

Financial Liberalization, Growth and Distribution in Developing Countries: Some Notes on a Different Approach

by Domenica Tropeano

0. Introduction

Financial liberalization, according to conventional wisdom should on the one hand improve the growth prospect of an economy and on the other hand make the distribution of income more equal. All these effects however are hard to see in practice. Extensive empirical literature, which has grown rapidly in the last years, has shown that in most cases financial liberalization has not been successful. Even if growth may have accelerated, though not in all cases, efficiency has decreased and income distribution has worsened, leading to an increase in inequality. Higher output growth has not been accompanied by higher investment and by higher savings. In particular, the realization of financial reform has had a negative effect on the wage share in many countries. Real interest rates have risen almost everywhere.

No consistent explanation connecting these sparse pieces of evidence, has been produced so far. The authors of the empirical studies usually make some conjecture on their own results based on the standard neo-classical model. Real interest rates would rise after liberalization because higher rates of profits are earned or simply expected (see Reinhart - Tokatlidis, 2001). The higher prices of shares are also attributed to the expected higher productivity due to the liberalization policy (see Das - Mohapatra, 2003). The data on investment and productivity do not actually support such an interpretation, as some students have pointed out (see the contributions in Taylor ed., 2001). However, this is not the main point. The causal nexus in this type of explanation goes from the real to the monetary sector. This means that the high (either realized or expected) rate of return on capital would call for a higher rate of interest. In this paper, instead it will be argued that

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the higher real rate of interest may be responsible for the higher rate of profit. This means putting together the different pieces of the puzzle and explaining why high interest rates may call for higher profit rates but also a higher profit share and what the implications for growth are. Higher output growth but no higher investment may be explained in this framework. This exercise has been carried out for developed countries by Nardozzi, (2002), who shows that in Europe and in the U.S. the higher real rates of interest may have led to higher profit rates and, given the constancy of the capital-output ratio, to a higher profit share. The argument I have followed below shows how, unlike other types of explanation, this hypothesis might well fit both the stylized facts and the results of empirical studies¹.

The paper is organized as follows. The first section reviews the empirical evidence on the consequences of financial liberalization. The main results found in empirical literature are that after financial liberalization real interest rates and the supply of credit rise, savings fall and investments do not rise. The second reviews some post-Keynesian work, which explains why financial liberalization policies in developing countries have failed. The third proposes another way of solving the problem, based on the monetary theory of production. The fourth answers the question as to whether the monetary theory of production, which links the profit rate to the interest rate by competition forces, may be applied to developing countries; the answer to this question depends on whether competition works in those countries. The fifth compares the last approach to the post-keynesian literature and points out the differences. Lastly are the concluding remarks.

1. Stylized facts and empirical literature

In this section we will review the empirical literature on the effects of financial liberalization and stress the most important results. The main stylized facts are (see Table 1 below):

- a) Real interest rates are increasing.
- b) Credit is increasing.
- c) Saving is falling in the majority of cases.
- d) Investment is more or less constant or even falling.

Table 1, taken from a work by Reinhart - Tokatlidis, (2001), summarizes the main results of what happens after liberalizations are carried out for the main macroeconomic indicators. The sample includes 50 countries, 14 developed and 36 developing, and the time period considered is 1970-1998. Each liberalization episode is considered separately. So, for example, if a country

¹ I am not going to test statistically such a thesis for developing countries. This task would require an enormous work of collection and selection of internationally comparable data, which goes beyond the scope of this paper.

which has liberalized then decides to resume its former regime and some time later re-liberalizes those episodes are considered separately.

Table 1 below shows that almost everywhere real interest rates have risen. The effects on output, saving and investment are mixed. Output grows while investment does not and saving falls in developed countries and in Latin America, while rising in Asia.

The problem of why output grows while investment does not is solved in a book (see Taylor, ed., 2001), in which it is shown, by disaggregating aggregate demand components for a group of developing countries, that the items, which grow, are consumption and state expenditure. Furthermore there is strong evidence of the positive effect on credit almost everywhere.

The first of the facts listed above is the one least open to question. All the studies agree that both nominal and real interest rates rose to very high levels after liberalization and that this happened almost everywhere. Honohan, (2001) gives the most detailed and complete statistical study on the subject. He first proves that interest rates have risen following financial liberalization, then he attempts to find an explanation for this by using econometric techniques. The findings of this research are that both deposit and lending rates depend positively on wholesale rates, meaning the inter-bank market rates and money market rates. A role is also played by the increase in markup charged by banks, though, as some authors have observed, the number of banks and financial institutions has greatly increased (see Arestis - Niskanke - Sten, 2003).

As for saving, different results in different countries or groups of countries were found. However, the most common case is that saving falls rather than increases. Bandiera *et al.* (2000), using a sample comprising a certain number of countries, have made a very accurate study of this. It is impossible to get results which hold true for all countries. In the majority of them, saving decreases after financial liberalization while an exception in this respect is Turkey. Credit increases in the majority of cases with some exceptions. Turkey is again an exception. The thesis that liberalization mitigates credit constraints faced by households is not supported by the results of the empirical exercise carried out in Bandiera *et al.* (2000). If saving falls then it is more likely that business saving falls rather than households saving, so conclude the authors.

In Table 1 we can see that saving patterns vary across groups of countries. It appears that in Latin America they unambiguously decrease whereas in Asia they increase. However, even in the latter case, it is difficult to infer that financial liberalization has increased saving for real interest rates do not increase at all. Thus, even in this case, it cannot be claimed that an increase in real interest rates, after financial liberalization, increases saving. What has happened is that, in Asia, the governments, which are very active in macroeconomic management, have succeeded in enlarging the sector of formal intermediation by attracting funds that were previously held in informal curb markets. These funds were then channelled to firms according to the invest-

Tab. 1. Macroeconomic indicators before and after liberalization

	Before	After	Before	After	Before	After	Before	After		
	Gross	Gross	Domestic	Domestic	Real	Real	Credit	Credit		
	Saving	Investment	Investment	Investment	Interest	Interest	to gdp	to gdp		
					Rate	Rate	Growth	Growth		
							Rate	Rate		
All countries	19.1	21.19*	22.41	22.45	1.58	7.73*	32.21	55.2*	4.15	3.77*
Developed	24.98	22.74*	25.66	21.37*	0.43	6.27*	56.59	82.48*	3.04	2.54*
Emerging	17.81	21.55*	21.7	23.15*	1.98	8.83*	25.62	39.63*	4.62	4.29
Emerging Africa	13.74	13.21	18.55	17.75	-1.49	8.96*	19.73	26.77*	4.08	3.38
Emerging Asia	22.91	29.69*	25.11	29.61*	5.52	5.0	32.7	57.82*	6.56	5.66*
Emerging Latin America	22.81	19.17*	22.87	19.37*	1.42	14.7*	25.79	33.48*	2.89	3.72
Emerging Middle East	13.10	12.17	23.18	22.11	12.12	8.06	28.31	37.65*	5.22	4.07
High income	24.55	24.05	26.48	23.28*	1.10	6.02*	56.48	81.94*	3.08	3.26
Upper-middle income	24.69	23.46	24.9	22.41*	-3.28	9.03*	32.12	44.67*	4.52	4.41
Lower-middle income	19.09	17.32*	23.16	21.83*	15.47	9.97	24.54	41.55*	4.59	3.57*
Low income	13.44	14.93	18.28	19.94*	0.06	9.73*	17.66	18.23	4.32	4.04

Note: An asterisk indicates that the difference between the pre and post liberalization sample means is statistically significant at the 5% significance level. Source: Reinhart - Tokatlidis (2001), rearranged by the author.

ment plans approved by the same governments. The policy of «getting the prices right» inspiring neo-classical theorizing about liberalization would have not worked in this case.

Credit seems to increase almost everywhere. However, the main part of this credit is attributed to the non-traded goods sector (see Tornell - Westermann, 2003).

Investment does not show a big difference with respect to pre-liberalization values (see Table 1 above). Thus the thesis that financial liberalization, through the increase in the supply of savings, will stimulate investment does not seem well founded in reality. An answer to this problem has recently been given by neoclassical economists (see Levine 2001), who argue that what matters is not the rate of increase in physical capital but rather the increase in efficiency thus in technological investment and productivity, which in turn stimulates growth.

As for productivity patterns after financial liberalization the findings are mixed. Berg - Taylor (2001), who sum up the main results of the studies in Taylor ed. (2001), find that productivity does not change a lot. Productivity improvements are however higher in the traded goods than in the non-traded goods sector. The problem is that in most countries, after all types of liberalization, the productive structure changed with a fall in the weight of the former sector and an increase in the weight of the latter. Even when productivity increased, it did so thanks to investment in rationalization, which caused unemployment without expanding the industry (see Moguillansky - Bielschowsky - Pini, 2001).

According to Moguillansky - Bielschowsky - Pini (2001, p. 142), investment in the industrial sector declined in the 1990s with respect to the period

1970-1980. Moreover, it changed the composition of investment favouring the production of commodities based on natural resources extraction. The result was a fall in the input-output linkages and a change in industrial specialization, which was no longer oriented towards the leading manufacturing sectors². The productivity improvements were not transmitted from one sector to the other as the production chain was increasingly disarticulated. This could be an example of how the pursuit of higher profit rates has led to a worsening in macroeconomic conditions. Moreover, the result was not brought about by the frictions and impediments to free competition but rather by the deregulation, which allowed entry by big groups to sectors which were not open to them before the liberalization.

Now we will briefly sum up the main findings on the changes in distribution. The wage share shows a declining trend in some developed countries and in emerging countries³. The typical pattern is that the wage share falls in bad periods following external shocks, financial crisis and so on but fails to recover in good periods. For Latin America the wage share fell by 5-10 points in the Eighties but did not recover in the Nineties (see Cornia - Kiskis, 2001). Cornia and Kiskis presume that all reforms may be responsible for this outcome. However, they stress the role played by changes in the labour market in particular such as growing informalization, weakening of the trade unions, lowering of minimum wages. They also show a positive correlation between an average index of all the reforms and income inequality.

Diwan (2000) shows also that there is a trend towards a decreasing wage share and income inequality and that openness and reforms may have contributed to this trend. The main factor affecting the wage share in its analysis is the exchange rate. Behrman *et al.* (2000), found that all the reforms increased inequality in income distribution because they increased the wage differential. They used data from household surveys in Latin America in the last twenty years. Among the reforms, the most important ones explaining the increase in the wage differential are financial liberalization and the opening of the capital account. The others, the trade and the labour market reforms, instead do not account for such increase. Moreover, they obtained the same results by using the wage share as a dependent variables rather than the wage differential. Even in this case domestic financial liberalization and capital account opening were the reforms that are relevant for the trend in the wage share.

The same discussion with reference to the divergent behaviour of the wage share in Europe and in the United States can be found in Nardozzi (2002). Nardozzi criticizes Blanchard's theory that the fall in the wage share in Europe may be traced back to the shocks occurring to the supply and de-

² Exceptions were some industries such as the automotive industry in Argentina and Brazil, which benefited from particular sectoral policies.

³ Perhaps the most important exception, in this regard, is the United States, where the wage share is constant and the profit rate is increasing.

mand for labour. The weakening of the trade unions, the rationalization leading to unemployment and other events occurring in the labour market would have caused, according to Blanchard's thesis, a fall in the wage rate and then in the wage share in Europe. Nardozzi (2002) argues that it is possible to invert this reasoning and to explain first why the profit share has increased thus implying a reduction in the wage share. Under the assumption of constant output capital ratio, an increase in the profit rate will also raise the profit share and the opposite holds true for a fall. Nardozzi (2002) also refers to Staffa's idea of closing the mathematical system that determines relative prices, by fixing the profit rate rather than the wage rate.

The same reasoning could apply here. The studies discussed in these pages deal mainly with measures of inequality in the distribution of income, like Gini indexes of labour income or wage differentials. The same results however could hold true for the primary distribution between wages and profits. Thus, it could be argued, financial liberalization by raising real interest rates may cause a change in the normal rate of profit in the same direction thus letting the wage rate fall. This adaptation of the normal rate of profit to the real interest rate would be a long process rather than an immediate event. This would not be in contrast with what Staffa was thinking (Staffa, 1999). Ciocca (2002) writes that, in Staffa's view, the link between the rate of interest and rate of profit passes through class conflict and the tendency to the equalization of profit rates through sectors and firms. The main forces at work would be competition and a reallocation of resources that both take time. Thus, according to this interpretation, what would matter is the change in the productive structure rather than the rate of accumulation of capital goods, the same as in the past. In this regard, the data on aggregate investment does not say a lot. Certainly, there is no support for the neo-classical theory that investment increases (see Shaw 1973; Mc Kinnon 1973; Fry 1980). What aggregate data cannot tell us are the changes in the quality of goods used and in the techniques of production, which would surely occur during such processes.

In section 3 and 4, we will go on explaining in detail whether and how this idea, which was put forward in the debate on distribution trends in Europe and in general in developed countries, could be applied to developing ones. In the next section we will discuss some works by post-Keynesian economists, who explain why financial liberalization did not succeed in improving macroeconomic conditions.

2. Financial liberalization, distribution and growth: The contribution of post-Keynesian literature

In this section, we are going to review some studies by post Keynesian economists that explain why financial liberalization may harm growth rather than foster it.

Burkert and Dutt (see Burkert - Dutt, 1991) develop a macroeconomic model, in which the increase of interest rates on deposits makes aggregate demand, investment and output fall by increasing the propensity to save; this happens even if the cost of credit falls. It is assumed that the increase in deposits will allow banks to increase the loan supply. This is exactly what the neoclassical economists argue (see Shaw 1973; Mc Kinnon 1973; Fry 1980). The effects on growth however are not as good as the neoclassical economists think. The reason is that this increase in savings makes effective demand, profits and planned investment decline. In this study, aggregate saving depends on income as in the Keynesian models, but the propensity to save out of income is endogenous and depends on the rate of interest. Even if the increase in the deposit rate equilibrates the loans markets, which was in disequilibrium before the change, the new equilibrium in the goods market will be reached at a lower level of effective demand and employment than before. Thus, the «right» price for loans would worsen macroeconomic conditions. The policy of «getting the prices right» would not work.

In Dutt (1990) however financial liberalization may have had effects on growth if the economy is in a state of excess capacity. If full capacity prevails, an increase in the interest rate will improve the distribution of income in the long run with a higher real wage and a lower inflation rate; but the effect on growth is uncertain. In the case of full capacity, the change in the general price level will depend on aggregate demand pressure over supply. If instead there is unutilized capacity, supply may accommodate increases in demand without causing changes in the price level. In this case, distribution would depend on macroeconomic factors.

The rise in the interest rate would positively affect the rate of capitalists' saving but negatively the wage rate through the increase in mark-up on costs depending on the rate of interest too. In the case of excess capacity in the short run the real wage is considered as fixed. The effect of the higher real interest rate is to raise capitalists' saving and make the demand for investment fall. The supply of savings is defined as equal to the capitalists' savings, which depend on the rate of capacity utilization, the interest rate and the real wage. The demand for investment depends on capacity utilization, the profit rate and the real interest rate. A rise in the interest rate will shift both the saving and investment curves, both a function of the utilization rate in the short run. At the new equilibrium, both the level of capacity utilization and investment will be lower.

In the long run instead there will be a negative effect on real wages through the increase in the interest rate because it is assumed that capitalists have a desired level of mark-up, which depends on the interest rate. If the latter rises, then they will lower the real wage.

In both Burkert - Dutt (1991) and Dutt (1990) it is supposed that financial liberalization will succeed in raising savings⁴. In Burkert - Dutt (1991) all

⁴ Dutt (1990) argues that the assumption is needed to show that the results of neoclassi-

savings will rise and deposits at banks will thus increase, in Dutt (1990) only capitalists' savings will rise after the increase in interest rates. The probable negative effect on growth will come out of the lower real wages and higher mark-up in an economy with excess capacity. The changes in the interest rate will affect investment decisions through their effects on either the money market or on the propensity to save of some groups supposed sensitive to it.

The main shortcoming of these models is that they refer to the increase in saving as the main result of financial liberalization. In turn, the increase in saving, acting through the demand channel, would jeopardize future growth prospects. The main problem with this approach is that the increase in saving is very doubtful, according to the empirical evidence, reviewed in section 2. Thus, if one wants to explain the reasons behind the failure of financial liberalization, must resort to some other device. In the next section, another approach will be proposed, based on the monetary theory of production.

3. The rate of interest and rate of profit in the monetary theory of distribution

In this section I am going to explain briefly what the monetary theory of distribution means by drawing on Pivetti's work (see Pivetti, 1991)⁵.

Pivetti (1991) defines the normal rate of profit as determined by the interest rate plus the remuneration for risk and trouble in each branch of production. The consequences for the theory of distribution are the following. Classical economists thought that the real wage would be fixed by institutional factors (mainly subsistence levels); profits were then defined as what remains of the product after having taken off wages, just a residual. On the contrary, according to Pivetti, the wage rate would be a residual depending on the normal profit, which must be at least equal to the long run money rate of interest.

Pivetti's (1991) starting point is Sraffa's theory of the determination of prices. The analysis is microeconomic for it regards static price determination theory. He is referring to Ricardo's notion of natural prices. This theory defines the natural price as the price, at which, in each sphere of production, what remains of the value of the product after deducting wages and the replacement of means of production, is sufficient to remunerate the risk and trouble and to pay interest at a uniform rate.

In the classical system, the real wage is considered fixed by institutional factors and prices are expressed in terms of a *numeraire*, which is the price of a money-commodity. Pivetti (1991) rewrites the system by considering the

cal theory on the effects of liberalization do not hold true, even if liberalization succeeds in increasing savings.

⁵ For a recent survey of the relation between the rate of interest and rate of profit in the history of thought see Rancherri (2002).

real wage as a residual, the rate of interest as fixed by monetary policy decisions and the money wage rate as given by bargaining between workers and capitalists. The system of $2k + 2$ equations now determine $k + 1$ prices, the normal rates of profits in each sphere of production and the real wage (see Pivetti, 1991, p. 71). The price level thus depends on the money wage and on the money rate of interest, if the technique of production is given. The rate of interest thus becomes the regulator of the ratio of money prices to money wages. This in turn requires that lasting changes in the rate of interest are not associated with opposite movements in the normal profits of enterprise as percentages of the capital employed. This is not unreasonable. Pivetti argues, if the profits considered are normal profits as a percentage of the capital employed while actual profits may and do move contrarily to the interest rate.

As for the theories explaining the rate of profit by the degree of competition, Pivetti argues that the rate of profit logically comes first with respect to the profit margin; further, he argues that it must be explained under the assumption of perfect competition. In deciding whether to invest their capital for a long time, entrepreneurs must look at whether this investment pays more as a percentage of capital invested than the yield of an investment in long-term securities. Thus, the mark-up would depend on the rate of profit and the capital-output ratio, while in Kalecki the rate of profit depends on the mark-up, on the degree of competition (see Pivetti, 1991, ch. 10). Pivetti (1991) argues instead that monopoly elements may explain a rate of profit which is higher than the normal one, but do not explain its normal level. The role of competition is to establish the level of the normal rate of profit in each production sector exactly at the level of the money rate of interest plus some compensation for entrepreneurial effort. A rise in money interest rates would cause an increase in profit rates, *if monetary wages and the technique of production are considered as given.*

Competition has an important role in establishing the normal rate of profit. We can read in Pivetti (1991):

Given the nominal rate of interest r_n , competition implies that any unit of money, however invested at time t , must still yield $(1 + r_n)$ at time $t + 1$ (Pivetti, 1991, p. 52).

and

And if r_n is 20 per cent and 100 is the amount of capital (the price of capital goods) employed in production at the beginning of the year, equalization of the rate of profit with r_n by competition among firms simply implies that, *whatever the change in prices during the year*, firms should be left at the end of the year with 120 after paying wages (Pivetti, 1991, p. 53).

Pivetti concentrates on what happens if inflation erodes the value of the real rate of profits. In our case, the problem is more microeconomic than

macroeconomic. Once the long run money rate of interest has changed how will the new normal rate of profit higher than the previous one be established? Of course, one can suppose that competition between firms will bring about that result. However, how will this process actually develop? In our opinion, it will involve a deep-seated transformation in the productive structure of an economy and the reactions of firms will depend upon the constraints imposed by monetary, fiscal and exchange rate policy, foreign trade regimes, conditions of the labour market and so on.

In actual fact there are many production techniques and many wage regimes, which depend on different conditions in different productive sectors. If it is no more convenient to produce at the new level of the money rate of interest then many enterprises will close their businesses. The adaptation of the new rate of profit to the new money rate of interest may happen through different routes. The production technique may be improved thus allowing entrepreneurs to pay the same expenses as before but with a higher margin. Alternatively, the rate of increase of money wages may decrease while, with unchanged inflation rates, real wages fall. They may move to sectors such as non-traded goods sectors where profit margins are higher because they are excluded from international competition. These adjustments being painful and lengthy, in the end the productive structure may be deeply changed and this process may affect output.

Now we shall return to the question of the practical effects of financial liberalization to see how these ideas could be applied. By pushing the interest rate up and engendering expectations that it will stay at that level in the future, liberalization in the financial markets would have raised the normal rate of profit causing a fall in the real wage⁶. In the latter explanation, the real wage would have been a residual rather than the independent variable. However, to apply this reasoning, we have to assume that the equalization of profit rates is a credible hypothesis even in developing countries. As the equalization of profit rates depends on competition, it will not occur in countries where competition forces are weak. One may have doubts on the functioning of competitive forces in developing countries, often described as corrupt and immobile. In the next section, we will answer that question.

4. Do the forces of competition work in developing countries?

According to recent studies, both competition and rates of return on capital are as high in developing countries as they are in developed ones (see Glen *et al.*, 1999; Glen *et al.*, 2001; Singh, 2003). The method used in the

⁶ This would also agree with the sequence of reforms. While trade and financial liberalization are the first reforms to be implemented, the other reforms, and in particular the reform of the labour market, follow with a certain time lag (see Morley - Machado - Pettinato, 1999).

studies cited to measure competition does not rely upon concentration ratios but measures the persistence of profits at different moments in time. A low degree of persistence would be a signal of a high level of competition, while a high degree of persistence would mean a low level of competition. If competition is strong there would be little persistency in the relative rate of return of firms. Those firms which show profits above average for a certain period would not presumably have the same performance at later dates. The studies mentioned above have found that in developing countries the value of the persistence of profits is as low as in developed ones, and in some cases even lower. If this is so, then the competition forces should select from the economy those enterprises that are no longer profitable according to the new definition of the normal rate of profit.

In Pivetti (1991) it is assumed that only one production technique is available. Thus the adjustment to the higher normal rate of profit must pass through a rise in the prices of production and thus a fall in real wages (monetary wages are given by contracts). He also warns that normal rates of profit are different from effective rates of profit. The problem with this reasoning is that in some sectors prices cannot be raised because of the constraints imposed by competition. This is an important question in small open economies. These sectors are those subject to international competition, such as the traded goods ones. Of course, even in these sectors a policy of raising prices may work if other circumstances, for example a depreciating exchange rate, favour foreign sales. In this case, the firms may earn a higher profit rate by imposing higher prices at unchanged nominal wages and production techniques. The other side of the coin is that real wages will fall⁷. However, a pricing policy of that type would not be possible in all circumstances. If the exchange rate is pegged to some leading currency at a high level and it is maintained at that level by capital inflows and tight fiscal policy, the policy of raising prices is no longer affordable by the export sectors. A higher profit rate could be obtained instead by fixing by contract a lower rate of nominal wage.

Another way to adapt to the new higher normal rate of profit would be that of introducing technical innovations that raise productivity. In the end those enterprises, which either use a more productive technique or enjoy a monopoly power, will be able to survive. Of course, the results for the growth of the country will be very different, according to which of the two things happen.

Many outcomes are possible. Financial liberalization could boost growth by increasing labour productivity if the selection process expels firms with a lower level of technology, it would instead harm growth if only the firms operating in protected and less competitive sectors survived⁸. In a certain sense,

⁷ This has happened for example in Brazil (see Pivetti, 1991).

⁸ Even in this case the change in the rate of profit would affect the production technique

both things could happen at the same time. For example, firms operating with a medium level of technology but in a sector where competition is stronger or needing skilled labour, the remuneration for which may not fall below a certain level, may be forced out. On the contrary, firms with a lower level of technology but which operate in less competitive sectors and use lower paid labour may well survive. A polarization might result. Both the very good and the very bad firms will survive, though for different reasons. The best ones will succeed since they were already using a higher level of technology; the very bad ones thanks either to monopoly power or to the availability of low skilled and low paid labour⁹. It must be stressed that, even if the production technique changes, the rate of profit is not determined by real factors alone; on the contrary it is the new higher normal rate of profit that, at an unchanged wage rate, requires a better production technique. This means that the rate of profit, which depends on the rate of interest, affects the technology in use. Thus, the rate of profit is not determined by the production technique, as neo-classical theory claims¹⁰.

In actual fact, what happened was that greater investment in rationalization was pursued almost everywhere, leading to an increase in the productivity of labour but to a fall in employment. In Latin America for example in the first phase, investment fell except for rationalization of existing plants. In the second phase, it increased but only in certain sectors where high returns were more or less certain because of certain market characteristics or changes in regulations. The industries in the electricity and telecommunications sectors were privatized. Foreign conglomerates often bought them up partially or completely. Another sector in which investment by foreign conglomerates increased was that of minerals and oil. In these sectors, the exploitation of natural resources by foreigners was not allowed in the past by law. All these sectors ensure high returns for different reasons but do not contribute much to the growth of domestic demand. The reason is that many inputs in the production process are imported thus worsening the trade balance even in good macroeconomic conditions (see Moguillansky - Bielschowsky - Pini, 2001); moreover profits earned by multinationals flow back.

In contrast to the studies discussed in the preceding section, the effects of financial liberalization on growth would not pass through its effect on financial deepening; while financial deepening acts negatively on saving. The effects on effective demand and growth would instead depend on how this process of competition, leading to a uniform rate of profit, normal with re-

and not the other way around. The rate of profit would not depend on the characteristics of a production function. For the effects of a change in the rate of profit on the techniques of production used see Gargnani (1979).

⁹ This in turn may explain the widening wage gap, the increase in the differential among wages.

¹⁰ For a discussion of the neoclassical theory on this point see Rancchetti (2002); Gargnani (1979).

spect to the new level of the long term money interest rate, works. Entrepreneurs may react to the change both in the money rate of interest and in the opportunity cost of their capital in different ways and at different moments in time. The type of reaction is going to depend on the constraints they face, which in turn may be different in different countries. In general, one should distinguish between the short term and long term response. The process of the equalization of profit rates through competition is a long run phenomenon. In the short run, profitability measured by the effective profit rates may even fall because of higher interest rates and of the increase in competition¹¹. This should however start a process of industrial restructuring which would, in the end, lead to a new, higher average profit margin. This process may cause deep transformations in the industrial structure and may depend on changes in regulations, which may occur within the developing countries or at an international level. In developing countries, in the second half of the 1990s and at the beginning the 2000s, the most important institutional change has been the deregulation and privatization of many utilities. A change in regulation has allowed many foreign conglomerates to purchase whole industries. Of course, these conglomerates were only willing to buy in sectors where the expected profitability was very high. If domestic firms and foreign conglomerates compete with each other, the latter are favoured¹². This explains why most of the investment carried out in the last ten years in Latin America has concentrated in the sector of utilities or in the sectors where natural resources are exploited (see Moguillansky - Bielschowsky - Pini, 2001). Thus the process of adaptation of the new normal rate of profit to the interest rate, based on competition, may end up with a lower level of competition than before¹³. Moreover, if domestic firms do not have the resources to compete with foreign firms to enter high return sectors, they will simply disappear and the greater part of production will be supplied by multinational enterprises.

5. A comparison between the post Keynesian criticism of financial liberalization and the approach based on the monetary theory of production

In this note, I have looked at the relation between financial liberalization and the distribution of income in developing countries from a different perspective. Neo-classical theory predicts that financial liberalization will cause

¹¹ Glen *et al.* (1999) have found that the profit margins of a sample of firms, operating in the manufacturing sector in nine emerging countries, decrease after liberalization and capacity utilization increases. The time horizon of this exercise is however quite short.

¹² An international regulation on competition would then be required. For a discussion on competition policy at the international level, see Singh (2002).

¹³ The competitive process would then be just a stage in the process of consolidation of multinational oligopolistic groups.

higher investment, higher availability of finance, higher savings and an equal distribution of income. In reality almost none of these things happen. Empirical literature is full of country studies or cross-country econometric exercises, where it has been proved that investment does not increase, financial deepening may or may not occur, saving often falls and the distribution of income is made worse (see Behrman *et al.*, 2001; Reinhart - Tokatlidis, 2001; Bandiera *et al.*, 2000). No serious attempt at revising that theory has been made so far.

Post-Keynesian economists are not so optimistic about the effects of financial liberalization on growth and the distribution of income, though they usually assume that financial liberalization will succeed in increasing savings. In Burkert - Dutt (1991) financial liberalization increases the interest rate and savings but at the same time, through the negative effects on real wage, makes income distribution worse and depresses growth. In Dutt (1990) the effect of financial liberalization on income distribution depends on the state of the economy when it is implemented. If there is excess capacity then the distribution worsens and growth falls. If there is full capacity then the distribution improves and growth prospects are uncertain. In his model there is also a positive effect of the interest rate on the mark-up desired by firms and thus on the real wage, which is established by bargaining. Thus, the question of whether financial liberalization improves or worsens the distribution of income depends ultimately on the level of capacity utilization.

In reality, after liberalization, neither deposits nor savings rise¹⁴. *Instead, if this alternative route of thought is followed, financial liberalization does not need to increase financial savings or deposits at financial institutions to do harm.* In actual fact, financial liberalization usually raises real interest rates while it is very uncertain whether it succeeds in increasing deposits at financial institutions or savings in macroeconomic terms. Since the increase in long term interest rates is used to calculate the normal rate of profit, an increase in this normal rate of profit will make all the enterprises, unable to earn that rate of profit disappear, if the forces of competition are at work. Moreover it is the rise in the profit rate which causes the fall in wages rather than the other way around. The process of adjustment to a change in the money rate of interest, which is expected to last in the future, will involve a deep change in the production structure, which, according to its direction, will affect future growth. In the post-Keynesian studies examined above it was only the demand side which mattered for the long term effects of liberalization.

¹⁴ In the only country, Turkey, in which saving has increased, deposits have not (see Bandiera *et al.*, 2000), leading us to suppose that the higher share of saving may be related to changes in distribution. Perhaps the change in the composition of output, due to a higher weight of interest payments over national product, has determined the higher savings. In fact, if the propensity to save from wealth is higher than that from income then the share of saving over national product must rise.

An alternative way of considering the effects of financial liberalization can be illustrated as follows. Financial liberalization, by raising the interest rate, also raises the opportunity cost of capital, if this rise is believed to be lasting. This is likely if the authorities are committed to not changing their policy. In this case a long and painful adjustment of the normal rate of profit to the changed interest rate will follow. This process will involve a deep transformation of the production structure, the shape of which will vary from one country to another according to the initial level of development of industry, the monetary and exchange rate policy, the trade regime and the conditions of the labour market. The firms which survive will either choose a more advanced technique of production or move to a more protected sector with lower wages. The effect on growth will thus depend on these structural changes. If the firms which survive, given the constraints often present in developing countries, react by moving over to protected sectors like the non traded goods one, overall productivity may decline. Of course this process will have repercussions on effective demand, which also depends on the changes in distribution. Yet the first channel through which the structural change occurs is supply rather than demand. According to this reasoning, saving does not need to increase after financial liberalization to justify its bad or good effects. That assumption, present in both neo-classical and post-Keynesian models, can be dropped.

6. Conclusions

In this paper, a new approach to explaining the effects of financial liberalization has been proposed, differing from both the neo-classical and the post-Keynesian theories. Though a number of empirical studies have shown that the predictions of neo-classical theory on the effects of financial liberalization have failed, no satisfying explanation for this fact has emerged so far. We have seen that post-Keynesian economists take for granted that financial liberalization will succeed in increasing savings; they argue, however, that, if growth is demand driven, it will depress capital accumulation and eventually worsen income distribution. In fact savings have not increased everywhere. In this paper, it has been argued that it would be better to start with another hypothesis, the rise in the real interest rate both in the short run and in the long run following financial liberalization. If the monetary theory of distribution, which states that in the long run the rate of profit is determined by the rate of interest, holds true, the next step will be that a higher rate of interest calls for a higher rate of profit and, under certain conditions, a lower wage share. However, the theory deals with the normal rate of profit whereas in reality effective profit margins in the short run may behave differently. In particular, it is stressed in the paper that the process of adjustment of the rate of profit to the interest rate requires time and a re-allocation of resources through sectors and firms. In the present state of international competi-

tion, it is very doubtful that this will both accelerate growth and improve the distribution of income. Though productivity may increase in some sectors it is improbable that it will spread to the rest of the economy: income distribution may worsen because one way of adapting to the new interest rate for some firms will be to repress the growth of wages. The share of wages could fall if the restructuring process causes a fall in general employment. That process would not pass through aggregate demand contractions only but through the dismantling of input-output linkages among productive sectors too.

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Summary: Financial Liberalization, Growth and Distribution in Developing Countries. Some Notes on a Different Approach (J.E.L. D53, E25, 01)

The paper is going to review some of the evidence that has been provided so far on the practical effects of financial liberalization policies. Contrary to conventional wisdom, financial liberalization does not foster growth. The stylized facts, stressed in the paper, are that real interest rates rise and the supply of credit increases while investment does not, moreover, in the majority of the cases, inequality in the distribution of income is higher. Previous attempts at explaining why financial liberalization does not work will be discussed. The paper presents a new approach to the problem, which builds on the monetary theory of distribution. The increase in real interest rates, if lasting, as it is, causes a process of readjustment of the profit rate in an upward direction. Such process, however, is neither instantaneous nor smooth, for it

requires a reshuffling of production, which passes through sectors and firms. Its effects on long run growth and distribution will thus depend on the constraints that macroeconomic policies, regulation, exchange rate regimes and other factors pose to the firms' reactions.

In the present state of international competition, it is very doubtful that this will both accelerate growth and improve the distribution of income. Though productivity may increase in some sectors it is improbable that it will spread to the rest of the economy; income distribution may worsen because one way of adapting to the new interest rate for some firms will be to repress the growth of wages. The share of wages could fall if the restructuring process causes a fall in general employment. That process would not pass through aggregate demand contractions only but through the dismantling of input-output linkages among productive sectors too.