0.35	0.36	0.36	0.37	0.37	0.27	0.29	0.28	0.27
BLR	0.13	0.17	0.20	0.20	0.19	0.32	0.35	0.33	0.34	0.45	0.49	0.53	0.55	0.53	0.50	0.52	0.55	0.60	0.60	0.61	0.68	0.66	0.64	0.55	0.46	0.47	0.45	0.43
BLZ	0.07	0.07	0.07	0.07	0.07	0.07	0.11	0.08	0.08	0.09	0.10	0.11	0.11	0.12	0.11	0.18	0.25	0.13	0.16	0.14	0.15	0.15	0.15	0.14	0.10	0.11	0.10	0.10
BMU	0.08	0.08	0.07	0.07	0.11	0.11	0.10	0.08	0.08	0.15	0.13	0.14	0.12	0.26	0.24	0.25	0.26	0.29	0.29	0.32	0.19	0.15	0.15	0.15	0.11	0.12	0.11	0.11
BOL	0.09	0.10	0.10	0.10	0.10	0.11	0.12	0.11	0.10	0.12	0.12	0.13	0.15	0.15	0.14	0.14	0.16	0.17	0.17	0.18	0.19	0.19	0.21	0.21	0.16	0.17	0.17	0.09
BRA	0.42	0.45	0.40	0.41	0.39	0.41	0.43	0.43	0.39	0.46	0.50	0.54	0.58	0.58	0.53	0.52	0.59	0.62	0.64	0.65	0.63	0.64	0.63	0.62	0.51	0.51	0.49	0.46
BRB	0.10	0.11	0.10	0.11	0.10	0.12	0.16	0.11	0.11	0.14	0.17	0.22	0.23	0.27	0.21	0.22	0.22	0.25	0.26	0.22	0.34	0.29	0.28	0.30	0.25	0.27	0.27	0.25

Table C.5: Continued on next page

Table C.5: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BRN	0.16	0.14	0.06	0.06	0.06	0.07	0.08	0.09	0.09	0.09	0.13	0.12	0.13	0.15	0.12	0.12	0.12	0.25	0.25	0.25	0.17	0.19	0.20	0.20	0.12	0.13	0.12	0.14
BTN	0.07	0.08	0.09	0.08	0.08	0.09	0.11	0.10	0.10	0.13	0.14	0.16	0.19	0.19	0.18	0.18	0.20	0.23	0.23	0.23	0.24	0.24	0.29	0.29	0.18	0.21	0.25	0.24
CAF	0.05	0.06	0.06	0.06	0.06	0.07	0.08	0.07	0.07	0.08	0.09	0.10	0.10	0.10	0.09	0.09	0.09	0.10	0.11	0.11	0.11	0.12	0.13	0.12	0.09	0.10	0.09	0.09
CAN	0.33	0.33	0.33	0.35	0.33	0.33	0.34	0.34	0.34	0.36	0.38	0.39	0.39	0.40	0.39	0.40	0.43	0.45	0.46	0.46	0.45	0.44	0.43	0.42	0.38	0.39	0.38	0.39
CHE	1.03	1.18	1.17	1.13	0.85	0.90	0.91	0.78	0.72	0.95	1.01	1.10	1.07	1.02	0.91	0.89	1.06	1.11	1.11	1.18	1.20	1.23	1.26	1.22	0.91	0.96	0.86	0.87
CHL	0.17	0.19	0.20	0.23	0.20	0.20	0.22	0.20	0.20	0.22	0.23	0.26	0.28	0.27	0.26	0.24	0.26	0.24	0.26	0.26	0.26	0.22	0.31	0.25	0.20	0.21	0.19	0.18
CHN	1.05	1.13	1.19	1.23	1.20	1.29	1.58	1.52	1.48	1.91	1.94	2.25	2.70	2.89	3.09	3.26	3.70	3.96	4.17	4.67	5.07	5.26	5.98	5.93	4.09	3.96	3.94	4.03
CIV	0.27	0.08	0.09	0.09	0.10	0.11	0.12	0.11	0.12	0.13	0.11	0.15	0.15	0.14	0.13	0.14	0.11	0.14	0.13	0.14	0.13	0.16	0.15	0.13	0.10	0.12	0.11	0.10
CMR	0.09	0.08	0.09	0.09	0.08	0.09	0.11	0.10	0.10	0.12	0.12	0.14	0.15	0.15	0.14	0.14	0.15	0.15	0.14	0.16	0.16	0.15	0.16	0.16	0.12	0.12	0.11	0.12
COG	0.05	0.06	0.06	0.06	0.06	0.06	0.07	0.06	0.06	0.08	0.09	0.10	0.10	0.10	0.09	0.09	0.15	0.12	0.11	0.14	0.12	0.12	0.13	0.13	0.09	0.10	0.13	0.10
COL	0.24	0.28	0.28	0.28	0.27	0.27	0.29	0.28	0.27	0.33	0.34	0.38	0.38	0.37	0.35	0.35	0.38	0.39	0.39	0.42	0.41	0.40	0.40	0.38	0.30	0.31	0.28	0.27
CPV	0.05	0.06	0.06	0.06	0.06	0.07	0.08	0.07	0.07	0.08	0.09	0.10	0.10	0.10	0.09	0.09	0.09	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.10	0.11	0.10	0.11
CRI	0.13	0.14	0.14	0.14	0.15	0.15	0.14	0.19	0.19	0.24	0.25	0.27	0.29	0.27	0.25	0.25	0.32	0.32	0.30	0.33	0.32	0.31	0.33	0.31	0.24	0.25	0.22	0.21
CUB	0.08	0.10	0.11	0.09	0.09	0.08	0.14	0.10	0.13	0.20	0.19	0.18	0.19	0.17	0.17	0.17	0.21	0.17	0.18	0.20	0.18	0.13	0.14	0.13	0.10	0.10	0.10	0.10
CYP	0.20	0.23	0.26	0.25	0.25	0.27	0.32	0.30	0.29	0.37	0.43	0.49	0.50	0.45	0.42	0.42	0.46	0.47	0.45	0.43	0.45	0.43	0.43	0.43	0.34	0.36	0.35	0.36
CZE	0.66	0.78	0.82	0.88	0.88	0.92	1.04	0.96	0.91	1.11	1.30	1.38	1.31	1.25	1.12	1.11	1.18	1.17	1.14	1.10	1.16	1.13	1.20	1.19	0.95	0.98	0.95	0.90
DEU	2.14	2.34	2.46	2.38	2.30	2.20	2.76	2.35	2.03	2.57	2.87	3.10	2.88	2.62	2.54	2.36	2.61	2.52	2.58	2.55	2.75	2.63	2.53	2.60	2.18	2.19	2.07	2.05
DNK	0.62	0.76	0.87	0.86	0.75	0.79	0.88	0.68	0.61	0.87	0.92	1.00	0.98	0.89	0.84	0.85	0.90	0.85	0.89	0.87	0.90	0.88	0.88	0.88	0.73	0.77	0.72	0.71
DOM	0.07	0.08	0.08	0.09	0.07	0.07	0.08	0.08	0.09	0.12	0.15	0.19	0.18	0.18	0.18	0.22	0.21	0.23	0.18	0.22	0.20	0.19	0.17	0.15	0.13	0.15	0.13	0.12
DZA	0.25	0.24	0.25	0.25	0.26	0.26	0.30	0.24	0.24	0.29	0.30	0.33	0.32	0.30	0.27	0.26	0.28	0.29	0.30	0.30	0.30	0.30	0.31	0.31	0.24	0.29	0.30	0.29
ECU	0.14	0.15	0.15	0.15	0.15	0.15	0.17	0.17	0.18	0.21	0.21	0.24	0.24	0.23	0.21	0.21	0.24	0.26	0.26	0.28	0.27	0.27	0.33	0.29	0.22	0.23	0.20	0.18
EGY	0.24	0.33	0.30	0.30	0.30	0.32	0.35	0.35	0.30	0.35	0.34	0.43	0.47	0.46	0.44	0.41	0.47	0.50	0.45	0.51	0.51	0.50	0.53	0.53	0.39	0.56	0.61	0.50
ESP	1.15	1.42	1.50	1.50	1.49	1.57	1.68	1.43	1.39	1.77	1.81	1.90	1.85	1.70	1.56	1.45	1.51	1.41	1.37	1.37	1.52	1.50	1.50	1.54	1.49	1.38	1.32	1.31
EST	0.14	0.19	0.20	0.20	0.20	0.23	0.25	0.23	0.22	0.29	0.35	0.39	0.41	0.40	0.38	0.36	0.35	0.38	0.40	0.40	0.42	0.42	0.44	0.45	0.34	0.37	0.35	0.32
ETH	0.07	0.08	0.09	0.09	0.09	0.10	0.11	0.10	0.10	0.13	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.17	0.17	0.21	0.21	0.22	0.24	0.15	0.10	0.11	0.11	0.11
FIN	0.31	0.37	0.40	0.40	0.42	0.44	0.52	0.46	0.43	0.55	0.59	0.66	0.66	0.61	0.59	0.56	0.59	0.58	0.60	0.59	0.61	0.60	0.60	0.59	0.48	0.49	0.47	0.47
FJI	0.07	0.07	0.07	0.06	0.06	0.07	0.08	0.08	0.08	0.07	0.08	0.08	0.12	0.11	0.11	0.11	0.11	0.12	0.13	0.14	0.14	0.13	0.14	0.14	0.10	0.11	0.11	0.10
FRA	1.25	1.41	1.48	1.58	1.49	1.50	1.59	1.29	1.21	1.50	1.56	1.66	1.62	1.53	1.32	1.23	1.34	1.30	1.33	1.31	1.40	1.36	1.33	1.31	1.10	1.14	1.09	1.05
GAB	0.07	0.07	0.07	0.06	0.06	0.06	0.07	0.07	0.07	0.08	0.09	0.10	0.10	0.10	0.09	0.09	0.09	0.10	0.10	0.11	0.11	0.11	0.13	0.12	0.08	0.09	0.09	0.09
GBR	1.28	1.51	1.61	1.53	1.53	1.50	1.58	1.25	1.10	1.30	1.34	1.44	1.33	1.26	1.21	1.05	1.10	1.15	1.15	1.19	1.10	1.06	1.20	1.16	0.98	1.00	0.95	0.93
GEO	0.09	0.10	0.12	0.12	0.12	0.14	0.16	0.15	0.14	0.18	0.20	0.22	0.23	0.22	0.23	0.23	0.23	0.25	0.29	0.31	0.32	0.31	0.33	0.34	0.25	0.25	0.25	0.25
GHA	0.09	0.09	0.11	0.12	0.12	0.13	0.16	0.12	0.11	0.14	0.17	0.23	0.25	0.25	0.23	0.24	0.19	0.22	0.22	0.22	0.23	0.18	0.21	0.19	0.15	0.23	0.25	0.33
GMB	0.06	0.06	0.06	0.07	0.06	0.07	0.08	0.07	0.07	0.09	0.09	0.11	0.11	0.11	0.10	0.10	0.10	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.09	0.10	0.09	0.09
GRC	0.38	0.41	0.41	0.42	0.43	0.46	0.56	0.45	0.43	0.54	0.69	0.72	0.72	0.68	0.59	0.58	0.66	0.64	0.54	0.54	0.59	0.58	0.60	0.59	0.47	0.51	0.49	0.47
GTM	0.13	0.15	0.17	0.17	0.15	0.18	0.19	0.15	0.14	0.19	0.19	0.21	0.21	0.23	0.23	0.24	0.23	0.26	0.27	0.27	0.28	0.28	0.32	0.33	0.22	0.19	0.18	0.18
HKG	0.15	0.17	0.18	0.19	0.18	0.21	0.25	0.21	0.21	0.26	0.26	0.31	0.34	0.37	0.36	0.40	0.43	0.49	0.53	0.54	0.59	0.62	0.73	0.66	0.40	0.43	0.42	0.43
HND	0.10	0.11	0.12	0.12	0.10	0.10	0.11	0.12	0.11	0.12	0.14	0.15	0.17	0.17	0.16	0.16	0.11	0.18	0.20	0.25	0.25	0.17	0.18	0.18	0.13	0.14	0.13	0.13
HRV	0.32	0.40	0.38	0.37	0.34	0.38	0.42	0.37	0.35	0.45	0.60	0.67	0.68	0.63	0.58	0.59	0.63	0.59	0.57	0.56	0.60	0.59	0.59	0.60	0.47	0.50	0.45	0.47
HTI	0.05	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.10	0.09	0.10	0.10	0.10	0.09	0.09	0.09	0.10	0.11	0.11	0.11	0.11	0.12	0.11	0.08	0.09	0.08	0.08
HUN	0.38	0.43	0.45	0.44	0.43	0.46	0.50	0.43	0.44	0.58	0.64	0.69	0.72	0.68	0.66	0.69	0.69	0.68	0.69	0.67	0.71	0.71	0.72	0.77	0.62	0.65	0.60	0.56
IDN	0.24	0.23	0.23	0.27	0.25	0.30	0.50	0.47	0.45	0.58	0.59	0.64	0.60	0.55	0.55	0.46	0.49	0.49	0.54	0.60	0.52	0.59	0.70	0.79	0.77	0.74	0.71	0.69
IND	0.39	0.44	0.47	0.45	0.46	0.47	0.60	0.54	0.52	0.65	0.68	0.76	0.79	0.78	0.81	0.80	0.88	0.94	0.94	0.94	0.93	0.98	1.04	1.10	0.84	0.91	0.88	0.92
IRL	0.39	0.42	0.43	0.44	0.47	0.49	0.57	0.53	0.54	0.71	0.77	0.78	0.80	0.70	0.65	0.62	0.72	0.68	0.74	0.74	0.77	0.74	0.70	0.72	0.65	0.66	0.57	0.53
IRN	0.22	0.33	0.33	0.37	0.41	0.46	0.58	0.58	0.59	0.46	0.46	0.49	0.49	0.44	0.40	0.42	0.50	0.61	0.64	0.63	0.72	0.58	0.61	0.66	0.48	0.54	0.61	0.74
IRQ	0.70	1.71	3.27	3.45	4.66	4.70	4.98	4.12	3.58	3.83	3.27	2.66	1.80	0.26	0.22	0.22	0.26	0.25	0.26	0.34	0.30	0.31	0.30	0.29	0.25	0.26	0.24	0.26
ISL	0.11	0.13	0.13	0.13	0.14	0.13	0.15	0.14	0.13	0.15	0.18	0.20	0.22	0.21	0.18	0.17	0.19	0.20	0.19	0.19	0.19	0.19	0.19	0.22	0.17	0.17	0.15	0.14
ISR	0.31	0.38	0.44	0.44	0.45	0.47	0.50	0.42	0.42	0.51	0.55	0.55	0.58	0.51	0.49	0.49	0.53	0.57	0.60	0.61	0.66	0.65	0.70	0.69	0.53	0.54	0.51	0.49
ITA	2.40	2.82	3.09	3.20	3.19	3.32	3.39	2.69	2.53	3.14	3.32	3.45	3.30	2.94	2.67	2.54	2.68	2.44	2.40	2.34	2.51	2.41	2.39	2.42	1.97	1.94	1.83	1.79
JAM	0.66	0.78	0.80	0.85	0.85	0.66	0.73	0.90	0.54	0.57	0.62	0.81	0.75	0.73	0.56	0.59	0.48	0.55	0.71	0.58	0.67	0.64	0.61	0.29	0.24	0.51	0.60	0.20
JOR	0.21	0.26	0.28	0.28	0.29	0.31	0.35	0.31	0.30	0.38	0.39	0.42	0.42	0.36	0.34	0.34	0.36	0.36	0.36	0.39	0.39	0.42	0.45	0.47	0.36	0.37	0.31	0.34
JPN	3.64	4.29	4.09	3.53	3.28	3.42	4.18	3.91	3.38	3.99	4.20	4.77	4.69	3.92	4.08	3.84	4.60	5.13	4.80	4.87	4.29	4.01	4.02	4.16	3.08	3.07	2.99	3.16
KAZ	0.13	0.13	0.12	0.22	0.12	0.13	0.15	0.15	0.13	0.17	0.19	0.23	0.27	0.27	0.28	0.27	0.26	0.30	0.31	0.34	0.38	0.38	0.40	0.35	0.26	0.28	0.27	0.28
KEN	0.10	0.11	0.11	0.14	0.13	0.13	0.15	0.14	0.13	0.16	0.18	0.19	0.20	0.20	0.18	0.20	0.19	0.20	0.20	0.21	0.23	0.22	0.25	0.25	0.18	0.19	0.19	0.20
KGZ	0.10	0.11	0.11	0.13	0.12	0.13	0.14	0.13	0.12	0.16	0.18	0.21	0.23	0.23	0.23	0.23	0.21	0.24	0.25	0.27	0.31	0.30	0.32	0.30	0.21	0.23	0.22	0.22
KHM	0.06	0.08	0.09	0.09	0.09	0.10	0.12	0.11	0.10	0.14	0.15	0.17	0.18	0.17	0.16	0.16	0.17	0.20	0.21	0.22	0.25	0.27	0.29	0.32	0.20	0.21	0.18	0.18
KOR	0.94	0.99	0.93	0.92	0.89	1.04	1.32	1.18	1.11	1.41	1.84	2.43	2.74	2.78	2.43	2.23	2.58	3.14	2.62	2.71	2.95	3.11	3.47	3.21	1.98	1.93	1.70	1.77
KWT	0.19	0.27	0.31	0.31	0.35	0.37	0.43	0.39	0.36	0.48	0.51	0.53	0.50	0.37	0.31	0.36	0.48	0.46	0.48	0.51	0.52	0.53	0.55	0.53	0.39	0.38	0.35	0.32
LAO	0.08	0.08	0.09	0.09	0.09	0.10	0.13	0.13	0.12	0.17	0.18	0.20	0.22	0.23	0.21	0.28	0.32	0.36	0.36	0.38	0.41	0.42	0.48	0.48	0.33	0.37	0.36	0.35
LBN	0.25	0.17	0.20	0.17	0.16	0.37	0.46	0.43	0.41	0.55	0.60	0.69	0.62	0.50	0.42	0.45	0.51	0.52	0.52	0.54	0.55	0.52	0.28	0.26	0.19	0.19	0.19	0.21

Table C.5: Continued on next page

Table C.5: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
LBR	0.06	0.06	0.06	0.07	0.06	0.08	0.10	0.07	0.08	0.08	0.09	0.10	0.10	0.10	0.09	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.09	0.10	0.09	0.09
LBY	0.11	0.12	0.15	0.13	0.12	0.13	0.15	0.13	0.13	0.19	0.22	0.24	0.20	0.19	0.17	0.18	0.18	0.19	0.19	0.19	0.20	0.20	0.21	0.21	0.15	0.16	0.15	0.15
LCA	0.05	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.08	0.09	0.10	0.10	0.11	0.11	0.12	0.11	0.11	0.12	0.13	0.13	0.12	0.14	0.13	0.09	0.10	0.09	0.09
LKA	0.11	0.13	0.15	0.15	0.16	0.16	0.18	0.15	0.15	0.26	0.33	0.40	0.41	0.39	0.21	0.24	0.27	0.29	0.26	0.26	0.33	0.36	0.38	0.35	0.25	0.28	0.25	0.27
LTU	0.17	0.21	0.22	0.21	0.21	0.23	0.26	0.24	0.23	0.30	0.35	0.38	0.41	0.41	0.39	0.39	0.35	0.38	0.41	0.43	0.46	0.45	0.45	0.46	0.35	0.38	0.37	0.40
LVA	0.13	0.17	0.18	0.17	0.17	0.19	0.22	0.19	0.20	0.25	0.28	0.34	0.36	0.36	0.35	0.31	0.32	0.37	0.40	0.40	0.44	0.43	0.43	0.43	0.34	0.36	0.35	0.33
MAC	0.20	0.31	0.31	0.32	0.33	0.39	0.56	0.72	0.57	0.62	0.51	0.46	0.66	0.80	0.67	0.59	0.59	0.64	0.90	1.05	1.20	1.33	1.19	1.24	0.71	0.69	0.63	0.68
MAR	0.27	0.30	0.31	0.32	0.32	0.33	0.36	0.31	0.29	0.37	0.39	0.41	0.42	0.44	0.42	0.39	0.45	0.45	0.47	0.48	0.49	0.47	0.51	0.47	0.37	0.39	0.37	0.39
MDA	0.14	0.17	0.18	0.18	0.19	0.19	0.20	0.19	0.19	0.25	0.27	0.31	0.33	0.31	0.31	0.32	0.30	0.32	0.33	0.34	0.37	0.36	0.36	0.34	0.25	0.28	0.26	0.27
MDG	0.06	0.06	0.06	0.07	0.07	0.07	0.08	0.07	0.06	0.07	0.08	0.08	0.09	0.09	0.08	0.08	0.08	0.09	0.10	0.10	0.10	0.10	0.11	0.11	0.08	0.08	0.08	0.08
MDV	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.09	0.09	0.13	0.16	0.15	0.10	0.10	0.09	0.11	0.11	0.12	0.28	0.28	0.28	0.14	0.09	0.10	0.09	0.09
MEX	0.37	0.44	0.40	0.41	0.36	0.41	0.47	0.44	0.45	0.48	0.58	0.57	0.59	0.52	0.45	0.47	0.54	0.51	0.50	0.52	0.56	0.56	0.57	0.58	0.36	0.38	0.36	0.34
MKD	0.15	0.17	0.15	0.19	0.22	0.23	0.27	0.24	0.23	0.29	0.32	0.36	0.35	0.34	0.31	0.31	0.34	0.35	0.39	0.38	0.43	0.46	0.48	0.50	0.42	0.68	0.82	0.80
MLT	0.16	0.20	0.21	0.22	0.21	0.22	0.26	0.23	0.22	0.29	0.32	0.34	0.35	0.33	0.31	0.31	0.38	0.44	0.42	0.40	0.41	0.41	0.46	0.49	0.31	0.43	0.41	0.43
MMR	0.09	0.10	0.14	0.14	0.11	0.13	0.16	0.23	0.16	0.21	0.22	0.60	0.81	0.88	0.89	0.91	1.14	1.09	1.01	0.76	0.23	0.24	0.27	0.28	0.18	0.19	0.19	0.19
MNG	0.08	0.09	0.09	0.09	0.09	0.10	0.11	0.11	0.10	0.14	0.15	0.17	0.19	0.19	0.18	0.19	0.19	0.22	0.25	0.26	0.28	0.27	0.31	0.30	0.19	0.22	0.21	0.21
MOZ	0.06	0.06	0.06	0.06	0.07	0.07	0.06	0.06	0.06	0.08	0.08	0.09	0.10	0.09	0.09	0.09	0.09	0.10	0.10	0.18	0.12	0.13	0.12	0.15	0.08	0.09	0.09	0.08
MUS	0.08	0.09	0.10	0.10	0.10	0.11	0.13	0.13	0.13	0.16	0.17	0.17	0.18	0.17	0.15	0.13	0.15	0.18	0.18	0.17	0.20	0.21	0.22	0.24	0.16	0.16	0.16	0.15
MWI	0.06	0.07	0.06	0.07	0.07	0.07	0.09	0.08	0.08	0.09	0.10	0.11	0.12	0.11	0.10	0.11	0.12	0.13	0.13	0.13	0.14	0.14	0.15	0.15	0.10	0.11	0.11	0.09
MYS	0.25	0.29	0.32	0.35	0.39	0.50	0.56	0.57	0.57	0.71	0.74	0.74	0.74	0.71	0.71	0.76	0.86	0.91	0.89	0.97	0.94	1.03	1.22	1.08	0.85	0.79	0.79	0.90
NER	0.06	0.07	0.07	0.07	0.07	0.08	0.09	0.08	0.08	0.10	0.10	0.11	0.12	0.11	0.10	0.10	0.10	0.12	0.12	0.12	0.13	0.14	0.16	0.17	0.13	0.14	0.10	0.10
NGA	0.08	0.09	0.09	0.09	0.10	0.11	0.11	0.07	0.07	0.09	0.09	0.11	0.11	0.11	0.10	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.14	0.14	0.11	0.11	0.10	0.10
NIC	0.09	0.09	0.09	0.09	0.08	0.09	0.10	0.09	0.09	0.10	0.11	0.12	0.12	0.15	0.13	0.13	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.15	0.11	0.11	0.10	0.10
NLD	0.85	0.96	1.15	1.14	1.10	1.26	1.32	1.13	1.04	1.32	1.34	1.47	1.44	1.27	1.17	1.16	1.42	1.30	1.16	1.07	1.21	1.16	1.09	1.07	0.89	0.95	0.82	0.77
NOR	0.23	0.30	0.33	0.32	0.30	0.32	0.38	0.32	0.31	0.42	0.45	0.49	0.50	0.47	0.46	0.46	0.50	0.51	0.53	0.52	0.52	0.50	0.50	0.50	0.39	0.41	0.38	0.37
NPL	0.10	0.12	0.12	0.11	0.11	0.13	0.14	0.14	0.14	0.19	0.19	0.23	0.25	0.25	0.21	0.18	0.25	0.30	0.33	0.35	0.38	0.38	0.45	0.45	0.31	0.34	0.36	0.34
NZL	0.13	0.14	0.15	0.14	0.13	0.14	0.15	0.14	0.13	0.16	0.19	0.22	0.25	0.23	0.23	0.22	0.24	0.24	0.23	0.27	0.28	0.30	0.31	0.31	0.25	0.25	0.24	0.24
OMN	0.14	0.15	0.16	0.15	0.16	0.17	0.21	0.19	0.18	0.22	0.23	0.27	0.28	0.26	0.23	0.24	0.28	0.31	0.34	0.37	0.35	0.33	0.40	0.40	0.29	0.29	0.27	0.29
PAK	0.20	0.23	0.23	0.23	0.23	0.25	0.26	0.23	0.23	0.29	0.31	0.40	0.43	0.42	0.41	0.43	0.47	0.48	0.48	0.54	0.58	0.59	0.65	0.66	0.50	0.50	0.46	0.46
PAN	0.14	0.15	0.15	0.13	0.14	0.14	0.17	0.16	0.15	0.17	0.21	0.20	0.19	0.17	0.16	0.16	0.23	0.24	0.25	0.21	0.26	0.25	0.29	0.26	0.20	0.19	0.16	0.13
PER	0.15	0.17	0.17	0.19	0.19	0.20	0.21	0.21	0.21	0.26	0.27	0.30	0.31	0.29	0.29	0.30	0.34	0.37	0.37	0.41	0.36	0.36	0.37	0.37	0.29	0.30	0.29	0.25
PHL	0.23	0.26	0.26	0.25	0.25	0.29	0.34	0.32	0.26	0.34	0.42	0.46	0.54	0.47	0.46	0.46	0.51	0.55	0.54	0.63	0.64	0.60	0.64	0.65	0.39	0.40	0.39	0.36
PNG	0.05	0.06	0.06	0.06	0.05	0.06	0.07	0.07	0.06	0.07	0.08	0.09	0.09	0.10	0.09	0.09	0.09	0.11	0.12	0.14	0.12	0.12	0.13	0.13	0.09	0.10	0.09	0.09
POL	0.54	0.63	0.67	0.61	0.60	0.65	0.75	0.69	0.69	0.82	0.95	1.04	1.06	1.03	1.02	0.98	0.98	1.04	1.07	1.10	1.18	1.18	1.22	1.25	1.04	1.08	1.09	1.04
PRT	0.74	0.86	0.96	0.95	0.93	0.95	0.99	0.80	0.73	0.95	1.06	1.17	1.09	0.97	0.94	0.89	1.03	0.99	0.98	0.98	1.06	1.05	1.03	1.01	0.77	0.72	0.67	0.64
PRY	0.08	0.09	0.09	0.09	0.08	0.09	0.10	0.10	0.09	0.11	0.12	0.13	0.14	0.14	0.15	0.15	0.16	0.17	0.18	0.18	0.19	0.19	0.14	0.15	0.10	0.10	0.09	0.09
QAT	0.15	0.19	0.18	0.19	0.27	0.24	0.30	0.25	0.25	0.29	0.35	0.51	0.36	0.46	0.46	0.72	0.73	0.49	0.52	0.50	0.61	0.61	0.68	0.72	0.49	0.52	0.48	0.52
ROU	0.37	0.40	0.42	0.41	0.39	0.43	0.43	0.38	0.36	0.45	0.48	0.54	0.54	0.53	0.52	0.52	0.53	0.54	0.54	0.54	0.56	0.56	0.59	0.59	0.44	0.47	0.45	0.45
RUS	0.37	0.45	0.50	0.44	0.39	0.32	0.36	0.32	0.34	0.41	0.44	0.51	0.58	0.60	0.65	0.63	0.58	0.61	0.63	0.68	0.72	0.67	0.63	0.60	0.50	0.52	0.53	0.52
RWA	0.05	0.06	0.06	0.06	0.06	0.06	0.10	0.10	0.10	0.13	0.14	0.15	0.15	0.14	0.13	0.13	0.14	0.15	0.16	0.16	0.16	0.16	0.18	0.19	0.14	0.15	0.14	0.14
SAU	0.25	0.31	0.36	0.37	0.37	0.41	0.47	0.42	0.40	0.48	0.45	0.46	0.43	0.36	0.36	0.34	0.39	0.43	0.43	0.44	0.44	0.45	0.49	0.52	0.40	0.44	0.42	0.42
SCG	0.13	0.33	0.28	0.33	0.31	0.33	0.39	0.43	0.28	0.36	0.40	0.49	0.50	1.03	0.96	0.98	1.09	1.07	1.07	1.01	1.06	1.06	0.68	0.69	0.84	0.89	0.84	0.84
SEN	0.09	0.09	0.09	0.09	0.10	0.11	0.13	0.12	0.11	0.15	0.16	0.18	0.19	0.18	0.17	0.16	0.20	0.20	0.20	0.20	0.23	0.23	0.24	0.21	0.16	0.17	0.17	0.19
SGP	0.11	0.13	0.15	0.16	0.18	0.19	0.23	0.19	0.20	0.28	0.29	0.33	0.34	0.32	0.31	0.42	0.39	0.45	0.49	0.57	0.63	0.87	0.92	0.90	0.63	1.17	1.30	1.51
SLE	0.06	0.07	0.07	0.09	0.07	0.07	0.08	0.08	0.07	0.09	0.10	0.11	0.11	0.11	0.10	0.09	0.09	0.11	0.15	0.12	0.12	0.12	0.13	0.12	0.09	0.09	0.09	0.09
SLV	0.08	0.12	0.12	0.13	0.12	0.13	0.14	0.13	0.12	0.13	0.14	0.21	0.19	0.23	0.20	0.22	0.22	0.20	0.21	0.26	0.29	0.30	0.33	0.32	0.25	0.20	0.18	0.20
SOM	0.06	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.07	0.09	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.11	0.12	0.13	0.13	0.14	0.14	0.14	0.10	0.10	0.10	0.10
SUR	0.18	0.17	0.19	0.21	0.20	0.20	0.22	0.22	0.21	0.23	0.24	0.31	0.29	0.29	0.28	0.27	0.22	0.24	0.24	0.23	0.23	0.21	0.19	0.11	0.08	0.08	0.08	0.07
SVK	0.43	0.45	0.47	0.46	0.44	0.47	0.49	0.44	0.42	0.58	0.65	0.72	0.73	0.64	0.66	0.67	0.72	0.73	0.73	0.66	0.68	0.66	0.69	0.72	0.55	0.59	0.56	0.56
SVN	0.40	0.47	0.59	0.57	0.53	0.59	0.62	0.50	0.46	0.59	0.66	0.71	0.68	0.64	0.58	0.57	0.61	0.65	0.65	0.64	0.68	0.66	0.68	0.69	0.52	0.55	0.50	0.48
SWE	0.31	0.35	0.43	0.43	0.45	0.46	0.49	0.43	0.41	0.54	0.56	0.62	0.62	0.58	0.54	0.53	0.55	0.62	0.64	0.64	0.67	0.63	0.63	0.66	0.52	0.48	0.47	0.47
SYR	0.29	0.36	0.42	0.43	0.47	0.51	0.60	0.53	0.47	0.55	0.61	0.69	0.75	0.22	0.20	0.22	0.24	0.25	0.25	0.25	0.24	0.23	0.25	0.25	0.17	0.18	0.17	0.17
THA	0.55	0.50	0.47	0.61	0.62	0.71	1.02	0.85	0.80	1.09	1.02	1.01	1.10	1.06	1.01	0.92	1.05	1.18	0.99	1.09	1.12	1.09	1.17	1.15	0.87	0.89	0.96	0.88
TJK	0.08	0.09	0.10	0.10	0.10	0.11	0.12	0.11	0.11	0.14	0.15	0.17	0.18	0.18	0.17	0.17	0.18	0.21	0.21	0.21	0.23	0.26	0.29	0.29	0.21	0.22	0.22	0.20
TKM	0.06	0.08	0.09	0.11	0.12	0.13	0.13	0.13	0.12	0.14	0.15	0.17	0.18	0.16	0.14	0.15	0.14	0.17	0.18	0.18	0.19	0.19	0.21	0.44	0.32	0.32	0.30	0.32
TON	0.04	0.04	0.04	0.04	0.05	0.05	0.06	0.05	0.06	0.07	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.07	0.07	0.07	0.07
TTO	0.27	0.72	0.92	0.75	0.71	0.37	0.50	0.48	0.50	0.61	1.49	1.98	2.23	1.64	1.55	2.19	1.75	2.56	2.71	2.65	2.55	2.12	2.10	1.11	0.89	1.24	0.69	0.60
TUN	0.32	0.36	0.39	0.38	0.35	0.40	0.45	0.38	0.36	0.46	0.45	0.49	0.48	0.43	0.41	0.38	0.46	0.45	0.44	0.44	0.46	0.47	0.49	0.49	0.35	0.37	0.35	0.34
TUR	0.55	0.56	0.58	0.55	0.58	0.62	0.70	0.63	0.57	0.80	0.89	1.02	1.08	0.97	0.93	0.93	1.06	1.09	1.05	1.12	1.17	1.12	1.17	1.20	0.94	0.93	0.91	0.93

Table C.5: Continued on next page

Table C.5: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
TZA	0.08	0.08	0.09	0.09	0.10	0.11	0.12	0.11	0.11	0.13	0.13	0.13	0.15	0.13	0.12	0.13	0.15	0.15	0.14	0.15	0.18	0.18	0.21	0.22	0.17	0.17	0.17	0.18
UGA	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.07	0.07	0.09	0.10	0.11	0.13	0.13	0.15	0.18	0.15	0.17	0.18	0.20	0.25	0.22	0.22	0.21	0.14	0.16	0.14	0.14
UKR	0.40	0.43	0.43	0.39	0.37	0.37	0.37	0.33	0.34	0.40	0.45	0.51	0.55	0.55	0.55	0.55	0.48	0.51	0.54	0.59	0.62	0.56	0.57	0.52	0.41	0.45	0.45	0.49
URY	0.16	0.17	0.15	0.15	0.14	0.14	0.15	0.13	0.12	0.13	0.15	0.17	0.18	0.18	0.17	0.18	0.20	0.20	0.22	0.23	0.23	0.22	0.25	0.24	0.18	0.18	0.17	0.16
USA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
UZB	0.06	0.07	0.09	0.11	0.12	0.11	0.11	0.12	0.10	0.12	0.14	0.18	0.21	0.22	0.28	0.25	0.22	0.34	0.23	0.25	0.44	0.43	0.46	0.48	0.29	0.29	0.27	0.28
VEN	0.24	0.28	0.33	0.33	0.31	0.33	0.50	0.33	0.33	0.37	0.38	0.45	0.46	0.41	0.32	0.29	0.24	0.29	0.27	0.24	0.24	0.28	0.24	0.19	0.16	0.13	0.09	0.09
VNM	0.14	0.17	0.21	0.22	0.19	0.24	0.30	0.34	0.39	0.52	0.57	0.61	0.67	0.69	0.65	0.67	0.89	0.93	0.95	1.10	1.17	1.20	0.95	1.36	0.99	1.13	1.14	1.20
YEM	0.13	0.17	0.13	0.11	0.12	0.14	0.16	0.15	0.13	0.16	0.19	0.21	0.22	0.20	0.21	0.18	0.25	0.22	0.21	0.22	0.24	0.24	0.16	0.16	0.11	0.12	0.11	0.11
ZAF	0.23	0.25	0.25	0.22	0.23	0.13	0.25	0.22	0.21	0.27	0.32	0.38	0.38	0.33	0.30	0.29	0.33	0.36	0.37	0.37	0.37	0.35	0.35	0.35	0.29	0.29	0.28	0.26
ZMB	0.07	0.07	0.08	0.09	0.13	0.17	0.13	0.11	0.10	0.12	0.13	0.11	0.14	0.14	0.12	0.13	0.15	0.23	0.23	0.16	0.31	0.13	0.24	0.23	0.19	0.23	0.24	0.26
ZWE	0.09	0.10	0.10	0.10	0.08	0.08	0.11	0.11	0.11	0.16	0.16	0.15	0.17	0.17	0.14	0.14	0.15	0.13	0.14	0.15	0.16	0.13	0.14	0.14	0.10	0.11	0.10	0.11

Table C.6: IMR in the other sector by country and year (BLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	0.23	0.26	0.25	0.26	0.24	0.26	0.27	0.28	0.30	0.31	0.33	0.37	0.39	0.40	0.41	0.42	0.31	0.34	0.32	0.36	0.37	0.40	0.40	0.39	0.36	0.38	0.37	0.38
AGO	0.20	0.21	0.21	0.23	0.21	0.22	0.25	0.26	0.25	0.25	0.25	0.26	0.31	0.30	0.31	0.34	0.25	0.26	0.30	0.32	0.30	0.33	0.34	0.34	0.37	0.36	0.33	0.34
ALB	0.23	0.26	0.26	0.29	0.25	0.27	0.28	0.28	0.29	0.30	0.34	0.40	0.40	0.42	0.44	0.45	0.34	0.38	0.42	0.40	0.40	0.45	0.42	0.43	0.43	0.45	0.44	0.44
ARE	0.26	0.27	0.27	0.29	0.27	0.30	0.35	0.35	0.38	0.43	0.51	0.64	0.77	0.61	0.66	0.75	0.60	0.89	0.78	0.88	0.82	0.81	0.85	0.85	0.90	0.94	0.92	0.86
ARG	0.28	0.26	0.24	0.23	0.22	0.23	0.23	0.22	0.22	0.20	0.26	0.32	0.32	0.33	0.35	0.37	0.28	0.31	0.32	0.34	0.34	0.34	0.35	0.33	0.33	0.31	0.29	0.31
ARM	0.21	0.25	0.24	0.26	0.23	0.24	0.26	0.27	0.26	0.30	0.35	0.39	0.40	0.39	0.40	0.40	0.29	0.35	0.35	0.35	0.36	0.39	0.38	0.38	0.36	0.38	0.37	0.38
AUS	0.29	0.31	0.31	0.33	0.29	0.29	0.31	0.29	0.29	0.36	0.38	0.42	0.43	0.43	0.40	0.41	0.30	0.34	0.37	0.36	0.35	0.35	0.33	0.34	0.33	0.33	0.32	0.35
AUT	0.71	0.79	0.78	0.78	0.64	0.68	0.68	0.61	0.64	0.68	0.73	0.83	0.82	0.82	0.88	0.91	0.73	0.76	0.87	0.77	0.78	0.80	0.75	0.74	0.76	0.78	0.73	0.85
AZE	0.21	0.23	0.23	0.24	0.22	0.23	0.24	0.25	0.26	0.27	0.30	0.35	0.37	0.38	0.39	0.40	0.29	0.35	0.34	0.35	0.36	0.39	0.38	0.37	0.36	0.37	0.36	0.37
BDI	0.18	0.19	0.19	0.20	0.18	0.18	0.19	0.20	0.20	0.21	0.23	0.26	0.27	0.28	0.29	0.30	0.21	0.25	0.26	0.26	0.26	0.29	0.28	0.28	0.26	0.27	0.26	0.26
BEL	0.73	1.09	1.23	1.33	1.09	1.15	1.25	1.15	1.11	1.18	1.28	1.47	1.44	1.38	1.39	1.49	1.18	1.31	1.63	1.41	1.42	1.52	1.40	1.39	1.49	1.50	1.47	1.58
BEN	0.19	0.20	0.21	0.22	0.19	0.19	0.20	0.21	0.21	0.23	0.24	0.28	0.30	0.30	0.32	0.33	0.24	0.30	0.28	0.29	0.30	0.31	0.31	0.31	0.30	0.31	0.29	0.30
BFA	0.19	0.21	0.21	0.22	0.20	0.20	0.21	0.22	0.22	0.23	0.25	0.29	0.31	0.31	0.32	0.34	0.24	0.31	0.28	0.29	0.31	0.32	0.32	0.32	0.30	0.31	0.30	0.30
BGD	0.23	0.27	0.27	0.28	0.25	0.26	0.28	0.30	0.32	0.35	0.39	0.46	0.53	0.51	0.52	0.56	0.49	0.58	0.51	0.52	0.57	0.60	0.58	0.60	0.59	0.61	0.60	0.61
BGR	0.31	0.32	0.29	0.31	0.27	0.29	0.29	0.29	0.31	0.33	0.37	0.43	0.45	0.46	0.48	0.50	0.37	0.41	0.44	0.43	0.44	0.48	0.46	0.46	0.45	0.48	0.47	0.48
BHR	0.32	0.37	0.37	0.39	0.35	0.39	0.41	0.28	0.29	0.32	0.36	0.44	0.51	0.47	0.49	0.54	0.42	0.61	0.47	0.53	0.55	0.55	0.56	0.55	0.57	0.54	0.51	0.45
BHS	0.20	0.22	0.22	0.23	0.21	0.25	0.23	0.24	0.24	0.26	0.28	0.33	0.36	0.36	0.37	0.40	0.29	0.38	0.38	0.35	0.36	0.36	0.37	0.37	0.34	0.34	0.32	0.31
BIH	0.24	0.28	0.28	0.31	0.27	0.29	0.30	0.30	0.31	0.33	0.37	0.43	0.43	0.44	0.46	0.47	0.34	0.40	0.44	0.41	0.44	0.49	0.44	0.44	0.43	0.45	0.43	0.45
BLR	0.25	0.30	0.30	0.31	0.28	0.34	0.34	0.33	0.35	0.37	0.42	0.48	0.50	0.52	0.54	0.55	0.42	0.49	0.47	0.48	0.50	0.53	0.51	0.49	0.48	0.51	0.50	0.52
BLZ	0.20	0.20	0.21	0.21	0.19	0.20	0.21	0.22	0.22	0.24	0.27	0.31	0.35	0.34	0.36	0.43	0.31	0.37	0.37	0.34	0.35	0.35	0.37	0.38	0.34	0.33	0.32	0.31
BMU	0.35	0.22	0.25	0.23	0.21	0.22	0.24	0.25	0.25	0.27	0.29	0.35	0.38	0.38	0.39	0.43	0.31	0.41	0.42	0.37	0.38	0.38	0.39	0.40	0.37	0.37	0.35	0.34
BOL	0.19	0.21	0.19	0.19	0.17	0.17	0.18	0.19	0.19	0.20	0.21	0.24	0.24	0.25	0.26	0.27	0.19	0.22	0.22	0.23	0.25	0.26	0.26	0.25	0.24	0.24	0.23	0.24
BRA	0.50	0.48	0.45	0.44	0.38	0.40	0.36	0.38	0.37	0.36	0.38	0.42	0.44	0.46	0.49	0.54	0.44	0.49	0.49	0.50	0.50	0.50	0.45	0.45	0.48	0.46	0.45	0.46
BRB	0.19	0.20	0.20	0.21	0.19	0.19	0.20	0.22	0.22	0.24	0.26	0.30	0.34	0.33	0.35	0.39	0.29	0.37	0.34	0.33	0.34	0.34	0.35	0.35	0.33	0.33	0.31	0.30
BRN	0.30	0.34	0.25	0.29	0.30	0.29	0.26	0.26	0.27	0.30	0.33	0.40	0.45	0.44	0.45	0.49	0.39	0.78	0.93	0.77	0.45	0.47	0.47	0.48	0.44	0.46	0.44	0.43
BTN	0.25	0.28	0.27	0.27	0.26	0.28	0.29	0.30	0.32	0.34	0.36	0.39	0.42	0.44	0.44	0.45	0.33	0.37	0.45	0.39	0.40	0.44	0.44	0.43	0.39	0.41	0.41	0.42
CAF	0.21	0.22	0.22	0.24	0.21	0.22	0.23	0.23	0.23	0.24	0.25	0.29	0.31	0.31	0.32	0.34	0.24	0.30	0.28	0.29	0.30	0.31	0.31	0.32	0.30	0.31	0.30	0.30
CAN	0.48	0.50	0.50	0.52	0.48	0.49	0.50	0.53	0.52	0.52	0.54	0.58	0.59	0.60	0.61	0.63	0.49	0.54	0.57	0.54	0.54	0.55	0.54	0.54	0.52	0.53	0.52	0.53
CHE	0.82	0.89	0.94	1.17	0.97	0.99	1.07	0.94	0.80	0.84	0.91	1.01	0.98	0.95	0.97	1.03	0.74	0.79	0.93	0.82	0.82	0.87	0.82	0.83	0.83	0.84	0.83	1.03
CHL	0.19	0.20	0.23	0.22	0.20	0.20	0.20	0.20	0.20	0.21	0.22	0.25	0.26	0.26	0.28	0.28	0.21	0.23	0.23	0.24	0.28	0.25	0.25	0.25	0.24	0.24	0.23	0.25
CHN	1.45	1.64	1.70	1.70	1.71	1.95	2.10	2.04	2.27	2.45	2.52	2.63	2.85	2.84	3.02	3.28	3.09	2.87	2.90	2.96	2.98	2.79	3.22	3.28	3.49	3.22	3.28	3.78
CIV	0.24	0.24	0.26	0.29	0.23	0.21	0.23	0.23	0.23	0.25	0.25	0.28	0.29	0.30	0.31	0.33	0.24	0.30	0.27	0.28	0.29	0.31	0.31	0.31	0.29	0.30	0.29	0.29
CMR	0.21	0.22	0.22	0.24	0.20	0.20	0.22	0.23	0.22	0.24	0.26	0.30	0.32	0.32	0.34	0.36	0.25	0.32	0.34	0.31	0.31	0.33	0.33	0.33	0.32	0.32	0.31	0.32
COG	0.26	0.26	0.29	0.32	0.25	0.20	0.21	0.22	0.21	0.22	0.24	0.28	0.29	0.30	0.31	0.33	0.24	0.29	0.27	0.28	0.29	0.30	0.31	0.31	0.30	0.30	0.29	0.29
COL	0.22	0.24	0.23	0.23	0.20	0.20	0.20	0.23	0.24	0.25	0.26	0.29	0.30	0.30	0.32	0.33	0.25	0.28	0.29	0.29	0.32	0.33	0.31	0.32	0.30	0.31	0.30	0.30
CPV	0.18	0.19	0.19	0.20	0.18	0.18	0.19	0.20	0.20	0.21	0.23	0.26	0.27	0.28	0.29	0.30	0.21	0.25	0.26	0.26	0.27	0.29	0.28	0.28	0.26	0.27	0.26	0.26
CRI	0.19	0.20	0.20	0.20	0.18	0.18	0.19	0.19	0.20	0.25	0.29	0.34	0.35	0.36	0.37	0.38	0.31	0.34	0.36	0.36	0.36	0.39	0.40	0.42	0.44	0.46	0.47	0.49

Table C.6: Continued on next page

Table C.6: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
CUB	0.20	0.22	0.21	0.22	0.20	0.21	0.21	0.22	0.23	0.24	0.25	0.28	0.29	0.30	0.30	0.31	0.22	0.26	0.25	0.27	0.28	0.30	0.29	0.29	0.26	0.27	0.26	0.26
CYP	0.25	0.29	0.29	0.31	0.27	0.29	0.31	0.31	0.32	0.35	0.40	0.48	0.54	0.51	0.52	0.56	0.43	0.57	0.46	0.48	0.52	0.51	0.50	0.52	0.49	0.50	0.48	0.43
CZE	0.44	0.51	0.51	0.54	0.47	0.50	0.51	0.49	0.52	0.55	0.62	0.70	0.70	0.71	0.74	0.75	0.57	0.62	0.65	0.63	0.64	0.68	0.64	0.65	0.65	0.68	0.66	0.71
DEU	1.28	1.38	1.42	1.41	1.14	1.16	1.28	1.09	1.11	1.15	1.27	1.41	1.36	1.34	1.41	1.45	1.28	1.31	1.49	1.34	1.35	1.37	1.29	1.32	1.42	1.49	1.41	1.61
DNK	0.57	0.66	0.71	0.72	0.59	0.63	0.63	0.58	0.62	0.62	0.68	0.77	0.76	0.75	0.77	0.77	0.64	0.69	0.76	0.71	0.72	0.78	0.74	0.75	0.76	0.78	0.77	0.85
DOM	0.24	0.27	0.27	0.27	0.24	0.26	0.26	0.26	0.28	0.28	0.29	0.33	0.33	0.34	0.36	0.38	0.29	0.33	0.35	0.33	0.34	0.36	0.37	0.37	0.35	0.35	0.35	0.35
DZA	0.24	0.26	0.27	0.29	0.26	0.27	0.28	0.28	0.29	0.31	0.34	0.40	0.41	0.42	0.43	0.45	0.32	0.40	0.40	0.38	0.39	0.41	0.40	0.41	0.39	0.41	0.39	0.40
ECU	0.17	0.18	0.18	0.19	0.17	0.17	0.18	0.19	0.20	0.21	0.22	0.25	0.26	0.26	0.28	0.28	0.20	0.24	0.24	0.25	0.26	0.28	0.27	0.27	0.25	0.26	0.25	0.25
EGY	0.23	0.26	0.25	0.27	0.24	0.26	0.27	0.28	0.28	0.29	0.32	0.36	0.37	0.38	0.39	0.40	0.29	0.34	0.37	0.36	0.37	0.40	0.39	0.38	0.39	0.50	0.52	0.51
ESP	0.64	0.70	0.73	0.75	0.63	0.69	0.70	0.64	0.68	0.69	0.76	0.85	0.83	0.81	0.81	0.81	0.59	0.61	0.63	0.59	0.58	0.61	0.57	0.58	0.60	0.62	0.61	0.65
EST	0.25	0.28	0.29	0.31	0.28	0.30	0.31	0.30	0.32	0.34	0.39	0.46	0.47	0.48	0.49	0.51	0.37	0.44	0.45	0.44	0.45	0.48	0.46	0.46	0.46	0.47	0.46	0.48
ETH	0.20	0.21	0.21	0.22	0.20	0.20	0.21	0.22	0.22	0.24	0.25	0.29	0.30	0.31	0.33	0.34	0.23	0.28	0.33	0.30	0.30	0.33	0.32	0.32	0.30	0.31	0.30	0.30
FIN	0.35	0.39	0.41	0.41	0.36	0.39	0.40	0.38	0.39	0.41	0.45	0.51	0.51	0.52	0.53	0.55	0.41	0.45	0.48	0.46	0.46	0.49	0.46	0.46	0.45	0.47	0.46	0.48
FJI	0.17	0.18	0.18	0.18	0.17	0.17	0.19	0.20	0.20	0.22	0.24	0.28	0.32	0.31	0.33	0.36	0.26	0.34	0.31	0.30	0.32	0.31	0.32	0.33	0.31	0.31	0.29	0.28
FRA	0.82	0.91	0.92	1.01	0.84	0.89	0.90	0.80	0.84	0.86	0.93	1.02	0.99	0.97	0.97	0.94	0.75	0.79	0.82	0.80	0.82	0.90	0.83	0.83	0.87	0.87	0.86	0.92
GAB	0.19	0.20	0.20	0.22	0.19	0.19	0.20	0.21	0.21	0.22	0.24	0.28	0.29	0.30	0.31	0.33	0.23	0.29	0.27	0.28	0.29	0.30	0.30	0.31	0.29	0.30	0.29	0.29
GBR	0.96	1.07	1.04	0.93	0.83	0.87	0.88	0.78	0.88	0.83	0.88	0.99	0.95	0.90	0.94	0.88	0.70	0.76	0.86	0.79	0.79	0.83	0.81	0.79	0.79	0.80	0.80	0.88
GEO	0.21	0.24	0.24	0.25	0.23	0.23	0.24	0.25	0.26	0.27	0.30	0.35	0.35	0.37	0.38	0.39	0.28	0.33	0.34	0.34	0.35	0.38	0.37	0.36	0.34	0.36	0.35	0.36
GHA	0.25	0.28	0.27	0.27	0.23	0.23	0.26	0.25	0.24	0.26	0.28	0.34	0.39	0.38	0.40	0.44	0.39	0.48	0.47	0.45	0.47	0.45	0.45	0.39	0.36	0.37	0.34	0.33
GMB	0.23	0.24	0.27	0.28	0.24	0.24	0.24	0.24	0.23	0.25	0.28	0.33	0.37	0.36	0.38	0.42	0.31	0.41	0.36	0.36	0.38	0.37	0.38	0.38	0.36	0.36	0.34	0.32
GRC	0.28	0.30	0.30	0.31	0.27	0.29	0.31	0.32	0.35	0.38	0.42	0.48	0.48	0.49	0.50	0.52	0.39	0.43	0.44	0.41	0.41	0.44	0.42	0.42	0.40	0.42	0.41	0.42
GTM	0.18	0.19	0.19	0.20	0.18	0.18	0.20	0.20	0.21	0.22	0.23	0.26	0.26	0.27	0.28	0.29	0.21	0.24	0.25	0.25	0.26	0.28	0.28	0.28	0.25	0.26	0.25	0.26
HKG	0.49	0.50	0.50	0.52	0.50	0.56	0.61	0.59	0.62	0.71	0.72	1.12	0.95	0.98	1.01	1.20	0.86	1.06	1.18	0.97	1.02	1.05	1.14	1.14	1.16	1.03	1.00	1.07
HND	0.17	0.19	0.18	0.19	0.17	0.18	0.19	0.19	0.20	0.21	0.22	0.25	0.26	0.27	0.28	0.29	0.20	0.24	0.26	0.25	0.26	0.27	0.27	0.28	0.25	0.26	0.25	0.25
HRV	0.31	0.36	0.35	0.38	0.32	0.35	0.35	0.34	0.36	0.37	0.42	0.49	0.49	0.50	0.52	0.54	0.39	0.45	0.49	0.45	0.46	0.50	0.47	0.47	0.46	0.48	0.47	0.48
HTI	0.18	0.20	0.19	0.20	0.18	0.18	0.19	0.20	0.20	0.21	0.22	0.26	0.26	0.27	0.28	0.29	0.20	0.25	0.25	0.25	0.26	0.28	0.27	0.27	0.25	0.26	0.25	0.25
HUN	0.33	0.37	0.36	0.39	0.35	0.38	0.39	0.38	0.41	0.43	0.47	0.53	0.53	0.55	0.63	0.70	0.44	0.55	0.66	0.60	0.61	0.66	0.62	0.63	0.54	0.55	0.52	0.56
IDN	0.56	0.67	0.62	0.63	0.56	0.49	0.49	0.45	0.49	0.51	0.53	0.55	0.56	0.55	0.56	0.56	0.49	0.49	0.53	0.64	0.50	0.53	0.55	0.55	0.57	0.58	0.60	0.65
IND	0.65	0.72	0.68	0.64	0.58	0.64	0.65	0.64	0.70	0.72	0.74	0.78	0.82	0.81	0.86	0.89	0.92	0.80	0.83	0.86	0.88	0.97	0.91	0.92	0.94	0.95	0.96	1.02
IRL	0.66	0.73	0.71	0.73	0.64	0.69	0.71	0.68	0.75	0.75	0.80	0.87	0.85	0.83	0.83	0.84	0.73	0.78	0.92	0.83	0.82	0.85	0.76	0.75	0.74	0.76	0.73	0.78
IRN	0.21	0.25	0.25	0.26	0.25	0.26	0.27	0.27	0.29	0.28	0.31	0.35	0.36	0.36	0.38	0.39	0.29	0.33	0.36	0.35	0.35	0.38	0.38	0.39	0.38	0.40	0.41	0.49
IRQ	0.24	0.34	0.48	0.52	0.57	0.58	0.56	0.50	0.50	0.47	0.45	0.45	0.40	0.35	0.37	0.38	0.27	0.32	0.36	0.36	0.36	0.38	0.37	0.37	0.35	0.37	0.36	0.36
ISL	0.23	0.25	0.25	0.27	0.25	0.22	0.23	0.23	0.24	0.25	0.28	0.32	0.33	0.34	0.35	0.36	0.26	0.31	0.32	0.32	0.32	0.35	0.34	0.34	0.33	0.34	0.33	0.34
ISR	0.78	0.90	0.88	0.92	0.81	0.96	1.01	1.04	1.06	1.10	1.15	1.29	1.33	1.28	1.30	1.34	0.98	1.08	1.29	1.09	1.10	1.18	1.12	1.07	1.12	1.11	1.08	0.72
ITA	1.40	1.58	1.77	1.87	1.52	1.62	1.52	1.33	1.40	1.47	1.52	1.64	1.55	1.51	1.55	1.57	1.31	1.25	1.37	1.23	1.25	1.28	1.21	1.23	1.39	1.38	1.39	1.49
JAM	0.20	0.21	0.21	0.23	0.20	0.19	0.21	0.22	0.22	0.24	0.26	0.31	0.34	0.34	0.35	0.39	0.28	0.37	0.35	0.33	0.35	0.34	0.35	0.36	0.33	0.33	0.31	0.30
JOR	0.26	0.31	0.32	0.34	0.31	0.34	0.37	0.40	0.41	0.45	0.51	0.63	0.76	0.68	0.67	0.74	0.54	0.77	0.48	0.61	0.66	0.63	0.63	0.64	0.62	0.64	0.60	0.48
JPN	2.05	2.16	2.06	1.91	1.69	1.78	1.79	1.64	1.63	1.53	1.57	1.71	1.68	1.58	1.54	1.77	1.46	1.63	1.87	1.57	1.36	1.34	1.34	1.44	1.47	1.45	1.49	1.69
KAZ	0.25	0.27	0.27	0.27	0.25	0.27	0.28	0.29	0.31	0.33	0.35	0.39	0.42	0.44	0.45	0.47	0.33	0.38	0.33	0.39	0.40	0.43	0.43	0.42	0.39	0.41	0.40	0.41
KEN	0.20	0.22	0.22	0.23	0.21	0.22	0.23	0.24	0.24	0.27	0.30	0.35	0.40	0.40	0.41	0.46	0.35	0.46	0.40	0.40	0.43	0.42	0.43	0.43	0.41	0.41	0.39	0.38
KGZ	0.23	0.26	0.26	0.26	0.24	0.26	0.27	0.28	0.30	0.32	0.34	0.39	0.42	0.43	0.44	0.46	0.33	0.38	0.33	0.38	0.40	0.42	0.42	0.42	0.39	0.40	0.39	0.40
KHM	0.21	0.24	0.24	0.26	0.25	0.27	0.30	0.32	0.35	0.38	0.43	0.52	0.60	0.58	0.59	0.66	0.57	0.73	0.51	0.59	0.64	0.64	0.70	0.76	0.80	0.86	0.94	1.00
KOR	1.00	0.96	0.86	0.83	0.70	0.77	0.81	0.75	0.78	0.79	0.83	0.94	0.97	0.98	0.96	1.03	0.94	0.97	1.02	0.90	0.94	1.13	1.00	1.03	1.15	1.11	1.10	1.25
KWT	0.24	0.27	0.29	0.30	0.28	0.28	0.30	0.30	0.31	0.34	0.38	0.45	0.51	0.47	0.49	0.54	0.41	0.58	0.47	0.50	0.52	0.51	0.52	0.53	0.51	0.53	0.51	0.46
LAO	0.26	0.29	0.29	0.30	0.29	0.31	0.33	0.35	0.38	0.40	0.44	0.50	0.56	0.56	0.57	0.61	0.48	0.58	0.40	0.51	0.55	0.57	0.59	0.60	0.58	0.62	0.63	0.65
LBN	0.28	0.31	0.30	0.34	0.32	0.33	0.35	0.34	0.36	0.37	0.40	0.45	0.45	0.46	0.47	0.49	0.36	0.41	0.46	0.43	0.43	0.47	0.46	0.45	0.46	0.49	0.47	0.47
LBR	0.28	0.30	0.37	0.33	0.25	0.25	0.26	0.22	0.21	0.22	0.23	0.27	0.28	0.29	0.30	0.31	0.21	0.26	0.30	0.27	0.27	0.29	0.29	0.28	0.26	0.27	0.26	0.27
LBY	0.22	0.25	0.25	0.26	0.23	0.25	0.26	0.26	0.26	0.28	0.30	0.35	0.36	0.37	0.38	0.39	0.27	0.33	0.35	0.33	0.34	0.37	0.35	0.35	0.33	0.35	0.34	0.34
LCA	0.19	0.20	0.20	0.21	0.19	0.19	0.20	0.22	0.22	0.24	0.26	0.30	0.34	0.34	0.35	0.39	0.28	0.37	0.34	0.33	0.34	0.34	0.35	0.35	0.33	0.33	0.31	0.30
LKA	0.23	0.26	0.26	0.27	0.24	0.24	0.26	0.27	0.29	0.32	0.35	0.41	0.45	0.43	0.44	0.46	0.38	0.48	0.47	0.45	0.45	0.46	0.45	0.47	0.45	0.45	0.43	0.42
LTU	0.26	0.29	0.30	0.32	0.28	0.30	0.31	0.32	0.33	0.36	0.42	0.49	0.51	0.53	0.55	0.58	0.43	0.50	0.51	0.51	0.53	0.57	0.54	0.54	0.55	0.56	0.57	0.62
LVA	0.25	0.28	0.29	0.30	0.27	0.29	0.31	0.31	0.32	0.34	0.39	0.46	0.48	0.49	0.50	0.51	0.37	0.46	0.42	0.44	0.46	0.49	0.46	0.46	0.45	0.47	0.45	0.47
MAC	0.41	0.47	0.43	0.42	0.40	0.46	0.48	0.48	0.52	0.64	0.76	0.95	0.69	0.72	0.83	0.79	0.55	0.61	0.72	0.65	0.64	0.68	0.71	0.72	0.69	0.66	0.64	0.69
MAR	0.24	0.26	0.27	0.30	0.26	0.27	0.27	0.27	0.28	0.30	0.32	0.38	0.39	0.40	0.40	0.42	0.31	0.37	0.37	0.36	0.37	0.39	0.38	0.38	0.37	0.39	0.38	0.40
MDA	0.24	0.27	0.27	0.30	0.25	0.27	0.28	0.28	0.29	0.31	0.35	0.41	0.43	0.44	0.46	0.49	0.34	0.41	0.41	0.41	0.42	0.45	0.43	0.43	0.41	0.43	0.42	0.42
MDG	0.17	0.18	0.18	0.19	0.17	0.17	0.19	0.20	0.20	0.21	0.23	0.26	0.28	0.29	0.30	0.31	0.23	0.28	0.26	0.27	0.28	0.29	0.29	0.30	0.29	0.30	0.30	0.29
MDV	0.18	0.20	0.20	0.21	0.19	0.20	0.22	0.23	0.24	0.27	0.30	0.36	0.40	0.38	0.39	0.42	0.34	0.44	0.37	0.38	0.56	0.59	0.59	0.42	0.39	0.40	0.39	0.36
MEX	0.27	0.28	0.30	0.31	0.29	0.31	0.32	0.33	0.35	0.37	0.39	0.41	0.40	0.40	0.40	0.41	0.33	0.37	0.36	0.38	0.39	0.41	0.47	0.52	0.38	0.38	0.38	0.40
MKD	0.25	0.28	0.28	0.30	0.26	0.27	0.28	0.28	0.29	0.31	0.34	0.40	0.40	0.42	0.43	0.45	0.32	0.39	0.45	0.43	0.44	0.49	0.47	0.48	0.50	0.51	0.52	0.55

Table C.6: Continued on next page

Table C.6: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MLT	0.31	0.34	0.35	0.37	0.32	0.34	0.37	0.35	0.36	0.39	0.43	0.49	0.56	0.53	0.55	0.60	0.43	0.56	0.54	0.51	0.53	0.54	0.54	0.56	0.54	0.55	0.53	0.52
MMR	0.28	0.32	0.31	0.31	0.30	0.33	0.36	0.37	0.40	0.42	0.46	0.52	0.59	0.58	0.58	0.62	0.51	0.61	2.86	0.61	0.65	0.87	0.67	0.66	0.63	0.65	0.63	0.63
MNG	0.26	0.29	0.27	0.28	0.26	0.29	0.30	0.31	0.33	0.35	0.37	0.41	0.44	0.46	0.46	0.48	0.34	0.39	0.33	0.40	0.41	0.45	0.45	0.44	0.41	0.42	0.41	0.43
MOZ	0.17	0.18	0.18	0.18	0.17	0.17	0.18	0.20	0.20	0.22	0.23	0.26	0.27	0.28	0.29	0.30	0.21	0.25	0.24	0.26	0.26	0.31	0.27	0.27	0.27	0.27	0.26	0.26
MUS	0.22	0.24	0.24	0.24	0.21	0.22	0.24	0.24	0.24	0.30	0.30	0.35	0.39	0.38	0.42	0.44	0.33	0.44	0.39	0.38	0.41	0.42	0.43	0.42	0.40	0.40	0.38	0.37
MWI	0.19	0.20	0.20	0.21	0.19	0.19	0.21	0.22	0.23	0.25	0.28	0.33	0.38	0.36	0.38	0.43	0.31	0.42	0.36	0.37	0.39	0.38	0.39	0.40	0.37	0.37	0.35	0.34
MYS	0.37	0.40	0.41	0.43	0.39	0.45	0.47	0.44	0.47	0.51	0.54	0.61	0.66	0.67	0.70	0.74	0.58	0.68	0.79	0.65	0.65	0.71	0.70	0.70	0.68	0.71	0.71	0.77
NER	0.19	0.21	0.21	0.23	0.20	0.20	0.21	0.22	0.22	0.24	0.26	0.30	0.31	0.32	0.33	0.35	0.25	0.31	0.30	0.30	0.31	0.33	0.33	0.33	0.32	0.33	0.31	0.31
NGA	0.25	0.27	0.28	0.28	0.20	0.21	0.22	0.24	0.24	0.26	0.28	0.34	0.39	0.37	0.39	0.43	0.33	0.44	0.38	0.38	0.41	0.39	0.40	0.39	0.37	0.37	0.35	0.33
NIC	0.17	0.18	0.18	0.18	0.17	0.17	0.18	0.19	0.19	0.20	0.22	0.25	0.25	0.26	0.27	0.28	0.20	0.24	0.25	0.25	0.25	0.27	0.27	0.27	0.25	0.25	0.24	0.25
NLD	0.63	0.72	0.72	0.74	0.61	0.68	0.69	0.63	0.66	0.68	0.75	1.00	1.10	1.06	1.14	1.23	1.00	1.02	1.20	1.03	1.02	1.12	1.04	1.04	1.06	1.05	1.04	1.18
NOR	0.33	0.38	0.39	0.41	0.36	0.39	0.39	0.37	0.38	0.39	0.43	0.49	0.49	0.50	0.52	0.53	0.39	0.44	0.46	0.45	0.45	0.48	0.44	0.44	0.43	0.44	0.43	0.46
NPL	0.25	0.28	0.27	0.27	0.25	0.28	0.29	0.30	0.32	0.33	0.35	0.39	0.42	0.43	0.45	0.47	0.35	0.37	0.34	0.40	0.42	0.46	0.47	0.46	0.45	0.47	0.47	0.49
NZL	0.25	0.27	0.28	0.27	0.24	0.23	0.24	0.24	0.24	0.25	0.28	0.32	0.32	0.32	0.33	0.33	0.24	0.27	0.30	0.28	0.28	0.30	0.29	0.30	0.29	0.29	0.29	0.31
OMN	0.21	0.22	0.22	0.23	0.21	0.22	0.23	0.24	0.25	0.26	0.28	0.33	0.34	0.34	0.36	0.37	0.27	0.32	0.35	0.34	0.34	0.38	0.37	0.36	0.36	0.35	0.35	0.36
PAK	0.35	0.39	0.38	0.38	0.35	0.38	0.40	0.42	0.45	0.48	0.52	0.60	0.68	0.64	0.67	0.74	0.61	0.74	0.52	0.62	0.68	0.65	0.67	0.69	0.66	0.66	0.63	0.60
PAN	0.26	0.27	0.27	0.27	0.24	0.25	0.26	0.26	0.27	0.28	0.23	0.26	0.27	0.28	0.29	0.31	0.23	0.26	0.27	0.26	0.27	0.28	0.27	0.27	0.26	0.25	0.24	0.25
PER	0.21	0.22	0.22	0.22	0.20	0.21	0.22	0.23	0.24	0.25	0.25	0.28	0.29	0.30	0.32	0.33	0.25	0.28	0.28	0.29	0.38	0.38	0.37	0.37	0.38	0.39	0.38	0.41
PHL	0.29	0.32	0.31	0.32	0.29	0.30	0.31	0.31	0.33	0.34	0.37	0.42	0.42	0.50	0.51	0.53	0.35	0.40	0.48	0.42	0.42	0.46	0.46	0.45	0.44	0.46	0.49	0.48
PNG	0.18	0.19	0.19	0.19	0.17	0.18	0.19	0.20	0.20	0.21	0.23	0.26	0.27	0.28	0.29	0.31	0.21	0.25	0.29	0.27	0.26	0.29	0.29	0.29	0.26	0.27	0.26	0.27
POL	0.46	0.52	0.56	0.54	0.48	0.52	0.54	0.52	0.56	0.58	0.67	0.77	0.78	0.78	0.83	0.86	0.68	0.70	0.76	0.71	0.74	0.80	0.76	0.78	0.82	0.85	0.83	0.91
PRT	0.43	0.47	0.48	0.59	0.48	0.50	0.51	0.44	0.46	0.47	0.52	0.59	0.56	0.55	0.56	0.56	0.43	0.46	0.50	0.47	0.48	0.51	0.49	0.48	0.50	0.51	0.50	0.51
PRY	0.18	0.19	0.18	0.18	0.17	0.17	0.18	0.18	0.19	0.19	0.21	0.24	0.24	0.26	0.27	0.29	0.20	0.24	0.23	0.25	0.26	0.27	0.27	0.26	0.24	0.25	0.24	0.25
QAT	0.22	0.24	0.24	0.26	0.24	0.25	0.27	0.27	0.29	0.31	0.35	0.44	0.52	0.47	0.50	0.55	0.43	0.63	0.48	0.53	0.55	0.53	0.55	0.57	0.55	0.56	0.53	0.51
ROU	0.34	0.38	0.38	0.40	0.35	0.37	0.36	0.35	0.37	0.40	0.43	0.50	0.52	0.53	0.56	0.57	0.42	0.46	0.50	0.47	0.49	0.53	0.50	0.51	0.51	0.52	0.51	0.54
RUS	0.40	0.44	0.44	0.42	0.38	0.37	0.37	0.36	0.40	0.41	0.48	0.52	0.56	0.58	0.62	0.64	0.46	0.51	0.46	0.52	0.55	0.57	0.52	0.50	0.51	0.53	0.52	0.55
RWA	0.19	0.20	0.20	0.21	0.19	0.19	0.20	0.21	0.21	0.23	0.24	0.28	0.29	0.30	0.31	0.33	0.22	0.27	0.32	0.28	0.28	0.30	0.30	0.30	0.28	0.29	0.27	0.28
SAU	0.26	0.29	0.29	0.30	0.27	0.29	0.30	0.30	0.31	0.32	0.34	0.38	0.38	0.38	0.40	0.41	0.31	0.39	0.40	0.40	0.41	0.44	0.43	0.43	0.43	0.44	0.46	0.47
SCG	0.25	0.32	0.30	0.33	0.29	0.31	0.32	0.32	0.31	0.33	0.37	0.43	0.44	0.98	1.03	1.08	0.80	0.82	0.90	0.83	0.87	0.90	0.51	0.52	0.87	0.92	0.90	1.00
SEN	0.19	0.20	0.20	0.21	0.19	0.19	0.20	0.21	0.21	0.22	0.24	0.28	0.30	0.30	0.32	0.33	0.24	0.30	0.28	0.29	0.29	0.31	0.31	0.31	0.29	0.30	0.29	0.30
SGP	0.32	0.35	0.36	0.38	0.35	0.41	0.46	0.45	0.52	0.58	0.66	0.74	0.81	0.81	0.81	0.89	0.73	0.90	1.16	0.90	0.92	1.20	1.13	1.17	1.15	1.29	1.32	1.58
SLE	0.23	0.25	0.25	0.26	0.23	0.22	0.23	0.24	0.24	0.26	0.29	0.34	0.38	0.37	0.39	0.42	0.31	0.41	0.36	0.36	0.38	0.38	0.38	0.38	0.36	0.36	0.34	0.33
SLV	0.17	0.18	0.18	0.19	0.18	0.18	0.19	0.20	0.21	0.22	0.23	0.26	0.26	0.27	0.28	0.30	0.21	0.25	0.27	0.26	0.27	0.29	0.29	0.29	0.26	0.26	0.26	0.27
SOM	0.20	0.21	0.22	0.23	0.21	0.21	0.23	0.24	0.25	0.27	0.30	0.37	0.42	0.40	0.43	0.48	0.35	0.49	0.42	0.42	0.44	0.42	0.44	0.45	0.43	0.42	0.40	0.38
SUR	0.18	0.19	0.18	0.19	0.17	0.17	0.18	0.19	0.19	0.20	0.22	0.25	0.26	0.27	0.28	0.29	0.20	0.25	0.23	0.25	0.25	0.27	0.27	0.27	0.24	0.25	0.24	0.24
SVK	0.33	0.37	0.43	0.40	0.35	0.39	0.40	0.39	0.41	0.43	0.48	0.55	0.55	0.57	0.60	0.62	0.45	0.51	0.55	0.53	0.54	0.59	0.55	0.55	0.55	0.57	0.54	0.58
SVN	0.44	0.49	0.48	0.51	0.44	0.47	0.47	0.43	0.45	0.47	0.52	0.59	0.57	0.58	0.59	0.63	0.45	0.50	0.52	0.50	0.50	0.55	0.51	0.52	0.51	0.53	0.52	0.53
SWE	0.39	0.43	0.48	0.50	0.43	0.47	0.49	0.44	0.45	0.49	0.54	0.63	0.60	0.59	0.62	0.67	0.52	0.56	0.61	0.56	0.56	0.58	0.54	0.55	0.54	0.55	0.53	0.59
SYR	0.25	0.28	0.28	0.29	0.27	0.28	0.29	0.29	0.30	0.33	0.35	0.40	0.41	0.42	0.42	0.44	0.32	0.40	0.37	0.38	0.39	0.42	0.42	0.42	0.40	0.42	0.41	0.40
THA	0.56	0.63	0.60	0.60	0.52	0.55	0.52	0.49	0.54	0.56	0.58	0.63	0.67	0.67	0.71	0.73	0.64	0.68	0.74	0.72	0.75	0.74	0.71	0.73	0.72	0.74	0.77	0.79
TJK	0.23	0.25	0.25	0.26	0.24	0.26	0.27	0.28	0.30	0.31	0.33	0.38	0.40	0.42	0.43	0.44	0.32	0.37	0.32	0.37	0.39	0.41	0.41	0.41	0.38	0.39	0.39	0.39
TKM	0.20	0.22	0.21	0.23	0.21	0.22	0.23	0.24	0.25	0.26	0.29	0.33	0.35	0.36	0.37	0.39	0.28	0.34	0.34	0.34	0.35	0.37	0.36	0.37	0.35	0.35	0.35	0.38
TON	0.16	0.17	0.17	0.17	0.16	0.16	0.17	0.19	0.19	0.21	0.23	0.27	0.30	0.30	0.31	0.34	0.25	0.33	0.29	0.29	0.30	0.30	0.31	0.32	0.29	0.29	0.28	0.27
TTO	0.21	0.22	0.22	0.23	0.20	0.20	0.22	0.23	0.24	0.25	0.26	0.31	0.34	0.34	0.35	0.38	0.28	0.36	0.34	0.33	0.34	0.34	0.35	0.36	0.33	0.34	0.32	0.31
TUN	0.29	0.32	0.32	0.35	0.30	0.32	0.33	0.33	0.34	0.36	0.39	0.45	0.46	0.46	0.47	0.49	0.37	0.44	0.46	0.42	0.43	0.46	0.44	0.45	0.44	0.45	0.44	0.45
TUR	0.29	0.30	0.32	0.34	0.31	0.34	0.36	0.36	0.36	0.44	0.51	0.60	0.64	0.64	0.68	0.71	0.63	0.64	0.69	0.67	0.67	0.68	0.66	0.65	0.67	0.66	0.65	0.71
TZA	0.19	0.21	0.21	0.22	0.20	0.20	0.22	0.23	0.24	0.26	0.29	0.34	0.39	0.39	0.41	0.46	0.34	0.45	0.38	0.39	0.41	0.40	0.41	0.42	0.40	0.40	0.38	0.36
UGA	0.20	0.21	0.21	0.22	0.20	0.21	0.22	0.24	0.24	0.27	0.29	0.35	0.40	0.39	0.41	0.46	0.34	0.45	0.39	0.39	0.42	0.40	0.41	0.42	0.40	0.40	0.38	0.36
UKR	0.29	0.32	0.30	0.31	0.28	0.29	0.30	0.30	0.32	0.34	0.39	0.45	0.47	0.48	0.51	0.53	0.37	0.44	0.42	0.45	0.46	0.49	0.46	0.45	0.44	0.46	0.45	0.47
URY	0.20	0.21	0.20	0.19	0.18	0.18	0.18	0.19	0.19	0.19	0.21	0.25	0.26	0.27	0.28	0.29	0.20	0.24	0.24	0.25	0.26	0.27	0.27	0.26	0.24	0.25	0.23	0.24
USA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
UZB	0.20	0.22	0.22	0.24	0.22	0.23	0.23	0.24	0.24	0.26	0.28	0.33	0.35	0.36	0.37	0.39	0.28	0.34	0.35	0.34	0.35	0.38	0.37	0.39	0.36	0.36	0.36	0.37
VEN	0.23	0.23	0.23	0.22	0.19	0.19	0.19	0.20	0.20	0.21	0.22	0.25	0.26	0.27	0.28	0.29	0.20	0.24	0.24	0.25	0.25	0.27	0.27	0.27	0.24	0.25	0.24	0.24
VNM	0.31	0.38	0.40	0.47	0.48	0.55	0.59	0.58	0.65	0.69	0.75	0.84	0.88	0.90	0.92	1.00	0.92	0.89	0.86	0.85	0.89	0.95	1.03	1.10	1.22	1.31	1.50	2.04
YEM	0.21	0.22	0.22	0.24	0.21	0.22	0.24	0.25	0.26	0.28	0.31	0.38	0.43	0.40	0.42	0.46	0.36	0.49	0.38	0.42	0.44	0.43	0.44	0.45	0.43	0.43	0.41	0.38
ZAF	0.37	0.39	0.39	0.40	0.37	0.41	0.43	0.44	0.44	0.48	0.51	0.53	0.53	0.53	0.55	0.55	0.46	0.47	0.48	0.43	0.43	0.45	0.42	0.42	0.46	0.49	0.48	0.47
ZMB	0.19	0.20	0.21	0.21	0.19	0.19	0.21	0.23	0.23	0.26	0.28	0.33	0.38	0.37	0.39	0.42	0.31	0.42	0.36	0.37	0.39	0.38	0.39	0.39	0.38	0.38	0.37	0.34
ZWE	0.22	0.24	0.24	0.25	0.22	0.22	0.24	0.25	0.25	0.28	0.30	0.35	0.39	0.38	0.40	0.43	0.32	0.43	0.36	0.38	0.39	0.39	0.39	0.39	0.38	0.38	0.36	0.35

Table C.7: IMR in the textiles sector by country and year (BLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	0.32	0.34	0.35	0.37	0.42	0.48	0.54	0.65	0.72	0.77	0.83	0.91	1.00	1.00	1.14	1.11	1.19	1.32	1.31	1.21	1.21	1.18	1.22	1.19	1.18	1.25	1.28	1.45
AGO	0.18	0.19	0.20	0.21	0.23	0.25	0.27	0.30	0.33	0.36	0.40	0.44	0.45	0.47	0.52	0.54	0.56	0.59	0.60	0.60	0.60	0.61	0.62	0.61	0.62	0.65	0.65	0.69
ALB	0.34	0.42	0.49	0.55	0.56	0.66	0.73	0.83	0.96	1.04	1.17	1.26	1.29	1.22	1.49	1.45	1.62	1.68	1.65	1.59	1.68	1.67	1.65	1.77	1.80	1.87	1.89	2.08
ARE	0.31	0.29	0.32	0.33	0.38	0.44	0.49	0.54	0.58	0.62	0.66	0.72	0.82	0.72	0.93	0.95	0.91	0.97	1.00	1.31	1.07	1.06	1.13	0.97	0.99	1.22	1.38	1.19
ARG	0.52	0.51	0.51	0.51	0.56	0.56	0.56	0.60	0.64	0.58	0.70	0.78	0.80	0.77	0.89	0.84	0.89	1.03	1.04	1.02	1.05	0.98	1.05	0.97	0.99	0.90	0.89	0.91
ARM	0.23	0.26	0.29	0.30	0.35	0.40	0.44	0.52	0.57	0.62	0.68	0.74	0.76	0.75	0.86	0.86	0.91	0.97	0.98	0.95	0.96	0.95	0.97	0.97	1.02	1.09	1.11	1.20
AUS	0.39	0.40	0.42	0.39	0.41	0.41	0.44	0.46	0.48	0.52	0.58	0.61	0.62	0.62	0.72	0.72	0.79	0.84	0.82	0.80	0.79	0.76	0.77	0.77	0.76	0.79	0.80	0.88
AUT	0.55	0.60	0.69	0.68	0.73	0.83	0.91	0.98	1.09	1.16	1.25	1.30	1.34	1.26	1.47	1.41	1.44	1.52	1.52	1.44	1.48	1.46	1.46	1.45	1.48	1.52	1.51	1.60
AZE	0.26	0.28	0.32	0.32	0.37	0.41	0.44	0.52	0.58	0.61	0.67	0.72	0.75	0.76	0.86	0.86	0.91	0.98	0.99	0.96	0.96	0.95	0.96	0.95	0.98	1.03	1.07	1.15
BDI	0.19	0.20	0.22	0.22	0.25	0.27	0.29	0.33	0.36	0.40	0.44	0.48	0.49	0.51	0.57	0.59	0.61	0.64	0.65	0.65	0.66	0.66	0.68	0.67	0.68	0.72	0.73	0.77
BEL	0.69	0.80	0.93	0.93	0.97	1.13	1.20	1.28	1.41	1.55	1.67	1.68	3.10	2.67	1.83	2.83	3.04	3.51	3.32	3.19	3.31	3.26	3.29	3.40	3.62	3.46	3.56	4.17
BEN	0.19	0.21	0.24	0.26	0.30	0.32	0.32	0.38	0.42	0.46	0.48	0.53	0.53	0.53	0.61	0.61	0.64	0.69	0.68	0.67	0.68	0.67	0.67	0.65	0.66	0.68	0.69	0.71
BFA	0.19	0.21	0.23	0.27	0.29	0.32	0.32	0.37	0.41	0.44	0.46	0.49	0.49	0.51	0.57	0.59	0.62	0.63	0.65	0.65	0.64	0.65	0.65	0.63	0.64	0.66	0.67	0.69
BGD	0.65	0.73	0.88	0.90	1.01	1.14	1.34	1.71	1.93	2.12	2.40	2.52	2.70	2.52	3.19	3.02	3.99	4.50	4.24	4.18	4.75	4.66	5.24	6.73	7.75	7.84	8.60	10.73
BGR	0.35	0.39	0.44	0.44	0.50	0.59	0.64	0.80	0.98	1.10	1.24	1.29	1.34	1.24	1.43	1.34	1.30	1.50	1.52	1.44	1.50	1.48	1.47	1.50	1.57	1.61	1.60	1.71
BHR	0.25	0.29	0.34	0.36	0.41	0.47	0.49	0.62	0.82	0.78	0.84	0.89	0.98	0.75	0.92	0.92	0.97	1.13	1.10	1.11	1.11	1.07	1.09	1.08	1.13	1.17	1.23	1.34
BHS	0.20	0.23	0.24	0.25	0.27	0.30	0.31	0.34	0.38	0.40	0.44	0.47	0.48	0.50	0.52	0.55	0.55	0.55	0.58	0.57	0.56	0.56	0.56	0.55	0.55	0.56	0.57	0.58
BIH	0.25	0.29	0.33	0.36	0.42	0.49	0.53	0.61	0.68	0.77	0.85	0.90	0.93	0.94	1.10	1.07	1.11	1.16	1.17	1.15	1.17	1.21	1.21	1.23	1.20	1.27	1.30	1.28
BLR	0.26	0.31	0.35	0.36	0.40	0.49	0.51	0.59	0.65	0.71	0.79	0.86	0.88	0.88	1.02	1.04	1.08	1.18	1.18	1.15	1.17	1.13	1.09	1.08	1.13	1.16	1.18	1.24
BLZ	0.25	0.28	0.30	0.32	0.36	0.40	0.44	0.48	0.54	0.60	0.64	0.67	0.66	0.65	0.67	0.69	0.69	0.66	0.68	0.66	0.64	0.66	0.67	0.67	0.66	0.67	0.68	0.69
BMU	0.21	0.25	0.25	0.26	0.30	0.32	0.34	0.39	0.42	0.43	0.47	0.51	0.51	0.52	0.59	0.59	0.58	0.58	0.60	0.59	0.57	0.58	0.59	0.64	0.60	0.60	0.74	0.59
BOL	0.25	0.26	0.26	0.27	0.30	0.33	0.35	0.39	0.43	0.44	0.49	0.54	0.54	0.54	0.59	0.58	0.57	0.61	0.62	0.60	0.60	0.59	0.60	0.58	0.58	0.59	0.60	0.62
BRA	0.80	0.76	0.67	0.72	0.71	0.73	0.70	0.79	0.82	0.82	0.91	0.97	0.99	0.98	1.17	1.12	1.22	1.44	1.42	1.35	1.34	1.27	1.16	1.22	1.30	1.23	1.26	1.26
BRB	0.20	0.22	0.23	0.24	0.26	0.28	0.30	0.33	0.35	0.37	0.41	0.44	0.44	0.46	0.49	0.52	0.55	0.56	0.59	0.55	0.53	0.54	0.54	0.52	0.52	0.53	0.54	0.55
BRN	0.25	0.29	0.28	0.31	0.39	0.44	0.49	0.64	0.71	0.80	0.86	0.91	0.94	0.85	0.99	0.95	1.03	1.04	1.07	1.01	0.98	0.99	1.02	1.02	1.03	1.04	1.08	1.14
BTN	0.32	0.35	0.37	0.39	0.45	0.52	0.59	0.73	0.80	0.89	0.99	1.10	1.24	1.21	1.41	1.35	1.48	1.65	1.62	1.48	1.50	1.46	1.55	1.52	1.53	1.62	1.65	1.85
CAF	0.19	0.20	0.22	0.22	0.25	0.27	0.29	0.33	0.36	0.39	0.43	0.47	0.48	0.50	0.55	0.57	0.60	0.62	0.64	0.64	0.64	0.64	0.65	0.64	0.64	0.67	0.69	0.72
CAN	0.49	0.52	0.53	0.56	0.60	0.66	0.70	0.74	0.78	0.82	0.84	0.86	0.87	0.87	0.88	0.89	0.85	0.84	0.85	0.85	0.85	0.86	0.87	0.87	0.86	0.87	0.88	0.91
CHE	0.70	0.77	0.88	0.91	0.89	1.02	1.11	1.14	1.29	1.42	1.52	1.59	1.53	1.48	1.75	1.75	1.59	1.61	1.63	1.56	1.58	1.58	1.59	1.57	1.59	1.64	1.65	2.13
CHL	0.34	0.34	0.34	0.33	0.35	0.36	0.37	0.39	0.42	0.43	0.49	0.54	0.54	0.54	0.59	0.60	0.61	0.62	0.62	0.59	0.60	0.58	0.61	0.59	0.60	0.60	0.61	0.65
CHN	3.07	2.77	2.76	2.61	2.73	2.83	3.20	3.60	3.89	4.39	5.17	5.59	6.40	6.18	7.66	7.55	9.25	11.04	10.21	9.90	10.26	9.81	10.49	10.59	10.65	9.81	10.67	15.05
CIV	0.21	0.21	0.24	0.25	0.27	0.30	0.31	0.34	0.37	0.40	0.43	0.47	0.47	0.49	0.54	0.56	0.58	0.62	0.63	0.63	0.62	0.62	0.63	0.61	0.62	0.65	0.67	0.69
CMR	0.25	0.26	0.29	0.30	0.33	0.35	0.37	0.39	0.44	0.48	0.52	0.57	0.57	0.59	0.64	0.66	0.67	0.69	0.70	0.70	0.69	0.70	0.72	0.71	0.72	0.74	0.75	0.80
COG	0.18	0.21	0.21	0.21	0.24	0.26	0.27	0.31	0.34	0.36	0.40	0.44	0.45	0.47	0.52	0.54	0.58	0.60	0.62	0.62	0.60	0.60	0.68	0.61	0.61	0.70	0.66	0.67
COL	0.40	0.41	0.43	0.43	0.45	0.47	0.48	0.53	0.58	0.61	0.65	0.70	0.72	0.70	0.79	0.77	0.76	0.83	0.81	0.81	0.82	0.80	0.79	0.80	0.81	0.81	0.82	0.83
CPV	0.18	0.20	0.21	0.22	0.24	0.27	0.28	0.32	0.35	0.38	0.42	0.46	0.46	0.48	0.54	0.56	0.57	0.59	0.61	0.60	0.60	0.60	0.61	0.60	0.61	0.64	0.64	0.67
CRI	0.41	0.43	0.47	0.46	0.49	0.49	0.58	0.61	0.64	0.69	0.64	0.66	0.67	0.63	0.68	0.66	0.67	0.69	0.69	0.68	0.68	0.68	0.69	0.69	0.69	0.70	0.71	0.74
CUB	0.22	0.24	0.26	0.27	0.30	0.33	0.36	0.39	0.43	0.46	0.49	0.52	0.53	0.54	0.57	0.58	0.58	0.59	0.60	0.60	0.60	0.60	0.62	0.61	0.61	0.63	0.63	0.65
CYP	0.30	0.33	0.37	0.38	0.41	0.45	0.47	0.53	0.58	0.67	0.74	0.79	0.82	0.82	0.91	0.92	0.97	0.98	0.99	0.96	0.93	0.94	0.94	0.95	0.99	1.00	1.01	1.05
CZE	0.41	0.48	0.53	0.54	0.58	0.64	0.69	0.77	0.86	0.95	1.04	1.09	1.10	1.08	1.25	1.25	1.31	1.39	1.39	1.36	1.40	1.37	1.37	1.40	1.43	1.46	1.46	1.55
DEU	0.73	0.79	0.89	0.81	0.84	0.95	1.07	1.10	1.20	1.29	1.42	1.49	1.51	1.44	1.66	1.60	1.72	1.94	1.93	1.92	2.00	1.95	1.98	2.07	2.07	2.10	2.11	2.25
DNK	0.36	0.41	0.49	0.48	0.52	0.57	0.62	0.68	0.86	0.93	1.05	1.09	1.16	1.07	1.27	1.24	1.16	1.24	1.25	1.21	1.24	1.22	1.22	1.22	1.27	1.31	1.30	1.41
DOM	0.55	0.59	0.64	0.63	0.71	0.75	0.84	0.87	1.06	0.96	1.07	0.97	0.94	0.78	0.80	0.74	0.69	0.73	0.79	0.72	0.73	0.73	0.76	0.76	0.77	0.77	0.79	0.80
DZA	0.31	0.33	0.35	0.37	0.41	0.46	0.48	0.53	0.60	0.65	0.71	0.76	0.76	0.76	0.84	0.87	0.89	0.89	0.93	0.91	0.91	0.91	0.91	0.89	0.91	0.92	0.94	0.95
ECU	0.25	0.26	0.28	0.28	0.31	0.34	0.36	0.40	0.45	0.48	0.50	0.56	0.56	0.56	0.61	0.61	0.62	0.65	0.67	0.65	0.66	0.65	0.66	0.63	0.63	0.65	0.65	0.66
EGY	0.39	0.43	0.45	0.46	0.51	0.57	0.60	0.67	0.68	0.73	0.75	0.84	0.87	0.85	0.99	1.00	1.02	1.09	1.07	1.04	1.04	1.04	1.03	1.04	1.21	1.71	1.91	2.21
ESP	0.77	0.83	0.93	0.94	0.99	1.04	1.09	1.10	1.21	1.30	1.41	1.40	1.36	1.28	1.43	1.36	1.40	1.44	1.41	1.34	1.37	1.32	1.31	1.30	1.34	1.39	1.40	1.49
EST	0.24	0.28	0.31	0.33	0.37	0.42	0.46	0.53	0.59	0.65	0.79	0.78	0.80	0.79	0.90	0.91	0.93	0.99	1.04	1.00	1.03	1.02	0.98	0.97	1.00	1.03	1.05	1.11
ETH	0.24	0.26	0.28	0.29	0.32	0.34	0.37	0.41	0.46	0.51	0.56	0.61	0.63	0.64	0.72	0.74	0.76	0.80	0.80	0.83	0.84	0.85	0.89	0.89	0.93	0.97	1.02	1.12
FIN	0.31	0.34	0.39	0.39	0.43	0.47	0.51	0.54	0.60	0.67	0.75	0.80	0.83	0.82	0.94	0.95	0.94	1.01	1.00	0.97	1.00	0.99	0.98	0.95	1.01	1.03	1.05	1.12
FJI	0.23	0.25	0.27	0.28	0.30	0.33	0.37	0.41	0.41	0.38	0.42	0.46	0.45	0.46	0.51	0.52	0.56	0.58	0.59	0.58	0.56	0.56	0.57	0.56	0.56	0.57	0.58	0.63
FRA	0.90	0.96	1.08	1.08	1.11	1.21	1.28	1.30	1.42	1.49	1.60	1.63	1.61	1.51	1.69	1.65	1.82	1.90	1.86	1.89	2.04	2.05	2.00	2.02	2.16	2.18	2.31	2.20
GAB	0.18	0.20	0.21	0.22	0.24	0.26	0.28	0.31	0.34	0.37	0.41	0.47	0.46	0.48	0.52	0.55	0.57	0.60	0.61	0.61	0.61	0.62	0.63	0.60	0.61	0.64	0.65	0.67
GBR	0.81	0.85	0.92	0.89	0.97	0.99	1.00	0.98	1.02	1.06	1.10	1.14	1.15	1.10	1.22	1.22	1.22	1.27	1.28	1.27	1.29	1.27	1.27	1.27	1.30	1.32	1.33	1.39
GEO	0.23	0.26	0.29	0.30	0.35	0.39	0.43	0.49	0.55	0.61	0.68	0.73	0.76	0.76	0.86	0.86	0.91	0.97	0.98	0.95	0.96	0.95	0.97	0.96	0.99	1.03	1.06	1.13
GHA	0.21	0.23	0.26	0.27	0.30	0.32	0.32	0.35	0.39	0.42	0.46	0.51	0.53	0.55	0.61	0.63	0.68	0.72	0.75	0.72	0.71	0.68	0.68	0.58	0.58	0.61	0.63	0.64
GMB	0.20	0.22	0.23	0.24	0.26	0.29	0.29	0.33	0.36	0.39	0.43	0.46	0.46	0.48	0.52	0.55	0.56	0.57	0.60	0.59	0.58	0.58	0.58	0.56	0.56	0.59	0.60	0.61

Table C.7: Continued on next page

Table C.7: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
GRC	0.53	0.53	0.57	0.57	0.60	0.65	0.71	0.79	0.85	0.98	1.17	1.19	1.19	1.15	1.33	1.25	1.29	1.34	1.29	1.21	1.21	1.19	1.17	1.16	1.20	1.26	1.25	1.31
GTM	0.35	0.37	0.43	0.46	0.53	0.60	0.69	0.76	0.83	0.91	0.95	0.97	0.92	0.85	0.89	0.85	0.88	0.94	0.91	0.89	0.91	0.91	0.96	0.98	1.01	1.02	1.04	1.12
HKG	1.37	1.35	1.31	1.32	1.47	1.82	2.59	3.22	3.37	4.01	4.37	4.44	4.80	4.50	5.04	4.61	3.77	3.72	3.58	3.27	3.10	3.13	3.53	3.16	2.87	2.84	2.94	4.20
HND	0.36	0.40	0.47	0.53	0.63	0.70	0.84	0.91	0.97	1.05	1.09	1.07	1.07	0.93	1.06	0.96	1.08	1.20	1.13	1.10	1.05	1.10	1.15	1.21	1.29	1.31	1.38	1.39
HRV	0.36	0.43	0.47	0.49	0.54	0.60	0.66	0.74	0.83	0.91	0.99	1.02	1.05	1.02	1.18	1.17	1.20	1.24	1.25	1.20	1.22	1.22	1.20	1.20	1.24	1.28	1.26	1.31
HTI	0.21	0.22	0.24	0.26	0.30	0.35	0.38	0.42	0.46	0.47	0.51	0.54	0.57	0.57	0.63	0.63	0.69	0.72	0.73	0.73	0.76	0.75	0.78	0.79	0.81	0.80	0.82	0.87
HUN	0.39	0.42	0.48	0.55	0.64	0.71	0.77	0.86	0.96	1.03	1.11	1.12	1.15	1.08	1.29	1.23	1.29	1.38	1.38	1.31	1.37	1.36	1.34	1.36	1.40	1.42	1.40	1.48
IDN	0.99	1.02	1.07	1.13	1.17	1.06	1.28	1.39	1.41	1.55	1.69	1.65	1.71	1.63	1.90	1.69	1.97	2.23	2.21	2.09	2.18	2.10	2.37	2.54	2.76	2.83	3.18	3.85
IND	1.04	1.12	1.21	1.16	1.30	1.29	1.41	1.62	1.62	1.74	1.90	2.04	2.20	2.15	2.56	2.35	2.94	3.64	3.44	3.04	3.21	2.97	3.06	3.04	3.28	3.36	3.46	3.85
IRL	0.38	0.42	0.45	0.46	0.50	0.54	0.56	0.65	0.69	0.74	0.78	0.83	0.81	0.82	0.90	0.91	0.93	0.97	0.97	0.96	1.00	0.98	0.99	0.97	0.96	1.01	1.00	1.04
IRN	0.39	0.47	0.49	0.51	0.58	0.64	0.72	0.83	0.92	0.79	0.82	0.86	0.88	0.86	0.99	0.98	1.07	1.17	1.16	1.14	1.15	1.07	1.09	1.15	1.21	1.29	1.43	1.94
IRQ	0.43	0.54	0.90	0.97	1.33	1.38	1.44	1.50	1.53	1.50	1.43	1.28	1.11	0.85	0.94	0.94	0.98	1.03	1.02	0.98	0.97	0.95	0.98	0.97	1.00	1.06	1.09	1.18
ISL	0.20	0.22	0.24	0.25	0.28	0.30	0.32	0.36	0.39	0.43	0.48	0.52	0.54	0.56	0.62	0.64	0.67	0.70	0.71	0.71	0.72	0.72	0.73	0.72	0.73	0.76	0.76	0.80
ISR	0.50	0.56	0.59	0.59	0.64	0.71	0.75	0.87	0.92	0.98	1.05	1.06	1.08	1.02	1.13	1.12	1.20	1.25	1.24	1.16	1.11	1.06	1.08	1.07	1.12	1.15	1.19	1.25
ITA	2.00	2.08	2.50	2.64	2.56	2.59	2.68	2.68	2.95	3.10	3.36	3.38	3.22	2.93	3.58	3.32	3.40	3.61	3.51	3.39	3.57	3.39	3.21	3.34	3.67	3.71	3.87	4.11
JAM	0.33	0.36	0.40	0.40	0.41	0.42	0.43	0.45	0.46	0.47	0.49	0.50	0.48	0.49	0.51	0.53	0.53	0.54	0.56	0.55	0.54	0.55	0.55	0.53	0.53	0.54	0.55	0.56
JOR	0.27	0.33	0.37	0.40	0.48	0.55	0.59	0.67	0.74	0.86	0.93	0.99	1.02	0.95	1.05	1.01	1.04	1.08	1.06	1.01	0.98	0.97	1.10	1.02	1.09	1.12	1.19	1.27
JPN	1.30	1.26	1.27	1.11	1.21	1.30	1.40	1.56	1.51	1.57	1.69	1.76	1.84	1.68	1.97	2.01	2.21	2.34	2.37	2.07	1.88	1.85	1.99	2.05	2.07	2.01	2.02	2.31
KAZ	0.36	0.35	0.35	0.36	0.40	0.45	0.50	0.60	0.66	0.73	0.82	0.91	0.97	0.98	1.11	1.08	1.15	1.29	1.28	1.23	1.18	1.14	1.19	1.12	1.12	1.18	1.21	1.36
KEN	0.23	0.25	0.27	0.28	0.30	0.32	0.35	0.39	0.42	0.45	0.50	0.54	0.54	0.56	0.62	0.63	0.70	0.80	0.79	0.78	0.78	0.76	0.78	0.75	0.76	0.78	0.82	0.87
KGZ	0.32	0.33	0.34	0.35	0.40	0.44	0.49	0.59	0.65	0.72	0.80	0.89	0.95	0.96	1.09	1.07	1.15	1.29	1.26	1.19	1.17	1.13	1.17	1.11	1.10	1.16	1.20	1.33
KHM	0.27	0.31	0.35	0.39	0.50	0.64	0.81	1.01	1.13	1.29	1.45	1.55	1.67	1.57	1.95	1.91	2.24	2.49	2.48	2.37	2.44	2.46	2.65	2.88	3.19	3.27	3.59	4.25
KOR	2.51	2.46	2.60	2.35	2.52	2.74	3.10	3.59	3.54	3.66	3.80	3.69	3.91	3.32	3.81	3.53	4.06	5.07	4.12	3.80	3.75	3.61	3.58	3.56	3.72	3.45	3.37	3.99
KWT	0.25	0.29	0.35	0.38	0.46	0.53	0.57	0.65	0.71	0.77	0.79	0.80	0.78	0.71	0.81	0.83	0.90	0.93	0.94	0.92	0.89	0.89	0.89	0.89	0.91	0.96	1.30	1.19
LAO	0.37	0.41	0.43	0.45	0.51	0.59	0.68	0.87	0.93	1.03	1.15	1.26	1.35	1.31	1.53	1.47	1.60	1.76	1.74	1.58	1.56	1.51	1.57	1.48	1.46	1.56	1.63	1.87
LBN	0.34	0.38	0.39	0.42	0.50	0.55	0.61	0.69	0.78	0.86	0.92	0.96	1.00	0.97	1.06	1.11	1.16	1.21	1.16	1.10	1.09	1.07	1.13	1.16	1.23	1.23	1.23	1.28
LBR	0.21	0.23	0.24	0.24	0.27	0.29	0.31	0.34	0.37	0.41	0.45	0.49	0.50	0.52	0.57	0.59	0.59	0.61	0.63	0.63	0.63	0.63	0.65	0.64	0.65	0.67	0.68	0.71
LBY	0.26	0.29	0.32	0.33	0.38	0.45	0.47	0.53	0.59	0.65	0.70	0.75	0.77	0.76	0.87	0.90	0.88	0.91	0.91	0.89	0.90	0.89	0.90	0.89	0.91	0.98	0.99	1.02
LCA	0.21	0.23	0.24	0.24	0.26	0.28	0.29	0.32	0.35	0.37	0.40	0.44	0.44	0.46	0.48	0.51	0.51	0.52	0.54	0.54	0.52	0.53	0.53	0.51	0.51	0.53	0.54	0.54
LKA	0.56	0.60	0.67	0.71	0.82	0.93	1.04	1.24	1.34	1.47	1.55	1.56	1.65	1.46	2.02	1.47	1.73	1.78	1.66	1.76	1.94	1.88	1.94	1.98	2.16	2.16	2.27	2.61
LTU	0.28	0.32	0.36	0.38	0.43	0.49	0.54	0.61	0.69	0.76	0.85	0.89	0.90	0.88	1.02	1.01	1.06	1.13	1.13	1.11	1.12	1.12	1.11	1.11	1.15	1.18	1.20	1.28
LVA	0.25	0.28	0.31	0.33	0.37	0.45	0.45	0.52	0.58	0.64	0.76	0.77	0.79	0.78	0.90	0.90	0.93	0.98	1.00	0.97	0.99	0.98	0.98	0.96	0.99	1.02	1.03	1.08
MAC	1.32	1.53	1.80	1.94	2.72	3.39	4.21	5.78	5.95	6.79	7.69	7.57	7.32	5.79	7.17	5.71	4.00	3.60	3.29	2.91	2.86	2.83	3.07	3.04	2.82	2.71	2.90	3.81
MAR	0.42	0.45	0.50	0.51	0.54	0.56	0.59	0.64	0.72	0.78	0.83	0.87	0.85	0.83	1.02	1.04	1.01	1.06	1.03	1.03	1.05	1.03	1.05	1.07	1.13	1.15	1.20	1.40
MDA	0.25	0.29	0.32	0.35	0.39	0.45	0.49	0.57	0.70	0.79	0.89	0.94	0.97	0.94	1.07	1.04	1.06	1.13	1.16	1.12	1.14	1.14	1.13	1.14	1.19	1.23	1.22	1.27
MDG	0.20	0.22	0.23	0.24	0.26	0.29	0.31	0.36	0.40	0.40	0.45	0.51	0.53	0.53	0.62	0.63	0.68	0.69	0.70	0.70	0.69	0.69	0.71	0.71	0.75	0.77	0.79	0.87
MDV	0.21	0.23	0.25	0.27	0.30	0.35	0.46	0.68	0.75	0.86	0.79	0.71	0.55	0.55	0.63	0.65	0.72	0.75	0.78	0.77	1.33	1.30	1.35	0.73	0.74	0.77	0.80	0.83
MEX	0.31	0.41	0.48	0.50	0.55	0.60	0.66	0.71	0.78	0.85	0.90	0.90	0.87	0.82	0.87	0.84	0.90	0.97	0.93	0.93	0.97	0.95	0.95	0.95	0.98	0.98	1.00	1.15
MKD	0.32	0.34	0.44	0.40	0.45	0.56	0.57	0.67	0.76	0.85	0.94	0.99	1.02	0.99	1.22	1.19	1.19	1.25	1.32	1.22	1.23	1.22	1.24	1.29	1.34	1.38	1.36	1.44
MLT	0.32	0.37	0.42	0.45	0.49	0.55	0.60	0.66	0.73	0.82	0.88	0.87	0.92	0.82	0.93	0.94	0.96	0.98	1.03	0.99	0.98	0.97	0.95	0.92	0.93	0.97	1.06	1.02
MMR	0.37	0.42	0.46	0.47	0.55	0.64	0.74	1.03	1.12	1.18	1.27	1.33	1.30	1.27	1.48	1.43	1.64	1.81	1.68	1.82	2.02	2.13	2.39	2.57	2.84	3.05	3.43	4.43
MNG	0.32	0.35	0.36	0.37	0.42	0.49	0.56	0.70	0.77	0.87	0.97	1.08	1.16	1.15	1.32	1.29	1.38	1.54	1.52	1.38	1.37	1.32	1.38	1.29	1.26	1.31	1.35	1.55
MOZ	0.18	0.20	0.20	0.21	0.23	0.25	0.27	0.33	0.35	0.39	0.43	0.47	0.48	0.49	0.54	0.55	0.58	0.61	0.62	0.61	0.61	0.61	0.63	0.61	0.62	0.65	0.66	0.70
MUS	0.41	0.47	0.57	0.62	0.65	0.75	0.84	1.07	1.11	1.17	1.15	1.10	1.12	0.96	1.28	1.22	1.39	1.43	1.29	1.21	1.24	1.17	1.18	1.27	1.23	1.23	1.20	1.19
MWI	0.21	0.22	0.23	0.24	0.26	0.28	0.30	0.33	0.36	0.39	0.43	0.48	0.48	0.49	0.53	0.56	0.59	0.61	0.63	0.62	0.59	0.60	0.61	0.59	0.59	0.61	0.64	0.65
MYS	0.59	0.63	0.68	0.73	0.79	0.89	1.02	1.18	1.27	1.37	1.50	1.50	1.60	1.48	1.89	1.96	1.82	2.19	2.04	1.91	1.88	1.91	1.97	1.74	1.75	1.75	1.85	2.13
NER	0.20	0.22	0.24	0.26	0.29	0.32	0.33	0.37	0.41	0.44	0.48	0.52	0.52	0.54	0.59	0.61	0.63	0.66	0.67	0.67	0.66	0.67	0.68	0.66	0.67	0.70	0.71	0.73
NGA	0.25	0.28	0.40	0.43	0.48	0.45	0.42	0.45	0.51	0.54	0.58	0.63	0.63	0.61	0.68	0.68	0.75	0.83	0.80	0.79	0.81	0.78	0.79	0.77	0.79	0.78	0.78	0.81
NIC	0.24	0.26	0.28	0.31	0.35	0.40	0.46	0.53	0.61	0.67	0.71	0.73	0.76	0.72	0.81	0.77	0.82	0.88	0.89	0.86	0.87	0.89	0.91	0.92	0.96	0.99	1.02	1.06
NLD	0.47	0.52	0.59	0.69	0.78	0.94	1.02	1.08	1.17	1.29	1.40	1.43	1.52	1.39	1.68	1.60	1.73	1.92	1.87	1.77	1.88	1.86	1.79	1.82	1.90	1.98	1.92	2.19
NOR	0.26	0.29	0.32	0.33	0.37	0.41	0.43	0.48	0.53	0.59	0.66	0.71	0.74	0.75	0.85	0.87	0.88	0.94	0.95	0.93	0.94	0.93	0.93	0.92	0.94	0.97	0.98	1.04
NPL	0.39	0.41	0.42	0.42	0.48	0.58	0.69	0.83	0.87	0.90	1.03	1.12	1.24	1.22	1.41	1.37	1.49	1.67	1.63	1.48	1.49	1.44	1.51	1.46	1.48	1.56	1.61	1.79
NZL	0.33	0.33	0.34	0.34	0.35	0.37	0.38	0.42	0.45	0.48	0.51	0.55	0.57	0.57	0.65	0.64	0.69	0.74	0.71	0.73	0.72	0.70	0.72	0.72	0.71	0.72	0.73	0.80
OMN	0.24	0.28	0.30	0.31	0.36	0.40	0.45	0.51	0.56	0.62	0.67	0.72	0.75	0.73	0.86	0.88	0.92	0.96	0.96	0.97	0.98	0.96	1.00	0.99	1.05	1.10	1.10	1.15
PAK	0.76	0.82	0.90	0.89	0.94	1.02	1.09	1.26	1.32	1.45	1.60	1.68	1.76	1.67	1.99	1.89	2.21	2.49	2.43	2.21	2.22	2.18	2.27	2.28	2.49	2.44	2.49	2.99
PAN	0.30	0.31	0.34	0.31	0.34	0.37	0.42	0.46	0.52	0.55	0.57	0.60	0.65	0.59	0.68	0.67	0.65	0.67	0.66	0.66	0.63	0.62	0.63	0.62	0.62	0.64	0.64	0.66
PER	0.33	0.35	0.36	0.37	0.41	0.44	0.48	0.53	0.58	0.62	0.67	0.71	0.72	0.69	0.78	0.75	0.75	0.87	0.86	0.84	0.87	0.83	0.83	0.82	0.85	0.85	0.87	0.87
PHL	0.49	0.53	0.57	0.58	0.62	0.71	0.78	0.90	0.96	1.04	1.13	1.25	1.40	1.30	1.37	1.37	1.54	1.61	1.52	1.45	1.43	1.45	1.51	1.51	1.53	1.51	1.55	1.70
PNG	0.22	0.23	0.24	0.24	0.27	0.29	0.32	0.36	0.39	0.44	0.49	0.54	0.57	0.59	0.66	0.68	0.71	0.74	0.75	0.73	0.73	0.74	0.77	0.77	0.76	0.79	0.80	0.88

Table C.7: Continued on next page

Table C.7: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
POL	0.52	0.56	0.64	0.59	0.63	0.69	0.73	0.80	0.90	0.98	1.07	1.12	1.13	1.10	1.30	1.27	1.26	1.46	1.52	1.47	1.55	1.55	1.57	1.66	1.74	1.74	1.80	1.98
PRT	0.85	0.91	1.02	1.06	1.07	1.11	1.13	1.10	1.22	1.32	1.45	1.34	1.26	1.17	1.34	1.29	1.45	1.55	1.52	1.49	1.57	1.54	1.51	1.56	1.66	1.66	1.62	1.84
PRY	0.26	0.27	0.27	0.29	0.32	0.35	0.37	0.42	0.45	0.46	0.52	0.58	0.58	0.59	0.66	0.65	0.65	0.70	0.72	0.68	0.68	0.67	0.68	0.65	0.66	0.66	0.67	0.70
QAT	0.22	0.26	0.29	0.31	0.36	0.41	0.45	0.53	0.58	0.62	0.68	0.71	0.73	0.72	0.79	0.80	0.87	0.90	0.96	0.95	0.93	0.87	0.90	0.88	0.90	0.93	0.99	1.17
ROU	0.43	0.47	0.53	0.56	0.58	0.66	0.75	0.85	1.17	1.32	1.49	1.50	1.54	1.37	1.54	1.31	1.35	1.57	1.66	1.60	1.68	1.68	1.65	1.70	1.78	1.79	1.75	1.60
RUS	0.51	0.47	0.48	0.46	0.48	0.50	0.54	0.62	0.69	0.75	0.87	0.96	0.97	0.98	1.11	1.08	1.10	1.24	1.24	1.17	1.19	1.14	1.14	1.10	1.13	1.18	1.22	1.39
RWA	0.23	0.25	0.26	0.27	0.29	0.32	0.34	0.38	0.42	0.47	0.52	0.56	0.58	0.60	0.66	0.69	0.70	0.73	0.73	0.73	0.73	0.74	0.77	0.77	0.79	0.83	0.85	0.90
SAU	0.26	0.30	0.34	0.36	0.43	0.50	0.56	0.62	0.68	0.74	0.78	0.80	0.82	0.77	0.90	0.89	0.96	1.02	1.00	1.01	1.02	1.01	1.05	1.05	1.12	1.17	1.23	1.32
SCG	0.26	0.35	0.39	0.43	0.48	0.55	0.61	0.72	0.76	0.84	0.93	0.98	1.02	1.79	2.08	2.08	2.29	2.25	2.29	2.27	2.43	2.32	1.36	1.37	2.40	2.45	2.38	2.81
SEN	0.19	0.21	0.22	0.23	0.25	0.27	0.28	0.32	0.35	0.38	0.42	0.45	0.46	0.48	0.52	0.55	0.56	0.59	0.60	0.60	0.60	0.60	0.61	0.59	0.60	0.62	0.64	0.66
SGP	0.53	0.59	0.67	0.61	0.60	0.70	0.82	1.01	1.01	1.16	1.30	1.38	1.61	1.47	1.77	1.79	1.91	2.13	2.06	1.88	1.58	1.67	1.71	1.73	1.68	1.88	1.88	2.09
SLE	0.20	0.22	0.23	0.24	0.26	0.28	0.29	0.33	0.36	0.39	0.42	0.46	0.46	0.48	0.51	0.54	0.55	0.56	0.59	0.58	0.57	0.57	0.57	0.55	0.56	0.58	0.59	0.61
SLV	0.30	0.35	0.42	0.47	0.67	0.75	0.91	1.01	1.06	1.15	1.20	1.14	1.12	0.95	1.09	1.04	1.11	1.26	1.17	1.14	1.19	1.14	1.20	1.26	1.33	1.31	1.29	1.14
SOM	0.22	0.25	0.26	0.27	0.30	0.33	0.34	0.39	0.42	0.46	0.51	0.56	0.55	0.57	0.62	0.65	0.69	0.70	0.73	0.71	0.68	0.69	0.70	0.68	0.69	0.72	0.75	0.78
SUR	0.19	0.20	0.20	0.21	0.24	0.26	0.27	0.31	0.33	0.36	0.39	0.42	0.44	0.45	0.49	0.51	0.51	0.54	0.56	0.55	0.55	0.56	0.58	0.54	0.54	0.56	0.57	0.59
SVK	0.34	0.39	0.45	0.47	0.55	0.64	0.71	0.81	0.91	1.00	1.10	1.11	1.16	1.09	1.30	1.27	1.32	1.41	1.42	1.35	1.39	1.39	1.39	1.40	1.45	1.50	1.46	1.54
SVN	0.48	0.52	0.66	0.65	0.69	0.77	0.83	0.86	0.97	1.04	1.17	1.22	1.21	1.14	1.30	1.26	1.27	1.32	1.33	1.26	1.28	1.25	1.23	1.23	1.26	1.30	1.30	1.35
SWE	0.27	0.31	0.36	0.37	0.41	0.48	0.54	0.53	0.59	0.66	0.73	0.78	0.84	0.85	1.00	1.00	0.98	1.05	1.07	1.04	1.07	1.05	1.05	1.03	1.06	1.08	1.10	1.19
SYR	0.45	0.51	0.59	0.62	0.71	0.81	0.89	1.00	1.17	1.28	1.36	1.39	1.44	1.38	1.45	1.45	1.78	1.94	1.62	1.36	1.21	1.07	1.12	1.14	1.19	1.06	1.09	1.15
THA	1.14	1.26	1.37	1.07	1.09	1.08	1.24	1.56	1.62	1.68	1.80	1.84	2.06	1.88	2.35	2.27	2.32	2.65	2.42	2.42	2.50	2.28	2.32	2.40	2.59	2.67	2.84	3.25
TJK	0.30	0.32	0.33	0.35	0.40	0.45	0.50	0.60	0.66	0.72	0.80	0.89	0.95	0.94	1.08	1.05	1.13	1.28	1.26	1.18	1.17	1.13	1.17	1.12	1.13	1.18	1.19	1.32
TKM	0.21	0.24	0.26	0.28	0.32	0.36	0.41	0.49	0.72	0.80	0.62	0.67	0.72	0.72	0.82	0.84	0.91	0.98	0.98	0.96	0.97	0.96	0.98	1.49	1.53	1.47	1.57	1.94
TON	0.17	0.18	0.19	0.19	0.21	0.22	0.23	0.26	0.28	0.31	0.34	0.38	0.39	0.41	0.44	0.47	0.49	0.51	0.53	0.52	0.50	0.51	0.52	0.50	0.49	0.51	0.53	0.56
TTO	0.20	0.22	0.23	0.24	0.26	0.28	0.29	0.32	0.35	0.38	0.41	0.44	0.44	0.46	0.49	0.51	0.53	0.53	0.55	0.55	0.53	0.53	0.54	0.53	0.52	0.53	0.55	0.57
TUN	0.47	0.53	0.61	0.63	0.67	0.74	0.79	0.85	0.97	1.05	1.14	1.16	1.16	1.08	1.27	1.25	1.36	1.41	1.34	1.28	1.29	1.26	1.22	1.23	1.26	1.49	1.49	1.42
TUR	0.86	0.88	0.98	0.95	1.03	1.12	1.18	1.29	1.41	1.86	2.08	2.15	2.20	2.01	2.41	2.20	2.37	2.70	2.60	2.64	2.78	2.63	2.64	2.73	2.96	2.97	3.14	3.66
TZA	0.21	0.23	0.24	0.25	0.27	0.30	0.31	0.35	0.38	0.41	0.46	0.50	0.50	0.52	0.56	0.59	0.63	0.66	0.68	0.66	0.64	0.65	0.68	0.64	0.65	0.67	0.70	0.74
UGA	0.20	0.23	0.24	0.25	0.27	0.30	0.31	0.35	0.38	0.42	0.46	0.51	0.51	0.53	0.57	0.60	0.64	0.66	0.69	0.67	0.65	0.65	0.66	0.64	0.64	0.67	0.69	0.71
UKR	0.39	0.39	0.38	0.37	0.41	0.46	0.51	0.58	0.66	0.73	0.81	0.87	0.88	0.87	0.99	0.98	1.01	1.07	1.08	1.05	1.05	1.04	1.05	1.03	1.06	1.10	1.12	1.18
URY	0.38	0.40	0.42	0.43	0.48	0.50	0.52	0.58	0.63	0.63	0.73	0.80	0.82	0.78	0.89	0.84	0.83	0.89	0.90	0.85	0.85	0.82	0.84	0.80	0.78	0.75	0.74	0.73
USA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
UZB	0.21	0.25	0.30	0.40	0.42	0.47	0.50	0.59	0.65	0.71	0.77	0.80	0.84	0.83	0.99	0.98	1.10	1.30	1.24	1.24	1.30	1.29	1.37	1.41	1.38	1.36	1.42	1.64
VEN	0.33	0.32	0.35	0.35	0.36	0.39	0.40	0.44	0.48	0.51	0.54	0.56	0.58	0.59	0.65	0.62	0.61	0.65	0.64	0.63	0.63	0.62	0.62	0.60	0.60	0.61	0.61	0.63
VNM	0.50	0.57	0.65	0.75	0.88	0.97	1.19	1.41	1.50	1.82	2.23	2.31	2.61	2.40	3.18	3.13	3.89	4.55	4.29	4.03	4.44	4.64	4.75	5.75	6.55	6.83	7.71	10.09
YEM	0.20	0.23	0.24	0.25	0.29	0.33	0.35	0.40	0.44	0.48	0.53	0.58	0.59	0.59	0.66	0.68	0.73	0.77	0.78	0.77	0.75	0.75	0.72	0.70	0.71	0.76	0.79	0.82
ZAF	0.43	0.45	0.48	0.46	0.42	0.35	0.51	0.56	0.57	0.62	0.72	0.76	0.75	0.72	0.80	0.79	0.86	0.93	0.86	0.85	0.85	0.83	0.84	0.83	0.88	0.90	0.90	0.94
ZMB	0.21	0.23	0.24	0.25	0.27	0.28	0.30	0.34	0.37	0.40	0.44	0.48	0.48	0.49	0.53	0.55	0.59	0.60	0.62	0.61	0.59	0.59	0.59	0.57	0.58	0.61	0.62	0.65
ZWE	0.28	0.30	0.31	0.31	0.32	0.33	0.35	0.41	0.44	0.47	0.50	0.53	0.52	0.53	0.57	0.58	0.60	0.63	0.65	0.63	0.60	0.59	0.60	0.58	0.58	0.61	0.64	0.66

Table C.8: IMR in the vehicles sector by country and year (BLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	0.15	0.15	0.16	0.16	0.17	0.19	0.20	0.24	0.26	0.26	0.27	0.31	0.32	0.34	0.33	0.35	0.33	0.35	0.34	0.32	0.32	0.31	0.33	0.32	0.26	0.26	0.27	0.28
AGO	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.28	0.23	0.23	0.26	0.24	0.26	0.26	0.18	0.19	0.18	0.16	0.16	0.16	0.16
ALB	0.16	0.18	0.18	0.18	0.20	0.23	0.24	0.27	0.29	0.31	0.32	0.35	0.36	0.37	0.37	0.37	0.36	0.33	0.34	0.32	0.32	0.32	0.32	0.32	0.27	0.27	0.28	0.26
ARE	0.21	0.20	0.18	0.17	0.19	0.20	0.22	0.23	0.25	0.27	0.29	0.33	0.38	0.31	0.37	0.35	0.30	0.31	0.32	0.37	0.36	0.34	0.30	0.28	0.22	0.26	0.27	0.28
ARG	0.24	0.23	0.21	0.21	0.21	0.22	0.20	0.23	0.24	0.22	0.24	0.26	0.28	0.30	0.30	0.32	0.30	0.33	0.33	0.32	0.31	0.29	0.29	0.27	0.25	0.26	0.26	0.25
ARM	0.15	0.16	0.16	0.16	0.17	0.20	0.21	0.25	0.27	0.27	0.28	0.31	0.31	0.33	0.32	0.33	0.29	0.30	0.30	0.28	0.28	0.27	0.27	0.27	0.23	0.23	0.24	0.24
AUS	0.20	0.21	0.20	0.20	0.20	0.19	0.20	0.22	0.23	0.25	0.26	0.29	0.29	0.30	0.29	0.30	0.28	0.28	0.28	0.26	0.26	0.25	0.24	0.24	0.20	0.20	0.21	0.21
AUT	0.44	0.47	0.52	0.53	0.54	0.58	0.60	0.68	0.77	0.84	0.88	0.97	0.99	1.00	1.08	1.04	0.85	0.94	1.00	0.88	0.89	0.86	0.84	0.81	0.78	0.82	0.88	0.90
AZE	0.16	0.16	0.17	0.17	0.18	0.20	0.21	0.26	0.28	0.27	0.28	0.32	0.32	0.34	0.33	0.34	0.30	0.32	0.31	0.29	0.29	0.28	0.28	0.28	0.24	0.24	0.26	0.26
BDI	0.11	0.12	0.12	0.12	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.20	0.20	0.22	0.21	0.22	0.19	0.20	0.20	0.20	0.20	0.19	0.19	0.19	0.16	0.16	0.17	0.16
BEL	0.91	0.96	0.91	0.88	1.08	1.22	1.25	1.25	1.44	1.53	1.48	1.52	1.54	1.45	1.56	1.42	2.32	2.46	2.66	2.40	2.38	2.32	2.21	2.18	2.17	2.22	2.35	1.81

Table C.8: Continued on next page

Table C.8: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BEN	0.12	0.13	0.13	0.13	0.13	0.15	0.15	0.17	0.18	0.19	0.20	0.22	0.22	0.23	0.25	0.24	0.22	0.24	0.24	0.23	0.22	0.21	0.21	0.20	0.17	0.17	0.18	0.17
BFA	0.12	0.13	0.13	0.13	0.14	0.15	0.16	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.23	0.24	0.21	0.22	0.22	0.22	0.21	0.21	0.21	0.20	0.18	0.18	0.19	0.18
BGD	0.16	0.18	0.18	0.17	0.18	0.19	0.20	0.24	0.26	0.29	0.30	0.33	0.33	0.35	0.34	0.34	0.32	0.33	0.32	0.30	0.30	0.30	0.32	0.32	0.28	0.29	0.31	0.32
BGR	0.19	0.20	0.20	0.20	0.21	0.24	0.25	0.29	0.31	0.33	0.34	0.38	0.39	0.41	0.41	0.42	0.36	0.39	0.39	0.36	0.37	0.37	0.37	0.37	0.33	0.34	0.35	0.34
BHR	0.15	0.17	0.17	0.16	0.17	0.19	0.20	0.23	0.25	0.26	0.26	0.29	0.30	0.29	0.28	0.29	0.27	0.28	0.28	0.26	0.29	0.25	0.25	0.25	0.21	0.22	0.24	0.24
BHS	0.18	0.18	0.19	0.17	0.21	0.18	0.19	0.21	0.25	0.25	0.26	0.30	0.36	0.34	0.29	0.31	0.25	0.28	0.28	0.29	0.35	0.38	0.33	0.26	0.22	0.24	0.25	0.23
BIH	0.17	0.19	0.19	0.20	0.22	0.25	0.26	0.30	0.32	0.34	0.36	0.39	0.40	0.41	0.41	0.41	0.35	0.37	0.38	0.35	0.36	0.35	0.35	0.35	0.30	0.30	0.31	0.29
BLR	0.20	0.22	0.22	0.23	0.24	0.30	0.30	0.34	0.37	0.39	0.40	0.45	0.46	0.47	0.48	0.49	0.40	0.44	0.46	0.42	0.41	0.39	0.38	0.36	0.33	0.34	0.36	0.35
BLZ	0.15	0.16	0.17	0.18	0.18	0.18	0.18	0.22	0.23	0.24	0.24	0.25	0.26	0.28	0.27	0.43	0.43	0.27	0.33	0.28	0.29	0.28	0.26	0.27	0.24	0.25	0.26	0.33
BMU	0.20	0.25	0.35	0.42	0.53	0.34	0.33	0.36	0.41	0.31	0.59	0.35	0.60	0.48	0.35	1.11	0.27	1.04	0.91	0.32	0.25	0.23	0.36	0.36	0.21	0.24	0.29	0.27
BOL	0.13	0.13	0.13	0.14	0.13	0.14	0.14	0.17	0.17	0.18	0.18	0.20	0.21	0.22	0.21	0.22	0.20	0.21	0.20	0.20	0.20	0.19	0.19	0.18	0.16	0.16	0.17	0.16
BRA	0.34	0.34	0.33	0.31	0.31	0.30	0.28	0.34	0.35	0.36	0.40	0.44	0.49	0.49	0.52	0.57	0.54	0.58	0.57	0.51	0.51	0.46	0.40	0.41	0.43	0.40	0.41	0.37
BRB	0.13	0.14	0.14	0.15	0.15	0.16	0.15	0.17	0.19	0.20	0.20	0.21	0.22	0.23	0.22	0.24	0.28	0.23	0.24	0.21	0.21	0.21	0.20	0.19	0.17	0.17	0.19	0.17
BRN	0.14	0.15	0.15	0.15	0.16	0.17	0.20	0.21	0.24	0.24	0.26	0.27	0.27	0.30	0.27	0.28	0.26	0.27	0.26	0.25	0.25	0.24	0.25	0.25	0.20	0.20	0.21	0.21
BTN	0.16	0.16	0.16	0.17	0.17	0.19	0.20	0.25	0.26	0.28	0.29	0.33	0.35	0.37	0.36	0.37	0.36	0.39	0.37	0.35	0.36	0.35	0.37	0.36	0.29	0.28	0.29	0.30
CAF	0.12	0.13	0.13	0.13	0.13	0.14	0.15	0.17	0.18	0.19	0.19	0.21	0.21	0.23	0.22	0.24	0.21	0.22	0.21	0.22	0.21	0.20	0.21	0.20	0.17	0.17	0.18	0.17
CAN	0.58	0.59	0.60	0.60	0.59	0.59	0.61	0.64	0.63	0.63	0.62	0.65	0.66	0.67	0.65	0.64	0.58	0.60	0.60	0.59	0.57	0.56	0.55	0.55	0.51	0.51	0.53	0.51
CHE	0.46	0.49	0.52	0.53	0.53	0.54	0.55	0.63	0.69	0.74	0.75	0.78	0.78	0.80	0.83	0.82	0.66	0.70	0.73	0.70	0.68	0.66	0.64	0.64	0.57	0.59	0.61	0.61
CHL	0.13	0.14	0.13	0.14	0.13	0.14	0.14	0.15	0.16	0.16	0.17	0.18	0.18	0.20	0.19	0.20	0.18	0.18	0.18	0.18	0.17	0.17	0.17	0.17	0.14	0.14	0.15	0.15
CHN	0.51	0.45	0.45	0.47	0.50	0.53	0.59	0.67	0.73	0.88	0.97	1.08	1.21	1.30	1.47	1.62	1.82	1.98	1.93	1.90	1.97	1.95	2.13	2.13	1.76	1.68	1.80	2.03
CIV	0.13	0.13	0.13	0.13	0.13	0.15	0.16	0.17	0.20	0.19	0.20	0.21	0.25	0.25	0.22	0.23	0.24	0.21	0.21	0.22	0.21	0.20	0.20	0.20	0.23	0.17	0.18	0.18
CMR	0.12	0.13	0.13	0.13	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.22	0.22	0.23	0.24	0.27	0.22	0.24	0.26	0.25	0.24	0.22	0.21	0.21	0.18	0.18	0.19	0.19
COG	0.11	0.13	0.12	0.12	0.12	0.13	0.14	0.16	0.17	0.18	0.18	0.20	0.20	0.21	0.23	0.30	0.28	0.34	0.23	0.27	0.24	0.21	0.32	0.19	0.17	0.17	0.17	0.19
COL	0.17	0.17	0.17	0.17	0.18	0.18	0.16	0.19	0.21	0.21	0.22	0.24	0.25	0.27	0.26	0.26	0.23	0.25	0.24	0.24	0.24	0.23	0.22	0.22	0.19	0.19	0.20	0.19
CPV	0.12	0.13	0.13	0.13	0.13	0.15	0.15	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.22	0.23	0.20	0.21	0.21	0.20	0.21	0.20	0.20	0.20	0.17	0.17	0.17	0.17
CRI	0.12	0.14	0.13	0.14	0.15	0.16	0.15	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.21	0.23	0.20	0.20	0.21	0.20	0.20	0.19	0.20	0.20	0.17	0.17	0.18	0.17
CUB	0.18	0.20	0.20	0.21	0.21	0.23	0.22	0.26	0.27	0.26	0.26	0.29	0.28	0.30	0.28	0.29	0.26	0.27	0.26	0.26	0.26	0.25	0.26	0.25	0.22	0.22	0.22	0.22
CYP	0.20	0.18	0.19	0.23	0.19	0.22	0.26	0.27	0.29	0.31	0.33	0.34	0.35	0.44	0.37	0.37	0.30	0.31	0.33	0.29	0.29	0.30	0.30	0.28	0.24	0.24	0.29	0.26
CZE	0.41	0.44	0.46	0.49	0.53	0.60	0.63	0.74	0.83	0.88	0.93	1.01	1.04	1.07	1.20	1.18	1.08	1.19	1.28	1.09	1.12	1.12	1.10	1.09	1.11	1.13	1.15	1.18
DEU	1.58	1.60	1.67	1.63	1.65	1.69	1.81	1.86	2.07	2.27	2.49	2.51	2.52	2.38	2.83	2.68	2.27	2.53	2.78	2.49	2.49	2.46	2.39	2.30	2.41	2.42	2.33	2.34
DNK	0.37	0.39	0.42	0.42	0.44	0.49	0.50	0.57	0.62	0.64	0.66	0.71	0.76	0.79	0.80	0.77	0.57	0.62	0.68	0.62	0.62	0.56	0.55	0.53	0.47	0.47	0.47	0.45
DOM	0.13	0.13	0.14	0.14	0.14	0.16	0.16	0.18	0.19	0.20	0.20	0.22	0.22	0.24	0.22	0.23	0.20	0.21	0.21	0.21	0.20	0.20	0.20	0.20	0.17	0.17	0.18	0.17
DZA	0.17	0.18	0.19	0.19	0.20	0.22	0.23	0.26	0.28	0.30	0.31	0.33	0.34	0.34	0.34	0.35	0.30	0.31	0.31	0.30	0.30	0.29	0.29	0.29	0.25	0.25	0.27	0.26
ECU	0.13	0.13	0.13	0.13	0.13	0.14	0.14	0.16	0.18	0.18	0.19	0.20	0.21	0.22	0.21	0.22	0.20	0.20	0.21	0.20	0.20	0.19	0.20	0.19	0.17	0.17	0.17	0.16
EGY	0.15	0.17	0.17	0.17	0.18	0.20	0.21	0.24	0.25	0.25	0.26	0.29	0.29	0.30	0.30	0.30	0.27	0.29	0.28	0.27	0.27	0.27	0.27	0.26	0.22	0.25	0.27	0.24
ESP	0.55	0.61	0.66	0.65	0.64	0.66	0.66	0.69	0.73	0.81	0.84	0.86	0.83	0.83	0.87	0.92	0.89	0.88	0.91	0.80	0.83	0.80	0.79	0.80	0.80	0.81	0.84	0.92
EST	0.19	0.21	0.21	0.21	0.24	0.29	0.31	0.38	0.39	0.41	0.42	0.47	0.49	0.49	0.45	0.45	0.36	0.39	0.42	0.39	0.39	0.39	0.36	0.35	0.31	0.32	0.33	0.31
ETH	0.12	0.13	0.13	0.13	0.13	0.14	0.15	0.17	0.19	0.20	0.20	0.22	0.23	0.24	0.23	0.24	0.21	0.22	0.22	0.22	0.22	0.21	0.22	0.22	0.18	0.19	0.19	0.21
FIN	0.27	0.29	0.31	0.32	0.33	0.41	0.50	0.56	0.58	0.60	0.59	0.63	0.68	0.67	0.64	0.62	0.49	0.48	0.48	0.41	0.41	0.39	0.44	0.38	0.42	0.42	0.45	0.37
FJI	0.11	0.11	0.11	0.12	0.11	0.12	0.12	0.14	0.15	0.16	0.16	0.18	0.18	0.19	0.18	0.19	0.17	0.18	0.17	0.18	0.17	0.17	0.17	0.17	0.14	0.14	0.15	0.15
FRA	1.04	1.08	1.08	1.09	1.11	1.16	1.38	1.28	1.42	1.68	1.78	1.53	1.50	1.36	1.45	1.29	1.19	1.21	1.23	1.13	1.13	1.16	1.12	1.21	1.22	1.27	1.30	1.15
GAB	0.12	0.12	0.12	0.12	0.13	0.14	0.17	0.16	0.17	0.18	0.19	0.22	0.22	0.22	0.27	0.34	0.26	0.27	0.41	0.37	0.38	0.32	0.22	0.31	0.21	0.24	0.20	0.20
GBR	0.73	0.75	0.75	0.74	0.79	0.84	0.87	0.87	0.88	0.94	0.95	0.98	1.01	0.95	1.03	1.05	0.93	0.89	0.96	0.95	0.96	0.90	0.87	0.86	0.88	0.87	0.83	0.86
GEO	0.15	0.16	0.17	0.17	0.18	0.20	0.20	0.24	0.25	0.26	0.28	0.31	0.31	0.33	0.32	0.33	0.28	0.30	0.30	0.28	0.28	0.28	0.28	0.27	0.24	0.24	0.25	0.24
GHA	0.13	0.14	0.14	0.14	0.14	0.15	0.16	0.17	0.19	0.19	0.20	0.22	0.22	0.23	0.23	0.24	0.21	0.22	0.22	0.22	0.23	0.20	0.20	0.20	0.18	0.17	0.19	0.18
GMB	0.13	0.14	0.14	0.14	0.14	0.15	0.15	0.17	0.19	0.20	0.21	0.22	0.22	0.24	0.23	0.24	0.21	0.21	0.22	0.22	0.21	0.20	0.20	0.20	0.17	0.18	0.19	0.18
GRC	0.18	0.19	0.19	0.19	0.20	0.23	0.23	0.27	0.29	0.31	0.33	0.36	0.37	0.38	0.37	0.37	0.32	0.33	0.33	0.32	0.31	0.30	0.31	0.31	0.26	0.27	0.28	0.26
GTM	0.14	0.15	0.15	0.16	0.16	0.17	0.18	0.21	0.22	0.22	0.22	0.24	0.24	0.26	0.25	0.27	0.24	0.25	0.26	0.25	0.25	0.24	0.25	0.25	0.22	0.23	0.24	0.25
HKG	0.32	0.31	0.30	0.30	0.31	0.33	0.38	0.41	0.44	0.51	0.53	0.60	0.63	0.68	0.67	0.72	0.66	0.68	0.66	0.60	0.58	0.56	0.64	0.58	0.46	0.46	0.49	0.52
HND	0.12	0.13	0.13	0.13	0.14	0.15	0.15	0.17	0.18	0.19	0.20	0.21	0.21	0.23	0.21	0.23	0.20	0.21	0.22	0.21	0.20	0.20	0.20	0.20	0.17	0.18	0.18	0.18
HRV	0.22	0.24	0.24	0.24	0.27	0.31	0.33	0.37	0.40	0.43	0.44	0.47	0.48	0.49	0.51	0.49	0.43	0.45	0.46	0.40	0.41	0.41	0.41	0.41	0.35	0.35	0.38	0.34
HTI	0.12	0.13	0.13	0.13	0.14	0.15	0.16	0.18	0.19	0.20	0.20	0.22	0.22	0.23	0.22	0.23	0.20	0.21	0.21	0.20	0.20	0.20	0.20	0.20	0.17	0.17	0.18	0.17
HUN	0.23	0.25	0.26	0.27	0.32	0.39	0.43	0.48	0.52	0.57	0.62	0.66	0.69	0.71	0.80	0.79	0.71	0.78	0.82	0.69	0.72	0.75	0.75	0.75	0.72	0.73	0.79	0.81
IDN	0.20	0.22	0.23	0.23	0.22	0.18	0.22	0.29	0.28	0.33	0.32	0.35	0.37	0.39	0.39	0.39	0.38	0.42	0.43	0.40	0.39	0.37	0.43	0.45	0.41	0.42	0.48	0.51
IND	0.27	0.28	0.31	0.30	0.30	0.27	0.33	0.36	0.38	0.41	0.44	0.55	0.56	0.57	0.59	0.59	0.66	0.74	0.74	0.66	0.64	0.64	0.68	0.68	0.65	0.67	0.66	0.69
IRL	0.24	0.26	0.27	0.28	0.33	0.37	0.38	0.43	0.47	0.49	0.46	0.49	0.49	0.49	0.47	0.49	0.43	0.45	0.45	0.42	0.43	0.41	0.38	0.37	0.31	0.32	0.32	0.31
IRN	0.18	0.19	0.19	0.20	0.23	0.26	0.30	0.38	0.45	0.34	0.37	0.41	0.42	0.43	0.42	0.45	0.46	0.48	0.47	0.38	0.36	0.36	0.36	0.38	0.37	0.33	0.37	0.52
IRQ	0.15	0.17	0.21	0.21	0.25	0.27	0.27	0.30	0.32	0.30	0.30	0.31	0.31	0.31	0.30	0.31	0.28	0.29	0.29	0.27	0.27	0.26	0.27	0.26	0.23	0.23	0.24	0.24
ISL	0.15	0.16	0.16	0.16	0.17	0.20	0.20	0.23	0.25	0.27	0.27	0.29	0.29	0.30	0.29	0.30	0.26	0.27	0.27	0.26	0.27	0.27	0.25	0.25	0.21	0.22	0.22	0.21

Table C.8: Continued on next page

Table C.8: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
ISR	0.20	0.21	0.21	0.21	0.23	0.25	0.35	0.42	0.42	0.33	0.34	0.37	0.37	0.39	0.40	0.40	0.36	0.36	0.36	0.34	0.34	0.32	0.33	0.31	0.28	0.29	0.30	0.30
ITA	0.56	0.62	0.63	0.66	0.65	0.67	0.65	0.72	0.77	0.81	0.83	0.87	0.87	0.91	0.98	0.97	0.83	0.86	0.89	0.82	0.83	0.83	0.82	0.81	0.81	0.83	0.82	0.88
JAM	0.14	0.15	0.15	0.15	0.15	0.17	0.16	0.18	0.19	0.21	0.21	0.22	0.23	0.25	0.23	0.25	0.22	0.22	0.22	0.22	0.21	0.20	0.22	0.20	0.17	0.19	0.19	0.19
JOR	0.15	0.17	0.17	0.17	0.18	0.20	0.22	0.25	0.28	0.27	0.28	0.30	0.29	0.31	0.30	0.31	0.27	0.28	0.28	0.26	0.26	0.25	0.26	0.25	0.21	0.22	0.23	0.22
JPN	5.97	5.23	4.24	3.59	4.04	3.91	4.30	4.50	4.29	4.91	5.04	5.00	5.20	4.79	5.40	5.33	4.51	4.83	4.37	3.88	3.47	3.05	3.18	3.31	3.55	3.54	3.62	3.74
KAZ	0.16	0.17	0.17	0.17	0.18	0.20	0.21	0.24	0.26	0.27	0.28	0.32	0.33	0.36	0.35	0.36	0.33	0.36	0.35	0.35	0.35	0.34	0.35	0.33	0.27	0.28	0.29	0.30
KEN	0.14	0.15	0.15	0.14	0.14	0.15	0.15	0.17	0.18	0.19	0.20	0.22	0.22	0.23	0.22	0.24	0.21	0.21	0.21	0.22	0.21	0.20	0.20	0.20	0.17	0.17	0.19	0.19
KGZ	0.15	0.16	0.16	0.16	0.17	0.20	0.20	0.24	0.25	0.27	0.28	0.31	0.32	0.35	0.34	0.35	0.32	0.35	0.34	0.33	0.33	0.32	0.33	0.32	0.26	0.26	0.27	0.28
KHM	0.14	0.15	0.14	0.15	0.16	0.17	0.19	0.24	0.25	0.28	0.28	0.32	0.33	0.35	0.34	0.35	0.32	0.35	0.33	0.32	0.32	0.31	0.35	0.33	0.25	0.26	0.28	0.28
KOR	0.99	1.05	1.07	1.11	1.24	1.23	1.54	1.73	1.88	2.21	2.45	2.83	3.14	3.11	3.39	3.20	3.03	3.22	3.14	2.66	2.66	2.37	2.31	2.20	2.18	1.85	1.85	1.97
KWT	0.14	0.17	0.16	0.16	0.17	0.18	0.19	0.22	0.24	0.25	0.25	0.28	0.27	0.30	0.28	0.29	0.26	0.27	0.27	0.26	0.25	0.24	0.25	0.24	0.21	0.21	0.27	0.24
LAO	0.17	0.17	0.17	0.18	0.19	0.20	0.22	0.28	0.29	0.31	0.32	0.37	0.39	0.41	0.40	0.42	0.40	0.44	0.41	0.39	0.40	0.39	0.43	0.41	0.31	0.31	0.33	0.33
LBN	0.15	0.16	0.16	0.16	0.17	0.19	0.20	0.24	0.25	0.26	0.27	0.29	0.30	0.31	0.30	0.31	0.27	0.28	0.29	0.27	0.27	0.26	0.27	0.26	0.22	0.23	0.24	0.23
LBR	0.17	0.17	0.15	0.19	0.21	0.23	0.17	0.21	0.27	0.25	0.26	0.28	0.31	0.30	0.27	0.26	0.27	0.23	0.23	0.22	0.22	0.23	0.25	0.21	0.20	0.19	0.21	0.19
LBY	0.15	0.16	0.16	0.16	0.17	0.20	0.20	0.23	0.25	0.26	0.27	0.30	0.30	0.31	0.31	0.31	0.27	0.28	0.28	0.27	0.27	0.27	0.27	0.26	0.22	0.23	0.24	0.22
LCA	0.13	0.14	0.14	0.14	0.14	0.15	0.15	0.17	0.18	0.20	0.20	0.21	0.22	0.23	0.22	0.23	0.20	0.21	0.21	0.21	0.20	0.20	0.20	0.19	0.17	0.17	0.18	0.17
LKA	0.13	0.14	0.14	0.14	0.14	0.15	0.16	0.18	0.20	0.21	0.22	0.25	0.24	0.26	0.25	0.27	0.23	0.24	0.23	0.23	0.23	0.22	0.23	0.22	0.18	0.20	0.21	0.19
LTU	0.20	0.22	0.22	0.23	0.25	0.29	0.29	0.33	0.36	0.38	0.40	0.44	0.45	0.46	0.47	0.47	0.39	0.42	0.43	0.39	0.39	0.38	0.38	0.37	0.33	0.33	0.35	0.34
LVA	0.19	0.21	0.22	0.22	0.24	0.28	0.29	0.33	0.35	0.37	0.39	0.43	0.43	0.44	0.44	0.44	0.36	0.39	0.41	0.38	0.38	0.37	0.35	0.34	0.31	0.31	0.32	0.31
MAC	0.22	0.22	0.20	0.21	0.22	0.24	0.25	0.31	0.32	0.36	0.36	0.42	0.46	0.50	0.50	0.55	0.51	0.55	0.55	0.53	0.52	0.49	0.53	0.52	0.40	0.39	0.42	0.45
MAR	0.18	0.20	0.21	0.21	0.21	0.23	0.23	0.26	0.28	0.29	0.30	0.32	0.32	0.33	0.33	0.35	0.31	0.32	0.32	0.31	0.32	0.32	0.32	0.32	0.31	0.33	0.36	0.38
MDA	0.18	0.19	0.19	0.19	0.20	0.23	0.24	0.27	0.30	0.32	0.33	0.37	0.37	0.39	0.39	0.40	0.33	0.35	0.36	0.34	0.34	0.33	0.32	0.32	0.28	0.29	0.30	0.29
MDG	0.11	0.11	0.11	0.11	0.11	0.12	0.13	0.15	0.16	0.17	0.17	0.19	0.19	0.20	0.19	0.20	0.18	0.19	0.19	0.19	0.18	0.18	0.18	0.18	0.15	0.15	0.16	0.15
MDV	0.12	0.13	0.13	0.13	0.13	0.14	0.15	0.17	0.19	0.20	0.21	0.23	0.22	0.24	0.23	0.24	0.21	0.22	0.22	0.22	0.25	0.24	0.25	0.21	0.17	0.17	0.18	0.18
MEX	0.39	0.41	0.41	0.45	0.46	0.47	0.51	0.56	0.59	0.59	0.59	0.57	0.57	0.64	0.70	0.71	0.69	0.79	0.84	0.82	0.84	0.86	0.89	0.89	0.99	1.04	1.14	1.15
MKD	0.17	0.19	0.19	0.19	0.20	0.23	0.25	0.28	0.29	0.31	0.33	0.36	0.36	0.38	0.37	0.38	0.32	0.34	0.36	0.32	0.33	0.33	0.33	0.32	0.29	0.31	0.31	0.30
MLT	0.19	0.20	0.19	0.20	0.23	0.25	0.25	0.28	0.32	0.34	0.35	0.39	0.38	0.41	0.42	0.57	0.39	0.37	0.41	0.36	0.38	0.35	0.31	0.34	0.28	0.26	0.27	0.27
MMR	0.18	0.18	0.19	0.20	0.20	0.21	0.22	0.28	0.30	0.33	0.36	0.40	0.40	0.42	0.40	0.41	0.40	0.43	0.40	0.38	0.38	0.37	0.40	0.38	0.29	0.30	0.32	0.33
MNG	0.18	0.18	0.18	0.18	0.19	0.21	0.22	0.27	0.29	0.31	0.32	0.37	0.38	0.40	0.39	0.41	0.38	0.42	0.39	0.37	0.38	0.37	0.39	0.38	0.30	0.29	0.31	0.31
MOZ	0.11	0.11	0.11	0.11	0.11	0.12	0.13	0.17	0.18	0.19	0.20	0.22	0.22	0.22	0.21	0.22	0.20	0.21	0.20	0.20	0.19	0.19	0.19	0.19	0.16	0.17	0.17	0.16
MUS	0.12	0.13	0.13	0.12	0.12	0.13	0.13	0.15	0.17	0.18	0.18	0.21	0.21	0.24	0.20	0.22	0.21	0.22	0.20	0.20	0.19	0.19	0.19	0.19	0.15	0.17	0.17	0.17
MWI	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.15	0.16	0.18	0.18	0.20	0.20	0.21	0.20	0.22	0.19	0.20	0.20	0.20	0.19	0.18	0.19	0.18	0.15	0.16	0.17	0.17
MYS	0.24	0.24	0.24	0.25	0.24	0.26	0.29	0.48	0.38	0.42	0.44	0.45	0.60	0.66	0.45	0.47	0.47	0.50	0.48	0.44	0.43	0.43	0.47	0.46	0.41	0.40	0.43	0.45
NER	0.13	0.13	0.14	0.14	0.14	0.15	0.16	0.18	0.19	0.20	0.21	0.23	0.23	0.24	0.24	0.25	0.22	0.23	0.23	0.23	0.22	0.21	0.21	0.21	0.18	0.18	0.19	0.18
NGA	0.14	0.14	0.14	0.14	0.14	0.15	0.16	0.17	0.19	0.20	0.21	0.22	0.23	0.24	0.30	0.26	0.25	0.31	0.31	0.29	0.25	0.23	0.22	0.21	0.20	0.19	0.19	0.18
NIC	0.12	0.13	0.13	0.13	0.13	0.15	0.15	0.17	0.18	0.19	0.19	0.21	0.21	0.23	0.21	0.23	0.20	0.20	0.30	0.20	0.21	0.20	0.20	0.20	0.17	0.18	0.18	0.17
NLD	0.50	0.55	0.57	0.56	0.59	0.67	0.68	0.78	0.87	0.94	0.94	0.98	0.99	0.96	1.00	0.97	0.81	0.80	0.97	0.95	0.97	0.95	0.78	0.80	0.72	0.77	0.77	0.70
NOR	0.31	0.33	0.34	0.33	0.36	0.41	0.42	0.44	0.47	0.50	0.52	0.54	0.56	0.59	0.61	0.60	0.49	0.49	0.50	0.47	0.47	0.45	0.43	0.40	0.36	0.37	0.37	0.36
NPL	0.15	0.16	0.16	0.17	0.17	0.19	0.20	0.24	0.26	0.27	0.28	0.33	0.35	0.37	0.36	0.37	0.36	0.40	0.38	0.35	0.35	0.35	0.37	0.36	0.29	0.28	0.29	0.30
NZL	0.15	0.15	0.13	0.13	0.13	0.13	0.13	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.19	0.21	0.19	0.20	0.19	0.20	0.19	0.18	0.18	0.18	0.16	0.16	0.17	0.18
OMN	0.17	0.18	0.16	0.16	0.17	0.18	0.17	0.21	0.22	0.24	0.23	0.26	0.26	0.27	0.26	0.27	0.24	0.25	0.25	0.25	0.24	0.23	0.24	0.23	0.20	0.20	0.21	0.20
PAK	0.20	0.21	0.22	0.22	0.22	0.22	0.23	0.27	0.30	0.31	0.32	0.37	0.36	0.40	0.39	0.41	0.41	0.43	0.43	0.40	0.38	0.36	0.38	0.37	0.31	0.32	0.31	0.32
PAN	0.23	0.26	0.24	0.25	0.24	0.19	0.19	0.21	0.25	0.26	0.27	0.27	0.30	0.31	0.29	0.34	0.33	0.29	0.27	0.28	0.27	0.26	0.26	0.28	0.22	0.20	0.21	0.20
PER	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.16	0.17	0.18	0.18	0.20	0.20	0.22	0.21	0.22	0.20	0.21	0.21	0.21	0.20	0.19	0.19	0.19	0.17	0.17	0.18	0.18
PHL	0.20	0.21	0.20	0.20	0.22	0.23	0.25	0.27	0.28	0.30	0.34	0.36	0.39	0.40	0.39	0.42	0.39	0.44	0.43	0.39	0.38	0.38	0.41	0.41	0.34	0.31	0.34	0.34
PNG	0.12	0.13	0.13	0.12	0.13	0.13	0.14	0.16	0.17	0.18	0.19	0.21	0.22	0.23	0.21	0.23	0.20	0.21	0.21	0.20	0.20	0.19	0.20	0.20	0.16	0.17	0.17	0.17
POL	0.38	0.41	0.43	0.44	0.46	0.51	0.53	0.61	0.65	0.66	0.71	0.82	0.83	0.85	0.91	0.91	0.82	0.88	0.92	0.79	0.81	0.79	0.79	0.77	0.76	0.77	0.79	0.80
PRT	0.24	0.25	0.32	0.34	0.34	0.35	0.35	0.38	0.41	0.43	0.45	0.46	0.45	0.46	0.45	0.47	0.43	0.45	0.49	0.44	0.44	0.42	0.42	0.41	0.39	0.42	0.44	0.45
PRY	0.14	0.14	0.14	0.14	0.15	0.16	0.15	0.18	0.19	0.19	0.20	0.22	0.23	0.24	0.23	0.25	0.22	0.24	0.23	0.22	0.22	0.20	0.20	0.19	0.17	0.17	0.17	0.17
QAT	0.14	0.15	0.15	0.15	0.15	0.17	0.18	0.20	0.22	0.23	0.24	0.27	0.27	0.29	0.27	0.28	0.26	0.25	0.26	0.25	0.24	0.23	0.24	0.23	0.19	0.20	0.22	0.27
ROU	0.22	0.22	0.22	0.23	0.24	0.27	0.28	0.31	0.33	0.36	0.38	0.42	0.44	0.46	0.48	0.50	0.49	0.52	0.54	0.48	0.53	0.52	0.51	0.51	0.52	0.54	0.55	0.55
RUS	0.28	0.29	0.29	0.29	0.30	0.30	0.29	0.34	0.37	0.39	0.41	0.46	0.47	0.50	0.50	0.51	0.44	0.50	0.49	0.51	0.50	0.47	0.45	0.43	0.46	0.47	0.50	0.51
RWA	0.12	0.12	0.13	0.13	0.13	0.13	0.14	0.16	0.17	0.18	0.19	0.21	0.21	0.23	0.22	0.23	0.20	0.21	0.21	0.21	0.20	0.20	0.20	0.20	0.17	0.17	0.18	0.18
SAU	0.14	0.15	0.15	0.15	0.16	0.17	0.18	0.21	0.22	0.23	0.24	0.26	0.26	0.28	0.26	0.27	0.26	0.25	0.25	0.24	0.24	0.24	0.24	0.24	0.20	0.21	0.21	0.21
SCG	0.18	0.21	0.21	0.22	0.24	0.27	0.28	0.32	0.34	0.36	0.37	0.41	0.41	0.79	0.79	0.82	0.73	0.81	0.83	0.78	0.89	0.87	0.83	0.81	0.74	0.74	0.75	0.73
SEN	0.12	0.13	0.13	0.13	0.14	0.15	0.15	0.17	0.19	0.20	0.20	0.22	0.22	0.23	0.22	0.24	0.21	0.21	0.21	0.21	0.21	0.20	0.20	0.20	0.17	0.17	0.18	0.17
SGP	0.37	0.48	0.46	0.37	0.23	0.28	0.29	0.36	0.37	0.45	0.44	0.44	0.52	0.58	0.49	0.56	0.71	0.61	0.60	0.60	0.59	0.57	0.64	0.54	0.41	0.42	0.42	0.47
SLE	0.13	0.14	0.14	0.14	0.14	0.15	0.15	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.23	0.24	0.21	0.21	0.22	0.22	0.21	0.20	0.20	0.20	0.17	0.17	0.18	0.18
SLV	0.12	0.13	0.13	0.14	0.14	0.15	0.15	0.18	0.18	0.19	0.20	0.21	0.21	0.23	0.22	0.23	0.20	0.21	0.21	0.21	0.20	0.20	0.20	0.20	0.18	0.18	0.19	0.18

Table C.8: Continued on next page

Table C.8: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
SOM	0.13	0.14	0.14	0.13	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.22	0.22	0.23	0.22	0.24	0.21	0.21	0.22	0.22	0.21	0.20	0.20	0.20	0.17	0.17	0.19	0.18
SUR	0.13	0.13	0.13	0.13	0.14	0.15	0.15	0.17	0.18	0.19	0.20	0.21	0.21	0.23	0.21	0.22	0.20	0.21	0.21	0.20	0.20	0.19	0.19	0.19	0.16	0.16	0.17	0.16
SVK	0.24	0.26	0.28	0.29	0.32	0.41	0.46	0.54	0.62	0.68	0.73	0.78	0.80	0.81	0.88	0.88	0.78	0.89	0.96	0.87	0.89	0.86	0.85	0.86	0.83	0.90	0.99	1.07
SVN	0.26	0.29	0.32	0.32	0.33	0.39	0.39	0.43	0.47	0.50	0.50	0.55	0.56	0.57	0.70	0.60	0.52	0.55	0.56	0.49	0.49	0.49	0.48	0.49	0.46	0.48	0.49	0.49
SWE	0.45	0.48	0.55	0.55	0.54	0.56	0.63	0.65	0.66	0.69	0.77	0.80	0.81	0.78	0.82	0.79	0.63	0.66	0.72	0.61	0.62	0.59	0.59	0.59	0.59	0.63	0.63	0.59
SYR	0.15	0.16	0.16	0.17	0.18	0.20	0.21	0.24	0.26	0.26	0.27	0.30	0.31	0.32	0.31	0.32	0.28	0.29	0.29	0.28	0.28	0.27	0.27	0.26	0.22	0.23	0.24	0.23
THA	0.27	0.23	0.22	0.33	0.35	0.30	0.33	0.44	0.44	0.52	0.54	0.57	0.66	0.67	0.71	0.72	0.72	0.79	0.70	0.71	0.73	0.72	0.74	0.75	0.74	0.77	0.78	0.77
TJK	0.15	0.15	0.16	0.16	0.17	0.19	0.20	0.23	0.25	0.26	0.27	0.31	0.32	0.34	0.33	0.34	0.31	0.34	0.33	0.32	0.32	0.31	0.32	0.31	0.25	0.25	0.27	0.27
TKM	0.14	0.15	0.15	0.15	0.16	0.18	0.20	0.24	0.26	0.25	0.26	0.29	0.29	0.32	0.29	0.31	0.27	0.29	0.29	0.27	0.26	0.26	0.26	0.26	0.22	0.22	0.23	0.23
TON	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.13	0.14	0.16	0.16	0.17	0.17	0.19	0.18	0.19	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.13	0.14	0.15	0.14
TTO	0.13	0.13	0.14	0.14	0.15	0.15	0.15	0.17	0.19	0.22	0.20	0.21	0.21	0.23	0.21	0.23	0.20	0.22	0.22	0.25	0.20	0.20	0.19	0.19	0.17	0.23	0.18	0.17
TUN	0.17	0.19	0.19	0.19	0.20	0.23	0.24	0.26	0.29	0.31	0.33	0.36	0.37	0.39	0.39	0.39	0.34	0.34	0.34	0.32	0.32	0.32	0.32	0.31	0.27	0.28	0.29	0.28
TUR	0.27	0.24	0.26	0.25	0.27	0.29	0.29	0.34	0.35	0.39	0.45	0.51	0.54	0.55	0.59	0.60	0.53	0.54	0.55	0.51	0.52	0.51	0.51	0.52	0.53	0.58	0.61	0.58
TZA	0.12	0.13	0.13	0.13	0.13	0.14	0.14	0.16	0.17	0.18	0.19	0.21	0.21	0.22	0.21	0.22	0.20	0.21	0.21	0.21	0.20	0.19	0.19	0.19	0.16	0.17	0.18	0.17
UGA	0.13	0.13	0.14	0.14	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.22	0.22	0.23	0.23	0.24	0.21	0.22	0.22	0.22	0.21	0.20	0.20	0.20	0.17	0.17	0.18	0.18
UKR	0.24	0.24	0.24	0.23	0.24	0.27	0.27	0.32	0.35	0.37	0.40	0.45	0.46	0.48	0.50	0.51	0.41	0.46	0.48	0.45	0.43	0.40	0.39	0.37	0.34	0.35	0.37	0.35
URY	0.18	0.20	0.16	0.16	0.16	0.18	0.16	0.20	0.21	0.20	0.21	0.23	0.24	0.26	0.25	0.27	0.23	0.26	0.26	0.24	0.24	0.22	0.22	0.21	0.18	0.18	0.19	0.18
USA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
UZB	0.14	0.14	0.14	0.16	0.18	0.20	0.20	0.23	0.24	0.25	0.26	0.29	0.31	0.34	0.35	0.35	0.28	0.32	0.32	0.31	0.30	0.30	0.29	0.27	0.24	0.25	0.26	0.26
VEN	0.17	0.17	0.19	0.18	0.19	0.20	0.18	0.20	0.21	0.22	0.23	0.24	0.25	0.27	0.26	0.24	0.21	0.22	0.22	0.21	0.21	0.21	0.20	0.20	0.17	0.17	0.18	0.17
VNM	0.16	0.16	0.16	0.16	0.18	0.20	0.21	0.27	0.31	0.34	0.36	0.41	0.43	0.45	0.46	0.48	0.49	0.53	0.52	0.51	0.54	0.53	0.70	0.75	0.46	0.45	0.48	0.52
YEM	0.13	0.14	0.14	0.14	0.14	0.15	0.16	0.18	0.20	0.21	0.22	0.24	0.23	0.25	0.24	0.25	0.22	0.23	0.23	0.22	0.22	0.21	0.22	0.21	0.17	0.18	0.19	0.18
ZAF	0.21	0.20	0.23	0.23	0.19	0.14	0.26	0.29	0.32	0.33	0.37	0.39	0.40	0.39	0.37	0.37	0.37	0.38	0.37	0.35	0.34	0.33	0.33	0.35	0.34	0.36	0.39	0.37
ZMB	0.12	0.12	0.13	0.12	0.12	0.13	0.13	0.15	0.17	0.18	0.18	0.20	0.20	0.21	0.21	0.22	0.19	0.20	0.20	0.20	0.20	0.18	0.19	0.18	0.15	0.16	0.17	0.17
ZWE	0.12	0.13	0.13	0.13	0.13	0.13	0.14	0.17	0.18	0.19	0.20	0.21	0.21	0.23	0.22	0.23	0.20	0.21	0.21	0.21	0.20	0.19	0.20	0.19	0.16	0.17	0.18	0.18

Table C.9: IMR in the wood-paper sector by country and year (BLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	0.05	0.05	0.05	0.05	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.09	0.11	0.11	0.12	0.12	0.14	0.14	0.15	0.15	0.16	0.17	0.18	0.18	0.11	0.11	0.11	0.11
AGO	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.10	0.09	0.12	0.10	0.11	0.11	0.10	0.11	0.11	0.11	0.07	0.08	0.07	0.07
ALB	0.07	0.08	0.08	0.08	0.10	0.11	0.11	0.11	0.12	0.13	0.14	0.15	0.16	0.16	0.17	0.17	0.20	0.19	0.20	0.19	0.20	0.21	0.21	0.21	0.14	0.15	0.15	0.16
ARE	0.11	0.09	0.08	0.08	0.11	0.12	0.14	0.13	0.14	0.15	0.16	0.16	0.19	0.16	0.19	0.19	0.18	0.20	0.21	0.23	0.25	0.26	0.27	0.27	0.18	0.21	0.24	0.26
ARG	0.14	0.14	0.13	0.13	0.16	0.17	0.17	0.17	0.18	0.16	0.20	0.23	0.25	0.26	0.26	0.27	0.29	0.29	0.31	0.31	0.31	0.31	0.34	0.33	0.29	0.30	0.29	0.31
ARM	0.05	0.06	0.06	0.06	0.07	0.08	0.08	0.08	0.09	0.10	0.10	0.11	0.12	0.12	0.13	0.13	0.13	0.14	0.15	0.15	0.16	0.17	0.17	0.17	0.11	0.12	0.13	0.13
AUS	0.08	0.09	0.08	0.14	0.16	0.16	0.17	0.15	0.18	0.21	0.24	0.25	0.27	0.27	0.24	0.24	0.25	0.26	0.28	0.27	0.25	0.25	0.25	0.26	0.22	0.22	0.23	0.23
AUT	0.41	0.44	0.43	0.44	0.51	0.56	0.57	0.52	0.56	0.63	0.72	0.75	0.78	0.80	0.79	0.77	0.74	0.73	0.76	0.75	0.76	0.77	0.74	0.75	0.62	0.67	0.70	0.80
AZE	0.06	0.06	0.06	0.06	0.07	0.08	0.08	0.08	0.09	0.10	0.10	0.11	0.12	0.13	0.13	0.14	0.14	0.15	0.16	0.16	0.17	0.18	0.18	0.18	0.12	0.13	0.13	0.14
BDI	0.04	0.05	0.05	0.04	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.07	0.07	0.07	0.07
BEL	0.36	0.38	0.45	0.46	0.52	0.57	0.58	0.52	1.17	1.31	0.74	0.78	1.66	1.69	1.67	1.64	1.41	1.48	1.54	1.57	1.56	1.58	1.53	1.53	1.28	1.25	1.36	1.46
BEN	0.06	0.06	0.06	0.05	0.07	0.08	0.09	0.08	0.10	0.09	0.09	0.09	0.12	0.12	0.15	0.12	0.12	0.13	0.15	0.16	0.17	0.20	0.17	0.16	0.10	0.10	0.09	0.09
BFA	0.05	0.06	0.06	0.05	0.06	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.10	0.10	0.10	0.11	0.10	0.11	0.12	0.12	0.12	0.13	0.13	0.12	0.08	0.08	0.08	0.08
BGD	0.07	0.07	0.07	0.06	0.08	0.08	0.09	0.09	0.10	0.11	0.11	0.12	0.13	0.13	0.14	0.14	0.15	0.16	0.16	0.16	0.17	0.17	0.18	0.21	0.15	0.15	0.16	0.18
BGR	0.09	0.10	0.12	0.10	0.12	0.13	0.14	0.13	0.14	0.16	0.18	0.20	0.21	0.22	0.23	0.22	0.23	0.23	0.25	0.25	0.26	0.27	0.28	0.28	0.20	0.21	0.22	0.23
BHR	0.07	0.08	0.08	0.08	0.10	0.12	0.13	0.11	0.11	0.11	0.11	0.12	0.14	0.15	0.16	0.15	0.17	0.19	0.20	0.21	0.23	0.24	0.25	0.25	0.19	0.19	0.21	0.22
BHS	0.07	0.07	0.07	0.07	0.09	0.09	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.12	0.13	0.12	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.09	0.09	0.09	0.10
BIH	0.08	0.09	0.09	0.11	0.15	0.16	0.16	0.15	0.16	0.18	0.19	0.20	0.20	0.21	0.22	0.22	0.22	0.23	0.25	0.24	0.25	0.27	0.26	0.26	0.19	0.20	0.20	0.22
BLR	0.09	0.10	0.11	0.11	0.13	0.16	0.16	0.17	0.18	0.20	0.22	0.24	0.25	0.26	0.27	0.28	0.27	0.30	0.32	0.31	0.33	0.34	0.33	0.33	0.25	0.28	0.30	0.32
BLZ	0.06	0.07	0.06	0.06	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.11	0.13	0.13	0.12	0.14	0.13	0.13	0.14	0.14	0.13	0.08	0.08	0.08	0.08
BMU	0.08	0.08	0.08	0.08	0.10	0.10	0.10	0.10	0.12	0.11	0.11	0.11	0.12	0.16	0.17	0.18	0.18	0.18	0.19	0.18	0.16	0.17	0.16	0.16	0.10	0.10	0.10	0.10
BOL	0.06	0.06	0.06	0.06	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.10	0.11	0.11	0.11	0.12	0.13	0.13	0.14	0.14	0.14	0.14	0.15	0.15	0.11	0.12	0.11	0.11
BRA	0.21	0.22	0.21	0.22	0.25	0.26	0.26	0.28	0.28	0.32	0.38	0.41	0.45	0.47	0.47	0.43	0.43	0.46	0.43	0.43	0.42	0.43	0.43	0.45	0.47	0.54	0.51	0.52
BRB	0.08	0.08	0.08	0.08	0.09	0.11	0.10	0.09	0.10	0.10	0.11	0.10	0.11	0.12	0.12	0.13	0.14	0.16	0.14	0.14	0.13	0.14	0.14	0.14	0.09	0.09	0.10	0.10

Table C.9: Continued on next page

Table C.9: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BRN	0.05	0.06	0.05	0.05	0.07	0.07	0.07	0.07	0.08	0.09	0.09	0.09	0.10	0.11	0.12	0.12	0.12	0.13	0.14	0.14	0.14	0.15	0.16	0.15	0.09	0.09	0.09	0.09
BTN	0.05	0.05	0.07	0.07	0.07	0.08	0.07	0.07	0.08	0.09	0.10	0.10	0.13	0.15	0.16	0.13	0.15	0.17	0.16	0.17	0.17	0.19	0.20	0.20	0.11	0.12	0.12	0.12
CAF	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.08	0.09	0.08	0.08
CAN	0.46	0.48	0.50	0.48	0.55	0.54	0.56	0.57	0.56	0.55	0.57	0.58	0.59	0.58	0.56	0.55	0.54	0.57	0.58	0.56	0.57	0.57	0.55	0.55	0.49	0.51	0.51	0.52
CHE	0.44	0.45	0.45	0.46	0.54	0.58	0.59	0.53	0.58	0.65	0.72	0.73	0.72	0.74	0.72	0.71	0.68	0.66	0.71	0.69	0.69	0.71	0.63	0.62	0.47	0.49	0.56	0.63
CHL	0.15	0.17	0.16	0.13	0.15	0.15	0.18	0.18	0.20	0.24	0.26	0.30	0.30	0.31	0.36	0.38	0.39	0.35	0.36	0.35	0.34	0.36	0.39	0.47	0.38	0.43	0.42	0.45
CHN	0.18	0.17	0.17	0.17	0.21	0.24	0.24	0.24	0.28	0.34	0.47	0.54	0.66	0.76	0.82	0.90	0.97	0.98	0.99	1.16	1.21	1.29	1.40	1.38	1.02	0.93	1.05	1.13
CIV	0.08	0.09	0.09	0.08	0.09	0.10	0.10	0.09	0.10	0.11	0.11	0.12	0.13	0.12	0.13	0.13	0.12	0.12	0.13	0.13	0.13	0.14	0.13	0.13	0.08	0.09	0.08	0.08
CMR	0.07	0.10	0.11	0.08	0.10	0.11	0.11	0.11	0.12	0.12	0.13	0.13	0.15	0.14	0.15	0.15	0.16	0.18	0.19	0.19	0.18	0.16	0.16	0.17	0.11	0.12	0.11	0.11
COG	0.07	0.07	0.07	0.07	0.08	0.09	0.09	0.08	0.09	0.10	0.11	0.12	0.13	0.12	0.13	0.14	0.13	0.14	0.15	0.14	0.14	0.15	0.16	0.15	0.10	0.11	0.11	0.11
COL	0.10	0.11	0.11	0.11	0.13	0.13	0.13	0.13	0.14	0.15	0.16	0.17	0.18	0.18	0.19	0.20	0.21	0.21	0.21	0.22	0.20	0.20	0.20	0.20	0.16	0.17	0.17	0.17
CPV	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.06	0.07	0.07	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.08	0.08	0.08	0.08
CRI	0.07	0.08	0.08	0.08	0.09	0.10	0.10	0.10	0.11	0.11	0.11	0.12	0.13	0.13	0.14	0.14	0.15	0.15	0.16	0.17	0.17	0.17	0.17	0.17	0.12	0.13	0.13	0.13
CUB	0.08	0.09	0.09	0.08	0.09	0.10	0.10	0.10	0.11	0.11	0.12	0.12	0.12	0.12	0.13	0.13	0.14	0.15	0.16	0.15	0.16	0.16	0.17	0.16	0.11	0.12	0.11	0.11
CYP	0.08	0.09	0.09	0.09	0.11	0.12	0.13	0.12	0.13	0.14	0.16	0.17	0.18	0.18	0.19	0.18	0.19	0.19	0.20	0.19	0.19	0.19	0.19	0.19	0.13	0.15	0.15	0.15
CZE	0.21	0.25	0.25	0.26	0.31	0.35	0.36	0.34	0.37	0.42	0.50	0.51	0.54	0.56	0.56	0.54	0.54	0.54	0.57	0.55	0.56	0.58	0.57	0.58	0.46	0.50	0.52	0.59
DEU	0.74	0.74	0.76	0.79	0.91	0.97	1.10	0.97	1.03	1.17	1.33	1.42	1.45	1.44	1.44	1.24	1.25	1.21	1.24	1.24	1.26	1.26	1.18	1.20	1.07	1.10	1.17	1.32
DNK	0.23	0.25	0.32	0.32	0.37	0.42	0.43	0.39	0.41	0.45	0.52	0.52	0.54	0.53	0.53	0.51	0.43	0.42	0.44	0.43	0.44	0.45	0.44	0.44	0.33	0.35	0.35	0.40
DOM	0.07	0.08	0.09	0.10	0.10	0.11	0.11	0.12	0.14	0.14	0.18	0.17	0.18	0.18	0.21	0.22	0.12	0.13	0.26	0.27	0.27	0.14	0.14	0.14	0.09	0.10	0.09	0.10
DZA	0.08	0.09	0.09	0.08	0.10	0.11	0.11	0.11	0.12	0.13	0.14	0.14	0.15	0.15	0.16	0.16	0.16	0.17	0.18	0.19	0.19	0.20	0.18	0.18	0.12	0.13	0.13	0.13
ECU	0.07	0.07	0.08	0.08	0.09	0.10	0.10	0.10	0.11	0.11	0.13	0.13	0.13	0.14	0.14	0.15	0.16	0.16	0.16	0.17	0.17	0.18	0.19	0.19	0.15	0.16	0.16	0.18
EGY	0.07	0.08	0.08	0.07	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.15	0.15	0.16	0.15	0.15	0.16	0.17	0.17	0.17	0.18	0.19	0.18	0.14	0.22	0.26	0.22
ESP	0.30	0.31	0.33	0.34	0.39	0.42	0.43	0.41	0.45	0.51	0.57	0.58	0.61	0.62	0.61	0.60	0.54	0.53	0.55	0.54	0.54	0.53	0.51	0.52	0.47	0.49	0.50	0.54
EST	0.11	0.14	0.15	0.15	0.20	0.23	0.24	0.23	0.25	0.28	0.34	0.34	0.35	0.37	0.37	0.34	0.33	0.36	0.39	0.39	0.41	0.44	0.43	0.44	0.34	0.37	0.38	0.43
ETH	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.12	0.12	0.12	0.13	0.13	0.12	0.07	0.08	0.08	0.08
FIN	0.69	0.74	0.76	0.75	0.86	0.97	0.97	0.87	0.91	0.89	1.02	0.99	0.94	1.00	0.96	0.88	0.80	0.79	0.80	0.79	0.80	0.83	0.79	0.81	0.72	0.76	0.79	0.85
FJI	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.12	0.12	0.08	0.08	0.09	0.09
FRA	0.44	0.46	0.46	0.53	0.61	0.66	0.67	0.60	0.67	0.74	0.81	0.83	0.86	0.86	0.82	0.76	0.68	0.67	0.70	0.69	0.69	0.71	0.68	0.68	0.58	0.59	0.60	0.63
GAB	0.10	0.11	0.10	0.10	0.13	0.13	0.14	0.13	0.14	0.15	0.17	0.17	0.18	0.18	0.20	0.19	0.18	0.18	0.17	0.17	0.17	0.18	0.19	0.19	0.10	0.10	0.11	0.09
GBR	0.44	0.46	0.47	0.48	0.61	0.67	0.69	0.63	0.66	0.74	0.80	0.83	0.84	0.83	0.79	0.77	0.60	0.56	0.58	0.60	0.58	0.60	0.60	0.59	0.49	0.49	0.51	0.56
GEO	0.06	0.06	0.06	0.06	0.08	0.08	0.08	0.08	0.09	0.10	0.11	0.11	0.13	0.13	0.14	0.14	0.15	0.16	0.17	0.17	0.17	0.18	0.18	0.18	0.12	0.13	0.13	0.13
GHA	0.07	0.07	0.08	0.07	0.09	0.10	0.10	0.09	0.10	0.10	0.11	0.13	0.16	0.16	0.17	0.18	0.15	0.16	0.17	0.17	0.18	0.17	0.17	0.18	0.11	0.12	0.12	0.11
GMB	0.05	0.05	0.06	0.05	0.06	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.11	0.13	0.13	0.13	0.13	0.14	0.14	0.10	0.08	0.09	0.08
GRC	0.11	0.12	0.12	0.11	0.14	0.15	0.15	0.15	0.18	0.20	0.26	0.27	0.28	0.29	0.31	0.24	0.25	0.26	0.26	0.25	0.25	0.27	0.26	0.26	0.20	0.21	0.21	0.23
GTM	0.06	0.07	0.07	0.07	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.11	0.12	0.12	0.13	0.13	0.14	0.15	0.15	0.15	0.16	0.17	0.17	0.12	0.12	0.13	0.13
HKG	0.12	0.11	0.10	0.10	0.12	0.14	0.13	0.13	0.16	0.18	0.20	0.21	0.25	0.26	0.28	0.33	0.35	0.36	0.38	0.41	0.43	0.47	0.52	0.45	0.22	0.22	0.25	0.26
HND	0.06	0.07	0.07	0.07	0.08	0.09	0.09	0.09	0.09	0.10	0.11	0.11	0.12	0.12	0.12	0.12	0.13	0.14	0.15	0.15	0.15	0.16	0.17	0.16	0.12	0.13	0.13	0.13
HRV	0.14	0.15	0.15	0.15	0.18	0.20	0.20	0.19	0.21	0.23	0.25	0.26	0.28	0.29	0.29	0.30	0.30	0.29	0.31	0.31	0.32	0.33	0.32	0.33	0.25	0.27	0.27	0.30
HTI	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.08	0.08	0.08	0.08
HUN	0.15	0.17	0.17	0.17	0.21	0.22	0.22	0.22	0.25	0.28	0.32	0.33	0.35	0.36	0.37	0.37	0.34	0.35	0.37	0.36	0.37	0.38	0.38	0.38	0.29	0.31	0.32	0.35
IDN	0.39	0.35	0.31	0.35	0.41	0.45	0.51	0.46	0.47	0.51	0.55	0.52	0.52	0.50	0.49	0.39	0.41	0.39	0.39	0.40	0.38	0.39	0.40	0.46	0.34	0.37	0.40	0.46
IND	0.12	0.13	0.13	0.12	0.14	0.15	0.16	0.16	0.17	0.20	0.21	0.22	0.24	0.25	0.28	0.28	0.29	0.33	0.32	0.33	0.33	0.35	0.36	0.36	0.28	0.30	0.31	0.32
IRL	0.20	0.22	0.23	0.24	0.32	0.37	0.40	0.38	0.40	0.46	0.54	0.59	0.59	0.61	0.61	0.52	0.32	0.33	0.32	0.32	0.31	0.32	0.31	0.30	0.24	0.24	0.24	0.23
IRN	0.07	0.08	0.08	0.08	0.10	0.11	0.12	0.12	0.13	0.11	0.11	0.12	0.13	0.13	0.14	0.14	0.15	0.16	0.17	0.18	0.19	0.19	0.19	0.20	0.16	0.18	0.22	0.30
IRQ	0.05	0.06	0.07	0.07	0.09	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.13	0.14	0.15	0.16	0.15	0.15	0.16	0.17	0.17	0.11	0.12	0.12	0.12
ISL	0.07	0.08	0.08	0.08	0.10	0.10	0.10	0.10	0.10	0.11	0.12	0.13	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.11	0.11	0.11	0.10
ISR	0.15	0.15	0.15	0.16	0.20	0.21	0.22	0.21	0.25	0.26	0.28	0.27	0.29	0.31	0.31	0.31	0.33	0.32	0.30	0.30	0.30	0.30	0.31	0.31	0.24	0.25	0.26	0.28
ITA	0.42	0.43	0.49	0.56	0.66	0.71	0.68	0.62	0.69	0.79	0.91	0.94	0.93	0.93	0.88	0.90	0.82	0.76	0.81	0.80	0.80	0.81	0.76	0.78	0.64	0.65	0.68	0.73
JAM	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.10	0.11	0.10	0.11	0.11	0.11	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.08	0.09	0.09	0.09
JOR	0.07	0.08	0.08	0.08	0.10	0.11	0.11	0.11	0.12	0.13	0.14	0.14	0.16	0.16	0.17	0.17	0.18	0.19	0.20	0.20	0.20	0.21	0.22	0.23	0.16	0.17	0.17	0.16
JPN	0.76	0.78	0.74	0.65	0.79	1.01	1.01	0.96	0.85	0.92	1.01	1.03	1.11	1.07	1.11	1.16	1.23	1.22	1.14	1.18	1.04	1.04	1.06	1.13	0.90	0.88	0.95	1.06
KAZ	0.06	0.06	0.06	0.05	0.07	0.07	0.07	0.08	0.09	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.15	0.16	0.17	0.18	0.18	0.19	0.20	0.20	0.12	0.13	0.13	0.13
KEN	0.06	0.06	0.06	0.06	0.07	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.14	0.15	0.15	0.15	0.15	0.16	0.17	0.15	0.11	0.11	0.11	0.11
KGZ	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.07	0.08	0.09	0.10	0.10	0.11	0.12	0.13	0.13	0.14	0.15	0.16	0.16	0.17	0.18	0.19	0.18	0.11	0.11	0.12	0.11
KHM	0.07	0.08	0.08	0.06	0.09	0.09	0.09	0.09	0.09	0.10	0.11	0.11	0.12	0.13	0.13	0.13	0.14	0.15	0.17	0.17	0.18	0.21	0.19	0.21	0.13	0.13	0.13	0.14
KOR	0.32	0.38	0.39	0.42	0.56	0.81	0.74	0.67	0.69	0.69	0.79	0.82	0.89	0.88	0.72	0.70	0.76	0.84	0.78	0.86	0.88	0.89	0.88	0.89	0.74	0.72	0.78	0.85
KWT	0.06	0.07	0.07	0.07	0.09	0.10	0.11	0.11	0.12	0.14	0.15	0.15	0.16	0.16	0.16	0.17	0.18	0.19	0.20	0.20	0.20	0.21	0.21	0.21	0.16	0.16	0.17	0.16
LAO	0.06	0.06	0.06	0.06	0.07	0.07	0.08	0.08	0.09	0.10	0.11	0.12	0.13	0.15	0.17	0.18	0.17	0.20	0.23	0.24	0.26	0.31	0.24	0.24	0.13	0.14	0.15	0.16
LBN	0.08	0.09	0.09	0.10	0.11	0.13	0.14	0.13	0.15	0.16	0.18	0.18	0.20	0.20	0.20	0.20	0.21	0.22	0.22	0.22	0.22	0.23	0.24	0.24	0.15	0.15	0.16	0.15

Table C.9: Continued on next page

Table C.9: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
LBR	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.09	0.09	0.11	0.10	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.08	0.09	0.08	0.08
LBY	0.06	0.07	0.07	0.07	0.08	0.10	0.09	0.09	0.10	0.10	0.11	0.12	0.13	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.10	0.11	0.11	0.11
LCA	0.06	0.07	0.07	0.06	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.11	0.11	0.11	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.08	0.09	0.09	0.09
LKA	0.05	0.05	0.05	0.05	0.06	0.06	0.07	0.07	0.07	0.10	0.12	0.13	0.15	0.16	0.12	0.12	0.11	0.12	0.13	0.13	0.16	0.15	0.16	0.16	0.11	0.11	0.11	0.11
LTU	0.09	0.11	0.12	0.14	0.19	0.16	0.17	0.18	0.20	0.23	0.26	0.27	0.29	0.30	0.31	0.31	0.29	0.31	0.34	0.33	0.35	0.37	0.36	0.37	0.28	0.30	0.31	0.34
LVA	0.09	0.12	0.13	0.13	0.18	0.21	0.21	0.21	0.23	0.26	0.30	0.31	0.33	0.34	0.35	0.30	0.31	0.34	0.37	0.37	0.39	0.41	0.39	0.40	0.32	0.36	0.36	0.41
MAC	0.12	0.11	0.11	0.09	0.12	0.12	0.09	0.09	0.10	0.11	0.12	0.13	0.16	0.17	0.20	0.22	0.26	0.25	0.27	0.30	0.29	0.33	0.35	0.34	0.18	0.19	0.21	0.21
MAR	0.09	0.10	0.10	0.10	0.12	0.12	0.12	0.12	0.13	0.15	0.15	0.15	0.16	0.16	0.17	0.17	0.17	0.18	0.19	0.35	0.35	0.36	0.19	0.19	0.28	0.31	0.17	0.38
MDA	0.07	0.08	0.08	0.08	0.10	0.11	0.11	0.11	0.12	0.13	0.15	0.16	0.17	0.17	0.18	0.18	0.18	0.19	0.21	0.21	0.21	0.22	0.22	0.22	0.14	0.15	0.15	0.15
MDG	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.06	0.07	0.07	0.06
MDV	0.04	0.05	0.04	0.04	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.11	0.11	0.35	0.36	0.37	0.12	0.07	0.08	0.08	0.07
MEX	0.10	0.15	0.13	0.13	0.15	0.15	0.15	0.15	0.16	0.17	0.18	0.16	0.17	0.17	0.19	0.20	0.21	0.22	0.23	0.23	0.24	0.25	0.25	0.24	0.17	0.18	0.18	0.18
MKD	0.08	0.08	0.09	0.09	0.11	0.12	0.12	0.12	0.13	0.13	0.16	0.16	0.17	0.18	0.18	0.18	0.19	0.19	0.21	0.20	0.21	0.22	0.22	0.22	0.15	0.16	0.16	0.16
MLT	0.09	0.10	0.10	0.10	0.12	0.14	0.15	0.14	0.15	0.17	0.19	0.19	0.21	0.22	0.22	0.22	0.22	0.23	0.23	0.23	0.24	0.24	0.24	0.23	0.15	0.18	0.21	0.25
MMR	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.10	0.11	0.12	0.14	0.17	0.21	0.23	0.25	0.26	0.29	0.23	0.26	0.26	0.25	0.25	0.25	0.24	0.13	0.13	0.13	0.40
MNG	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.07	0.08	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.18	0.20	0.22	0.21	0.12	0.13	0.13	0.13
MOZ	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.12	0.11	0.11	0.12	0.12	0.12	0.08	0.08	0.08	0.08
MUS	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.07	0.08	0.08	0.09	0.10	0.11	0.11	0.12	0.12	0.12	0.13	0.12	0.11	0.12	0.12	0.12	0.13	0.08	0.09	0.09	0.09
MWI	0.05	0.05	0.05	0.04	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.08	0.09	0.09	0.09	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.12	0.11	0.07	0.08	0.08	0.08
MYS	0.34	0.31	0.27	0.30	0.36	0.35	0.37	0.34	0.35	0.40	0.46	0.47	0.50	0.52	0.54	0.50	0.47	0.46	0.45	0.45	0.45	0.47	0.46	0.45	0.34	0.35	0.37	0.39
NER	0.05	0.06	0.06	0.05	0.06	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.10	0.10	0.10	0.10	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.08	0.09	0.08	0.08
NGA	0.07	0.08	0.08	0.08	0.10	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.14	0.17	0.17	0.17	0.12	0.11	0.09	0.08
NIC	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.12	0.12	0.12	0.12	0.13	0.12	0.08	0.08	0.08	0.08
NLD	0.36	0.40	0.48	0.50	0.59	0.69	0.67	0.62	0.72	0.78	0.83	0.88	0.97	0.90	0.92	0.87	0.75	0.76	0.75	0.73	0.73	0.76	0.71	0.72	0.62	0.63	0.63	0.69
NOR	0.27	0.30	0.32	0.30	0.35	0.38	0.39	0.36	0.39	0.40	0.45	0.46	0.48	0.48	0.47	0.46	0.38	0.39	0.41	0.39	0.37	0.38	0.36	0.38	0.29	0.31	0.32	0.34
NPL	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.07	0.08	0.09	0.09	0.10	0.12	0.12	0.13	0.13	0.14	0.16	0.17	0.17	0.18	0.19	0.21	0.21	0.13	0.14	0.15	0.15
NZL	0.19	0.20	0.21	0.21	0.23	0.28	0.24	0.25	0.26	0.30	0.34	0.35	0.36	0.35	0.34	0.33	0.31	0.33	0.32	0.35	0.35	0.36	0.33	0.35	0.37	0.40	0.41	0.43
OMN	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.13	0.14	0.14	0.15	0.16	0.16	0.16	0.11	0.12	0.12	0.13
PAK	0.08	0.11	0.13	0.13	0.16	0.17	0.12	0.12	0.13	0.14	0.15	0.16	0.16	0.17	0.18	0.19	0.19	0.21	0.21	0.22	0.22	0.24	0.25	0.25	0.17	0.17	0.18	0.18
PAN	0.07	0.07	0.07	0.07	0.08	0.09	0.09	0.09	0.09	0.10	0.11	0.10	0.11	0.11	0.12	0.12	0.11	0.12	0.13	0.13	0.18	0.13	0.13	0.13	0.09	0.09	0.09	0.09
PER	0.07	0.08	0.08	0.08	0.10	0.11	0.11	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.17	0.18	0.19	0.20	0.20	0.21	0.21	0.21	0.22	0.22	0.18	0.19	0.19	0.18
PHL	0.09	0.09	0.09	0.09	0.10	0.12	0.11	0.11	0.10	0.11	0.13	0.13	0.15	0.16	0.17	0.18	0.19	0.20	0.20	0.21	0.22	0.23	0.24	0.24	0.14	0.15	0.20	0.17
PNG	0.09	0.11	0.09	0.09	0.10	0.08	0.09	0.09	0.09	0.10	0.11	0.11	0.12	0.13	0.14	0.13	0.12	0.14	0.15	0.14	0.15	0.16	0.16	0.16	0.12	0.14	0.14	0.14
POL	0.20	0.22	0.25	0.23	0.28	0.32	0.34	0.33	0.37	0.42	0.47	0.49	0.52	0.54	0.56	0.57	0.52	0.54	0.57	0.58	0.60	0.63	0.62	0.63	0.52	0.56	0.60	0.66
PRT	0.23	0.25	0.27	0.28	0.32	0.35	0.34	0.32	0.34	0.38	0.45	0.46	0.46	0.46	0.45	0.45	0.42	0.43	0.46	0.48	0.48	0.48	0.47	0.47	0.39	0.41	0.42	0.45
PRY	0.06	0.06	0.06	0.06	0.07	0.08	0.08	0.08	0.09	0.09	0.10	0.11	0.12	0.13	0.13	0.13	0.14	0.15	0.16	0.15	0.15	0.16	0.17	0.17	0.12	0.14	0.13	0.14
QAT	0.06	0.09	0.06	0.06	0.08	0.09	0.09	0.09	0.10	0.10	0.11	0.14	0.15	0.15	0.17	0.17	0.18	0.17	0.22	0.26	0.28	0.29	0.22	0.22	0.15	0.15	0.16	0.17
ROU	0.11	0.12	0.12	0.13	0.14	0.16	0.16	0.16	0.17	0.20	0.22	0.24	0.26	0.27	0.28	0.29	0.27	0.28	0.30	0.31	0.32	0.33	0.32	0.33	0.25	0.27	0.27	0.30
RUS	0.13	0.15	0.17	0.15	0.17	0.17	0.18	0.18	0.21	0.23	0.26	0.29	0.33	0.35	0.38	0.38	0.35	0.37	0.38	0.39	0.40	0.41	0.40	0.40	0.34	0.36	0.38	0.39
RWA	0.05	0.05	0.05	0.04	0.06	0.06	0.06	0.06	0.07	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.08	0.08	0.09	0.09
SAU	0.07	0.08	0.08	0.08	0.09	0.11	0.12	0.12	0.13	0.15	0.16	0.16	0.18	0.18	0.19	0.19	0.20	0.21	0.21	0.23	0.23	0.25	0.25	0.26	0.22	0.24	0.24	0.25
SCG	0.08	0.13	0.12	0.13	0.15	0.16	0.18	0.20	0.16	0.19	0.20	0.22	0.24	0.52	0.54	0.56	0.57	0.53	0.57	0.57	0.62	0.63	0.38	0.38	0.48	0.51	0.52	0.58
SEN	0.05	0.06	0.06	0.05	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.13	0.13	0.13	0.13	0.13	0.09	0.09	0.09	0.09
SGP	0.12	0.14	0.14	0.14	0.18	0.22	0.24	0.24	0.33	0.42	1.15	1.11	1.64	1.79	1.14	0.97	1.01	1.01	0.79	0.71	0.75	0.95	0.96	0.75	0.35	0.76	0.86	1.24
SLE	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.08	0.10	0.10	0.11
SLV	0.06	0.06	0.06	0.06	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11	0.10	0.12	0.13	0.14	0.14	0.16	0.16	0.17	0.17	0.17	0.18	0.11	0.11	0.11	0.12
SOM	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.07	0.08	0.08	0.07
SUR	0.06	0.05	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.12	0.12	0.13	0.14	0.15	0.15	0.12	0.13	0.12	0.12
SVK	0.16	0.18	0.18	0.18	0.22	0.25	0.25	0.24	0.26	0.29	0.33	0.35	0.38	0.40	0.41	0.42	0.41	0.44	0.45	0.44	0.45	0.47	0.47	0.46	0.34	0.37	0.38	0.41
SVN	0.20	0.21	0.24	0.24	0.28	0.31	0.30	0.27	0.29	0.32	0.36	0.36	0.37	0.38	0.38	0.37	0.37	0.36	0.39	0.38	0.38	0.40	0.39	0.40	0.29	0.31	0.32	0.33
SWE	0.64	0.67	0.69	0.71	0.79	0.85	0.86	0.77	0.81	0.84	0.97	0.96	0.98	0.99	0.95	0.86	0.86	0.83	0.84	0.84	0.83	0.85	0.80	0.79	0.73	0.76	0.79	0.94
SYR	0.09	0.10	0.10	0.10	0.13	0.14	0.15	0.14	0.14	0.15	0.17	0.18	0.23	0.26	0.23	0.22	0.29	0.29	0.26	0.24	0.20	0.19	0.20	0.19	0.11	0.12	0.12	0.12
THA	0.14	0.13	0.12	0.16	0.21	0.15	0.16	0.18	0.19	0.25	0.28	0.29	0.29	0.31	0.34	0.33	0.33	0.34	0.35	0.38	0.41	0.41	0.41	0.41	0.31	0.32	0.35	0.37
TJK	0.05	0.05	0.05	0.05	0.07	0.07	0.08	0.08	0.08	0.09	0.10	0.10	0.11	0.11	0.12	0.13	0.13	0.14	0.15	0.15	0.16	0.17	0.18	0.18	0.11	0.11	0.11	0.11
TKM	0.05	0.05	0.06	0.05	0.07	0.08	0.08	0.08	0.09	0.09	0.10	0.11	0.12	0.12	0.13	0.13	0.13	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.11	0.12	0.12	0.13
TON	0.04	0.04	0.04	0.03	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.08	0.09	0.08	0.08	0.09	0.09	0.09	0.05	0.06	0.06	0.05
TTO	0.07	0.08	0.08	0.07	0.10	0.10	0.11	0.10	0.11	0.12	0.12	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.15	0.16	0.17	0.11	0.10	0.10	0.11
TUN	0.10	0.10	0.11	0.11	0.13	0.14	0.14	0.14	0.15	0.16	0.20	0.20	0.21	0.21	0.17	0.17	0.18	0.19	0.21	0.21	0.21	0.22	0.21	0.21	0.14	0.15	0.15	0.16
TUR	0.13	0.13	0.13	0.12	0.15	0.17	0.17	0.17	0.17	0.22	0.23	0.25	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.37	0.37	0.39	0.40	0.40	0.33	0.34	0.36	0.39

Table C.9: Continued on next page

Table C.9: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
TZA	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.12	0.12	0.13	0.13	0.09	0.09	0.09	0.09
UGA	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.08	0.09	0.09	0.09
UKR	0.10	0.10	0.11	0.10	0.13	0.14	0.14	0.15	0.17	0.19	0.21	0.23	0.25	0.27	0.28	0.28	0.27	0.29	0.31	0.31	0.31	0.32	0.31	0.31	0.22	0.25	0.25	0.27
URY	0.09	0.09	0.09	0.09	0.10	0.11	0.11	0.11	0.12	0.12	0.14	0.15	0.16	0.17	0.17	0.22	0.22	0.24	0.24	0.24	0.25	0.26	0.29	0.30	0.27	0.32	0.31	0.30
USA	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
UZB	0.05	0.06	0.06	0.07	0.08	0.08	0.09	0.09	0.10	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.14	0.15	0.15	0.15	0.16	0.17	0.17	0.11	0.11	0.11	0.11
VEN	0.09	0.10	0.10	0.09	0.10	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.11	0.11	0.11	0.12	0.13	0.12	0.12	0.13	0.13	0.13	0.09	0.10	0.09	0.08
VNM	0.09	0.08	0.08	0.08	0.10	0.10	0.11	0.10	0.12	0.13	0.15	0.16	0.18	0.19	0.21	0.22	0.25	0.26	0.28	0.31	0.30	0.33	0.33	0.37	0.23	0.26	0.28	0.32
YEM	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.07	0.08	0.09	0.09	0.10	0.11	0.11	0.11	0.11	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.09	0.09	0.09	0.13
ZAF	0.17	0.17	0.16	0.15	0.15	0.12	0.20	0.20	0.20	0.21	0.26	0.28	0.29	0.28	0.28	0.28	0.30	0.30	0.28	0.28	0.27	0.27	0.27	0.27	0.24	0.24	0.24	0.24
ZMB	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.08	0.08	0.09	0.10	0.10	0.10	0.11	0.11	0.11	0.12	0.11	0.12	0.12	0.12	0.08	0.08	0.08	0.07
ZWE	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.08	0.08	0.09	0.10	0.10	0.10	0.11	0.10	0.11	0.11	0.12	0.13	0.13	0.13	0.12	0.12	0.12	0.08	0.09	0.09	0.08

Table C.10: OMR in the chemical sector by country and year (TLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	1.02	1.01	1.08	1.13	0.99	0.78	0.82	0.67	0.67	0.69	0.64	0.82	1.3	1.29	1.61	2.26	1.73	1.89	2.59	2.77	2.6	2.56	2.22	2.67	2.32	2.47	2.63	2.52
AGO	1.09	1.07	1.13	1.11	0.9	0.73	0.7	0.51	0.51	0.53	0.49	0.62	0.98	1.06	1.35	1.88	1.39	1.48	2.04	2.34	2.09	2.08	1.66	1.89	1.68	1.75	1.85	1.75
ALB	1.21	1.25	1.37	1.43	1.25	1.08	1.08	0.9	0.89	0.95	0.91	1.17	1.71	1.73	2.17	3.03	2.32	2.29	3.07	3.15	2.89	2.78	2.39	2.82	2.41	2.57	2.62	2.58
ARE	4.09	4.57	4.41	4.22	3.64	3.22	2.85	2.87	2.83	2.82	2.72	3.22	4.23	4.79	5.26	6.71	6.02	6.09	7.35	7.88	6.16	5.75	5.52	6.49	6.82	6.95	7.83	6.93
ARG	3.47	3.36	3.24	3.26	2.75	2.17	1.98	1.84	1.67	1.16	1.22	1.62	2.42	2.43	3.04	4.32	3.09	3.92	5.4	6.11	5.91	5.57	4.76	5.09	4.95	4.67	4.75	4.41
ARM	1.03	1.07	1.15	1.19	1.15	0.91	0.98	0.79	0.77	0.78	0.72	0.94	1.44	1.48	1.88	2.57	1.84	2.07	2.79	2.97	2.75	2.66	2.25	2.66	2.36	2.52	2.71	2.64
AUS	3.03	2.99	2.88	2.96	2.39	1.81	1.81	1.58	1.39	1.56	1.58	1.97	2.98	3	3.54	4.6	3.42	3.92	5.27	5.83	5.04	4.53	3.51	3.95	3.23	2.97	3.14	3.47
AUT	4.3	4.17	4.01	3.88	3.31	2.74	2.67	2.54	2.22	2.19	2.11	2.62	4.15	3.78	4.71	6.38	4.52	5.07	6.73	7.15	6.73	6.46	5.13	6	5.4	6.04	6.24	5.71
AZE	1.18	1.18	1.37	1.5	1.37	1.09	1.03	0.92	0.9	0.89	0.86	1.09	1.64	1.84	2.23	3.14	2.3	2.53	3.44	3.62	3.42	3.38	2.68	3.06	2.78	2.98	3.23	3.12
BDI	0.9	0.89	0.94	0.9	0.78	0.63	0.63	0.51	0.51	0.53	0.48	0.62	0.94	0.93	1.16	1.67	1.2	1.32	1.82	1.92	1.78	1.77	1.55	1.87	1.59	1.67	1.75	1.72
BEL	5.73	5.64	7.28	6.92	5.91	5.22	4.9	4.76	4.79	10.1	5.68	7.36	19.63	11.19	13.59	33.54	22.19	14.04	19.3	20.86	19.63	17.75	14.04	16.98	17.86	19.61	19.37	17.36
BEN	0.94	0.93	1.12	1.14	1	0.78	0.83	0.64	0.63	0.65	0.6	0.76	1.15	1.19	1.51	2.07	1.48	1.66	2.28	2.32	2.23	2.25	1.87	2.16	1.9	2.03	2.14	2.09
BFA	0.95	0.93	1.01	1.15	0.89	0.73	0.74	0.59	0.59	0.61	0.55	0.7	1.05	1.05	1.32	1.86	1.33	1.46	1.99	2.11	1.99	1.97	1.68	2.03	1.73	1.84	1.92	1.87
BGD	1.65	1.66	1.62	1.67	1.51	1.1	1.11	0.94	0.91	0.92	0.84	0.98	1.46	1.48	1.9	2.79	2	2.37	3.38	3.39	3.31	3.39	3.14	2.7	2.52	2.69	2.95	3.02
BGR	1.76	1.82	1.95	2.13	1.81	1.46	1.44	1.21	1.2	1.25	1.23	1.59	2.38	2.47	3.23	4.47	3.07	3.25	4.34	4.46	4.2	4.17	3.46	4.04	3.75	4.01	3.59	3.41
BHR	1.68	1.79	1.9	2.59	1.34	1.08	0.97	2.06	2.1	2.08	2.11	2.57	3.92	4.11	5.19	7.19	4.99	5.75	7.53	8.15	7.53	7.05	5.29	7.96	7.68	8.05	4.36	4.11
BHS	2.05	1.74	1.56	1.6	1.32	1.05	1.07	0.88	0.85	0.83	0.82	0.95	1.46	1.48	1.77	2.46	1.77	2.15	2.64	2.84	2.59	2.64	2.22	2.63	2.15	2.23	2.34	2.23
BIH	1.23	1.29	1.39	1.45	1.3	1.1	1.11	0.93	0.92	0.98	0.99	1.3	1.93	1.96	2.47	3.45	2.43	2.64	3.56	3.62	3.38	3.31	2.75	3.24	2.85	3.15	3.21	3.05
BLR	1.55	1.72	1.87	1.91	1.61	1.82	1.61	1.4	1.34	1.32	1.32	1.73	2.68	2.84	3.63	5.16	3.47	3.99	5.67	5.99	5.09	4.94	3.82	4.17	3.99	4.27	4.46	4
BLZ	1.22	1.24	1.2	1.27	1.11	0.91	0.97	0.76	0.77	0.77	0.76	0.91	1.43	1.38	1.7	2.5	1.83	1.9	2.63	2.68	2.53	2.58	2.3	2.73	2.23	2.27	2.37	2.37
BMU	2.75	2.17	2.93	2.7	2.41	2.17	2.35	1.83	1.72	1.52	1.27	2.27	2.17	1.86	2.15	3.01	3.18	2.92	4.64	6.28	3.97	2.79	2.48	2.77	2.39	2.55	2.47	2.38
BOL	1.26	1.27	1.28	1.31	1.19	0.94	0.9	0.75	0.72	0.67	0.61	0.76	1.14	1.11	1.4	2.08	1.48	1.88	2.72	3.03	2.95	2.81	2.26	2.33	1.98	2.03	2.16	2.06
BRA	4.84	4.61	4.7	4.51	3.87	2.98	2.71	2.59	2.34	1.98	1.92	2.52	3.83	4.01	5.27	8.23	5.58	7.03	9.61	10.21	9.76	9.25	6.82	7.48	7.06	7.44	8.35	7.39
BRB	1.67	1.62	1.68	1.72	1.58	1.33	1.42	1.95	1.18	1.03	1.12	1.16	1.91	1.98	2.44	2.79	2.12	2.43	2.92	3.01	2.63	2.6	2.37	2.7	2.46	2.51	2.45	2.47
BRN	2	1.86	1.84	1.82	1.51	1.05	1.08	1.07	1	0.97	0.9	1.07	1.58	1.64	1.88	2.88	2.12	2.39	3.27	3.6	3.24	2.99	2.33	2.66	2.45	2.59	2.81	2.87
BTN	0.99	1.01	1.06	1.08	0.94	0.75	0.8	0.63	0.63	0.67	0.62	0.79	1.26	1.29	1.61	2.23	1.67	1.89	2.63	2.76	2.54	2.56	2.23	2.64	2.25	2.39	2.47	2.4
CAF	0.85	0.86	0.91	0.93	0.78	0.63	0.64	0.51	0.5	0.52	0.48	0.61	0.93	0.93	1.17	1.67	1.18	1.3	1.78	1.87	1.73	1.74	1.51	1.83	1.54	1.64	1.73	1.7
CAN	4.75	4.6	4.28	4.28	3.73	3.08	3.26	2.76	2.68	2.64	2.55	3.14	4.85	4.92	5.77	7.58	5.19	5.99	8.04	8.65	7.94	7.75	6.37	7.36	6.61	6.92	7.41	6.98
CHE	4.78	4.73	4.8	4.64	4.02	3.32	3.1	2.72	2.87	3.05	2.87	3.41	5.16	4.89	5.93	7.67	6	6.13	8.13	8.45	8.11	7.75	6.26	7.48	7.49	7.86	8.34	8.32
CHL	2.64	2.5	2.52	2.54	2.2	1.71	1.65	1.52	1.4	1.24	1.31	1.66	1.55	2.19	3.15	4.67	3.22	3.31	4.42	4.89	4.23	3.82	3.15	3.43	3.94	4.07	4.33	3.94
CHN	5.04	4.62	4.63	4.89	4.05	2.99	3.14	2.98	2.92	2.9	3.02	4.02	6.24	6.66	8.42	11.82	9.95	12.5	18.19	20.97	20.18	19.79	16.35	19.04	17.58	17.29	19.76	19.2
CIV	1.22	1.2	1.25	1.29	1.16	0.91	0.92	0.7	0.67	0.68	0.66	0.85	1.23	1.26	1.54	2.16	1.52	1.78	2.42	2.61	2.45	2.43	2.03	2.42	2.26	2.32	2.49	2.39
CMR	1.22	1.14	1.22	1.22	1.03	0.84	0.81	0.68	0.7	0.71	0.64	0.82	1.25	1.35	1.7	2.44	1.7	1.94	2.7	2.71	2.55	2.25	2.11	2.43	2.11	2.49	2.83	2.68
COG	0.91	0.95	0.94	0.94	0.78	0.67	0.69	0.51	0.51	0.53	0.49	0.63	0.96	0.98	1.21	1.7	1.23	1.34	1.89	2.02	1.82	1.84	1.55	1.83	1.58	1.66	1.74	1.68
COL	2.5	2.49	2.59	2.43	2.2	1.74	1.54	1.45	1.39	1.3	1.23	1.55	2.37	2.49	3.11	4.3	3.15	3.25	5.59	6.24	5.8	5.47	4.25	4.74	4.34	4.57	4.85	4.26
CPV	0.84	0.9	0.98	1.02	0.81	0.66	0.68	0.55	0.54	0.56	0.53	0.67	1	1	1.25	1.77	1.25	1.39	1.9	1.96	1.83	1.82	1.58	1.89	1.62	1.71	1.76	1.71
CRI	1.88	1.82	1.79	1.77	1.5	1.26	1.24	1.13	1.11	1.09	1.05	1.29	1.91	2.01	2.44	3.38	2.24	2.71	3.58	3.63	3.38	3.32	2.92	3.37	2.99	3.02	3.14	3.25

Table C.10: Continued on next page

Table C.10: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
CUB	1.72	1.66	1.71	1.67	1.49	1.21	1.3	1.09	1.07	1.05	0.96	1.18	1.75	1.71	2.02	2.85	2.18	2.45	3.34	3.67	3.36	2.99	2.63	3.11	2.57	2.63	2.44	2.45
CYP	1.62	1.76	1.94	1.88	1.6	1.3	1.31	1.09	1.05	1.06	1.01	1.18	1.59	1.81	2.44	3.32	2.45	2.64	3.46	3.5	3.3	3.17	2.58	3.05	2.4	2.75	3.1	2.72
CZE	2.7	2.78	3.12	3.17	2.75	2.28	2.26	1.88	2.02	2.2	1.97	2.6	3.73	4.08	4.65	6.81	4.64	5.11	6.92	6.86	6.18	5.98	4.58	5.34	5	5.76	5.92	5.45
DEU	8.37	8.26	8.39	8.41	6.86	4.85	5.06	4.1	4.29	4.01	3.92	4.92	7.23	7.17	8.58	12.01	8.26	9.24	12.23	11.67	10.62	10.18	7.9	9.28	8.6	9.77	9.98	9.55
DNK	3.15	3.07	3.2	3.1	2.61	2.2	2.14	1.77	1.75	1.79	1.67	2.08	3.01	3.1	3.91	5.05	3.52	3.79	5	5.08	4.79	4.68	3.87	4.51	4.27	4.61	4.57	4.31
DOM	2.3	2.28	2.42	2.4	2.17	1.77	1.82	1.68	1.72	1.51	1.35	1.67	2.36	2.59	3.31	4.23	2.81	3.25	4.58	5.01	4.67	4.48	3.82	4.46	4.15	4.32	4.69	4.34
DZA	3.73	3.68	3.62	3.46	2.92	2.5	2.43	2.25	2.19	2.15	1.99	2.4	3.43	3.37	4.04	5.26	3.98	4.15	5.33	5.51	5.01	4.81	3.62	4.33	3.91	3.74	3.91	3.58
ECU	1.73	2.06	1.85	1.71	1.62	1.56	1.09	1.12	1.17	1.08	1.08	1.38	2.02	2.09	2.63	3.59	2.67	3.36	3.77	4.86	4.56	4.51	3.65	3.84	3.65	3.88	4.18	3.66
EGY	2.26	2.19	2.26	2.24	1.95	1.65	1.57	1.21	1.15	1.07	0.91	1.25	1.92	1.87	2.34	3.8	2.99	3.41	4.66	5.02	4.62	4.81	3.85	4.53	4.33	5.08	5.82	4.86
ESP	5.87	5.71	6	5.87	4.76	3.88	3.98	3.7	3.52	3.35	3.43	4.24	6.38	6.48	8.08	10.8	7	7.3	9.94	10.16	9.38	9.12	7.06	7.9	7.65	7.08	7.37	6.85
EST	1.17	1.22	1.7	1.87	1.7	1.33	1.33	0.93	0.94	0.99	0.98	1.25	1.88	1.96	2.46	3.41	2.28	2.53	3.41	3.65	3.39	3.29	2.7	3.17	2.85	3.22	3.26	3.13
ETH	1.02	1.02	1.05	1.06	0.9	0.72	0.72	0.6	0.6	0.62	0.58	0.74	1.16	1.15	1.44	2.07	1.53	1.71	2.3	2.52	2.36	2.37	2.14	2.48	2.09	2.18	2.28	2.25
FIN	2.72	2.79	2.98	2.8	2.35	1.92	1.88	1.72	1.63	1.61	1.59	2.04	3.01	3.1	3.83	4.53	2.9	3.32	4.31	4.55	4.27	4.1	3.39	3.92	3.64	3.86	4	3.77
FJI	0.94	1	0.94	0.99	0.83	0.65	0.65	0.44	0.43	0.45	0.44	0.56	0.86	0.86	1.03	1.46	1.02	1.16	1.57	1.68	1.56	1.59	1.37	1.66	1.39	1.44	1.52	1.49
FRA	7.53	7.61	7.77	7.75	6.26	5.16	5.06	4.52	4.23	4.3	4.1	5.2	7.98	7.28	8.88	12.44	8.23	8.16	11.4	11.41	9.96	9.37	7.13	8.26	7.07	7.72	8.57	7.95
GAB	0.98	0.93	0.99	1.01	0.84	0.68	0.68	0.53	0.53	0.54	0.49	0.63	0.97	0.97	1.22	1.77	1.24	1.37	1.88	1.97	1.84	1.82	1.55	1.87	1.59	1.69	1.79	1.74
GBR	6.97	7.06	7.05	7.08	5.8	4.68	4.6	4.19	3.67	3.76	3.55	4.63	6.73	6.84	9.04	10.91	6.48	8.05	10.78	11.48	10.65	10.99	8.54	9.78	9.32	9.63	9.9	9.46
GEO	1.04	1.05	1.15	1.21	1.1	0.88	0.92	0.77	0.74	0.77	0.75	0.99	1.49	1.57	1.97	2.78	1.85	2.13	2.95	3.13	2.93	2.73	2.34	2.78	2.46	2.61	2.9	2.63
GHA	1.24	1.07	1.17	1.19	1	0.79	0.81	0.66	0.65	0.65	0.73	0.81	1.22	1.23	1.56	2.19	1.57	1.81	2.55	2.71	2.91	2.78	2.43	2.77	2.61	2.61	2.8	1.89
GMB	0.98	0.98	1.01	1.05	0.88	0.7	0.72	0.55	0.55	0.58	0.54	0.69	1.04	1.02	1.29	1.84	1.28	1.41	1.93	2.01	1.87	1.9	1.66	2.01	1.66	1.73	1.84	1.83
GRC	3.51	3.37	3.42	3.31	2.83	2.3	2.23	1.89	1.71	1.72	1.98	2.56	3.92	3.94	4.98	7.26	5.08	5.19	6.71	6.98	6.44	6.08	4.55	5.14	5.01	5.41	5.5	4.69
GTM	1.67	1.67	1.69	1.71	1.55	1.32	1.32	1.13	1.12	1.12	1.08	1.3	1.99	1.94	2.44	3.31	2.39	2.76	3.67	3.96	3.78	3.69	3.24	3.75	3.44	3.51	3.74	3.65
HKG	22.25	25.84	29.38	28.27	25.83	18.76	17.11	16.94	14.2	11.77	11.5	13.05	15.38	15.95	17.69	18.68	14.54	18.21	21.54	22.93	20.68	17.51	13.64	14.53	15.35	16.65	16.8	15.62
HND	1.25	1.2	1.24	1.23	1.24	1.12	1.13	1	0.97	0.96	0.9	1.07	1.61	1.31	1.68	2.35	1.7	1.92	2.58	2.72	2.64	2.46	2.21	2.61	2.24	2.32	2.41	2.36
HRV	2.14	2.23	2.31	2.33	2.06	1.75	1.68	1.44	1.46	1.52	1.44	1.81	2.5	2.56	3.2	4.38	3.02	3.15	4.12	4.15	3.89	3.81	3.12	3.73	3.37	3.63	3.81	3.68
HTI	0.96	0.97	1.08	1.07	0.96	0.74	0.76	0.62	0.62	0.64	0.58	0.73	1.1	1.1	1.37	1.9	1.33	1.48	2.02	2.12	1.97	1.96	1.71	2.04	1.72	1.82	1.86	1.82
HUN	2.93	2.95	2.97	2.89	2.54	2.13	2.1	1.69	1.84	1.87	1.91	2.52	3.74	3.78	4.68	6.62	4.34	4.69	6.34	6.42	5.86	5.77	4.42	5.23	4.73	4.99	5.22	4.91
IDN	2.06	2.3	2.41	2.43	1.86	0.95	1.08	0.87	0.89	0.82	0.74	0.96	1.5	1.55	1.85	3.1	2.42	2.96	3.59	3.97	3.89	3.71	3.32	4.31	3.77	4.29	4.98	4.55
IND	3.79	3.86	4.1	3.8	3.29	2.51	2.62	2.22	2.13	2.11	2.04	2.68	4.23	4.42	5.65	7.78	5.86	7.15	10.15	10.85	9.73	9.3	7.54	8.6	8.48	9.2	9.54	8.5
IRL	2.35	2.44	2.22	2.21	1.86	2.47	2.99	2.87	2.7	2.83	2.69	3.27	4.98	5.08	5.96	7.65	5.36	6.14	8.13	8.37	3.81	3.98	3.33	3.79	3.29	3.58	3.5	3.65
IRN	1.86	2.08	2.06	2.13	2.1	1.76	1.87	1.85	1.85	1.31	1.23	1.57	2.26	2.29	3.15	4.35	4.3	4.8	6.72	7.69	7.46	6.1	4.42	5.47	5.53	6.5	8.58	9.61
IRQ	2.33	2.19	2.12	2.01	1.73	1.41	1.33	1.13	1.09	1.05	0.96	1.18	1.77	1.62	1.97	2.78	2.33	2.58	3.36	3.64	3.59	3.37	3.06	3.59	2.69	2.89	3.12	2.99
ISL	1.18	1.17	1.21	1.23	1.09	0.88	0.89	0.72	0.71	0.73	0.69	0.88	1.32	1.31	1.64	2.24	1.55	1.74	2.46	2.48	2.23	2.23	1.94	2.27	2.06	2.15	2.24	2.15
ISR	3.46	3.41	3.65	3.61	2.98	2.41	2.34	2.17	1.96	1.93	1.8	2.2	3.27	3.23	4.05	5.62	3.76	4.27	5.57	5.81	5.7	5.93	4.58	5.33	5.06	5.57	6.09	5.78
ITA	7.59	7.38	7.91	7.4	6.13	5.27	5.25	4.68	4.33	4.26	4	4.93	7.22	6.96	8.54	11.31	8.46	9.69	12.51	12.64	11.2	9.95	7.88	8.71	8.4	8.85	9.21	8.05
JAM	1.73	1.71	1.74	1.84	1.61	1.31	1.36	1.04	1.03	1.07	1.03	1.15	1.73	1.75	2.17	2.9	1.92	2.03	2.73	2.91	2.64	2.57	2.26	2.65	2.39	2.41	2.52	2.42
JOR	1.94	1.91	1.91	1.96	1.64	1.36	1.34	1.12	1.11	1.12	0.99	1.26	1.89	1.87	2.39	3.32	2.51	2.79	3.75	4.16	3.88	3.91	3.19	3.57	3.26	3.4	3.55	3.15
JPN	13.34	12.18	12.37	11.66	9.51	6.47	7.1	6.19	5.75	5.04	4.81	5.74	8.26	8.52	9.45	14.11	10.21	12.34	18.14	20.21	16.62	16.02	12.37	13.68	12.52	13.64	14.26	13.34
KAZ	1.16	1.17	1.25	1.25	1.04	0.81	0.8	0.63	0.7	0.71	0.69	0.88	1.42	1.42	1.78	2.59	1.93	2.18	3.12	3.49	3.32	3.08	2.52	2.93	2.67	2.78	2.93	2.79
KEN	1.44	1.49	1.59	1.63	1.3	0.97	0.82	0.72	0.7	0.68	0.63	0.79	1.25	1.29	1.61	2.24	1.64	1.92	2.67	2.8	2.55	2.46	2.16	2.51	2.25	2.31	2.45	2.45
KGZ	0.95	0.97	1.08	1.15	0.94	0.8	0.79	0.63	0.64	0.66	0.62	0.79	1.23	1.24	1.56	2.22	1.63	1.85	2.52	2.71	2.56	2.55	2.16	2.57	2.23	2.37	2.45	2.37
KHM	1.04	1.06	1.13	1.19	1	0.78	0.86	0.72	0.72	0.75	0.68	0.85	1.26	1.32	1.61	2.22	1.65	1.88	2.55	2.83	2.69	2.69	2.36	2.85	2.59	2.76	2.98	2.83
KOR	9.36	8.23	9.26	8.79	6.8	3.64	4.77	5.31	4.79	4.63	4.27	5.34	7.96	8.31	9.68	13.02	8.91	11.32	15.49	16.61	15.18	14.57	10.57	11.3	11.18	12.3	12.6	11.11
KWT	2.12	2.29	2.2	2.38	2.23	1.66	1.5	1.75	1.71	1.93	2	2.72	4.48	4.52	5.95	7.35	5.56	6.33	8.43	9.24	8.37	7.66	6.14	7.11	6.57	7.02	7.16	6.13
LAO	1.11	1.11	1.2	1.23	1.05	0.78	0.84	0.68	0.67	0.72	0.65	0.83	1.25	1.26	1.56	2.21	1.66	1.84	2.51	2.72	2.6	2.62	2.27	2.71	2.32	2.46	2.59	2.52
LBN	1.89	1.95	2.26	2.12	1.77	1.49	1.47	1.32	1.33	1.31	1.25	1.55	2.19	2.09	2.6	3.59	2.81	3.06	3.89	4.15	3.99	3.94	3.4	3.99	3.59	3.71	3.71	3.29
LBR	0.89	0.93	0.97	0.97	0.85	0.68	0.69	0.56	0.57	0.58	0.55	0.71	1.08	1.09	1.34	1.91	1.33	1.5	2.06	2.12	1.96	1.95	1.72	2.09	1.71	1.78	1.88	1.88
LBY	1.49	1.42	1.51	1.44	1.26	1.06	1.05	0.83	0.85	0.92	0.84	1.06	1.62	1.61	1.97	2.78	2.18	2.34	2.67	2.92	2.7	2.62	2.2	2.72	2.31	2.48	2.59	2.34
LCA	1.12	1.13	1.12	1.17	1.02	0.83	0.84	0.66	0.64	0.65	0.62	0.77	1.15	1.17	1.43	1.97	1.4	1.56	2.11	2.19	2.04	2.05	1.83	2.18	1.82	1.91	1.98	1.96
LKA	1.47	1.41	1.47	1.46	1.16	0.94	0.91	0.81	0.81	0.95	0.98	1.26	1.88	1.98	1.75	2.51	1.65	1.72	2.72	2.81	2.93	2.79	2.41	2.8	2.57	2.45	2.6	2.43
LTU	1.4	1.52	1.72	1.82	1.7	1.43	1.33	1.25	1.28	1.3	1.29	1.71	2.68	2.77	3.42	4.96	3.25	3.74	5.11	5.27	5.01	3.96	3.28	3.75	3.52	3.77	3.88	3.74
LVA	1.24	1.36	1.48	1.73	1.67	1.32	1.31	0.92	0.92	0.97	0.96	1.23	1.84	1.95	2.48	3.35	2.28	2.52	3.43	3.58	3.36	3.28	2.71	3.17	2.87	3.06	3.15	3.01
MAC	2.59	2.7	2.78	2.91	2.61	1.97	1.95	1.35	1.34	1.37	1.34	1.75	2.57	2.69	3.33	4.45	3.53	4.12	5.72	6.26	6.47	6.6	5.63	6.09	5.81	6.64	7.62	9.66
MAR	1.9	1.91	1.97	1.97	1.64	1.38	1.34	1.22	1.16	1.19	1.12	1.42	2.19	2.21	2.76	3.89	2.66	3.04	4.21	4.32	3.93	3.7	2.95	3.46	3.22	3.43	3.78	3.61
MDA	1.18	1.38	1.38	1.56	1.26	1.1	1.05	0.86	0.87	0.9	0.86	1.1	1.66	1.68	2.13	3.01	2.11	2.28	3.05	3.16	2.97	2.93	2.45	2.93	2.59	2.78	2.88	2.75
MDG	0.79	0.79	0.82	0.84	0.7	0.55	0.56	0.45	0.44	0.46	0.43	0.55	0.82	0.82	1.03	1.48	1.07	1.17	1.59	1.68	1.56	1.57	1.37	1.66	1.42	1.5	1.59	1.55
MDV	0.8	0.8	1.04	1.08	0.94	0.67	0.77	0.6	0.69	0.59	0.54	0.7	0.96	0.98	1.22	1.69	1.21	1.42	1.86	2.01	1.88	1.95	1.66	2.04	1.88	1.89	2.04	1.82
MEX	3.38	4.08	3.39	3.73	3.59	2.96	3.1	3.07	2.94	2.64	3.04	3.5	5.28	5.52	6.47	8.42	5.95	7.03	9.32	10.08	9.47	9.12	7.11	7.55	7.86	8.12	8.5	7.46
MKD	1.33	1.49	1.56	1.58	1.45	1.19	1.2	1.03	0.99	1.02	0.99	1.27	1.87	1.92	2.32	3.37	2.37	2.48	3.26	3.3	3.11	3.05	2.57	3.02	2.66	2.85	2.92	2.83

Table C.10: Continued on next page

Table C.10: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MLT	1.89	1.68	2.69	1.88	1.9	1.53	1.34	1.23	1.18	1.21	1.16	1.38	1.92	2.09	2.47	3.32	2.39	2.59	3.39	3.46	3.26	3.44	2.89	3.12	2.95	3.25	3.49	3.25
MMR	1.36	1.28	1.5	1.6	1.61	1.34	1.41	1.09	0.98	1.14	1.11	1.55	2.48	2.66	3.36	4.55	3.73	4.07	5.31	6.12	5.97	6.03	5.38	6.57	6.29	6.56	7.33	7.25
MNG	0.93	0.93	1	1.05	0.91	0.71	0.75	0.61	0.61	0.64	0.6	0.78	1.18	1.2	1.49	2.11	1.56	1.77	2.48	2.7	2.52	2.53	2.13	2.55	2.15	2.27	2.37	2.32
MOZ	0.75	0.8	0.84	0.83	0.71	0.56	0.62	0.54	0.52	0.53	0.5	0.65	0.96	0.96	1.2	1.7	1.23	1.36	1.88	2	1.98	1.95	1.7	1.95	1.65	1.8	1.95	1.84
MUS	1.69	1.19	1.2	1.51	1.25	0.99	0.99	0.71	0.68	0.67	0.64	0.8	1.19	1.18	1.47	2.03	1.54	1.74	2.23	2.45	2.26	2.23	1.87	2.29	2.02	2.05	2.24	2.1
MWI	0.99	0.99	1.01	1.04	0.85	0.64	0.65	0.52	0.51	0.53	0.49	0.63	0.97	0.97	1.23	1.79	1.28	1.43	1.92	2.17	1.96	1.94	1.7	2.01	1.74	1.8	1.91	1.84
MYS	2.65	2.59	2.8	2.76	2.36	1.24	1.6	1.67	1.48	1.57	1.36	1.87	2.8	2.89	3.26	4.45	3.27	3.93	4.82	5.84	5.74	5.36	4.34	5.34	4.63	5.16	5.84	5.09
NER	1.22	1.12	1.22	1.16	1.01	0.83	0.84	0.65	0.63	0.63	0.58	0.75	1.11	1.13	1.43	1.92	1.41	1.55	2.12	2.23	2.09	2.06	1.75	2.1	1.83	1.92	1.96	1.93
NGA	1.44	1.29	2.01	2	1.62	1.22	1.32	1.03	1.01	0.94	0.92	1.22	1.91	2.17	2.79	3.71	2.62	3.21	4.52	4.8	4.7	4.64	3.59	3.78	3.55	3.81	4.45	4.52
NIC	1.18	1.17	1.16	1.17	1.09	0.87	0.87	0.72	0.73	0.72	0.68	0.83	1.28	1.31	1.6	2.2	1.61	1.8	2.39	2.55	2.35	2.32	2.1	2.49	2.13	2.12	2.19	2.17
NLD	5.08	4.94	5.34	4.65	4.08	3.34	3.09	3.34	3.09	3.46	3.26	4.31	6.8	5.4	8.24	8.9	7.22	6.68	9.64	10.14	8.77	8.07	6.09	7.08	7.43	8.88	9.22	8.03
NOR	2.32	2.32	2.38	2.17	1.74	1.45	1.51	1.31	1.16	1.21	1.12	1.43	2.15	2.15	3.58	5.31	2.47	2.75	3.77	3.96	3.54	3.43	2.79	3.33	3.01	3.15	3.3	3.22
NPL	1.03	1.09	1.16	1.12	0.97	0.78	0.87	0.67	0.65	0.7	0.67	0.83	1.34	1.36	1.69	2.36	1.82	2.07	2.85	3.03	2.87	2.86	2.46	2.94	2.63	2.81	2.93	2.76
NZL	2.58	2.53	2.61	2.58	2.11	1.32	1.66	1.35	1.28	1.3	1.21	1.52	2.45	2.34	2.88	3.74	2.62	2.93	4.29	4.34	4.01	3.83	3.06	3.52	3.25	3.34	3.62	3.47
OMN	1.42	1.4	1.42	1.4	1.24	1.04	1.04	0.94	0.94	0.97	1.02	1.13	1.73	1.64	2.18	3.31	2.5	2.7	3.15	3.57	3.38	3.59	2.91	3.42	3.03	3.29	3.49	3.62
PAK	2.74	2.27	2.61	2.63	2.09	1.59	1.65	1.47	1.31	1.29	1.1	1.42	2.26	2.29	2.9	3.98	2.95	3.31	4.49	4.74	4.38	4.47	3.88	4.63	4.37	4.43	4.68	4.41
PAN	1.33	1.4	1.39	1.41	1.28	0.97	0.96	0.85	0.8	0.8	0.76	0.92	1.35	1.73	2.11	3.26	2.72	3.27	4.96	5.46	4.96	4.25	3.69	4.14	3.73	3.99	3.71	3.19
PER	2	2.04	2.1	2.08	1.88	1.49	1.27	1.15	1.12	1.06	0.99	1.24	1.9	1.96	2.44	3.47	2.56	3.01	3.98	4.46	4.23	4.11	3.36	3.76	3.46	3.63	3.86	3.44
PHL	3.32	3.34	3.27	3.36	2.87	1.94	2.01	1.76	1.56	1.44	1.41	1.66	2.45	2.5	2.97	4.04	2.92	3.36	4.51	5.05	4.7	4.63	3.82	4.58	4.55	4.78	5.18	4.4
PNG	0.98	1.01	0.98	1.01	0.82	0.6	0.63	0.48	0.48	0.49	0.47	0.59	0.9	0.89	1.12	1.63	1.18	1.35	1.9	2.03	1.82	1.99	1.82	2.14	1.86	1.92	2.08	1.98
POL	3.41	3.3	3.48	3.63	3.32	2.74	2.69	2.38	2.33	2.26	2.22	2.89	4.4	4.5	5.67	7.82	5.23	5.87	7.97	8.13	7.48	7.2	5.66	6.54	6.2	6.6	6.04	5.81
PRT	3.78	3.87	3.49	3.99	3.38	2.75	2.69	2.5	2.35	2.27	2.23	2.54	3.39	3.49	4.24	5.66	4.64	5.1	6.58	6.65	6.11	5.75	4.54	5.11	4.95	5.52	5.65	5.1
PRY	1.29	1.34	1.35	1.39	1.26	0.99	0.94	0.77	0.76	0.7	0.66	0.85	1.28	1.29	1.67	2.49	1.73	2.04	2.81	2.97	2.83	2.79	2.35	2.69	2.41	2.5	2.6	2.46
QAT	1.34	1.48	1.5	1.55	1.25	1.09	1	0.77	0.93	1.05	0.99	1.13	1.61	1.48	1.79	3.69	3.75	4.42	5.75	6.46	5.93	5.68	4.66	3.05	2.91	2.83	3.38	3.18
ROU	2.43	2.29	2.45	2.42	2.01	1.69	1.55	1.41	1.4	1.46	1.41	1.86	2.83	2.96	3.82	5.4	3.6	3.82	5.18	5.29	4.8	4.67	3.76	4.42	4.03	4.52	4.78	4.57
RUS	1.89	1.95	2.11	2.23	1.85	1.28	1.14	1.02	1.08	1.07	1.34	1.79	3.21	3.48	4.49	6.48	4.18	4.95	6.89	7.64	7.18	6.61	4.87	5.93	5.79	6.11	6.66	5.94
RWA	0.9	0.92	0.94	1	0.87	0.69	0.7	0.55	0.56	0.59	0.55	0.7	1.09	1.07	1.33	1.95	1.44	1.57	2.13	2.23	2.1	2.09	1.89	2.29	1.94	1.98	2.16	2.18
SAU	2.39	2.34	2.38	2.2	1.96	1.71	1.57	1.5	1.48	1.45	1.34	1.53	2.19	2.14	2.99	3.95	3.37	3.78	4.7	5.21	4.91	4.94	4.6	5.47	5.07	5.01	6.99	6.61
SCG	1.35	1.87	1.81	2.09	1.86	1.51	1.44	1.37	1.19	1.29	1.24	1.7	2.21	5.44	7.09	10.34	6.94	7.08	9.61	9.81	9.79	9.04	4.49	5.08	7.9	9.11	9.31	8.82
SEN	1.22	1.12	1.2	1.21	1.07	0.8	0.83	0.69	0.67	0.64	0.62	0.83	1.2	1.16	1.52	2.2	1.5	1.62	2.23	2.37	2.28	2.21	1.88	2.19	1.95	2.08	2.19	2.17
SGP	7.38	6.12	4.62	6.93	3.58	4.81	5.57	7.71	4.8	3.6	2.49	3.79	5.29	5.2	5.85	9.95	4.8	7.42	11.18	11.62	12.01	12.06	8.51	8.72	9.04	7.84	10.09	7.59
SLE	0.94	0.95	0.98	1.03	0.86	0.67	0.69	0.53	0.54	0.56	0.52	0.66	1	0.99	1.25	1.78	1.25	1.39	1.91	2.01	1.86	1.88	1.64	1.96	1.62	1.7	1.76	1.75
SLV	1.71	1.6	1.54	1.77	1.56	1.26	1.22	1.08	1.08	1.06	0.99	1.18	1.79	1.82	2.17	2.95	2.16	2.43	3.23	3.46	3.24	3.18	2.8	3.24	2.91	2.97	3.18	2.98
SOM	0.95	1.01	1	1.12	0.84	0.67	0.67	0.53	0.53	0.54	0.51	0.63	0.97	0.96	1.24	1.77	1.25	1.42	1.95	2.07	1.82	1.87	1.64	1.99	1.63	1.69	1.84	1.85
SUR	0.97	0.98	1.02	1.02	0.9	0.74	0.74	0.59	0.58	0.57	0.53	0.67	1.01	1.04	1.29	1.84	1.31	1.44	1.97	2.07	1.93	1.89	1.6	1.85	1.59	1.67	1.74	1.7
SVK	1.93	2.33	2.36	2.36	2.26	1.87	1.85	1.71	1.71	1.69	1.62	2.05	2.92	3.09	3.87	5.43	3.76	4.05	5.41	5.4	5.84	6.2	5.02	5.93	4.39	5.39	6.2	5.76
SVN	2.61	2.7	3.08	2.92	2.53	2.04	1.97	1.67	1.6	1.65	1.57	1.99	2.91	2.88	3.58	4.76	3.33	3.54	4.61	4.59	4.2	4.1	3.36	3.89	3.59	3.93	4.54	4.64
SWE	3.07	3.02	3.12	3.06	2.41	2	1.88	1.64	1.56	1.58	1.56	1.94	2.85	2.84	3.62	4.77	3.39	3.72	4.79	5.05	4.53	4.64	4.07	4.29	3.84	4.17	4.6	4.62
SYR	2.33	2.24	2.17	2.39	2.2	1.91	1.93	1.87	1.88	1.88	1.84	2.34	3.11	1.67	2.03	2.91	2.29	2.51	2.76	2.82	2.61	2.61	2.36	2.82	2.37	2.52	2.63	2.53
THA	5.66	4.68	4.87	4.49	3.06	1.46	1.64	1.86	1.75	2.04	1.87	2.23	3.06	2.98	3.68	5.06	3.44	4.04	4.7	6.13	5.85	5.4	4.62	5.36	4.81	5.13	5.52	5.19
TJK	0.92	0.94	1.01	1.05	0.9	0.73	0.75	0.65	0.63	0.65	0.61	0.78	1.19	1.21	1.51	2.14	1.57	1.76	2.43	2.56	2.42	2.44	2.08	2.48	2.13	2.26	2.38	2.32
TKM	0.94	0.97	1.04	1.34	1.09	0.8	0.87	0.73	0.7	0.7	0.66	0.84	1.26	1.27	1.63	2.34	1.59	1.74	2.5	2.67	2.56	2.49	2.09	2.51	2.22	2.57	2.61	2.68
TON	0.76	0.77	0.77	0.76	0.62	0.47	0.49	0.38	0.37	0.38	0.36	0.45	0.7	0.69	1.01	1.25	0.89	1	1.38	1.46	1.35	1.37	1.18	1.45	1.16	1.2	1.28	1.3
TTO	1.39	1.41	1.43	1.35	1.22	1.08	0.98	1.46	1.46	1.27	1.18	1.5	2.38	2.46	3.03	4.19	2.96	3.2	4.3	4.54	4.41	4.43	3.84	4.34	3.96	3.97	4.38	4.09
TUN	2.26	2.23	2.16	2.21	1.82	1.49	1.48	1.23	1.2	1.18	1.1	1.32	2	1.95	2.48	3.36	2.54	2.7	3.54	3.93	3.61	3.53	2.8	3.34	2.95	3.01	3.19	3.03
TUR	4.23	3.53	3.95	3.83	3.35	2.65	2.58	2.4	2.08	2	2.06	2.76	4.09	4.26	5.19	7.15	4.76	5.62	7.72	8.02	7.5	7.16	5.53	6.34	6.11	6.17	6.38	6.14
TZA	1.02	1.03	1.1	1.08	0.88	0.69	0.69	0.55	0.55	0.55	0.52	0.64	0.99	0.98	1.24	1.87	1.3	1.48	2.03	2.16	2.05	2.1	1.77	2.1	1.79	1.85	2.01	2.01
UGA	0.98	1.01	1.06	1.11	0.89	0.71	0.71	0.55	0.55	0.56	0.53	0.66	1.01	1.02	1.3	1.9	1.35	1.5	2.05	2.18	2.07	2.06	1.8	2.14	1.85	1.91	2.04	2.07
UKR	1.93	1.88	1.8	2.4	2.08	1.55	1.39	1.23	1.3	1.36	1.34	1.78	2.84	2.96	3.81	5.26	3.44	3.92	5.35	5.69	5.14	4.36	3.46	3.86	3.75	4.02	4.22	3.81
URY	1.85	1.84	1.94	2.07	1.83	1.53	1.42	1.23	1.15	0.94	0.88	1.18	1.74	1.76	2.17	3.18	2.22	2.68	3.61	3.95	3.8	3.62	3.1	3.46	3.06	3.08	3.11	2.88
USA	12.42	11.7	10.55	10.39	8.94	7.29	7.73	6.97	6.67	6.32	6.14	7.43	11.7	12.16	14.08	17.94	11.86	14.15	19.25	21.05	19.12	18.58	15.34	17.35	16.75	17.7	19.32	17.88
UZB	0.89	0.92	1.06	1.18	0.99	0.81	0.78	0.68	0.67	0.63	0.6	0.77	1.21	1.23	1.55	2.32	1.64	1.72	2.36	2.44	2.42	2.46	2.17	2.62	2.5	2.6	2.81	2.83
VEN	1.94	1.65	1.94	1.5	1.69	1.47	1.46	1.12	1.13	0.97	0.85	1.12	1.75	1.85	2.31	3.62	2.68	2.82	3.99	4.47	3.64	2.29	1.9	2.2	1.81	1.87	2	1.92
VNM	1.12	1.13	1.24	1.27	1.32	0.99	1	1.2	1.28	1.24	1.21	1.45	2.13	2.26	2.87	4.02	3.42	4.1	5.34	5.84	5.45	5.39	4.85	5.89	6.13	5.93	6.57	6.25
YEM	1.23	1.16	1.17	1.25	1.03	0.81	0.87	0.79	0.77	0.78	0.77	0.95	1.49	1.56	1.96	2.7	1.92	2.06	2.55	2.7	2.41	2.38	1.82	2.21	1.87	1.85	2.06	2
ZAF	3.29	3.21	3.13	2.79	1.98	1.19	1.87	1.76	1.61	1.45	1.58	2.01	2.95	2.97	3.57	4.43	3.13	3.99	4.88	5.44	5.25	4.92	3.93	4.37	4.2	4.38	4.62	4.05
ZMB	1.02	1.01	1.01	1.08	0.89	0.73	0.65	0.51	0.51	0.54	0.49	0.65	1.04	1.22	1.23	1.8	1.28	1.73	2.1	2.38	2.35	1.93	2.34	2.35	2.11	2.48	2.65	2.42
ZWE	1.21	1.23	1.24	1.29	1.05	0.77	0.8	0.65	0.61	0.61	0.54	0.72	1.06	1.05	1.28	1.77	1.8	1.5	2.24	2.18	2.15	2.01	1.75	2.06	1.75	1.82	1.91	1.9

Table C.11: OMR in the food sector by country and year (TLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	0.25	0.23	0.27	0.26	0.23	0.2	0.19	0.24	0.28	0.26	0.3	0.3	0.42	0.42	0.49	0.54	0.53	0.63	0.81	0.76	0.95	1.02	0.85	0.69	0.88	0.82	0.81	0.53
AGO	0.38	0.33	0.37	0.39	0.34	0.29	0.24	0.3	0.39	0.34	0.4	0.41	0.46	0.54	0.57	1.05	1	0.99	1.33	1.68	1.4	1.66	1.17	0.73	1.03	0.99	0.85	0.7
ALB	0.4	0.34	0.39	0.62	0.45	0.42	0.43	0.4	0.46	0.42	0.47	0.49	0.55	0.58	0.74	1.01	0.85	0.98	1.16	1.06	1.04	0.97	0.95	0.78	0.77	0.8	0.82	0.82
ARE	1.1	1.85	1.99	1.86	1.87	1.6	0.95	1.46	1.72	1.45	1.81	1.64	1.7	2.3	2.31	3.42	4.13	3.39	4.55	3.89	3.06	3.99	3.98	3.33	5.17	4.31	4.3	4.36
ARG	0.81	0.73	0.65	0.59	0.56	0.52	0.45	0.48	0.53	0.25	0.31	0.33	0.4	0.4	0.48	0.66	0.57	0.84	1.13	1.05	1.08	1.17	1.31	0.89	1.04	1.01	0.84	0.81
ARM	0.24	0.31	0.39	0.45	0.53	0.42	0.4	0.43	0.46	0.38	0.41	0.44	0.51	0.53	0.7	1.04	0.78	1	1.21	1.11	1.1	1.28	1.15	0.88	1.06	1.1	1.1	1.08
AUS	0.56	0.55	0.58	0.55	0.46	0.37	0.38	0.36	0.36	0.39	0.5	0.49	0.59	0.59	0.81	1.13	1.07	1.35	1.68	1.62	1.51	1.6	1.43	1.14	1.25	1.26	1.2	1.31
AUT	2.75	2.64	2.68	2.46	1.98	1.75	1.43	1.44	1.58	1.36	1.49	1.48	1.58	1.53	1.89	2.68	2.29	2.51	3	2.75	2.75	3.01	2.66	2.02	2.27	2.35	2.26	2.23
AZE	0.42	0.35	0.45	0.69	0.6	0.52	0.47	0.5	0.59	0.49	0.55	0.55	0.66	0.69	0.88	1.21	1.14	1.38	1.62	1.53	1.5	1.61	1.4	1.12	1.33	1.27	1.32	1.36
BDI	0.46	0.47	0.48	0.52	0.49	0.48	0.44	0.53	0.61	0.53	0.56	0.56	0.61	0.64	0.74	0.55	0.5	0.61	0.79	0.77	0.75	0.84	0.81	0.6	0.67	0.64	0.67	0.67
BEL	2.87	2.78	3.12	2.7	2.26	2.11	1.89	2	2.24	1.86	2.13	2.07	2.28	2.22	2.72	3.75	3.15	5.98	7.23	3.15	3.14	6.95	6.31	2.32	2.75	2.74	2.59	2.68
BEN	0.3	0.27	0.31	0.33	0.27	0.31	0.28	0.26	0.33	0.28	0.32	0.33	0.39	0.6	0.75	0.82	0.96	1.23	1.1	1.05	1.13	1.42	0.99	0.87	1.21	1.16	0.94	0.89
BFA	0.24	0.21	0.26	0.25	0.23	0.37	0.27	0.31	0.39	0.37	0.31	0.35	0.3	0.32	0.36	0.48	0.44	0.51	0.64	0.6	0.59	0.63	0.58	0.44	0.48	0.52	0.47	0.47
BGD	0.87	0.9	1.01	0.97	0.89	0.81	0.73	0.87	0.99	0.82	0.92	0.85	0.93	0.98	1.38	1.88	1.71	2.16	3.02	2.38	2.45	2.8	3.08	1.68	1.97	2.06	2.12	2.27
BGR	0.79	0.72	0.8	0.76	0.66	0.66	0.54	0.61	0.69	0.61	0.69	0.74	0.84	0.92	1.22	1.82	1.55	1.66	1.99	1.71	1.76	1.84	1.66	1.32	1.58	1.58	1.57	1.59
BHR	1.95	1.63	1.7	1.69	1.24	1.34	1.11	1.5	1.73	1.52	1.47	1.43	1.71	1.4	1.76	2.55	2.02	2.69	3.16	3.26	3.75	4.21	3.96	3.28	3.68	3.58	3.5	3.43
BHS	0.46	0.42	0.47	0.43	0.44	0.42	0.35	0.37	0.4	0.34	0.35	0.35	0.61	0.74	0.85	1.02	0.89	0.91	1.01	0.97	0.91	1.01	1.01	0.8	0.97	0.96	0.91	0.72
BIH	0.43	0.33	0.36	0.45	0.42	0.4	0.34	0.37	0.42	0.39	0.61	0.69	0.8	0.83	1.01	1.38	1.21	1.34	1.66	1.47	1.44	1.51	1.35	1.08	1.21	1.22	1.21	1.17
BLR	0.37	0.37	0.42	0.46	0.39	0.67	0.52	0.59	0.7	0.62	0.69	0.74	0.88	0.98	1.2	1.62	1.37	1.52	1.76	1.88	1.76	1.82	1.71	1.24	1.33	1.37	1.35	1.3
BLZ	0.31	0.3	0.28	0.28	0.25	0.22	0.2	0.25	0.29	0.24	0.25	0.26	0.28	0.3	0.38	0.53	0.45	0.54	0.69	0.65	0.62	0.74	0.74	0.55	0.54	0.56	0.55	0.55
BMU	1.12	1.09	1.11	1.26	1	0.96	0.93	0.91	0.86	0.75	0.78	0.9	0.84	0.91	1.06	1.25	1.08	1.03	1.17	1.28	0.65	0.74	0.73	0.57	0.56	0.58	0.56	0.57
BOL	0.34	0.32	0.33	0.31	0.27	0.25	0.22	0.24	0.26	0.2	0.21	0.2	0.26	0.26	0.34	0.44	0.39	0.47	0.64	0.61	0.58	0.65	0.67	0.48	0.54	0.58	0.56	0.55
BRA	0.95	0.91	0.98	0.95	0.83	0.74	0.49	0.61	0.58	0.44	0.46	0.46	0.56	0.61	0.77	1.11	0.93	1.25	1.58	1.49	1.51	1.7	1.44	1.09	1.19	1.24	1.18	1.06
BRB	0.83	0.83	0.86	0.78	0.77	0.75	0.73	0.8	0.83	0.72	0.77	0.74	0.79	0.81	0.87	1.13	1.56	1.09	1.29	1.59	1.25	1.28	1.29	1.1	1.28	1.28	1.09	1.11
BRN	0.64	0.85	0.83	0.88	0.78	0.61	0.47	0.56	0.53	0.45	0.45	0.48	0.46	0.51	0.61	0.75	0.7	0.81	0.94	0.89	0.96	1	0.97	0.79	0.75	0.76	0.79	0.83
BTN	0.22	0.23	0.24	0.22	0.2	0.18	0.17	0.17	0.2	0.17	0.21	0.23	0.29	0.3	0.4	0.5	0.43	0.54	0.7	0.64	0.59	0.67	0.66	0.5	0.49	0.53	0.52	0.54
CAF	0.22	0.24	0.27	0.24	0.2	0.16	0.15	0.16	0.17	0.14	0.16	0.16	0.19	0.19	0.25	0.34	0.29	0.35	0.46	0.41	0.39	0.45	0.43	0.3	0.32	0.33	0.32	0.32
CAN	1.66	1.52	1.37	1.33	1.21	1.13	1.05	1.12	1.26	1.08	1.22	1.29	1.48	1.58	1.87	2.3	2.09	2.42	2.91	2.65	2.54	2.86	2.82	2.12	2.25	2.37	2.38	2.44
CHE	3.31	3.27	3.4	3.13	2.28	2.12	1.84	1.94	2.19	1.88	2.04	1.98	2.08	2.15	2.45	3.03	2.74	2.93	3.62	3.31	3.34	3.62	3.34	2.6	2.87	2.9	2.8	3.05
CHL	0.66	0.59	0.59	0.6	0.54	0.49	0.4	0.45	0.44	0.34	0.36	0.37	0.43	0.45	0.55	0.81	0.67	0.86	1.14	0.99	1.26	1.11	1.07	1.2	1.28	1.36	1.25	1.22
CHN	2.07	1.85	2.2	2.15	2.02	1.64	1.47	1.82	2.14	1.86	2.16	2.41	2.85	3.02	4.02	6.06	6.08	7.98	10.48	10.67	11.44	12.69	12.69	10.04	11.12	10.77	11.6	13.16
CIV	0.34	0.27	0.3	0.29	0.34	0.31	0.26	0.28	0.34	0.29	0.34	0.33	0.37	0.41	0.5	0.7	0.62	0.69	0.86	0.85	0.83	0.94	0.91	0.7	0.86	0.87	0.83	0.84
CMR	0.49	0.34	0.38	0.37	0.32	0.31	0.29	0.3	0.37	0.33	0.35	0.39	0.44	0.44	0.55	0.75	0.69	0.79	1.04	0.91	0.92	0.99	0.9	0.65	0.81	0.78	0.8	0.84
COG	0.3	0.29	0.3	0.3	0.26	0.24	0.21	0.25	0.31	0.25	0.29	0.29	0.33	0.35	0.38	0.54	0.48	0.52	0.64	0.61	0.63	0.75	0.61	0.44	0.56	0.51	0.5	0.5
COL	0.78	0.74	0.72	0.77	0.67	0.63	0.54	0.6	0.7	0.57	0.55	0.58	0.66	0.7	0.9	1.22	1.06	1.36	1.66	1.72	1.68	1.77	1.59	1.27	1.35	1.45	1.4	1.32
CPV	0.32	0.31	0.36	0.39	0.35	0.33	0.31	0.32	0.36	0.3	0.34	0.35	0.39	0.39	0.51	0.69	0.61	0.69	0.85	0.76	0.78	0.84	0.78	0.62	0.75	0.7	0.65	0.63
CRI	0.68	0.62	0.6	0.56	0.51	0.47	0.49	0.46	0.55	0.46	0.46	0.5	0.56	0.6	0.73	0.98	0.78	1.1	1.38	1.37	1.38	1.44	1.44	1.14	1.2	1.24	1.21	1.13
CUB	1.37	1.12	1.03	0.79	0.75	0.71	0.71	0.79	0.84	0.74	0.82	0.81	0.97	0.84	1	1.33	1.01	1.18	1.28	1.27	1.31	1.43	1.46	1.25	1.52	1.44	1.07	1.06
CYP	1.11	1.25	1.64	1.81	1.63	1.29	1.14	1.14	1.21	0.94	0.97	1.04	1.14	1.23	1.4	1.83	1.64	1.82	1.9	1.76	1.67	1.78	1.69	1.33	1.44	1.43	1.39	1.28
CZE	1.6	1.67	1.76	1.81	1.52	1.38	1.17	1.2	1.4	1.27	1.36	1.45	1.55	1.65	2.05	2.64	2.22	2.41	2.96	2.63	2.57	2.74	2.47	1.9	2.14	2.25	2.23	2.15
DEU	6.13	5.77	5.84	5.31	4.3	3.73	3.42	3.14	3.6	2.99	3.16	3.19	3.36	3.42	3.96	5.35	4.52	4.84	5.84	5.03	4.89	5.42	4.82	3.68	4.22	4.4	4.32	4.42
DNK	1.3	1.1	1.23	1.23	1	0.97	0.81	0.89	0.98	0.85	0.89	0.91	1.08	1.16	1.49	1.74	1.46	1.69	2.09	1.93	1.99	2.25	2.06	1.47	1.46	1.53	1.42	1.45
DOM	0.78	0.76	0.76	0.77	0.74	0.69	0.73	0.71	0.75	0.69	0.6	0.59	0.69	0.77	0.97	1.31	1.28	1.44	1.72	1.6	1.62	1.83	1.88	1.57	1.72	1.77	1.75	1.71
DZA	1.07	0.97	0.95	0.86	0.75	0.71	0.61	0.74	0.86	0.72	0.76	0.8	0.86	0.87	1.07	1.46	1.27	1.47	1.91	1.78	1.75	2.02	1.78	1.33	1.58	0.55	0.55	0.54
ECU	0.43	0.39	0.4	0.37	0.42	0.42	0.29	0.51	0.45	0.4	0.43	0.48	0.49	0.48	0.69	0.88	0.79	0.95	1.05	1.03	1.07	1.22	1.21	0.94	1.05	1.13	1	0.97
EGY	1.25	1.14	1.18	1.15	1.05	0.96	0.83	0.72	0.79	0.59	0.52	0.56	0.67	0.67	0.79	1.62	1.35	1.67	2.25	2.26	1.99	2.35	2.41	1.81	2.25	2.64	2.91	2.68
ESP	4.02	3.62	3.65	3.3	2.66	2.38	2.15	2.25	2.67	2.22	2.56	2.63	2.96	2.87	3.56	4.61	3.75	4	4.69	3.96	3.8	4.04	3.67	2.8	3.66	3.78	3.53	3.2
EST	0.52	0.53	0.75	0.79	0.81	0.75	0.53	0.55	0.63	0.56	0.65	0.64	0.75	0.76	0.99	1.35	1.11	1.24	1.51	1.38	1.43	1.55	1.36	1.05	1.15	1.19	1.15	1.17
ETH	0.27	0.27	0.24	0.27	0.21	0.19	0.19	0.22	0.27	0.21	0.25	0.24	0.27	0.29	0.36	0.54	0.46	0.59	0.76	0.78	0.79	0.91	0.96	0.75	0.89	0.91	0.81	0.85
FIN	1.56	1.55	1.56	1.52	1.33	1.19	1.01	1.05	1.19	1.01	1.15	1.18	1.28	1.3	1.6	2.19	1.9	2.09	2.51	2.27	2.29	2.44	2.16	1.64	1.79	1.85	1.78	1.83
FJI	0.27	0.28	0.27	0.22	0.28	0.18	0.15	0.2	0.23	0.21	0.21	0.25	0.27	0.26	0.34	0.47	0.39	0.49	0.61	0.58	0.55	0.65	0.61	0.49	0.46	0.54	0.54	0.54
FRA	3.8	3.67	3.62	3.47	2.78	2.59	2.13	2.4	2.75	2.33	2.63	2.7	2.86	2.79	3.38	4.51	3.88	4.02	4.83	4.19	4.2	4.71	4.21	3.17	4.24	4.26	4.08	4.21
GAB	0.43	0.34	0.34	0.33	0.31	0.3	0.27	0.35	0.38	0.28	0.27	0.32	0.4	0.42	0.5	0.63	0.61	0.69	0.66	0.59	0.61	0.66	0.61	0.49	0.52	0.59	0.58	0.61
GBR	5.13	4.88	4.79	4.91	4.31	3.99	3.49	4.29	4.81	4.08	4.75	5.14	5.62	5.5	6.59	8.4	7.16	7.88	8.94	7.85	7.6	8.67	7.68	5.49	5.51	5.54	5.64	6.09
GEO	0.24	0.25	0.27	0.45	0.44	0.35	0.3	0.33	0.36	0.31	0.35	0.42	0.49	0.54	0.71	0.97	0.81	0.99	1.29	1.23	1.21	1.3	1.15	0.92	1.03	1.06	1.02	1.01
GHA	0.45	0.38	0.39	0.36	0.31	0.29	0.3	0.37	0.51	0.38	0.41	0.53	0.61	0.65	0.86	1.14	1.05	1.21	1.59	1.56	1.59	1.76	1.45	1.04	1.43	1.45	1.33	1.1
GMB	0.36	0.28	0.33	0.33	0.32	0.32	0.24	0.18	0.26	0.23	0.25	0.27	0.3	0.28	0.35	0.47	0.42	0.46	0.59	0.55	0.53	0.59	0.57	0.43	0.48	0.49	0.48	0.49

Table C.11: Continued on next page

Table C.11: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
GRC	2.49	2.26	2.28	2.03	1.78	1.64	1.38	1.43	1.46	1.31	1.61	1.77	1.9	1.97	2.43	3.27	2.91	2.97	3.21	2.76	2.69	2.96	2.42	1.88	2.51	2.56	2.42	2.28
GTM	0.59	0.55	0.48	0.51	0.47	0.46	0.41	0.47	0.57	0.47	0.51	0.53	0.61	0.59	0.79	1.04	0.93	1.11	1.32	1.28	1.31	1.47	1.47	1.17	1.27	1.32	1.33	1.33
HKG	26.47	28.82	32.97	30.99	29.05	23.22	19.44	22.35	21.73	16.5	15.08	14.19	13.61	12.48	14.6	18.45	19.59	21.58	24.15	24	26.53	25.75	18.31	24	28.73	28.53	26.29	24.82
HND	0.47	0.42	0.39	0.42	0.38	0.36	0.35	0.4	0.46	0.38	0.4	0.41	0.47	0.47	0.63	0.86	0.78	0.88	1.08	1.05	1.05	1.13	1.14	0.9	0.95	0.98	0.96	1
HRV	1.18	1.24	1.31	1.25	1.11	1.01	0.83	0.91	1.07	0.93	1	1.08	1.16	1.19	1.5	2.03	1.72	1.77	2.14	1.9	1.94	2.1	1.88	1.48	1.72	1.74	1.7	1.64
HTI	0.56	0.49	0.68	0.65	0.6	0.24	0.19	0.22	0.23	0.18	0.19	0.19	0.22	0.22	0.28	0.37	0.31	0.36	0.47	0.43	0.42	0.47	0.47	0.35	0.34	0.38	0.41	0.39
HUN	1.35	1.39	1.37	1.22	1.07	0.95	0.8	0.92	1.16	1.05	1.19	1.27	1.37	1.36	1.68	2.24	1.83	1.91	2.29	2.03	1.94	2.11	2	1.51	1.73	1.8	1.75	1.74
IDN	1.12	0.87	1.13	1.2	0.82	0.46	0.6	0.66	0.78	0.59	0.72	0.63	0.77	0.87	1.19	1.4	1.26	1.59	2.1	1.99	2.2	2.13	2.04	1.91	2.3	2.54	2.5	2.39
IND	1.16	1.29	1.24	1.03	1.03	0.99	0.97	1.03	1.15	0.99	1.08	1.1	1.34	1.34	1.69	2.12	2.24	3.06	3.73	3.15	3.06	3.49	3.35	2.9	3.45	3.39	3.33	3.53
IRL	0.79	0.91	0.91	1.05	0.96	0.8	0.77	0.91	1.13	1.05	1.09	1.08	1.17	1.17	1.45	1.92	1.61	1.87	2.26	2.18	2.1	2.4	1.99	1.4	1.49	1.42	1.2	1.42
IRN	1.2	1.07	1.16	1.14	1	0.97	0.92	1.08	1.28	0.7	0.76	0.78	0.86	0.88	1.23	1.77	1.66	1.94	2.36	2.76	2.33	2.23	1.91	1.63	2.18	2.25	2.73	3.02
IRQ	1.23	2.2	4	4.09	4.94	4.16	3.48	3.59	3.66	2.78	2.58	2.22	1.88	0.95	0.77	1.3	1.8	2.14	2.62	2.78	2.94	1.49	2.88	2.31	0.94	0.98	0.89	0.95
ISL	0.41	0.42	0.42	0.39	0.42	0.34	0.31	0.33	0.35	0.33	0.38	0.4	0.47	0.46	0.53	0.68	0.63	0.69	0.82	0.74	0.71	0.8	0.8	0.7	0.74	0.78	0.71	0.71
ISR	2.15	2.22	2.37	2.4	2.18	1.95	1.73	1.96	2.15	1.73	1.73	1.64	1.85	1.88	2.31	3.4	2.99	3.57	4.26	3.93	4	4.23	4.04	3.45	4.15	4.06	4.14	4.21
ITA	6.01	5.53	5.55	5.29	4.35	3.86	3.17	3.53	4.05	3.19	3.6	3.72	3.79	3.68	4.55	5.7	4.71	5.27	6.22	5.26	5.11	5.44	4.71	3.49	4.64	4.53	4.25	4.03
JAM	0.78	0.72	0.8	0.81	0.8	0.77	0.72	0.78	0.9	0.79	0.8	0.78	0.91	0.92	1.13	1.43	1.25	1.33	1.55	1.55	1.45	1.44	1.43	1.16	1.36	1.2	1.28	1.28
JOR	0.82	0.84	0.79	0.91	0.77	0.71	0.61	0.75	0.85	0.74	0.74	0.76	0.84	0.89	1.15	1.71	1.58	1.85	2.2	2.2	2.18	2.45	2.45	1.92	2.08	2.02	1.9	1.76
JPN	27.45	27.19	28.15	24.95	21.02	17.55	16.62	20.03	20.57	15.46	15.35	15.17	16.06	14.15	15.07	18.7	17.61	19.22	23.65	22.43	19.66	19.99	18.24	15.3	18.86	18.86	19.21	19.08
KAZ	0.47	0.43	0.49	0.48	0.42	0.36	0.28	0.3	0.43	0.36	0.41	0.45	0.56	0.61	0.8	1.23	1.01	1.18	1.57	1.48	1.53	1.62	1.44	1	1.12	1.13	1.17	1.27
KEN	0.61	0.63	0.7	0.7	0.73	0.66	0.32	0.35	0.4	0.33	0.35	0.36	0.42	0.45	0.61	0.79	0.79	1.07	1.36	1.36	1.31	1.51	1.39	1.11	1.37	1.35	1.34	1.34
KGZ	0.3	0.28	0.34	0.37	0.31	0.27	0.22	0.28	0.33	0.28	0.28	0.29	0.35	0.38	0.49	0.74	0.66	0.76	1.01	0.96	0.98	1.04	0.92	0.67	0.74	0.73	0.75	0.74
KHM	0.41	0.39	0.44	0.44	0.39	0.32	0.31	0.32	0.27	0.29	0.28	0.36	0.41	0.43	0.49	0.61	0.69	0.88	1.27	1.44	1.68	1.81	1.96	1.6	1.91	1.87	1.94	2.13
KOR	6.13	6.16	7.11	6.88	6	3.42	3.75	5.38	5.87	5.26	5.15	4.94	5.52	5.42	6.47	7.86	6.47	8.09	10.08	9.11	9.19	10.15	9.56	7.94	9.71	10.07	10.22	10.61
KWT	1.75	1.52	1.48	1.44	1.26	1.15	1	0.95	1.07	0.92	1.07	1	1.51	1.71	1.88	2.82	2.47	2.6	3.11	2.86	2.85	3.29	3.28	2.76	2.85	2.8	3.04	3.14
LAO	0.24	0.26	0.3	0.29	0.26	0.2	0.19	0.23	0.27	0.23	0.24	0.26	0.31	0.32	0.41	0.59	0.54	0.64	0.81	0.78	0.81	0.9	0.86	0.75	0.8	0.81	0.82	0.93
LBN	1.81	1.77	1.93	1.9	1.74	1.6	1.28	1.41	1.61	1.27	1.23	1.19	1.3	1.29	1.58	2.24	2.23	2.64	3.07	3.09	3.08	3.28	3.11	2.58	2.81	2.56	2.38	1.86
LBR	0.17	0.17	0.17	0.17	0.15	0.14	0.12	0.14	0.16	0.14	0.16	0.16	0.18	0.19	0.24	0.32	0.28	0.34	0.45	0.4	0.39	0.44	0.43	0.3	0.31	0.36	0.34	0.34
LBY	0.62	0.58	0.6	0.56	0.47	0.43	0.34	0.38	0.45	0.38	0.36	0.38	0.45	0.47	0.52	0.77	0.6	0.72	0.97	1.05	1.02	1.07	1.02	0.74	0.78	0.81	0.73	0.43
LCA	0.64	0.59	0.61	0.58	0.53	0.5	0.5	0.55	0.55	0.47	0.53	0.54	0.59	0.56	0.65	0.83	0.81	0.9	1.01	1	0.98	1	0.97	0.82	0.94	0.96	1	0.9
LKA	0.92	0.85	0.88	0.92	0.84	0.66	0.59	0.63	0.58	0.65	0.75	0.82	0.96	1.02	0.86	1.12	0.99	1.27	1.73	1.45	1.7	2.18	2.08	1.69	1.99	1.9	1.73	1.73
LTU	0.71	0.73	0.79	0.86	0.78	0.69	0.58	0.65	0.76	0.64	0.71	0.76	0.88	0.93	1.17	1.66	1.26	1.39	1.76	1.52	1.54	1.64	1.42	1.06	1.05	1.1	1.1	1.12
LVA	0.52	0.61	0.65	0.72	0.68	0.62	0.52	0.55	0.65	0.57	0.65	0.68	0.8	0.85	1.06	1.34	1.13	1.26	1.51	1.37	1.37	1.42	1.27	0.98	1.12	1.18	1.13	1.15
MAC	3.28	3.76	3.9	3.42	3.02	2.43	2.34	2.57	3.34	3.07	2.96	3.11	3.22	3.06	3.84	4.19	4.55	5.43	6.72	7.01	7.53	8.21	8.01	6.88	6.64	7.15	7.55	7.39
MAR	1.02	0.97	0.97	0.93	0.8	0.75	0.65	0.71	0.76	0.65	0.73	0.74	0.83	0.84	1.1	1.52	1.33	1.52	1.93	1.78	1.71	1.81	1.58	1.23	1.53	1.52	1.7	1.71
MDA	0.59	0.56	0.55	0.36	0.33	0.32	0.25	0.32	0.38	0.36	0.4	0.44	0.53	0.54	0.7	1.06	0.82	0.96	1.22	1.13	1.11	1.16	1.02	0.79	0.97	1.01	1	0.96
MDG	0.21	0.19	0.19	0.18	0.18	0.15	0.15	0.21	0.24	0.18	0.23	0.2	0.24	0.23	0.3	0.41	0.35	0.43	0.56	0.5	0.49	0.55	0.5	0.39	0.51	0.51	0.46	0.48
MDV	0.18	0.2	0.52	0.56	0.5	0.46	0.53	0.53	0.53	0.4	0.43	0.46	0.48	0.52	0.69	0.92	0.94	1.09	1.22	1.27	1.46	1.65	1.54	1.46	1.48	1.52	1.65	1.06
MEX	1.91	2.13	1.33	1.38	1.3	1.19	1.15	1.44	1.79	1.47	1.67	1.61	1.83	1.78	2.26	2.78	2.27	2.61	3.06	2.89	2.93	3.06	2.7	1.98	2.39	2.39	2.25	1.98
MKD	0.6	0.71	0.7	0.73	0.68	0.6	0.55	0.57	0.62	0.53	0.58	0.6	0.66	0.66	0.86	1.22	1.03	1.11	1.34	1.21	1.21	1.28	1.16	0.93	1.11	1.16	1.15	1.11
MLT	1.6	1.49	1.73	1.64	1.54	1.38	1.33	1.36	1.44	1.23	1.41	1.44	1.38	1.33	1.75	2.14	1.95	2.07	2.3	2.11	2.07	2.33	2.01	1.73	1.97	1.95	1.91	1.76
MMR	0.34	0.36	0.4	0.38	0.34	0.27	0.25	0.28	0.28	0.32	0.36	0.45	0.59	0.65	0.83	1.12	1.08	1.07	1.3	1.24	1.26	1.4	1.46	1.25	1.2	1.15	1.06	1.13
MNG	0.24	0.24	0.26	0.28	0.24	0.21	0.18	0.21	0.25	0.21	0.23	0.24	0.28	0.29	0.38	0.56	0.49	0.63	0.83	0.8	0.8	0.87	0.96	0.71	0.74	0.81	0.85	0.93
MOZ	0.17	0.19	0.21	0.22	0.21	0.22	0.2	0.22	0.22	0.2	0.21	0.22	0.25	0.25	0.34	0.44	0.4	0.44	0.61	0.61	0.6	0.65	0.62	0.44	0.48	0.54	0.55	0.54
MUS	0.47	0.46	0.53	0.49	0.45	0.35	0.33	0.5	0.47	0.4	0.45	0.46	0.55	0.6	0.73	1.4	1.16	1.45	1.6	1.71	1.47	1.73	1.48	1.39	1.48	1.43	1.38	1.37
MWI	0.36	0.24	0.25	0.26	0.25	0.17	0.21	0.22	0.25	0.23	0.29	0.31	0.36	0.39	0.46	0.64	0.6	0.68	0.81	0.69	0.7	0.81	0.8	0.62	0.73	0.77	0.74	0.79
MYS	0.96	0.92	1.05	1.16	1.04	0.56	0.7	0.83	0.94	0.76	0.73	0.74	0.87	0.91	1.1	1.47	1.37	1.82	2.09	2.18	2.39	2.83	2.66	2.01	2.23	2.34	2.18	2.33
NER	0.23	0.21	0.3	0.34	0.22	0.2	0.18	0.21	0.26	0.22	0.25	0.26	0.3	0.3	0.37	0.51	0.44	0.53	0.68	0.64	0.58	0.7	0.66	0.48	0.57	0.59	0.47	0.5
NGA	0.76	0.48	0.77	0.76	0.75	0.64	0.55	0.53	0.72	0.57	0.66	0.61	0.7	0.76	1.14	0.99	1.2	1.41	2.88	1.94	1.86	1.97	1.52	1.14	1.4	1.29	1.29	1.77
NIC	0.52	0.45	0.4	0.37	0.3	0.28	0.28	0.28	0.31	0.26	0.27	0.26	0.27	0.4	0.48	0.6	0.52	0.58	0.64	0.57	0.58	0.68	0.67	0.51	0.46	0.46	0.42	0.43
NLD	1.52	1.59	1.56	1.41	1.06	0.95	0.9	0.97	1.11	0.93	1.18	1.2	1.24	1.27	1.64	2.29	1.77	2.02	2.87	2.4	2.38	2.83	2.75	1.79	2.09	2.34	2.18	2.19
NOR	1.42	1.37	1.41	1.41	1.23	1.05	0.91	1.01	1.18	1.09	1.2	1.24	1.4	1.36	1.68	2.27	1.87	2.09	2.61	2.42	2.22	2.42	2.14	1.58	1.67	1.69	1.62	1.7
NPL	0.43	0.42	0.42	0.41	0.36	0.33	0.33	0.39	0.38	0.33	0.4	0.37	0.43	0.44	0.46	0.52	0.65	0.91	1.18	1.14	1.16	1.29	1.27	1.06	1.29	1.35	1.33	1.35
NZL	0.29	0.31	0.35	0.29	0.25	0.19	0.19	0.19	0.2	0.19	0.23	0.23	0.27	0.27	0.34	0.46	0.42	0.49	0.65	0.58	0.52	0.6	0.6	0.44	0.46	0.51	0.48	0.53
OMN	0.64	0.6	0.59	0.57	0.51	0.51	0.51	0.55	0.64	0.63	0.41	0.57	0.59	0.59	0.77	1.14	1.01	1.2	1.37	1.31	1.27	1.55	1.59	1.14	1.3	1.37	1.37	1.39
PAK	0.88	0.87	0.82	0.79	0.7	0.59	0.51	0.6	0.63	0.54	0.61	0.69	0.89	0.93	1.07	1.33	1.27	1.59	1.93	1.94	1.84	2.16	2.19	1.77	2.04	1.9	1.83	1.8
PAN	0.54	0.53	0.51	0.53	0.48	0.46	0.44	0.5	0.55	0.47	0.51	0.46	0.49	0.59	0.73	1	0.86	1.03	1.2	1.29	1.32	1.44	1.44	1.18	1.27	1.31	1.32	1.21
PER	0.56	0.49	0.5	0.51	0.44	0.5	0.43	0.47	0.54	0.46	0.48	0.48	0.52	0.53	0.67	0.96	0.83	1.01	1.31	1.28	1.3	1.36	1.35	1.04	1.23	1.33	1.25	1.26
PHL	1.47	1.46	1.68	1.82	1.63	1.41	1.24	1.44	1.44	1.15	1.1	1.1	1.32	1.22	1.52	2.46	2.13	2.67	2.65	2.9	2.92	3.4	3.4	3.02	4.02	4.21	4.34	4.08
PNG	0.36	0.31	0.26	0.27	0.22	0.21	0.15	0.2	0.23	0.18	0.19	0.21	0.23	0.22	0.28	0.4	0.37	0.46	0.58	0.59	0.54	0.59	0.57	0.44	0.47	0.43	0.45	0.46

Table C.11: Continued on next page

Table C.11: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
POL	2.08	1.89	2.1	2.16	1.89	1.74	1.45	1.52	1.75	1.45	1.59	1.63	1.85	1.87	2.36	3.29	2.6	2.84	3.34	2.96	2.89	3.03	2.59	1.92	2.12	2.36	2.24	2.24
PRT	2.38	2.49	2.6	2.36	2.01	1.89	1.77	1.84	2.02	1.62	1.81	1.85	1.92	1.88	2.32	2.9	2.65	2.77	3.13	2.64	2.68	2.71	2.44	2.03	2.62	2.89	2.69	2.54
PRY	0.4	0.4	0.43	0.41	0.38	0.34	0.25	0.29	0.3	0.23	0.24	0.25	0.28	0.29	0.35	0.48	0.4	0.5	0.68	0.64	0.57	0.59	0.58	0.43	0.49	0.52	0.49	0.46
QAT	0.76	0.71	0.73	0.71	0.58	0.58	0.54	0.65	0.71	0.67	0.53	0.47	0.83	0.95	1.22	1.86	1.55	2.14	2.02	2.54	2.56	3	3.02	2.58	3.37	2.82	2.87	2.54
ROU	1.46	1.36	1.51	1.49	1.28	1.17	0.93	1.1	1.29	1.07	1.04	1.12	1.35	1.47	1.87	2.63	2.1	2.15	2.55	2.31	2.3	2.37	2.17	1.79	2.09	2.16	2.14	2.14
RUS	1.02	1.03	1.09	1.73	1.59	1.19	0.86	0.92	1.24	1.06	1.23	1.3	1.57	1.7	2.2	3.19	2.61	3.21	3.91	3.58	3.55	3.61	2.84	2.13	2.53	2.48	2.47	2.39
RWA	0.42	0.3	0.33	0.39	0.33	0.32	0.26	0.31	0.38	0.34	0.37	0.37	0.43	0.46	0.56	0.73	0.67	0.81	0.96	0.91	0.98	1.07	1.05	0.86	1.09	0.99	1.01	1.08
SAU	1.11	0.91	1.18	1.13	1.15	0.99	0.89	1.1	1.18	0.96	1.1	1.1	1.22	1.25	1.47	2.26	2.15	2.29	2.68	2.67	2.77	3.16	3.32	2.51	2.86	2.64	2.92	3
SCG	0.42	1.09	0.91	1.15	1.02	0.85	0.78	1.02	0.85	0.8	0.9	0.95	0.91	2.66	3.41	4.81	3.95	3.98	4.95	4.49	4.44	4.52	2.54	1.9	3.4	3.57	3.35	3.54
SEN	0.61	0.39	0.49	0.53	0.45	0.4	0.36	0.36	0.44	0.38	0.45	0.48	0.6	0.54	0.7	1.03	0.78	0.83	1.02	0.99	1.04	1.08	0.99	0.78	1	1.04	0.87	0.97
SGP	15.04	13.41	11.46	12.19	11.68	8.53	8.09	9.03	9.66	6.99	5.57	6.73	6.41	6.25	7.73	8.04	6.69	7.27	9.04	9.99	10.17	10.19	6.18	7.59	16.73	4.66	3.57	3.45
SLE	0.29	0.27	0.31	0.28	0.23	0.2	0.15	0.19	0.22	0.21	0.22	0.22	0.24	0.26	0.33	0.46	0.39	0.45	0.63	0.59	0.58	0.6	0.58	0.44	0.54	0.52	0.33	0.32
SLV	0.36	0.44	0.39	0.47	0.45	0.44	0.43	0.47	0.54	0.5	0.54	0.56	0.62	0.7	0.8	1.03	0.92	1.01	1.18	1.16	1.17	1.31	1.3	1.06	1.07	1.12	1.17	1.18
SOM	0.19	0.19	0.21	0.21	0.18	0.16	0.14	0.16	0.18	0.15	0.17	0.17	0.2	0.2	0.26	0.37	0.3	0.39	0.52	0.48	0.45	0.53	0.53	0.37	0.36	0.38	0.37	0.38
SUR	0.54	0.18	0.22	0.22	0.2	0.19	0.16	0.19	0.19	0.16	0.19	0.19	0.23	0.23	0.28	0.38	0.36	0.42	0.52	0.53	0.51	0.56	0.54	0.4	0.46	0.47	0.47	0.45
SVK	0.87	1.05	1.06	1.05	0.94	0.86	0.68	0.75	0.84	0.73	0.81	0.84	1	0.99	1.27	1.86	1.53	1.7	2.09	1.8	1.91	2	1.77	1.43	1.62	1.68	1.65	1.64
SVN	1.28	1.27	1.49	1.37	1.16	1.05	0.89	0.95	1.03	0.89	0.92	0.96	1.04	1.05	1.33	1.79	1.54	1.6	1.95	1.62	1.62	1.81	1.62	1.27	1.44	1.47	1.41	1.42
SWE	2.02	2.01	1.88	1.91	1.56	1.41	1.22	1.33	1.47	1.27	1.46	1.48	1.59	1.64	1.98	2.66	2.28	2.57	3.07	2.81	2.85	3.04	2.69	2.11	2.32	2.36	2.26	2.28
SYR	1.4	1.42	1.4	0.72	0.63	0.56	0.49	0.76	1.03	0.97	0.97	1.09	1.16	1.2	1.21	1.6	2.48	2.61	1.59	1.26	1.18	1.27	1.32	1.13	0.7	0.72	0.7	0.69
THA	0.78	0.59	0.65	0.73	0.64	0.35	0.38	0.45	0.49	0.54	0.53	0.55	0.71	0.71	0.87	1.03	0.98	1.3	1.38	1.86	2.13	2.03	1.91	1.5	1.67	1.71	1.74	1.83
TJK	0.35	0.34	0.32	0.32	0.28	0.25	0.22	0.28	0.33	0.28	0.33	0.35	0.4	0.41	0.52	0.71	0.59	0.78	0.94	0.9	0.95	1.01	0.9	0.69	0.75	0.77	0.8	0.69
TKM	0.22	0.24	0.28	0.26	0.32	0.23	0.27	0.28	0.22	0.18	0.2	0.2	0.23	0.25	0.31	0.44	0.37	0.48	0.6	0.55	0.55	0.59	0.58	1.53	1.68	1.52	1.55	1.75
TON	0.28	0.29	0.29	0.27	0.24	0.21	0.19	0.2	0.21	0.19	0.21	0.21	0.23	0.23	0.28	0.4	0.38	0.41	0.51	0.49	0.48	0.51	0.3	0.21	0.21	0.22	0.22	0.22
TTO	0.58	0.38	0.45	0.49	0.36	0.41	0.45	0.5	0.56	0.45	0.42	0.4	0.41	0.33	0.42	0.59	0.57	0.59	0.75	0.74	0.75	0.86	0.94	0.85	0.87	0.72	0.81	0.91
TUN	1.1	1.03	1.05	1.03	0.94	0.85	0.74	0.83	0.92	0.79	0.8	0.82	0.87	0.87	1.09	1.45	1.29	1.51	1.77	1.65	1.59	1.74	1.59	1.25	1.43	1.29	1.28	1.24
TUR	1.87	1.37	1.64	1.58	1.39	1.27	1.05	1.25	1.22	1.21	1.33	1.38	1.54	1.55	1.95	2.66	2.23	2.76	3.13	2.97	2.95	3.46	2.94	2.24	2.88	2.73	2.64	2.71
TZA	0.29	0.29	0.28	0.29	0.27	0.25	0.23	0.26	0.33	0.28	0.32	0.31	0.35	0.36	0.43	0.64	0.57	0.68	0.89	0.9	0.91	0.98	0.92	0.77	0.84	0.84	0.83	0.86
UGA	0.31	0.39	0.43	0.41	0.38	0.34	0.28	0.3	0.32	0.27	0.29	0.3	0.34	0.34	0.43	0.6	0.54	0.65	0.81	0.76	0.72	0.84	0.79	0.58	0.71	0.69	0.7	0.73
UKR	1.29	1.11	1.02	0.99	0.95	0.79	0.61	0.69	0.88	0.77	0.88	0.92	1.14	1.23	1.52	2.21	1.7	2	2.39	2.32	2.24	2.18	1.66	1.18	1.42	1.48	1.49	1.56
URY	0.49	0.47	0.45	0.42	0.36	0.31	0.27	0.29	0.34	0.22	0.23	0.23	0.26	0.27	0.35	0.49	0.41	0.58	0.74	0.66	0.66	0.78	0.81	0.57	0.56	0.61	0.54	0.51
USA	4.74	4.22	3.75	3.63	3.39	3.19	3.05	3.38	3.85	3.43	3.69	3.93	4.42	4.45	5.07	6.14	5.62	6.22	7.32	6.83	6.52	7.48	7.9	6.09	6.75	7.06	7.16	7.37
UZB	0.21	0.25	0.3	0.33	0.27	0.23	0.22	0.25	0.27	0.21	0.23	0.24	0.27	0.27	0.35	0.48	0.4	0.49	0.61	0.54	1.27	1.43	1.46	1.16	1.23	1.08	1.16	1.24
VEN	1.14	0.88	1.03	0.89	0.71	0.85	0.87	0.88	1.01	0.68	0.66	0.74	0.8	0.84	1.01	1.8	1.1	0.92	1.86	1.95	1.76	1.01	0.86	0.58	0.67	0.67	0.59	0.52
VNM	0.36	0.36	0.37	0.35	0.31	0.25	0.22	0.57	0.74	0.56	0.68	0.71	0.83	0.89	1.16	1.63	1.63	2.08	2.52	2.51	2.76	3.04	4.86	2.76	3.38	3.35	3.64	4.1
YEM	0.92	0.9	0.66	0.63	0.51	0.46	0.4	0.5	0.51	0.42	0.37	0.52	0.65	0.66	0.83	1.17	1.11	1.41	1.59	1.64	1.65	1.94	1.14	0.9	1.21	0.87	0.96	0.74
ZAF	1.3	1.26	1.2	1.08	1.01	0.87	0.81	1.02	1.11	0.94	1.01	1.05	1.19	1.23	1.51	1.91	1.71	2.01	2.44	2.31	2.12	2.18	2.12	1.62	2.16	2.2	2.13	1.98
ZMB	0.34	0.31	0.31	0.32	0.29	0.27	0.25	0.29	0.34	0.29	0.32	0.3	0.35	0.37	0.45	0.6	0.53	0.61	0.74	0.71	0.62	0.83	0.74	0.55	0.61	0.62	0.59	0.57
ZWE	0.36	0.36	0.35	0.38	0.32	0.25	0.24	0.27	0.3	0.25	0.25	0.31	0.27	0.29	0.32	0.44	0.45	0.56	0.78	0.76	0.74	0.89	0.9	0.68	0.78	0.89	0.97	1

Table C.12: OMR in the machines sector by country and year (TLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	10.49	12.22	13.94	16.2	16.72	11.39	11.57	16.17	11.55	9.38	6.56	7.24	5.85	6.42	6.92	7.52	6.98	7.16	7.35	8.04	7.93	7.77	7.25	6.73	6.52	5.97	7	6.2
AGO	8.9	10.56	12.2	14.18	14.5	9.73	9.73	13.5	9.42	7.76	5.33	5.92	4.71	5.2	5.56	6.23	5.76	5.79	5.86	6.44	6.3	6.17	5.62	5.03	4.96	4.46	5.19	4.48
ALB	11.38	13.66	15.92	18.46	18.98	13.68	13.91	18.79	13.75	11.66	8.64	9.51	7.75	8.47	9.08	9.71	8.53	8.61	8.84	9.18	9.11	8.93	8.24	7.66	7.17	6.74	7.72	6.84
ARE	14.11	19.8	21.33	24.11	23.98	16.61	14.34	21.89	16.24	13.87	9.75	11.29	8.09	10.58	11.25	13.25	13.6	12.64	13.58	15.39	12.02	12.27	11.63	10.84	15.35	11.18	13.07	11.62
ARG	16.43	17.56	17.94	20.86	21.83	14.85	13.41	17.54	11.83	8.32	5.86	6.81	5.6	6.21	7.04	7.85	6.81	7.47	7.95	8.46	8.62	8.07	7.67	6.81	7.75	6.41	7.1	6.16
ARM	10.74	12.63	14.56	16.89	17.54	12.27	12.46	17.19	12.24	10.14	7.19	7.97	6.42	7.07	7.68	8.3	7.49	7.62	7.9	8.41	8.31	8.11	7.44	6.87	6.57	6.1	7.12	6.3
AUS	17.35	19.24	21.28	24.55	23.51	14.81	14.42	18.93	12.7	10.6	7.1	8.11	6.27	6.68	7.79	8.47	8.09	8.08	7.63	8.41	8.79	8.42	7.57	6.95	7.7	7.06	8.32	7.43
AUT	26.45	29.87	34.17	37.89	36.9	27.5	27.99	36.22	26.34	21.9	15.96	17.14	13.96	15	16.19	17.31	15.1	15.11	15.35	15.91	15.85	15.63	14.22	13.48	13.56	13.22	15.16	13.36
AZE	10.94	12.7	14.63	17.25	17.86	12.38	12.49	17.24	12.36	10.18	7.2	8.03	6.47	7.12	7.8	8.49	7.68	7.8	8.17	8.72	8.64	8.42	7.69	7.07	6.92	6.37	7.5	6.65
BDI	9.25	10.92	12.67	14.75	14.92	10.02	9.98	13.84	9.61	7.97	5.41	6.11	4.8	5.24	5.62	6.09	5.62	5.73	5.82	6.24	6.17	6.03	5.58	5.1	4.9	4.44	5.2	4.56
BEL	33.55	36.8	40.94	46.85	46.83	34.87	71.09	91.07	66.46	54.61	40.12	23.81	19.39	20.52	22.05	23.48	37.07	35.26	19.29	36.63	36.35	36.12	32.54	30.83	31.15	29.46	34.31	29.94

Table C.12: Continued on next page

Table C.12: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BEN	10.17	11.88	13.62	15.79	15.96	10.89	11.06	15.3	10.7	8.98	6.16	6.82	5.38	5.93	6.38	6.88	6.4	6.56	6.65	6.93	6.95	6.87	6.26	5.73	5.39	4.95	5.95	5.19
BFA	10.32	12.13	13.9	16.11	16.38	11.2	11.22	15.43	10.77	9.04	6.14	6.96	5.47	5.96	6.44	6.92	6.29	6.42	6.6	6.91	6.91	6.78	6.24	5.7	5.42	4.91	5.84	5.01
BGD	12.4	15.38	16.44	18.11	18.59	12.09	12.41	18.01	12.57	10.61	6.78	7.79	6.02	6.75	7.7	8.33	8.13	8.36	8.84	9.14	9.02	9.2	8.52	7.34	6.79	6.17	7.27	6.27
BGR	12.56	14.49	16.92	19.68	20.23	14.64	14.88	20.04	14.42	12.27	9.11	10.06	8.26	9.14	10.02	10.71	9.17	9.2	9.48	9.94	10.11	9.96	8.96	8.37	8.06	7.63	8.63	7.69
BHR	13.33	16.2	17.39	19.32	19.94	13.79	13.35	18.9	13.51	11.83	7.78	9.02	7.13	7.96	9.33	10.86	10.07	10.25	10.42	11.22	10.39	10.5	9.9	9	9.13	8.31	9.22	8.19
BHS	14.54	17.45	19.44	22.31	23.03	15.66	15.74	21.82	15.14	13.27	8.46	9.72	7.76	8.38	9.05	9.5	8.54	8.8	9.02	9.75	9.48	9.3	8.75	7.85	7.23	6.62	7.6	6.6
BIH	11.68	14.12	16.47	19.06	19.73	14.28	14.73	19.89	14.41	12.34	9.27	10.23	8.38	9.28	9.94	10.62	9.14	9.2	9.45	9.79	9.73	9.61	8.83	8.26	7.8	7.39	8.42	7.45
BLR	12.3	14.77	17.07	20	20.69	15.32	15.12	20.45	14.95	12.71	9.22	10.46	8.55	9.55	10.52	11.51	9.8	10.17	10.55	11.25	11.25	10.82	9.49	8.87	8.69	8.28	9.6	8.36
BLZ	15.62	18.54	20.45	23.91	24.74	16.84	16.79	23.27	16.18	13.98	8.6	9.88	7.72	8.3	9.01	9.62	8.62	8.98	9.12	9.96	9.74	9.47	8.96	8.05	7.58	6.95	8.05	6.93
BMU	15.48	18.52	20.78	23.69	24.51	16.89	17.2	23.92	16.62	14.44	9.36	10.84	8.74	9.39	10.05	10.55	9.38	9.67	9.89	10.64	10.24	10.07	9.51	8.52	7.7	7.1	8.17	7.16
BOL	10.54	12.31	14	16.32	17.1	11.62	11.14	15.34	10.6	8.37	5.58	6.23	5	5.47	5.9	6.48	5.78	6.11	6.31	6.83	6.86	6.59	6.1	5.44	5.4	4.99	5.71	4.9
BRA	19.01	21.26	24.87	28.4	28.59	18.33	16.02	21.79	15.3	11.14	7.32	8.29	6.82	7.66	9.05	10.47	9.4	10.43	10.69	11.15	11.53	10.8	8.89	7.87	9.11	8.29	9.99	8.5
BRB	13.73	16.4	18.19	20.89	21.46	14.27	14.19	19.79	13.59	11.74	7.38	8.55	6.75	7.3	8.01	8.54	7.78	7.98	8.15	8.7	8.48	8.27	7.68	6.9	6.4	5.8	6.74	5.87
BRN	13.53	16.68	18.81	21.64	20.9	12.88	13.16	19.7	13.23	11.29	6.56	7.75	5.59	6.24	7.17	7.65	7.48	7.68	7.97	8.47	8.44	8.46	7.76	7.05	6.16	5.66	6.57	5.61
BTN	10.18	12.02	13.79	15.83	16.21	10.89	11.12	15.62	11.12	9.16	6.42	7.06	5.69	6.25	6.68	7.29	6.84	7.14	7.35	7.91	7.91	7.82	7.43	6.85	6.5	6	6.98	6.2
CAF	9.86	11.61	13.31	15.45	15.67	10.59	10.77	14.89	10.38	8.68	5.84	6.51	5.1	5.58	6.03	6.51	6.05	6.13	6.23	6.63	6.6	6.48	5.99	5.45	5.17	4.67	5.48	4.76
CAN	33.36	37.61	41.52	46.86	48.73	35.43	35.7	48.18	33.02	28.11	18.39	19.74	16.2	16.94	17.74	18.18	15.42	16.1	16.24	17.86	17.48	17.12	16.64	15.14	15.32	14.76	16.86	15.54
CHE	33.51	36.94	42.12	47.37	45.55	34.06	33.72	43.4	30.94	26.55	17.85	19.51	15.91	17.04	18.6	19.65	18.09	18.24	18.49	18.87	18.76	18.42	16.72	15.52	15.81	15.23	17.73	15.16
CHL	12.39	13.52	15.45	17.71	18.53	12.43	11.48	15.36	10.67	8.34	5.7	6.42	5.27	5.74	6.35	7.15	6.3	6.6	6.84	7.49	7.7	7.39	6.9	6.25	6.38	5.89	6.81	6.05
CHN	27.52	26.22	27.76	32.15	31.02	19.91	19.79	27.4	20.78	16.94	12.33	14.1	11.19	12.69	14.61	17.31	18.2	19.04	20.21	22.8	24.7	24.71	23.38	22.35	23.7	20.3	25.1	22.62
CIV	10.09	11.83	13.59	15.74	15.99	10.88	10.89	14.88	10.36	8.65	5.87	6.66	5.23	5.7	6.17	6.62	6.04	6.16	6.31	6.66	6.66	6.53	6.04	5.5	5.28	4.79	5.7	4.9
CMR	12.23	14.16	16.37	19.53	19.61	13.07	12.99	17.83	12.36	10.57	6.82	7.77	6.04	6.55	7.18	7.79	7.07	7.26	7.32	7.77	7.69	7.5	6.9	6.24	5.92	5.34	6.38	5.47
COG	9.64	11.34	12.96	15.09	15.29	10.29	10.4	14.42	10.04	8.36	5.6	6.24	4.89	5.36	5.78	6.27	5.86	5.92	6.01	6.46	6.42	6.3	5.82	5.28	5.04	4.54	5.31	4.59
COL	12.55	14.35	16.25	18.6	19.22	13.08	12.36	16.66	11.85	9.57	6.43	7.21	5.91	6.47	7.07	7.7	6.84	7.18	7.42	8.07	8	7.71	7.03	6.27	6.24	5.78	6.72	5.79
CPV	9.39	11.22	12.98	15.01	15.42	10.57	10.58	14.59	10.22	8.48	5.86	6.55	5.24	5.72	6.08	6.54	5.81	6.03	6.22	6.52	6.45	6.32	5.8	5.33	5.1	4.68	5.43	4.71
CRI	10.23	12.08	13.73	16.03	16.97	12.69	12.78	16.99	12.19	10.36	7.36	8.15	6.65	7.25	7.68	8.29	7.33	7.87	8.07	8.99	8.87	8.48	7.21	6.66	6.62	6.11	7.02	6.25
CUB	13.5	16.22	18.21	20.65	21.86	15.74	16.14	22.52	15.52	12.74	8.55	9.16	7.44	8.06	8.24	8.6	7.41	7.67	7.87	8.54	8.47	8.26	7.99	7.33	7.13	6.76	7.43	6.73
CYP	13.04	15.77	17.47	19.36	19.73	13.65	13.85	19.39	13.66	11.67	7.91	9.04	7.14	8.05	8.87	9.6	8.88	8.9	9.22	9.55	9.33	9.27	8.45	7.77	7.17	6.61	7.73	6.67
CZE	18.91	21.98	26.18	29.44	29.42	22.04	22.12	29.1	21.82	18.38	13.77	15.3	12.45	13.92	15.1	15.73	13.38	14.93	15.31	15.72	15.59	15.77	13.5	12.73	12.72	12.17	13.93	12.42
DEU	52.9	55.55	61.06	65.57	61.09	43.63	46.15	56.17	40.81	32.24	23.43	24.96	20.33	22.16	23.92	25.66	22.39	22.39	22.64	22.84	22.9	22.95	20.47	19.85	21.76	21.02	24.6	20.02
DNK	20.24	23	27.6	30.14	30.25	22.3	23.11	29.8	21.85	18.1	13.5	14.24	11.74	12.94	14.12	15.04	12.78	12.58	13	13.78	13.6	13.39	12.3	11.74	11.8	11.21	13.14	11.54
DOM	11.56	13.32	15.3	17.36	17.89	12.78	12.75	17.14	11.9	10.21	6.89	7.63	6.3	6.88	7.35	7.89	6.88	7.12	7.31	7.89	7.73	7.55	7.15	6.69	6.12	5.71	6.6	5.7
DZA	14.19	16.12	18.33	21	21.29	15.13	15.47	20.74	14.94	12.78	8.96	9.96	7.95	8.65	9.37	10.11	9.28	9.32	9.32	9.72	9.74	9.65	8.85	8.1	7.67	6.51	7.67	6.52
ECU	10.24	11.91	13.66	15.69	16.29	11.27	10.77	14.7	10.54	8.78	5.92	6.6	5.34	5.8	6.21	6.83	6.11	6.41	6.63	7.22	7.23	7	6.47	5.74	5.7	5.27	6.06	5.18
EGY	12.4	14.37	16.41	18.99	19.28	13.51	13.49	17.31	12.3	10.2	7.15	7.94	6.4	7.01	7.51	8.72	8.03	8.11	8.11	8.71	8.62	8.39	7.81	7.24	7.37	7.71	9.35	6.99
ESP	26.83	28.48	32.36	37.52	35.3	25.55	25.88	32.75	23.99	19.34	14.38	15.82	12.66	13.66	15.72	16.56	13.33	12.94	12.52	12.39	12.31	12.32	11.41	10.84	11.62	11	12.92	11.34
EST	11.69	14.23	17.12	20	20.71	14.91	15.22	20.16	14.92	12.73	9.38	10.39	8.65	9.54	10.3	10.99	9.3	9.65	10.11	10.71	10.62	10.32	9.21	8.61	8.24	7.75	8.89	7.74
ETH	11.21	13.28	15.5	18.46	18.62	12.35	12.27	16.84	11.69	9.88	6.54	7.43	5.83	6.32	6.89	7.47	6.8	6.98	7	7.62	7.49	7.32	6.85	6.26	6.11	5.47	6.34	5.51
FIN	17.21	20.71	25.86	29.25	29.12	21.01	20.84	27.55	19.72	16.24	11.76	12.77	10.46	11.45	12.87	13.86	11.55	11.57	11.72	12.26	12.09	11.67	10.29	9.71	10.05	9.39	11.02	9.16
FJI	11.77	14.21	15.49	17.82	17.93	11.07	11.08	15.97	10.64	9.09	5.39	6.34	4.7	5.13	5.81	6.26	5.95	6.08	6.21	6.66	6.58	6.51	5.96	5.36	5	4.43	5.24	4.45
FRA	39.54	42.09	46.94	55.43	52	37.81	39.01	50.31	35.55	28.52	20.68	21.33	17.14	18.11	19.9	20.73	18.5	18.03	17.99	18.41	18.53	18.33	16.43	15.5	16.72	15.04	18.49	16.57
GAB	9.91	11.61	13.26	15.41	15.61	10.56	10.49	14.52	10.12	8.45	5.67	6.42	5.05	5.51	5.97	6.45	5.91	6.03	6.19	6.54	6.52	6.39	5.87	5.33	5.09	4.61	5.49	4.68
GBR	44.32	46.52	51.49	56.4	56.75	39.93	39.17	52.02	35.55	28.84	21.02	23.08	18.39	19.69	21.4	21.75	17.48	18.78	18.52	19.09	19.36	19.69	18.17	16.91	17.34	16.49	18.7	16.63
GEO	10.6	12.54	14.59	17.12	17.63	12.2	12.13	16.72	11.91	9.97	7.1	7.99	6.47	7.13	7.71	8.35	7.32	7.54	7.9	8.44	8.32	8.16	7.47	6.96	6.71	6.2	7.16	6.3
GHA	13.74	16.37	18.02	20.72	21	13.58	13.55	19.14	13	11.19	6.93	8.07	6.14	6.77	7.7	8.29	7.86	8.09	8.28	8.76	8.58	8.5	7.72	6.9	6.52	5.86	6.98	5.76
GMB	13.6	16.29	18.01	20.68	21.01	13.71	13.74	19.41	13.21	11.38	7.06	8.17	6.25	6.84	7.63	8.15	7.56	7.73	7.88	8.36	8.18	8.06	7.41	6.66	6.17	5.56	6.58	5.65
GRC	15.45	16.87	19.19	22.09	22.06	16	16.17	20.75	14.74	12.39	9.39	10.38	8.29	9.1	10	10.95	9.5	9.27	9.22	9.55	9.45	9.28	8.47	7.92	7.76	7.37	8.5	7.59
GTM	11.56	13.43	15.26	17.71	18.62	13.33	13.36	18.25	13.01	10.78	7.2	8	6.45	6.94	7.3	7.78	6.8	7.16	7.34	8	7.96	7.75	7.37	6.74	6.57	6.13	7.05	6.14
HKG	59.39	66.53	76.32	82.94	82.51	56.38	53.49	70.96	56.75	46.74	40.08	44.69	39.62	43.09	47.77	49.24	44.12	47.64	49.35	52.57	54.32	52.59	46.95	47.03	36.87	36.31	38.02	33.27
HND	10.11	11.94	13.77	15.85	16.47	11.64	11.73	15.89	11.3	9.48	6.51	7.29	5.9	6.4	6.76	7.25	6.35	6.65	6.85	7.44	7.45	7.16	6.82	6.2	5.92	5.46	6.2	5.42
HRV	13.54	16.08	18.76	21.4	22.33	16.35	16.91	22.5	16.5	14.16	10.65	11.62	9.54	10.44	11.12	11.79	10.14	10.18	10.38	10.7	10.69	10.56	9.76	9.21	8.63	8.19	9.33	8.28
HTI	10.02	11.91	13.78	15.85	16.32	11.32	11.59	15.9	11.12	9.36	6.45	7.1	5.76	6.24	6.51	6.88	6.15	6.35	6.55	7.01	6.91	6.74	6.33	5.78	5.41	5.02	5.77	5.09
HUN	14.99	17.47	20.06	22.83	24.39	19.39	20.76	27.14	18.85	16.06	12.28	13.73	11.16	12.03	13.12	13.98	11.76	11.71	11.94	12.22	12.31	12.2	11.92	11.89	10.55	10.05	11.71	10.53
IDN	14.21	14.94	17.72	20.5	19.13	11.49	10.74	16.34	11.63	8.54	5.72	6.83	5.5	5.87	6.53	7.83	6.7	7.43	7.21	7.92	8.15	7.96	7.28	7.06	8.1	7.46	8.57	7.33
IND	20.19	23.64	26.23	28.68	28.46	17.84	17.6	24.11	16.72	14.24	8.95	10.43	8.46	9.46	11.34	12.4	11.98	12.39	12.57	13.31	12.95	12.7	11.91	11.16	12.14	10.95	12.74	10.92
IRL	21.29	24.66	28.89	33.75	35.14	25.19	25.37	34.79	24.78	20.35	13.86	14.88	12.24	13.23	14.16	14.26	11.68	11.88	11.97	12.51	12.63	12.7	11.95	10.93	10.45	9.95	11.52	10.48
IRN	14.12	14.76	16.13	19.05	20.24	14.16	14.3	19.27	14.08	10.68	7.57	8.38	6.78	7.27	8.19	9.03	8.35	8.27	8.4	9.16	8.68	8.45	7.71	7.33	7.59	6.78	8.38	8.16
IRQ	12.2	13.57	16.53	19.37	21.04	14.42	14.16	18.64	13.35	10.99	7.62	8.39	6.73	7.26	7.86	8.63	8.15	8.29	8.49	9.43	9.35	8.5	8.41	7.65	6.77	6.17	7.19	6.35
ISL	10.63	12.69	14.71	16.86	17.35	12.28	12.47	17.03	12.07	10.12	7.26	8.09	6.59	7.2	7.54	7.9	6.85	7.05	7.33	7.66	7.62	7.51	7.03	6.52	6.19	5.78	6.6	5.82

Table C.12: Continued on next page

Table C.12: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
ISR	22.09	25.32	27.79	31.71	30.92	21.15	21.1	28.78	20.47	16.83	10.97	12.29	9.7	10.62	12.36	13.55	12.31	12.67	13.11	14.03	13.52	13.25	12.03	11.48	11.84	11.13	13.53	12.24
ITA	30.43	33.26	40.69	47.5	45.86	32.63	32.25	42.29	29.8	24.37	17.8	19.24	15.16	16.29	18.1	19.08	16.24	17.06	16.69	16.45	16.33	16.08	14.44	13.7	14.8	14.03	16.06	14.15
JAM	14.18	16.92	18.78	21.65	22.1	14.81	14.71	20.47	14.17	12.38	7.8	8.99	7.11	7.71	8.38	8.86	7.97	8.2	8.41	9.05	8.82	8.64	8.11	7.26	6.79	6.19	7.17	6.16
JOR	14.59	17.64	18.83	21.09	21.74	14.86	15.05	21.45	15.16	12.86	8.23	9.3	7.22	8.08	9.26	10.13	9.57	9.61	10.06	10.68	10.36	10.21	9.47	8.63	8.1	7.39	8.75	7.46
JPN	43.73	47.75	56.55	63.65	60.27	37.74	38.41	51.93	35.62	26.36	18.5	19.69	15.5	16.33	17.55	18.74	17.22	17.21	18.36	18.33	17.49	17.29	16.49	15.9	17.25	16.21	19.38	17.42
KAZ	10.7	12.53	14.64	17.39	17.63	11.7	11.74	16.25	11.86	9.82	6.8	7.62	6.13	6.83	7.55	8.36	7.58	7.78	8.1	8.73	8.84	8.56	7.85	7.22	7.11	6.51	7.86	6.97
KEN	13.73	16.53	18.23	20.73	20.72	13.18	13.07	18.69	12.69	10.87	6.55	7.71	5.76	6.4	7.34	7.97	7.65	7.78	7.96	8.49	8.26	8.21	7.5	6.76	6.4	5.68	6.7	5.71
KGZ	10.41	12.21	14.21	16.59	16.92	11.43	11.58	15.97	11.68	9.73	6.7	7.53	6.03	6.74	7.48	8.23	7.57	7.71	8.09	8.66	8.77	8.52	7.84	7.07	6.75	6.21	7.44	6.54
KHM	9.81	11.71	13.61	15.71	16.08	10.71	10.95	15.74	11.2	9.33	6.4	7.07	5.55	6.05	6.62	7.3	6.79	7.08	7.3	7.86	8.22	8.38	8.04	7.44	6.74	5.97	7.01	6.1
KOR	30.28	33.85	39.14	46.61	42.01	21.11	24.47	34.64	24.19	20.25	14.56	15.37	12.89	14.09	14.45	14.92	14.27	15.7	15.5	16.02	16.08	15.91	14.41	13.25	17.03	16.73	19.08	16.91
KWT	14.57	16.86	18.27	20.93	21.46	14.41	14.23	19.31	13.74	11.83	7.81	8.94	7.19	8.17	9.74	10.68	9.83	10.04	10.31	11.15	10.73	10.7	10.07	9.3	9.21	8.25	9.35	7.75
LAO	10.66	12.54	14.35	16.54	16.93	11.33	11.59	16.61	11.95	9.87	6.8	7.47	5.88	6.41	6.88	7.65	7.15	7.51	7.72	8.35	8.6	8.62	8.23	7.58	6.99	6.36	7.46	6.57
LBN	12.73	15.03	17.23	20.13	20.4	14.36	14.35	19.19	14.01	11.75	8.23	9.05	7.24	7.88	8.55	9.37	8.47	8.66	8.8	9.35	9.27	8.93	8.31	7.66	7.41	6.87	7.96	6.62
LBR	11.15	13.15	15.34	18.19	18.47	12.37	12.33	16.9	11.68	9.9	6.51	7.37	5.79	6.25	6.74	7.22	6.47	6.69	6.72	7.23	7.12	6.91	6.42	5.83	5.54	5.04	5.88	5.13
LBY	11.86	13.63	15.71	18.17	18.63	13.12	13.28	17.81	12.79	10.78	7.71	8.53	6.88	7.52	7.94	8.6	7.79	7.99	7.92	8.5	8.47	8.23	7.57	6.93	6.57	6.13	7.12	5.98
LCA	13.66	16.34	18.08	20.78	21.31	14.13	14.15	19.8	13.56	11.75	7.35	8.47	6.63	7.2	7.9	8.39	7.66	7.86	8.04	8.64	8.4	8.19	7.63	6.84	6.32	5.74	6.68	5.8
LKA	11.37	13.96	15.14	16.75	17.1	11.15	11.3	16.37	11.27	9.51	6.03	6.95	5.18	5.81	6.51	7.03	6.7	6.88	7.32	7.67	7.56	7.55	6.98	6.44	6.01	5.38	6.29	5.38
LTU	12.4	14.97	17.43	20.38	21.1	15.25	15.41	20.76	15.2	12.94	9.47	10.54	8.68	9.66	10.57	11.38	9.55	10.05	10.49	11.08	11.1	10.96	9.7	9.11	8.58	8.33	9.73	8.66
LVA	11.91	14.54	17.06	19.84	20.52	14.77	15.06	20.25	14.83	12.65	9.25	10.26	8.45	9.4	10.24	10.9	9.18	9.52	10.05	10.53	10.47	10.25	9.15	8.53	8.11	7.65	8.8	7.73
MAC	15.09	17.12	19.56	22.61	22.94	15.68	15.57	21.52	16.3	14.11	10.41	11.92	9.91	10.89	11.78	12.82	12.14	13.03	13.64	15.23	15.58	15.44	14.66	13.3	11.14	10.39	11.73	10.25
MAR	13.63	15.73	17.74	20.49	20.74	14.83	15.19	20.47	14.6	12.33	8.56	9.59	7.61	8.27	9.04	9.77	8.74	8.71	8.82	9.15	9.16	9.06	8.32	7.71	7.52	6.83	7.99	6.88
MDA	11.79	14.06	16.23	19.17	19.67	13.98	13.81	18.88	13.7	11.66	8.44	9.54	7.78	8.6	9.44	10.18	8.67	8.98	9.54	10.02	10.05	9.75	8.81	8.22	7.98	7.68	8.96	7.82
MDG	9.04	10.65	12.17	14.21	14.3	9.45	9.41	13.16	9.09	7.51	5.01	5.69	4.41	4.81	5.23	5.7	5.27	5.36	5.48	5.8	5.79	5.67	5.25	4.78	4.6	4.13	4.91	4.24
MDV	10.57	13.09	14.35	15.87	16.22	10.5	10.76	15.63	10.74	9.05	5.74	6.65	4.98	5.59	6.32	6.8	6.51	6.62	6.96	7.3	7.18	7.22	6.65	6.12	5.7	5.19	6.04	5.07
MEX	25.43	27.72	29.48	33.38	34.18	24.72	25.13	33.48	23.9	18.67	12.45	13.62	10.72	11.51	12.07	12.93	11.23	11.88	11.94	13.24	13.49	13.38	12.83	12.31	14.7	13.87	16.1	13.86
MKD	11.56	13.92	16.2	18.68	19.16	13.83	14.23	19.18	13.8	11.7	8.67	9.55	7.79	8.59	9.2	9.84	8.59	8.67	8.93	9.35	9.34	9.21	8.52	7.96	7.46	7.04	8.07	7.07
MLT	17.49	20.74	23.27	26.06	26.22	18	18.3	25.61	17.89	15.22	10.34	12.36	9.24	10.15	11.56	12.15	10.38	11.22	11.37	11.92	11.65	11.4	10.35	9.47	8.66	7.97	9.18	7.94
MMR	13.32	16.32	17.54	19.24	19.72	12.8	13.16	19.34	13.59	11.43	7.31	8.25	6.21	6.92	7.86	8.61	8.41	8.74	9.01	9.36	9.39	9.47	8.85	8.01	7.32	6.69	7.9	6.9
MNG	10.28	12.11	13.85	16.17	16.5	11.02	11.29	15.94	11.4	9.41	6.62	7.27	5.79	6.37	6.75	7.38	6.92	7.21	7.52	8.14	8.21	8.11	7.66	7.07	6.64	6.12	7.16	6.39
MOZ	8.61	10.33	11.89	13.73	13.98	9.28	9.33	13.22	9.11	7.46	5.13	5.71	4.5	4.92	5.24	5.7	5.26	5.41	5.53	5.93	5.93	5.75	5.28	4.74	4.56	4.18	4.92	4.31
MUS	13.67	16.24	17.67	20.37	20.29	12.82	12.87	18.01	12.27	10.57	6.19	7.4	5.53	6.07	6.96	7.56	7.18	7.31	7.47	8	7.78	7.71	7.02	6.32	5.95	5.28	6.24	5.26
MWI	12.97	15.6	16.99	19.42	19.62	12.38	12.34	17.75	11.95	10.24	6.13	7.22	5.38	5.94	6.81	7.35	7.04	7.24	7.4	7.9	7.71	7.61	6.97	6.2	5.79	5.14	6.1	5.16
MYS	22.21	26.64	33.65	40.12	37.35	22.85	22.68	31.33	22	18.01	11.09	13.6	9.57	10.42	12.53	13.09	12.31	13.05	12.87	14.04	13.92	13.74	12.32	11.65	9.84	9.05	10.59	8.99
NER	10.9	12.69	14.44	16.75	17	11.6	11.76	16.16	11.33	9.56	6.44	7.19	5.63	6.17	6.68	7.23	6.74	6.82	6.87	7.29	7.26	7.13	6.57	5.97	5.66	5.1	6.03	5.22
NGA	14.57	16.79	18.5	21.31	21.15	13.7	13.58	19.26	13.15	11.33	7.14	8.33	6.37	7.1	8	8.67	8.16	8.47	8.6	8.8	8.72	8.7	7.8	7.1	6.67	6.15	7.9	6.78
NIC	9.93	11.74	13.45	15.67	16.3	11.5	11.52	15.61	11.08	9.33	6.42	7.21	5.91	6.35	6.69	7.19	6.3	6.69	6.9	7.52	7.6	7.37	6.94	6.45	6.14	5.57	6.35	5.58
NLD	29.19	31.59	35.53	39.57	42.38	29.67	33.05	41.6	30.96	25.33	19.7	23.25	19.09	20.63	21.37	22.5	18.47	18.5	18.39	19.62	19.78	19.77	17.75	17.01	18.55	17.88	20.48	17.54
NOR	17.07	19.81	23.09	26.15	26.1	18.52	18.48	24.22	17.76	14.83	10.6	11.63	9.64	10.63	11.71	12.49	10.91	10.89	11.12	11.85	11.66	11.28	10.02	9.25	9.14	8.72	10.04	8.97
NPL	10.2	12.08	13.83	15.89	16.23	10.93	11.16	15.65	11.14	9.17	6.41	7.04	5.74	6.31	6.77	7.38	6.94	7.24	7.45	8	7.99	7.9	7.49	6.96	6.7	6.22	7.2	6.35
NZL	12.19	13.92	16	18.59	18.22	11.45	11.31	15.16	10.41	8.84	6.03	6.91	5.41	5.66	6.34	6.84	6.21	6.3	6.65	7.01	7.01	6.82	6.26	5.78	6.06	5.48	6.47	5.57
OMN	10.92	12.96	14.91	17.38	17.88	12.35	11.63	16.17	11.71	9.86	6.71	7.73	6	6.85	7.47	8.37	7.77	7.72	7.99	8.83	8.29	8.08	7.74	6.99	7.42	6.52	7.51	6.74
PAK	18.07	21.71	23.19	25.71	26.2	16.54	16.45	23.55	16.2	14.05	8.35	9.81	7.4	8.3	9.78	10.66	10.47	10.59	10.88	11.6	11.17	11.15	10.41	9.5	9.16	8.13	9.57	8.12
PAN	10.77	12.31	14	16.07	16.69	11.77	11.71	15.75	11.18	9.3	6.33	7.05	5.74	6.49	7	7.58	6.64	7	7.2	7.91	7.74	7.43	6.88	6.22	6.13	5.6	6.47	5.5
PER	10.94	12.77	14.76	17.03	17.64	11.83	11.23	15.39	10.77	8.64	5.74	6.39	5.13	5.64	6.14	6.84	6.06	6.38	6.61	7.23	7.36	7.11	6.57	5.93	5.96	5.49	6.41	5.49
PHL	16.32	18.56	21.78	28.22	28.66	18.98	18.3	23.87	17.27	15	9.98	11.12	8.51	8.99	9.91	10.27	9.18	9.68	9.09	10.39	10.27	10.1	9.66	9.35	9.51	8.85	9.59	7.01
PNG	10.36	12.12	14.12	16.9	16.93	10.78	10.66	14.88	10.22	8.55	5.51	6.34	4.88	5.24	5.73	6.25	5.74	5.96	6.07	6.65	6.48	6.35	5.87	5.34	5.12	4.63	5.43	4.69
POL	18.86	21.34	25.03	29.07	29.44	21.37	21.33	27.69	20.24	16.69	12.12	13.38	11.13	12.24	13.52	14.86	12.62	12.79	12.89	13.2	13.2	13.09	11.92	11.15	11.34	11.06	12.43	11.39
PRT	17.04	18.77	22.03	25.31	24.9	17.85	18.36	23.52	17.15	14.04	10.32	11.26	9.19	9.78	10.92	11.73	10.13	9.83	9.63	9.59	9.54	9.51	8.78	8.18	8.11	7.82	8.97	7.82
PRY	10.79	12.76	14.45	16.72	17.46	11.91	11.32	15.58	10.8	8.34	5.64	6.33	5.15	5.73	6.25	6.96	6.14	6.64	6.85	7.25	7.29	6.92	6.3	5.62	5.7	5.18	5.94	5.09
QAT	13.24	16.01	18.01	19.68	20.75	13.81	13.25	19.04	13.72	11.76	7.55	8.68	7.2	8.72	10.65	11.83	11.16	10.55	10.51	11.58	10.86	11.01	10.38	9.48	9.64	8.57	9.76	8.09
ROU	13.66	15.79	18.28	21.06	21.03	15.01	14.96	20.17	14.6	12.39	9.17	10.19	8.4	9.37	10.56	11.31	9.54	9.67	10.05	10.39	10.48	10.3	9.48	8.99	8.85	8.45	9.8	8.84
RUS	14.73	17.17	19.83	25.46	24.56	15.75	15.35	20.87	15.39	12.79	9.06	10.21	8.35	9.38	10.81	12.11	10.16	10.61	11.06	12	12.02	11.46	9.82	9.49	10.59	9.18	11.02	9.74
RWA	11.31	13.26	15.52	18.6	18.69	12.33	12.26	16.83	11.61	9.84	6.39	7.26	5.66	6.11	6.66	7.25	6.55	6.75	6.8	7.32	7.18	6.96	6.48	5.89	5.67	5.07	6.03	5.22
SAU	14.24	14.99	17.11	19.53	20.5	13.61	13.42	17.98	12.93	10.78	7.54	8.31	6.7	7.5	8.62	9.59	8.89	8.68	8.96	9.99	9.87	9.64	9.21	8.14	8.72	7.59	9.06	7.9
SCG	11.93	15	17.07	20.21	20.86	15.11	15.5	20.97	14.95	12.85	9.44	10.6	8.44	19.05	20.86	22.2	18.5	16.72	17.39	17.79	17.9	17.54	17.1	16.21	15.8	15.06	17.21	15.69
SEN	10.27	12.06	13.87	16.03	16.28	11.17	11.43	15.7	10.96	9.19	6.24	6.93	5.47	5.97	6.42	6.89	6.31	6.39	6.51	6.89	6.88	6.75	6.23	5.69	5.47	4.96	5.8	5.08
SGP	58.54	68.46	77.68	79.14	73.9	47.22	47.77	62.39	44.3	31.3	15.54	31.07	15.62	17.36	29.41	34.09	25.07	28.04	27.21	29.55	29.87	27.41	23.92	23.63	41.08	28.11	31.75	27.45
SLE	13.4	16.09	17.72	20.36	20.67	13.41	13.42	19.01	12.93	11.11	6.87	7.95	6.06	6.64	7.44	7.96	7.42	7.59	7.75	8.23	8.05	7.94	7.28	6.52	6.06	5.45	6.41	5.49
SLV	10.22	12.14	13.87	16	16.6	11.72	11.69	16.02	11.44	9.6	6.61	7.35	5.98	6.47	6.85	7.31	6.35	6.73	6.91	7.49	7.47	7.15	6.79	6.18	5.89	5.46	6.26	5.48

Table C.12: Continued on next page

Table C.12: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
SOM	13.93	16.88	18.41	21.08	21.28	13.48	13.33	19.14	13.01	11.27	6.7	7.94	5.88	6.55	7.59	8.29	8.02	8.08	8.25	8.88	8.53	8.44	7.76	6.93	6.46	5.67	6.73	5.69
SUR	9.63	11.56	13.25	15.15	15.73	10.7	10.77	15.02	10.45	8.5	5.8	6.4	5.12	5.57	5.89	6.32	5.63	5.86	6.07	6.43	6.43	6.2	5.73	5.19	5	4.65	5.45	4.75
SVK	14.06	17.55	20.34	22.98	24.01	18.53	19.16	25.63	19.16	16.35	12.46	13.53	11.17	12.18	12.92	13.96	11.96	12.18	12.49	12.97	12.99	12.89	11.93	11.21	10.83	10.46	12.01	10.65
SVN	15.32	17.91	21.84	24.28	24.84	18.47	18.93	25.12	18.13	15.31	11.42	12.39	10.15	11.01	11.7	12.34	10.62	10.8	11	11.32	11.62	11.53	10.28	9.63	9.17	8.87	10.09	8.97
SWE	19.58	23.04	29	32.86	32.01	22.87	22.55	29.25	20.53	16.9	12.28	13.34	10.81	11.81	13.19	13.87	11.74	12.16	11.59	12.69	12.68	12.28	10.5	9.86	10.07	9.54	10.88	9.78
SYR	12.33	14.59	16.19	18.85	19.19	13.59	13.4	18.35	13.35	11.45	8.01	8.83	6.83	7.5	8.12	8.81	8.1	8.29	8.26	8.83	8.74	8.49	8.03	7.38	6.97	6.43	7.45	6.48
THA	17.26	18.69	22.2	25.79	24.26	15.5	15.5	21.23	15.72	12.75	8.76	9.1	7.3	7.64	8.23	10.26	8.49	9.83	8.78	10.06	10.2	9.61	8.82	8.07	8.01	7.56	8.78	7.77
TJK	10.18	11.99	13.79	16.02	16.42	11.15	11.34	15.88	11.3	9.35	6.53	7.24	5.79	6.41	6.94	7.56	6.98	7.18	7.46	8.01	8	7.87	7.29	6.69	6.45	5.97	6.99	6.15
TKM	10.01	11.85	13.69	15.9	16.6	11.43	11.48	15.92	11.29	9.28	6.5	7.31	5.85	6.43	6.98	7.56	6.85	6.99	7.3	7.75	7.62	7.46	6.88	6.38	6.11	5.61	6.6	5.84
TON	11.55	13.93	15.22	17.5	17.63	10.89	10.87	15.73	10.45	8.92	5.26	6.18	4.57	4.98	5.66	6.09	5.83	5.95	6.05	6.52	6.42	6.32	5.8	5.2	4.83	4.28	5.08	4.33
TTO	13.79	16.28	18.22	20.92	22.08	14.57	14.23	19.76	13.88	11.83	7.51	8.71	6.79	7.34	8.1	8.77	7.89	7.91	8.13	8.74	8.59	8.31	7.82	7.01	6.59	6.06	7.02	6.06
TUN	14.26	16.21	18.48	21.3	21.63	15.41	15.7	20.96	15.19	12.98	8.96	10.16	8.11	8.85	9.59	10.35	9.35	9.5	9.59	9.92	9.89	9.76	8.9	8.16	7.77	6.95	8.04	6.96
TUR	18.99	18.16	21.34	24.73	25.39	17.79	17.04	22.77	15.46	13.37	9.77	11.15	9.18	10.09	11.29	12.07	10.52	10.85	11.27	11.73	12.17	11.84	10.77	10.23	10.99	9.74	10.93	10.1
TZA	13.41	16.13	17.64	20.07	20.22	12.83	12.76	18.31	12.38	10.61	6.35	7.49	5.57	6.18	7.1	7.7	7.38	7.51	7.69	8.21	7.98	7.92	7.24	6.48	6.05	5.37	6.4	5.45
UGA	13.59	16.39	17.97	20.47	20.67	13.19	13.01	18.61	12.63	10.84	6.56	7.77	5.81	6.48	7.37	8	7.63	7.8	8.02	8.44	8.19	8.14	7.44	6.67	6.24	5.55	6.6	5.59
UKR	13.37	15.32	17.46	20.82	21.51	15.12	15.02	20.56	15	12.63	9.17	10.31	8.42	9.35	10.39	11.35	9.42	9.75	10.26	10.96	10.89	10.33	9.14	8.62	8.59	8.14	9.63	8.25
URY	11.65	13.4	14.75	17.33	18.31	12.82	11.96	16.07	11.07	8.14	5.64	6.47	5.32	5.86	6.46	7.18	6.29	6.87	7.19	7.7	7.74	7.35	6.93	6.1	6.07	5.35	6.01	5.25
USA	71.13	75.24	80.24	86.24	84.25	57.71	57.4	74.09	49.35	39.57	26.14	28.45	22.81	24.09	26.63	26.95	22.52	22.9	23.21	25.26	25.43	25.44	24.64	23.31	27.83	26.36	31	29.21
UZB	9.56	11.44	13.43	16.06	16.28	11.01	10.98	15.18	10.77	8.95	6.25	7.05	5.65	6.26	6.79	7.35	6.63	6.86	7.17	7.58	7.59	7.44	6.85	6.27	6.22	5.83	7	6.09
VEN	13.5	14.23	16.16	18.13	19.3	13.52	13.08	17.44	12.35	9.82	6.49	7.43	6.22	6.76	7.4	8.34	7.29	7.39	7.76	8.46	7.92	6.76	6.28	5.67	5.4	5	5.79	5.04
VNM	10.1	11.91	13.66	15.79	16.67	11.15	11.39	16.59	11.84	9.84	6.94	7.69	6.05	6.64	7.54	8.33	7.94	8.06	8.46	9.18	10.11	10.48	10.36	10	10.26	8.28	9.83	8.52
YEM	12.04	14.42	15.72	17.65	18.14	11.97	11.87	16.96	11.79	10.06	6.4	7.45	5.66	6.39	7.32	8.01	7.64	7.64	7.94	8.5	8.19	8.18	7.5	6.73	6.41	5.65	6.69	5.69
ZAF	16.56	18.37	20.12	22.57	22.02	14.41	13.62	18.14	12.31	10.2	7.01	8.06	6.38	6.87	7.52	8.16	7.43	7.71	7.63	8.14	8.1	7.62	6.93	6.22	6.33	5.68	6.65	6
ZMB	13.12	15.74	17.15	19.6	19.83	12.55	12.36	17.73	11.94	10.24	6.15	7.3	5.46	6.04	6.92	7.45	7.05	7.25	7.43	7.94	7.77	7.64	7.01	6.21	5.82	5.21	6.19	5.24
ZWE	13.52	16.27	17.7	20.18	20.36	12.82	12.57	18.12	12.15	10.4	6.24	7.42	5.53	6.09	6.97	7.49	7.15	7.34	7.47	7.99	7.83	7.68	7.04	6.24	5.85	5.19	6.16	5.26

Table C.13: OMR in the metals sector by country and year (TLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	0.31	0.24	0.24	0.25	0.22	0.2	0.2	0.35	0.3	0.24	0.22	0.26	0.33	0.45	0.7	0.86	0.62	0.73	0.87	1.04	0.95	0.9	0.78	0.58	0.62	0.71	0.81	0.78
AGO	0.22	0.18	0.18	0.19	0.18	0.16	0.17	0.26	0.22	0.19	0.17	0.2	0.26	0.37	0.51	0.77	0.65	0.64	0.67	0.97	0.81	0.82	0.73	0.45	0.46	0.48	0.54	0.5
ALB	0.32	0.27	0.31	0.31	0.28	0.27	0.28	0.46	0.39	0.33	0.3	0.36	0.43	0.61	0.93	1.18	0.85	0.83	1	1.1	1	0.94	0.91	0.7	0.73	0.84	0.9	0.85
ARE	1.17	1.13	1.05	1.18	0.99	0.92	0.83	1.42	1.23	1.15	1.04	1.08	1.25	1.86	2.87	4.79	2.81	2.08	2.15	3.5	2.36	2.31	2.28	1.73	2.13	2.04	2.44	2.27
ARG	0.61	0.46	0.41	0.43	0.44	0.41	0.36	0.55	0.41	0.25	0.26	0.32	0.39	0.5	0.75	1.01	0.72	0.87	1.04	1.27	1.22	1.15	1.13	0.76	0.91	0.97	1.09	0.95
ARM	0.3	0.24	0.26	0.26	0.27	0.24	0.23	0.39	0.33	0.28	0.25	0.28	0.35	0.49	0.79	0.96	0.68	0.78	0.91	1.06	0.94	0.91	0.81	0.6	0.64	0.73	0.81	0.8
AUS	0.66	0.51	0.46	0.53	0.47	0.37	0.41	0.59	0.43	0.45	0.42	0.45	0.54	0.61	0.97	1.25	1.14	1.13	1.36	1.85	1.5	1.38	1.26	0.95	0.99	1.15	1.37	1.51
AUT	1.18	1	1.15	1.05	0.85	0.87	0.89	1.38	1.18	0.96	0.87	0.97	1.12	1.6	2.44	2.84	2	2.11	2.62	2.81	2.6	2.55	2.33	1.88	2.17	2.55	2.76	2.54
AZE	0.32	0.24	0.27	0.29	0.27	0.25	0.26	0.45	0.35	0.31	0.3	0.36	0.43	0.57	0.87	1.02	0.72	0.87	1.08	1.27	1.14	1.08	1.04	0.74	0.77	0.88	0.98	0.95
BDI	0.23	0.18	0.19	0.18	0.16	0.15	0.15	0.26	0.21	0.17	0.15	0.17	0.22	0.3	0.46	0.56	0.39	0.45	0.56	0.66	0.59	0.58	0.53	0.38	0.45	0.5	0.53	0.48
BEL	1.75	1.41	1.41	1.37	1.18	1.16	1.19	1.93	3.01	2.6	1.2	1.34	1.51	2.19	3.38	7.49	4.89	4.92	6.32	6.55	6	5.92	5.23	4.32	5.13	5.89	6.39	5.53
BEN	0.25	0.2	0.24	0.23	0.18	0.17	0.17	0.29	0.24	0.2	0.19	0.21	0.26	0.52	0.73	0.79	0.58	0.7	0.83	0.92	0.83	0.8	0.69	0.52	0.58	0.69	0.79	0.56
BFA	0.22	0.18	0.19	0.19	0.18	0.17	0.18	0.3	0.23	0.2	0.16	0.19	0.24	0.34	0.53	0.64	0.46	0.52	0.62	0.74	0.69	0.66	0.6	0.45	0.45	0.52	0.58	0.53
BGD	0.5	0.4	0.4	0.45	0.41	0.35	0.36	0.63	0.51	0.43	0.39	0.42	0.51	0.65	1.01	1.23	1.23	1.38	1.61	2.01	1.84	1.68	1.57	0.89	0.92	0.93	1.08	1.07
BGR	0.43	0.34	0.37	0.39	0.36	0.33	0.35	0.53	0.44	0.39	0.37	0.47	0.57	0.82	1.33	1.56	1.03	1.16	1.4	1.53	1.45	1.43	1.28	1.03	1.16	1.36	1.51	1.41
BHR	0.72	0.58	0.55	0.57	0.57	0.51	0.52	0.59	0.5	0.43	0.44	0.47	0.65	0.65	1.06	1.77	1	1.19	1.45	1.82	1.65	1.55	1.61	1.31	1.33	1.2	1.32	1.27
BHS	0.29	0.25	0.29	0.26	0.27	0.27	0.27	0.46	0.34	0.29	0.23	0.28	0.34	0.48	0.68	0.8	0.54	0.64	0.78	0.94	0.86	0.85	0.75	0.56	0.62	0.7	0.75	0.73
BIH	0.33	0.29	0.32	0.33	0.3	0.29	0.31	0.52	0.42	0.36	0.35	0.43	0.51	0.72	1.12	1.32	0.86	0.98	1.19	1.34	1.22	1.2	1.08	0.84	0.94	1.1	1.2	1.1
BLR	0.33	0.29	0.32	0.32	0.29	0.34	0.34	0.57	0.44	0.39	0.36	0.44	0.52	0.75	1.16	1.41	0.91	1.13	1.37	1.53	1.45	1.36	1.14	0.86	0.98	1.14	1.3	1.18
BLZ	0.31	0.26	0.24	0.25	0.23	0.23	0.23	0.42	0.34	0.27	0.21	0.26	0.31	0.44	0.65	0.87	0.57	0.63	0.77	0.92	0.85	0.83	0.79	0.56	0.58	0.64	0.72	0.66
BMU	0.37	0.32	0.34	0.33	0.36	0.36	0.38	0.52	0.39	0.35	0.29	0.38	0.42	0.57	0.79	1.14	0.65	0.7	0.84	0.99	0.84	0.83	0.77	0.56	0.58	0.67	0.72	0.67
BOL	0.23	0.19	0.19	0.19	0.18	0.19	0.18	0.3	0.24	0.2	0.16	0.18	0.22	0.3	0.46	0.62	0.42	0.49	0.6	0.75	0.68	0.67	0.62	0.42	0.44	0.48	0.55	0.49
BRA	0.66	0.48	0.46	0.52	0.51	0.48	0.42	0.73	0.57	0.42	0.34	0.39	0.5	0.7	1.12	1.52	1.19	1.58	1.71	2.07	2.03	1.85	1.44	0.99	1.18	1.42	1.65	1.54
BRB	0.37	0.29	0.33	0.33	0.34	0.33	0.35	0.53	0.39	0.33	0.29	0.31	0.37	0.5	0.68	0.82	0.62	0.83	0.8	0.91	0.78	0.75	0.71	0.54	0.57	0.63	0.67	0.63

Table C.13: Continued on next page

Table C.13: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BRN	0.67	0.46	0.47	0.5	0.44	0.33	0.25	0.39	0.33	0.3	0.25	0.27	0.32	0.43	0.64	0.77	0.66	0.68	0.82	1.01	0.92	0.8	0.81	0.59	0.66	0.96	0.9	0.81
BTN	0.32	0.26	0.26	0.26	0.22	0.19	0.21	0.34	0.29	0.25	0.23	0.26	0.34	0.47	0.72	0.85	0.67	0.81	0.97	1.1	0.97	0.91	0.84	0.61	0.63	0.74	0.81	0.78
CAF	0.2	0.17	0.18	0.17	0.16	0.15	0.14	0.25	0.2	0.17	0.14	0.17	0.21	0.3	0.47	0.57	0.39	0.45	0.55	0.65	0.59	0.59	0.54	0.38	0.4	0.46	0.51	0.47
CAN	1.2	1.03	0.92	0.92	0.87	0.88	0.95	1.63	1.22	1.05	0.81	1.01	1.19	1.59	2.03	2.39	1.58	1.89	2.31	2.84	2.56	2.55	2.3	1.74	1.88	2.19	2.48	2.41
CHE	1.5	1.23	1.38	1.22	1.1	1.06	1.09	1.78	1.53	1.15	0.98	1.08	1.3	1.88	2.6	3.12	2.4	2.32	2.79	3.08	2.89	2.7	2.44	1.98	2.21	2.86	3.12	2.69
CHL	0.39	0.31	0.33	0.41	0.43	0.51	0.52	0.81	0.75	0.63	0.51	0.46	0.53	0.5	0.69	1	0.74	0.88	1.03	1.34	1.28	1.2	1.17	0.87	0.97	1.07	1.25	1.13
CHN	2.68	1.48	1.16	1.3	1.02	0.86	0.98	1.75	1.45	1.26	1.37	1.54	1.81	2.27	3.45	4.25	4.86	5.59	6.47	7.89	7.73	6.98	6.19	4.69	5.64	6.29	7.67	8.64
CIV	0.27	0.21	0.22	0.22	0.21	0.2	0.22	0.33	0.26	0.21	0.19	0.23	0.27	0.36	0.55	0.65	0.48	0.54	0.63	0.78	0.72	0.71	0.69	0.49	0.55	0.61	0.71	0.64
CMR	0.28	0.2	0.22	0.23	0.19	0.19	0.18	0.3	0.28	0.21	0.17	0.2	0.25	0.38	0.6	0.73	0.52	0.58	0.7	0.83	0.77	0.77	0.69	0.49	0.52	0.59	0.64	0.62
COG	0.21	0.17	0.18	0.18	0.18	0.16	0.16	0.25	0.21	0.17	0.15	0.17	0.23	0.31	0.49	0.65	0.41	0.46	0.56	0.7	0.73	0.81	0.74	0.42	0.45	0.49	0.53	0.48
COL	0.53	0.41	0.41	0.41	0.37	0.33	0.29	0.5	0.39	0.31	0.27	0.31	0.4	0.54	0.8	0.99	0.78	0.89	1.09	1.36	1.23	1.19	1.05	0.75	0.77	0.89	1	0.87
CPV	0.21	0.18	0.2	0.19	0.17	0.16	0.17	0.27	0.22	0.18	0.16	0.18	0.22	0.33	0.49	0.6	0.41	0.48	0.58	0.65	0.59	0.58	0.53	0.39	0.42	0.48	0.52	0.48
CRI	0.43	0.34	0.33	0.32	0.32	0.32	0.33	0.49	0.39	0.34	0.29	0.32	0.36	0.52	0.74	0.92	0.56	0.74	0.93	1.15	1.04	0.99	0.96	0.73	0.78	0.88	0.97	0.88
CUB	0.51	0.42	0.39	0.4	0.35	0.36	0.39	0.58	0.47	0.39	0.31	0.36	0.46	0.58	0.74	0.89	0.59	0.7	0.85	0.99	0.91	0.86	0.84	0.64	0.69	0.77	0.72	0.67
CYP	0.5	0.39	0.43	0.43	0.36	0.37	0.36	0.53	0.45	0.38	0.36	0.4	0.46	0.61	0.95	1.2	0.84	0.9	0.98	1.11	0.93	0.91	0.86	0.65	0.74	0.9	0.94	0.88
CZE	0.91	0.75	0.89	0.84	0.75	0.75	0.74	1.15	0.99	0.85	0.76	0.95	1.12	1.59	2.43	2.84	1.8	2.1	2.61	2.79	2.58	2.55	2.3	1.84	2.11	2.47	2.66	2.42
DEU	2.35	1.9	2.04	1.78	1.47	1.44	1.66	2.42	1.99	1.6	1.36	1.53	1.85	2.67	4.08	4.87	3.03	3.63	4.56	4.79	4.36	4.27	3.8	3.05	3.55	4.25	4.53	4.04
DNK	0.99	0.79	0.98	0.9	0.8	0.77	0.78	1.21	0.98	0.84	0.74	0.85	0.99	1.39	2.09	2.41	1.52	1.63	1.99	2.16	1.98	1.98	1.78	1.47	1.61	1.68	1.81	1.85
DOM	0.44	0.34	0.33	0.35	0.31	0.31	0.32	0.54	0.41	0.38	0.29	0.33	0.4	0.57	0.84	1.03	0.69	0.81	1.02	1.16	1.06	1.04	1.03	0.81	0.83	0.98	1.14	1
DZA	0.53	0.41	0.41	0.39	0.33	0.32	0.33	0.54	0.45	0.38	0.32	0.37	0.45	0.65	0.97	1.26	1.02	1.06	1.19	1.36	1.28	1.28	1.17	0.9	0.95	0.87	0.95	0.83
ECU	0.39	0.31	0.3	0.3	0.28	0.29	0.23	0.4	0.35	0.33	0.24	0.29	0.34	0.45	0.65	0.91	0.7	0.73	0.91	1.11	1.03	0.98	0.88	0.61	0.67	0.75	0.85	0.7
EGY	0.65	0.45	0.48	0.5	0.42	0.42	0.43	0.52	0.41	0.32	0.24	0.42	0.41	0.54	0.81	1.34	1.14	1.17	1.35	1.76	1.52	1.49	1.42	1.11	1.22	1.97	2.41	1.52
ESP	1.37	1.11	1.27	1.24	1.09	1.07	1.23	1.92	1.54	1.34	1.25	1.41	1.59	2.12	3.12	3.25	2.11	2.24	2.51	2.62	2.43	2.4	2.19	1.72	2.06	2.44	2.72	2.42
EST	0.32	0.27	0.34	0.34	0.32	0.31	0.3	0.5	0.39	0.35	0.32	0.39	0.48	0.67	1.05	1.23	0.76	0.92	1.15	1.26	1.16	1.13	1	0.77	0.85	0.98	1.1	1.03
ETH	0.25	0.21	0.22	0.23	0.2	0.18	0.17	0.3	0.25	0.21	0.18	0.21	0.27	0.38	0.6	0.73	0.54	0.61	0.73	0.93	0.87	0.89	0.85	0.58	0.61	0.65	0.69	0.65
FIN	0.63	0.54	0.59	0.57	0.5	0.46	0.48	0.81	0.63	0.53	0.47	0.55	0.65	0.91	1.43	1.66	1.1	1.25	1.5	1.6	1.48	1.46	1.3	1.02	1.15	1.31	1.42	1.35
FJI	0.23	0.2	0.19	0.19	0.16	0.15	0.15	0.25	0.19	0.17	0.16	0.18	0.22	0.29	0.42	0.51	0.37	0.42	0.5	0.61	0.56	0.56	0.51	0.39	0.41	0.45	0.51	0.48
FRA	1.75	1.45	1.51	1.59	1.35	1.33	1.4	2.3	1.8	1.49	1.28	1.45	1.63	2.25	3.39	3.88	2.66	2.92	3.44	3.67	3.38	3.27	2.95	2.34	2.7	3.17	3.59	3.29
GAB	0.24	0.19	0.2	0.2	0.18	0.17	0.16	0.28	0.24	0.21	0.17	0.18	0.23	0.33	0.51	0.62	0.5	0.53	0.62	0.78	0.73	0.72	0.68	0.5	0.53	0.61	0.68	0.63
GBR	2.13	1.65	1.7	1.68	1.51	1.46	1.49	2.38	1.85	1.56	1.39	1.51	1.67	2.3	3.28	3.48	2.68	3.16	3.6	4.07	3.53	3.56	3.32	2.64	3.05	3.54	4.22	3.98
GEO	0.28	0.23	0.26	0.26	0.24	0.23	0.22	0.38	0.3	0.26	0.24	0.29	0.34	0.49	0.77	0.93	0.61	0.75	0.92	1.08	0.98	0.96	0.86	0.65	0.69	0.8	0.9	0.83
GHA	0.29	0.21	0.24	0.27	0.24	0.23	0.21	0.38	0.31	0.22	0.19	0.26	0.32	0.43	0.68	0.84	0.72	0.83	1.01	1.23	1.12	1.06	0.99	0.72	0.85	0.92	1	0.84
GMB	0.23	0.19	0.19	0.19	0.17	0.17	0.16	0.28	0.23	0.19	0.16	0.19	0.23	0.33	0.52	0.62	0.42	0.48	0.59	0.71	0.64	0.63	0.58	0.41	0.44	0.53	0.56	0.52
GRC	0.83	0.63	0.69	0.69	0.6	0.54	0.57	0.87	0.67	0.59	0.62	0.75	0.83	1.13	1.69	1.96	1.37	1.44	1.56	1.67	1.56	1.48	1.27	1	1.16	1.39	1.51	1.42
GTM	0.38	0.31	0.29	0.3	0.3	0.32	0.32	0.52	0.42	0.34	0.28	0.32	0.4	0.51	0.75	0.92	0.63	0.74	0.91	1.08	1.03	1.02	1	0.76	0.77	0.86	0.98	0.9
HKG	8.57	7.51	9.51	10.85	10.14	7.53	6.67	8.59	6.41	5.84	6.23	5.37	5.06	5.74	6.33	5.8	5.84	6.03	5.99	5.63	5.57	4.88	4.46	3.82	4.06	4.47	5.54	6.69
HND	0.3	0.25	0.24	0.25	0.25	0.25	0.27	0.41	0.34	0.28	0.24	0.27	0.32	0.42	0.62	0.77	0.52	0.61	0.77	0.96	0.88	0.87	0.85	0.63	0.64	0.71	0.79	0.74
HRV	0.55	0.47	0.52	0.52	0.48	0.45	0.46	0.71	0.61	0.55	0.59	0.66	0.77	1.06	1.59	1.86	1.13	1.18	1.4	1.51	1.44	1.38	1.23	1.01	1.11	1.28	1.37	1.31
HTI	0.23	0.2	0.22	0.2	0.19	0.17	0.17	0.29	0.23	0.2	0.16	0.19	0.24	0.34	0.49	0.59	0.38	0.46	0.57	0.67	0.6	0.59	0.55	0.4	0.41	0.48	0.52	0.48
HUN	0.66	0.56	0.61	0.58	0.57	0.54	0.58	0.92	0.78	0.68	0.63	0.75	0.82	1.14	1.69	1.97	1.28	1.47	1.79	1.97	1.87	1.84	1.72	1.38	1.59	1.86	2.06	1.92
IDN	1.01	0.76	0.76	0.88	0.69	0.32	0.3	0.61	0.43	0.37	0.33	0.41	0.47	0.53	0.8	1.3	0.97	1.2	1.25	2.04	1.8	1.64	1.42	1.22	1.25	1.5	1.92	1.56
IND	1.09	0.87	0.88	0.86	0.79	0.62	0.68	1.04	0.82	0.7	0.64	0.78	0.95	1.32	2.07	2.41	2.27	2.64	3.18	3.49	3.28	2.97	2.81	2.11	2.56	3.1	3.5	3.18
IRL	0.68	0.59	0.62	0.64	0.59	0.56	0.58	0.89	0.73	0.64	0.56	0.63	0.73	0.99	1.5	1.68	1.14	1.22	1.41	1.58	1.54	1.55	1.44	1.15	1.27	1.44	1.67	1.61
IRN	0.76	0.52	0.5	0.63	0.57	0.53	0.59	1.06	0.9	0.54	0.5	0.58	0.68	0.86	1.49	1.79	1.49	1.66	1.86	2.35	1.99	1.73	1.37	1.12	1.36	1.6	2.31	3.17
IRQ	0.56	0.7	1.14	1.27	1.43	1.24	1.24	1.81	1.41	1.09	0.82	0.76	0.77	0.82	0.87	1.13	0.93	1.1	1.32	1.73	1.73	1.83	1.25	0.91	0.66	0.74	0.84	0.82
ISL	0.32	0.26	0.27	0.29	0.23	0.23	0.23	0.38	0.33	0.28	0.24	0.28	0.35	0.47	0.66	0.77	0.52	0.75	0.89	1.02	0.78	0.71	0.76	0.55	0.6	0.68	0.74	0.66
ISR	1.47	1.12	1.17	1.18	1.04	0.9	0.87	1.29	1.03	0.84	0.74	0.79	0.89	1.13	1.72	2.07	1.47	1.81	2.19	2.49	2.32	2.12	1.97	1.68	1.63	1.89	2.11	2.05
ITA	1.67	1.46	1.83	1.8	1.64	1.57	1.63	2.78	2.13	1.76	1.6	1.83	2.02	2.87	4.27	4.63	2.85	3.48	3.96	3.89	3.64	3.52	3.21	2.52	3.21	3.86	4.14	3.59
JAM	0.51	0.41	0.41	0.41	0.36	0.35	0.36	0.53	0.44	0.37	0.32	0.36	0.43	0.56	0.8	0.95	0.6	0.65	0.8	0.93	0.87	0.86	0.8	0.59	0.69	0.78	0.85	0.72
JOR	0.57	0.42	0.45	0.45	0.4	0.38	0.37	0.58	0.5	0.42	0.35	0.41	0.49	0.66	1.03	1.33	0.96	1.03	1.19	1.46	1.37	1.32	1.22	0.94	0.96	1.09	1.13	1.07
JPN	3.55	2.69	2.81	2.58	2.14	1.52	1.74	2.98	2.31	1.5	1.36	1.52	1.75	2.26	3.24	3.74	2.79	3.23	4.02	4.25	3.64	3.56	3.33	2.64	3.49	4.12	4.88	4.77
KAZ	0.4	0.3	0.29	0.28	0.24	0.21	0.21	0.36	0.32	0.26	0.25	0.3	0.38	0.54	0.83	1.05	0.85	1	1.2	1.47	1.39	1.23	1.11	0.79	0.89	1.03	1.2	1.18
KEN	0.3	0.23	0.26	0.26	0.25	0.22	0.19	0.32	0.26	0.21	0.18	0.21	0.26	0.36	0.57	0.69	0.58	0.64	0.8	0.99	0.94	0.93	0.85	0.61	0.68	0.77	0.84	0.8
KGZ	0.32	0.25	0.26	0.27	0.23	0.22	0.21	0.35	0.31	0.27	0.25	0.29	0.35	0.48	0.74	0.94	0.76	0.86	1.05	1.2	1.17	1.06	0.96	0.71	0.76	0.87	1.02	1.03
KHM	0.35	0.29	0.34	0.32	0.27	0.2	0.22	0.37	0.31	0.29	0.25	0.29	0.36	0.47	0.72	0.85	0.66	0.78	0.89	1.06	0.99	0.95	0.91	0.7	0.77	0.94	1.06	1.04
KOR	2.6	2.48	2.88	3.07	2.2	0.88	1.34	2.39	1.74	1.68	1.59	1.9	2.24	2.78	4.15	4.8	3.45	4.77	4.82	4.69	4.44	4.16	3.52	2.74	3.29	3.79	4.33	4.35
KWT	0.74	0.5	0.51	0.61	0.54	0.49	0.45	0.58	0.5	0.45	0.4	0.44	0.73	1.11	1.68	2.11	1.28	1.58	1.74	1.94	1.94	1.87	1.73	1.54	1.6	1.8	1.87	1.43
LAO	0.41	0.33	0.35	0.34	0.28	0.22	0.23	0.39	0.33	0.3	0.27	0.31	0.4	0.56	0.85	1	0.83	0.97	1.14	1.34	1.28	1.18	1.08	0.82	0.92	1.03	1.17	1.1
LBN	0.65	0.55	0.6	0.68	0.6	0.52	0.5	0.72	0.65	0.54	0.48	0.52	0.58	0.75	1.12	1.68	1.35	1.49	1.66	1.95	1.83	1.69	1.44	1.17	1.22	1.41	1.35	1.15

Table C.13: Continued on next page

Table C.13: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
LBR	0.22	0.18	0.18	0.18	0.16	0.15	0.15	0.26	0.21	0.17	0.14	0.18	0.22	0.31	0.49	0.6	0.4	0.48	0.58	0.69	0.62	0.61	0.55	0.4	0.41	0.48	0.53	0.49
LBY	0.41	0.3	0.31	0.31	0.28	0.26	0.25	0.39	0.34	0.29	0.25	0.3	0.35	0.5	0.74	0.92	0.68	0.81	0.83	1	0.94	0.89	0.79	0.57	0.59	0.69	0.76	0.65
LCA	0.27	0.23	0.23	0.24	0.21	0.21	0.21	0.34	0.27	0.22	0.18	0.23	0.27	0.39	0.55	0.67	0.46	0.53	0.64	0.76	0.7	0.67	0.62	0.47	0.52	0.55	0.62	0.57
LKA	0.38	0.32	0.31	0.3	0.27	0.24	0.25	0.39	0.3	0.3	0.29	0.33	0.4	0.52	0.7	0.78	0.6	0.67	0.82	1.01	1	0.96	0.91	0.72	0.8	0.83	0.97	0.84
LTU	0.34	0.31	0.36	0.35	0.33	0.31	0.31	0.52	0.41	0.37	0.34	0.41	0.51	0.74	1.15	1.32	0.81	0.95	1.21	1.33	1.33	1.37	1.09	0.84	0.9	1.05	1.17	1.12
LVA	0.31	0.28	0.37	0.38	0.34	0.32	0.33	0.47	0.38	0.34	0.31	0.38	0.46	0.67	1.05	1.29	0.75	0.91	1.15	1.27	1.16	1.11	0.98	0.74	0.79	0.92	1.03	0.96
MAC	1	0.84	0.74	0.73	0.65	0.53	0.47	0.65	0.54	0.49	0.57	0.62	0.84	1.14	1.52	1.72	1.37	1.52	1.79	2.17	2.21	2.11	1.9	1.3	1.26	1.39	1.47	1.53
MAR	0.57	0.43	0.44	0.42	0.36	0.36	0.38	0.58	0.47	0.4	0.37	0.42	0.51	0.7	1.06	1.33	0.97	1.04	1.23	1.53	1.51	1.47	1.15	0.95	1.21	1.38	1.44	1.71
MDA	0.31	0.27	0.34	0.36	0.31	0.29	0.29	0.47	0.38	0.32	0.3	0.36	0.44	0.61	0.98	1.18	0.72	0.84	1.02	1.13	1.03	1.04	0.92	0.69	0.73	0.85	0.94	0.85
MDG	0.2	0.16	0.17	0.16	0.14	0.13	0.13	0.23	0.18	0.15	0.13	0.15	0.18	0.26	0.4	0.53	0.43	0.42	0.49	0.58	0.71	0.72	0.68	0.48	0.55	0.6	0.7	0.58
MDV	0.2	0.17	0.22	0.23	0.21	0.19	0.21	0.3	0.25	0.21	0.2	0.25	0.31	0.39	0.6	0.69	0.47	0.53	0.64	0.76	1.29	1.26	1.24	0.62	0.61	0.74	0.81	0.63
MEX	1.2	1	0.69	0.83	0.84	0.85	1	1.72	1.21	0.98	0.82	0.89	1.01	1.38	1.82	2.02	1.61	1.84	2.08	2.7	2.55	2.49	2.47	1.88	2.44	2.77	3.21	2.71
MKD	0.36	0.3	0.34	0.34	0.33	0.29	0.3	0.59	0.44	0.33	0.3	0.38	0.46	0.68	1.04	1.24	0.8	0.92	1.13	1.27	1.19	1.23	1.12	0.9	1.04	1.24	1.43	1.26
MLT	0.53	0.44	0.5	0.45	0.41	0.39	0.36	0.57	0.48	0.42	0.42	0.41	0.5	0.66	0.99	1.16	0.82	0.92	1.05	1.11	1.06	1.06	1	0.93	0.79	0.92	1.02	0.98
MMR	0.43	0.36	0.36	0.39	0.33	0.25	0.26	0.47	0.45	0.38	0.29	0.41	0.57	0.76	1.16	1.37	1.31	1.31	1.63	1.89	1.74	1.57	1.41	1.02	1.03	1.08	1.13	1.02
MNG	0.31	0.24	0.24	0.25	0.21	0.18	0.19	0.33	0.27	0.24	0.22	0.25	0.31	0.43	0.65	0.78	0.6	0.72	0.89	1.03	0.94	0.91	0.82	0.6	0.63	0.73	0.83	0.83
MOZ	0.18	0.15	0.16	0.16	0.14	0.13	0.14	0.23	0.19	0.17	0.14	0.16	0.2	0.27	0.41	0.5	0.37	0.41	0.59	0.71	0.65	0.64	0.58	0.38	0.43	0.5	0.54	0.49
MUS	0.48	0.37	0.35	0.4	0.33	0.32	0.32	0.43	0.34	0.32	0.29	0.31	0.35	0.44	0.68	0.78	0.69	0.78	0.81	0.95	0.85	0.81	0.71	0.55	0.56	0.61	0.73	0.63
MWI	0.23	0.19	0.18	0.19	0.17	0.15	0.15	0.26	0.2	0.16	0.14	0.17	0.21	0.3	0.47	0.58	0.43	0.48	0.58	0.71	0.66	0.65	0.58	0.41	0.45	0.51	0.57	0.55
MYS	1.78	1.46	1.57	1.69	1.37	0.7	0.85	1.42	1.07	0.95	0.78	0.87	1.01	1.22	1.83	2.06	1.73	1.95	2.18	2.73	2.8	2.56	2.16	1.67	1.84	2.07	2.27	2.11
NER	0.24	0.19	0.2	0.2	0.18	0.17	0.16	0.29	0.23	0.19	0.16	0.2	0.24	0.35	0.54	0.67	0.48	0.56	0.63	0.74	0.68	0.67	0.61	0.43	0.46	0.53	0.57	0.53
NGA	0.49	0.34	0.42	0.43	0.25	0.22	0.21	0.37	0.33	0.27	0.29	0.29	0.36	0.53	0.87	0.91	0.79	0.85	0.93	1.09	1.03	1.07	0.89	0.62	0.66	0.77	0.91	0.99
NIC	0.26	0.22	0.21	0.21	0.2	0.2	0.21	0.33	0.27	0.22	0.18	0.22	0.26	0.36	0.53	0.65	0.43	0.52	0.64	0.78	0.72	0.7	0.66	0.5	0.49	0.54	0.58	0.54
NLD	1.4	1.15	1.4	1.29	1.06	1.03	1.1	1.67	1.33	1.11	0.98	1.07	1.2	1.69	2.54	3.12	2.17	2.23	2.97	3.21	2.94	2.94	2.48	2.16	2.46	2.95	3.34	3.14
NOR	0.62	0.58	0.6	0.59	0.54	0.52	0.5	0.77	0.61	0.53	0.45	0.53	0.67	0.93	1.48	1.6	1.09	1.24	1.59	1.82	1.56	1.53	1.29	0.98	1.23	1.31	1.47	1.29
NPL	0.35	0.29	0.28	0.28	0.25	0.21	0.24	0.38	0.3	0.27	0.26	0.28	0.36	0.5	0.75	0.9	0.77	0.91	1.08	1.23	1.17	1.1	1.03	0.8	0.9	1.09	1.18	1.09
NZL	0.52	0.43	0.42	0.45	0.37	0.29	0.32	0.47	0.38	0.37	0.33	0.38	0.47	0.54	0.81	0.94	0.76	0.8	0.99	1.2	1.1	1.07	0.98	0.79	0.87	0.96	1.15	1.13
OMN	0.43	0.33	0.33	0.34	0.32	0.3	0.28	0.44	0.4	0.34	0.26	0.37	0.43	0.62	1.05	1.47	0.95	0.98	1.12	1.5	1.36	1.28	1.22	0.9	1.02	1.17	1.16	1.15
PAK	0.59	0.42	0.43	0.45	0.37	0.32	0.33	0.54	0.44	0.37	0.33	0.36	0.47	0.63	0.96	1.14	0.93	1	1.16	1.45	1.35	1.32	1.26	0.97	1.09	1.17	1.33	1.3
PAN	0.33	0.27	0.26	0.26	0.25	0.24	0.24	0.36	0.29	0.25	0.21	0.24	0.27	0.4	0.61	0.78	0.57	0.66	0.76	1.04	0.94	0.94	0.84	0.61	0.62	0.68	0.75	0.64
PER	0.33	0.29	0.28	0.29	0.27	0.27	0.24	0.4	0.33	0.27	0.23	0.26	0.32	0.41	0.56	0.75	0.57	0.66	0.8	0.97	0.8	0.79	0.76	0.48	0.76	0.5	0.58	0.52
PHL	0.98	0.73	0.77	0.89	0.74	0.48	0.53	0.8	0.59	0.5	0.46	0.45	0.53	0.59	0.83	1	0.83	0.96	1.09	1.3	1.22	1.1	1.1	1.01	1.26	1.59	1.71	1.42
PNG	0.38	0.3	0.28	0.29	0.22	0.19	0.19	0.32	0.26	0.21	0.18	0.21	0.25	0.35	0.52	0.65	0.53	0.62	0.78	0.93	0.82	0.74	0.62	0.46	0.49	0.55	0.66	0.63
POL	0.75	0.6	0.68	0.69	0.62	0.62	0.64	1.03	0.87	0.7	0.64	0.79	0.94	1.35	2.14	2.54	1.64	1.91	2.3	2.51	2.35	2.36	2.11	1.69	1.92	2.41	2.72	2.76
PRT	0.91	0.8	0.9	0.86	0.79	0.75	0.83	1.23	0.99	0.84	0.75	0.85	0.94	1.22	1.79	2.03	1.45	1.54	1.68	1.71	1.63	1.64	1.49	1.19	1.42	1.73	1.87	1.73
PRY	0.24	0.2	0.2	0.2	0.2	0.19	0.17	0.29	0.24	0.18	0.15	0.18	0.22	0.31	0.49	0.65	0.45	0.56	0.66	0.8	0.75	0.73	0.66	0.46	0.51	0.6	0.69	0.68
QAT	0.62	0.48	0.61	0.59	0.44	0.44	0.38	0.62	0.56	0.49	0.4	0.47	0.86	1.45	2.46	3.05	2.01	2	1.78	2.13	1.94	2.01	2.06	1.55	1.56	1.77	1.87	1.8
ROU	0.56	0.46	0.47	0.52	0.44	0.4	0.38	0.62	0.53	0.46	0.42	0.51	0.63	0.93	1.53	1.85	1.21	1.35	1.62	1.78	1.67	1.65	1.49	1.18	1.34	1.59	1.77	1.67
RUS	0.46	0.35	0.38	0.44	0.34	0.27	0.28	0.78	0.38	0.36	0.37	0.45	0.58	0.85	1.39	1.68	1.13	1.42	1.76	2.1	1.97	1.79	1.47	1.1	1.42	1.6	1.98	1.91
RWA	0.23	0.18	0.2	0.2	0.18	0.16	0.16	0.28	0.23	0.18	0.16	0.19	0.25	0.33	0.53	0.67	0.53	0.57	0.67	0.83	0.77	0.71	0.66	0.47	0.51	0.56	0.67	0.64
SAU	0.91	0.59	0.59	0.61	0.53	0.48	0.49	0.77	0.63	0.53	0.45	0.48	0.61	0.88	1.41	1.86	1.32	1.44	1.66	2.33	2.11	2	1.82	1.23	1.3	1.38	1.74	1.63
SCG	0.36	0.45	0.42	0.48	0.43	0.39	0.41	0.74	0.48	0.44	0.42	0.51	0.53	1.64	2.63	3.32	2.23	2.22	2.73	3.42	3.25	2.69	1.58	1.27	2.33	2.71	3.23	3.11
SEN	0.26	0.2	0.21	0.21	0.18	0.19	0.18	0.29	0.25	0.21	0.17	0.21	0.25	0.34	0.53	0.65	0.46	0.51	0.62	0.73	0.68	0.66	0.61	0.45	0.51	0.61	0.62	0.57
SGP	12.27	10.2	12.27	12.44	12.79	7.61	7.75	8.79	7.25	6.49	5.23	6.26	6.47	8.39	10.39	12.38	10.92	10.66	12.43	12.49	11.98	10.09	7.53	7.31	8.76	5.94	6.94	6.54
SLE	0.22	0.18	0.18	0.19	0.16	0.15	0.15	0.27	0.22	0.18	0.16	0.18	0.23	0.32	0.5	0.61	0.42	0.49	0.61	0.73	0.65	0.64	0.58	0.41	0.45	0.5	0.53	0.49
SLV	0.36	0.3	0.29	0.31	0.31	0.3	0.29	0.45	0.4	0.33	0.29	0.32	0.37	0.5	0.69	0.85	0.57	0.67	0.8	0.94	0.9	0.86	0.83	0.63	0.63	0.71	0.78	0.72
SOM	0.22	0.18	0.19	0.2	0.17	0.16	0.15	0.28	0.22	0.18	0.15	0.18	0.23	0.33	0.53	0.66	0.46	0.51	0.62	0.77	0.7	0.68	0.63	0.43	0.46	0.52	0.58	0.54
SUR	0.28	0.23	0.23	0.23	0.21	0.19	0.2	0.3	0.24	0.19	0.17	0.19	0.23	0.32	0.48	0.58	0.41	0.47	0.57	0.66	0.61	0.59	0.52	0.36	0.39	0.45	0.51	0.48
SVK	0.54	0.49	0.55	0.51	0.49	0.48	0.51	0.8	0.72	0.62	0.55	0.63	0.73	1.03	1.61	1.99	1.28	1.53	1.83	1.98	1.91	1.94	1.77	1.41	1.6	1.89	2.05	1.87
SVN	0.81	0.65	0.76	0.71	0.64	0.63	0.64	0.99	0.81	0.7	0.63	0.73	0.84	1.21	1.81	2.07	1.34	1.52	1.79	1.89	1.78	1.72	1.55	1.26	1.42	1.66	1.72	1.56
SWE	0.72	0.64	0.74	0.71	0.61	0.58	0.61	0.96	0.73	0.62	0.57	0.66	0.78	1.08	1.76	1.96	1.33	1.55	1.88	2.03	1.83	1.75	1.54	1.22	1.44	1.67	1.86	1.67
SYR	0.49	0.39	0.46	0.47	0.39	0.35	0.34	0.53	0.64	0.62	0.51	0.61	0.46	0.8	1.19	1.56	1.26	1.33	1.23	1.37	1.33	1.1	1.01	0.67	0.66	0.77	0.82	0.75
THA	2.25	1.68	1.81	1.8	1.23	0.67	0.88	1.27	1	1.02	0.94	1.04	1.29	1.45	2.17	2.48	1.96	2.59	2.76	3.66	3.59	2.91	2.61	2.08	2.37	2.75	3.11	2.96
TJK	0.36	0.27	0.26	0.28	0.25	0.22	0.21	0.36	0.3	0.25	0.22	0.27	0.31	0.43	0.66	0.81	0.6	0.76	0.88	1.04	0.96	0.88	0.79	0.58	0.6	0.71	0.82	0.78
TKM	0.26	0.22	0.23	0.24	0.23	0.21	0.23	0.38	0.29	0.23	0.2	0.24	0.3	0.42	0.65	0.79	0.55	0.63	0.76	0.89	0.79	0.77	0.69	0.6	0.61	0.67	0.77	0.75
TON	0.18	0.14	0.15	0.14	0.12	0.11	0.11	0.2	0.16	0.13	0.11	0.13	0.16	0.22	0.35	0.43	0.31	0.36	0.44	0.53	0.47	0.46	0.41	0.28	0.3	0.34	0.39	0.37
TTO	0.33	0.22	0.23	0.37	0.44	0.43	0.42	0.61	0.52	0.43	0.4	0.48	0.52	0.66	0.99	1.24	0.87	0.94	1.07	1.3	1.24	1.25	1.13	0.83	0.58	0.88	1.19	0.72
TUN	0.58	0.43	0.45	0.44	0.39	0.37	0.38	0.6	0.49	0.41	0.46	0.52	0.6	0.84	1.11	1.32	0.95	1.02	1.13	1.27	1.18	1.15	1.03	0.77	0.86	0.94	1.02	0.93
TUR	1.1	0.65	0.74	0.73	0.71	0.63	0.61	1.06	0.73	0.7	0.65	0.78	0.98	1.36	2.09	2.39	1.71	2.14	2.57	2.91	2.92	2.82	2.55	1.98	2.49	2.68	2.79	2.8

Table C.13: Continued on next page

Table C.13: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
TZA	0.23	0.19	0.22	0.21	0.18	0.16	0.16	0.29	0.23	0.19	0.16	0.19	0.23	0.33	0.51	0.65	0.48	0.53	0.65	0.8	0.77	0.75	0.64	0.46	0.48	0.6	0.63	0.6
UGA	0.23	0.2	0.21	0.21	0.18	0.17	0.17	0.29	0.23	0.19	0.16	0.19	0.24	0.34	0.54	0.67	0.5	0.54	0.66	0.8	0.73	0.72	0.66	0.46	0.52	0.57	0.63	0.6
UKR	0.59	0.45	0.46	0.45	0.4	0.34	0.33	0.54	0.4	0.36	0.34	0.41	0.53	0.78	1.27	1.44	0.87	1.13	1.36	1.61	1.45	1.38	1.2	0.86	1.08	1.26	1.46	1.28
URY	0.36	0.3	0.28	0.3	0.29	0.26	0.23	0.35	0.29	0.19	0.17	0.21	0.27	0.38	0.57	0.76	0.51	0.63	0.75	0.9	0.85	0.8	0.76	0.53	0.53	0.59	0.64	0.6
USA	3.15	2.63	2.18	2.23	2.05	2.06	2.28	3.82	2.67	2.27	1.75	2.12	2.49	3.23	4.11	4.55	3.23	3.72	4.51	5.73	5.28	5.37	5.05	3.86	4.78	5.62	6.5	6.19
UZB	0.27	0.23	0.26	0.32	0.28	0.24	0.22	0.38	0.31	0.26	0.23	0.27	0.34	0.46	0.71	0.83	0.59	0.72	0.86	1.02	0.94	0.92	0.87	0.65	0.79	0.92	1.2	1.2
VEN	0.54	0.35	0.4	0.38	0.33	0.33	0.33	0.52	0.42	0.3	0.23	0.28	0.36	0.49	0.75	1.01	0.74	0.77	0.93	1.28	1.11	0.64	0.58	0.4	0.41	0.53	0.57	0.55
VNM	0.46	0.32	0.33	0.36	0.32	0.26	0.28	0.66	0.62	0.6	0.6	0.67	0.77	0.96	1.53	1.79	1.75	1.99	2.08	2.5	2.45	2.27	2.45	1.93	2.48	2.6	3.03	2.98
YEM	0.41	0.24	0.27	0.27	0.23	0.21	0.2	0.34	0.28	0.24	0.19	0.24	0.3	0.44	0.7	0.85	0.63	0.69	0.77	0.97	0.9	0.9	0.73	0.53	0.54	0.59	0.65	0.59
ZAF	0.52	0.41	0.41	0.34	0.28	0.25	0.25	0.38	0.29	0.28	0.25	0.27	0.32	0.39	0.57	0.64	0.59	0.61	0.97	1.27	1.12	1.08	0.92	0.68	0.76	0.84	0.92	0.6
ZMB	0.42	0.32	0.3	0.29	0.26	0.21	0.2	0.33	0.21	0.17	0.14	0.22	0.3	0.4	0.63	0.82	0.62	0.68	0.8	1.02	0.95	0.93	0.81	0.61	0.72	0.9	1.01	0.81
ZWE	0.37	0.29	0.29	0.29	0.26	0.21	0.22	0.37	0.27	0.22	0.18	0.22	0.27	0.36	0.56	0.64	0.44	0.49	0.62	0.76	0.68	0.66	0.6	0.43	0.45	0.52	0.58	0.53

Table C.14: OMR in the minerals sector by country and year (TLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.04	0.02	0.02	0.02	0.03	0.03	0.03	0.02	0.02	0.04	0.04	0.06	0.05
AGO	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.01	0.01	0.02	0.03	0.04	0.05	0.04	0.03	0.03	0.05	0.04	0.09	0.07	0.06	0.1	0.08	0.09	0.08
ALB	0.04	0.03	0.03	0.05	0.04	0.04	0.04	0.05	0.06	0.04	0.04	0.04	0.05	0.07	0.09	0.09	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.04	0.07	0.08	0.09	0.1
ARE	0.26	0.27	0.25	0.28	0.24	0.2	0.16	0.23	0.26	0.19	0.16	0.16	0.17	0.27	0.36	0.38	0.23	0.17	0.19	0.19	0.15	0.16	0.17	0.18	0.32	0.3	0.36	0.35
ARG	0.16	0.13	0.1	0.11	0.1	0.08	0.07	0.08	0.08	0.03	0.03	0.04	0.05	0.07	0.1	0.09	0.05	0.06	0.07	0.07	0.08	0.08	0.08	0.06	0.11	0.11	0.13	0.13
ARM	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.03	0.02	0.02	0.03	0.04	0.06	0.06	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.06	0.07	0.08	0.08
AUS	0.16	0.14	0.11	0.11	0.09	0.07	0.06	0.07	0.08	0.07	0.06	0.06	0.06	0.08	0.09	0.1	0.06	0.06	0.07	0.07	0.07	0.07	0.06	0.07	0.11	0.11	0.13	0.15
AUT	0.27	0.22	0.21	0.2	0.17	0.14	0.13	0.15	0.16	0.12	0.11	0.1	0.11	0.16	0.21	0.21	0.13	0.12	0.14	0.14	0.13	0.14	0.12	0.12	0.18	0.22	0.25	0.27
AZE	0.05	0.03	0.03	0.04	0.04	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.05	0.08	0.08	0.05	0.05	0.05	0.06	0.06	0.06	0.05	0.04	0.07	0.08	0.09	0.1
BDI	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.03	0.03	0.03	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.03	0.05	0.05
BEL	0.25	0.19	0.23	0.22	0.18	0.17	0.15	0.2	0.22	0.15	0.15	0.15	0.16	0.23	0.3	0.31	0.18	0.15	0.17	0.17	0.15	0.17	0.16	0.15	0.22	0.23	0.26	0.27
BEN	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.03	0.04	0.03	0.02	0.02	0.03	0.04	0.05	0.04	0.03	0.03	0.04	0.03	0.03	0.04	0.03	0.03	0.05	0.05	0.06	0.07
BFA	0.03	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.03	0.04	0.05	0.05
BGD	0.13	0.09	0.08	0.13	0.1	0.09	0.06	0.09	0.1	0.07	0.06	0.05	0.06	0.09	0.12	0.12	0.08	0.13	0.1	0.11	0.11	0.13	0.13	0.1	0.17	0.2	0.24	0.27
BGR	0.08	0.06	0.05	0.06	0.05	0.04	0.04	0.05	0.06	0.04	0.04	0.05	0.06	0.09	0.13	0.14	0.07	0.06	0.06	0.06	0.06	0.07	0.06	0.05	0.09	0.11	0.13	0.14
BHR	0.54	0.38	0.31	0.34	0.14	0.15	0.14	0.27	0.32	0.24	0.23	0.2	0.29	0.32	0.48	0.59	0.44	0.35	0.33	0.34	0.29	0.32	0.32	0.34	0.55	0.65	0.67	0.68
BHS	0.07	0.05	0.06	0.06	0.07	0.07	0.05	0.06	0.06	0.05	0.04	0.03	0.04	0.07	0.07	0.06	0.04	0.03	0.03	0.04	0.04	0.05	0.04	0.04	0.06	0.07	0.08	0.06
BIH	0.04	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.04	0.03	0.04	0.04	0.05	0.07	0.09	0.1	0.05	0.05	0.06	0.06	0.05	0.06	0.05	0.05	0.07	0.08	0.09	0.1
BLR	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.06	0.07	0.05	0.05	0.05	0.05	0.08	0.11	0.12	0.07	0.07	0.08	0.09	0.09	0.09	0.07	0.06	0.09	0.1	0.12	0.12
BLZ	0.04	0.04	0.03	0.03	0.03	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.04	0.05	0.03	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.05	0.04	0.05	0.05
BMU	0.16	0.1	0.13	0.1	0.09	0.1	0.14	0.14	0.09	0.07	0.06	0.06	0.07	0.12	0.13	0.13	0.11	0.08	0.07	0.08	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.05
BOL	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.04	0.04	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.06	0.06	0.07	0.05
BRA	0.18	0.14	0.13	0.14	0.13	0.1	0.07	0.1	0.1	0.06	0.05	0.05	0.05	0.09	0.12	0.14	0.09	0.1	0.12	0.12	0.12	0.12	0.08	0.07	0.12	0.12	0.15	0.16
BRB	0.12	0.1	0.1	0.11	0.1	0.09	0.09	0.12	0.1	0.08	0.07	0.06	0.06	0.09	0.1	0.1	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.08	0.12	0.11	0.11	0.12
BRN	0.17	0.16	0.16	0.17	0.17	0.07	0.03	0.04	0.05	0.04	0.02	0.02	0.02	0.04	0.04	0.05	0.03	0.04	0.05	0.05	0.04	0.05	0.04	0.03	0.07	0.07	0.07	0.06
BTN	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.02	0.03	0.02	0.02	0.03	0.04	0.06	0.06
CAF	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.03	0.03	0.03
CAN	0.24	0.18	0.16	0.16	0.14	0.12	0.12	0.15	0.16	0.12	0.1	0.09	0.11	0.16	0.18	0.15	0.08	0.08	0.09	0.1	0.1	0.1	0.1	0.1	0.13	0.15	0.17	0.19
CHE	0.35	0.29	0.27	0.26	0.18	0.16	0.14	0.17	0.2	0.14	0.13	0.12	0.13	0.19	0.24	0.24	0.17	0.17	0.19	0.19	0.18	0.2	0.17	0.17	0.24	0.27	0.31	0.34
CHL	0.16	0.12	0.12	0.11	0.11	0.09	0.07	0.09	0.1	0.06	0.05	0.05	0.06	0.09	0.11	0.12	0.07	0.07	0.09	0.1	0.1	0.09	0.09	0.08	0.13	0.14	0.16	0.16
CHN	0.32	0.23	0.19	0.21	0.15	0.1	0.09	0.11	0.13	0.09	0.09	0.08	0.09	0.14	0.18	0.21	0.16	0.17	0.22	0.25	0.27	0.3	0.26	0.26	0.47	0.45	0.56	0.65
CIV	0.14	0.04	0.04	0.05	0.04	0.04	0.03	0.04	0.04	0.03	0.02	0.02	0.03	0.04	0.05	0.05	0.03	0.03	0.03	0.03	0.03	0.04	0.03	0.03	0.06	0.06	0.07	0.08
CMR	0.05	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.04	0.03	0.02	0.02	0.03	0.04	0.05	0.05	0.04	0.03	0.03	0.04	0.04	0.04	0.04	0.03	0.06	0.06	0.07	0.07
COG	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.03	0.02	0.02	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.04	0.04
COL	0.13	0.11	0.1	0.09	0.09	0.07	0.05	0.06	0.07	0.05	0.04	0.04	0.04	0.07	0.09	0.09	0.05	0.06	0.07	0.08	0.08	0.09	0.07	0.07	0.1	0.11	0.13	0.12
CPV	0.03	0.03	0.05	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.06	0.07	0.04	0.04	0.04	0.04	0.03	0.04	0.03	0.04	0.06	0.06	0.06	0.07
CRI	0.09	0.08	0.07	0.07	0.06	0.06	0.08	0.06	0.07	0.05	0.04	0.04	0.05	0.07	0.09	0.09	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.1	0.11	0.12	0.13

Table C.14: Continued on next page

Table C.14: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
CUB	0.05	0.05	0.05	0.05	0.05	0.04	0.05	0.06	0.06	0.05	0.04	0.04	0.04	0.06	0.07	0.07	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.04	0.06	0.06	0.04	0.04
CYP	0.13	0.1	0.11	0.11	0.09	0.08	0.07	0.08	0.09	0.07	0.07	0.07	0.08	0.11	0.15	0.16	0.1	0.09	0.09	0.07	0.05	0.05	0.05	0.05	0.08	0.1	0.12	0.12
CZE	0.14	0.11	0.11	0.13	0.1	0.09	0.08	0.09	0.11	0.1	0.08	0.09	0.1	0.14	0.19	0.2	0.11	0.1	0.12	0.11	0.11	0.12	0.1	0.09	0.15	0.18	0.2	0.22
DEU	0.5	0.41	0.38	0.35	0.26	0.22	0.22	0.22	0.25	0.17	0.14	0.13	0.15	0.21	0.26	0.27	0.16	0.15	0.18	0.17	0.17	0.19	0.16	0.16	0.24	0.27	0.33	0.36
DNK	0.19	0.14	0.16	0.16	0.14	0.12	0.11	0.13	0.15	0.11	0.1	0.09	0.11	0.16	0.21	0.19	0.1	0.1	0.11	0.11	0.11	0.12	0.1	0.11	0.16	0.18	0.21	0.23
DOM	0.11	0.08	0.08	0.08	0.08	0.07	0.12	0.1	0.12	0.09	0.06	0.05	0.05	0.07	0.1	0.1	0.06	0.06	0.07	0.07	0.07	0.08	0.07	0.08	0.09	0.11	0.14	0.14
DZA	0.08	0.05	0.05	0.05	0.04	0.04	0.03	0.05	0.06	0.04	0.04	0.03	0.04	0.06	0.07	0.07	0.04	0.05	0.05	0.05	0.05	0.06	0.05	0.05	0.07	0.06	0.08	0.09
ECU	0.08	0.07	0.07	0.07	0.06	0.06	0.04	0.05	0.07	0.05	0.04	0.04	0.04	0.06	0.08	0.09	0.05	0.05	0.06	0.07	0.07	0.08	0.07	0.06	0.09	0.11	0.12	0.1
EGY	0.13	0.11	0.1	0.1	0.09	0.08	0.07	0.07	0.07	0.04	0.03	0.03	0.03	0.06	0.08	0.1	0.07	0.07	0.06	0.06	0.06	0.08	0.07	0.06	0.1	0.15	0.2	0.17
ESP	0.3	0.2	0.19	0.19	0.15	0.14	0.15	0.17	0.22	0.16	0.15	0.15	0.18	0.26	0.35	0.3	0.15	0.13	0.13	0.11	0.09	0.1	0.08	0.08	0.11	0.16	0.19	0.2
EST	0.05	0.04	0.05	0.05	0.05	0.05	0.04	0.04	0.05	0.04	0.04	0.04	0.05	0.08	0.1	0.09	0.04	0.05	0.05	0.06	0.06	0.06	0.05	0.05	0.08	0.09	0.11	0.11
ETH	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.03	0.05	0.05	0.03	0.03	0.03	0.04	0.03	0.04	0.04	0.02	0.04	0.04	0.05	0.05
FIN	0.14	0.12	0.11	0.11	0.1	0.09	0.08	0.09	0.11	0.07	0.07	0.06	0.07	0.11	0.14	0.14	0.07	0.07	0.09	0.09	0.08	0.09	0.07	0.07	0.11	0.13	0.15	0.16
FJI	0.05	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.04	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.05
FRA	0.35	0.26	0.24	0.26	0.2	0.18	0.17	0.21	0.24	0.17	0.16	0.16	0.18	0.25	0.34	0.34	0.19	0.18	0.2	0.2	0.19	0.21	0.16	0.16	0.27	0.29	0.35	0.38
GAB	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.03	0.03	0.04	0.04
GBR	0.33	0.26	0.24	0.23	0.21	0.18	0.18	0.24	0.26	0.21	0.19	0.19	0.2	0.27	0.37	0.32	0.19	0.18	0.19	0.19	0.18	0.21	0.2	0.19	0.28	0.3	0.36	0.41
GEO	0.04	0.03	0.03	0.04	0.03	0.03	0.02	0.03	0.03	0.03	0.02	0.02	0.03	0.05	0.07	0.07	0.04	0.04	0.05	0.06	0.05	0.06	0.05	0.05	0.08	0.09	0.1	0.11
GHA	0.08	0.06	0.06	0.06	0.05	0.04	0.04	0.05	0.06	0.04	0.03	0.03	0.05	0.07	0.1	0.1	0.05	0.05	0.06	0.07	0.06	0.1	0.07	0.06	0.16	0.11	0.14	0.11
GMB	0.03	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.04	0.05
GRC	0.17	0.14	0.13	0.14	0.11	0.1	0.08	0.1	0.11	0.08	0.09	0.09	0.1	0.15	0.2	0.2	0.11	0.1	0.09	0.07	0.07	0.07	0.06	0.06	0.1	0.11	0.12	0.13
GTM	0.08	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.06	0.05	0.04	0.04	0.04	0.06	0.09	0.08	0.04	0.04	0.05	0.06	0.05	0.06	0.06	0.06	0.09	0.09	0.11	0.13
HKG	2.2	2.25	2.35	2.49	2.58	1.92	1.46	1.85	1.82	1.09	1.02	0.83	0.86	0.95	1.04	0.93	0.66	0.68	0.74	0.86	0.89	0.81	0.58	0.67	0.83	0.8	0.83	0.94
HND	0.07	0.05	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.03	0.03	0.03	0.03	0.05	0.06	0.06	0.03	0.04	0.04	0.05	0.06	0.04	0.04	0.04	0.06	0.06	0.08	0.08
HRV	0.1	0.08	0.08	0.09	0.09	0.07	0.06	0.07	0.08	0.07	0.07	0.07	0.07	0.1	0.14	0.14	0.08	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.1	0.11	0.13	0.14
HTI	0.03	0.02	0.03	0.03	0.03	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.02	0.03	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03
HUN	0.12	0.1	0.1	0.1	0.09	0.08	0.07	0.09	0.11	0.08	0.08	0.08	0.09	0.12	0.16	0.16	0.08	0.07	0.08	0.08	0.07	0.08	0.08	0.07	0.11	0.13	0.16	0.17
IDN	0.16	0.14	0.14	0.15	0.11	0.04	0.03	0.04	0.04	0.03	0.03	0.03	0.03	0.05	0.06	0.07	0.05	0.05	0.06	0.07	0.07	0.08	0.07	0.08	0.18	0.18	0.21	0.24
IND	0.16	0.13	0.12	0.12	0.1	0.07	0.07	0.09	0.1	0.06	0.05	0.06	0.06	0.1	0.15	0.16	0.1	0.1	0.12	0.13	0.12	0.13	0.11	0.11	0.21	0.24	0.27	0.27
IRL	0.13	0.12	0.11	0.13	0.11	0.09	0.09	0.1	0.09	0.07	0.07	0.07	0.09	0.13	0.18	0.15	0.08	0.06	0.05	0.05	0.05	0.06	0.06	0.07	0.1	0.09	0.11	0.13
IRN	0.13	0.11	0.1	0.11	0.11	0.09	0.09	0.12	0.14	0.07	0.05	0.05	0.06	0.08	0.12	0.13	0.08	0.06	0.08	0.1	0.07	0.07	0.05	0.06	0.12	0.13	0.18	0.25
IRQ	0.35	0.55	0.91	1.02	1.14	0.88	0.74	0.83	0.85	0.53	0.37	0.28	0.23	0.08	0.09	0.09	0.07	0.08	0.08	0.07	0.11	0.06	0.09	0.07	0.06	0.07	0.07	0.08
ISL	0.06	0.05	0.05	0.05	0.04	0.04	0.03	0.04	0.05	0.03	0.03	0.03	0.04	0.06	0.08	0.08	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.08	0.09	0.09	0.09
ISR	0.37	0.3	0.31	0.32	0.26	0.19	0.16	0.2	0.21	0.14	0.11	0.1	0.11	0.16	0.21	0.23	0.14	0.15	0.17	0.18	0.18	0.2	0.18	0.18	0.3	0.32	0.37	0.42
ITA	0.23	0.16	0.17	0.19	0.15	0.13	0.13	0.17	0.2	0.15	0.14	0.14	0.15	0.22	0.28	0.28	0.16	0.15	0.17	0.15	0.13	0.14	0.11	0.11	0.18	0.21	0.25	0.26
JAM	0.15	0.12	0.11	0.11	0.09	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.03	0.05	0.04	0.05	0.07	0.08	0.08	0.08	0.08	0.07	0.03	0.05	0.1	0.15	0.06
JOR	0.12	0.1	0.09	0.09	0.08	0.07	0.06	0.07	0.08	0.05	0.04	0.05	0.06	0.08	0.11	0.11	0.07	0.07	0.07	0.08	0.08	0.09	0.08	0.08	0.12	0.13	0.14	0.16
JPN	0.62	0.45	0.44	0.44	0.35	0.25	0.22	0.27	0.28	0.18	0.14	0.12	0.12	0.18	0.18	0.19	0.11	0.1	0.13	0.12	0.11	0.12	0.11	0.12	0.2	0.23	0.26	0.28
KAZ	0.05	0.03	0.04	0.06	0.03	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.03	0.05	0.08	0.07	0.04	0.04	0.04	0.05	0.05	0.05	0.04	0.04	0.06	0.07	0.08	0.09
KEN	0.04	0.03	0.04	0.04	0.03	0.03	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.05	0.06	0.03	0.03	0.03	0.04	0.04	0.06	0.04	0.04	0.07	0.08	0.08	0.09
KGZ	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.03	0.04	0.05	0.03	0.03	0.03	0.04	0.04	0.04	0.03	0.03	0.05	0.05	0.06	0.06
KHM	0.04	0.04	0.04	0.04	0.03	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.05	0.06	0.08	0.08
KOR	0.65	0.55	0.63	0.65	0.5	0.22	0.22	0.31	0.33	0.25	0.18	0.13	0.13	0.17	0.21	0.2	0.13	0.14	0.15	0.15	0.14	0.15	0.12	0.14	0.29	0.32	0.36	0.36
KWT	0.22	0.17	0.16	0.17	0.14	0.12	0.09	0.1	0.11	0.09	0.08	0.08	0.1	0.17	0.26	0.22	0.11	0.12	0.13	0.14	0.14	0.16	0.16	0.15	0.23	0.24	0.27	0.24
LAO	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.06	0.07	0.08	0.09
LBN	0.21	0.14	0.14	0.14	0.12	0.12	0.1	0.12	0.13	0.09	0.07	0.06	0.08	0.11	0.15	0.15	0.12	0.13	0.14	0.14	0.15	0.15	0.1	0.1	0.14	0.14	0.13	0.11
LBR	0.03	0.02	0.02	0.02	0.01	0.01	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03
LBY	0.06	0.04	0.04	0.04	0.03	0.03	0.02	0.03	0.03	0.03	0.03	0.02	0.03	0.04	0.04	0.04	0.03	0.03	0.03	0.04	0.05	0.04	0.03	0.03	0.04	0.05	0.06	0.05
LCA	0.07	0.06	0.06	0.05	0.05	0.04	0.06	0.05	0.05	0.03	0.03	0.03	0.04	0.06	0.06	0.06	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.07	0.06	0.07	0.07
LKA	0.1	0.08	0.06	0.06	0.05	0.05	0.04	0.05	0.06	0.05	0.05	0.05	0.06	0.09	0.09	0.1	0.06	0.06	0.08	0.09	0.1	0.11	0.1	0.1	0.16	0.14	0.19	0.16
LTU	0.06	0.06	0.05	0.06	0.05	0.05	0.04	0.05	0.06	0.05	0.05	0.05	0.06	0.09	0.12	0.11	0.05	0.05	0.06	0.06	0.06	0.07	0.06	0.05	0.08	0.09	0.1	0.1
LVA	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.04	0.05	0.04	0.03	0.04	0.05	0.08	0.11	0.09	0.04	0.04	0.05	0.06	0.06	0.06	0.05	0.05	0.07	0.08	0.1	0.1
MAC	0.23	0.26	0.19	0.17	0.16	0.09	0.06	0.04	0.05	0.05	0.06	0.08	0.12	0.17	0.22	0.2	0.1	0.08	0.11	0.14	0.16	0.18	0.21	0.15	0.25	0.23	0.22	0.22
MAR	0.12	0.08	0.08	0.08	0.07	0.06	0.05	0.07	0.07	0.05	0.05	0.05	0.05	0.09	0.12	0.12	0.08	0.07	0.09	0.09	0.08	0.09	0.08	0.07	0.12	0.13	0.15	0.17
MDA	0.05	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.04	0.06	0.07	0.07	0.04	0.04	0.05	0.05	0.05	0.05	0.04	0.04	0.07	0.08	0.1	0.11
MDG	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.04
MDV	0.02	0.02	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.08	0.1	0.12	0.07	0.06	0.07	0.08	0.09	0.1	0.11	0.11	0.18	0.22	0.23	0.15
MEX	0.2	0.18	0.1	0.12	0.13	0.11	0.11	0.14	0.15	0.11	0.1	0.08	0.09	0.14	0.2	0.16	0.08	0.08	0.1	0.1	0.1	0.11	0.1	0.09	0.21	0.23	0.28	0.29
MKD	0.04	0.04	0.04	0.05	0.04	0.04	0.04	0.05	0.05	0.04	0.04	0.04	0.04	0.06	0.08	0.08	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.06	0.13	0.19	0.2

Table C.14: Continued on next page

Table C.14: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MLT	0.19	0.16	0.16	0.15	0.12	0.1	0.1	0.11	0.12	0.09	0.09	0.09	0.1	0.13	0.17	0.17	0.11	0.09	0.11	0.1	0.1	0.11	0.09	0.08	0.18	0.15	0.19	0.19
MMR	0.04	0.04	0.05	0.05	0.04	0.03	0.02	0.04	0.03	0.02	0.02	0.04	0.06	0.1	0.13	0.14	0.1	0.09	0.1	0.08	0.03	0.03	0.03	0.03	0.04	0.04	0.06	0.06
MNG	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.03	0.03	0.02	0.02	0.02	0.03	0.03	0.03	0.02	0.02	0.03	0.04	0.05	0.05
MOZ	0.03	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.02	0.03	0.04	0.05	0.05
MUS	0.28	0.21	0.18	0.21	0.17	0.16	0.12	0.13	0.13	0.1	0.09	0.09	0.1	0.12	0.15	0.19	0.11	0.09	0.1	0.11	0.09	0.08	0.06	0.07	0.11	0.12	0.14	0.14
MWI	0.03	0.03	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.03	0.03	0.04	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.02	0.04	0.04	0.05	0.05
MYS	0.23	0.2	0.21	0.23	0.17	0.08	0.06	0.09	0.09	0.07	0.05	0.06	0.06	0.08	0.1	0.1	0.07	0.07	0.08	0.08	0.09	0.08	0.08	0.09	0.13	0.17	0.19	0.14
NER	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.04	0.04	0.04	0.04
NGA	0.08	0.05	0.05	0.05	0.04	0.04	0.04	0.05	0.07	0.05	0.04	0.03	0.03	0.06	0.09	0.08	0.06	0.07	0.06	0.05	0.05	0.06	0.04	0.03	0.05	0.05	0.07	0.09
NIC	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.04	0.04	0.02	0.02	0.02	0.02	0.04	0.05	0.04	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.05	0.05	0.06	0.07
NLD	0.3	0.25	0.26	0.26	0.21	0.16	0.17	0.19	0.21	0.15	0.14	0.13	0.14	0.21	0.28	0.28	0.14	0.13	0.18	0.18	0.15	0.16	0.14	0.15	0.22	0.26	0.34	0.38
NOR	0.17	0.13	0.13	0.14	0.11	0.09	0.08	0.1	0.11	0.08	0.07	0.07	0.08	0.12	0.17	0.17	0.09	0.09	0.1	0.11	0.09	0.1	0.08	0.08	0.13	0.14	0.17	0.17
NPL	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.04	0.04	0.04	0.03	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.09	0.1	0.11	0.11
NZL	0.19	0.17	0.17	0.17	0.15	0.1	0.1	0.11	0.11	0.09	0.08	0.08	0.09	0.11	0.14	0.13	0.08	0.07	0.09	0.08	0.08	0.09	0.08	0.08	0.12	0.13	0.16	0.17
OMN	0.09	0.07	0.06	0.06	0.05	0.04	0.04	0.04	0.05	0.04	0.04	0.03	0.04	0.06	0.08	0.1	0.06	0.06	0.07	0.08	0.07	0.08	0.07	0.06	0.11	0.11	0.12	0.13
PAK	0.11	0.08	0.08	0.08	0.06	0.05	0.04	0.05	0.05	0.04	0.03	0.04	0.05	0.07	0.08	0.07	0.05	0.05	0.06	0.07	0.06	0.08	0.07	0.07	0.12	0.13	0.14	0.15
PAN	0.08	0.07	0.06	0.07	0.06	0.05	0.05	0.05	0.05	0.04	0.04	0.03	0.04	0.06	0.08	0.08	0.06	0.06	0.06	0.06	0.07	0.08	0.07	0.06	0.1	0.1	0.11	0.08
PER	0.09	0.08	0.08	0.08	0.08	0.06	0.05	0.06	0.07	0.05	0.04	0.04	0.04	0.07	0.09	0.1	0.06	0.07	0.08	0.09	0.08	0.08	0.07	0.07	0.11	0.12	0.14	0.14
PHL	0.14	0.12	0.12	0.15	0.13	0.07	0.07	0.07	0.08	0.05	0.04	0.03	0.03	0.05	0.06	0.06	0.05	0.05	0.06	0.07	0.07	0.08	0.07	0.08	0.16	0.19	0.23	0.22
PNG	0.04	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.04
POL	0.17	0.14	0.14	0.15	0.14	0.12	0.12	0.14	0.15	0.1	0.09	0.09	0.1	0.16	0.23	0.25	0.13	0.12	0.14	0.13	0.11	0.13	0.1	0.1	0.16	0.2	0.23	0.26
PRT	0.19	0.15	0.15	0.15	0.13	0.11	0.12	0.14	0.16	0.11	0.09	0.09	0.1	0.14	0.17	0.17	0.09	0.09	0.09	0.08	0.07	0.07	0.06	0.06	0.12	0.15	0.18	0.2
PRY	0.05	0.04	0.04	0.04	0.04	0.03	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.04	0.05	0.03	0.03	0.04	0.04	0.04	0.05	0.03	0.03	0.04	0.05	0.05	0.06
QAT	0.16	0.12	0.1	0.1	0.08	0.07	0.06	0.07	0.08	0.07	0.05	0.06	0.12	0.2	0.3	0.43	0.22	0.2	0.14	0.18	0.21	0.22	0.22	0.22	0.33	0.34	0.37	0.33
ROU	0.12	0.08	0.08	0.09	0.07	0.06	0.05	0.07	0.08	0.06	0.06	0.06	0.08	0.12	0.19	0.2	0.1	0.09	0.1	0.09	0.09	0.1	0.08	0.08	0.13	0.15	0.19	0.22
RUS	0.12	0.11	0.1	0.13	0.1	0.07	0.05	0.07	0.09	0.06	0.05	0.05	0.07	0.11	0.17	0.17	0.08	0.08	0.09	0.1	0.1	0.1	0.07	0.07	0.12	0.14	0.17	0.18
RWA	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.03	0.04	0.05	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.07	0.07	0.09	0.1
SAU	0.2	0.14	0.12	0.13	0.11	0.08	0.08	0.09	0.11	0.07	0.06	0.06	0.07	0.09	0.13	0.13	0.08	0.08	0.09	0.1	0.1	0.11	0.1	0.09	0.16	0.17	0.21	0.23
SCG	0.04	0.08	0.06	0.08	0.07	0.06	0.05	0.08	0.07	0.05	0.05	0.05	0.05	0.21	0.31	0.32	0.18	0.15	0.18	0.17	0.16	0.17	0.09	0.09	0.23	0.27	0.3	0.35
SEN	0.05	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.05	0.06	0.06	0.04	0.03	0.03	0.03	0.04	0.04	0.03	0.03	0.05	0.07	0.07	0.08
SGP	4.03	3.58	2.99	3.14	2.5	1.64	1.04	1.41	1.02	0.68	0.62	0.57	0.66	0.87	1.06	0.77	0.72	0.68	0.69	0.7	0.61	0.48	0.42	0.41	0.68	0.37	0.37	0.33
SLE	0.03	0.02	0.02	0.03	0.02	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.02	0.03	0.03	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.04	0.04	0.03	0.03
SLV	0.09	0.09	0.08	0.08	0.08	0.07	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.08	0.09	0.09	0.05	0.05	0.06	0.07	0.07	0.07	0.07	0.07	0.11	0.11	0.14	0.14
SOM	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.04
SUR	0.04	0.03	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.03	0.03	0.03	0.02	0.02	0.02	0.03	0.03	0.03	0.02	0.02	0.02	0.03	0.03	0.04
SVK	0.08	0.07	0.06	0.07	0.06	0.06	0.05	0.06	0.08	0.06	0.06	0.06	0.07	0.11	0.16	0.16	0.09	0.09	0.1	0.11	0.1	0.11	0.1	0.1	0.14	0.16	0.19	0.2
SVN	0.12	0.1	0.11	0.11	0.09	0.08	0.07	0.09	0.1	0.07	0.07	0.07	0.08	0.11	0.15	0.15	0.08	0.08	0.08	0.08	0.07	0.08	0.07	0.06	0.1	0.12	0.14	0.14
SWE	0.19	0.15	0.14	0.14	0.1	0.09	0.08	0.1	0.11	0.08	0.07	0.07	0.08	0.11	0.15	0.15	0.08	0.08	0.1	0.1	0.1	0.1	0.09	0.09	0.14	0.14	0.18	0.19
SYR	0.16	0.13	0.13	0.14	0.12	0.1	0.09	0.12	0.12	0.09	0.09	0.09	0.09	0.06	0.07	0.08	0.05	0.05	0.04	0.04	0.03	0.04	0.04	0.03	0.05	0.05	0.06	0.06
THA	0.23	0.15	0.16	0.19	0.13	0.08	0.07	0.05	0.06	0.05	0.04	0.04	0.05	0.06	0.08	0.09	0.06	0.06	0.08	0.1	0.1	0.1	0.09	0.09	0.15	0.18	0.21	0.23
TJK	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.04	0.03	0.03	0.05	0.05	0.06	0.06
TKM	0.03	0.02	0.02	0.03	0.03	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.04	0.07	0.07	0.09	0.1
TON	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.03	0.01	0.01	0.02	0.02	0.02	0.02
TTO	0.03	0.08	0.1	0.11	0.1	0.03	0.02	0.03	0.03	0.02	0.05	0.06	0.07	0.11	0.15	0.15	0.08	0.08	0.09	0.1	0.1	0.1	0.09	0.02	0.03	0.14	0.04	0.05
TUN	0.11	0.09	0.08	0.09	0.07	0.06	0.06	0.07	0.08	0.06	0.05	0.05	0.05	0.07	0.1	0.1	0.06	0.06	0.06	0.07	0.07	0.07	0.06	0.06	0.09	0.09	0.11	0.12
TUR	0.21	0.13	0.13	0.14	0.12	0.1	0.08	0.1	0.09	0.08	0.07	0.07	0.09	0.15	0.2	0.18	0.1	0.11	0.13	0.13	0.14	0.15	0.13	0.12	0.19	0.19	0.18	0.2
TZA	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.03	0.04	0.04	0.03	0.02	0.03	0.03	0.03	0.04	0.03	0.03	0.05	0.05	0.06	0.07
UGA	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.03	0.05	0.06	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.03	0.05	0.06	0.06	0.07
UKR	0.13	0.09	0.08	0.08	0.07	0.05	0.04	0.05	0.06	0.05	0.05	0.05	0.06	0.09	0.14	0.15	0.07	0.07	0.08	0.08	0.08	0.08	0.06	0.06	0.1	0.12	0.15	0.17
URY	0.09	0.07	0.06	0.06	0.06	0.05	0.04	0.04	0.05	0.03	0.02	0.02	0.03	0.04	0.05	0.06	0.03	0.04	0.04	0.05	0.05	0.05	0.05	0.04	0.06	0.07	0.08	0.08
USA	0.58	0.48	0.42	0.42	0.39	0.35	0.37	0.41	0.44	0.36	0.27	0.26	0.3	0.42	0.46	0.35	0.16	0.15	0.16	0.18	0.19	0.21	0.22	0.22	0.3	0.34	0.41	0.46
UZB	0.02	0.02	0.02	0.03	0.03	0.02	0.01	0.02	0.02	0.02	0.01	0.02	0.02	0.03	0.05	0.05	0.02	0.04	0.03	0.03	0.05	0.05	0.05	0.05	0.07	0.09	0.11	0.11
VEN	0.12	0.07	0.07	0.06	0.05	0.06	0.06	0.06	0.07	0.05	0.03	0.03	0.04	0.06	0.08	0.09	0.06	0.05	0.06	0.06	0.05	0.04	0.03	0.02	0.03	0.03	0.03	0.03
VNM	0.06	0.05	0.05	0.06	0.08	0.06	0.05	0.06	0.09	0.06	0.06	0.06	0.06	0.09	0.11	0.12	0.09	0.08	0.09	0.09	0.08	0.09	0.13	0.1	0.19	0.18	0.22	0.24
YEM	0.08	0.06	0.05	0.05	0.04	0.03	0.03	0.04	0.04	0.03	0.02	0.03	0.03	0.05	0.07	0.06	0.04	0.03	0.03	0.04	0.04	0.05	0.02	0.03	0.04	0.03	0.04	0.04
ZAF	0.19	0.15	0.15	0.15	0.12	0.07	0.08	0.09	0.1	0.07	0.06	0.07	0.08	0.11	0.15	0.13	0.08	0.08	0.09	0.09	0.09	0.09	0.08	0.07	0.13	0.14	0.15	0.15
ZMB	0.04	0.03	0.03	0.03	0.03	0.03	0.02	0.03	0.03	0.02	0.02	0.01	0.02	0.03	0.04	0.04	0.03	0.03	0.04	0.03	0.05	0.03	0.04	0.03	0.05	0.07	0.09	0.1
ZWE	0.06	0.05	0.04	0.05	0.04	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.03	0.04	0.04	0.02	0.02	0.03	0.03	0.03	0.03	0.02	0.02	0.04	0.04	0.04	0.05

Table C.15: OMR in the other sector by country and year (TLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	0.63	0.49	0.52	0.44	0.57	0.44	0.5	0.71	0.61	0.67	0.6	0.58	0.69	0.81	0.98	1.01	0.77	0.89	0.5	1.06	1.17	1.15	1.24	1.17	0.89	0.95	0.9	0.74
AGO	0.66	0.5	0.54	0.45	0.59	0.46	0.54	0.77	0.64	0.68	0.59	0.54	0.69	0.81	0.98	1.05	0.84	0.88	0.5	1.1	1.16	1.11	1.24	1.12	0.94	0.96	0.88	0.74
ALB	0.76	0.61	0.66	0.57	0.73	0.6	0.7	0.92	0.8	0.88	0.83	0.82	0.96	1.16	1.43	1.46	1.14	1.26	0.69	1.36	1.52	1.48	1.6	1.51	1.2	1.3	1.23	1.03
ARE	1.02	1.12	1.24	1.02	1.3	1.07	1.02	1.66	1.55	1.75	1.66	1.7	1.95	2.34	2.72	3.23	3.78	3.73	2.42	3.74	3.9	3.32	3.81	3.61	3.45	3.45	3.41	2.63
ARG	1.14	0.77	0.77	0.62	0.87	0.71	0.73	0.94	0.76	0.62	0.7	0.74	0.89	1.06	1.32	1.35	1.08	1.21	0.67	1.39	1.61	1.43	1.71	1.46	1.25	1.2	1.06	0.92
ARM	0.7	0.57	0.61	0.5	0.66	0.52	0.62	0.87	0.71	0.85	0.82	0.77	0.93	1.06	1.27	1.3	0.97	1.18	0.59	1.25	1.42	1.33	1.44	1.37	1.07	1.16	1.09	0.9
AUS	1.38	1.05	1.12	0.9	1.11	0.86	0.95	1.23	1.05	1.26	1.13	1.08	1.27	1.42	1.63	1.66	1.38	1.44	0.81	1.67	1.81	1.6	1.77	1.65	1.35	1.38	1.3	1.19
AUT	2.28	1.79	1.98	1.53	1.82	1.49	1.61	2.02	1.78	1.92	1.76	1.7	1.93	2.21	2.87	2.91	2.59	2.64	1.55	2.79	3.08	2.82	3.04	2.87	2.41	2.62	2.45	2.27
AZE	0.69	0.54	0.58	0.49	0.64	0.5	0.57	0.8	0.69	0.77	0.72	0.71	0.86	1.01	1.24	1.28	0.97	1.17	0.55	1.26	1.42	1.32	1.45	1.37	1.06	1.14	1.09	0.91
BDI	0.6	0.45	0.49	0.4	0.51	0.4	0.45	0.64	0.55	0.6	0.54	0.52	0.62	0.75	0.9	0.92	0.67	0.79	0.45	0.9	1	0.95	1.07	1	0.76	0.8	0.75	0.63
BEL	3.2	3.03	3.81	3.09	3.71	3.06	3.47	4.59	3.89	4.14	3.65	3.48	4	4.4	5.35	5.66	4.57	4.32	2.7	4.61	4.84	4.49	4.82	4.54	3.88	4.02	3.8	3.39
BEN	0.68	0.51	0.57	0.47	0.58	0.46	0.52	0.72	0.61	0.69	0.62	0.6	0.73	0.86	1.05	1.08	0.83	1	0.52	1.05	1.2	1.11	1.23	1.14	0.88	0.92	0.84	0.72
BFA	0.66	0.51	0.56	0.46	0.59	0.46	0.52	0.74	0.63	0.7	0.63	0.62	0.75	0.88	1.08	1.11	0.83	1.02	0.52	1.06	1.22	1.13	1.26	1.18	0.91	0.95	0.87	0.73
BGD	0.73	0.6	0.68	0.54	0.67	0.5	0.61	0.89	0.77	0.87	0.8	0.78	1.02	1.1	1.31	1.43	1.38	1.8	0.7	1.62	1.92	1.67	1.84	1.76	1.43	1.47	1.35	1.07
BGR	0.99	0.72	0.72	0.61	0.77	0.63	0.7	0.97	0.83	0.95	0.9	0.88	1.06	1.28	1.62	1.67	1.26	1.37	0.73	1.49	1.68	1.61	1.75	1.65	1.31	1.43	1.36	1.14
BHR	1.12	0.94	1.03	0.87	1.13	0.92	1.03	0.99	0.85	0.97	0.91	0.94	1.22	1.35	1.6	1.89	1.66	2.31	1	2.01	2.29	1.92	2.26	2.15	1.9	1.79	1.61	1.23
BHS	0.84	0.65	0.72	0.59	0.8	0.72	0.75	1.07	0.88	1	0.91	0.9	1.14	1.28	1.54	1.61	1.23	1.61	0.92	1.57	1.77	1.55	1.82	1.77	1.37	1.39	1.26	1.04
BIH	0.79	0.63	0.68	0.59	0.76	0.61	0.69	0.95	0.81	0.9	0.87	0.87	1.02	1.21	1.49	1.51	1.14	1.32	0.73	1.42	1.63	1.61	1.67	1.57	1.21	1.32	1.24	1.05
BLR	0.82	0.67	0.73	0.62	0.8	0.75	0.79	1.09	0.94	1.04	0.99	0.99	1.21	1.44	1.77	1.85	1.44	1.69	0.79	1.76	2.02	1.86	2.01	1.79	1.45	1.59	1.53	1.27
BLZ	0.8	0.59	0.64	0.52	0.7	0.55	0.65	0.94	0.78	0.9	0.81	0.81	1.04	1.18	1.45	1.65	1.24	1.51	0.87	1.47	1.68	1.46	1.76	1.72	1.32	1.31	1.18	0.99
BMU	1.21	0.68	0.84	0.63	0.82	0.7	0.81	1.12	0.94	1.08	0.99	0.99	1.25	1.4	1.67	1.75	1.35	1.78	1.06	1.71	1.89	1.68	1.94	1.9	1.45	1.48	1.33	1.14
BOL	0.68	0.53	0.54	0.43	0.57	0.45	0.49	0.71	0.6	0.64	0.57	0.54	0.65	0.78	0.95	0.98	0.71	0.85	0.45	0.98	1.14	1.07	1.21	1.1	0.85	0.89	0.83	0.7
BRA	1.37	1.04	1.2	0.94	1.25	0.98	0.91	1.28	1.04	1.02	0.87	0.81	1.02	1.26	1.62	1.88	1.61	1.88	1.02	2.17	2.41	2.11	2.14	1.88	1.64	1.65	1.58	1.35
BRB	0.76	0.58	0.64	0.54	0.71	0.56	0.66	0.94	0.78	0.88	0.81	0.78	1.03	1.14	1.38	1.49	1.15	1.51	0.79	1.43	1.63	1.39	1.64	1.61	1.23	1.24	1.11	0.93
BRN	0.86	0.68	0.88	0.88	0.75	0.52	0.58	0.81	0.65	0.75	0.68	0.69	0.91	0.98	1.16	1.24	1.1	2.37	1.2	2.38	1.55	1.31	1.47	1.45	1.14	1.18	1.06	0.79
BTN	0.61	0.48	0.51	0.42	0.54	0.42	0.48	0.68	0.58	0.64	0.57	0.54	0.63	0.75	0.9	0.91	0.71	0.83	0.62	0.98	1.11	1.1	1.2	1.12	0.85	0.9	0.85	0.71
CAF	0.67	0.51	0.55	0.46	0.58	0.46	0.52	0.74	0.61	0.68	0.6	0.58	0.7	0.83	1.01	1.04	0.77	0.94	0.49	0.99	1.13	1.04	1.18	1.1	0.84	0.88	0.81	0.68
CAN	2.84	2.18	2.21	1.65	2.31	1.97	2.25	3.01	2.67	2.92	2.5	2.23	2.68	3.06	3.56	3.4	2.68	2.9	1.58	3.18	3.55	3.18	3.71	3.47	2.72	2.86	2.69	2.53
CHE	3.11	2.35	2.45	1.94	2.36	1.96	2.06	2.61	2.31	2.46	2.22	2.09	2.43	2.76	3.32	3.44	2.98	3.08	1.78	3.3	3.59	3.34	3.66	3.53	3.16	3.56	3.69	2.36
CHL	0.83	0.63	0.79	0.63	0.83	0.65	0.65	0.91	0.77	0.79	0.71	0.68	0.82	0.97	1.18	1.22	0.97	1.11	0.63	1.29	1.63	1.28	1.48	1.37	1.15	1.19	1.1	0.95
CHN	0.93	0.77	0.87	0.73	0.93	0.76	0.87	1.2	1.09	1.14	0.97	0.87	0.93	1.04	1.15	1.37	1.29	1.67	0.97	2.35	3.08	3.34	3.66	3.87	3.04	2.7	2.69	2.49
CIV	0.82	0.57	0.67	0.57	0.67	0.49	0.57	0.78	0.66	0.73	0.62	0.61	0.72	0.85	1.04	1.07	0.81	0.99	0.5	1.04	1.19	1.1	1.24	1.15	0.88	0.92	0.85	0.72
CMR	0.77	0.56	0.61	0.5	0.63	0.48	0.56	0.78	0.65	0.74	0.66	0.65	0.79	0.93	1.17	1.22	0.88	1.07	0.67	1.15	1.29	1.17	1.34	1.26	0.96	0.98	0.9	0.79
COG	0.77	0.57	0.65	0.55	0.66	0.45	0.5	0.72	0.59	0.65	0.58	0.56	0.68	0.81	0.99	1.02	0.76	0.91	0.47	0.97	1.11	1.02	1.16	1.08	0.83	0.86	0.79	0.66
COL	0.76	0.62	0.67	0.54	0.72	0.56	0.59	0.91	0.81	0.86	0.74	0.71	0.88	1.02	1.25	1.27	1.02	1.18	0.67	1.36	1.61	1.47	1.59	1.47	1.15	1.24	1.17	0.97
CPV	0.61	0.47	0.51	0.42	0.55	0.44	0.5	0.7	0.59	0.66	0.6	0.57	0.69	0.82	0.99	1	0.75	0.89	0.48	0.98	1.11	1.05	1.17	1.09	0.83	0.88	0.81	0.68
CRI	0.71	0.55	0.58	0.47	0.64	0.53	0.57	0.81	0.7	0.89	0.87	0.86	1.02	1.21	1.44	1.48	1.22	1.39	0.87	1.6	1.78	1.68	1.98	1.95	1.7	1.8	1.76	1.56
CUB	0.91	0.72	0.74	0.58	0.8	0.68	0.79	1.09	0.97	1.06	0.92	0.84	1.02	1.19	1.36	1.33	0.98	1.12	0.55	1.24	1.43	1.35	1.56	1.45	1.08	1.16	1.03	0.88
CYP	0.9	0.74	0.82	0.69	0.86	0.68	0.79	1.09	0.93	1.05	0.97	0.99	1.26	1.38	1.67	1.82	1.53	2	0.81	1.73	2.01	1.67	1.91	1.86	1.47	1.55	1.42	1.07
CZE	1.45	1.16	1.32	1.05	1.33	1.1	1.19	1.54	1.38	1.62	1.4	1.41	1.68	1.96	2.44	2.42	1.93	2.07	1.14	2.21	2.44	2.34	2.52	2.41	2.02	2.24	2.14	1.85
DEU	4.6	3.41	3.6	2.69	3.09	2.52	2.9	3.34	2.96	2.97	2.6	2.34	2.79	3.21	3.81	4.01	3.92	4	2.19	4.16	4.51	4.22	4.6	4.37	3.76	4.28	4	3.68
DNK	1.8	1.43	1.65	1.32	1.67	1.38	1.5	1.94	1.71	1.78	1.65	1.54	1.81	2.14	2.58	2.59	2.26	2.4	1.35	2.54	2.84	2.71	2.98	2.85	2.4	2.52	2.45	2.24
DOM	0.88	0.71	0.75	0.61	0.81	0.68	0.77	1.03	0.9	1.02	0.85	0.79	0.96	1.15	1.42	1.44	1.19	1.3	0.79	1.43	1.62	1.56	1.79	1.72	1.38	1.42	1.36	1.16
DZA	0.87	0.66	0.73	0.61	0.78	0.62	0.71	0.98	0.84	0.94	0.87	0.86	1.04	1.21	1.48	1.53	1.16	1.39	0.77	1.43	1.64	1.5	1.67	1.59	1.23	1.23	1.15	0.96
ECU	0.64	0.5	0.55	0.44	0.59	0.48	0.52	0.73	0.67	0.74	0.65	0.63	0.75	0.88	1.07	1.07	0.82	0.96	0.57	1.13	1.29	1.21	1.34	1.22	0.97	1.02	0.95	0.8
EGY	0.82	0.65	0.69	0.57	0.74	0.62	0.69	0.88	0.73	0.79	0.72	0.7	0.82	0.97	1.18	1.3	1.03	1.19	0.68	1.32	1.47	1.4	1.57	1.46	1.22	1.59	1.61	1.29
ESP	2.43	1.72	1.85	1.53	1.89	1.63	1.87	2.39	2.14	2.3	2.19	2.11	2.47	2.79	3.43	3.34	2.67	2.63	1.37	2.41	2.55	2.4	2.65	2.54	2.09	2.26	2.2	1.9
EST	0.8	0.65	0.75	0.64	0.84	0.68	0.74	0.99	0.88	0.97	0.93	0.93	1.13	1.33	1.62	1.66	1.24	1.5	0.74	1.56	1.79	1.66	1.78	1.68	1.33	1.45	1.37	1.16
ETH	0.68	0.51	0.55	0.46	0.59	0.45	0.52	0.73	0.61	0.69	0.62	0.6	0.72	0.85	1.06	1.08	0.78	0.93	0.61	1.07	1.18	1.12	1.28	1.21	0.93	0.97	0.9	0.77
FIN	1.21	0.98	1.1	0.88	1.11	0.92	1.01	1.3	1.15	1.23	1.14	1.09	1.27	1.48	1.8	1.81	1.41	1.55	0.84	1.69	1.87	1.75	1.85	1.73	1.4	1.52	1.46	1.25
FJI	0.61	0.46	0.51	0.41	0.53	0.39	0.47	0.69	0.57	0.65	0.6	0.6	0.78	0.85	1.05	1.13	0.87	1.19	0.55	1.11	1.28	1.06	1.26	1.24	0.96	0.95	0.85	0.68
FRA	3.31	2.46	2.67	2.25	2.69	2.29	2.5	3.19	2.87	3.05	2.81	2.61	2.98	3.31	4.06	3.91	3.43	3.4	1.88	3.43	3.72	3.54	3.79	3.61	3.06	3.17	3.1	2.81
GAB	0.64	0.48	0.53	0.44	0.56	0.43	0.49	0.69	0.59	0.66	0.59	0.57	0.69	0.82	1.01	1.04	0.78	0.95	0.48	0.99	1.14	1.04	1.18	1.1	0.83	0.87	0.81	0.68
GBR	2.97	2.5	2.71	2.45	3.43	2.9	3.25	4.12	3.18	3.82	3.39	3.19	3.56	4.03	5.05	4.79	4.06	4.07	2.19	3.87	4.31	4.18	4.84	4.4	3.66	3.83	3.75	3.37
GEO	0.68	0.54	0.59	0.5	0.65	0.51	0.57	0.79	0.69	0.76	0.7	0.68	0.81	0.98	1.2	1.22	0.91	1.07	0.57	1.22	1.35	1.31	1.41	1.31	1.01	1.1	1.03	0.86
GHA	0.86	0.67	0.72	0.58	0.72	0.55	0.67	0.9	0.73	0.83	0.76	0.78	1.01	1.12	1.4	1.52	1.45	1.83	0.94	1.79	2.02	1.65	1.92	1.58	1.23	1.24	1.12	0.87
GMB	0.8	0.61	0.7	0.57	0.72	0.55	0.63	0.87	0.7	0.82	0.75	0.76	0.98	1.09	1.35	1.46	1.13	1.54	0.72	1.41	1.62	1.36	1.6	1.54	1.18	1.2	1.08	0.88

Table C.15: Continued on next page

Table C.15: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
GRC	1.1	0.91	1	0.82	1.03	0.84	0.96	1.27	1.14	1.28	1.22	1.18	1.37	1.61	1.98	2.03	1.69	1.65	0.85	1.57	1.72	1.64	1.75	1.66	1.32	1.44	1.37	1.16
GTM	0.69	0.54	0.58	0.47	0.64	0.52	0.59	0.82	0.73	0.81	0.72	0.68	0.82	0.96	1.15	1.16	0.86	1.01	0.58	1.13	1.28	1.21	1.41	1.34	1.03	1.09	1.03	0.88
HKG	7.27	7.24	8.11	7.18	8.23	5.82	5.92	7.5	6.42	5.92	5.74	5.44	5.42	5.66	6.48	6.21	6.59	6.71	5.1	8.45	8.78	8.17	7.51	7.28	6.87	7.28	6.83	5.07
HND	0.65	0.5	0.53	0.44	0.59	0.48	0.55	0.76	0.67	0.74	0.66	0.63	0.76	0.9	1.08	1.1	0.81	0.96	0.57	1.07	1.24	1.15	1.32	1.26	0.96	1.02	0.95	0.81
HRV	1.02	0.81	0.89	0.76	0.97	0.79	0.86	1.14	1	1.12	1.07	1.05	1.22	1.45	1.79	1.84	1.42	1.54	0.85	1.61	1.8	1.72	1.85	1.75	1.41	1.55	1.47	1.22
HTI	0.68	0.54	0.57	0.47	0.62	0.48	0.55	0.77	0.66	0.73	0.66	0.63	0.75	0.89	1.07	1.06	0.77	0.93	0.52	1.03	1.17	1.12	1.26	1.19	0.88	0.94	0.88	0.74
HUN	1.11	0.89	0.92	0.77	1.01	0.86	0.96	1.3	1.13	1.24	1.18	1.15	1.29	1.49	2.04	2.22	1.42	1.74	1.03	2	2.23	2.14	2.39	2.25	1.57	1.69	1.67	1.47
IDN	1.16	0.97	1.01	0.79	0.93	0.39	0.49	0.73	0.66	0.72	0.63	0.6	0.7	0.81	0.95	0.97	0.81	0.91	0.49	1.36	1.15	1.08	1.19	1.14	0.93	1	0.95	0.84
IND	1.5	1.03	1.13	0.94	1.22	0.94	1.12	1.47	1.25	1.38	1.18	1.1	1.35	1.43	1.81	2.04	2.3	2.4	1.22	2.59	2.82	2.49	2.69	2.69	2.31	2.24	2.13	1.85
IRL	2.27	1.81	1.93	1.65	2.18	1.85	2.04	2.63	2.29	2.51	2.23	2.07	2.41	2.76	3.28	3.22	2.74	2.83	1.73	3.05	3.3	3.15	3.39	3.1	2.48	2.63	2.47	2.26
IRN	0.81	0.63	0.67	0.55	0.73	0.58	0.65	0.89	0.81	0.82	0.75	0.72	0.84	0.97	1.26	1.3	1.03	1.06	0.58	1.44	1.29	1.24	1.4	1.35	1.1	1.15	1.14	1.12
IRQ	0.82	0.82	1.27	1.06	1.68	1.28	1.33	1.63	1.34	1.33	1.08	0.92	0.95	0.98	1.18	1.21	0.97	1.16	0.7	1.42	1.63	1.33	1.83	1.71	1.02	1.08	1.02	0.85
ISL	0.82	0.64	0.69	0.59	0.77	0.54	0.61	0.85	0.73	0.8	0.74	0.72	0.86	1.01	1.22	1.2	0.91	1.06	0.57	1.16	1.32	1.28	1.42	1.34	1.05	1.13	1.06	0.9
ISR	2.65	2.25	2.38	1.94	2.29	1.75	2.15	2.96	2.32	2.61	2.35	2.28	2.62	2.79	3.42	3.69	2.87	3.38	1.92	3.34	3.64	3.13	3.52	3.45	2.93	2.92	2.69	1.59
ITA	1.99	1.53	2.06	1.7	2.13	1.86	2	2.75	2.31	2.61	2.4	2.36	2.69	3.11	3.81	3.66	3.26	3.37	1.75	3.24	3.47	3.27	3.54	3.4	2.84	3.05	2.85	2.39
JAM	0.82	0.63	0.69	0.58	0.74	0.58	0.69	0.97	0.81	0.94	0.85	0.83	1.06	1.18	1.44	1.52	1.16	1.53	0.83	1.47	1.67	1.45	1.7	1.65	1.28	1.3	1.17	0.98
JOR	0.92	0.78	0.88	0.74	0.94	0.73	0.86	1.27	1.06	1.23	1.15	1.2	1.61	1.66	1.98	2.24	1.8	2.54	0.87	2.07	2.44	1.95	2.3	2.28	1.81	1.87	1.69	1.16
JPN	4.61	3.78	4.12	3.02	3.24	2.4	2.76	3.44	2.99	2.95	2.5	1.94	2.27	2.45	2.66	2.87	2.63	2.31	1.21	2.8	3.05	2.77	3.27	3.07	2.74	2.82	2.83	2.46
KAZ	0.65	0.5	0.55	0.46	0.59	0.46	0.51	0.71	0.64	0.7	0.64	0.62	0.77	0.91	1.13	1.18	0.89	1.06	0.56	1.19	1.38	1.29	1.39	1.31	1.02	1.07	1.03	0.86
KEN	0.71	0.54	0.61	0.5	0.66	0.52	0.58	0.85	0.7	0.81	0.73	0.75	0.98	1.1	1.35	1.5	1.24	1.67	0.74	1.54	1.76	1.48	1.72	1.65	1.31	1.33	1.2	0.97
KGZ	0.62	0.49	0.53	0.44	0.57	0.45	0.5	0.71	0.62	0.69	0.63	0.62	0.77	0.9	1.11	1.17	0.89	1.1	0.55	1.18	1.39	1.26	1.38	1.32	1.03	1.08	1.02	0.83
KHM	0.62	0.5	0.55	0.46	0.58	0.43	0.5	0.75	0.65	0.71	0.64	0.61	0.74	0.86	1.02	1.05	0.83	1.01	0.55	1.1	1.26	1.18	1.35	1.27	1.04	1.07	1.03	0.97
KOR	1.55	1.47	1.88	1.59	1.74	0.82	1.17	1.78	1.52	1.79	1.61	1.52	1.85	2.21	2.82	2.77	2.52	2.76	1.39	2.6	2.64	2.16	3.05	2.93	2.29	2.55	2.45	2.18
KWT	1.1	0.82	0.95	0.82	1.01	0.76	0.83	1.06	0.91	1.03	0.96	0.96	1.26	1.4	1.69	1.87	1.62	2.18	0.95	1.96	2.24	1.89	2.24	2.18	1.8	1.84	1.72	1.31
LAO	0.61	0.49	0.53	0.44	0.57	0.43	0.49	0.71	0.61	0.67	0.6	0.58	0.69	0.81	0.96	0.99	0.77	0.94	0.51	1.06	1.23	1.17	1.3	1.22	0.95	0.99	0.93	0.81
LBN	1.05	0.85	0.92	0.8	0.99	0.78	0.85	1.13	1	1.08	0.97	0.94	1.05	1.23	1.46	1.57	1.3	1.42	0.88	1.55	1.71	1.63	1.83	1.73	1.44	1.56	1.43	1.12
LBR	0.87	0.66	0.79	0.59	0.68	0.53	0.62	0.77	0.61	0.69	0.61	0.6	0.72	0.86	1.06	1.08	0.76	0.91	0.6	1.02	1.13	1.07	1.22	1.14	0.85	0.89	0.83	0.72
LBY	0.81	0.61	0.66	0.55	0.7	0.56	0.64	0.88	0.74	0.82	0.75	0.73	0.87	1.04	1.25	1.27	0.97	1.13	0.61	1.24	1.41	1.33	1.44	1.33	1.01	1.1	1.05	0.83
LCA	0.75	0.57	0.62	0.51	0.67	0.52	0.63	0.89	0.73	0.85	0.78	0.77	1	1.12	1.37	1.46	1.11	1.49	0.78	1.41	1.6	1.37	1.62	1.58	1.21	1.22	1.1	0.91
LKA	0.68	0.57	0.64	0.53	0.66	0.49	0.58	0.85	0.73	0.83	0.76	0.75	0.94	1.02	1.2	1.29	1.15	1.52	0.68	1.46	1.6	1.32	1.52	1.53	1.23	1.24	1.12	0.85
LTU	0.85	0.7	0.77	0.65	0.85	0.7	0.77	1.06	0.93	1.04	1.01	1.01	1.23	1.47	1.82	1.9	1.44	1.7	0.83	1.79	2.06	1.93	2.08	1.92	1.57	1.69	1.64	1.39
LVA	0.81	0.66	0.73	0.62	0.8	0.66	0.73	1	0.89	0.98	0.94	0.95	1.17	1.39	1.7	1.71	1.28	1.56	0.72	1.59	1.84	1.69	1.83	1.71	1.34	1.46	1.39	1.17
MAC	0.93	0.78	0.78	0.65	0.79	0.61	0.67	0.89	0.76	0.94	0.96	1	0.95	1.09	1.39	1.32	1.21	1.42	1.29	2.01	2.26	2.28	2.23	2.03	1.8	1.94	1.83	1.4
MAR	0.85	0.65	0.74	0.62	0.79	0.66	0.71	0.97	0.84	0.93	0.86	0.85	1.02	1.2	1.46	1.49	1.16	1.33	0.73	1.39	1.56	1.45	1.62	1.53	1.21	1.27	1.22	1.07
MDA	0.77	0.62	0.67	0.58	0.73	0.59	0.66	0.91	0.79	0.88	0.83	0.83	1.03	1.21	1.51	1.59	1.15	1.41	0.7	1.48	1.68	1.55	1.65	1.56	1.22	1.33	1.26	1.04
MDG	0.56	0.42	0.46	0.37	0.48	0.37	0.42	0.61	0.53	0.58	0.52	0.5	0.6	0.7	0.87	0.89	0.66	0.8	0.42	0.86	0.98	0.91	1.03	0.96	0.74	0.78	0.74	0.61
MDV	0.57	0.45	0.52	0.44	0.56	0.42	0.5	0.74	0.63	0.71	0.66	0.67	0.86	0.94	1.13	1.22	1.08	1.47	0.57	1.3	2.09	1.8	2.06	1.44	1.14	1.19	1.08	0.8
MEX	1.47	1.17	1.08	0.88	1.28	1.1	1.26	1.73	1.54	1.63	1.4	1.24	1.47	1.7	1.99	1.99	1.64	1.69	0.86	1.84	2.13	1.93	2.55	2.55	1.86	1.96	1.91	1.65
MKD	0.8	0.65	0.7	0.59	0.75	0.59	0.67	0.93	0.79	0.88	0.82	0.82	0.96	1.16	1.42	1.44	1.09	1.29	0.73	1.43	1.6	1.57	1.71	1.62	1.32	1.43	1.38	1.18
MLT	1.08	0.86	1	0.82	1.01	0.82	0.93	1.28	1.06	1.19	1.1	1.09	1.4	1.55	1.9	2.03	1.56	2.06	1.01	1.9	2.16	1.87	2.16	2.11	1.78	1.8	1.67	1.37
MMR	0.68	0.55	0.62	0.51	0.66	0.49	0.61	0.87	0.74	0.84	0.76	0.76	0.99	1.05	1.25	1.37	1.26	1.7	3.96	1.72	1.98	1.8	1.84	1.84	1.48	1.5	1.36	1.07
MNG	0.63	0.49	0.51	0.42	0.54	0.42	0.47	0.67	0.58	0.64	0.57	0.54	0.64	0.76	0.92	0.93	0.7	0.84	0.44	0.97	1.12	1.1	1.21	1.14	0.85	0.9	0.85	0.71
MOZ	0.56	0.43	0.46	0.37	0.49	0.38	0.43	0.63	0.55	0.59	0.52	0.5	0.6	0.71	0.85	0.86	0.66	0.77	0.4	0.88	1.04	0.93	1.02	0.93	0.72	0.76	0.71	0.59
MUS	0.8	0.61	0.66	0.54	0.66	0.52	0.62	0.84	0.68	0.87	0.72	0.73	0.93	1.04	1.35	1.42	1.16	1.55	0.72	1.41	1.64	1.38	1.62	1.51	1.22	1.23	1.1	0.87
MWI	0.66	0.5	0.56	0.46	0.59	0.44	0.53	0.78	0.64	0.74	0.68	0.69	0.91	1	1.25	1.37	1.1	1.53	0.67	1.37	1.58	1.29	1.52	1.48	1.17	1.18	1.06	0.84
MYS	1.07	0.85	1.02	0.79	1.01	0.71	0.84	1.27	1	1.11	0.96	0.97	1.23	1.34	1.61	1.67	1.49	2.02	0.88	1.84	2.06	1.77	1.97	1.98	1.65	1.66	1.49	1.15
NER	0.68	0.52	0.57	0.47	0.6	0.47	0.53	0.75	0.63	0.71	0.64	0.63	0.76	0.9	1.1	1.14	0.85	1.04	0.55	1.09	1.25	1.15	1.3	1.22	0.94	0.97	0.88	0.74
NGA	1	0.72	0.82	0.64	0.68	0.52	0.61	0.87	0.73	0.85	0.77	0.79	1.02	1.13	1.42	1.52	1.29	1.71	0.8	1.54	1.78	1.47	1.69	1.59	1.24	1.26	1.16	0.98
NIC	0.63	0.49	0.52	0.42	0.58	0.46	0.53	0.74	0.64	0.71	0.64	0.61	0.73	0.87	1.05	1.05	0.77	0.92	0.55	1.05	1.18	1.12	1.28	1.23	0.93	0.98	0.91	0.79
NLD	2.66	2.06	2.08	1.68	2.07	1.68	1.9	2.38	2.02	2.09	1.88	2.12	2.72	3.13	3.84	4.3	3.57	3.5	2.1	3.77	4.02	3.79	4.24	4.1	3.48	3.75	3.77	3.58
NOR	1.33	1.08	1.18	0.97	1.25	1.01	1.09	1.4	1.21	1.33	1.22	1.17	1.37	1.6	1.95	1.95	1.54	1.67	0.92	1.85	1.98	1.86	1.98	1.86	1.51	1.6	1.53	1.35
NPL	0.63	0.49	0.52	0.43	0.55	0.43	0.48	0.69	0.59	0.65	0.58	0.55	0.65	0.76	0.94	0.97	0.77	0.87	0.49	1.03	1.19	1.19	1.31	1.26	1.01	1.07	1.04	0.86
NZL	1.03	0.81	0.91	0.71	0.88	0.63	0.72	0.93	0.78	0.86	0.81	0.77	0.91	1.01	1.22	1.2	0.94	1.04	0.68	1.2	1.33	1.23	1.38	1.31	1.08	1.11	1.05	0.95
OMN	0.72	0.56	0.61	0.5	0.65	0.51	0.55	0.78	0.69	0.74	0.65	0.66	0.76	0.92	1.14	1.21	0.94	1.06	0.62	1.21	1.34	1.28	1.48	1.33	1.1	1.1	1.04	0.88
PAK	0.92	0.69	0.78	0.65	0.82	0.62	0.77	1.09	0.9	1.04	0.95	0.96	1.25	1.32	1.64	1.88	1.73	2.32	0.89	2.01	2.33	1.86	2.19	2.2	1.81	1.78	1.6	1.25
PAN	0.86	0.69	0.73	0.6	0.79	0.65	0.73	0.98	0.86	0.94	0.65	0.6	0.73	1.05	1.24	1.27	1.07	1.24	0.77	1.42	1.5	1.39	1.54	1.41	1.15	1.16	1.09	0.88
PER	0.76	0.59	0.66	0.53	0.71	0.56	0.64	0.89	0.78	0.83	0.72	0.68	0.81	0.95	1.19	1.24	1.01	1.14	0.63	1.32	1.87	1.64	1.8	1.7	1.45	1.52	1.45	1.29
PHL	0.78	0.61	0.7	0.61	0.77	0.54	0.62	0.85	0.72	0.79	0.69	0.64	0.75	1	1.2	1.24	0.8	0.95	0.65	1.13	1.25	1.22	1.37	1.36	1.15	1.24	1.21	0.97
PNG	0.62	0.46	0.48	0.39	0.5	0.36	0.43	0.6	0.5	0.56	0.5	0.48	0.58	0.68	0.84	0.86	0.6	0.73	0.48	0.86	0.94	0.89	1.01	0.96	0.72	0.74	0.69	0.6

Table C.15: Continued on next page

Table C.15: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
POL	1.54	1.24	1.42	1.11	1.47	1.22	1.33	1.72	1.51	1.6	1.5	1.5	1.77	2.07	2.61	2.73	2.21	2.25	1.23	2.34	2.66	2.55	2.72	2.56	2.16	2.48	2.31	2.1
PRT	1.2	0.89	0.99	1.01	1.22	1.01	1.16	1.4	1.24	1.34	1.27	1.24	1.42	1.61	1.94	1.93	1.54	1.64	0.86	1.57	1.71	1.67	1.84	1.72	1.41	1.56	1.47	1.29
PRY	0.66	0.52	0.56	0.44	0.58	0.46	0.49	0.7	0.59	0.61	0.55	0.54	0.65	0.79	0.99	1.04	0.79	0.94	0.52	1.05	1.2	1.12	1.24	1.13	0.88	0.92	0.85	0.74
QAT	0.79	0.63	0.69	0.58	0.77	0.59	0.68	0.99	0.84	0.96	0.87	0.92	1.26	1.43	1.74	1.98	1.83	2.45	1.07	2.07	2.37	1.95	2.31	2.29	1.91	1.91	1.78	1.37
ROU	1.04	0.84	0.92	0.77	0.95	0.77	0.78	1.07	0.92	1.01	0.92	0.92	1.13	1.38	1.82	1.87	1.38	1.49	0.82	1.59	1.76	1.71	1.88	1.79	1.43	1.57	1.53	1.35
RUS	1.05	0.84	0.92	0.81	1.01	0.72	0.76	1.02	0.95	1.01	1	0.95	1.16	1.44	1.85	2.02	1.53	1.74	0.91	1.97	2.23	1.97	1.94	1.75	1.44	1.56	1.54	1.36
RWA	0.68	0.5	0.54	0.45	0.59	0.44	0.51	0.71	0.6	0.68	0.6	0.59	0.7	0.87	1.04	1.08	0.75	0.9	0.61	1.02	1.12	1.06	1.21	1.14	0.87	0.9	0.85	0.74
SAU	1.1	0.79	0.86	0.67	0.93	0.69	0.77	1.03	0.9	0.96	0.85	0.78	0.91	1.07	1.32	1.37	1.15	1.3	0.73	1.5	1.67	1.53	1.83	1.66	1.37	1.41	1.47	1.26
SCG	0.82	0.74	0.75	0.67	0.85	0.69	0.76	1.07	0.87	0.97	0.92	0.91	1.01	2.79	3.53	3.7	2.83	2.8	1.58	3	3.44	3.15	2.03	1.9	2.58	2.86	2.75	2.5
SEN	0.67	0.51	0.56	0.45	0.58	0.46	0.52	0.73	0.62	0.7	0.63	0.62	0.75	0.88	1.08	1.11	0.84	1.01	0.53	1.06	1.19	1.11	1.24	1.17	0.9	0.94	0.87	0.74
SGP	3.8	3.52	3.83	3.66	4.53	3.09	3.01	4.05	3.03	2.93	2.55	2.58	2.84	2.88	3.54	3.5	3.39	3.98	2.39	4.43	4.88	4.58	4.62	4.76	4.79	4.17	4.17	3.3
SLE	0.79	0.61	0.67	0.54	0.69	0.52	0.6	0.85	0.7	0.83	0.76	0.76	0.98	1.09	1.35	1.45	1.14	1.54	0.72	1.42	1.63	1.36	1.6	1.53	1.19	1.19	1.08	0.87
SLV	0.66	0.52	0.56	0.46	0.63	0.52	0.58	0.81	0.72	0.8	0.72	0.68	0.81	0.95	1.13	1.13	0.86	1	0.61	1.12	1.28	1.2	1.38	1.31	1.01	1.06	0.99	0.85
SOM	0.69	0.52	0.6	0.49	0.63	0.47	0.57	0.83	0.68	0.8	0.73	0.76	1	1.1	1.37	1.55	1.25	1.77	0.78	1.55	1.77	1.42	1.7	1.68	1.33	1.31	1.18	0.92
SUR	0.63	0.48	0.51	0.41	0.55	0.44	0.49	0.69	0.59	0.65	0.58	0.56	0.67	0.8	0.96	0.96	0.72	0.86	0.43	0.96	1.08	1.02	1.14	1.06	0.79	0.85	0.79	0.67
SVK	1	0.85	1.07	0.78	1.02	0.87	0.95	1.28	1.13	1.24	1.15	1.14	1.31	1.55	1.97	2.02	1.54	1.74	0.95	1.89	2.13	2.06	2.22	2.1	1.72	1.87	1.78	1.52
SVN	1.23	0.98	1.05	0.87	1.1	0.91	0.98	1.27	1.1	1.22	1.14	1.13	1.3	1.52	1.87	1.95	1.5	1.64	0.87	1.68	1.85	1.81	1.94	1.84	1.47	1.62	1.54	1.3
SWE	1.48	1.19	1.37	1.09	1.35	1.12	1.23	1.53	1.3	1.52	1.4	1.38	1.5	1.72	2.14	2.26	1.81	1.96	1.07	2.06	2.25	2.1	2.22	2.11	1.74	1.84	1.75	1.61
SYR	0.87	0.7	0.73	0.61	0.79	0.62	0.69	0.96	0.84	0.96	0.86	0.83	0.93	1.08	1.3	1.34	1.03	1.22	0.62	1.27	1.44	1.34	1.54	1.44	1.1	1.17	1.1	0.89
THA	1.04	0.83	0.97	0.83	0.93	0.64	0.64	0.9	0.81	0.9	0.81	0.74	0.94	1.09	1.34	1.39	1.17	1.37	0.83	1.8	1.96	1.58	1.73	1.56	1.49	1.59	1.51	1.31
TJK	0.61	0.48	0.52	0.44	0.57	0.44	0.5	0.71	0.61	0.68	0.62	0.6	0.74	0.86	1.05	1.11	0.85	1.04	0.52	1.12	1.29	1.22	1.34	1.26	0.96	1.02	0.97	0.79
TKM	0.63	0.5	0.54	0.45	0.6	0.46	0.53	0.74	0.63	0.71	0.65	0.64	0.78	0.91	1.11	1.15	0.88	1.06	0.52	1.14	1.29	1.19	1.32	1.25	0.97	1.02	0.99	0.84
TON	0.58	0.43	0.48	0.39	0.5	0.36	0.44	0.65	0.53	0.62	0.56	0.56	0.73	0.81	1	1.08	0.83	1.14	0.52	1.06	1.22	1.01	1.2	1.18	0.9	0.9	0.81	0.65
TTO	0.84	0.63	0.69	0.58	0.73	0.59	0.68	0.96	0.84	0.93	0.82	0.8	1.02	1.16	1.41	1.5	1.17	1.5	0.79	1.48	1.66	1.43	1.68	1.64	1.28	1.32	1.2	1
TUN	1.03	0.79	0.86	0.71	0.9	0.74	0.83	1.11	0.96	1.06	0.95	0.93	1.1	1.28	1.55	1.59	1.25	1.46	0.83	1.52	1.72	1.58	1.75	1.65	1.29	1.31	1.23	1.05
TUR	1.04	0.74	0.88	0.77	1.03	0.84	0.93	1.27	1.01	1.3	1.25	1.27	1.59	1.84	2.32	2.38	2.19	2.23	1.25	2.49	2.75	2.48	2.67	2.46	2.04	2	1.89	1.65
TZA	0.7	0.53	0.59	0.49	0.62	0.47	0.56	0.81	0.67	0.78	0.71	0.72	0.94	1.06	1.33	1.47	1.2	1.61	0.7	1.45	1.67	1.37	1.61	1.57	1.24	1.25	1.13	0.91
UGA	0.7	0.54	0.61	0.5	0.64	0.48	0.58	0.84	0.69	0.8	0.73	0.75	0.98	1.09	1.35	1.49	1.21	1.66	0.71	1.49	1.72	1.4	1.66	1.61	1.27	1.28	1.16	0.92
UKR	0.94	0.72	0.74	0.63	0.82	0.65	0.71	0.99	0.88	0.98	0.93	0.92	1.14	1.37	1.7	1.8	1.3	1.55	0.75	1.69	1.9	1.71	1.79	1.67	1.34	1.47	1.43	1.2
URY	0.73	0.55	0.57	0.46	0.62	0.5	0.53	0.73	0.61	0.6	0.56	0.56	0.67	0.81	1	1.04	0.77	0.93	0.52	1.05	1.2	1.11	1.25	1.13	0.89	0.91	0.83	0.71
USA	6.94	5.32	5.38	3.91	5.8	5.06	5.95	7.56	6.78	7.75	6.42	5.36	6.34	6.88	7.73	7.02	6.89	6.73	3.41	7.26	8.27	7.28	9.09	8.61	7.24	7.41	7.06	6.97
UZB	0.62	0.48	0.53	0.46	0.6	0.46	0.51	0.72	0.61	0.68	0.62	0.62	0.76	0.89	1.08	1.12	0.86	1.05	0.51	1.12	1.29	1.2	1.33	1.3	1.01	1.05	1.02	0.86
VEN	0.93	0.65	0.71	0.53	0.72	0.55	0.63	0.86	0.76	0.77	0.66	0.65	0.8	0.95	1.15	1.24	0.95	1.03	0.61	1.22	1.3	1.09	1.22	1.14	0.85	0.91	0.84	0.71
VNM	0.69	0.57	0.65	0.56	0.74	0.55	0.64	0.92	0.81	0.87	0.76	0.7	0.82	0.95	1.13	1.15	0.94	1.05	0.59	1.15	1.35	1.25	1.45	1.34	1.1	1.09	1.02	1.24
YEM	0.72	0.54	0.61	0.51	0.64	0.49	0.57	0.83	0.7	0.8	0.74	0.77	1	1.1	1.35	1.48	1.29	1.76	0.68	1.51	1.77	1.45	1.67	1.64	1.34	1.32	1.21	0.9
ZAF	1.4	1.07	1.13	0.86	1.09	0.88	0.96	1.21	1.21	1.17	1	0.93	1.08	1.22	1.4	1.41	1.26	1.32	0.84	1.54	1.53	1.28	1.45	1.28	1.06	1.03	0.96	0.77
ZMB	0.68	0.51	0.57	0.47	0.61	0.45	0.54	0.8	0.65	0.76	0.69	0.69	0.92	1.01	1.26	1.38	1.1	1.52	0.66	1.38	1.58	1.3	1.53	1.48	1.18	1.18	1.08	0.85
ZWE	0.79	0.6	0.68	0.54	0.7	0.51	0.6	0.85	0.71	0.82	0.72	0.72	0.94	1.03	1.27	1.37	1.1	1.52	0.65	1.37	1.57	1.28	1.51	1.46	1.15	1.15	1.04	0.82

Table C.16: OMR in the textile sector by country and year (TLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	0.92	0.66	0.48	0.42	0.36	0.31	0.24	0.19	0.17	0.15	0.14	0.18	0.16	0.27	0.18	0.23	0.16	0.15	0.22	0.26	0.26	0.29	0.29	0.25	0.22	0.26	0.26	0.2
AGO	0.8	0.56	0.4	0.34	0.29	0.25	0.19	0.15	0.13	0.11	0.12	0.14	0.13	0.22	0.14	0.19	0.13	0.12	0.17	0.21	0.2	0.23	0.22	0.18	0.16	0.19	0.19	0.15
ALB	1.41	1.16	0.94	0.89	0.7	0.64	0.53	0.42	0.38	0.34	0.35	0.43	0.38	0.57	0.44	0.53	0.38	0.37	0.5	0.54	0.56	0.62	0.6	0.56	0.48	0.57	0.57	0.47
ARE	1.33	1.73	1.51	1.2	0.98	0.77	0.49	0.52	0.45	0.42	0.45	0.5	0.35	0.88	0.44	0.57	0.65	0.65	0.9	0.8	0.75	0.83	0.83	0.77	0.71	0.77	0.79	0.54
ARG	2.18	1.37	0.89	0.76	0.66	0.55	0.41	0.3	0.24	0.16	0.19	0.24	0.22	0.36	0.26	0.32	0.22	0.24	0.35	0.4	0.4	0.41	0.43	0.36	0.31	0.32	0.31	0.24
ARM	0.93	0.7	0.54	0.46	0.41	0.36	0.28	0.23	0.2	0.17	0.17	0.21	0.19	0.3	0.21	0.27	0.18	0.18	0.26	0.29	0.29	0.32	0.31	0.27	0.24	0.3	0.3	0.23
AUS	2.16	1.4	0.99	0.8	0.61	0.48	0.4	0.28	0.22	0.21	0.22	0.25	0.22	0.33	0.23	0.28	0.18	0.19	0.26	0.32	0.32	0.34	0.35	0.31	0.28	0.33	0.35	0.31
AUT	4.63	3.11	2.51	1.95	1.55	1.37	1.09	0.82	0.71	0.62	0.63	0.74	0.64	0.93	0.69	0.82	0.58	0.55	0.73	0.77	0.79	0.86	0.82	0.75	0.68	0.79	0.8	0.71
AZE	1.05	0.72	0.58	0.48	0.42	0.36	0.28	0.22	0.2	0.17	0.17	0.21	0.18	0.3	0.21	0.26	0.18	0.18	0.26	0.29	0.29	0.31	0.3	0.27	0.24	0.29	0.29	0.23
BDI	0.85	0.59	0.43	0.36	0.3	0.26	0.2	0.16	0.14	0.12	0.12	0.15	0.13	0.22	0.14	0.19	0.13	0.12	0.17	0.2	0.2	0.22	0.23	0.19	0.17	0.2	0.2	0.16
BEL	6.65	4.48	3.41	2.84	2.41	2.07	1.68	1.27	1.09	0.98	1	1.11	1.85	2.42	1.06	1.99	1.46	1.08	1.42	1.52	1.51	1.68	1.57	1.42	1.25	1.38	1.37	1.29

Table C.16: Continued on next page

Table C.16: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BEN	0.93	0.64	0.52	0.45	0.4	0.34	0.26	0.2	0.18	0.16	0.16	0.2	0.18	0.27	0.19	0.23	0.16	0.16	0.22	0.24	0.24	0.27	0.26	0.22	0.19	0.23	0.23	0.18
BFA	0.91	0.64	0.48	0.46	0.38	0.33	0.25	0.2	0.18	0.16	0.15	0.18	0.16	0.26	0.17	0.22	0.15	0.14	0.2	0.23	0.23	0.26	0.25	0.21	0.19	0.22	0.23	0.18
BGD	1.21	0.99	0.76	0.61	0.46	0.36	0.31	0.23	0.21	0.2	0.19	0.21	0.19	0.28	0.2	0.26	0.2	0.2	0.26	0.32	0.33	0.4	0.43	0.34	0.31	0.37	0.39	0.35
BGR	1.22	0.88	0.69	0.62	0.55	0.49	0.39	0.34	0.32	0.3	0.31	0.36	0.33	0.5	0.37	0.44	0.28	0.3	0.41	0.44	0.45	0.5	0.48	0.43	0.38	0.46	0.44	0.35
BHR	1.3	0.98	0.76	0.65	0.58	0.49	0.49	0.28	0.28	0.21	0.21	0.26	0.25	0.32	0.24	0.35	0.23	0.25	0.33	0.33	0.34	0.43	0.44	0.41	0.37	0.42	0.39	0.32
BHS	1.31	0.95	0.72	0.6	0.53	0.48	0.41	0.32	0.3	0.28	0.27	0.32	0.29	0.43	0.3	0.34	0.22	0.2	0.28	0.32	0.31	0.35	0.37	0.32	0.28	0.33	0.33	0.28
BIH	1.08	0.83	0.65	0.59	0.52	0.47	0.37	0.31	0.27	0.25	0.26	0.32	0.29	0.47	0.34	0.42	0.28	0.27	0.37	0.42	0.41	0.48	0.46	0.41	0.34	0.42	0.42	0.31
BLR	1.12	0.85	0.66	0.57	0.5	0.47	0.36	0.29	0.25	0.23	0.24	0.29	0.26	0.42	0.31	0.4	0.27	0.27	0.38	0.42	0.42	0.46	0.42	0.37	0.34	0.4	0.4	0.32
BLZ	1.41	1.03	0.72	0.61	0.52	0.47	0.39	0.31	0.28	0.26	0.26	0.3	0.27	0.41	0.28	0.34	0.2	0.19	0.26	0.3	0.29	0.34	0.35	0.31	0.26	0.31	0.31	0.26
BMU	1.54	1.27	0.85	0.71	0.66	0.63	0.54	0.44	0.4	0.45	0.4	0.42	0.39	0.62	0.51	0.6	0.39	0.25	0.33	0.37	0.34	0.39	0.41	0.39	0.32	0.37	0.42	0.32
BOL	1.11	0.75	0.53	0.45	0.39	0.34	0.26	0.21	0.18	0.15	0.15	0.18	0.16	0.26	0.18	0.22	0.14	0.14	0.21	0.24	0.24	0.26	0.26	0.21	0.18	0.22	0.22	0.17
BRA	2.83	1.84	1.23	1.08	0.85	0.67	0.46	0.35	0.27	0.22	0.22	0.26	0.24	0.4	0.3	0.38	0.28	0.31	0.44	0.5	0.5	0.51	0.44	0.36	0.35	0.4	0.41	0.32
BRB	1.2	0.86	0.65	0.55	0.48	0.43	0.36	0.29	0.26	0.23	0.23	0.26	0.24	0.36	0.24	0.3	0.19	0.18	0.25	0.28	0.27	0.31	0.31	0.28	0.24	0.28	0.28	0.23
BRN	0.93	0.59	0.61	0.62	0.31	0.25	0.2	0.16	0.13	0.11	0.11	0.14	0.12	0.19	0.13	0.16	0.11	0.11	0.16	0.2	0.2	0.21	0.22	0.18	0.15	0.19	0.19	0.14
BTN	0.82	0.59	0.44	0.37	0.32	0.26	0.21	0.16	0.15	0.13	0.13	0.16	0.14	0.24	0.16	0.21	0.14	0.14	0.2	0.24	0.25	0.27	0.28	0.24	0.2	0.25	0.24	0.19
CAF	0.86	0.6	0.44	0.37	0.31	0.27	0.21	0.16	0.14	0.13	0.13	0.15	0.14	0.23	0.15	0.2	0.13	0.13	0.18	0.21	0.21	0.23	0.23	0.2	0.17	0.21	0.21	0.16
CAN	5.27	3.48	2.49	2.06	1.81	1.71	1.54	1.23	1.14	1.04	0.99	1.09	0.95	1.27	0.89	0.87	0.55	0.56	0.72	0.77	0.78	0.84	0.89	0.76	0.66	0.79	0.84	0.81
CHE	5.27	3.65	2.86	2.35	1.78	1.6	1.29	0.95	0.82	0.77	0.76	0.88	0.78	1.13	0.85	1.03	0.7	0.7	0.91	0.98	0.96	1.04	1.03	0.98	0.9	1.09	1.11	0.89
CHL	1.62	1.07	0.75	0.62	0.52	0.43	0.32	0.25	0.21	0.17	0.17	0.21	0.19	0.32	0.23	0.29	0.19	0.21	0.3	0.37	0.36	0.38	0.37	0.32	0.29	0.34	0.35	0.27
CHN	2.09	1.29	0.89	0.77	0.61	0.49	0.37	0.28	0.26	0.23	0.25	0.32	0.28	0.5	0.33	0.45	0.36	0.38	0.57	0.77	0.86	0.97	1.02	0.89	0.74	0.76	0.8	0.62
CIV	1.03	0.66	0.49	0.42	0.36	0.31	0.24	0.18	0.16	0.14	0.14	0.17	0.15	0.25	0.17	0.21	0.14	0.14	0.19	0.23	0.22	0.26	0.25	0.21	0.19	0.22	0.23	0.18
CMR	1.29	0.86	0.65	0.55	0.46	0.39	0.31	0.22	0.21	0.19	0.19	0.23	0.2	0.31	0.21	0.27	0.17	0.16	0.22	0.26	0.25	0.29	0.29	0.25	0.22	0.26	0.26	0.22
COG	0.83	0.63	0.43	0.36	0.31	0.26	0.2	0.16	0.14	0.12	0.12	0.15	0.13	0.22	0.14	0.19	0.13	0.12	0.18	0.21	0.2	0.22	0.24	0.19	0.16	0.22	0.2	0.15
COL	1.75	1.2	0.85	0.7	0.59	0.49	0.37	0.29	0.26	0.22	0.21	0.25	0.23	0.37	0.27	0.32	0.22	0.24	0.34	0.37	0.39	0.41	0.4	0.33	0.29	0.35	0.35	0.27
CPV	0.82	0.6	0.44	0.37	0.33	0.28	0.22	0.17	0.15	0.14	0.13	0.17	0.15	0.24	0.17	0.21	0.14	0.14	0.19	0.22	0.22	0.24	0.24	0.2	0.18	0.22	0.21	0.17
CRI	1.37	0.96	0.69	0.56	0.5	0.47	0.34	0.28	0.24	0.21	0.18	0.22	0.21	0.32	0.23	0.28	0.18	0.19	0.26	0.3	0.3	0.33	0.33	0.28	0.25	0.29	0.29	0.24
CUB	1.43	1.02	0.73	0.62	0.55	0.51	0.45	0.37	0.32	0.28	0.27	0.31	0.27	0.4	0.27	0.3	0.19	0.2	0.27	0.3	0.3	0.32	0.33	0.27	0.23	0.28	0.27	0.23
CYP	1.27	0.91	0.73	0.61	0.53	0.45	0.35	0.28	0.25	0.23	0.23	0.27	0.24	0.37	0.27	0.34	0.24	0.23	0.3	0.33	0.31	0.35	0.35	0.31	0.27	0.32	0.32	0.25
CZE	2.43	1.75	1.46	1.23	1.02	0.93	0.74	0.57	0.5	0.45	0.44	0.54	0.51	0.74	0.54	0.66	0.46	0.45	0.61	0.64	0.64	0.71	0.69	0.63	0.57	0.68	0.68	0.59
DEU	12.37	7.58	5.37	4.04	3.05	2.6	2.01	1.39	1.21	1.02	1	1.11	1.02	1.51	1.02	1.25	0.96	0.94	1.22	1.28	1.32	1.45	1.38	1.24	1.14	1.3	1.35	1.31
DNK	2.75	1.97	1.64	1.33	1.16	1.06	0.86	0.64	0.63	0.57	0.54	0.62	0.57	0.84	0.65	0.75	0.5	0.49	0.63	0.68	0.67	0.76	0.71	0.64	0.59	0.68	0.68	0.59
DOM	2.01	1.41	1.02	0.85	0.72	0.59	0.51	0.41	0.27	0.28	0.23	0.27	0.27	0.4	0.29	0.34	0.21	0.2	0.32	0.32	0.32	0.36	0.36	0.31	0.27	0.31	0.31	0.25
DZA	1.5	1.02	0.76	0.64	0.55	0.49	0.38	0.3	0.26	0.24	0.24	0.29	0.27	0.42	0.29	0.37	0.25	0.23	0.33	0.36	0.36	0.4	0.4	0.35	0.31	0.34	0.33	0.26
ECU	1.11	0.79	0.58	0.48	0.41	0.36	0.27	0.22	0.2	0.18	0.17	0.21	0.19	0.3	0.21	0.26	0.17	0.17	0.25	0.28	0.29	0.31	0.31	0.25	0.22	0.26	0.26	0.2
EGY	1.52	1.05	0.8	0.68	0.58	0.5	0.39	0.29	0.23	0.2	0.19	0.24	0.21	0.34	0.23	0.33	0.22	0.21	0.29	0.33	0.32	0.37	0.37	0.32	0.31	0.51	0.56	0.47
ESP	4.14	2.78	2.1	1.77	1.42	1.21	1.01	0.75	0.63	0.56	0.59	0.69	0.64	0.94	0.69	0.81	0.54	0.54	0.69	0.71	0.72	0.8	0.79	0.73	0.67	0.78	0.79	0.65
EST	1.06	0.77	0.66	0.58	0.51	0.45	0.36	0.28	0.25	0.23	0.25	0.28	0.26	0.42	0.3	0.38	0.26	0.25	0.35	0.39	0.39	0.44	0.39	0.35	0.31	0.37	0.37	0.29
ETH	1.14	0.8	0.57	0.48	0.41	0.34	0.28	0.21	0.19	0.17	0.17	0.2	0.18	0.3	0.2	0.24	0.16	0.15	0.21	0.26	0.26	0.3	0.31	0.28	0.24	0.3	0.3	0.24
FIN	1.94	1.42	1.09	0.92	0.73	0.66	0.53	0.39	0.34	0.3	0.3	0.36	0.32	0.5	0.36	0.44	0.29	0.29	0.39	0.43	0.43	0.47	0.45	0.39	0.36	0.41	0.42	0.35
FJI	1.05	0.77	0.54	0.45	0.36	0.3	0.26	0.18	0.15	0.12	0.13	0.15	0.13	0.21	0.14	0.17	0.11	0.1	0.15	0.17	0.2	0.2	0.2	0.17	0.15	0.18	0.21	0.14
FRA	5.95	3.93	2.96	2.56	1.98	1.71	1.32	0.97	0.82	0.76	0.77	0.88	0.83	1.07	0.79	0.92	0.67	0.68	0.91	0.97	0.95	1.02	1	0.91	0.79	0.9	0.89	0.89
GAB	0.86	0.6	0.45	0.37	0.32	0.27	0.21	0.16	0.14	0.13	0.13	0.16	0.14	0.23	0.15	0.2	0.13	0.13	0.18	0.21	0.2	0.23	0.23	0.19	0.17	0.21	0.2	0.16
GBR	6.38	4.55	3.42	2.83	2.54	2.11	1.72	1.37	1.18	1.09	1.1	1.25	1.13	1.57	1.15	1.26	0.89	0.91	1.15	1.17	1.19	1.51	1.52	1.41	1.22	1.28	1.34	1.25
GEO	0.95	0.68	0.53	0.46	0.41	0.35	0.27	0.22	0.19	0.17	0.17	0.21	0.19	0.31	0.22	0.27	0.19	0.19	0.27	0.3	0.3	0.33	0.32	0.28	0.24	0.29	0.29	0.23
GHA	1.16	0.81	0.61	0.5	0.43	0.36	0.28	0.21	0.19	0.17	0.18	0.22	0.2	0.32	0.22	0.27	0.18	0.18	0.25	0.28	0.28	0.3	0.3	0.23	0.2	0.24	0.24	0.19
GMB	1.17	0.81	0.56	0.47	0.4	0.35	0.28	0.21	0.19	0.18	0.18	0.21	0.19	0.3	0.2	0.24	0.16	0.15	0.21	0.24	0.23	0.26	0.27	0.23	0.2	0.24	0.24	0.2
GRC	1.86	1.41	1.11	0.94	0.77	0.67	0.54	0.39	0.33	0.3	0.35	0.42	0.37	0.56	0.42	0.52	0.36	0.33	0.41	0.43	0.43	0.48	0.45	0.4	0.36	0.43	0.44	0.34
GTM	1.24	0.9	0.63	0.53	0.47	0.41	0.33	0.27	0.24	0.23	0.22	0.25	0.25	0.35	0.26	0.31	0.2	0.2	0.27	0.31	0.32	0.35	0.36	0.31	0.28	0.33	0.33	0.27
HKG	7.57	6.84	6.53	6.13	5.18	3.54	2.78	2.49	2.17	1.68	1.61	1.69	1.56	1.94	1.53	1.64	1.34	1.55	1.91	2.25	2.44	2.28	1.95	1.79	1.74	1.84	1.72	1.02
HND	1.26	0.9	0.67	0.57	0.49	0.41	0.35	0.29	0.25	0.23	0.22	0.24	0.23	0.34	0.25	0.34	0.2	0.2	0.27	0.3	0.36	0.34	0.35	0.31	0.28	0.33	0.32	0.26
HRV	1.48	1.12	0.89	0.79	0.7	0.62	0.5	0.41	0.35	0.32	0.33	0.39	0.35	0.54	0.4	0.5	0.34	0.32	0.43	0.46	0.47	0.54	0.52	0.46	0.42	0.49	0.48	0.39
HTI	1.01	0.71	0.54	0.46	0.42	0.34	0.28	0.23	0.19	0.17	0.16	0.19	0.18	0.28	0.2	0.24	0.16	0.16	0.22	0.25	0.25	0.28	0.28	0.24	0.2	0.24	0.24	0.2
HUN	1.59	1.18	0.93	0.9	0.84	0.73	0.61	0.48	0.42	0.37	0.38	0.44	0.39	0.57	0.43	0.52	0.36	0.35	0.48	0.51	0.52	0.59	0.59	0.51	0.46	0.55	0.54	0.46
IDN	1.45	1	0.75	0.64	0.45	0.22	0.25	0.18	0.13	0.14	0.14	0.17	0.14	0.25	0.17	0.21	0.16	0.17	0.25	0.3	0.3	0.32	0.36	0.33	0.3	0.39	0.43	0.35
IND	2.06	1.4	1.02	0.79	0.68	0.5	0.42	0.31	0.26	0.23	0.23	0.27	0.26	0.44	0.29	0.38	0.26	0.28	0.36	0.45	0.46	0.49	0.5	0.45	0.41	0.47	0.47	0.38
IRL	2.52	1.81	1.35	1.18	1.05	0.95	0.81	0.66	0.59	0.57	0.58	0.68	0.62	0.93	0.71	0.75	0.59	0.52	0.7	0.81	0.73	0.88	0.89	0.91	0.89	1	1.06	0.85
IRN	1.45	1.12	0.81	0.72	0.64	0.53	0.43	0.34	0.3	0.2	0.19	0.23	0.2	0.32	0.24	0.3	0.21	0.2	0.28	0.36	0.32	0.34	0.33	0.31	0.28	0.33	0.36	0.35
IRQ	2.02	1.56	1.84	1.59	1.69	1.31	0.98	0.68	0.55	0.44	0.39	0.4	0.29	0.37	0.24	0.31	0.23	0.22	0.29	0.35	0.36	0.33	0.42	0.37	0.25	0.3	0.3	0.24
ISL	1.02	0.74	0.57	0.48	0.42	0.36	0.29	0.23	0.2	0.18	0.18	0.22	0.2	0.32	0.23	0.27	0.18	0.17	0.24	0.28	0.27	0.31	0.31	0.27	0.23	0.28	0.28	0.22

Table C.16: Continued on next page

Table C.16: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
ISR	2.46	1.78	1.29	1.04	0.88	0.75	0.62	0.46	0.42	0.35	0.33	0.38	0.34	0.51	0.37	0.45	0.32	0.32	0.44	0.48	0.48	0.53	0.53	0.5	0.45	0.55	0.58	0.47
ITA	4.35	3.17	2.74	2.37	1.92	1.74	1.35	1.04	0.88	0.8	0.8	0.96	0.83	1.23	0.92	1.06	0.73	0.75	0.99	0.98	0.95	1.04	0.98	0.86	0.78	0.93	0.9	0.74
JAM	1.73	1.26	0.93	0.77	0.64	0.53	0.45	0.34	0.29	0.26	0.25	0.29	0.26	0.38	0.27	0.31	0.2	0.19	0.25	0.29	0.28	0.32	0.33	0.29	0.25	0.3	0.3	0.25
JOR	1.4	1.02	0.79	0.7	0.63	0.55	0.43	0.33	0.29	0.26	0.26	0.3	0.26	0.39	0.27	0.33	0.23	0.22	0.3	0.33	0.31	0.34	0.39	0.31	0.27	0.31	0.32	0.25
JPN	12.27	8.65	6.79	5.35	3.66	2.56	2.16	1.54	1.25	0.97	0.93	0.99	0.8	1.12	0.75	0.84	0.63	0.63	0.89	1.08	1.06	1.04	1.02	0.95	0.84	1.01	1.07	0.9
KAZ	1.03	0.68	0.5	0.42	0.35	0.29	0.22	0.18	0.16	0.14	0.14	0.18	0.15	0.26	0.18	0.23	0.15	0.16	0.22	0.27	0.28	0.3	0.29	0.25	0.21	0.26	0.26	0.2
KEN	1.1	0.77	0.56	0.47	0.4	0.33	0.27	0.2	0.19	0.16	0.15	0.18	0.17	0.27	0.18	0.22	0.15	0.16	0.22	0.27	0.25	0.3	0.29	0.24	0.21	0.25	0.26	0.21
KGZ	0.92	0.64	0.48	0.41	0.35	0.29	0.22	0.18	0.16	0.14	0.14	0.17	0.15	0.25	0.17	0.23	0.15	0.15	0.22	0.26	0.26	0.29	0.28	0.25	0.21	0.26	0.26	0.19
KHM	0.88	0.63	0.48	0.41	0.36	0.31	0.26	0.2	0.17	0.15	0.15	0.18	0.16	0.26	0.18	0.23	0.16	0.17	0.24	0.3	0.3	0.34	0.35	0.3	0.27	0.31	0.31	0.25
KOR	2.66	2.02	1.71	1.53	1.07	0.58	0.57	0.47	0.41	0.39	0.38	0.43	0.4	0.67	0.44	0.49	0.35	0.43	0.55	0.63	0.67	0.74	0.74	0.67	0.58	0.72	0.74	0.61
KWT	1.94	1.23	1.1	0.81	0.74	0.65	0.49	0.32	0.28	0.25	0.23	0.26	0.26	0.41	0.29	0.35	0.26	0.25	0.34	0.39	0.41	0.44	0.46	0.41	0.35	0.4	0.42	0.35
LAO	0.86	0.63	0.47	0.38	0.32	0.25	0.21	0.17	0.15	0.13	0.13	0.15	0.14	0.23	0.16	0.2	0.14	0.13	0.2	0.24	0.25	0.27	0.28	0.23	0.2	0.24	0.24	0.18
LBN	1.82	1.31	0.98	0.82	0.72	0.61	0.48	0.36	0.33	0.3	0.29	0.34	0.29	0.46	0.3	0.41	0.31	0.28	0.36	0.41	0.4	0.44	0.46	0.41	0.36	0.41	0.4	0.29
LBR	1.1	0.76	0.55	0.46	0.39	0.34	0.27	0.2	0.19	0.17	0.17	0.2	0.18	0.29	0.2	0.24	0.15	0.14	0.2	0.24	0.23	0.27	0.27	0.24	0.2	0.24	0.24	0.2
LBY	1.21	0.83	0.64	0.55	0.49	0.45	0.34	0.26	0.23	0.21	0.2	0.25	0.23	0.36	0.25	0.32	0.21	0.2	0.28	0.33	0.33	0.36	0.35	0.3	0.26	0.32	0.32	0.24
LCA	1.24	0.86	0.63	0.53	0.45	0.4	0.33	0.25	0.23	0.21	0.21	0.25	0.22	0.34	0.23	0.27	0.18	0.17	0.23	0.26	0.25	0.29	0.29	0.26	0.22	0.26	0.27	0.22
LKA	1.19	0.86	0.65	0.53	0.43	0.35	0.29	0.21	0.19	0.17	0.17	0.2	0.17	0.26	0.23	0.18	0.13	0.13	0.19	0.26	0.29	0.31	0.31	0.29	0.25	0.31	0.3	0.24
LTU	1.25	0.92	0.72	0.62	0.55	0.48	0.38	0.31	0.27	0.25	0.25	0.31	0.28	0.44	0.32	0.4	0.27	0.26	0.37	0.4	0.41	0.46	0.43	0.38	0.34	0.4	0.4	0.33
LVA	1.1	0.83	0.64	0.57	0.5	0.47	0.35	0.28	0.25	0.23	0.24	0.28	0.26	0.41	0.3	0.37	0.25	0.24	0.34	0.38	0.38	0.42	0.4	0.35	0.32	0.38	0.38	0.3
MAC	1.42	1.06	0.82	0.76	0.82	0.73	0.64	0.49	0.44	0.4	0.39	0.44	0.41	0.58	0.42	0.5	0.32	0.33	0.5	0.63	0.69	0.75	0.7	0.59	0.58	0.68	0.69	0.49
MAR	1.41	1	0.73	0.62	0.53	0.5	0.4	0.31	0.27	0.25	0.25	0.29	0.26	0.4	0.3	0.39	0.24	0.23	0.31	0.35	0.34	0.38	0.4	0.35	0.29	0.35	0.37	0.34
MDA	1.07	0.8	0.61	0.54	0.46	0.41	0.32	0.26	0.25	0.23	0.23	0.28	0.25	0.4	0.29	0.35	0.24	0.24	0.33	0.37	0.37	0.41	0.39	0.35	0.31	0.37	0.36	0.28
MDG	0.86	0.57	0.41	0.34	0.28	0.23	0.18	0.14	0.12	0.1	0.11	0.13	0.12	0.19	0.13	0.17	0.12	0.11	0.16	0.19	0.19	0.21	0.21	0.18	0.16	0.2	0.2	0.16
MDV	0.77	0.53	0.42	0.36	0.3	0.25	0.22	0.18	0.16	0.14	0.13	0.15	0.12	0.19	0.13	0.17	0.12	0.12	0.17	0.2	0.34	0.37	0.38	0.19	0.17	0.21	0.22	0.15
MEX	2.2	1.84	1.14	0.95	0.81	0.71	0.58	0.47	0.42	0.36	0.36	0.39	0.34	0.49	0.34	0.38	0.25	0.27	0.36	0.4	0.42	0.44	0.44	0.36	0.33	0.4	0.42	0.36
MKD	1.1	0.88	0.81	0.6	0.53	0.49	0.36	0.3	0.27	0.25	0.26	0.31	0.28	0.44	0.33	0.41	0.27	0.26	0.37	0.39	0.38	0.43	0.43	0.39	0.34	0.41	0.4	0.32
MLT	1.54	1.16	0.85	0.73	0.64	0.56	0.46	0.36	0.32	0.29	0.3	0.4	0.33	0.5	0.36	0.43	0.32	0.29	0.39	0.42	0.41	0.5	0.5	0.5	0.39	0.46	0.47	0.41
MMR	0.91	0.68	0.51	0.42	0.35	0.28	0.23	0.19	0.17	0.14	0.14	0.16	0.14	0.23	0.16	0.2	0.15	0.14	0.19	0.28	0.32	0.38	0.42	0.39	0.36	0.43	0.45	0.38
MNG	0.83	0.59	0.44	0.37	0.31	0.26	0.2	0.16	0.15	0.13	0.13	0.16	0.14	0.23	0.16	0.2	0.14	0.14	0.21	0.25	0.25	0.27	0.27	0.23	0.19	0.23	0.24	0.18
MOZ	0.77	0.53	0.38	0.32	0.27	0.22	0.18	0.15	0.13	0.11	0.12	0.14	0.13	0.2	0.14	0.17	0.11	0.11	0.16	0.19	0.19	0.2	0.2	0.17	0.15	0.18	0.18	0.14
MUS	1.45	1.06	0.78	0.68	0.54	0.42	0.36	0.25	0.23	0.2	0.17	0.2	0.18	0.3	0.21	0.25	0.17	0.16	0.22	0.26	0.25	0.28	0.27	0.28	0.23	0.27	0.26	0.2
MWI	1.05	0.68	0.48	0.4	0.34	0.28	0.23	0.17	0.15	0.14	0.14	0.17	0.14	0.23	0.15	0.19	0.13	0.12	0.17	0.2	0.2	0.22	0.23	0.19	0.17	0.2	0.2	0.16
MYS	1.21	0.88	0.72	0.54	0.42	0.33	0.25	0.18	0.16	0.15	0.14	0.17	0.14	0.24	0.17	0.23	0.15	0.17	0.26	0.31	0.32	0.35	0.35	0.27	0.24	0.29	0.29	0.21
NER	0.99	0.69	0.52	0.45	0.39	0.33	0.25	0.2	0.17	0.16	0.15	0.19	0.17	0.27	0.18	0.23	0.16	0.15	0.21	0.24	0.24	0.27	0.27	0.23	0.2	0.24	0.24	0.19
NGA	1.4	0.93	0.92	0.78	0.67	0.51	0.37	0.27	0.25	0.22	0.22	0.27	0.24	0.34	0.24	0.29	0.2	0.21	0.28	0.3	0.31	0.34	0.34	0.3	0.26	0.3	0.3	0.26
NIC	1.03	0.72	0.51	0.43	0.37	0.33	0.27	0.23	0.21	0.19	0.18	0.21	0.2	0.3	0.22	0.27	0.17	0.17	0.24	0.28	0.29	0.31	0.31	0.29	0.26	0.31	0.31	0.25
NLD	5.29	3.65	2.67	2.38	2.42	1.68	1.44	1.09	0.91	0.79	0.82	0.91	0.82	1.15	0.89	1.06	0.79	0.75	1.04	1.08	1.09	1.22	1.22	1.14	1.07	1.25	1.3	1.15
NOR	2.18	1.53	1.14	0.94	0.78	0.67	0.54	0.42	0.36	0.32	0.31	0.37	0.34	0.51	0.38	0.47	0.32	0.32	0.43	0.48	0.46	0.5	0.48	0.42	0.39	0.45	0.45	0.38
NPL	0.85	0.64	0.46	0.38	0.33	0.28	0.23	0.18	0.16	0.13	0.14	0.16	0.15	0.25	0.17	0.22	0.15	0.15	0.21	0.25	0.26	0.28	0.29	0.24	0.21	0.26	0.26	0.2
NZL	1.45	0.97	0.67	0.52	0.45	0.37	0.32	0.22	0.19	0.17	0.17	0.2	0.19	0.29	0.2	0.23	0.17	0.16	0.25	0.26	0.27	0.31	0.31	0.28	0.24	0.28	0.29	0.24
OMN	1.15	0.87	0.66	0.55	0.48	0.4	0.3	0.25	0.22	0.2	0.2	0.24	0.19	0.36	0.22	0.29	0.21	0.2	0.28	0.3	0.3	0.33	0.35	0.3	0.26	0.31	0.3	0.23
PAK	1.55	1.1	0.77	0.63	0.52	0.45	0.36	0.26	0.23	0.21	0.21	0.25	0.23	0.38	0.27	0.34	0.23	0.22	0.31	0.37	0.37	0.42	0.45	0.42	0.37	0.41	0.41	0.34
PAN	1.21	0.84	0.62	0.49	0.42	0.37	0.3	0.24	0.21	0.19	0.17	0.21	0.19	0.41	0.31	0.35	0.24	0.28	0.39	0.45	0.4	0.42	0.42	0.34	0.3	0.35	0.36	0.26
PER	1.38	0.97	0.71	0.6	0.52	0.43	0.34	0.27	0.24	0.21	0.2	0.24	0.21	0.33	0.23	0.28	0.18	0.2	0.29	0.33	0.35	0.37	0.36	0.31	0.27	0.33	0.33	0.26
PHL	1.32	0.85	0.64	0.62	0.48	0.36	0.28	0.21	0.19	0.17	0.16	0.21	0.2	0.31	0.19	0.23	0.16	0.15	0.21	0.27	0.28	0.32	0.32	0.28	0.25	0.31	0.31	0.23
PNG	0.98	0.66	0.46	0.38	0.31	0.25	0.21	0.15	0.13	0.12	0.12	0.15	0.13	0.21	0.14	0.18	0.11	0.11	0.15	0.19	0.19	0.21	0.22	0.19	0.16	0.19	0.2	0.15
POL	2.57	1.75	1.33	1.07	0.93	0.8	0.63	0.49	0.43	0.38	0.37	0.47	0.42	0.64	0.47	0.59	0.39	0.41	0.59	0.62	0.64	0.72	0.7	0.64	0.59	0.74	0.73	0.67
PRT	2.74	1.92	1.52	1.32	1.1	0.97	0.78	0.57	0.5	0.43	0.45	0.49	0.43	0.64	0.46	0.54	0.41	0.4	0.51	0.53	0.54	0.6	0.57	0.52	0.48	0.57	0.59	0.45
PRY	1.09	0.76	0.53	0.46	0.4	0.35	0.27	0.21	0.18	0.14	0.15	0.18	0.17	0.27	0.19	0.25	0.16	0.16	0.24	0.26	0.26	0.28	0.27	0.23	0.2	0.24	0.23	0.18
QAT	1.14	0.8	0.62	0.54	0.49	0.4	0.32	0.26	0.23	0.2	0.19	0.3	0.22	0.36	0.25	0.32	0.24	0.24	0.35	0.38	0.39	0.44	0.45	0.43	0.4	0.47	0.42	0.34
ROU	1.55	1.09	0.82	0.72	0.57	0.49	0.4	0.33	0.36	0.33	0.33	0.39	0.36	0.53	0.4	0.44	0.29	0.31	0.45	0.49	0.49	0.56	0.54	0.49	0.44	0.52	0.5	0.36
RUS	1.68	1.06	0.78	0.67	0.56	0.45	0.33	0.26	0.23	0.21	0.22	0.28	0.24	0.4	0.29	0.37	0.25	0.26	0.36	0.44	0.44	0.47	0.42	0.38	0.36	0.42	0.43	0.35
RWA	1.14	0.77	0.56	0.46	0.39	0.33	0.27	0.2	0.18	0.16	0.16	0.2	0.18	0.29	0.19	0.24	0.15	0.15	0.2	0.24	0.24	0.27	0.28	0.25	0.21	0.26	0.26	0.22
SAU	2.11	1.24	0.97	0.79	0.75	0.58	0.44	0.33	0.29	0.25	0.25	0.29	0.24	0.4	0.26	0.33	0.25	0.23	0.32	0.36	0.37	0.4	0.44	0.38	0.33	0.39	0.41	0.32
SCG	1.13	0.99	0.77	0.73	0.62	0.55	0.44	0.37	0.3	0.27	0.28	0.34	0.29	0.88	0.65	0.82	0.58	0.52	0.72	0.8	0.84	0.91	0.52	0.46	0.69	0.82	0.81	0.72
SEN	0.95	0.65	0.5	0.41	0.35	0.3	0.23	0.18	0.16	0.15	0.14	0.17	0.16	0.25	0.17	0.22	0.15	0.14	0.2	0.23	0.22	0.25	0.25	0.21	0.19	0.22	0.23	0.18
SGP	5.77	4.42	3.38	3.49	3.02	1.97	1.61	1.15	1.23	0.98	0.96	0.98	0.8	1.19	0.93	1.12	0.87	0.82	1.04	1.19	1.24	1.24	1.28	1.17	1.22	1.55	1.53	1
SLE	1.07	0.75	0.54	0.46	0.39	0.33	0.27	0.2	0.19	0.17	0.17	0.2	0.18	0.28	0.19	0.23	0.15	0.14	0.2	0.23	0.22	0.26	0.26	0.22	0.19	0.23	0.23	0.19
SLV	1.05	0.76	0.55	0.46	0.51	0.43	0.37	0.34	0.3	0.27	0.26	0.28	0.27	0.38	0.29	0.35	0.23	0.23	0.32	0.35	0.38	0.4	0.41	0.35	0.32	0.38	0.36	0.24

Table C.16: Continued on next page

Table C.16: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
SOM	1.07	0.75	0.55	0.46	0.39	0.32	0.25	0.19	0.17	0.15	0.15	0.19	0.16	0.26	0.17	0.22	0.14	0.13	0.19	0.22	0.21	0.24	0.25	0.22	0.18	0.22	0.23	0.18
SUR	0.87	0.61	0.44	0.37	0.33	0.28	0.22	0.18	0.15	0.13	0.13	0.16	0.14	0.23	0.16	0.2	0.13	0.13	0.19	0.21	0.21	0.23	0.24	0.19	0.17	0.2	0.2	0.16
SVK	1.39	1.14	0.91	0.8	0.78	0.75	0.61	0.5	0.44	0.4	0.41	0.48	0.43	0.63	0.48	0.59	0.42	0.4	0.56	0.59	0.6	0.67	0.65	0.58	0.52	0.62	0.6	0.5
SVN	1.66	1.29	1.13	0.96	0.82	0.74	0.59	0.45	0.39	0.35	0.37	0.44	0.4	0.59	0.44	0.53	0.36	0.35	0.47	0.49	0.48	0.54	0.52	0.46	0.41	0.49	0.48	0.39
SWE	2.52	1.72	1.26	1.03	0.81	0.74	0.63	0.44	0.37	0.33	0.34	0.39	0.35	0.55	0.41	0.49	0.32	0.32	0.44	0.49	0.49	0.54	0.52	0.47	0.43	0.5	0.51	0.43
SYR	2.04	1.47	1.16	1	0.88	0.76	0.61	0.46	0.43	0.38	0.38	0.44	0.37	0.58	0.37	0.48	0.38	0.38	0.43	0.43	0.38	0.38	0.4	0.36	0.31	0.32	0.32	0.24
THA	2.28	1.59	1.25	0.68	0.51	0.33	0.31	0.24	0.21	0.16	0.16	0.19	0.19	0.31	0.22	0.29	0.18	0.19	0.25	0.37	0.39	0.38	0.39	0.34	0.31	0.37	0.37	0.29
TJK	0.89	0.64	0.47	0.41	0.35	0.29	0.23	0.18	0.16	0.14	0.14	0.18	0.16	0.26	0.18	0.24	0.16	0.17	0.24	0.27	0.27	0.3	0.29	0.24	0.21	0.25	0.24	0.18
TKM	0.85	0.63	0.47	0.41	0.37	0.31	0.25	0.2	0.24	0.21	0.15	0.18	0.16	0.26	0.18	0.23	0.16	0.15	0.22	0.26	0.25	0.28	0.28	0.37	0.32	0.36	0.37	0.33
TON	0.86	0.58	0.41	0.34	0.28	0.23	0.18	0.14	0.12	0.11	0.11	0.13	0.11	0.19	0.12	0.15	0.1	0.09	0.13	0.16	0.15	0.18	0.18	0.15	0.13	0.16	0.16	0.13
TTO	1.2	0.83	0.61	0.55	0.45	0.4	0.35	0.29	0.24	0.23	0.21	0.26	0.23	0.35	0.24	0.29	0.19	0.18	0.28	0.29	0.28	0.31	0.33	0.28	0.24	0.28	0.29	0.25
TUN	1.74	1.27	1	0.84	0.71	0.62	0.49	0.37	0.33	0.3	0.29	0.35	0.32	0.48	0.34	0.42	0.3	0.28	0.37	0.41	0.4	0.44	0.43	0.38	0.33	0.44	0.43	0.3
TUR	2.49	1.56	1.31	1.05	0.92	0.75	0.54	0.44	0.35	0.39	0.4	0.49	0.43	0.67	0.49	0.58	0.4	0.44	0.59	0.65	0.67	0.73	0.69	0.61	0.54	0.6	0.6	0.48
TZA	1.05	0.72	0.51	0.42	0.35	0.3	0.24	0.18	0.16	0.14	0.14	0.17	0.15	0.25	0.16	0.2	0.13	0.13	0.18	0.21	0.21	0.24	0.24	0.21	0.18	0.21	0.22	0.18
UGA	1.03	0.73	0.53	0.44	0.37	0.31	0.25	0.19	0.17	0.15	0.15	0.18	0.16	0.26	0.17	0.22	0.14	0.14	0.19	0.23	0.22	0.25	0.25	0.22	0.19	0.22	0.23	0.18
UKR	1.63	1.02	0.69	0.6	0.52	0.45	0.36	0.28	0.25	0.23	0.23	0.28	0.26	0.4	0.29	0.38	0.25	0.25	0.34	0.4	0.39	0.41	0.39	0.34	0.31	0.37	0.38	0.3
URY	1.42	0.99	0.68	0.6	0.52	0.46	0.36	0.27	0.23	0.16	0.18	0.23	0.22	0.34	0.25	0.31	0.2	0.2	0.29	0.32	0.31	0.33	0.34	0.28	0.24	0.26	0.25	0.19
USA	13.55	8.31	5.82	4.49	3.64	3.06	2.56	1.95	1.69	1.42	1.37	1.46	1.25	1.67	1.19	1.14	0.83	0.95	1.17	1.31	1.38	1.42	1.56	1.35	1.23	1.46	1.65	1.78
UZB	0.85	0.64	0.53	0.56	0.44	0.38	0.29	0.23	0.2	0.17	0.17	0.19	0.17	0.27	0.19	0.24	0.17	0.18	0.24	0.3	0.3	0.34	0.35	0.3	0.25	0.29	0.3	0.24
VEN	1.62	1.02	0.81	0.63	0.52	0.45	0.35	0.28	0.24	0.21	0.19	0.22	0.21	0.34	0.25	0.32	0.21	0.19	0.27	0.31	0.29	0.28	0.27	0.23	0.2	0.23	0.23	0.18
VNM	1	0.73	0.55	0.48	0.39	0.3	0.26	0.22	0.19	0.17	0.17	0.2	0.18	0.29	0.21	0.26	0.19	0.2	0.29	0.35	0.37	0.42	0.49	0.38	0.35	0.41	0.39	0.31
YEM	1.02	0.7	0.51	0.43	0.38	0.32	0.24	0.19	0.17	0.15	0.14	0.18	0.15	0.25	0.17	0.22	0.15	0.15	0.21	0.24	0.23	0.26	0.25	0.22	0.19	0.22	0.22	0.17
ZAF	2.17	1.42	1.06	0.79	0.56	0.36	0.4	0.29	0.25	0.21	0.24	0.29	0.25	0.38	0.26	0.31	0.21	0.22	0.29	0.33	0.33	0.35	0.35	0.31	0.27	0.32	0.32	0.25
ZMB	1.05	0.71	0.51	0.42	0.35	0.29	0.23	0.18	0.16	0.14	0.14	0.17	0.15	0.25	0.16	0.2	0.13	0.12	0.18	0.21	0.2	0.22	0.23	0.19	0.17	0.2	0.21	0.17
ZWE	1.38	0.91	0.65	0.52	0.42	0.33	0.27	0.21	0.19	0.16	0.16	0.2	0.17	0.26	0.17	0.21	0.13	0.13	0.19	0.21	0.2	0.23	0.23	0.19	0.17	0.2	0.21	0.16

Table C.17: OMR in the vehicles sector by country and year (TLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	1.2	1.11	1.55	1.58	1.09	0.98	0.84	0.94	1	0.85	0.96	1.14	1.11	1.49	1.2	1.52	1.49	1.6	1.63	2.79	2.73	2.9	2.77	2.67	2.67	2.9	2.88	2.86
AGO	1.03	0.94	1.41	1.31	0.93	0.81	0.7	0.73	0.86	0.68	0.8	1.09	1	1.29	1.26	1.6	1.73	1.62	1.75	3.08	3.28	2.53	2.22	1.98	1.87	2.32	2.23	1.9
ALB	1.44	1.37	1.9	1.97	1.42	1.41	1.24	1.32	1.32	1.18	1.36	1.62	1.51	1.97	1.62	2.01	1.97	1.88	1.88	2.87	2.86	3.08	3.02	2.99	2.79	3.09	3.05	2.77
ARE	2.35	2.89	3.78	3.85	2.91	2.38	1.69	2.01	2.27	2.21	2.67	2.97	2.62	4.52	3.26	4.88	4.66	5.13	5.49	9.55	7.98	8.98	9.48	9.33	15.17	10.45	9.97	9.06
ARG	2.88	2.74	3.09	3.06	2.2	1.88	1.35	1.36	1.18	0.82	1.03	1.32	1.38	1.81	1.55	2.09	1.96	2.42	2.57	3.94	4.1	3.76	3.76	3.67	4.16	4.08	3.25	3.15
ARM	1.29	1.19	1.68	1.72	1.26	1.18	1.01	1.14	1.17	0.98	1.12	1.34	1.27	1.69	1.4	1.78	1.59	1.7	1.74	2.72	2.62	2.8	2.74	2.65	2.52	2.75	2.81	2.66
AUS	2.93	2.74	3.87	3.57	2.23	1.8	1.66	1.61	1.51	1.5	1.79	1.97	1.92	2.32	2.06	2.6	2.68	3.06	3.12	5.41	4.91	4.9	4.48	4.53	5.97	6.11	5.74	5.97
AUT	3.87	3.58	5.03	4.87	3.31	3.18	2.72	2.84	2.79	2.5	2.87	3.52	3.36	4.05	3.24	4.18	3.89	3.86	3.96	5.75	5.69	6.03	5.81	5.93	5.98	6.66	6.42	6.02
AZE	1.31	1.22	1.73	1.83	1.32	1.23	1.03	1.18	1.24	1.01	1.18	1.4	1.36	1.86	1.53	2	1.79	1.88	1.99	3.11	2.98	3.13	2.95	2.89	2.78	3.05	3.19	3.08
BDI	0.96	0.91	1.3	1.27	0.86	0.78	0.67	0.72	0.75	0.66	0.74	0.87	0.83	1.13	0.89	1.13	1.07	1.15	1.17	1.93	1.89	2.02	1.98	1.9	1.79	1.99	2	1.86
BEL	4.92	4.37	6.03	6.04	5.27	5.65	5.37	5.08	5.18	4.67	5.16	5.76	5.53	6.66	5.93	7.14	13.98	12.42	12.16	17.11	17.01	18.81	17.71	19.11	19.94	22.4	23.27	17.49
BEN	1.14	1.06	1.47	1.43	1.01	0.94	0.81	0.85	0.88	0.8	0.91	1.04	1	1.29	1.2	1.44	1.49	1.74	1.68	2.53	2.34	2.49	2.29	2.13	2.01	2.41	2.39	2.23
BFA	1.11	1.04	1.46	1.44	1.01	0.93	0.82	0.87	0.91	0.79	0.87	1.01	0.97	1.27	1.02	1.3	1.25	1.31	1.33	2.2	2.16	2.24	2.19	2.08	1.98	2.25	2.28	2.09
BGD	1.4	1.5	2.06	2	1.35	1.1	0.91	0.99	1.1	1	1.11	1.34	1.19	1.61	1.28	1.65	1.71	1.71	1.87	2.92	2.8	2.97	3.07	2.56	2.58	3.12	3.31	3.24
BGR	1.76	1.56	2.16	2.25	1.61	1.58	1.38	1.49	1.45	1.3	1.53	1.89	1.82	2.38	1.99	2.48	2.11	2.16	2.21	3.35	3.41	3.71	3.64	3.55	3.41	3.8	3.74	3.54
BHR	1.94	1.92	2.24	2.12	2	1.84	1.59	1.31	1.45	1.48	1.72	1.77	1.89	2.11	1.99	3	2.61	2.74	2.67	4.57	4.54	5.13	5.43	5.14	4.71	5.35	5.25	4.41
BHS	3.54	2.56	2.64	3.64	1.63	1.33	1.16	1.19	1.35	1.19	1.29	1.48	1.6	2.31	2.07	2.51	2.13	2.1	1.74	2.94	3.04	3.43	3.48	2.76	2.72	3.05	3.26	2.86
BIH	1.43	1.4	1.94	2.01	1.49	1.45	1.28	1.35	1.35	1.23	1.44	1.73	1.67	2.14	1.78	2.21	1.93	2	2.05	3.07	3.08	3.34	3.24	3.23	3.04	3.4	3.4	3.03
BLR	1.54	1.52	2.11	2.19	1.64	1.66	1.32	1.4	1.45	1.33	1.51	1.81	1.73	2.38	2.05	2.7	2.17	2.32	2.49	3.9	3.84	3.85	3.42	3.33	3.26	3.73	3.94	3.58
BLZ	1.42	1.38	1.8	1.79	1.24	1.08	0.91	1	1.04	0.97	1.03	1.15	1.15	1.52	1.2	2.13	2.08	1.41	1.7	2.5	2.57	2.65	2.45	2.38	2.2	2.55	2.58	3.05
BMU	2.17	3.5	4.21	5.19	3.81	3.27	2.69	3.53	4.36	4.58	4.14	5.34	4.71	8.41	7.29	9.32	4.11	5.71	5.19	3.61	2.71	2.75	4.11	4	2.65	3.23	3.8	3.61
BOL	1.32	1.28	1.81	1.75	1.22	1.09	0.81	0.89	0.87	0.72	0.79	0.95	0.93	1.25	1	1.33	1.25	1.43	1.51	2.4	2.4	2.45	2.36	2.19	2.14	2.38	2.36	2.12
BRA	3.24	3.16	4.86	4.12	2.9	2.3	1.65	1.74	1.68	1.33	1.49	1.78	1.83	2.43	2.22	3.22	3.49	4.13	4.35	6.44	6.45	6.37	5.15	4.32	4.8	5.93	6.08	5.43
BRB	1.37	1.32	1.86	1.83	1.32	1.2	1.04	1.05	1.06	0.99	1.06	1.21	1.26	1.51	1.21	1.48	1.28	1.35	1.43	2.39	2.23	2.32	2.3	2.22	2.09	2.38	2.48	2.35

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Table C.17: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
BRN	1.61	1.48	2.35	2.44	1.43	0.99	0.85	0.84	0.9	0.89	0.91	0.98	0.89	1.19	1.01	1.31	1.32	1.32	1.55	2.26	2.18	2.4	2.32	2.08	2.04	2.37	2.48	2.33
BTN	1.17	1.11	1.56	1.55	1.04	0.9	0.78	0.86	0.91	0.79	0.89	1.08	1.02	1.37	1.08	1.4	1.42	1.58	1.62	2.59	2.6	2.83	2.83	2.7	2.68	3	2.98	2.87
CAF	1.03	0.98	1.37	1.39	0.91	0.84	0.72	0.76	0.79	0.7	0.79	0.92	0.88	1.16	0.96	1.26	1.2	1.26	1.27	2.15	2.05	2.16	2.15	2.01	1.84	2.08	2.12	1.94
CAN	6.46	5.88	7.75	7.29	4.96	4.36	4.03	4.42	4.44	4.04	4.22	4.58	4.4	5.41	4.27	4.73	4.41	4.97	4.93	8.08	8.02	8.29	8.64	8.2	8.22	9.39	9.71	9.74
CHE	4.13	3.92	5.55	5.41	3.64	3.38	3.08	3.06	3.02	2.75	3.02	3.38	3.28	4.1	3.42	4.15	4.17	4.3	4.26	6.31	6.05	6.46	6.34	6.63	6.46	7.21	7.28	7.28
CHL	1.9	1.66	2.47	2.46	1.74	1.39	1	1.06	1	0.88	0.99	1.18	1.32	1.65	1.44	1.91	1.68	2.23	2.42	3.92	3.69	3.45	3.27	3.24	3.46	4.15	3.69	3.01
CHN	3.67	2.9	3.69	3.53	2.24	1.81	1.54	1.62	1.89	1.73	2.11	2.28	2.04	2.79	2.5	3.52	4.54	5.26	5.82	9.76	10.35	11.8	11.35	11.45	14.61	16.41	16.65	18.02
CIV	1.17	1.05	1.49	1.48	1.02	0.93	0.84	0.84	0.92	0.78	0.85	1.02	1.11	1.32	1.03	1.28	1.39	1.39	1.33	2.26	2.63	2.35	2.44	2.17	2.63	2.36	2.27	2.17
CMR	1.21	1.12	1.56	1.57	1.06	0.92	0.79	0.81	0.85	0.78	0.87	1.01	0.97	1.29	1.14	1.55	1.43	1.53	1.65	2.75	2.52	2.61	2.4	2.29	2.08	2.43	2.45	2.38
COG	1.04	1.06	1.36	1.64	0.91	0.85	0.73	0.74	0.79	0.69	0.77	0.93	0.87	1.16	1.24	1.83	2.01	2.24	1.89	3.41	3.3	3.57	4.42	3.39	2.11	2.4	2.14	2.13
COL	2.06	1.94	2.53	2.26	1.68	1.42	1.02	1.09	1.17	1.03	1.09	1.28	1.33	1.78	1.53	1.8	1.78	2.02	2.24	3.46	3.35	3.6	3.27	2.88	2.77	3.19	3.26	2.9
CPV	1.05	1.02	1.41	1.37	0.97	0.9	0.8	0.84	0.87	0.77	0.85	1	0.94	1.23	0.99	1.23	1.13	1.22	1.23	1.99	1.96	2.09	2.05	1.99	1.92	2.06	2.08	1.95
CRI	1.35	1.28	1.61	1.63	1.25	1.22	0.94	0.98	1.02	0.93	1.01	1.12	1.08	1.42	1.17	1.41	1.21	1.39	1.67	2.5	2.45	2.52	2.6	2.54	2.32	2.51	2.41	2.21
CUB	2.04	1.99	2.65	2.59	1.77	1.71	1.52	1.76	1.81	1.52	1.55	1.79	1.64	2.06	1.57	1.85	1.69	1.89	1.82	2.95	3.04	3.16	3.34	3.13	2.88	3.22	3.06	2.91
CYP	1.94	1.72	2.48	2.54	1.59	1.53	1.39	1.35	1.4	1.3	1.42	1.69	1.6	2.12	1.77	2.19	1.89	1.94	1.95	2.9	2.71	3.56	3.42	3.6	3.98	4.03	3.94	3.53
CZE	2.67	2.55	3.7	3.72	2.67	2.56	2.21	2.34	2.39	2.18	2.42	2.92	2.86	3.69	3.07	3.95	3.64	3.76	3.81	5.4	5.43	5.97	5.89	6.01	5.96	6.76	6.65	6.15
DEU	7.34	6.52	9.13	8.69	5.81	5.44	4.81	4.59	4.56	4.03	4.51	5.08	5	6.41	5.11	6.47	6.77	6.49	6.33	9.21	9.1	9.89	9.38	9.87	10.05	11.57	12.18	12.06
DNK	2.86	2.75	3.9	3.75	2.72	2.61	2.19	2.25	2.21	2.03	2.21	2.63	2.63	3.5	2.86	3.48	3.1	3.02	3.04	4.56	4.72	4.87	4.68	4.69	4.69	5.57	5.17	4.98
DOM	1.4	1.42	1.7	1.68	1.25	1.22	1.11	1.21	1.18	1.19	1.07	1.2	1.29	1.59	1.35	1.58	1.35	1.56	1.49	2.44	2.38	2.61	2.68	2.68	2.48	2.81	2.84	2.58
DZA	1.59	1.51	2.09	2.08	1.45	1.37	1.21	1.26	1.27	1.18	1.33	1.57	1.53	1.94	1.61	2.05	2	1.99	1.99	3.38	3.23	3.37	3.19	3.07	2.9	2.88	2.97	2.74
ECU	1.45	1.54	1.89	1.63	1.19	1.09	0.79	0.84	1	0.95	0.97	1.1	1.14	1.46	1.18	1.53	1.47	1.65	1.68	2.62	2.62	2.77	2.56	2.28	2.39	2.78	2.77	2.36
EGY	1.49	1.46	1.98	1.98	1.42	1.31	1.13	1.12	1.12	0.96	1.05	1.25	1.19	1.6	1.3	1.83	1.83	1.95	1.9	3.09	2.97	3.39	3.47	3.4	2.97	3.88	4.04	3.64
ESP	4.42	3.76	5.15	5.23	3.59	3.42	3.34	3.27	3.17	2.87	3.53	3.92	3.86	4.72	4.05	4.34	4.01	4.12	3.87	5.42	5.46	6.18	6.22	6.2	6.28	7.21	7.02	6.23
EST	1.42	1.41	2.06	2.11	1.69	1.64	1.36	1.51	1.53	1.35	1.57	1.86	1.84	2.43	1.97	2.39	1.92	2.06	2.24	3.61	3.61	3.75	3.27	3.22	3.37	3.69	3.73	3.39
ETH	1.11	1.05	1.51	1.48	1	0.86	0.75	0.8	0.83	0.74	0.83	0.97	0.95	1.29	1.03	1.32	1.22	1.32	1.35	2.29	2.25	2.44	2.48	2.43	2.38	2.58	2.55	2.62
FIN	2	1.93	2.74	2.73	1.96	2.12	1.94	2.01	2.02	1.78	1.99	2.33	2.35	3.02	2.53	3.13	2.57	2.65	2.73	3.94	3.96	3.96	4.09	3.72	4.35	4.77	4.89	4.2
FJI	0.99	1	1.33	1.3	0.82	0.68	0.6	0.58	0.62	0.58	0.66	0.73	0.69	0.93	0.71	0.94	0.87	0.91	0.98	1.7	1.73	1.8	1.68	1.65	1.57	1.9	2.02	1.76
FRA	6.44	5.91	8.19	8.17	5.41	5.18	5.49	4.83	4.81	4.9	5.57	5.26	5.15	5.97	5.12	5.71	5.93	5.86	5.78	8.18	8.03	8.86	8.69	10.26	10.47	11.9	11.73	11.55
GAB	1.13	1.03	1.4	1.43	0.97	0.91	0.88	0.79	0.82	0.73	0.83	1	0.92	1.18	1.2	1.82	1.55	1.62	2.43	3.9	4.13	4.42	2.92	3.67	2.56	2.98	2.65	2.57
GBR	7.74	7.23	9.14	8.5	6.54	5.99	5.46	5.36	5.46	5.03	5.73	6.37	5.81	7.45	6.36	6.68	6.05	7.27	7.07	9.7	9.87	11.74	12.29	12.31	12.07	12.8	12.79	13.21
GEO	1.28	1.2	1.71	1.75	1.29	1.18	0.98	1.08	1.08	0.95	1.08	1.34	1.29	1.73	1.43	1.85	1.62	1.77	1.84	2.93	2.89	3.04	2.85	2.79	2.75	3.07	3.13	2.9
GHA	1.31	1.29	1.74	1.79	1.21	1.05	0.9	0.87	0.92	0.85	0.94	1.05	1.06	1.4	1.19	1.51	1.46	1.54	1.64	2.77	2.61	2.62	2.52	2.41	2.43	2.7	2.77	2.18
GMB	1.25	1.2	1.66	1.61	1.09	0.96	0.81	0.84	0.88	0.82	0.9	1.02	0.98	1.32	1.05	1.34	1.23	1.27	1.32	2.24	2.1	2.18	2.14	2.04	1.9	2.22	2.34	2.26
GRC	3.47	2.43	3.27	3.43	2.3	2.3	2.13	2.03	1.88	1.8	2.41	2.62	2.29	2.88	2.57	3.04	3.33	2.78	2.29	3.5	3.32	3.69	3.56	3.54	3.69	3.72	3.53	3.24
GTM	1.41	1.33	1.7	1.63	1.19	1.14	0.99	1.06	1.09	0.99	1.05	1.21	1.16	1.5	1.2	1.46	1.31	1.4	1.45	2.33	2.33	2.47	2.5	2.41	2.27	2.51	2.48	2.32
HKG	15.65	15.26	18.72	16.95	14.7	11.35	8.1	8.64	8.5	7.17	7.82	8.08	8.09	9.38	8.03	8.73	9.28	9.73	11.45	16.89	17.44	18.18	17.34	17.24	10.2	11.52	11.37	11.38
HND	1.19	1.17	1.52	1.49	1.08	1.02	0.89	0.94	0.97	0.87	0.93	1.05	1.02	1.34	1.08	1.31	1.2	1.28	1.37	2.14	2.1	2.22	2.24	2.17	2.03	2.28	2.25	2.05
HRV	1.93	1.82	2.62	2.61	2.06	1.97	1.7	1.77	1.81	1.64	1.89	2.14	2.06	2.62	2.23	2.75	2.35	2.32	2.28	3.44	3.37	3.72	3.59	3.63	3.44	3.94	4.02	3.53
HTI	1.15	1.13	1.58	1.51	1.08	1	0.88	0.96	0.98	0.89	0.94	1.08	1.04	1.35	1.06	1.27	1.14	1.25	1.26	2.06	2.04	2.19	2.2	2.11	1.93	2.17	2.17	1.98
HUN	2.23	2.12	2.72	2.67	2.1	2.16	1.88	1.97	1.9	1.77	2.08	2.44	2.35	3.01	2.49	3.08	2.6	2.6	2.84	4.46	4.69	5.04	4.93	4.8	4.91	5.65	5.5	5.14
IDN	2.1	2.1	3.11	2.95	1.88	0.94	0.87	1.17	1.11	1.04	1.1	1.27	1.24	1.64	1.39	1.99	2.27	2.42	2.58	4.22	3.64	3.6	3.71	3.66	4.07	4.9	4.81	4.82
IND	2.54	2.42	3.54	3.35	2.16	1.52	1.44	1.43	1.51	1.46	1.71	2.16	1.98	2.68	2.27	2.94	3.12	3.4	3.57	5.76	5.46	5.86	5.87	5.66	6.31	7.36	7.25	7.45
IRL	2.5	2.46	3.36	3.39	2.74	2.75	2.53	2.66	2.59	2.33	2.46	2.87	2.84	3.66	3.14	3.4	3.19	3.25	3.35	5.06	4.81	5.59	5.28	5.69	6.24	6.9	7.08	6.61
IRN	1.88	1.58	2.19	2.42	1.77	1.66	1.51	1.76	2.02	1.4	1.62	1.85	1.81	2.29	2.02	2.76	2.83	2.78	2.89	4.21	3.74	4.21	3.85	4.12	4.35	4.09	4.34	5.67
IRQ	1.48	1.46	2.44	2.49	2.04	1.71	1.42	1.48	1.52	1.28	1.3	1.51	1.49	1.84	1.47	2.06	1.99	2.1	2.1	3.75	3.54	3.66	3.57	3.18	2.76	2.98	3.03	2.97
ISL	1.27	1.23	1.72	1.7	1.21	1.19	1.05	1.12	1.11	1.01	1.11	1.3	1.28	1.65	1.32	1.54	1.37	1.45	1.48	2.37	2.37	2.58	2.54	2.52	2.47	2.69	2.6	2.39
ISR	3.37	3.22	4.09	3.99	2.61	2.14	2.39	2.33	2.41	1.75	1.78	2.02	1.99	2.45	2.39	3.05	3.15	3.23	3.28	4.96	4.88	5.27	4.94	5.56	5.32	6.27	7.25	6.42
ITA	5.81	5.1	7.47	7.58	5.62	5.01	4.41	4.32	4.33	4	4.61	5.16	4.92	5.88	5.23	6.08	6.3	5.98	5.87	7.56	7.46	8.1	7.92	8.47	8.57	9.89	9.57	8.99
JAM	1.66	1.53	2.15	2.01	1.46	1.29	1.05	1.1	1.17	1.13	1.15	1.25	1.23	1.66	1.29	1.59	1.41	1.43	1.52	2.53	2.37	2.47	2.58	2.49	2.53	2.75	2.76	2.66
JOR	1.9	1.9	2.5	2.47	1.73	1.51	1.31	1.37	1.48	1.25	1.33	1.54	1.47	1.93	1.62	2.13	2.1	2.06	2.04	3.34	3.2	3.41	3.46	3.22	3.09	3.42	3.64	3.33
JPN	4.47	4.29	6.77	6.39	3.72	2.95	2.69	2.8	2.83	2.34	2.62	2.82	2.63	3.3	2.22	3.03	3.47	3.75	4.39	6.72	6.19	6.79	7.1	7.41	7.19	8.16	8.17	8.17
KAZ	1.19	1.12	1.63	1.68	1.17	1.03	0.87	0.89	0.98	0.86	1	1.18	1.14	1.6	1.36	1.68	1.55	1.68	1.84	3.15	3.16	3.28	2.93	2.75	2.84	3.26	3.34	3.3
KEN	1.41	1.39	1.93	1.78	1.17	1.01	0.78	0.79	0.88	0.8	0.87	0.99	0.96	1.32	1.08	1.38	1.32	1.37	1.42	2.45	2.28	2.41	2.42	2.18	2.18	2.5	2.62	2.49
KGZ	1.14	1.07	1.54	1.57	1.1	1	0.84	0.88	0.95	0.84	0.96	1.12	1.07	1.49	1.23	1.54	1.44	1.54	1.66	2.81	2.76	2.93	2.71	2.56	2.55	2.89	2.97	2.89
KHM	1.22	1.17	1.67	1.72	1.13	0.86	0.74	0.87	0.94	0.83	0.92	1.05	0.96	1.27	1.04	1.36	1.37	1.41	1.45	2.3	2.28	2.43	2.63	2.43	2.37	2.79	3.03	2.76
KOR	4.18	4.16	5.75	5.53	3.5	1.81	1.87	2.03	1.98	1.79	1.81	1.85	1.94	2.6	2.34	2.62	2.68	3.33	3.57	5.51	5.54	6.71	6.72	6.52	6.2	8.16	8.26	8.36
KWT	2.59	2.32	3.09	2.8	2.13	1.92	1.52	1.13	1.22	1.1	1.23	1.4	2.22	2.48	2.19	2.88	2.65	2.76	2.88	5.31	4.95	5.13	4.95	4.39	4.22	4.99	5.29	4.76
LAO	1.35	1.27	1.78	1.84	1.18	0.93	0.8	0.93	0.99	0.86	0.97	1.11	1.01	1.35	1.08	1.41	1.47	1.58	1.65	2.65	2.72	2.94	2.97	2.81	2.79	3.16	3.2	3.06
LBN	1.7	1.69	2.36	2.35	1.77	1.55	1.33	1.36	1.44	1.21	1.35	1.58	1.49	1.89	1.63	2.23	2.4	2.37	2.18	3.34	3.39	3.49	3.53	3.47	3.47	3.67	3.48	2.99

Table C.17: Continued on next page

Table C.17: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
LBR	1.38	1.26	1.58	1.74	1.27	1.12	0.82	0.9	1.01	0.85	0.94	1.09	1.1	1.39	1.07	1.31	1.32	1.29	1.29	2.16	2.11	2.29	2.33	2.08	2.1	2.28	2.36	2.14
LBY	1.36	1.29	1.81	1.84	1.31	1.23	1.06	1.11	1.13	1.04	1.15	1.38	1.3	1.71	1.37	1.73	1.68	1.79	1.62	2.83	2.77	2.84	2.75	2.67	2.46	2.8	2.86	2.43
LCA	1.33	1.29	1.74	1.7	1.18	1.04	0.89	0.94	0.96	0.91	0.99	1.09	1.07	1.44	1.15	1.4	1.26	1.33	1.38	2.3	2.14	2.24	2.22	2.13	1.97	2.28	2.38	2.26
LKA	1.32	1.33	1.77	1.66	1.13	1	0.83	0.86	0.85	0.79	0.91	1.03	0.93	1.27	1.01	1.29	1.18	1.34	1.59	2.37	2.3	2.51	2.68	2.4	2.39	3.07	2.67	2.19
LTU	1.55	1.55	2.18	2.31	1.79	1.69	1.34	1.44	1.51	1.42	1.61	1.89	1.82	2.49	2.21	2.75	2.13	2.32	2.5	3.79	3.78	3.89	3.61	3.61	3.6	4.04	4.11	3.76
LVA	1.47	1.49	2.09	2.11	1.6	1.56	1.28	1.36	1.41	1.29	1.47	1.75	1.69	2.31	1.98	2.41	1.92	2.12	2.28	3.55	3.48	3.68	3.31	3.27	3.23	3.7	3.69	3.32
MAC	1.96	1.86	2.34	2.28	1.73	1.4	1.29	1.19	1.27	1.25	1.4	1.63	1.59	2.02	1.72	2.02	2.03	2.31	2.65	4.17	4.2	4.51	4.89	4.34	4.08	4.69	4.64	4.58
MAR	1.7	1.6	2.18	2.17	1.51	1.43	1.28	1.33	1.32	1.19	1.34	1.57	1.5	1.95	1.65	2.08	2	2.02	1.99	3.2	3.13	3.31	3.28	3.33	3.35	3.95	4.17	4
MDA	1.43	1.37	1.9	1.91	1.39	1.34	1.12	1.21	1.23	1.12	1.29	1.54	1.49	1.99	1.68	2.14	1.72	1.83	1.91	2.99	2.92	3.08	2.96	2.97	2.84	3.23	3.3	3
MDG	0.9	0.86	1.21	1.18	0.79	0.7	0.6	0.65	0.68	0.59	0.67	0.79	0.74	0.99	0.78	1.03	0.97	1.03	1.05	1.76	1.7	1.81	1.78	1.7	1.64	1.86	1.86	1.73
MDV	1.05	1.07	1.51	1.48	1.02	0.87	0.74	0.76	0.81	0.72	0.84	0.94	0.87	1.17	0.94	1.26	1.14	1.17	1.25	2.02	2.28	2.44	2.44	2	1.84	2.21	2.3	2.01
MEX	2.75	2.73	2.67	2.89	2.15	1.99	1.76	2.04	2.09	1.79	1.83	2.06	1.97	2.56	2.14	2.48	2.24	2.37	2.4	4.04	4.38	4.64	4.6	4.26	4.34	4.84	4.69	4.49
MKD	1.51	1.48	2.04	2.06	1.46	1.44	1.28	1.36	1.32	1.2	1.37	1.65	1.54	2.04	1.66	2.08	1.91	1.96	2.01	2.91	2.92	3.15	3.08	2.98	2.89	3.24	3.23	2.96
MLT	1.91	1.86	3.05	2.45	1.71	1.63	1.47	1.43	1.38	1.29	1.54	1.98	1.59	2.1	1.75	2.17	2.64	2.41	2.38	3.6	3.49	3.97	4.17	3.68	3.95	3.74	5.13	3.82
MMR	1.58	1.59	2.22	2.22	1.39	1.07	0.89	0.99	1.08	0.97	1.17	1.29	1.11	1.49	1.18	1.51	1.59	1.65	1.76	2.91	2.92	3.05	3.13	2.76	2.74	3.19	3.3	3.15
MNG	1.16	1.1	1.52	1.54	1.03	0.91	0.77	0.85	0.91	0.79	0.89	1.05	0.97	1.32	1.05	1.38	1.34	1.53	1.6	2.62	2.64	2.85	2.76	2.67	2.7	3.05	3.07	2.95
MOZ	0.95	0.94	1.37	1.28	0.84	0.73	0.66	0.82	0.82	0.69	0.79	0.97	0.93	1.21	0.96	1.16	1.13	1.22	1.27	2.01	2.06	2.12	2.13	1.84	1.8	2.03	2	1.82
MUS	1.3	1.33	1.73	1.65	1.2	0.93	0.92	0.79	0.85	0.75	0.84	0.97	1.01	1.39	1.02	1.31	1.29	1.33	1.35	2.3	2.17	2.41	2.23	2.13	2.08	2.47	2.56	2.32
MWI	1.15	1.13	1.56	1.5	0.99	0.81	0.68	0.71	0.75	0.7	0.77	0.88	0.83	1.16	0.91	1.2	1.13	1.16	1.22	2.13	1.96	2.02	1.96	1.82	1.69	2.06	2.17	2.05
MYS	2.42	2.59	3.8	3.67	2.61	1.44	1.19	1.65	1.26	1.2	1.25	1.43	1.51	2.15	1.51	2.01	2.3	2.42	2.57	4.11	4.08	4.07	3.98	3.87	4.09	4.75	4.78	4.71
NER	1.14	1.07	1.51	1.48	1.02	0.94	0.81	0.85	0.89	0.8	0.89	1.03	0.99	1.3	1.07	1.36	1.33	1.42	1.41	2.34	2.21	2.32	2.26	2.12	1.99	2.31	2.33	2.17
NGA	1.62	1.39	1.88	1.78	1.24	1.06	0.9	0.91	0.97	0.93	1.09	1.18	1.16	1.5	1.61	1.83	2.18	2.73	2.55	3.78	3.04	3.2	2.72	2.48	2.5	3.52	3.46	3.45
NIC	1.12	1.08	1.43	1.42	1.03	0.98	0.84	0.89	0.92	0.83	0.88	1.01	0.98	1.31	1.01	1.24	1.13	1.22	1.82	2.09	2.12	2.19	2.19	2.12	1.99	2.18	2.11	1.95
NLD	4.8	4.24	6.2	5.71	3.91	3.81	3.55	3.52	3.5	3.05	3.34	3.73	3.57	4.45	3.76	4.74	5.09	4.48	4.91	7.48	7.29	8.15	6.38	6.52	6.45	8.02	8.36	7.06
NOR	3.01	2.69	3.6	3.58	2.82	2.62	2.11	2.13	2.08	1.88	2.03	2.32	2.34	3.13	2.81	3.5	3.07	3.22	3.35	5.02	4.82	4.98	4.61	4.41	4.67	5	5.04	5.11
NPL	1.19	1.12	1.58	1.58	1.05	0.92	0.79	0.88	0.92	0.8	0.91	1.1	1.06	1.43	1.14	1.46	1.48	1.66	1.67	2.68	2.7	2.95	2.95	2.86	2.87	3.22	3.15	3
NZL	2.05	2.07	2.71	2.66	1.77	1.3	1.36	1.12	1.12	1.11	1.35	1.47	1.47	1.61	1.47	1.66	1.52	1.73	2.1	3	3.14	3.56	3.3	3.33	3.84	4.24	4.09	3.82
OMN	1.78	1.62	2.1	2.13	1.55	1.28	1	1.11	1.19	1.05	1.18	1.41	1.37	1.93	1.62	2.3	2.1	2.26	2.26	3.03	3.7	2.98	3.67	3.27	3.09	3.31	3.34	3.55
PAK	2.13	1.96	2.65	2.57	1.64	1.32	1.09	1.13	1.23	1.15	1.29	1.5	1.41	2.02	1.66	2.11	2.09	2.15	2.28	3.73	3.45	3.6	3.57	3.42	3.49	4.05	3.73	3.67
PAN	2.01	1.88	2.28	2.22	1.55	1.3	1.09	1.07	1.19	1.04	1.1	1.22	1.29	1.69	1.39	1.72	1.66	1.73	1.75	2.85	2.8	2.98	2.92	2.81	2.61	2.8	2.81	2.35
PER	1.42	1.44	2.07	1.85	1.29	1.13	0.85	0.91	0.93	0.79	0.85	0.99	0.98	1.32	1.11	1.52	1.45	1.74	1.8	3.02	2.98	2.97	2.84	2.69	2.67	3.02	3.03	2.75
PHL	1.91	1.89	2.61	2.81	1.77	1.12	0.98	1.02	1.01	0.86	1.01	1.06	1.05	1.4	1.18	1.58	1.62	1.88	1.97	3.26	3.26	3.49	3.72	4.14	4.81	5.1	4.97	4.42
PNG	1	0.95	1.33	1.32	0.87	0.68	0.57	0.63	0.64	0.58	0.64	0.74	0.72	0.96	0.75	0.99	0.95	1.05	1.11	1.91	1.78	1.87	1.87	1.78	1.76	1.97	1.98	1.9
POL	2.58	2.43	3.45	3.64	2.72	2.58	2.18	2.23	2.2	1.97	2.25	2.75	2.68	3.48	3.01	3.95	3.47	3.61	3.71	5.51	5.6	5.94	5.61	5.68	5.84	6.82	6.76	6.27
PRT	2.72	2.94	4.05	3.86	2.62	2.49	2.31	2.2	2.11	1.8	2	2.39	2.36	2.8	2.61	3.05	2.92	3.19	2.78	3.68	3.75	4.21	4.28	4.46	4.6	5.37	5.23	4.49
PRY	1.42	1.43	2	1.88	1.35	1.2	0.88	0.96	0.94	0.74	0.82	1	0.99	1.34	1.1	1.51	1.43	1.71	1.77	2.68	2.7	2.71	2.5	2.32	2.26	2.59	2.43	2.22
QAT	1.81	1.67	2.24	2.14	2.13	1.38	1.11	1.22	1.3	1.24	1.21	1.58	1.74	2.17	2.3	3.04	2.82	2.84	2.82	4.95	5.03	5.43	5.36	5.09	5.19	5.59	5.29	5.11
ROU	1.84	1.69	2.36	2.41	1.71	1.62	1.34	1.42	1.43	1.31	1.54	1.94	1.97	2.64	2.44	3	2.37	2.47	2.57	3.94	4.16	4.47	4.42	4.42	4.62	5.28	5.24	4.97
RUS	2.02	1.94	2.69	2.89	2.1	1.72	1.31	1.41	1.47	1.32	1.54	1.9	1.9	2.64	2.41	3.28	2.5	2.93	3.26	5.68	5.45	5.34	4.3	4.37	5.41	6.08	6.21	5.96
RWA	1.04	0.97	1.41	1.41	0.95	0.81	0.69	0.73	0.76	0.69	0.77	0.9	0.88	1.19	0.96	1.25	1.15	1.24	1.28	2.17	2.06	2.17	2.14	2.09	1.97	2.18	2.23	2.2
SAU	2.37	1.93	2.46	2.36	2	1.49	1.21	1.34	1.49	1.33	1.54	1.71	1.83	2.36	2	2.76	2.77	2.89	2.86	5.32	5.3	5.46	5.72	4.8	5.04	5.52	6	5.69
SCG	1.49	1.57	2.08	2.24	1.64	1.58	1.37	1.49	1.44	1.32	1.5	1.82	1.63	4.18	3.64	4.66	3.95	4.18	4.41	6.69	7.16	7.56	7.2	7.04	6.89	7.83	7.92	7.29
SEN	1.12	1.05	1.48	1.45	1	0.93	0.81	0.85	0.88	0.8	0.87	1.01	0.98	1.27	1.02	1.29	1.22	1.27	1.27	2.11	2.04	2.15	2.13	2.05	1.95	2.25	2.28	2.08
SGP	10.78	10.97	13.8	15.37	11.34	7.09	6.43	5.91	5.93	4.72	5.37	7.22	6.27	7.46	9.48	10.28	5.89	7.94	8.56	11.04	10.99	11.54	8.76	11.27	15.31	15.14	17.84	13.03
SLE	1.23	1.19	1.62	1.6	1.08	0.94	0.79	0.84	0.87	0.8	0.89	1	0.98	1.28	1.02	1.3	1.22	1.26	1.35	2.27	2.1	2.24	2.14	2	1.88	2.19	2.25	2.12
SLV	1.32	1.3	1.73	1.66	1.15	1.09	0.97	0.98	1	0.92	1	1.15	1.08	1.4	1.11	1.32	1.19	1.3	1.35	2.16	2.18	2.29	2.31	2.25	2.1	2.35	2.33	2.13
SOM	1.21	1.2	1.67	1.6	1.06	0.88	0.71	0.74	0.8	0.74	0.82	0.94	0.88	1.23	0.97	1.3	1.19	1.22	1.29	2.28	2.07	2.14	2.1	1.97	1.84	2.19	2.35	2.25
SUR	1.14	1.12	1.58	1.51	1.05	0.97	0.82	0.89	0.91	0.78	0.85	0.99	0.95	1.24	0.98	1.23	1.17	1.29	1.29	2.09	2.08	2.19	2.11	1.96	1.84	2.1	2.12	1.92
SVK	1.9	1.98	2.77	2.96	2.16	2.21	1.97	2.23	2.29	2.1	2.24	2.7	2.68	3.3	2.57	3.43	3.03	3.06	3.16	4.72	4.93	5.28	5.3	5.15	5.21	5.8	5.05	4.47
SVN	2.45	2.31	3.52	3.39	2.44	2.39	2.05	2.08	2.07	1.8	2.03	2.43	2.32	2.9	2.79	3.02	2.74	2.76	2.69	3.85	3.82	4.2	4.09	4.13	4.08	4.6	4.51	4.13
SWE	2.37	2.38	3.6	3.51	2.45	2.33	1.87	2.06	2.07	1.87	2.24	2.59	2.5	3.19	2.76	3.3	2.98	3.34	3.44	4.98	4.92	5.31	5.21	5.26	5.55	6.06	5.9	5.58
SYR	1.67	1.53	2.14	2.14	1.46	1.33	1.14	1.22	1.34	1.21	1.33	1.61	1.37	1.79	1.46	1.86	1.77	1.89	1.74	2.8	2.73	2.9	2.96	2.87	2.68	2.93	2.95	2.73
THA	3.34	2.83	4.22	4.83	2.72	1.3	1.25	1.44	1.45	1.38	1.49	1.53	1.48	1.83	1.53	1.95	2.25	2.35	2.57	4.63	4.71	4.81	4.54	4.23	4.47	5.07	5.07	4.9
TJK	1.13	1.07	1.5	1.52	1.08	0.98	0.82	0.9	0.94	0.82	0.93	1.1	1.05	1.43	1.16	1.48	1.38	1.52	1.56	2.58	2.55	2.75	2.67	2.53	2.52	2.88	2.93	2.75
TKM	1.12	1.07	1.51	1.55	1.13	1.05	0.91	1.02	1.08	0.88	0.99	1.18	1.12	1.52	1.21	1.56	1.45	1.52	1.56	2.5	2.41	2.6	2.51	2.46	2.33	2.55	2.58	2.47
TON	0.93	0.91	1.26	1.21	0.78	0.65	0.53	0.56	0.59	0.55	0.61	0.68	0.64	0.87	0.68	0.89	0.83	0.87	0.92	1.63	1.52	1.59	1.53	1.47	1.4	1.64	1.72	1.65
TTO	1.46	1.29	1.83	1.89	1.36	1.19	1.04	1.1	1.35	1.15	1.1	1.3	1.21	1.62	1.32	1.58	1.41	1.57	1.84	3.46	2.74	2.85	2.92	2.93	2.53	2.65	2.78	2.68
TUN	1.7	1.62	2.21	2.18	1.59	1.47	1.33	1.34	1.37	1.26	1.45	1.71	1.66	2.14	1.81	2.21	2.14	2.14	2.05	3.37	3.19	3.39	3.26	3.17	3.05	3.3	3.33	3.07
TUR	3.41	2.21	3.44	3.43	2.61	2.18	1.77	2.08	1.61	1.46	1.89	2.46	2.33	2.86	2.43	2.99	2.83	3.21	3.38	4.95	5.04	5.28	5.34	5.06	4.99	4.97	4.72	5.47

Table C.17: Continued on next page

Table C.17: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
TZA	1.27	1.23	1.72	1.61	1.06	0.89	0.72	0.75	0.8	0.74	0.81	0.92	0.87	1.21	0.98	1.29	1.22	1.27	1.34	2.32	2.13	2.2	2.12	1.96	1.84	2.21	2.35	2.23
UGA	1.24	1.24	1.75	1.66	1.09	0.93	0.75	0.78	0.83	0.77	0.85	0.97	0.92	1.28	1.05	1.36	1.29	1.33	1.41	2.36	2.19	2.25	2.2	2.03	1.92	2.27	2.41	2.31
UKR	1.85	1.67	2.28	2.27	1.71	1.58	1.27	1.37	1.42	1.31	1.55	1.88	1.88	2.56	2.3	3.04	2.13	2.39	2.61	4.25	4.02	3.89	3.54	3.51	3.61	4.17	4.39	4.03
URY	1.94	1.99	2.18	2.13	1.58	1.4	1.01	1.1	1.02	0.76	0.87	1.09	1.11	1.48	1.24	1.66	1.5	1.84	1.93	2.88	2.92	2.83	2.73	2.57	2.59	2.72	2.51	2.31
USA	14.58	12.59	16.01	14.47	9.68	8.65	8.38	8.36	8.57	8.06	8.59	8.69	8.19	9.49	7.67	8.17	8.4	9.41	9.1	15.7	16.03	17.12	18.39	17.67	18.22	20.95	21.15	21.92
UZB	1.03	0.99	1.41	1.52	1.18	1.06	0.86	0.91	0.93	0.82	0.94	1.12	1.1	1.5	1.28	1.57	1.35	1.51	1.6	2.67	2.58	2.79	2.67	2.4	2.56	3.11	3.24	3.03
VEN	2.25	1.74	2.53	2.23	1.84	1.64	1.17	1.27	1.38	1.12	1.09	1.36	1.47	1.98	1.7	1.74	1.5	1.56	1.7	2.68	2.46	2.35	2.23	2.09	1.93	2.19	2.19	2
VNM	1.19	1.12	1.55	1.55	1.1	0.92	0.78	1.03	1.16	1.04	1.21	1.38	1.27	1.62	1.47	1.91	2.11	2.1	2.06	2.74	2.7	3.02	4.31	3.96	4.34	4.87	5.16	5.11
YEM	1.33	1.28	1.73	1.71	1.18	1.02	0.83	0.89	0.96	0.86	0.94	1.12	1.05	1.44	1.17	1.56	1.5	1.53	1.52	2.62	2.53	2.59	2.54	2.27	2.1	2.41	2.61	2.39
ZAF	2.77	2.54	3.76	3	1.7	1.15	1.36	1.49	1.49	1.19	1.52	1.91	1.93	2.39	2.02	2.1	2.11	2.43	2.48	3.89	3.65	3.76	3.48	3.05	3.36	3.72	3.57	3.18
ZMB	1.21	1.16	1.61	1.54	1.02	0.84	0.69	0.72	0.77	0.72	0.79	0.91	0.86	1.18	0.95	1.24	1.16	1.21	1.29	2.27	2.11	2.14	2.04	1.89	1.77	2.16	2.21	2.08
ZWE	1.34	1.31	1.83	1.72	1.13	0.88	0.74	0.8	0.83	0.78	0.85	0.99	0.94	1.26	1.01	1.28	1.21	1.36	1.39	2.37	2.12	2.15	2.08	1.9	1.81	2.19	2.22	2.11

Table C.18: OMR in the wood-paper sector by country and year (TLN USD)

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
AFG	0.44	0.4	0.41	0.34	0.27	0.21	0.2	0.26	0.25	0.23	0.19	0.23	0.27	0.28	0.38	0.43	0.37	0.46	0.48	0.45	0.45	0.47	0.47	0.44	0.58	0.59	0.5	0.27
AGO	0.34	0.31	0.31	0.25	0.2	0.15	0.15	0.19	0.19	0.17	0.14	0.17	0.2	0.21	0.33	0.4	0.39	0.39	0.38	0.39	0.35	0.36	0.35	0.3	0.42	0.38	0.33	0.2
ALB	0.57	0.53	0.57	0.49	0.39	0.33	0.33	0.39	0.38	0.36	0.31	0.37	0.41	0.44	0.62	0.71	0.62	0.69	0.68	0.61	0.61	0.6	0.6	0.57	0.66	0.67	0.58	0.4
ARE	0.99	1.78	1.86	1.6	1.22	0.95	0.78	1.13	1.12	1.04	0.96	1.04	0.9	1.32	1.28	1.43	1.56	1.58	1.5	1.21	0.98	1.06	1.12	1	1.9	1.46	1.22	0.83
ARG	1.38	1.09	1	0.87	0.75	0.62	0.56	0.62	0.56	0.32	0.31	0.39	0.46	0.48	0.71	0.85	0.66	0.83	0.86	0.84	0.84	0.77	0.81	0.71	1.09	0.87	0.73	0.5
ARM	0.46	0.42	0.45	0.36	0.3	0.24	0.25	0.3	0.3	0.27	0.23	0.27	0.31	0.33	0.48	0.59	0.45	0.55	0.56	0.53	0.53	0.53	0.53	0.49	0.6	0.64	0.55	0.36
AUS	1.61	1.39	1.33	1.41	1.01	0.76	0.78	0.9	0.81	0.79	0.71	0.83	0.89	0.88	1.07	1.2	0.96	1.12	1.07	1.03	0.96	0.9	0.9	0.84	1.26	1.23	1.02	0.71
AUT	2.43	2.16	2.37	1.85	1.33	1.11	1.13	1.28	1.24	1.17	1.04	1.18	1.25	1.32	1.83	2.08	1.54	1.73	1.72	1.57	1.53	1.53	1.46	1.39	1.88	1.95	1.68	1.12
AZE	0.47	0.41	0.44	0.39	0.31	0.25	0.24	0.3	0.3	0.27	0.23	0.29	0.33	0.34	0.49	0.6	0.46	0.57	0.61	0.58	0.58	0.55	0.56	0.52	0.7	0.69	0.6	0.4
BDI	0.37	0.32	0.33	0.26	0.21	0.17	0.16	0.2	0.2	0.18	0.14	0.17	0.2	0.21	0.28	0.33	0.28	0.33	0.33	0.32	0.31	0.31	0.32	0.28	0.34	0.34	0.29	0.18
BEL	3.37	2.93	3.36	2.71	2.03	1.75	1.76	2.03	3.77	3.42	1.52	1.73	3.55	3.78	5.32	5.95	4.09	3.74	3.75	3.42	3.27	3.27	3.07	2.93	3.48	3.23	2.97	1.99
BEN	0.54	0.4	0.43	0.34	0.27	0.23	0.27	0.3	0.33	0.24	0.2	0.23	0.33	0.33	0.54	0.5	0.4	0.49	0.53	0.51	0.54	0.59	0.51	0.44	0.5	0.5	0.39	0.27
BFA	0.42	0.36	0.38	0.3	0.24	0.19	0.19	0.23	0.24	0.21	0.17	0.2	0.23	0.24	0.34	0.4	0.31	0.38	0.38	0.36	0.36	0.37	0.36	0.33	0.38	0.38	0.31	0.19
BGD	0.87	0.94	0.95	0.78	0.52	0.47	0.52	0.56	0.57	0.5	0.45	0.49	0.53	0.57	0.68	1	0.8	0.99	1.13	1.03	1.03	1.2	1.23	0.52	0.73	0.72	0.63	0.42
BGR	0.75	0.66	0.78	0.68	0.52	0.44	0.44	0.54	0.54	0.53	0.47	0.57	0.64	0.69	0.99	1.11	0.82	0.92	0.92	0.84	0.85	0.85	0.84	0.8	1.04	1.07	0.9	0.6
BHR	1.2	1.19	1.14	0.94	0.7	0.59	0.56	0.71	0.65	0.58	0.47	0.5	0.59	0.55	0.78	1.03	0.81	0.99	0.98	1	0.95	1.03	1.02	0.92	1.12	1.18	1	0.73
BHS	0.56	0.49	0.5	0.4	0.35	0.31	0.31	0.38	0.36	0.33	0.27	0.32	0.35	0.37	0.47	0.53	0.4	0.47	0.47	0.45	0.45	0.45	0.45	0.43	0.54	0.54	0.44	0.25
BIH	0.6	0.56	0.6	0.56	0.48	0.39	0.38	0.45	0.43	0.41	0.37	0.45	0.49	0.52	0.73	0.86	0.66	0.76	0.77	0.69	0.7	0.72	0.7	0.66	0.86	0.89	0.75	0.51
BLR	0.58	0.55	0.59	0.5	0.4	0.38	0.37	0.46	0.46	0.44	0.37	0.45	0.5	0.56	0.8	1.01	0.73	0.89	0.9	0.85	0.86	0.85	0.77	0.7	0.89	0.93	0.81	0.5
BLZ	0.54	0.49	0.45	0.38	0.31	0.26	0.28	0.34	0.33	0.3	0.25	0.28	0.33	0.33	0.45	0.57	0.44	0.5	0.51	0.47	0.46	0.47	0.47	0.43	0.48	0.46	0.4	0.26
BMU	0.77	0.62	0.65	0.52	0.48	0.4	0.38	0.41	0.41	0.37	0.32	0.38	0.45	0.56	0.66	0.74	0.59	0.71	0.68	0.66	0.46	0.46	0.47	0.44	0.47	0.46	0.4	0.25
BOL	0.44	0.38	0.38	0.32	0.26	0.22	0.21	0.24	0.24	0.21	0.16	0.19	0.22	0.22	0.32	0.39	0.31	0.4	0.41	0.4	0.4	0.39	0.4	0.37	0.43	0.42	0.36	0.23
BRA	1.16	0.98	1.12	1.09	0.84	0.65	0.52	0.64	0.58	0.46	0.36	0.41	0.48	0.53	0.78	0.91	0.74	0.96	0.97	0.91	0.88	0.82	0.69	0.63	0.88	0.77	0.7	0.42
BRB	0.77	0.71	0.7	0.63	0.57	0.52	0.52	0.56	0.51	0.46	0.4	0.44	0.5	0.52	0.61	0.69	0.55	0.63	0.58	0.55	0.52	0.51	0.52	0.49	0.63	0.61	0.44	0.32
BRN	0.51	0.57	0.61	0.49	0.38	0.28	0.26	0.34	0.33	0.29	0.23	0.28	0.25	0.27	0.35	0.42	0.34	0.43	0.44	0.43	0.42	0.45	0.43	0.39	0.48	0.49	0.39	0.24
BTN	0.43	0.4	0.55	0.5	0.31	0.23	0.21	0.26	0.27	0.23	0.2	0.23	0.29	0.34	0.44	0.43	0.38	0.51	0.51	0.47	0.47	0.48	0.51	0.45	0.56	0.57	0.46	0.29
CAF	0.39	0.35	0.36	0.27	0.21	0.17	0.17	0.21	0.21	0.19	0.15	0.18	0.2	0.21	0.3	0.35	0.28	0.35	0.35	0.33	0.32	0.32	0.32	0.3	0.37	0.37	0.3	0.19
CAN	1.73	1.49	1.4	1.16	0.91	0.79	0.82	0.96	0.99	0.94	0.77	0.92	1.05	1.06	1.35	1.45	1.17	1.33	1.22	1.21	1.2	1.2	1.24	1.18	1.47	1.47	1.25	0.88
CHE	3.53	3.16	3.31	2.63	1.86	1.57	1.59	1.78	1.71	1.61	1.37	1.54	1.62	1.71	2.3	2.63	2.01	2.23	2.21	2.02	1.98	1.98	1.76	1.64	2.15	2.14	2.08	1.47
CHL	0.85	0.7	0.48	0.33	0.29	0.25	0.21	0.25	0.27	0.23	0.15	0.18	0.22	0.23	0.43	0.62	0.51	0.58	0.55	0.55	0.49	0.51	0.59	0.75	0.64	0.56	0.51	0.32
CHN	2.1	1.53	1.55	1.54	1.16	0.82	0.89	1.13	1.13	1.01	0.98	1.12	1.21	1.26	1.43	1.93	1.84	2.41	2.54	2.48	2.63	2.65	2.73	2.55	4.72	4.32	3.62	2.58
CIV	0.49	0.39	0.38	0.31	0.25	0.21	0.2	0.24	0.24	0.22	0.17	0.2	0.23	0.24	0.35	0.4	0.32	0.39	0.38	0.37	0.37	0.38	0.38	0.35	0.48	0.43	0.37	0.24
CMR	0.5	0.55	0.63	0.33	0.26	0.21	0.22	0.26	0.27	0.25	0.2	0.23	0.26	0.26	0.38	0.44	0.4	0.53	0.53	0.49	0.48	0.39	0.38	0.37	0.51	0.5	0.4	0.26
COG	0.51	0.44	0.45	0.34	0.27	0.22	0.21	0.24	0.25	0.24	0.2	0.24	0.26	0.27	0.37	0.44	0.34	0.41	0.41	0.4	0.38	0.38	0.39	0.35	0.44	0.44	0.36	0.23
COL	0.97	0.85	0.87	0.72	0.57	0.44	0.41	0.49	0.48	0.43	0.34	0.4	0.47	0.49	0.68	0.78	0.62	0.78	0.77	0.77	0.72	0.71	0.68	0.62	0.89	0.9	0.79	0.51
CPV	0.37	0.34	0.35	0.28	0.22	0.19	0.2	0.22	0.22	0.2	0.17	0.19	0.22	0.23	0.31	0.38	0.29	0.36	0.36	0.33	0.33	0.34	0.34	0.31	0.39	0.38	0.31	0.21
CRI	0.9	0.79	0.8	0.67	0.55	0.48	0.48	0.55	0.55	0.51	0.42	0.49	0.53	0.57	0.75	0.85	0.57	0.79	0.81	0.79	0.77	0.75	0.76	0.74	1.01	1	0.89	0.64

Table C.18: Continued on next page

Table C.18: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
CUB	0.57	0.51	0.5	0.41	0.33	0.27	0.31	0.36	0.37	0.33	0.27	0.33	0.37	0.36	0.47	0.55	0.41	0.5	0.49	0.48	0.48	0.47	0.51	0.49	0.55	0.52	0.39	0.25
CYP	1.08	1	1.06	0.9	0.67	0.56	0.54	0.61	0.59	0.55	0.5	0.58	0.6	0.63	0.85	0.95	0.71	0.8	0.76	0.68	0.62	0.63	0.62	0.58	0.73	0.75	0.65	0.43
CZE	1.44	1.33	1.52	1.26	0.96	0.83	0.81	0.93	0.94	0.95	0.78	0.93	1.04	1.11	1.53	1.69	1.25	1.43	1.44	1.29	1.25	1.26	1.24	1.17	1.57	1.62	1.34	0.89
DEU	4.96	4.23	4.4	3.39	2.37	2	2.26	2.27	2.2	1.97	1.62	1.8	1.99	2.08	2.81	2.78	2.18	2.47	2.4	2.15	2.09	2.1	2.03	1.93	2.75	2.78	2.37	1.55
DNK	2.4	2.12	2.52	2.03	1.57	1.32	1.31	1.43	1.37	1.24	1.08	1.2	1.32	1.39	1.9	2.06	1.32	1.44	1.4	1.27	1.23	1.24	1.17	1.1	1.47	1.45	1.23	0.89
DOM	0.94	0.84	0.89	0.81	0.64	0.57	0.6	0.7	0.61	0.82	0.53	0.61	0.72	0.87	1.06	1.22	0.67	0.72	1.11	1.06	1.06	0.72	0.76	0.71	0.87	0.89	0.79	0.55
DZA	0.88	0.73	0.73	0.59	0.44	0.37	0.38	0.45	0.45	0.41	0.34	0.4	0.44	0.45	0.64	0.75	0.58	0.69	0.68	0.67	0.66	0.68	0.64	0.59	0.71	0.57	0.46	0.29
ECU	0.68	0.61	0.63	0.5	0.4	0.34	0.31	0.37	0.4	0.38	0.33	0.38	0.4	0.42	0.56	0.68	0.55	0.66	0.65	0.63	0.62	0.63	0.62	0.55	0.77	0.78	0.68	0.42
EGY	0.88	0.87	0.96	0.78	0.59	0.52	0.49	0.4	0.37	0.32	0.24	0.31	0.35	0.36	0.51	0.94	0.74	0.89	0.85	0.84	0.81	0.81	0.86	0.75	1.3	1.73	1.59	0.92
ESP	3.25	2.73	2.88	2.4	1.75	1.5	1.54	1.75	1.68	1.57	1.4	1.62	1.75	1.8	2.49	2.55	1.69	1.79	1.66	1.43	1.4	1.41	1.38	1.3	1.89	1.99	1.69	1.13
EST	0.54	0.51	0.62	0.5	0.43	0.35	0.35	0.41	0.42	0.41	0.36	0.46	0.53	0.58	0.83	0.91	0.65	0.82	0.83	0.77	0.79	0.77	0.76	0.71	0.99	1.01	0.86	0.59
ETH	0.42	0.38	0.38	0.31	0.25	0.19	0.19	0.23	0.23	0.21	0.17	0.21	0.24	0.25	0.35	0.42	0.33	0.41	0.41	0.4	0.4	0.41	0.42	0.36	0.48	0.46	0.38	0.24
FIN	0.91	0.87	1.09	0.84	0.68	0.54	0.52	0.63	0.61	0.64	0.56	0.67	0.75	0.8	1.17	1.32	0.89	1.1	1.08	0.97	0.97	0.92	0.87	0.82	1.13	1.14	0.92	0.61
FJI	0.5	0.47	0.48	0.41	0.33	0.24	0.25	0.29	0.27	0.24	0.21	0.26	0.26	0.26	0.34	0.39	0.3	0.36	0.36	0.35	0.34	0.35	0.35	0.35	0.45	0.44	0.37	0.24
FRA	4.25	3.68	3.76	3.34	2.39	2.02	2	2.29	2.19	2	1.71	1.95	2.09	2.12	2.97	3.13	2.21	2.39	2.3	2.05	1.99	1.97	1.88	1.78	2.5	2.57	2.19	1.49
GAB	0.66	0.56	0.56	0.45	0.36	0.27	0.28	0.33	0.32	0.3	0.24	0.28	0.31	0.32	0.47	0.53	0.41	0.48	0.46	0.43	0.43	0.42	0.42	0.39	0.44	0.43	0.37	0.2
GBR	6.33	5.73	5.64	4.61	3.59	2.93	2.88	3.4	3.25	3.01	2.46	2.91	3	3.09	4.12	4.11	2.34	2.89	2.68	2.46	2.48	2.57	2.59	2.34	3.26	3.44	2.91	2.12
GEO	0.46	0.41	0.44	0.36	0.29	0.23	0.22	0.28	0.27	0.26	0.22	0.27	0.31	0.33	0.48	0.58	0.45	0.56	0.59	0.55	0.55	0.55	0.53	0.49	0.6	0.62	0.52	0.34
GHA	0.5	0.4	0.45	0.41	0.33	0.26	0.25	0.28	0.28	0.25	0.21	0.29	0.31	0.4	0.54	0.65	0.46	0.58	0.6	0.56	0.56	0.54	0.53	0.53	0.78	0.6	0.57	0.26
GMB	0.53	0.44	0.39	0.31	0.25	0.2	0.2	0.23	0.23	0.22	0.17	0.2	0.23	0.24	0.34	0.4	0.3	0.38	0.39	0.38	0.37	0.37	0.37	0.34	0.41	0.36	0.32	0.19
GRC	1.68	1.53	1.67	1.42	1.02	0.85	0.83	0.87	0.88	0.82	0.85	0.98	1.03	1.1	1.52	1.47	1.09	1.16	1.05	0.91	0.91	0.93	0.88	0.84	1.12	1.16	0.99	0.69
GTM	0.66	0.6	0.61	0.5	0.44	0.38	0.39	0.46	0.47	0.48	0.4	0.47	0.64	0.52	0.8	0.88	0.67	0.8	0.78	0.77	0.78	0.77	0.81	0.76	1.01	1	0.91	0.64
HKG	15.29	18.45	22.19	22.23	17.77	12.41	11.72	13.52	10.27	9.05	7.49	7.83	6.99	6.98	7.09	6.17	4.92	5.65	5.31	4.86	4.78	4.11	3.55	3.52	5.31	5.16	3.94	2.73
HND	0.59	0.5	0.52	0.44	0.35	0.31	0.31	0.37	0.37	0.36	0.3	0.34	0.4	0.41	0.54	0.76	0.48	0.58	0.57	0.55	0.62	0.55	0.57	0.55	0.68	0.68	0.59	0.39
HRV	1.05	0.96	1.02	0.87	0.7	0.58	0.55	0.64	0.66	0.64	0.54	0.63	0.68	0.73	1	1.17	0.89	0.96	0.96	0.86	0.87	0.88	0.84	0.8	1.1	1.16	0.96	0.67
HTI	0.42	0.37	0.41	0.33	0.26	0.19	0.19	0.23	0.23	0.22	0.17	0.2	0.23	0.24	0.32	0.38	0.28	0.35	0.37	0.35	0.35	0.33	0.34	0.32	0.35	0.35	0.29	0.19
HUN	1.43	1.3	1.34	1.09	0.87	0.72	0.73	0.85	0.87	0.83	0.74	0.86	0.89	0.9	1.22	1.42	0.98	1.09	1.09	0.98	0.97	0.99	0.99	0.94	1.26	1.29	1.11	0.76
IDN	0.53	0.55	0.59	0.5	0.32	0.22	0.17	0.26	0.24	0.25	0.24	0.27	0.3	0.32	0.5	0.66	0.57	0.74	0.8	0.77	0.77	0.69	0.7	0.85	1.34	1.46	1.33	0.83
IND	1.13	0.99	1.09	0.86	0.65	0.48	0.51	0.63	0.6	0.55	0.46	0.54	0.67	0.7	1	1.12	0.95	1.25	1.23	1.13	1.13	1.17	1.19	1.1	1.83	1.87	1.59	0.94
IRL	1.91	1.84	1.84	1.7	1.39	1.17	1.23	1.42	1.39	1.3	1.18	1.48	1.58	1.7	2.29	2.16	1.04	1.1	1.02	0.95	0.93	0.97	0.96	0.9	1.12	1.14	1	0.63
IRN	0.79	0.7	0.7	0.63	0.51	0.41	0.42	0.53	0.52	0.4	0.33	0.41	0.45	0.42	0.71	0.82	0.63	0.69	0.73	0.75	0.71	0.67	0.66	0.65	0.94	0.93	0.93	0.78
IRQ	0.54	0.49	0.56	0.47	0.41	0.32	0.31	0.37	0.37	0.33	0.28	0.34	0.37	0.37	0.47	0.55	0.52	0.67	0.65	0.65	0.66	0.56	0.68	0.62	0.5	0.51	0.43	0.28
ISL	0.64	0.56	0.58	0.48	0.39	0.3	0.3	0.35	0.33	0.31	0.27	0.33	0.37	0.39	0.51	0.55	0.41	0.48	0.47	0.43	0.43	0.43	0.43	0.4	0.5	0.5	0.4	0.26
ISR	2.31	2.12	2.3	1.93	1.44	1.17	1.15	1.3	1.24	1.05	0.86	0.95	1.01	1.06	1.42	1.68	1.28	1.56	1.35	1.26	1.29	1.25	1.25	1.19	1.77	1.8	1.54	1.12
ITA	3.27	2.99	3.67	2.91	2.17	1.8	1.82	2.2	2.05	1.88	1.62	1.92	2.04	2.17	2.93	3.21	2.17	2.56	2.45	2.08	2	1.97	1.91	1.81	2.87	3	2.53	1.69
JAM	0.77	0.67	0.69	0.61	0.46	0.39	0.4	0.47	0.44	0.43	0.36	0.4	0.45	0.47	0.58	0.71	0.48	0.56	0.54	0.52	0.5	0.51	0.52	0.46	0.65	0.55	0.46	0.33
JOR	0.94	0.85	0.87	0.71	0.53	0.45	0.45	0.55	0.56	0.51	0.42	0.51	0.55	0.57	0.78	0.93	0.71	0.85	0.83	0.77	0.76	0.79	0.81	0.77	1.03	1.04	0.91	0.57
JPN	11.95	10.13	10.38	9.06	6.12	3.65	4.07	4.86	3.92	3.23	2.7	2.97	2.81	2.74	3.1	3.5	2.98	3.3	3.36	3.25	2.97	2.8	2.66	2.59	4.13	4.2	3.73	2.52
KAZ	0.46	0.38	0.43	0.36	0.29	0.22	0.21	0.26	0.28	0.26	0.22	0.27	0.32	0.35	0.49	0.56	0.46	0.56	0.6	0.56	0.57	0.56	0.54	0.49	0.65	0.65	0.55	0.35
KEN	0.54	0.48	0.5	0.42	0.32	0.25	0.27	0.31	0.32	0.28	0.23	0.28	0.32	0.33	0.46	0.54	0.48	0.58	0.59	0.57	0.54	0.58	0.56	0.48	0.7	0.71	0.56	0.38
KGZ	0.43	0.37	0.41	0.34	0.28	0.22	0.21	0.26	0.27	0.25	0.21	0.25	0.29	0.3	0.43	0.51	0.41	0.51	0.56	0.52	0.53	0.53	0.52	0.48	0.6	0.61	0.52	0.3
KHM	0.64	0.57	0.6	0.46	0.38	0.26	0.26	0.38	0.37	0.37	0.31	0.36	0.4	0.42	0.55	0.66	0.51	0.68	0.7	0.69	0.72	0.82	0.88	0.83	1.47	1.4	1.27	0.83
KOR	3.37	2.73	2.96	2.49	1.45	0.55	0.84	1.19	1.08	1.23	0.98	1.06	1.18	1.28	1.34	1.42	1.04	1.58	1.33	1.16	1.15	1.23	1.28	1.23	1.82	1.94	1.54	1.12
KWT	1.11	0.97	0.99	0.84	0.65	0.52	0.48	0.47	0.46	0.45	0.39	0.44	0.59	0.67	0.85	1.02	0.77	0.8	0.86	0.84	0.82	0.83	0.88	0.81	0.99	0.96	0.84	0.51
LAO	0.54	0.48	0.5	0.41	0.31	0.21	0.22	0.29	0.29	0.27	0.23	0.27	0.29	0.33	0.44	0.56	0.41	0.58	0.64	0.61	0.65	0.71	0.61	0.55	0.74	0.73	0.61	0.4
LBN	1.16	1.05	1.14	1.03	0.78	0.67	0.64	0.73	0.75	0.66	0.55	0.63	0.68	0.68	0.9	1.06	0.89	1.04	0.99	0.93	0.93	0.93	0.92	0.87	1.03	1	0.8	0.46
LBR	0.39	0.33	0.34	0.27	0.22	0.18	0.19	0.25	0.25	0.24	0.18	0.17	0.2	0.21	0.3	0.35	0.27	0.33	0.34	0.32	0.32	0.32	0.32	0.29	0.34	0.34	0.27	0.18
LBY	0.63	0.54	0.56	0.45	0.36	0.31	0.29	0.33	0.33	0.3	0.24	0.29	0.33	0.36	0.47	0.58	0.45	0.57	0.52	0.52	0.52	0.5	0.49	0.44	0.53	0.54	0.45	0.26
LCA	0.6	0.53	0.54	0.44	0.34	0.29	0.29	0.33	0.31	0.3	0.25	0.29	0.32	0.33	0.41	0.47	0.39	0.45	0.44	0.42	0.41	0.4	0.41	0.37	0.45	0.44	0.38	0.25
LKA	1	0.91	1	0.81	0.62	0.48	0.5	0.61	0.57	0.54	0.51	0.61	0.67	0.7	0.72	0.8	0.62	0.76	0.8	0.73	0.79	0.77	0.81	0.83	1.2	1.14	1.02	0.68
LTU	0.63	0.63	0.68	0.68	0.61	0.4	0.4	0.51	0.52	0.49	0.43	0.54	0.61	0.65	0.92	1.06	0.74	0.89	0.92	0.86	0.87	0.88	0.85	0.79	1.04	1.07	0.93	0.64
LVA	0.55	0.53	0.6	0.5	0.41	0.33	0.34	0.4	0.43	0.41	0.36	0.46	0.53	0.59	0.85	0.85	0.64	0.79	0.82	0.76	0.78	0.78	0.75	0.7	0.89	0.93	0.78	0.51
MAC	3.18	3.06	3.22	3.28	2.7	2.27	1.93	1.58	1.42	1.99	1.72	1.8	1.47	1.35	1.3	1.1	0.84	0.95	0.97	0.94	0.87	0.93	0.96	0.9	1.04	1.08	0.92	0.62
MAR	0.99	0.85	0.87	0.72	0.55	0.52	0.52	0.59	0.59	0.55	0.48	0.54	0.58	0.61	0.86	0.97	0.76	0.84	0.84	1.27	1.24	1.24	0.77	0.74	1.65	1.7	1	1.1
MDA	0.55	0.53	0.58	0.5	0.39	0.32	0.3	0.38	0.39	0.37	0.32	0.37	0.44	0.46	0.65	0.77	0.57	0.69	0.71	0.64	0.64	0.64	0.62	0.57	0.73	0.76	0.64	0.39
MDG	0.36	0.31	0.32	0.25	0.2	0.15	0.15	0.2	0.19	0.16	0.15	0.17	0.19	0.19	0.27	0.33	0.25	0.31	0.31	0.28	0.28	0.29	0.3	0.27	0.34	0.35	0.29	0.19
MDV	0.37	0.33	0.47	0.4	0.34	0.29	0.31	0.34	0.33	0.29	0.27	0.34	0.36	0.37	0.5	0.56	0.39	0.46	0.47	0.47	1.17	1.18	1.25	0.53	0.59	0.61	0.56	0.3
MEX	1.9	1.92	1.48	1.33	1.16	1.02	1.19	1.47	1.41	1.32	1.14	1.22	1.33	1.37	1.67	1.79	1.29	1.55	1.39	1.41	1.44	1.4	1.44	1.33	2.6	2.58	2.32	1.57
MKD	0.61	0.65	0.73	0.58	0.46	0.37	0.38	0.45	0.43	0.38	0.35	0.43	0.49	0.53	0.74	0.87	0.67	0.75	0.76	0.68	0.68	0.69	0.68	0.64	0.8	0.82	0.69	0.46

Table C.18: Continued on next page

Table C.18: continued from previous page

ISO code	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
MLT	1.32	1.17	1.21	1.09	0.82	0.72	0.7	0.78	0.73	0.68	0.6	0.68	0.69	0.72	0.95	1.05	0.84	0.93	0.9	0.81	0.84	0.84	0.81	0.72	0.86	0.92	0.82	0.63
MMR	0.63	0.56	0.6	0.49	0.35	0.25	0.27	0.36	0.37	0.34	0.28	0.37	0.44	0.5	0.67	0.83	0.74	0.71	0.77	0.69	0.66	0.65	0.67	0.55	0.73	0.76	0.65	1.07
MNG	0.43	0.38	0.39	0.32	0.26	0.2	0.19	0.25	0.24	0.22	0.18	0.22	0.24	0.25	0.34	0.42	0.35	0.46	0.49	0.46	0.46	0.47	0.49	0.45	0.56	0.56	0.45	0.29
MOZ	0.32	0.3	0.32	0.24	0.18	0.14	0.15	0.21	0.2	0.18	0.15	0.18	0.21	0.23	0.31	0.37	0.28	0.36	0.38	0.33	0.34	0.33	0.34	0.31	0.35	0.38	0.31	0.19
MUS	1.24	1.07	1.11	0.98	0.75	0.67	0.63	0.66	0.6	0.56	0.5	0.52	0.47	0.49	0.64	0.71	0.55	0.65	0.59	0.59	0.57	0.56	0.51	0.53	0.65	0.66	0.56	0.33
MWI	0.43	0.38	0.37	0.31	0.24	0.18	0.19	0.23	0.24	0.21	0.17	0.2	0.23	0.24	0.33	0.4	0.33	0.4	0.39	0.36	0.36	0.36	0.36	0.33	0.44	0.44	0.38	0.24
MYS	0.7	0.72	0.88	0.71	0.5	0.32	0.32	0.49	0.45	0.41	0.31	0.37	0.43	0.44	0.56	0.66	0.54	0.79	0.83	0.79	0.81	0.84	0.85	0.84	1.3	1.41	1.29	0.84
NER	0.45	0.39	0.39	0.31	0.24	0.2	0.2	0.24	0.24	0.22	0.17	0.21	0.24	0.24	0.35	0.4	0.32	0.4	0.4	0.37	0.37	0.38	0.37	0.34	0.4	0.39	0.31	0.19
NGA	0.72	0.62	0.63	0.53	0.41	0.35	0.33	0.4	0.39	0.33	0.28	0.33	0.41	0.41	0.62	0.63	0.53	0.66	0.62	0.52	0.55	0.61	0.58	0.53	0.79	0.72	0.62	0.52
NIC	0.51	0.44	0.43	0.35	0.3	0.24	0.24	0.29	0.29	0.27	0.21	0.25	0.28	0.3	0.4	0.46	0.35	0.43	0.43	0.41	0.42	0.42	0.43	0.49	0.61	0.6	0.56	0.36
NLD	3.77	3.31	3.65	2.96	2.04	1.65	1.69	1.85	1.78	1.63	1.4	1.54	1.65	1.63	2.4	2.73	1.75	1.84	1.99	1.76	1.75	1.78	1.72	1.66	2.07	2.19	1.97	1.39
NOR	1.34	1.27	1.34	1.09	0.84	0.68	0.66	0.77	0.74	0.75	0.64	0.76	0.85	0.88	1.25	1.4	0.9	1.07	1.06	0.99	0.9	0.88	0.82	0.8	1.05	1.04	0.88	0.58
NPL	0.46	0.42	0.42	0.35	0.27	0.21	0.23	0.27	0.26	0.24	0.21	0.23	0.27	0.28	0.37	0.44	0.39	0.51	0.54	0.5	0.52	0.54	0.57	0.54	0.75	0.77	0.63	0.4
NZL	1.1	1	1.05	0.86	0.66	0.38	0.43	0.44	0.44	0.41	0.4	0.46	0.55	0.52	0.71	0.77	0.53	0.59	0.64	0.59	0.54	0.55	0.55	0.52	0.61	0.56	0.5	0.36
OMN	0.58	0.53	0.56	0.45	0.37	0.3	0.28	0.32	0.34	0.31	0.22	0.29	0.32	0.35	0.45	0.56	0.46	0.54	0.54	0.5	0.48	0.5	0.53	0.48	0.6	0.57	0.49	0.36
PAK	0.74	0.82	0.94	0.75	0.59	0.44	0.31	0.39	0.4	0.35	0.28	0.33	0.4	0.42	0.57	0.67	0.54	0.69	0.69	0.65	0.66	0.7	0.73	0.7	0.97	0.92	0.76	0.47
PAN	0.61	0.58	0.57	0.48	0.38	0.32	0.32	0.36	0.33	0.3	0.27	0.29	0.33	0.39	0.5	0.6	0.45	0.57	0.55	0.56	0.63	0.53	0.54	0.49	0.56	0.54	0.47	0.29
PER	0.65	0.61	0.64	0.56	0.45	0.36	0.32	0.39	0.39	0.36	0.29	0.34	0.39	0.41	0.56	0.71	0.55	0.71	0.69	0.67	0.7	0.69	0.68	0.63	0.88	0.86	0.76	0.5
PHL	1.2	1.08	1.17	1.18	0.87	0.57	0.61	0.69	0.59	0.53	0.44	0.47	0.52	0.53	0.64	0.69	0.55	0.68	0.71	0.68	0.69	0.7	0.72	0.76	1.48	1.58	1.23	0.72
PNG	0.52	0.54	0.5	0.42	0.32	0.2	0.21	0.24	0.22	0.21	0.17	0.2	0.23	0.24	0.33	0.38	0.29	0.38	0.4	0.36	0.36	0.37	0.36	0.33	0.46	0.49	0.4	0.25
POL	1.66	1.52	1.71	1.42	1.1	0.95	0.95	1.09	1.09	0.99	0.82	1.01	1.13	1.18	1.72	2.02	1.32	1.57	1.55	1.39	1.41	1.42	1.37	1.26	1.91	2.05	1.65	1.19
PRT	1.86	1.58	1.73	1.52	1.16	0.97	1	1.08	1.04	0.92	0.81	0.93	0.98	1	1.36	1.47	1.06	1.17	1.09	0.94	0.94	0.96	0.94	0.89	1.35	1.48	1.21	0.82
PRY	0.45	0.4	0.4	0.34	0.28	0.23	0.21	0.25	0.26	0.2	0.16	0.19	0.23	0.24	0.34	0.43	0.35	0.44	0.46	0.44	0.43	0.43	0.43	0.38	0.46	0.44	0.38	0.25
QAT	0.63	0.73	0.61	0.51	0.45	0.33	0.32	0.43	0.42	0.39	0.27	0.33	0.46	0.52	0.8	0.94	0.73	0.72	0.79	0.87	0.87	0.91	0.77	0.68	0.91	0.86	0.76	0.41
ROU	0.95	0.86	0.95	0.89	0.65	0.54	0.52	0.63	0.66	0.65	0.58	0.7	0.81	0.88	1.26	1.46	0.99	1.1	1.1	1	0.99	1	0.98	0.96	1.36	1.4	1.18	0.8
RUS	0.64	0.63	0.68	0.61	0.47	0.34	0.3	0.39	0.41	0.4	0.36	0.46	0.56	0.62	0.95	1.18	0.83	1.04	1	0.98	0.99	0.93	0.82	0.76	1.07	1.08	0.93	0.59
RWA	0.39	0.33	0.34	0.28	0.23	0.19	0.18	0.21	0.23	0.2	0.16	0.19	0.23	0.24	0.33	0.4	0.32	0.39	0.39	0.37	0.37	0.38	0.37	0.36	0.45	0.42	0.4	0.27
SAU	1.2	0.94	0.93	0.76	0.63	0.47	0.47	0.56	0.54	0.48	0.41	0.46	0.5	0.52	0.7	0.83	0.69	0.75	0.73	0.7	0.69	0.68	0.76	0.68	0.94	0.86	0.8	0.57
SCG	0.63	0.86	0.82	0.84	0.68	0.54	0.53	0.68	0.54	0.53	0.46	0.57	0.53	1.47	2.17	2.58	1.89	1.94	1.93	1.77	1.86	1.83	1.11	1.04	2.27	2.38	1.99	1.45
SEN	0.48	0.4	0.42	0.34	0.26	0.22	0.22	0.26	0.26	0.24	0.2	0.24	0.27	0.27	0.39	0.46	0.36	0.41	0.41	0.39	0.39	0.39	0.38	0.35	0.47	0.48	0.38	0.25
SGP	8.49	6.58	7.66	7.4	5.02	2.89	2.68	2.8	1.66	1.27	1.01	1.75	1.41	1.44	0.93	1.2	0.94	1.23	1.67	1.94	1.8	1.5	1.39	1.66	3.68	1.49	1.27	0.71
SLE	0.43	0.37	0.37	0.3	0.24	0.19	0.19	0.23	0.24	0.21	0.17	0.19	0.22	0.23	0.35	0.38	0.29	0.37	0.37	0.34	0.34	0.35	0.34	0.31	0.37	0.4	0.34	0.22
SLV	0.66	0.56	0.59	0.5	0.43	0.39	0.4	0.49	0.6	0.64	0.56	0.63	0.66	0.68	0.84	0.94	0.68	0.8	0.78	0.77	0.78	0.74	0.77	0.72	0.91	0.87	0.81	0.53
SOM	0.42	0.37	0.38	0.3	0.24	0.18	0.19	0.23	0.23	0.21	0.17	0.2	0.22	0.23	0.33	0.39	0.31	0.39	0.39	0.37	0.35	0.36	0.36	0.32	0.36	0.36	0.3	0.18
SUR	0.45	0.33	0.33	0.26	0.21	0.17	0.17	0.21	0.2	0.18	0.14	0.17	0.2	0.2	0.28	0.34	0.27	0.34	0.34	0.34	0.35	0.35	0.37	0.33	0.44	0.45	0.37	0.23
SVK	0.91	0.94	1.01	0.82	0.67	0.58	0.58	0.67	0.68	0.64	0.57	0.67	0.72	0.77	1.1	1.32	0.95	1.17	1.15	1.03	1.05	1.07	1.04	0.97	1.3	1.36	1.14	0.76
SVN	1.44	1.4	1.57	1.21	0.91	0.77	0.76	0.86	0.81	0.76	0.65	0.77	0.84	0.88	1.23	1.33	0.99	1.14	1.12	0.99	0.98	0.99	0.98	0.92	1.28	1.34	1.14	0.74
SWE	1.15	1.07	1.3	1.07	0.8	0.66	0.64	0.79	0.7	0.69	0.61	0.73	0.78	0.82	1.18	1.23	0.86	1.09	1.09	0.98	0.96	0.95	0.91	0.87	1.18	1.21	1	0.66
SYR	1.09	1	0.98	0.83	0.63	0.56	0.53	0.67	0.73	0.74	0.68	0.79	0.68	0.75	0.89	1.04	0.98	1.16	0.87	0.75	0.62	0.58	0.63	0.58	0.57	0.58	0.48	0.31
THA	2.04	1.78	1.89	1.79	1.08	0.41	0.46	0.63	0.58	0.66	0.55	0.6	0.66	0.67	0.86	1.06	0.76	0.98	0.85	1.01	0.99	0.88	0.88	0.81	1.42	1.48	1.25	0.92
TJK	0.41	0.37	0.39	0.32	0.26	0.2	0.21	0.27	0.26	0.23	0.2	0.24	0.26	0.28	0.38	0.48	0.39	0.49	0.52	0.48	0.49	0.5	0.49	0.45	0.59	0.59	0.5	0.31
TKM	0.41	0.38	0.4	0.34	0.28	0.23	0.24	0.3	0.27	0.25	0.21	0.26	0.28	0.29	0.41	0.48	0.38	0.48	0.47	0.44	0.45	0.44	0.45	0.41	0.52	0.53	0.46	0.3
TON	0.34	0.3	0.29	0.24	0.19	0.14	0.15	0.17	0.16	0.15	0.12	0.14	0.16	0.16	0.22	0.27	0.21	0.27	0.28	0.26	0.25	0.25	0.24	0.21	0.24	0.24	0.2	0.12
TTO	0.74	0.56	0.58	0.59	0.51	0.44	0.43	0.5	0.5	0.46	0.4	0.45	0.51	0.54	0.67	0.75	0.59	0.63	0.61	0.64	0.66	0.62	0.63	0.61	0.83	0.79	0.72	0.48
TUN	1.22	1.07	1.12	0.92	0.7	0.6	0.59	0.67	0.69	0.62	0.58	0.66	0.69	0.7	0.82	0.97	0.77	0.9	0.87	0.81	0.79	0.79	0.76	0.71	1	0.91	0.77	0.52
TUR	1.72	1.15	1.43	1.27	0.94	0.74	0.66	0.87	0.68	0.8	0.7	0.87	1.03	1.05	1.45	1.63	1.18	1.53	1.5	1.41	1.43	1.42	1.34	1.24	1.92	1.84	1.48	1.06
TZA	0.45	0.39	0.41	0.33	0.26	0.21	0.21	0.26	0.26	0.24	0.19	0.21	0.24	0.25	0.35	0.42	0.34	0.42	0.42	0.4	0.39	0.4	0.42	0.37	0.45	0.45	0.39	0.25
UGA	0.43	0.39	0.41	0.33	0.25	0.2	0.21	0.25	0.25	0.23	0.18	0.22	0.25	0.26	0.36	0.44	0.36	0.44	0.44	0.42	0.4	0.42	0.42	0.37	0.49	0.46	0.4	0.25
UKR	0.69	0.62	0.64	0.63	0.5	0.4	0.38	0.48	0.51	0.5	0.43	0.51	0.6	0.65	0.93	1.14	0.79	0.96	0.95	0.88	0.88	0.82	0.75	0.7	1.03	1.07	0.92	0.56
URY	0.77	0.64	0.62	0.55	0.44	0.38	0.34	0.38	0.36	0.25	0.21	0.26	0.3	0.31	0.45	0.59	0.44	0.58	0.61	0.58	0.57	0.55	0.54	0.49	0.53	0.44	0.38	0.25
USA	5.37	4.41	4.05	3.42	2.28	2	2.12	2.37	2.41	2.31	1.85	2.29	2.47	2.44	3.01	3.03	2.31	2.54	2.26	2.32	2.34	2.36	2.55	2.46	3.47	3.51	3.16	2.31
UZB	0.4	0.39	0.44	0.43	0.32	0.23	0.24	0.3	0.29	0.27	0.22	0.26	0.28	0.29	0.39	0.46	0.36	0.46	0.47	0.44	0.44	0.45	0.46	0.42	0.73	0.75	0.66	0.42
VEN	0.98	0.74	0.8	0.57	0.45	0.41	0.39	0.46	0.45	0.37	0.26	0.33	0.42	0.39	0.56	0.74	0.56	0.54	0.57	0.61	0.52	0.35	0.35	0.32	0.36	0.36	0.29	0.18
VNM	0.73	0.56	0.58	0.5	0.4	0.29	0.29	0.55	0.58	0.61	0.56	0.68	0.75	0.8	1.04	1.25	1.05	1.29	1.3	1.28	1.31	1.4	1.69	1.51	3.36	2.85	2.54	1.7
YEM	0.55	0.44	0.46	0.38	0.29	0.25	0.24	0.29	0.29	0.26	0.2	0.27	0.31	0.32	0.43	0.5	0.42	0.49	0.49	0.45	0.45	0.47	0.43	0.42	0.51	0.42	0.37	0.3
ZAF	1.51	1.31	1.26	1.04	0.65	0.36	0.57	0.66	0.6	0.54	0.51	0.62	0.72	0.75	0.97	1.08	0.86	1.04	0.96	0.91	0.88	0.82	0.81	0.73	1.09	1.15	1	0.61
ZMB	0.44	0.38	0.38	0.31	0.25	0.19	0.2	0.24	0.24	0.22	0.18	0.22	0.25	0.25	0.34	0.41	0.33	0.39	0.4	0.38	0.37	0.36	0.36	0.33	0.41	0.4	0.33	0.19
ZWE	0.54	0.51	0.5	0.43	0.32	0.22	0.24	0.29	0.28	0.25	0.19	0.24	0.26	0.27	0.35	0.41	0.32	0.44	0.44	0.44	0.42	0.38	0.37	0.33	0.41	0.44	0.36	0.22

Appendix D

Pearson correlation coefficients by sector (1993-2020)

Table D.1: Pearson correlation coefficients in the Chemicals sector

Variable	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
IMR__indegree	0.61	0.61	0.59	0.62	0.6	0.62	0.61	0.56	0.53	0.51	0.49	0.51	0.47	0.47	0.47	0.49	0.43	0.47	0.45	0.44	0.45	0.46	0.43	0.42	0.44	0.41	0.42	0.42
IMR__outdegree	0.63	0.64	0.63	0.63	0.62	0.62	0.61	0.57	0.56	0.53	0.52	0.52	0.51	0.5	0.51	0.52	0.48	0.49	0.49	0.48	0.49	0.48	0.47	0.47	0.48	0.47	0.48	0.48
IMR__weighted__indegree	0.85	0.85	0.86	0.85	0.8	0.77	0.74	0.7	0.66	0.63	0.57	0.6	0.63	0.58	0.6	0.67	0.59	0.6	0.61	0.61	0.63	0.63	0.6	0.64	0.67	0.61	0.65	0.65
IMR__weighted__outdegree	0.91	0.9	0.89	0.89	0.85	0.84	0.83	0.81	0.8	0.77	0.75	0.76	0.75	0.71	0.71	0.75	0.7	0.72	0.72	0.72	0.73	0.73	0.73	0.76	0.75	0.7	0.76	0.77
IMR__closeness__in	0.77	0.76	0.75	0.75	0.7	0.73	0.72	0.66	0.63	0.6	0.57	0.6	0.58	0.55	0.56	0.58	0.52	0.57	0.56	0.55	0.57	0.61	0.56	0.58	0.61	0.59	0.62	0.62
IMR__closeness__out	0.68	0.69	0.67	0.68	0.66	0.67	0.66	0.62	0.6	0.58	0.56	0.56	0.55	0.54	0.55	0.56	0.52	0.52	0.53	0.51	0.52	0.52	0.51	0.52	0.53	0.51	0.53	0.52
IMR__w__closeness__in	0.15	0.07	0.15	0.03	0.02	-0.05	0.22	-0.22	-0.37	-0.07	-0.18	0.05	0.15	0.08	-0.03	-0.02	0.19	0.19	0.23	0.25	0.26	0.25	0.34	0.33	0.32	0.19	0.32	0.32
IMR__w__closeness__out	-0.64	-0.58	-0.59	-0.61	-0.62	-0.62	-0.64	-0.6	-0.57	-0.57	-0.53	-0.56	-0.51	-0.51	-0.58	-0.43	-0.5	-0.57	-0.6	-0.57	-0.59	-0.62	-0.6	-0.54	-0.56	-0.55	-0.55	-0.62
IMR__betweenness	0.81	0.82	0.81	0.81	0.77	0.8	0.78	0.73	0.7	0.66	0.64	0.65	0.66	0.62	0.65	0.65	0.6	0.64	0.65	0.63	0.65	0.68	0.66	0.67	0.68	0.65	0.68	0.68
IMR__w__betweenness	-0.16	-0.17	-0.19	-0.19	-0.24	-0.24	-0.2	-0.22	-0.27	-0.2	-0.22	-0.19	-0.21	-0.24	-0.14	-0.19	-0.21	-0.22	-0.25	-0.25	-0.25	-0.24	-0.25	-0.23	-0.25	-0.24	-0.25	-0.2
IMR__eigen	0.51	0.52	0.51	0.55	0.55	0.56	0.56	0.51	0.48	0.46	0.45	0.47	0.43	0.43	0.43	0.45	0.4	0.43	0.41	0.4	0.4	0.41	0.38	0.37	0.39	0.36	0.37	0.36
IMR__w__eigen	0.81	0.81	0.84	0.83	0.76	0.73	0.68	0.63	0.62	0.61	0.56	0.6	0.63	0.58	0.6	0.68	0.6	0.61	0.62	0.6	0.62	0.61	0.59	0.65	0.63	0.58	0.63	0.64
OMR__indegree	0.58	0.53	0.5	0.5	0.47	0.49	0.52	0.48	0.5	0.5	0.52	0.55	0.52	0.56	0.57	0.54	0.51	0.57	0.56	0.54	0.53	0.53	0.5	0.49	0.5	0.47	0.46	0.46
OMR__outdegree	0.64	0.6	0.56	0.56	0.52	0.54	0.55	0.53	0.55	0.55	0.57	0.58	0.56	0.6	0.62	0.57	0.56	0.6	0.6	0.57	0.58	0.58	0.56	0.54	0.55	0.55	0.55	0.54
OMR__weighted__indegree	0.74	0.69	0.65	0.65	0.61	0.61	0.64	0.59	0.63	0.68	0.68	0.7	0.75	0.76	0.77	0.76	0.75	0.75	0.78	0.78	0.77	0.79	0.79	0.8	0.79	0.78	0.79	0.79
OMR__weighted__outdegree	0.65	0.59	0.54	0.54	0.5	0.52	0.57	0.51	0.57	0.59	0.61	0.63	0.66	0.69	0.69	0.67	0.66	0.72	0.74	0.74	0.72	0.74	0.76	0.76	0.73	0.73	0.74	0.74
OMR__closeness__in	0.65	0.59	0.57	0.56	0.53	0.54	0.58	0.53	0.56	0.57	0.59	0.62	0.62	0.65	0.66	0.63	0.59	0.67	0.67	0.65	0.65	0.65	0.62	0.63	0.64	0.62	0.61	0.6
OMR__closeness__out	0.68	0.64	0.6	0.59	0.56	0.57	0.59	0.57	0.58	0.59	0.61	0.62	0.6	0.64	0.66	0.61	0.6	0.64	0.64	0.61	0.62	0.62	0.6	0.58	0.58	0.59	0.58	0.57
OMR__w__closeness__in	0.16	0.05	0.07	0.01	0	0	0.18	-0.2	-0.29	-0.05	-0.15	0.1	0.18	0.09	0.05	0.03	0.23	0.27	0.32	0.36	0.37	0.35	0.52	0.45	0.42	0.18	0.45	0.38
OMR__w__closeness__out	-0.47	-0.46	-0.48	-0.46	-0.53	-0.38	-0.42	-0.48	-0.46	-0.48	-0.53	-0.61	-0.58	-0.61	-0.6	-0.43	-0.59	-0.61	-0.66	-0.58	-0.65	-0.67	-0.64	-0.59	-0.62	-0.64	-0.64	-0.64
OMR__betweenness	0.69	0.63	0.62	0.6	0.56	0.58	0.63	0.58	0.61	0.62	0.64	0.68	0.69	0.71	0.75	0.69	0.67	0.74	0.76	0.73	0.73	0.74	0.7	0.71	0.7	0.68	0.68	0.67
OMR__w__betweenness	-0.12	-0.13	-0.14	-0.19	-0.19	-0.17	-0.12	-0.19	-0.2	-0.19	-0.22	-0.22	-0.24	-0.28	-0.16	-0.19	-0.27	-0.26	-0.26	-0.25	-0.28	-0.23	-0.27	-0.26	-0.26	-0.27	-0.26	-0.22
OMR__eigen	0.52	0.48	0.45	0.46	0.44	0.46	0.48	0.45	0.46	0.46	0.49	0.51	0.47	0.52	0.52	0.49	0.47	0.52	0.51	0.5	0.49	0.48	0.45	0.44	0.45	0.43	0.41	0.41
OMR__w__eigen	0.7	0.66	0.63	0.62	0.57	0.57	0.59	0.55	0.6	0.65	0.68	0.7	0.75	0.75	0.78	0.78	0.76	0.76	0.79	0.78	0.78	0.79	0.8	0.81	0.79	0.77	0.8	0.8

Table D.2: Pearson correlation coefficients in the Food sector

Variable	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
IMR_indegree	0.62	0.63	0.6	0.59	0.57	0.56	0.59	0.57	0.56	0.57	0.58	0.59	0.57	0.58	0.57	0.57	0.56	0.55	0.55	0.57	0.54	0.5	0.51	0.49	0.47	0.5	0.49	0.49
IMR_outdegree	0.71	0.72	0.68	0.66	0.63	0.62	0.63	0.61	0.61	0.63	0.64	0.64	0.64	0.65	0.64	0.65	0.65	0.61	0.62	0.66	0.64	0.6	0.6	0.62	0.61	0.63	0.63	0.63
IMR_weighted_indegree	0.63	0.62	0.61	0.6	0.57	0.57	0.59	0.57	0.57	0.58	0.61	0.6	0.59	0.58	0.61	0.62	0.61	0.6	0.61	0.63	0.65	0.62	0.61	0.62	0.6	0.62	0.59	0.58
IMR_weighted_outdegree	0.87	0.86	0.86	0.85	0.83	0.82	0.83	0.82	0.83	0.83	0.85	0.86	0.85	0.85	0.86	0.86	0.86	0.83	0.84	0.87	0.86	0.82	0.82	0.86	0.85	0.86	0.85	0.85
IMR_closeness_in	0.7	0.7	0.69	0.66	0.63	0.62	0.66	0.63	0.62	0.64	0.65	0.66	0.64	0.64	0.64	0.63	0.62	0.62	0.63	0.65	0.63	0.6	0.61	0.61	0.57	0.61	0.62	0.61
IMR_closeness_out	0.77	0.77	0.73	0.71	0.68	0.67	0.68	0.66	0.65	0.68	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.67	0.67	0.71	0.7	0.65	0.65	0.67	0.66	0.68	0.68	0.69
IMR_w_closeness_in	0	-0.18	0.1	-0.05	0.13	-0.01	-0.15	-0.03	-0.2	0.07	-0.2	0.03	-0.09	-0.22	-0.18	0.14	-0.07	0.07	0.26	0.16	0.19	0.14	0.24	0.37	0.15	0.32	0.24	0.14
IMR_w_closeness_out	-0.34	-0.25	-0.51	-0.4	-0.39	-0.42	-0.48	-0.48	-0.51	-0.49	-0.58	-0.61	-0.62	-0.68	-0.62	-0.58	-0.64	-0.63	-0.66	-0.56	-0.66	-0.59	-0.66	-0.69	-0.72	-0.63	-0.63	-0.73
IMR_betweenness	0.78	0.77	0.76	0.73	0.72	0.7	0.73	0.7	0.71	0.71	0.72	0.75	0.71	0.71	0.72	0.72	0.7	0.7	0.69	0.75	0.72	0.69	0.7	0.7	0.66	0.69	0.71	0.69
IMR_w_betweenness	-0.07	-0.11	-0.08	-0.13	-0.12	-0.17	-0.24	-0.15	-0.17	-0.17	-0.17	-0.2	-0.24	-0.23	-0.22	-0.29	-0.23	-0.23	-0.26	-0.25	-0.22	-0.24	-0.19	-0.25	-0.24	-0.31	-0.26	-0.25
IMR_eigen	0.54	0.56	0.54	0.54	0.52	0.51	0.54	0.53	0.51	0.53	0.54	0.55	0.53	0.55	0.54	0.53	0.52	0.5	0.51	0.53	0.5	0.46	0.46	0.44	0.43	0.45	0.44	0.44
IMR_w_eigen	0.66	0.66	0.66	0.65	0.61	0.61	0.63	0.56	0.57	0.59	0.63	0.64	0.62	0.61	0.63	0.65	0.63	0.62	0.64	0.62	0.64	0.62	0.55	0.56	0.54	0.56	0.53	0.52
OMR_indegree	0.41	0.39	0.37	0.37	0.35	0.37	0.37	0.37	0.37	0.39	0.43	0.44	0.45	0.48	0.49	0.51	0.47	0.49	0.49	0.45	0.44	0.46	0.46	0.38	0.39	0.39	0.37	0.37
OMR_outdegree	0.39	0.37	0.36	0.35	0.33	0.32	0.33	0.32	0.32	0.35	0.36	0.37	0.39	0.41	0.42	0.44	0.41	0.42	0.42	0.39	0.37	0.4	0.41	0.32	0.34	0.34	0.34	0.35
OMR_weighted_indegree	0.6	0.59	0.56	0.55	0.51	0.5	0.52	0.54	0.55	0.54	0.56	0.57	0.6	0.59	0.59	0.6	0.57	0.59	0.61	0.58	0.54	0.59	0.65	0.53	0.51	0.54	0.56	0.57
OMR_weighted_outdegree	0.2	0.18	0.16	0.16	0.14	0.16	0.16	0.15	0.17	0.19	0.23	0.24	0.26	0.28	0.29	0.29	0.26	0.28	0.28	0.25	0.24	0.29	0.36	0.24	0.21	0.24	0.25	0.26
OMR_closeness_in	0.45	0.43	0.41	0.4	0.38	0.4	0.41	0.41	0.41	0.43	0.47	0.49	0.51	0.54	0.55	0.57	0.53	0.55	0.56	0.5	0.51	0.54	0.55	0.47	0.49	0.48	0.46	0.45
OMR_closeness_out	0.41	0.38	0.39	0.37	0.35	0.34	0.36	0.35	0.34	0.38	0.39	0.39	0.42	0.43	0.45	0.48	0.44	0.45	0.45	0.42	0.4	0.44	0.45	0.35	0.37	0.37	0.37	0.38
OMR_w_closeness_in	-0.14	-0.19	0.07	-0.05	-0.18	-0.12	-0.14	0	-0.34	-0.04	0.03	-0.09	-0.19	-0.21	-0.18	-0.02	-0.02	-0.25	-0.25	-0.2	0.07	0.01	0.12	0.12	-0.07	-0.02	0.23	-0.07
OMR_w_closeness_out	-0.13	-0.03	-0.05	-0.02	0.05	-0.05	-0.04	-0.05	-0.14	-0.07	-0.12	-0.1	-0.11	-0.17	-0.13	-0.17	-0.16	-0.23	-0.17	-0.14	-0.24	-0.27	-0.31	-0.21	-0.19	-0.12	-0.28	-0.32
OMR_betweenness	0.48	0.45	0.46	0.44	0.42	0.43	0.45	0.44	0.44	0.47	0.5	0.51	0.55	0.57	0.58	0.61	0.56	0.59	0.6	0.55	0.52	0.56	0.61	0.5	0.52	0.52	0.49	0.48
OMR_w_betweenness	-0.02	-0.01	-0.03	-0.05	-0.09	-0.08	-0.14	-0.08	-0.12	0.07	0.01	-0.08	-0.14	-0.14	-0.1	-0.16	-0.03	-0.16	-0.19	-0.09	-0.16	-0.16	-0.13	-0.16	-0.13	-0.14	-0.18	-0.12
OMR_eigen	0.37	0.35	0.33	0.34	0.33	0.33	0.33	0.34	0.34	0.35	0.39	0.41	0.41	0.44	0.46	0.47	0.44	0.45	0.45	0.41	0.41	0.42	0.42	0.34	0.35	0.34	0.34	0.33
OMR_w_eigen	0.5	0.48	0.44	0.45	0.47	0.46	0.5	0.57	0.57	0.55	0.56	0.54	0.57	0.57	0.56	0.56	0.52	0.58	0.6	0.58	0.54	0.59	0.65	0.55	0.52	0.56	0.57	0.59

Table D.3: Pearson correlation coefficients in the Machines sector

Variable	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
IMR_indegree	0.45	0.45	0.47	0.52	0.52	0.53	0.54	0.5	0.5	0.51	0.48	0.5	0.45	0.46	0.47	0.46	0.44	0.42	0.4	0.4	0.38	0.38	0.34	0.34	0.34	0.35	0.34	0.34
IMR_outdegree	0.46	0.48	0.5	0.53	0.53	0.55	0.55	0.52	0.54	0.54	0.51	0.52	0.51	0.5	0.52	0.51	0.5	0.46	0.47	0.47	0.46	0.45	0.43	0.43	0.41	0.44	0.42	0.41
IMR_weighted_indegree	0.58	0.61	0.66	0.71	0.71	0.67	0.64	0.65	0.66	0.63	0.58	0.65	0.57	0.57	0.64	0.66	0.64	0.62	0.64	0.61	0.62	0.61	0.58	0.58	0.55	0.54	0.56	0.54
IMR_weighted_outdegree	0.89	0.89	0.89	0.88	0.87	0.83	0.79	0.79	0.76	0.74	0.71	0.77	0.71	0.7	0.75	0.76	0.73	0.73	0.76	0.73	0.74	0.75	0.74	0.76	0.81	0.77	0.8	0.8
IMR_closeness_in	0.59	0.57	0.6	0.63	0.62	0.63	0.65	0.6	0.61	0.62	0.58	0.59	0.55	0.55	0.57	0.55	0.54	0.51	0.51	0.51	0.5	0.49	0.44	0.46	0.46	0.47	0.46	0.47
IMR_closeness_out	0.5	0.52	0.55	0.58	0.58	0.6	0.6	0.57	0.59	0.59	0.56	0.57	0.55	0.55	0.57	0.56	0.55	0.51	0.51	0.51	0.5	0.5	0.47	0.47	0.46	0.48	0.47	0.46
IMR_w_closeness_in	0.06	-0.03	-0.14	-0.12	0.02	0.1	0.01	-0.37	-0.39	-0.38	-0.12	-0.36	-0.18	0.19	-0.07	0.01	0.37	0.4	0.44	0.47	0.49	0.49	0.5	0.52	0.61	0.53	0.59	0.57
IMR_w_closeness_out	-0.49	-0.51	-0.58	-0.6	-0.65	-0.61	-0.65	-0.66	-0.64	-0.67	-0.61	-0.7	-0.68	-0.6	-0.56	-0.63	-0.62	-0.65	-0.62	-0.57	-0.56	-0.63	-0.6	-0.62	-0.55	-0.62	-0.62	-0.59
IMR_betweenness	0.64	0.63	0.66	0.7	0.68	0.69	0.73	0.67	0.7	0.7	0.65	0.66	0.62	0.63	0.66	0.64	0.65	0.62	0.61	0.61	0.61	0.6	0.55	0.55	0.56	0.57	0.55	0.55
IMR_w_betweenness	-0.17	-0.18	-0.21	-0.22	-0.22	-0.22	-0.27	-0.19	-0.19	-0.25	-0.2	-0.21	-0.23	-0.19	-0.21	-0.25	-0.21	-0.22	-0.25	-0.2	-0.23	-0.25	-0.21	-0.25	-0.18	-0.21	-0.22	-0.22
IMR_eigen	0.37	0.38	0.4	0.46	0.47	0.48	0.48	0.45	0.45	0.46	0.44	0.45	0.4	0.41	0.43	0.41	0.39	0.37	0.36	0.36	0.34	0.33	0.3	0.3	0.3	0.31	0.3	0.29
IMR_w_eigen	0.63	0.66	0.71	0.76	0.74	0.71	0.66	0.67	0.67	0.64	0.6	0.66	0.59	0.59	0.64	0.66	0.63	0.61	0.62	0.57	0.58	0.57	0.55	0.55	0.52	0.51	0.53	0.53
OMR_indegree	0.62	0.6	0.6	0.62	0.61	0.62	0.61	0.56	0.54	0.54	0.52	0.53	0.51	0.51	0.49	0.49	0.45	0.45	0.44	0.42	0.41	0.41	0.38	0.38	0.41	0.42	0.41	0.42
OMR_outdegree	0.64	0.63	0.63	0.64	0.63	0.63	0.59	0.57	0.56	0.55	0.54	0.55	0.55	0.54	0.54	0.54	0.51	0.49	0.5	0.48	0.47	0.47	0.46	0.45	0.48	0.51	0.5	0.5
OMR_weighted_indegree	0.88	0.86	0.86	0.86	0.85	0.83	0.75	0.75	0.73	0.71	0.68	0.73	0.71	0.69	0.69	0.7	0.67	0.66	0.7	0.66	0.67	0.68	0.68	0.69	0.7	0.71	0.73	0.73
OMR_weighted_outdegree	0.78	0.77	0.77	0.79	0.77	0.75	0.68	0.66	0.63	0.59	0.54	0.55	0.51	0.48	0.47	0.47	0.45	0.43	0.46	0.43	0.44	0.45	0.47	0.46	0.5	0.5	0.55	0.54
OMR_closeness_in	0.73	0.7	0.72	0.73	0.71	0.73	0.72	0.66	0.64	0.64	0.61	0.62	0.62	0.6	0.57	0.57	0.54	0.54	0.54	0.52	0.51	0.51	0.48	0.49	0.55	0.56	0.57	0.57
OMR_closeness_out	0.69	0.67	0.68	0.69	0.68	0.67	0.64	0.62	0.61	0.59	0.58	0.59	0.58	0.57	0.58	0.58	0.55	0.53	0.54	0.52	0.51	0.51	0.5	0.49	0.52	0.55	0.54	0.54
OMR_w_closeness_in	0.02	-0.05	0	-0.09	0	0.17	-0.01	-0.33	-0.34	-0.44	-0.01	-0.41	-0.09	-0.03	0	0.04	0.08	0.13	0.16	0.19	0.22	0.21	0.23	0.21	0.25	0.14	0.25	0.38
OMR_w_closeness_out	-0.56	-0.59	-0.68	-0.63	-0.69	-0.64	-0.65	-0.63	-0.63	-0.63	-0.61	-0.66	-0.67	-0.61	-0.56	-0.61	-0.59	-0.62	-0.61	-0.53	-0.5	-0.62	-0.58	-0.56	-0.56	-0.66	-0.69	-0.65
OMR_betweenness	0.78	0.75	0.78	0.79	0.76	0.78	0.78	0.72	0.7	0.69	0.66	0.66	0.67	0.66	0.65	0.64	0.62	0.62	0.62	0.6	0.6	0.6	0.57	0.57	0.64	0.65	0.66	0.65
OMR_w_betweenness	-0.17	-0.18	-0.23	-0.23	-0.23	-0.22	-0.26	-0.17	-0.18	-0.23	-0.19	-0.22	-0.22	-0.2	-0.21	-0.25	-0.2	-0.22	-0.26	-0.2	-0.22	-0.24	-0.19	-0.23	-0.22	-0.25	-0.25	-0.24
OMR_eigen	0.53	0.53	0.52	0.56	0.56	0.56	0.55	0.51	0.49	0.49	0.47	0.49	0.46	0.46	0.45	0.45	0.41	0.41	0.39	0.38	0.36	0.36	0.35	0.34	0.37	0.38	0.37	0.36
OMR_w_eigen	0.88	0.87	0.87	0.87	0.86	0.83	0.75	0.74	0.72	0.7	0.68	0.74	0.72	0.7	0.71	0.71	0.68	0.67	0.71	0.67	0.68	0.69	0.69	0.69	0.69	0.71	0.73	0.75

Table D.4: Pearson correlation coefficients in the Metals sector

Variable	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
IMR_indegree	0.55	0.56	0.56	0.61	0.61	0.58	0.58	0.59	0.55	0.57	0.59	0.62	0.58	0.6	0.58	0.56	0.53	0.53	0.51	0.51	0.49	0.49	0.48	0.46	0.49	0.49	0.49	0.49
IMR_outdegree	0.63	0.64	0.64	0.64	0.63	0.61	0.61	0.61	0.57	0.57	0.61	0.61	0.62	0.62	0.62	0.58	0.57	0.55	0.56	0.54	0.53	0.53	0.51	0.5	0.53	0.54	0.54	0.55
IMR_weighted_indegree	0.72	0.7	0.75	0.74	0.72	0.66	0.67	0.68	0.66	0.64	0.69	0.68	0.69	0.69	0.75	0.73	0.73	0.7	0.71	0.69	0.71	0.71	0.7	0.69	0.68	0.69	0.71	0.7
IMR_weighted_outdegree	0.89	0.87	0.86	0.86	0.83	0.81	0.82	0.83	0.79	0.8	0.85	0.85	0.85	0.83	0.85	0.82	0.83	0.82	0.82	0.83	0.83	0.84	0.84	0.83	0.82	0.82	0.83	0.82
IMR_closeness_in	0.7	0.7	0.71	0.72	0.7	0.67	0.66	0.67	0.64	0.67	0.68	0.71	0.68	0.67	0.67	0.64	0.61	0.62	0.61	0.6	0.59	0.6	0.6	0.59	0.61	0.61	0.62	0.62
IMR_closeness_out	0.68	0.68	0.68	0.69	0.68	0.66	0.65	0.65	0.62	0.62	0.66	0.66	0.66	0.66	0.67	0.62	0.62	0.6	0.61	0.58	0.58	0.58	0.56	0.55	0.57	0.59	0.59	0.59
IMR_w_closeness_in	0.1	0.1	0.11	0.07	0.07	0.01	-0.03	-0.22	-0.04	-0.35	-0.22	0	-0.01	-0.17	-0.14	-0.22	0.28	0.28	0.32	0.39	0.41	0.45	0.49	0.46	0.45	0.44	0.48	0.48
IMR_w_closeness_out	-0.44	-0.44	-0.4	-0.35	-0.53	-0.48	-0.45	-0.56	-0.55	-0.55	-0.62	-0.6	-0.55	-0.61	-0.59	-0.51	-0.51	-0.57	-0.57	-0.52	-0.43	-0.51	-0.57	-0.6	-0.58	-0.61	-0.59	-0.57
IMR_betweenness	0.74	0.73	0.76	0.78	0.76	0.71	0.72	0.72	0.7	0.72	0.74	0.76	0.73	0.72	0.73	0.7	0.68	0.69	0.67	0.67	0.67	0.67	0.67	0.65	0.66	0.67	0.67	0.67
IMR_w_betweenness	-0.12	-0.14	-0.12	-0.14	-0.15	-0.2	-0.18	-0.18	-0.16	-0.19	-0.21	-0.2	-0.18	-0.24	-0.19	-0.22	-0.25	-0.2	-0.22	-0.2	-0.12	-0.18	-0.2	-0.21	-0.23	-0.25	-0.29	-0.22
IMR_eigen	0.45	0.47	0.47	0.55	0.55	0.53	0.53	0.55	0.5	0.51	0.55	0.56	0.52	0.55	0.54	0.51	0.49	0.49	0.47	0.46	0.44	0.44	0.43	0.41	0.44	0.44	0.43	0.43
IMR_w_eigen	0.64	0.62	0.72	0.67	0.59	0.55	0.5	0.48	0.51	0.47	0.55	0.54	0.54	0.57	0.69	0.68	0.66	0.62	0.64	0.59	0.59	0.59	0.57	0.57	0.54	0.56	0.57	0.58
OMR_indegree	0.43	0.4	0.36	0.34	0.32	0.37	0.41	0.47	0.45	0.44	0.42	0.45	0.47	0.5	0.55	0.54	0.47	0.51	0.52	0.54	0.51	0.54	0.54	0.51	0.52	0.56	0.55	0.51
OMR_outdegree	0.48	0.46	0.42	0.4	0.35	0.41	0.45	0.5	0.49	0.48	0.46	0.48	0.52	0.53	0.58	0.58	0.53	0.54	0.55	0.57	0.55	0.57	0.58	0.56	0.57	0.62	0.61	0.59
OMR_weighted_indegree	0.48	0.45	0.41	0.39	0.35	0.4	0.43	0.54	0.52	0.5	0.47	0.5	0.54	0.57	0.63	0.63	0.6	0.64	0.64	0.69	0.68	0.71	0.75	0.69	0.7	0.79	0.79	0.79
OMR_weighted_outdegree	0.35	0.33	0.27	0.24	0.21	0.28	0.34	0.44	0.43	0.39	0.35	0.39	0.44	0.46	0.52	0.52	0.49	0.56	0.59	0.63	0.62	0.65	0.69	0.63	0.64	0.73	0.73	0.73
OMR_closeness_in	0.45	0.42	0.4	0.37	0.34	0.4	0.45	0.52	0.51	0.49	0.46	0.49	0.54	0.55	0.62	0.6	0.52	0.59	0.62	0.64	0.61	0.65	0.66	0.63	0.65	0.7	0.7	0.65
OMR_closeness_out	0.5	0.48	0.45	0.43	0.37	0.44	0.48	0.55	0.53	0.52	0.49	0.51	0.56	0.57	0.63	0.62	0.57	0.59	0.6	0.62	0.6	0.62	0.63	0.61	0.62	0.68	0.67	0.64
OMR_w_closeness_in	0.1	0.04	-0.04	-0.11	-0.02	0.07	-0.01	-0.02	-0.05	-0.11	-0.04	-0.1	-0.01	-0.09	-0.13	-0.24	0.25	0.25	0.28	0.35	0.36	0.35	0.37	0.32	0.3	0.35	0.39	0.47
OMR_w_closeness_out	-0.24	-0.24	-0.1	-0.13	-0.24	-0.19	-0.16	-0.44	-0.28	-0.35	-0.35	-0.34	-0.41	-0.49	-0.53	-0.5	-0.36	-0.54	-0.51	-0.56	-0.42	-0.58	-0.55	-0.59	-0.62	-0.62	-0.65	-0.62
OMR_betweenness	0.47	0.45	0.43	0.4	0.35	0.42	0.49	0.57	0.56	0.54	0.49	0.53	0.59	0.6	0.69	0.66	0.58	0.66	0.7	0.71	0.69	0.73	0.74	0.71	0.72	0.77	0.77	0.73
OMR_w_betweenness	-0.09	-0.09	-0.04	-0.11	-0.14	-0.06	-0.1	-0.17	-0.15	-0.17	-0.18	-0.2	-0.18	-0.2	-0.2	-0.22	-0.18	-0.22	-0.2	-0.21	-0.11	-0.23	-0.27	-0.26	-0.28	-0.27	-0.3	-0.25
OMR_eigen	0.39	0.37	0.33	0.32	0.3	0.35	0.38	0.44	0.43	0.41	0.4	0.42	0.44	0.46	0.51	0.5	0.44	0.47	0.47	0.49	0.46	0.49	0.49	0.46	0.47	0.51	0.49	0.45
OMR_w_eigen	0.45	0.42	0.38	0.37	0.31	0.34	0.36	0.46	0.45	0.42	0.42	0.46	0.5	0.54	0.62	0.62	0.58	0.62	0.63	0.64	0.64	0.66	0.68	0.64	0.65	0.72	0.73	0.74

Table D.5: Pearson correlation coefficients in the Minerals sector

Variable	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
IMR_indegree	0.57	0.54	0.48	0.51	0.44	0.47	0.46	0.47	0.5	0.52	0.54	0.57	0.55	0.58	0.56	0.55	0.54	0.52	0.49	0.51	0.51	0.5	0.48	0.46	0.5	0.5	0.5	0.47
IMR_outdegree	0.65	0.62	0.56	0.56	0.48	0.49	0.5	0.49	0.51	0.54	0.56	0.57	0.59	0.61	0.6	0.57	0.58	0.55	0.54	0.54	0.55	0.55	0.53	0.54	0.59	0.6	0.6	0.58
IMR_weighted_indegree	0.65	0.6	0.58	0.57	0.49	0.47	0.45	0.47	0.51	0.5	0.54	0.56	0.56	0.61	0.65	0.66	0.68	0.66	0.68	0.66	0.66	0.67	0.65	0.64	0.72	0.7	0.71	0.72
IMR_weighted_outdegree	0.81	0.79	0.74	0.73	0.64	0.63	0.64	0.64	0.66	0.69	0.72	0.74	0.75	0.79	0.8	0.79	0.79	0.77	0.78	0.79	0.81	0.82	0.83	0.84	0.84	0.82	0.83	0.84
IMR_closeness_in	0.69	0.62	0.56	0.58	0.5	0.53	0.52	0.52	0.55	0.57	0.59	0.62	0.6	0.63	0.61	0.61	0.6	0.58	0.54	0.57	0.58	0.57	0.55	0.58	0.63	0.63	0.64	0.59
IMR_closeness_out	0.71	0.67	0.61	0.61	0.54	0.54	0.55	0.53	0.56	0.58	0.61	0.62	0.63	0.66	0.65	0.62	0.63	0.59	0.58	0.58	0.59	0.59	0.57	0.58	0.63	0.64	0.63	0.62
IMR_w_closeness_in	0.14	0.14	0.32	0.09	0.22	0.16	0.11	0.12	0.11	0.07	0.1	0.12	0.16	0.19	0.14	0.39	0.17	0.42	0.47	0.51	0.54	0.58	0.65	0.62	0.61	0.55	0.58	0.58
IMR_w_closeness_out	-0.29	-0.16	-0.28	-0.34	-0.34	-0.41	-0.41	-0.38	-0.32	-0.53	-0.47	-0.52	-0.42	-0.56	-0.43	-0.54	-0.51	-0.38	-0.46	-0.48	-0.49	-0.54	-0.51	-0.5	-0.54	-0.57	-0.48	-0.55
IMR_betweenness	0.75	0.7	0.65	0.69	0.61	0.62	0.63	0.57	0.62	0.64	0.64	0.67	0.65	0.67	0.68	0.67	0.66	0.62	0.6	0.62	0.63	0.6	0.6	0.61	0.69	0.63	0.67	0.62
IMR_w_betweenness	0.01	-0.02	-0.05	-0.09	-0.11	-0.11	-0.14	-0.09	-0.12	-0.17	-0.15	-0.14	-0.16	-0.16	-0.08	-0.24	-0.19	-0.16	-0.18	-0.17	-0.2	-0.24	-0.16	-0.21	-0.22	-0.21	-0.17	-0.22
IMR_eigen	0.49	0.47	0.41	0.45	0.39	0.44	0.42	0.45	0.46	0.48	0.5	0.54	0.51	0.55	0.52	0.52	0.51	0.49	0.46	0.48	0.48	0.46	0.44	0.42	0.45	0.46	0.45	0.42
IMR_w_eigen	0.69	0.65	0.64	0.62	0.5	0.48	0.45	0.44	0.49	0.47	0.52	0.55	0.56	0.61	0.65	0.67	0.67	0.65	0.67	0.64	0.63	0.64	0.61	0.61	0.69	0.67	0.68	0.69
OMR_indegree	0.33	0.28	0.26	0.24	0.2	0.22	0.28	0.29	0.32	0.34	0.33	0.38	0.4	0.46	0.49	0.51	0.4	0.41	0.44	0.43	0.42	0.47	0.48	0.43	0.49	0.51	0.54	0.53
OMR_outdegree	0.38	0.35	0.35	0.33	0.3	0.31	0.35	0.34	0.37	0.4	0.4	0.43	0.44	0.5	0.54	0.56	0.46	0.47	0.5	0.48	0.47	0.52	0.51	0.5	0.55	0.6	0.63	0.64
OMR_weighted_indegree	0.36	0.33	0.32	0.32	0.29	0.28	0.34	0.33	0.36	0.4	0.37	0.4	0.4	0.46	0.46	0.46	0.37	0.36	0.4	0.39	0.4	0.46	0.47	0.46	0.49	0.53	0.58	0.62
OMR_weighted_outdegree	0.21	0.18	0.18	0.17	0.15	0.16	0.23	0.21	0.24	0.28	0.26	0.28	0.27	0.31	0.3	0.31	0.25	0.25	0.29	0.27	0.28	0.34	0.37	0.35	0.41	0.44	0.5	0.53
OMR_closeness_in	0.32	0.26	0.25	0.23	0.19	0.21	0.28	0.29	0.32	0.35	0.33	0.38	0.41	0.47	0.5	0.52	0.4	0.41	0.44	0.43	0.43	0.49	0.49	0.47	0.54	0.56	0.6	0.59
OMR_closeness_out	0.39	0.36	0.36	0.33	0.32	0.33	0.38	0.36	0.39	0.43	0.42	0.45	0.46	0.52	0.55	0.57	0.47	0.48	0.52	0.49	0.48	0.53	0.53	0.51	0.56	0.61	0.64	0.65
OMR_w_closeness_in	0.04	0.1	0.02	-0.07	0.06	0.07	0.17	-0.04	0.1	-0.12	0.13	0.05	0.02	0.05	0.03	0.05	0.01	0.07	0.14	0.15	0.17	0.21	0.22	0.2	0.28	0.25	0.29	0.34
OMR_w_closeness_out	-0.04	0.02	-0.03	-0.14	-0.01	-0.07	-0.12	-0.07	-0.12	-0.28	-0.22	-0.27	-0.25	-0.42	-0.28	-0.36	-0.25	-0.24	-0.26	-0.21	-0.31	-0.28	-0.31	-0.36	-0.35	-0.4	-0.41	-0.45
OMR_betweenness	0.3	0.26	0.25	0.25	0.18	0.23	0.34	0.3	0.33	0.36	0.34	0.38	0.4	0.46	0.51	0.5	0.4	0.4	0.44	0.46	0.43	0.49	0.51	0.49	0.56	0.56	0.62	0.6
OMR_w_betweenness	0.02	0.09	0	0	0.08	0.09	0.08	-0.05	-0.02	-0.14	-0.1	-0.11	-0.13	-0.13	-0.05	-0.17	-0.11	-0.12	-0.14	-0.07	-0.08	-0.16	-0.06	-0.13	-0.15	-0.16	-0.09	-0.17
OMR_eigen	0.32	0.27	0.25	0.24	0.19	0.22	0.27	0.28	0.31	0.34	0.32	0.37	0.39	0.45	0.48	0.5	0.4	0.41	0.43	0.41	0.4	0.45	0.45	0.4	0.46	0.48	0.5	0.5
OMR_w_eigen	0.34	0.31	0.29	0.3	0.27	0.26	0.31	0.3	0.33	0.38	0.36	0.39	0.4	0.45	0.46	0.45	0.36	0.36	0.4	0.4	0.42	0.47	0.47	0.47	0.5	0.52	0.58	0.62

Table D.6: Pearson correlation coefficients in the Other sectors

Variable	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
IMR_indegree	0.61	0.6	0.58	0.62	0.62	0.6	0.58	0.55	0.54	0.53	0.54	0.55	0.51	0.52	0.5	0.5	0.46	0.46	0.38	0.46	0.44	0.45	0.4	0.38	0.41	0.41	0.4	0.39
IMR_outdegree	0.66	0.67	0.64	0.65	0.63	0.62	0.61	0.59	0.58	0.57	0.58	0.58	0.56	0.56	0.54	0.52	0.51	0.48	0.41	0.5	0.49	0.51	0.46	0.45	0.47	0.5	0.49	0.49
IMR_weighted_indegree	0.64	0.63	0.65	0.64	0.61	0.56	0.55	0.56	0.54	0.52	0.54	0.55	0.52	0.52	0.53	0.54	0.58	0.58	0.53	0.6	0.6	0.64	0.57	0.57	0.56	0.57	0.56	0.53
IMR_weighted_outdegree	0.88	0.87	0.87	0.86	0.87	0.86	0.87	0.87	0.88	0.88	0.87	0.84	0.86	0.85	0.85	0.85	0.89	0.84	0.71	0.87	0.87	0.84	0.88	0.88	0.88	0.86	0.86	0.87
IMR_closeness_in	0.76	0.74	0.72	0.75	0.72	0.69	0.67	0.64	0.63	0.63	0.62	0.64	0.6	0.6	0.59	0.58	0.54	0.54	0.46	0.56	0.55	0.56	0.5	0.51	0.54	0.54	0.54	0.52
IMR_closeness_out	0.72	0.72	0.7	0.71	0.7	0.68	0.67	0.64	0.64	0.62	0.63	0.63	0.61	0.6	0.59	0.57	0.56	0.53	0.45	0.55	0.54	0.56	0.5	0.5	0.52	0.54	0.54	0.53
IMR_w_closeness_in	0.16	-0.04	-0.04	-0.07	-0.09	0.05	-0.1	-0.3	-0.14	-0.08	-0.12	0	-0.1	0.31	0.1	-0.1	0.61	0.62	0.49	0.63	0.63	0.59	0.67	0.67	0.67	0.63	0.63	0.6
IMR_w_closeness_out	-0.49	-0.6	-0.65	-0.56	-0.53	-0.51	-0.58	-0.64	-0.63	-0.6	-0.63	-0.61	-0.58	-0.59	-0.61	-0.48	-0.62	-0.58	-0.55	-0.55	-0.56	-0.57	-0.62	-0.56	-0.62	-0.59	-0.61	-0.61
IMR_betweenness	0.83	0.82	0.79	0.82	0.8	0.77	0.75	0.72	0.73	0.72	0.7	0.71	0.69	0.69	0.67	0.65	0.63	0.63	0.54	0.65	0.63	0.66	0.59	0.59	0.62	0.61	0.61	0.58
IMR_w_betweenness	-0.09	-0.13	-0.22	-0.21	-0.21	-0.22	-0.22	-0.23	-0.18	-0.2	-0.14	-0.23	-0.22	-0.19	-0.21	-0.21	-0.25	-0.25	-0.21	-0.18	-0.2	-0.25	-0.22	-0.27	-0.24	-0.2	-0.19	-0.23
IMR_eigen	0.5	0.51	0.5	0.55	0.55	0.54	0.53	0.51	0.48	0.48	0.49	0.5	0.46	0.47	0.46	0.45	0.42	0.41	0.35	0.42	0.4	0.4	0.35	0.34	0.36	0.37	0.36	0.35
IMR_w_eigen	0.72	0.69	0.7	0.69	0.65	0.61	0.59	0.59	0.58	0.56	0.57	0.58	0.56	0.56	0.57	0.58	0.61	0.6	0.54	0.6	0.58	0.59	0.57	0.57	0.55	0.55	0.56	0.55
OMR_indegree	0.61	0.57	0.55	0.54	0.56	0.58	0.58	0.56	0.55	0.55	0.56	0.55	0.54	0.56	0.56	0.58	0.54	0.51	0.42	0.51	0.5	0.49	0.48	0.46	0.48	0.47	0.47	0.48
OMR_outdegree	0.62	0.6	0.59	0.57	0.56	0.56	0.56	0.54	0.54	0.53	0.54	0.54	0.54	0.55	0.56	0.57	0.55	0.51	0.42	0.52	0.51	0.51	0.5	0.48	0.5	0.52	0.52	0.53
OMR_weighted_indegree	0.89	0.84	0.83	0.78	0.81	0.82	0.85	0.85	0.85	0.88	0.85	0.81	0.83	0.82	0.81	0.79	0.82	0.76	0.65	0.79	0.8	0.78	0.84	0.83	0.81	0.81	0.81	0.84
OMR_weighted_outdegree	0.67	0.6	0.59	0.53	0.54	0.57	0.59	0.57	0.55	0.54	0.48	0.45	0.43	0.41	0.38	0.39	0.39	0.38	0.35	0.42	0.46	0.49	0.51	0.53	0.5	0.47	0.47	0.51
OMR_closeness_in	0.72	0.66	0.64	0.62	0.64	0.66	0.67	0.65	0.64	0.65	0.64	0.64	0.64	0.65	0.67	0.68	0.63	0.6	0.5	0.61	0.6	0.6	0.6	0.6	0.62	0.61	0.62	0.65
OMR_closeness_out	0.67	0.64	0.63	0.62	0.61	0.61	0.61	0.59	0.58	0.58	0.58	0.58	0.58	0.59	0.6	0.62	0.6	0.55	0.45	0.56	0.56	0.56	0.55	0.53	0.55	0.56	0.57	0.58
OMR_w_closeness_in	0.13	-0.03	-0.19	-0.08	-0.15	-0.02	-0.2	-0.35	-0.41	-0.18	-0.2	0.32	-0.35	-0.17	-0.37	-0.33	-0.09	-0.01	0.02	0.02	0.04	0.1	0.09	0.11	0.09	0.07	0.16	0.34
OMR_w_closeness_out	-0.45	-0.52	-0.58	-0.46	-0.48	-0.56	-0.54	-0.55	-0.51	-0.49	-0.54	-0.53	-0.57	-0.55	-0.53	-0.47	-0.64	-0.52	-0.51	-0.47	-0.58	-0.5	-0.62	-0.55	-0.6	-0.54	-0.58	-0.67
OMR_betweenness	0.75	0.69	0.68	0.66	0.68	0.72	0.72	0.7	0.7	0.69	0.69	0.68	0.69	0.7	0.73	0.73	0.7	0.66	0.57	0.68	0.67	0.67	0.68	0.66	0.68	0.67	0.69	0.71
OMR_w_betweenness	-0.1	-0.11	-0.17	-0.17	-0.16	-0.17	-0.17	-0.21	-0.14	-0.18	-0.12	-0.2	-0.18	-0.16	-0.21	-0.18	-0.26	-0.25	-0.19	-0.18	-0.2	-0.23	-0.23	-0.26	-0.24	-0.17	-0.19	-0.25
OMR_eigen	0.52	0.5	0.49	0.49	0.51	0.53	0.52	0.51	0.5	0.5	0.51	0.51	0.49	0.51	0.52	0.53	0.49	0.46	0.38	0.46	0.45	0.44	0.43	0.41	0.43	0.43	0.42	0.42
OMR_w_eigen	0.89	0.84	0.83	0.78	0.79	0.8	0.83	0.82	0.84	0.87	0.84	0.81	0.82	0.81	0.8	0.79	0.81	0.75	0.65	0.78	0.79	0.78	0.83	0.83	0.82	0.8	0.81	0.85

Table D.7: Pearson correlation coefficients in the Textiles sector

Variable	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
IMR_indegree	0.47	0.48	0.46	0.46	0.42	0.37	0.35	0.28	0.29	0.29	0.29	0.3	0.3	0.32	0.3	0.32	0.32	0.32	0.3	0.31	0.28	0.27	0.26	0.14	0.15	0.15	0.14	0.14
IMR_outdegree	0.61	0.62	0.61	0.6	0.55	0.53	0.5	0.44	0.44	0.43	0.43	0.42	0.43	0.45	0.43	0.43	0.44	0.43	0.43	0.43	0.42	0.42	0.4	0.38	0.4	0.41	0.4	0.36
IMR_weighted_indegree	0.42	0.44	0.43	0.43	0.38	0.33	0.31	0.26	0.26	0.24	0.23	0.24	0.24	0.26	0.24	0.27	0.26	0.26	0.28	0.3	0.3	0.31	0.29	0.25	0.25	0.25	0.23	0.19
IMR_weighted_outdegree	0.85	0.82	0.8	0.78	0.71	0.66	0.62	0.55	0.56	0.54	0.55	0.57	0.59	0.63	0.64	0.68	0.76	0.79	0.8	0.81	0.81	0.81	0.81	0.79	0.78	0.76	0.78	0.8
IMR_closeness_in	0.52	0.53	0.52	0.53	0.46	0.39	0.38	0.3	0.31	0.31	0.31	0.31	0.33	0.35	0.33	0.36	0.37	0.38	0.38	0.38	0.36	0.34	0.32	0.36	0.37	0.36	0.34	0.3
IMR_closeness_out	0.65	0.66	0.65	0.64	0.59	0.56	0.53	0.46	0.46	0.45	0.45	0.44	0.45	0.47	0.45	0.46	0.47	0.46	0.46	0.47	0.46	0.45	0.43	0.41	0.43	0.44	0.43	0.39
IMR_w_closeness_in	0.04	0.01	0.05	-0.07	0.01	-0.08	-0.13	0.04	-0.03	-0.15	0	-0.08	0.07	0.35	0.4	0.57	0.66	0.69	0.69	0.71	0.7	0.69	0.7	0.72	0.69	0.65	0.65	0.7
IMR_w_closeness_out	-0.45	-0.48	-0.49	-0.41	-0.43	-0.41	-0.4	-0.42	-0.45	-0.31	-0.43	-0.34	-0.49	-0.4	-0.48	-0.43	-0.39	-0.41	-0.48	-0.45	-0.5	-0.44	-0.46	-0.44	-0.44	-0.45	-0.43	-0.5
IMR_betweenness	0.6	0.59	0.6	0.61	0.55	0.49	0.47	0.4	0.41	0.39	0.38	0.38	0.41	0.44	0.42	0.44	0.47	0.48	0.48	0.49	0.46	0.44	0.42	0.37	0.37	0.34	0.34	0.29
IMR_w_betweenness	-0.18	-0.15	-0.23	-0.22	-0.22	-0.26	-0.21	-0.16	-0.22	-0.2	-0.19	-0.17	-0.21	-0.2	-0.22	-0.23	-0.17	-0.23	-0.24	-0.19	-0.17	-0.17	-0.1	-0.17	-0.2	-0.24	-0.23	-0.21
IMR_eigen	0.41	0.43	0.41	0.42	0.39	0.34	0.33	0.27	0.27	0.28	0.28	0.28	0.28	0.3	0.28	0.3	0.29	0.29	0.27	0.28	0.25	0.24	0.23	0.11	0.12	0.12	0.12	0.12
IMR_w_eigen	0.52	0.53	0.51	0.49	0.42	0.36	0.33	0.27	0.28	0.28	0.28	0.3	0.31	0.35	0.32	0.35	0.34	0.33	0.35	0.35	0.36	0.36	0.36	0.31	0.3	0.3	0.26	0.22
OMR_indegree	0.61	0.61	0.58	0.58	0.57	0.58	0.6	0.54	0.52	0.53	0.55	0.56	0.52	0.54	0.56	0.55	0.52	0.53	0.52	0.51	0.48	0.5	0.48	0.46	0.47	0.49	0.48	0.48
OMR_outdegree	0.6	0.61	0.59	0.58	0.56	0.56	0.56	0.53	0.51	0.52	0.53	0.54	0.51	0.53	0.55	0.54	0.53	0.55	0.55	0.56	0.54	0.55	0.55	0.54	0.54	0.56	0.54	0.54
OMR_weighted_indegree	0.92	0.9	0.88	0.85	0.81	0.8	0.79	0.77	0.76	0.75	0.75	0.75	0.69	0.69	0.72	0.65	0.66	0.69	0.69	0.68	0.67	0.68	0.7	0.69	0.66	0.67	0.7	0.78
OMR_weighted_outdegree	0.54	0.51	0.5	0.47	0.45	0.49	0.46	0.4	0.37	0.36	0.34	0.34	0.27	0.28	0.27	0.25	0.23	0.25	0.27	0.3	0.32	0.35	0.38	0.37	0.33	0.32	0.33	0.31
OMR_closeness_in	0.73	0.72	0.7	0.68	0.65	0.68	0.69	0.63	0.61	0.64	0.63	0.64	0.62	0.63	0.65	0.64	0.61	0.63	0.64	0.63	0.6	0.63	0.6	0.62	0.63	0.64	0.65	0.68
OMR_closeness_out	0.65	0.66	0.64	0.63	0.6	0.61	0.61	0.57	0.56	0.57	0.57	0.58	0.55	0.57	0.6	0.58	0.57	0.59	0.6	0.6	0.58	0.6	0.6	0.58	0.58	0.61	0.59	0.59
OMR_w_closeness_in	-0.04	-0.16	-0.13	-0.11	-0.17	-0.07	-0.1	-0.43	-0.39	-0.39	-0.52	-0.25	-0.21	-0.26	-0.24	0	-0.02	0.03	0.06	0.09	0.09	0.13	0.14	0.14	0.11	0.09	0.07	0.08
OMR_w_closeness_out	-0.39	-0.5	-0.46	-0.31	-0.38	-0.47	-0.44	-0.46	-0.38	-0.44	-0.49	-0.38	-0.54	-0.44	-0.48	-0.47	-0.44	-0.43	-0.53	-0.52	-0.51	-0.58	-0.62	-0.49	-0.59	-0.47	-0.5	-0.64
OMR_betweenness	0.8	0.78	0.76	0.75	0.71	0.75	0.77	0.69	0.67	0.69	0.69	0.7	0.68	0.68	0.73	0.69	0.68	0.69	0.69	0.71	0.68	0.72	0.69	0.69	0.7	0.71	0.73	0.74
OMR_w_betweenness	-0.13	-0.12	-0.14	-0.15	-0.18	-0.22	-0.17	-0.21	-0.17	-0.13	-0.16	-0.13	-0.16	-0.21	-0.2	-0.24	-0.22	-0.28	-0.25	-0.24	-0.21	-0.26	-0.25	-0.21	-0.25	-0.21	-0.26	-0.25
OMR_eigen	0.51	0.52	0.51	0.52	0.51	0.53	0.54	0.5	0.47	0.49	0.51	0.52	0.48	0.5	0.51	0.5	0.48	0.49	0.47	0.47	0.44	0.45	0.44	0.42	0.42	0.43	0.42	0.42
OMR_w_eigen	0.94	0.92	0.92	0.89	0.83	0.81	0.8	0.77	0.78	0.77	0.79	0.81	0.73	0.74	0.76	0.71	0.71	0.73	0.74	0.72	0.71	0.71	0.73	0.73	0.7	0.69	0.75	0.83

Table D.8: Pearson correlation coefficients in the Vehicles sector

Variable	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
IMR_indegree	0.37	0.4	0.45	0.5	0.49	0.5	0.49	0.49	0.5	0.47	0.47	0.47	0.45	0.46	0.42	0.42	0.45	0.42	0.43	0.45	0.45	0.45	0.43	0.41	0.41	0.41	0.41	0.41
IMR_outdegree	0.4	0.44	0.48	0.51	0.48	0.5	0.49	0.48	0.49	0.48	0.47	0.48	0.46	0.48	0.46	0.44	0.47	0.44	0.46	0.47	0.48	0.49	0.47	0.47	0.47	0.47	0.47	0.47
IMR_weighted_indegree	0.34	0.39	0.47	0.52	0.46	0.45	0.41	0.38	0.39	0.37	0.39	0.39	0.38	0.39	0.39	0.41	0.47	0.43	0.47	0.46	0.47	0.5	0.47	0.49	0.48	0.5	0.49	0.5
IMR_weighted_outdegree	0.87	0.87	0.86	0.85	0.82	0.81	0.79	0.79	0.79	0.8	0.82	0.81	0.8	0.79	0.8	0.81	0.8	0.8	0.79	0.8	0.8	0.8	0.8	0.81	0.81	0.81	0.79	0.83
IMR_closeness_in	0.45	0.47	0.55	0.59	0.56	0.58	0.57	0.56	0.59	0.56	0.55	0.55	0.54	0.53	0.49	0.5	0.52	0.5	0.52	0.54	0.55	0.56	0.54	0.53	0.53	0.53	0.54	0.53
IMR_closeness_out	0.44	0.48	0.53	0.56	0.53	0.54	0.53	0.53	0.54	0.52	0.52	0.52	0.51	0.52	0.5	0.49	0.51	0.49	0.5	0.51	0.52	0.54	0.52	0.52	0.51	0.52	0.52	0.52
IMR_w_closeness_in	0.5	0.09	0.12	0.1	0.06	0.03	0.06	-0.22	0.65	0.05	0.38	0.62	0.06	0.01	0.19	0.36	0.67	0.66	0.47	0.44	0.38	0.45	0.55	0.69	0.71	0.43	0.46	0.72
IMR_w_closeness_out	-0.46	-0.37	-0.46	-0.55	-0.5	-0.52	-0.57	-0.44	-0.48	-0.55	-0.53	-0.57	-0.53	-0.55	-0.48	-0.51	-0.52	-0.52	-0.66	-0.59	-0.59	-0.6	-0.6	-0.63	-0.65	-0.63	-0.6	-0.6
IMR_betweenness	0.51	0.55	0.61	0.64	0.62	0.63	0.62	0.61	0.65	0.62	0.61	0.61	0.6	0.6	0.57	0.58	0.6	0.57	0.6	0.6	0.62	0.64	0.61	0.6	0.59	0.59	0.6	0.58
IMR_w_betweenness	-0.1	-0.1	-0.12	-0.14	-0.17	-0.17	-0.21	-0.16	-0.14	-0.11	-0.17	-0.16	-0.17	-0.12	-0.14	-0.15	-0.17	-0.18	-0.21	-0.17	-0.23	-0.17	-0.19	-0.22	-0.21	-0.25	-0.23	-0.19
IMR_eigen	0.31	0.34	0.4	0.45	0.44	0.45	0.45	0.44	0.45	0.43	0.44	0.43	0.41	0.41	0.39	0.38	0.41	0.38	0.39	0.41	0.41	0.4	0.38	0.37	0.37	0.37	0.37	0.36
IMR_w_eigen	0.34	0.38	0.45	0.49	0.41	0.42	0.38	0.35	0.36	0.33	0.35	0.36	0.34	0.36	0.36	0.39	0.45	0.39	0.42	0.41	0.42	0.45	0.45	0.47	0.44	0.45	0.44	0.48
OMR_indegree	0.59	0.58	0.6	0.59	0.56	0.61	0.64	0.62	0.57	0.56	0.58	0.59	0.57	0.55	0.51	0.52	0.55	0.57	0.56	0.57	0.56	0.56	0.53	0.52	0.54	0.55	0.52	0.52
OMR_outdegree	0.66	0.64	0.67	0.66	0.61	0.63	0.64	0.63	0.59	0.57	0.6	0.6	0.6	0.58	0.57	0.58	0.59	0.59	0.59	0.6	0.6	0.59	0.57	0.57	0.6	0.6	0.58	0.58
OMR_weighted_indegree	0.76	0.71	0.74	0.71	0.64	0.69	0.72	0.71	0.72	0.74	0.75	0.73	0.72	0.69	0.64	0.63	0.69	0.68	0.65	0.7	0.7	0.7	0.73	0.71	0.72	0.75	0.73	0.8
OMR_weighted_outdegree	0.55	0.54	0.59	0.59	0.51	0.58	0.63	0.61	0.61	0.6	0.59	0.55	0.56	0.54	0.47	0.46	0.52	0.52	0.51	0.55	0.56	0.58	0.61	0.6	0.59	0.63	0.62	0.68
OMR_closeness_in	0.66	0.65	0.68	0.66	0.61	0.69	0.73	0.71	0.66	0.65	0.66	0.67	0.66	0.63	0.57	0.59	0.62	0.65	0.65	0.67	0.67	0.67	0.64	0.65	0.69	0.69	0.68	0.69
OMR_closeness_out	0.69	0.67	0.71	0.69	0.65	0.66	0.68	0.67	0.63	0.62	0.65	0.64	0.65	0.62	0.61	0.62	0.64	0.64	0.64	0.64	0.64	0.63	0.61	0.62	0.64	0.65	0.63	0.63
OMR_w_closeness_in	0.12	0.1	0.05	0.17	0.09	0.05	0.05	-0.18	-0.01	0.03	-0.13	0.1	0.15	-0.15	-0.13	0.04	0.06	0.1	0.16	0.27	-0.01	0.19	0.27	0.31	0.29	0.21	0.47	0.38
OMR_w_closeness_out	-0.44	-0.48	-0.38	-0.45	-0.5	-0.51	-0.5	-0.35	-0.47	-0.56	-0.57	-0.59	-0.63	-0.57	-0.62	-0.49	-0.52	-0.62	-0.66	-0.66	-0.6	-0.61	-0.64	-0.67	-0.67	-0.68	-0.63	-0.66
OMR_betweenness	0.7	0.68	0.74	0.72	0.65	0.74	0.78	0.76	0.72	0.71	0.72	0.73	0.72	0.7	0.65	0.66	0.7	0.71	0.72	0.73	0.72	0.74	0.71	0.73	0.77	0.77	0.76	0.75
OMR_w_betweenness	-0.09	-0.1	-0.11	-0.09	-0.19	-0.17	-0.13	-0.16	-0.18	-0.14	-0.19	-0.2	-0.22	-0.16	-0.22	-0.16	-0.21	-0.23	-0.26	-0.25	-0.27	-0.19	-0.21	-0.25	-0.25	-0.29	-0.26	-0.23
OMR_eigen	0.52	0.52	0.54	0.54	0.52	0.56	0.58	0.57	0.52	0.51	0.54	0.55	0.53	0.51	0.48	0.49	0.51	0.53	0.52	0.53	0.52	0.51	0.48	0.47	0.49	0.49	0.46	0.46
OMR_w_eigen	0.69	0.64	0.66	0.63	0.54	0.6	0.63	0.63	0.66	0.67	0.69	0.67	0.65	0.64	0.59	0.6	0.65	0.62	0.61	0.65	0.66	0.67	0.71	0.69	0.68	0.7	0.69	0.77

Table D.9: Pearson correlation coefficients in the Wood-Paper sector

Variable	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
IMR_indegree	0.64	0.65	0.63	0.65	0.68	0.67	0.67	0.66	0.63	0.64	0.65	0.66	0.59	0.59	0.61	0.61	0.6	0.59	0.58	0.58	0.57	0.56	0.55	0.54	0.56	0.58	0.57	0.57
IMR_outdegree	0.69	0.7	0.69	0.69	0.7	0.68	0.68	0.67	0.66	0.66	0.67	0.66	0.63	0.62	0.63	0.63	0.63	0.62	0.62	0.62	0.6	0.6	0.59	0.59	0.61	0.64	0.63	0.64
IMR_weighted_indegree	0.83	0.82	0.82	0.81	0.79	0.74	0.74	0.76	0.73	0.72	0.7	0.7	0.65	0.65	0.73	0.76	0.77	0.74	0.75	0.75	0.75	0.74	0.74	0.75	0.73	0.7	0.7	0.66
IMR_weighted_outdegree	0.89	0.88	0.87	0.88	0.85	0.82	0.82	0.82	0.79	0.78	0.78	0.78	0.72	0.71	0.76	0.77	0.78	0.77	0.77	0.78	0.78	0.77	0.78	0.79	0.81	0.78	0.77	0.74
IMR_closeness_in	0.78	0.77	0.75	0.77	0.79	0.77	0.77	0.77	0.75	0.77	0.75	0.77	0.7	0.69	0.71	0.7	0.71	0.7	0.71	0.7	0.69	0.69	0.69	0.69	0.71	0.73	0.74	0.73
IMR_closeness_out	0.75	0.75	0.74	0.75	0.76	0.74	0.74	0.72	0.71	0.72	0.72	0.71	0.69	0.67	0.69	0.69	0.69	0.68	0.68	0.67	0.66	0.66	0.64	0.65	0.66	0.69	0.69	0.69
IMR_w_closeness_in	0.07	0.06	0.05	0.01	0.12	0.05	0.07	-0.3	-0.22	-0.23	-0.19	-0.4	-0.26	-0.32	-0.21	0.14	0.22	0.23	0.23	0.28	0.26	0.13	0.37	0.36	0.34	0.26	0.29	0.27
IMR_w_closeness_out	-0.44	-0.48	-0.4	-0.49	-0.55	-0.54	-0.53	-0.6	-0.53	-0.58	-0.63	-0.55	-0.63	-0.46	-0.64	-0.6	-0.55	-0.59	-0.64	-0.63	-0.51	-0.61	-0.59	-0.63	-0.59	-0.57	-0.57	-0.6
IMR_betweenness	0.84	0.81	0.8	0.83	0.85	0.83	0.83	0.83	0.81	0.83	0.81	0.83	0.77	0.75	0.78	0.77	0.79	0.78	0.77	0.76	0.76	0.77	0.77	0.76	0.76	0.79	0.79	0.78
IMR_w_betweenness	-0.1	-0.14	-0.05	-0.18	-0.14	-0.23	-0.21	-0.1	-0.18	-0.15	-0.22	-0.21	-0.16	-0.16	-0.19	-0.22	-0.24	-0.25	-0.2	-0.23	-0.23	-0.24	-0.24	-0.24	-0.2	-0.2	-0.21	-0.2
IMR_eigen	0.54	0.56	0.55	0.59	0.62	0.6	0.61	0.6	0.57	0.58	0.6	0.6	0.54	0.55	0.56	0.56	0.55	0.54	0.53	0.53	0.51	0.5	0.49	0.48	0.5	0.52	0.51	0.5
IMR_w_eigen	0.77	0.76	0.78	0.73	0.67	0.62	0.57	0.6	0.55	0.52	0.51	0.5	0.45	0.46	0.58	0.64	0.65	0.62	0.65	0.62	0.61	0.6	0.59	0.6	0.59	0.57	0.55	0.51
OMR_indegree	0.52	0.47	0.43	0.4	0.38	0.39	0.43	0.39	0.43	0.45	0.45	0.47	0.51	0.52	0.57	0.6	0.57	0.59	0.57	0.58	0.55	0.57	0.56	0.56	0.57	0.57	0.58	0.57
OMR_outdegree	0.56	0.51	0.48	0.43	0.4	0.41	0.43	0.41	0.46	0.46	0.47	0.49	0.53	0.54	0.57	0.6	0.59	0.62	0.61	0.61	0.6	0.61	0.61	0.61	0.63	0.65	0.65	0.65
OMR_weighted_indegree	0.69	0.61	0.56	0.51	0.47	0.46	0.48	0.49	0.54	0.55	0.54	0.56	0.6	0.61	0.66	0.68	0.68	0.68	0.68	0.68	0.68	0.7	0.74	0.73	0.75	0.75	0.76	0.74
OMR_weighted_outdegree	0.46	0.39	0.34	0.29	0.26	0.29	0.32	0.31	0.38	0.4	0.4	0.42	0.47	0.47	0.51	0.53	0.55	0.57	0.56	0.57	0.57	0.6	0.63	0.64	0.63	0.63	0.64	0.64
OMR_closeness_in	0.59	0.51	0.48	0.44	0.41	0.43	0.49	0.43	0.49	0.51	0.5	0.53	0.59	0.59	0.66	0.68	0.65	0.67	0.68	0.67	0.65	0.67	0.67	0.69	0.69	0.69	0.7	0.68
OMR_closeness_out	0.6	0.55	0.51	0.47	0.42	0.44	0.47	0.45	0.49	0.5	0.5	0.52	0.57	0.58	0.61	0.64	0.64	0.66	0.65	0.65	0.64	0.65	0.65	0.66	0.68	0.69	0.7	0.69
OMR_w_closeness_in	-0.14	-0.01	-0.08	-0.18	-0.02	-0.03	-0.06	-0.17	-0.2	-0.41	-0.41	-0.28	-0.19	-0.32	-0.34	0.01	0.12	0.16	0.19	0.2	0.17	0.09	0.28	0.27	0.38	0.33	0.28	0.33
OMR_w_closeness_out	-0.38	-0.4	-0.38	-0.22	-0.28	-0.4	-0.28	-0.44	-0.37	-0.48	-0.44	-0.43	-0.56	-0.47	-0.52	-0.61	-0.54	-0.56	-0.61	-0.53	-0.53	-0.6	-0.63	-0.63	-0.56	-0.57	-0.61	-0.63
OMR_betweenness	0.62	0.53	0.5	0.47	0.44	0.46	0.52	0.46	0.52	0.54	0.52	0.56	0.63	0.63	0.72	0.71	0.7	0.73	0.73	0.72	0.69	0.72	0.73	0.73	0.74	0.73	0.75	0.72
OMR_w_betweenness	-0.1	-0.09	-0.12	-0.14	-0.1	-0.15	-0.14	-0.1	-0.13	-0.15	-0.17	-0.17	-0.14	-0.14	-0.15	-0.23	-0.24	-0.23	-0.16	-0.21	-0.2	-0.25	-0.26	-0.26	-0.18	-0.19	-0.23	-0.2
OMR_eigen	0.46	0.42	0.39	0.37	0.35	0.37	0.39	0.36	0.4	0.41	0.42	0.44	0.47	0.49	0.52	0.55	0.53	0.55	0.53	0.53	0.51	0.52	0.51	0.51	0.52	0.53	0.53	0.53
OMR_w_eigen	0.63	0.56	0.52	0.47	0.39	0.35	0.35	0.36	0.4	0.41	0.42	0.44	0.47	0.48	0.56	0.61	0.62	0.62	0.63	0.61	0.61	0.62	0.65	0.65	0.71	0.7	0.7	0.68

Appendix E

General equilibrium effects of EU disintegration by country

Table E.1: General equilibrium effects in case of removal of the Eurozone

	No Eurozone					No Schengen Area					No European Economic Area					No EU customs union, Eurozone, Schengen Area				
	Conditional GE	Full Endowment GE				Conditional GE	Full Endowment GE				Conditional GE	Full Endowment GE				Conditional GE	Full Endowment GE			
Country	% exports	%Δ exports	%Δ price	%Δ IMR	%Δ GDP	% exports	%Δ exports	%Δ price	%Δ IMR	%Δ GDP	% exports	%Δ exports	%Δ price	%Δ IMR	%Δ GDP	% exports	%Δ exports	%Δ price	%Δ IMR	%Δ GDP
AFG	0,04	0,09	0,08	-0,07	0,15	0,02	0,04	0,04	-0,03	0,07	-0,01	-0,02	-0,02	0,02	-0,04	0,03	0,14	0,1	0	0,1
AGO	6,06	5,66	-0,32	-0,7	0,38	1,76	1,62	-0,09	-0,21	0,12	-1,31	-1,2	0,08	0,17	-0,09	4,83	4,56	-0,2	-0,51	0,31
ALB	14,2	12,81	0,08	-0,28	0,37	3,93	3,49	0,02	-0,09	0,11	-2,64	-2,33	0	0,08	-0,08	10,51	10,51	0,14	-0,12	0,26
ARE	1,3	1,16	-0,11	-0,24	0,14	0,56	0,5	-0,03	-0,09	0,06	-0,4	-0,35	0,03	0,07	-0,04	1,1	1,08	-0,07	-0,18	0,11
ARG	2,21	1,98	0,11	0,02	0,1	0,75	0,66	0,04	0	0,03	-0,56	-0,48	-0,03	-0,01	-0,02	1,67	1,8	0,06	0	0,06
ARM	3,64	3,37	0,18	-0,13	0,31	1,19	1,04	0,04	-0,07	0,11	-0,83	-0,72	-0,02	0,05	-0,08	2,76	2,82	0,19	-0,03	0,22
AUS	1,62	1,55	-0,06	-0,15	0,08	0,59	0,57	-0,03	-0,06	0,03	-0,55	-0,53	0,02	0,04	-0,03	1,25	1,27	-0,06	-0,12	0,06
AUT	4,49	2,6	-2,68	4,03	-6,38	0,71	0,18	-0,77	1,09	-1,83	-0,51	-0,15	0,52	-0,7	1,22	3,78	1,85	-1,81	3,34	-4,95
AZE	1,95	1,72	-0,27	-0,31	0,04	0,97	0,87	-0,11	-0,13	0,02	-0,8	-0,73	0,1	0,12	-0,02	1,6	1,53	-0,17	-0,2	0,04
BDI	10,38	9,69	-0,56	-0,61	0,06	3,58	3,29	-0,17	-0,19	0,02	-2,44	-2,24	0,13	0,14	-0,01	7,74	7,29	-0,34	-0,38	0,04
BEL	3,84	1,72	-2,92	3,81	-6,4	0,86	0,3	-0,8	0,99	-1,77	-0,43	-0,02	0,56	-0,66	1,23	3,22	0,99	-1,99	3,18	-4,97
BEN	4,59	4,3	-0,59	-0,67	0,09	1,43	1,34	-0,19	-0,22	0,03	-1,01	-0,94	0,14	0,16	-0,02	3,62	3,19	-0,38	-0,46	0,07
BFA	6,16	5,61	-0,5	-0,56	0,07	1,86	1,69	-0,15	-0,17	0,02	-1,3	-1,17	0,11	0,13	-0,02	4,79	4,5	-0,31	-0,36	0,05
BGD	1,48	1,28	0,95	0,87	0,08	0,53	0,34	0,34	0,31	0,03	-0,42	-0,26	-0,28	-0,25	-0,03	1,13	1,73	0,71	0,7	0,02
BGR	6,28	6,16	0,58	-0,28	0,87	2,14	1,96	0,18	-0,14	0,32	-0,67	-0,29	0,56	-0,66	1,23	5,82	7,79	2,12	-2,14	4,4
BHR	1,51	1,33	-0,11	-0,22	0,1	0,59	0,52	-0,04	-0,08	0,04	-0,43	-0,38	0,04	0,07	-0,03	1,27	1,22	-0,08	-0,16	0,08
BHS	1,51	1,46	0,31	0,04	0,27	1,22	1,11	0,2	-0,02	0,21	-0,88	-0,79	-0,15	0,01	-0,16	0,61	1,02	0,21	0,11	0,1
BIH	6,94	6,63	0,51	-0,26	0,77	2,34	2,1	0,15	-0,13	0,28	-1,57	-1,41	-0,09	0,11	-0,2	3,82	4,15	0,4	-0,02	0,42

Table E.1: Continued on next page

Table E.1: continued from previous page

	No Eurozone					No Schengen Area					No European Economic Area					No EU customs union, Eurozone, Schengen Area				
	Conditional GE	Full Endowment GE				Conditional GE	Full Endowment GE				Conditional GE	Full Endowment GE				Conditional GE	Full Endowment GE			
Country	% exports	%Δ exports	%Δ price	%Δ IMR	%Δ GDP	% exports	%Δ exports	%Δ price	%Δ IMR	%Δ GDP	% exports	%Δ exports	%Δ price	%Δ IMR	%Δ GDP	% exports	%Δ exports	%Δ price	%Δ IMR	%Δ GDP
BLR	1,69	1,44	-0,08	-0,24	0,16	0,79	0,67	-0,05	-0,13	0,07	-0,57	-0,47	0,04	0,09	-0,05	1,08	1,1	-0,04	-0,13	0,1
BLZ	0,22	-0,04	-0,01	-0,03	0,01	0,07	-0,01	-0,01	-0,01	0	-0,3	-0,19	-0,01	0	-0,01	0,12	0,22	0	0	0
BMU	8,25	7,23	0,1	-0,13	0,23	3,49	3	0,1	0	0,1	-2,51	-2,15	-0,06	0,01	-0,08	7,3	7,37	0,18	0	0,18
BOL	0,83	0,75	0,03	-0,04	0,07	0,32	0,29	0	-0,03	0,03	-0,23	-0,2	-0,01	0,01	-0,02	0,64	0,7	0,01	-0,03	0,05
BRA	2,84	2,53	0,06	-0,02	0,08	0,99	0,87	0,01	-0,02	0,03	-0,72	-0,63	-0,02	0	-0,02	2,22	2,29	0,03	-0,02	0,05
BRB	0,81	0,58	-0,01	-0,08	0,07	0,43	0,33	0	-0,04	0,03	-0,53	-0,43	0,01	0,05	-0,04	0,59	0,66	0	-0,04	0,04
BRN	0,35	0,35	0,05	0	0,04	0,12	0,14	0,01	0	0,01	-0,26	-0,26	-0,03	0	-0,02	0,3	0,41	0	-0,03	0,03
BTN	0,22	0,24	0,16	0,13	0,04	0,08	0,09	0,05	0,03	0,01	-0,06	-0,07	-0,05	-0,04	-0,01	0,18	0,35	0,1	0,08	0,02
CAF	11,36	10,57	-0,33	-0,9	0,57	3,17	2,89	-0,09	-0,27	0,18	-2,12	-1,93	0,07	0,19	-0,13	8,83	8,4	-0,15	-0,6	0,45
CAN	0,54	0,49	0,05	-0,03	0,08	0,21	0,19	0,02	-0,02	0,03	-0,18	-0,16	-0,02	0,01	-0,03	0,43	0,52	0,03	-0,03	0,06
CHE	6,08	6,01	0,41	-0,54	0,95	1,19	0,76	-0,67	1,12	-1,77	-1,32	-1,24	-0,1	0,13	-0,23	4,09	3,48	-0,31	1,02	-1,31
CHL	1,96	1,86	0,17	0,04	0,14	0,63	0,59	0,05	0,01	0,04	-0,47	-0,44	-0,05	-0,01	-0,03	1,52	1,64	0,11	0,02	0,1
CHN	1,65	1,34	0,21	0,17	0,04	0,59	0,48	0,07	0,06	0,01	-0,46	-0,37	-0,07	-0,05	-0,01	1,25	1,49	0,12	0,1	0,02
CIV	7,41	6,71	0,15	-0,28	0,43	2,14	1,85	0,06	-0,08	0,13	-1,55	-1,33	-0,04	0,06	-0,1	5,63	5,61	0,17	-0,14	0,31
CMR	10,64	9,61	0,05	-0,28	0,33	2,91	2,57	0,02	-0,08	0,1	-2,06	-1,82	-0,01	0,06	-0,07	8,19	8,11	0,09	-0,15	0,24
COG	2,23	2,29	0,4	0,01	0,4	0,69	0,64	0,12	-0,01	0,13	-0,51	-0,48	-0,08	0,02	-0,1	1,8	1,97	0,37	0,06	0,31
COL	2,27	2,09	-0,05	-0,12	0,06	0,79	0,73	-0,02	-0,04	0,02	-0,55	-0,51	0,01	0,03	-0,02	1,82	1,82	-0,04	-0,09	0,05
CPV	24,27	22,59	-1,21	-1,84	0,66	6,12	5,62	-0,31	-0,5	0,2	-4,05	-3,71	0,21	0,36	-0,15	18,52	17,25	-0,69	-1,21	0,53
CRI	1,23	1,17	0,18	0,06	0,13	0,39	0,35	0,06	0,02	0,04	-0,31	-0,27	-0,05	-0,02	-0,03	0,95	1,07	0,14	0,05	0,09
CUB	3,03	2,82	0,16	-0,1	0,25	0,9	0,8	0,05	-0,03	0,08	-0,66	-0,58	-0,05	0,01	-0,06	2,29	2,38	0,12	-0,06	0,18
CYP	11,62	9,95	-3,4	3,31	-6,38	2,56	2,3	-0,06	-0,29	0,23	-1,2	-0,86	0,62	-0,59	1,23	9,96	8,23	-1,51	1,58	-3,02
CZE	6,33	6,51	0,86	-0,31	1,19	0,68	0,06	-0,87	0,99	-1,83	-0,39	0,04	0,6	-0,64	1,25	5,59	6,72	1,63	-0,95	2,64
DEU	7,65	5,96	-2,74	3,88	-6,3	1,4	0,94	-0,76	1,05	-1,78	-0,9	-0,58	0,52	-0,67	1,2	6,32	4,33	-1,87	3,22	-4,89
DNK	4,31	4,26	0,3	-0,53	0,83	0,93	0,43	-0,74	1,07	-1,79	-0,52	-0,17	0,51	-0,7	1,23	3,11	3,8	0,86	-1,29	2,18
DOM	1,39	1,26	0,01	-0,06	0,07	0,46	0,42	0	-0,02	0,02	-0,33	-0,3	0	0,02	-0,02	1,1	1,15	0	-0,05	0,05
DZA	6,35	5,61	1,07	0,74	0,34	1,83	1,49	0,3	0,2	0,11	-1,27	-1,03	-0,2	-0,12	-0,08	4,95	5,6	0,87	0,66	0,21
ECU	3,19	2,85	0,1	0	0,1	1,02	0,89	0,03	0	0,03	-0,74	-0,64	-0,03	0	-0,02	2,48	2,56	0,06	-0,01	0,07
EGY	5,76	5,18	-0,14	-0,24	0,11	1,81	1,62	-0,06	-0,1	0,04	-1,44	-1,27	0,04	0,07	-0,03	4,32	4,29	-0,07	-0,15	0,08
ESP	6,69	4,91	-3,24	3,87	-6,74	1,54	1,06	-0,86	1,01	-1,85	-0,89	-0,55	0,58	-0,66	1,26	5,46	2,87	-2,14	3,34	-5,26
EST	6,82	4,66	-3,14	3,15	-6	1,04	0,42	-0,91	0,89	-1,77	-0,64	-0,22	0,61	-0,58	1,2	5,78	3,42	-2,17	2,59	-4,6
ETH	6,02	5,43	0,02	-0,14	0,16	1,98	1,75	0,01	-0,04	0,06	-1,44	-1,27	-0,01	0,03	-0,04	4,71	4,7	0,04	-0,08	0,12
FIN	8,32	6,71	-2,73	3,89	-6,3	1,44	0,99	-0,75	1,07	-1,8	-0,89	-0,58	0,51	-0,7	1,22	6,98	4,95	-1,88	3,19	-4,88
FJI	0,25	0,16	-0,01	-0,05	0,04	0,05	0,02	0	-0,01	0,01	-0,35	-0,3	-0,06	-0,02	-0,04	0,21	0,3	-0,01	-0,04	0,03
FRA	7,33	5,63	-3,02	3,92	-6,59	1,64	1,2	-0,8	1,04	-1,81	-0,99	-0,68	0,55	-0,67	1,23	5,94	3,57	-2,03	3,33	-5,14
GAB	9,82	9,25	-0,55	-0,74	0,19	2,9	2,71	-0,18	-0,24	0,06	-2,07	-1,93	0,13	0,18	-0,05	7,85	7,37	-0,36	-0,51	0,16
GBR	6,52	6,19	0,18	-0,46	0,64	2,13	1,95	0,07	-0,15	0,22	-1,43	-1,16	0,55	-0,62	1,18	4,82	4,84	0,21	-0,25	0,46
GEO	2,39	2,14	-0,05	-0,29	0,24	0,83	0,72	-0,04	-0,13	0,08	-0,81	-0,71	0,01	0,09	-0,08	1,21	1,33	-0,06	-0,18	0,12
GHA	3,6	3,04	0,56	0,38	0,18	1,09	0,84	0,17	0,11	0,06	-0,93	-0,73	-0,13	-0,08	-0,05	2,74	3,06	0,43	0,32	0,11
GMB	6,76	6,48	0,13	-0,58	0,71	1,98	1,84	0,03	-0,2	0,22	-1,51	-1,4	0	0,18	-0,18	5,22	5,12	0,17	-0,37	0,55
GRC	9,72	8,17	-3,41	3,64	-6,7	2,36	1,97	-0,87	0,97	-1,82	-1,08	-0,75	0,62	-0,63	1,26	8,76	6,2	-2,21	3,18	-5,17
GTM	0,9	0,81	0,03	-0,04	0,07	0,3	0,27	0,01	-0,01	0,02	-0,2	-0,18	-0,01	0,01	-0,02	0,73	0,79	0,01	-0,04	0,05
HKG	0,37	0,51	0,24	0,03	0,21	0,18	0,22	0,11	0	0,1	-0,15	-0,19	-0,1	-0,01	-0,08	0,31	0,52	0,19	0,02	0,17
HND	0,57	0,52	0,1	0,04	0,07	0,19	0,17	0,03	0,01	0,02	-0,14	-0,12	-0,03	-0,01	-0,02	0,45	0,55	0,07	0,02	0,05
HRV	11,15	10,5	0,14	-0,81	0,96	3,66	3,34	0,03	-0,32	0,35	-2,43	-2,21	-0,01	0,23	-0,25	11,89	13,48	1,59	-2,89	4,64
HTI	0,06	0,07	0,09	0,06	0,03	0,02	0,02	0,03	0,02	0,01	-0,02	-0,01	-0,02	-0,02	-0,01	0,05	0,16	0,07	0,05	0,01
HUN	5,57	5,8	0,74	-0,53	1,28	0,69	0,12	-0,78	1,04	-1,8	-0,35	0,05	0,56	-0,67	1,24	5,04	6,17	1,48	-1,23	2,76
IDN	1,2	1,1	0,21	0,13	0,08	0,4	0,36	0,07	0,04	0,03	-0,31	-0,27	-0,06	-0,04	-0,02	0,93	1,12	0,13	0,08	0,05
IND	2,01	1,71	0,14	0,08	0,06	0,71	0,6	0,05	0,02	0,02	-0,58	-0,48	-0,04	-0,03	-0,02	1,57	1,74	0,09	0,05	0,04
IRL	5,67	3,96	-2,44	4,01	-6,14	0,86	0,83	0,24	0,07	0,17	-0,65	-0,35	0,46	-0,72	1,19	4,12	3,1	-0,82	2,27	-3,01
IRN	3,21	3,03	-0,13	-0,15	0,02	1,07	1,01	-0,05	-0,06	0,01	-0,75	-0,7	0,03	0,04	-0,01	2,53	2,46	-0,1	-0,12	0,02
IRQ	0,02	-0,13	0,06	0,05	0,01	0,01	-0,03	0,02	0,02	0	-0,01	0,02	-0,02	-0,02	0	0,02	0,17	0,02	0,02	0
ISL	5,68	5,45	0,49	-0,19	0,68	1,37	0,8	-0,94	0,89	-1,8	-0,71	-0,3	0,64	-0,59	1,24	3,3	2,52	-0,46	1,13	-1,56
ISR	4,23	3,96	-0,06	-0,38	0,32	1,47	1,36	-0,03	-0,15	0,12	-1,1	-1	0,01	0,1	-0,09	3,3	3,24	-0,03	-0,28	0,25
ITA	7,06	5,57	-2,78	4,28	-6,69	1,52	1,11	-0,76	1,11	-1,84	-0,95	-0,67	0,51	-0,72	1,25	5,83	3,71	-1,85	3,59	-5,23

Table E.1: Continued on next page

Table E.1: continued from previous page

	No Eurozone					No Schengen Area					No European Economic Area					No EU customs union, Eurozone, Schengen Area				
	Conditional GE	Full Endowment GE				Conditional GE	Full Endowment GE				Conditional GE	Full Endowment GE				Conditional GE	Full Endowment GE			
Country	% exports	%Δ exports	%Δ price	%Δ IMR	%Δ GDP	% exports	%Δ exports	%Δ price	%Δ IMR	%Δ GDP	% exports	%Δ exports	%Δ price	%Δ IMR	%Δ GDP	% exports	%Δ exports	%Δ price	%Δ IMR	%Δ GDP
JAM	2,17	1,96	0,15	-0,02	0,17	0,99	0,86	0,07	-0,01	0,08	-0,88	-0,76	-0,07	0,01	-0,07	2	2,1	0,16	0,02	0,14
JOR	1,74	1,58	-0,18	-0,29	0,11	0,57	0,53	-0,07	-0,11	0,04	-0,46	-0,43	0,05	0,08	-0,03	1,29	1,22	-0,12	-0,21	0,08
JPN	1,13	1	0,17	0,12	0,05	0,4	0,36	0,06	0,04	0,02	-0,31	-0,28	-0,05	-0,04	-0,01	0,88	1,05	0,1	0,07	0,03
KAZ	2,06	1,89	-0,04	-0,22	0,18	0,78	0,71	-0,02	-0,09	0,07	-0,64	-0,58	0,01	0,07	-0,06	1,48	1,52	-0,02	-0,14	0,12
KEN	1,88	1,61	-0,07	-0,12	0,05	0,63	0,55	-0,03	-0,05	0,02	-0,68	-0,59	0,03	0,05	-0,02	1,46	1,51	-0,05	-0,09	0,04
KGZ	0,92	0,73	-0,03	-0,07	0,04	0,33	0,26	-0,03	-0,04	0,01	-0,23	-0,17	0,02	0,03	-0,01	0,7	0,72	-0,01	-0,04	0,03
KHM	1,33	1,13	0,52	0,45	0,08	0,45	0,33	0,19	0,16	0,03	-0,4	-0,28	-0,17	-0,14	-0,02	1,04	1,42	0,38	0,34	0,04
KOR	1,1	1,03	0,13	0,06	0,08	0,41	0,38	0,05	0,02	0,03	-0,32	-0,29	-0,04	-0,02	-0,02	0,83	0,98	0,07	0,02	0,05
KWT	2,48	2,42	-0,23	-0,32	0,08	0,87	0,86	-0,09	-0,12	0,03	-0,7	-0,69	0,07	0,09	-0,02	1,92	1,81	-0,17	-0,23	0,07
LAO	0,82	0,77	0,29	0,23	0,06	0,29	0,27	0,1	0,08	0,02	-0,26	-0,23	-0,09	-0,07	-0,02	0,61	0,89	0,18	0,15	0,03
LBN	3,12	2,81	-0,31	-0,54	0,23	1,35	1,21	-0,07	-0,17	0,1	-0,81	-0,72	0,08	0,15	-0,06	2,65	2,53	-0,15	-0,34	0,19
LBR	0,45	1,36	0,91	-0,42	1,34	0,19	0,6	0,41	-0,13	0,55	-0,14	-0,42	-0,29	0,12	-0,41	0,32	1,02	0,76	-0,21	0,97
LBY	1,72	3,07	1,43	-0,14	1,59	0,48	0,78	0,41	-0,07	0,47	-0,35	-0,57	-0,3	0,06	-0,35	1,33	2,28	1,32	0,07	1,27
LCA	1,49	1,31	-0,04	-0,08	0,05	0,46	0,41	-0,02	-0,03	0,01	-0,63	-0,58	0,05	0,06	-0,02	1,19	1,23	-0,03	-0,07	0,03
LKA	1,74	1,6	0,3	0,14	0,15	0,6	0,51	0,1	0,05	0,06	-0,64	-0,54	-0,12	-0,06	-0,06	1,4	1,63	0,24	0,14	0,11
LTU	7,44	5,52	-2,93	3,51	-6,13	0,94	0,39	-0,83	1,02	-1,82	-0,54	-0,15	0,57	-0,66	1,25	6,51	4,36	-2,04	2,83	-4,69
LVA	5,63	3,57	-2,84	3,43	-5,99	0,81	0,24	-0,79	1,01	-1,78	-0,46	-0,05	0,56	-0,65	1,22	4,87	2,73	-1,99	2,76	-4,58
MAC	2,94	2,82	0,06	-0,28	0,34	1,11	1,04	0	-0,13	0,13	-0,72	-0,67	-0,04	0,05	-0,09	2,53	2,55	0,02	-0,26	0,29
MAR	10,83	9,82	0,29	-0,2	0,49	3,09	2,72	0,09	-0,07	0,16	-2,19	-1,92	-0,06	0,05	-0,12	8,25	8,31	0,3	-0,05	0,36
MDA	4,01	3,56	0,04	-0,18	0,21	1,56	1,35	-0,03	-0,11	0,08	-1,79	-1,56	-0,01	0,09	-0,1	0,81	1,14	-0,03	-0,07	0,04
MDG	6,61	6,13	0,46	0,03	0,43	1,92	1,69	0,16	0,02	0,14	-1,34	-1,17	-0,12	-0,02	-0,1	5,17	5,34	0,41	0,09	0,32
MDV	2,82	2,56	0,06	-0,06	0,11	0,92	0,83	0,01	-0,02	0,04	-0,92	-0,83	-0,02	0,02	-0,04	2,22	2,36	0,04	-0,04	0,08
MEX	0,53	0,48	0,04	-0,03	0,08	0,18	0,16	0,01	-0,01	0,03	-0,13	-0,11	-0,01	0,01	-0,02	0,41	0,5	0,02	-0,03	0,05
MKD	6,6	6,39	0,81	0,11	0,71	2,17	1,94	0,26	0,01	0,25	-1,72	-1,55	-0,15	0,06	-0,21	4,07	4,53	0,68	0,27	0,42
MLT	7,87	6,19	-2,33	3,41	-5,5	1,88	1,49	-0,62	0,89	-1,49	-1,04	-0,77	0,41	-0,62	1,05	6,29	4,64	-1,63	2,78	-4,26
MMR	1,03	0,73	0,34	0,33	0,01	0,37	0,28	0,11	0,11	0	-0,29	-0,22	-0,1	-0,09	0	0,79	1,13	0,18	0,18	0
MNG	0,91	0,94	0,08	0,01	0,06	0,38	0,41	0,01	-0,01	0,03	-0,3	-0,32	-0,02	0	-0,02	0,63	0,73	0,03	-0,01	0,04
MOZ	6,78	6,7	0,77	-0,06	0,84	1,94	1,78	0,25	-0,01	0,26	-1,38	-1,26	-0,18	0,01	-0,19	5,19	5,47	0,72	0,09	0,63
MUS	3,03	3,1	0,43	-0,2	0,63	0,96	0,9	0,15	-0,06	0,21	-0,95	-0,91	-0,18	0,03	-0,21	2,44	2,72	0,45	-0,05	0,5
MWI	2,81	2,41	0,09	0,02	0,07	0,97	0,84	0,02	-0,01	0,02	-1,06	-0,92	-0,01	0,01	-0,03	2,15	2,38	0,06	0,01	0,04
MYS	0,71	0,74	0,18	0,05	0,13	0,24	0,23	0,06	0,02	0,04	-0,19	-0,19	-0,06	-0,02	-0,04	0,55	0,71	0,12	0,03	0,09
NER	9,44	8,54	-0,34	-0,54	0,2	2,62	2,33	-0,1	-0,15	0,06	-1,72	-1,51	0,07	0,11	-0,04	7,43	7,06	-0,2	-0,35	0,15
NGA	8,78	8,03	-0,24	-0,34	0,11	2,51	2,28	-0,08	-0,11	0,03	-1,95	-1,78	0,08	0,11	-0,03	6,85	6,63	-0,14	-0,22	0,08
NIC	0,41	0,36	0,06	0,01	0,05	0,14	0,13	0,02	0	0,02	-0,09	-0,08	-0,02	-0,01	-0,01	0,34	0,43	0,04	0	0,03
NLD	4,47	2,24	-2,95	3,3	-5,97	0,96	0,37	-0,82	0,87	-1,67	-0,51	-0,08	0,58	-0,58	1,17	3,69	1,47	-2,01	2,77	-4,61
NOR	4,56	4,25	0,09	-0,38	0,47	1,91	1,45	-0,85	0,96	-1,78	-0,99	-0,66	0,59	-0,63	1,23	1,87	1,24	-0,73	1,05	-1,76
NPL	2,45	2,14	0,19	0,14	0,05	0,85	0,74	0,06	0,04	0,02	-0,58	-0,5	-0,05	-0,04	-0,01	2,03	2,2	0,11	0,07	0,03
NZL	1,2	1,12	0,04	-0,08	0,12	0,42	0,39	0,01	-0,03	0,04	-0,39	-0,36	-0,02	0,02	-0,04	0,92	0,99	0,02	-0,07	0,09
OMN	1,03	0,93	-0,08	-0,2	0,12	0,35	0,32	-0,03	-0,07	0,04	-0,32	-0,3	0,02	0,06	-0,04	0,77	0,76	-0,08	-0,16	0,09
PAK	2,64	2,32	0,28	0,15	0,13	0,92	0,78	0,09	0,05	0,05	-0,77	-0,64	-0,08	-0,05	-0,04	2,04	2,27	0,2	0,11	0,08
PAN	1,1	0,98	0,03	-0,08	0,11	0,46	0,41	0,02	-0,02	0,05	-0,31	-0,27	-0,02	0,01	-0,03	0,88	0,95	0,02	-0,07	0,08
PER	2,19	2	0,14	0,05	0,09	0,76	0,69	0,04	0,01	0,03	-0,56	-0,51	-0,04	-0,02	-0,02	1,7	1,81	0,08	0,02	0,06
PHL	1	0,99	0,18	0,06	0,12	0,32	0,31	0,06	0,02	0,04	-0,26	-0,25	-0,05	-0,02	-0,03	0,76	0,91	0,12	0,03	0,08
PNG	1,4	1,36	0,36	0,25	0,12	0,42	0,38	0,11	0,07	0,04	-0,38	-0,34	-0,1	-0,07	-0,03	1,1	1,31	0,27	0,19	0,08
POL	7,4	7,02	0,55	-0,14	0,69	1,02	0,47	-0,91	1	-1,88	-0,56	-0,16	0,63	-0,64	1,28	6,31	7,43	1,27	-0,86	2,16
PRT	3,64	1,73	-3,06	4,22	-6,9	0,81	0,28	-0,82	1,1	-1,89	-0,43	-0,05	0,56	-0,72	1,29	3	0,58	-2,02	3,61	-5,4
PRY	1	0,87	0,11	0,04	0,08	0,38	0,31	0,04	0,02	0,03	-0,28	-0,23	-0,04	-0,02	-0,02	0,75	0,89	0,07	0,02	0,05
QAT	1,72	1,68	0,08	-0,23	0,31	0,58	0,56	0,02	-0,09	0,11	-0,51	-0,49	-0,02	0,07	-0,1	1,37	1,44	0,07	-0,17	0,24
ROU	8,18	7,83	0,47	-0,37	0,84	3,02	2,75	0,14	-0,19	0,34	-0,52	-0,14	0,58	-0,69	1,28	8,97	10,89	1,98	-2,4	4,53
RUS	4,33	3,92	-0,05	-0,2	0,15	1,73	1,54	-0,03	-0,09	0,06	-1,27	-1,13	0,02	0,07	-0,05	3	3,05	-0,02	-0,11	0,1
RWA	6,16	5,57	-0,24	-0,27	0,03	2,12	1,91	-0,08	-0,09	0,01	-1,59	-1,42	0,06	0,07	-0,01	4,65	4,5	-0,16	-0,18	0,02
SAU	2,36	2,2	-0,11	-0,23	0,13	0,81	0,77	-0,05	-0,09	0,04	-0,65	-0,61	0,04	0,07	-0,04	1,81	1,78	-0,08	-0,17	0,09
SCG	8,46	7,62	0,33	-0,05	0,37	2,97	2,6	0,08	-0,06	0,14	-2,16	-1,88	-0,05	0,05	-0,11	5,19	5,56	0,26	0,05	0,21
SEN	7,89	7,35	-0,43	-0,65	0,23	2,28	2,1	-0,12	-0,19	0,07	-1,58	-1,45	0,09	0,14	-0,05	6,19	5,86	-0,26	-0,44	0,18

Table E.1: Continued on next page

Table E.1: continued from previous page

	No Eurozone					No Schengen Area					No European Economic Area					No EU customs union, Eurozone, Schengen Area				
	Conditional GE	Full Endowment GE				Conditional GE	Full Endowment GE				Conditional GE	Full Endowment GE				Conditional GE	Full Endowment GE			
Country	% exports	%Δ exports	%Δ price	%Δ IMR	%Δ GDP	% exports	%Δ exports	%Δ price	%Δ IMR	%Δ GDP	% exports	%Δ exports	%Δ price	%Δ IMR	%Δ GDP	% exports	%Δ exports	%Δ price	%Δ IMR	%Δ GDP
SGP	0,92	0,97	0,19	-0,04	0,23	0,33	0,33	0,07	-0,02	0,09	-0,27	-0,27	-0,06	0,01	-0,07	0,74	0,9	0,14	-0,04	0,17
SLE	2,74	3,31	1	0,27	0,73	0,83	0,9	0,32	0,08	0,24	-0,63	-0,67	-0,21	-0,02	-0,19	2,08	2,54	0,91	0,35	0,56
SLV	0,43	0,38	0,04	-0,04	0,08	0,15	0,14	0,01	-0,02	0,03	-0,1	-0,09	-0,01	0,01	-0,02	0,34	0,41	0,01	-0,04	0,06
SOM	0,04	0,05	0,05	-0,25	0,3	0,01	0,01	0,01	-0,09	0,1	-0,01	0	0	0,08	-0,08	0,03	0,1	0,05	-0,17	0,21
SUR	5,22	4,82	-0,3	-0,53	0,23	2,61	2,33	-0,02	-0,14	0,12	-1,78	-1,58	0,02	0,1	-0,08	5,33	5,1	-0,11	-0,33	0,22
SVK	5,34	3,32	-2,68	3,3	-5,72	0,68	0,07	-0,83	0,96	-1,77	-0,4	0,02	0,57	-0,62	1,21	4,84	3,12	-1,78	2,67	-4,3
SVN	4,72	2,66	-2,74	3,58	-6,04	0,85	0,29	-0,78	0,98	-1,74	-0,55	-0,15	0,54	-0,62	1,17	4,28	2,45	-1,81	2,95	-4,59
SWE	5,1	4,98	0,29	-0,53	0,82	0,98	0,5	-0,74	1,1	-1,81	-0,56	-0,22	0,5	-0,72	1,24	3,66	4,28	0,85	-1,29	2,18
SYR	1,4	1,35	0,3	0,1	0,19	0,42	0,34	0,07	0,01	0,06	-0,35	-0,28	-0,06	-0,01	-0,05	1,01	1,17	0,28	0,16	0,13
THA	0,76	0,77	0,19	0,08	0,11	0,29	0,27	0,07	0,03	0,04	-0,23	-0,21	-0,06	-0,03	-0,03	0,6	0,77	0,12	0,05	0,07
TJK	2,17	1,89	0,11	-0,04	0,15	1,17	1	0,06	-0,02	0,08	-0,84	-0,71	-0,05	0,01	-0,06	1,75	1,99	0,1	0	0,1
TKM	0,11	0,08	0,1	0,1	0,01	0,04	0,05	0,02	0,02	0	-0,03	-0,04	-0,03	-0,03	0	0,08	0,22	0,04	0,04	0
TON	0,3	0,46	0,25	0,09	0,16	0,09	0,12	0,08	0,02	0,05	-0,07	-0,1	-0,07	-0,03	-0,04	0,24	0,42	0,22	0,09	0,13
TTO	1,28	1,16	0,1	-0,01	0,11	0,39	0,34	0,03	-0,01	0,03	-0,35	-0,31	-0,01	0,02	-0,03	1,01	1,11	0,08	0	0,08
TUN	9,96	9,75	0,94	-0,21	1,16	2,77	2,54	0,29	-0,07	0,36	-1,84	-1,69	-0,2	0,06	-0,26	7,62	7,86	0,9	0,03	0,89
TUR	5,72	5,16	0,29	-0,02	0,32	1,94	1,67	0,1	-0,02	0,11	-1,58	-1,36	-0,09	0,01	-0,1	3,94	4,17	0,24	0,04	0,2
TZA	2,48	2,18	0,01	-0,08	0,09	0,88	0,77	-0,01	-0,04	0,03	-0,72	-0,63	0,01	0,04	-0,03	1,92	1,98	0,01	-0,06	0,06
UGA	3,27	2,82	0,06	-0,08	0,14	1,15	0,97	0,02	-0,03	0,05	-0,85	-0,71	0	0,04	-0,04	2,45	2,5	0,07	-0,03	0,1
UKR	2,27	2,05	0,01	-0,24	0,25	1,16	1,03	-0,02	-0,15	0,13	-0,88	-0,77	0,01	0,11	-0,1	1,22	1,37	0,02	-0,1	0,13
URY	1,47	1,41	0,21	0,05	0,16	0,51	0,46	0,07	0,01	0,06	-0,38	-0,34	-0,06	-0,02	-0,04	1,15	1,29	0,16	0,05	0,11
USA	2,54	2,27	0,09	0	0,09	0,83	0,73	0,03	0	0,03	-0,7	-0,61	-0,03	0	-0,03	1,97	2,05	0,06	0	0,06
UZB	2,19	2,05	-0,24	-0,25	0,01	0,84	0,78	-0,1	-0,1	0	-0,59	-0,55	0,06	0,07	0	1,59	1,51	-0,15	-0,16	0,01
VEN	0,77	0,85	0,2	-0,11	0,3	0,24	0,25	0,06	-0,04	0,1	-0,17	-0,18	-0,05	0,03	-0,07	0,61	0,74	0,17	-0,07	0,24
VNM	1,08	1,01	0,31	0,22	0,09	0,39	0,33	0,12	0,08	0,03	-0,29	-0,24	-0,09	-0,07	-0,02	0,85	1,08	0,23	0,17	0,06
YEM	0,68	0,63	0,07	0	0,07	0,26	0,24	0,01	-0,01	0,03	-0,22	-0,2	-0,02	0,01	-0,02	0,51	0,6	0,04	-0,01	0,05
ZAF	2,47	2,31	0,15	-0,05	0,21	0,87	0,79	0,06	-0,02	0,07	-0,72	-0,65	-0,05	0,02	-0,06	1,92	2,08	0,14	-0,01	0,15
ZMB	0,54	0,48	0,1	0,06	0,04	0,49	0,44	0,11	0,08	0,03	-0,19	-0,18	-0,02	0	-0,01	0,7	0,91	0,14	0,1	0,03
ZWE	2,16	1,88	0,22	0,13	0,09	0,7	0,6	0,06	0,03	0,03	-0,68	-0,57	-0,05	-0,02	-0,03	1,65	1,89	0,15	0,1	0,06