Does the BRRD affect the retail banking business model in the Euro area?

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Abstract

This paper discusses how the introduction of the Banking Recovery and Resolution Directive (BRRD) in European Union legislation may change the retail banking business model, which is the most prevalent model in Southern European countries. The main point is the treatment of deposits in the BRRD. Uninsured deposits may be written down or converted into equity in case of resolution of a bank. This contrasts with the treatment of other short-term liabilities, in particular repurchase agreements. Short maturity repos are excluded from the bail-in, regardless of their size. Also, liabilities related to securities lending and derivatives are given privileged treatment. It is argued that this will be an advantage for wholesale and investment banks, which use these types of short-term funding largely to finance asset purchases. Moreover, it will severely hit retail banking business models of various types by undermining the trust of depositors in the bank, causing bank runs whenever rumours circulate about financial distress situations, thus increasing its cost of funding and lowering the value of its shares. Therefore, to avoid runs on repos, runs on banks are resurging.

Ayadi et al. (2015, pp. 20–21) distinguished five types of business models: focused retail, diversified retail type 1 and type 2, wholesale and investment. Among the retail-oriented models, the focused retail one includes banks that have assets consisting mainly of loans to nonfinancial entities and deposits from nonfinancial entities. The other types of retail banks have more diversified assets and liabilities, with some distinctions; for example, retail type 1 has more diversified assets while still getting funding through deposits, whereas retail type 2 has both diversified assets and diversified liabilities with a strong share of funding coming from debt liabilities.

In Europe, the geography of business models in the banking arena is split along the line core versus periphery countries. The core countries' banking systems, particularly in Germany and France, present a mix of business models with a strong share of investment banking models. The periphery countries' banks, instead, are focused mainly on retail activity, with a mixed composition of focused retail, diversified retail type 1 and retail type 2 (Ayadi et al., 2015, p. 106) models.

In Section 2, the evolution of business models in European banking since the global financial crisis is outlined. Numerous publications and research conducted by the European Central Bank provide data on this topic (ECB, 2016, 2017, 2018; Farnè & Vouldis, 2017). The main narrative is that the changes in regulations that were implemented and designed after the global financial crisis have induced banks to revert to a more retail-based business model. However, a more careful look at that data leads to the conclusion that they are not the result of a conscious decision to return to retail banking, but rather the result of various coincidental events such as the changes in the interbank market in peripheral countries and the transfer of other activities to nonbank entities for the big banks in core countries.

Aggregate balance sheet data for the entire European Union do not reveal what happens in different groups of countries, the core versus the peripheral. In addition, balance sheet data on banking should be supplemented with data on the evolution of the financial system as a whole, including nonbank financial institutions. In fact, banks may apparently revert to retail loans as a main asset and deposits as a main liability; however, they transfer all other assets such as derivatives, trading positions and similar exposures to financial entities that belong to the same group. On a parallel plane, if most loans to the nonfinancial sector are given by entities other than banks, as shown by recent data, then the bottom line is that banks are losing market share and relevance in the European financial system. So, rather than a resurgence of retail banking, there would be a general decline in banking of all types, given the increase in market share of nonbank financial institutions.

The new legislation on banks includes many other measures besides the BRRD, such as the liquidity coverage ratio (LCR), the stable funding ratio and the leverage ratio (LR). All these measures reserve special treatment to contracts that are linked to each other, such as those called "master netting agreement." Simpler contracts, like a deposit or a loan without financial collateral and for which no netting is allowed, are penalized. Those simpler contracts are the bread and butter of retail banking, whereas the most complex contracts are usually engineered by wholesale entities.

In Section 3, the treatment of deposits in the BRRD will be discussed. This treatment is not very favourable compared to that for other short-term liabilities, such as repo liabilities and liabilities related to derivatives and secured borrowing, that are more widely used in wholesale and investment banking. Furthermore, in the European institutional context, even insured deposits cannot be truly considered insured, because a common deposit insurance fund still remains to be set up. In general, the negative effects of the BRRD on liabilities of retail banks will not be offset by favourable treatment to deposits under other measures such as the LCR and the net stable funding ratio (NSFR). This is particularly relevant in the European context in which the position of insured depositors is weaker than that of their counterparts in the United States, because the insurance threshold is lower and the implicit guarantee of protection beyond the threshold is nonexistent.

In Section 4, it will be argued that the application of the BRRD in banking systems with a strong retail banking

2 | THE EVOLUTION OF THE EUROZONE BANKING SYSTEM SINCE THE GLOBAL FINANCIAL CRISIS: A RETURN TO RETAIL BANKING?

ECB (2016) holds the position that, in the time since the crisis, banking business models have been changed in a way that lowers risk. This favourable result would seem to be related to changes in banking regulations:

First, the regulatory reforms implemented in the wake of the crisis have materially affected business models by requiring bank balance sheets to contain more high-quality capital, liquid assets, bail-in-able debt and more stable funding sources. More specifically, regulation has made certain business lines more costly (in particular, trading activities), leading a number of banks to scale down these types of activity. Furthermore, some of the new regulations (such as the Bank Recovery and Resolution Directive and structural bank reforms) will have a direct impact on business models, by forcing banks to adapt their operating structures to new requirements. In addition, some business model changes have been triggered by conditions laid down in the restructuring plans of banks that received state aid, which often required affected banks to focus on more traditional banking activities. (p. 130)

It is further argued that there has been a shift towards retail business from investment banking and wholesale lending activities, thus reversing a precrisis trend. This would be confirmed by the increase, in the time period since then, of the retail ratio that measures the sum of customer deposits and customers loans to total assets (ECB, 2016, p. 131).

In this section, it will be argued that for both core and periphery countries' banks, a reduction in wholesale funding and an increase in loans over total assets do not reflect, contrarily to what may seem to be the case at first sight, a conscious decision to return to a retail-oriented model. The same holds for a change in income sources in the direction of an increase of interest income over other sources of income.

2.1 | Changes in funding and the return to retail banking

ECB (2016) maintained that, overall, the European banking system has become more oriented towards retail banking after the crisis as the share of deposits over total liabilities has increased. On the contrary, the share of wholesale market funding, which includes both secured and unsecured interbank lending, has declined.

Indeed, large systemic banks, most of them located in core countries, have decreased their share of wholesale funding. However, the fall in on-balance sheet wholesale funding may be accompanied by the rise in off-balance sheet wholesale funding.

Singh and Alam (2018, p. 12) found that if off-balance sheet funding of G-SIBs from pledged collateral is accounted for, wholesale funding is higher after the crisis relative to the size of the balance sheets. So, balance sheet data alone do not lead to the conclusion that retail banking has returned simply because wholesale funding has fallen in size. In fact, a sizable component of wholesale funding for big systemic banks does not even appear on their balance sheet. Singh and Alam (2018) showed that for the major systemic banks, pledged collateral—a proxy for wholesale funding—increased or remained constant after the crisis, whereas their balance sheets contracted. In the European Union, the countries in which most systemic banks are located, particularly those using pledged collateral, are core countries like the Netherlands, Germany, France and Luxembourg. Thus, the deleveraging taking place in these national banking systems may be overestimated. Moreover, the extent to which they are changing their business models to reduce their reliance on off-balance sheet funding is not clear.

CHART 1 Changes in liabilities of European banks, 2010–2011 (billion euro, flows). Source: Tropeano (2018)

In these years, the change in “other liabilities” is the most sizeable change in the whole European banking system flow of funds data. “Other liabilities” are related to derivatives as funds to be paid in the future on account of derivatives or secured financing or securities borrowing transactions.

The pattern reversed in the years that followed, presumably due to the compression of derivatives and the increasing use of central counterparties (Bank for International Settlements [BIS], 2015). Nevertheless, new situations of bank distress were the consequence of this accumulation of risky assets, as testified by the second failure of Dexia, a Franco-Belgian bank, in 2011.

For more traditional retail-oriented banks, which are more present in peripheral countries (see Ayadi et al., 2015, p. 106), the fall in wholesale funding may be simply due to the reduction in interbank credit since the global financial crisis and the European debt crisis. The reduction in the volume of the unsecured interbank market and the collateral discrimination on the secured interbank market towards the government bonds of peripheral countries may have forced peripheral countries' banks to reduce their funding through this source (Minenna, Boi, & Verzella, 2016; Tropeano, 2018).

2.2 | Asset composition and the return to retail banking

In the assets side, instead, the 2016 ECB report stresses that loans over total assets have increased, thereby concluding that banks are returning to the activity for which they were created, that is, plain lending. If the picture is broadened to take into account not only banks but the whole financial system in which banks are situated, the idea of a return to a more conservative pattern of lending to the nonfinancial sector is not convincing.

The leverage that took place, however, was not constant over the years after the global financial crisis. In the years 2010 and 2011, European banks as a whole, according to the consolidated data from the ECB, were accumulating assets consisting either of derivatives or of payables or receivables related to secured financing. At

CHART 2 Changes in assets of European banks, 2010–2011 (billion euro, flows). Source: Tropeano (2018)

Tropeano, 2018, chap. 6, pp. 103–114). They were heavily involved in manufacturing new derivatives, particularly interest rate swaps, foreign exchange swaps and exchange-traded funds.

The pattern of change in assets from 2012 onwards reversed due to the sizeable interventions to recapitalize banks made by various governments of the European Union, particularly of core countries; among the conditions for intervening, a change in the type of business strategy pursued was required. The pattern may have changed due to accounting changes, the compression of derivatives and the increasing use of central counterparties.

It may seem strange that banks would return to a retail banking model with a higher share of loans to customers in their assets in a context in which the demand for bank loans is declining. Data on the composition of the financial system and on the financing of nonfinancial corporations (Chart 3) show that banks are declining in size in the whole financial system and that most loans to the nonfinancial sector are given by financial institutions other than banks. Therefore, if this tendency to return to retail banking is effectively taking place, it is not successful because banks are not increasing their share of loans, rather they are losing positions with respect to other financial institutions. Chart 3 shows the changes in the composition of external financing to nonfinancial corporations in each year from 2008 to 2016; it is evident that there has been a continuous decrease in the external financing from 2008 onwards.

In particular, in 2016, there was a positive contribution to external financing of NFC by banks equal to one sixth of the flow of total financing. Instead, in 2008, that contribution was about one third of the total financing (ECB, 2017, p. 10). In 2016, there was a noticeably positive change in the item “unlisted shares and other equity.” Overall, nonfinancial corporations get financed less from banks and more from private equity funds. They do not issue more shares in the stock exchange but sell private equity to those investment funds.

The decline in bank loans is quite marked. The evolution points towards a disintermediation of banks on the asset side. This means that either there is a demand for loans that banks do not satisfy due to tougher standards, among possible other reasons, or that nonfinancial corporations prefer to obtain financing from other sources for whatever reasons (Del Giovane, Nobili, & Signoretti, 2013). Therefore, it is plain that banks are playing a weaker

Sources of external financing provided to euro area NFCs by component

Sources: ECB (EAA) and ECB calculations.

CHART 3 Sources of external financing provided to euro area nonfinancial corporations by components

financing of small- and medium-sized enterprises. Although loans to small/medium enterprises (SMEs) have been favoured in terms of regulatory capital by introducing the so-called SME factor, the same does not hold for other types of widely used credit arrangements. Even some measures aimed at increasing the capital cost for trading activities may have hit retail banking instead. Indeed, for banks dealing with small- and medium-sized firms, as often is the case in peripheral countries, the capital cost of overdrafts, factoring, trade financing and similar products has increased; this, in turn, has caused an increase in the interest rate charged or/and a tightening of standards. These items are considered as off-balance sheets (Härle, Lüders, Pepanides, Pfetsch, & Poppensieker, 2010). The decision to increase the risk weights attached to this type of loan was made to reduce the interconnectedness between banks and shadow banks, such as special purpose vehicles through off-balance sheet debt relations. However, these financial tools are also used for financing the trade of real goods. In the end, this means that the increase in weights hits banks specialized in retail activities. Some nonbank financial institutions, for example online platforms and fintech entities, have replaced banks in that business, but the volumes are still limited. Hence, demand is not fully satisfied. So, the same changes in regulation after the crisis may have opened a space for nonbank financial institutions as providers of credit in certain specialized fields.

2.3 | Sources of income and the return to retail banking

Another metric that can be useful for distinguishing between business models is the sources of income, as they can be inferred from the income statement. The narrative of a return to retail banking points to the rise of interest income over the total income as a metric of this return. Interest income usually comes from lending activity rather than from trading or financial derivatives dealings. However, detailed interest income data in Chart 4 shows that a

Interest income structure of euro area banking sectors

(2016; all domestic banks; percentage of total interest income)

Sources: ECB (CBD) and ECB calculations.

Note: Data are not available for Estonia, Finland, Lithuania, Malta, and Slovakia.

CHART 4 Interest income structure of euro area banking sectors

on-balance sheet activities. For example, for a core country like France that hosts large systemic banks, the share of interest income coming from derivatives (hedge accounting) is quite high (in the range of 20%). This, in turn, may be linked to the expansion in the years after the global financial crisis of the interest rate swaps contracts in euros. In contrast to the balance sheet data, the income statement data did not change pattern during the years of the European sovereign debt crisis. Core country banks have the same tendency to derive a share of their interest income from sources other than loans and receivables.

Even in a peripheral country like Italy, this may be an important factor. This is due to the fact that some large banks began to exploit their relationships with customers outside the lending and depositing contracts to sell other assets, such as mutual fund shares of affiliated companies or investment houses within the same group, or even to launch products directed to retail customers. Some of these assets contained many derivatives (so-called certificates of deposit, i.e., a hybrid security that offers the same yield of some index of bonds or shares). This is a type of retail banking, in which the main counterparties on the liabilities side are still individuals or family firms, that thus avoids all the increased regulatory costs for wholesale funding, but in which the product offered is very different from traditional deposits or bonds. However, this type of retail funding goes through securities that are sometimes both complex and risky. This happens in countries in which the nonbank financial institution sector is very small; so, in a way, the banks themselves start operating as nonbank financial institutions. This may not be very reassuring from the point of view of avoiding financial instability episodes, as the families or firms will be often mis-sold questionable and/or risky products just to increase the scarce profits of the banks.

calculated according to the new rules. Although there is an ample amount of literature devoted to the internal-based methodology of calculating risk capital as a way to save capital (Behn, Haselmann, & Vig, 2016), some studies have highlighted that, even by using the standardized method of pure application of risk weights to different assets, the amount of capital needed to comply with the regulations may vary, depending on the business models (Baglioni, 2016; Bruno, Nocera, & Resti, 2015, pp. 74–75; Cannata, Casellina, & Guidi, 2012). Bruno et al. (2015) found that risk weights are affected by bank size, business model and asset mix. In particular, the ratio of risk-weighted assets to total assets is higher for smaller banks and for those that are more involved in traditional businesses, as shown by the coefficients of deposits and loans (Bruno et al., 2015, p. 16). These authors' variable, *Business model*, includes four other variables: DEPOSITS (the ratio of deposits to total assets), LOANS (the ratio of loans to total assets), CORPORATE (the ratio of corporate loans to total customer loans) and RETAIL (the ratio of retail loans to total customer loans). Another paper, based on Italian banks (Cannata et al., 2012), found that the dispersion of risk-weighted assets over total assets may be explained more readily by the different portfolio composition, and therefore by the risk weights assigned to assets in the Standardized Approach than by the type of approach (Standardized vs. Internal Rating-based) used to calculate them.

The way risk-weighted assets are calculated and internal models are used has brought about regulatory arbitrage concerning some business models. Ferri and Pesic (2016) found that a business model, called retail diversified 2, in which most assets are loans but the funding is wholesale is the one most likely to host regulatory arbitrage practices. Tropeano (2018, chap. 3) argued that the increase in weights for trading is not very effective, because big banks are able to reduce their capital needs through the use of internal models and risk optimization techniques. The main tool is netting and hedging used through derivatives to decrease risk, and thus capital. Netting and hedging through derivatives are not easily achievable for banks with a traditional retail activity for the simple reason that netting loans and deposits by building a huge netting set is not allowed. Furthermore, real estate or property collateral cannot be used to save capital or to reduce risk-weighted assets, whereas financial collateral enjoys privileged treatment in the regulatory arena. Therefore, traditional business models of banking in which loans are secured by real collateral and are kept on the balance sheet until maturity without being securitized have a higher capital cost and, more generally, a higher regulatory cost.

Although Ferri and Pesic (2016) pointed out that regulatory arbitrage is not a legal way of saving capital, Tropeano (2018) explained how capital elusion may occur legally within the context of prescriptions contained in both the old and the new Basel agreement that are carefully exploited by banks with enough financial and technological resources to implement them. In particular, the mitigation of risk through derivatives and financial collateralization was allowed by the new Basel III capital regulation.

The risk mitigation technique based on netting and hedging sets is also acknowledged in the other new prudential measures, such as the LCR, the NSFR and the LR (Tropeano, 2018, chap. 3, pp. 42–47, chap. 4, pp. 55–75).

The LCR has weights for inflows and outflows of assets that can be gamed by using derivatives, asset swaps or securities lending contracts. As the inflows and outflows weights needed for calculating the ratio are fixed by the regulations, it is not difficult to get a better ratio by swapping or borrowing assets. This is more easily accomplished in the European Union where banks are required to disclose the LCR value as the simple average of month-end observations over the 12 months preceding the end of each quarter. Therefore, swapping or borrowing assets on the last day of each month would help improve the ratio. The Basel framework recommended that LCR be disclosed as the simple average of daily observations over the previous quarter. The Basel Committee on Banking Supervision (BCBS, 2017a, p. 4) warns that this might lead to an overstated average LCR in bank disclosures if EU banks seek to maximize their LCRs for the month-end measurement point. In the United States, instead, the LCR,

highly liquid. Although before the introduction of LCR, banks could simply fund loans with deposits of any type, now this is no longer possible, because some deposits cannot be used to fund loans if they are considered nonoperational, that is, either uninsured and/or not used for transactions. In fact, a high outflow rate is attached to these nonoperational deposits and they are considered the same as short-term wholesale finance. Therefore, banks will try to get rid of these nonoperational deposits and likewise, corporations that hold cash at banks will be induced into finding alternative ways to invest their cash, presumably at nonbank financial institutions. If the nonoperational deposits carried a low or a zero interest rate, funding loans with them would be an easy way of gaining an interest margin. Intuitively, this does not seem to encourage a return to a retail banking model.

LR may be gamed easily by using funding through borrow versus pledge contracts and by using derivatives to lend without recording the loans in the balance sheet.

For example, a BIS (2019) study recently found that dealer banks lend to hedge funds through the use of contracts related to the exchange of securities without any cash changing hands; these are not recorded in the balance sheet and they are combined with a total return swap. Essentially, prime brokers swap the return on some reference financial asset with a hedge fund; this is done in exchange for a financing rate. The report (BIS, 2019) found that “synthetic” prime brokerage, where hedge funds obtain leverage through derivatives with banks as counterparties, has grown rapidly in recent years, as it allows banks to lower regulatory capital charges. It is argued that like banks’ off-balance sheet exposure to CDOs was a source of instability in 2007, and now banks’ prime brokerage exposure to CLO holders could result in larger losses than implied by direct exposures.

As far as the NSFR is concerned, the net funding need is higher for a bank like a focused retail bank that has deposits as liabilities and loans as assets, compared to a bank that has mainly deposits as liabilities and, on the other side, has derivatives, highly rated securities, and repo as assets. The required stable funding for loans is in the range 65–80%, whereas the required stable funding of repo assets is merely 10–15%. The required stable funding for derivatives is 100% on a net measure if there is neither an offsetting item on the liabilities side nor collateral (Tropeano, 2018, p. 74).

3 | THE LIABILITIES SIDE OF RETAIL BANKING AND THE BRRD

Whereas retail banking is hit on the assets side by the new regulation on capital, on the liabilities side, the new regulation on resolution penalizes deposits that exceed the guaranteed threshold and bonds. Deposits and bonds, often sold to their own depositors, are the biggest sources of funding in peripheral countries’ banks. Although the cost of raising funds through bonds issue has increased, on the side of deposits, there have been flights of depositors from banks in difficult conditions, or perceived to be so, in anticipation of the application of the bail-in principle.

Among the source of funds, repo liabilities and liabilities related to securities lending have become safer than bonds, deposits and interbank loans in case of bankruptcy. Repo liabilities are a privileged funding tool for investment banks and nonbank financial institutions (see Pozsar, 2014; Ricks, 2016), whereas deposits and bonds are more often used in retail banking. By using repo liabilities, banks borrow while, at the same time, providing a security to the lender, which is the equivalent of the collateral for a loan. A repo liability means a borrowing secured with collateral. Most repos have a very short-term maturity. Depending on the type of collateral pledged, there is a variation in the cost of the repo borrowing. For banks or financial institutions providing high-rated collateral, the cost may be lower than that of issuing long-term bonds. The lender in a repo contract does not have to report

A run on repo occurred during the great financial crisis in the United States (Gorton & Metrick, 2012) when, to preserve the value of the guarantee, margin calls were used. Margin calls, consequently, lowered the value of the assets repoed and caused a massive sell off. This then caused further margin calls and further downgrading. A full circular feedback effect was developed. To avoid the run on repo and the consequent crisis, new insolvency laws have been introduced. The structure of the contract is such that it will cause a debt deflation during a crisis (Gabor & Vestergaard, 2016a, 2016b; Minsky, 2008; Sissoko, 2014, 2016).

3.1 | The legal treatment of repo in bankruptcy

Repo enjoys “safe harbour” rules that are designed into contracts created by international financial associations. The most common of such contracts are master netting agreements. Contracts between the same counterparts with the same expiry date can be netted separately from all other obligations of the counterparties to third parties. They can also be terminated in case of bankruptcy without waiting for the normal process of asset recollection and distribution among creditors according to the seniority of their claims. They enjoy a privileged treatment with respect to all other contracts that have to pass through the usual bankruptcy rules. The same rules are also used for derivatives.

In the EU, the change in legislation that paved the way for the development of those instruments is the European Financial Collateral Directive. Paech (2015, p. 15) argued that the risk mitigation techniques of master agreements are used to abolish established legal boundaries. In particular, the difference between full title and security interests disappears, because the safe harbour rules sanction the use of title transfer collateral, netting and margining. Furthermore, the collateral taker, who is the lender in the transaction, becomes the legal and beneficial owner of the asset and can therefore dispose of it without being obliged to return that specific asset (Paech, 2015, pp. 15–16). Paech added that, owing to the existence of safe harbour rules, a derivatives and repo portfolio can look like a balance of assets and liabilities, each booked at current market value that can be summed up to show a net exposure. Tropeano (2018, p. 81) observed that this leads to considerable savings in regulatory costs, as the exposure at default is the denominator in both the risk-weighted capital requirements and the newly introduced LR rule.

Another aspect worthy of note is that the rules behind master netting agreements create reciprocal obligations that do not need settlement by cash or bank deposits, except for a tiny portion of the notional amounts written in contracts. During a crisis, instead, when margin calls increase proportionally to the fall in the market value of the securities that are used as collateral, the need for liquidity could suddenly become urgent.

The ownership of the collateral by the lender in a repurchase agreement contrasts with the treatment of real estate or property collateral in mortgage or nonfinancial corporations lending by a bank. If a bank grants a customer credit to buy a house and receives the same house as collateral for the loan, it does not automatically become the legal owner of the house and cannot use it to raise funds on its own, to buy assets and expand its balance sheet. Therefore, leverage may increase more easily for institutions that make secured loans backed by financial collateral.

The rules on early termination and waiver on bankruptcy, however, do not apply only to repo but also to secured funding and security lending. The contracts are framed according to the same template. In the current scenario, after applying the LCR, on-balance sheet repo funding has diminished, but the technique is still used by securities subsidiaries and other affiliated companies within banking groups. From the regulatory point of view, it is more convenient to use securities lending contracts and, in general, contracts in which no cash is exchanged in the transaction because they can be taken off-balance sheet.

early termination rights are suspended for 2 days right at the beginning of the resolution and afterwards, they are resumed only for those repos that remain on the balance sheet of the old (bad) bank, whereas those that are transferred to the new and supposedly healthy bank are not restored unless the new bank proves to be less healthy than it should be: "Even where master agreements provide for termination and close-out upon reorganization or restructuring, resolution regimes eschew the route of privileged treatment through a safe harbour-like mechanism" (Paech, 2015, p. 28). Thus, the same idea is more strongly stated: "Resolution regimes are more clear-cut in this regard than insolvency laws. There are no exceptions from the administrative stay comparable to safe harbour rules in insolvency law" (Paech, 2015, pp. 28–29).

In resolution regimes, the repo creditors would no longer be privileged compared with other types of creditors. This view neglects the fact that, according to EU Directive (2014), repos with a maturity of <1 week are excluded from the bail-in. Repos in the new resolution regime still deserve privileged treatment, as they are exempted from being either written down or converted into equity. Paech (2015) maintained that safe harbour rules may no longer be needed in the new resolution regime. Zhou et al. (2012) were even more explicit on the topic:

More importantly, by eliminating insolvency risks, the pressure on distressed financial institutions to post more collateral against their repo contracts could be significantly reduced, thereby minimizing liquidity risks and preventing runs on repos or other contracts. Equally important is that bail-in would reduce the need for assisted mergers and therefore, provide an alternative to even larger SIFIs. (p. 9, emphasis added)

Article 71(5) states that upon the end of the termination stay, the contracts transferred to the new institution can be terminated only if the conditions for bankruptcy or resolution of the new institution are met. Instead, if the contracts are left in the old institution, they may be terminated. It is supposed that the new institution will be healthy, so the need to terminate the contracts does not arise, according to Paech (2015). Therefore, the dividing line is between the contracts that will be transferred to the new institution and those that will remain in the old one. The crucial decision is to discern which investors' claims will still be valid and which ones will, instead, be cancelled to guarantee the health of the new institution. In the BRRD (2014), article 44(2) states:

Resolution authorities shall not exercise the write down or conversion powers in relation to the following liabilities whether they are governed by the law of a Member State or of a third country:

(a) covered deposits;

(b) secured liabilities including covered bonds and liabilities in the form of financial instruments used for hedging purposes which form an integral part of the cover pool and which according to national law are secured in a way similar to covered bonds;

(c) any liability that arises by virtue of the holding by the institution or entity referred to in point (b), (c) or (d) of Article 1(1) of this Directive of client assets or client money including client assets or client money held on behalf of UCITS as defined in Article 1(2) of Directive 2009/65/EC or of AIFs as defined in point (a) of Article 4(1) of Directive 2011/61/EU of the European Parliament and of the Council (1), provided that such a client is protected under the applicable insolvency law;

(d) any liability that arises by virtue of a fiduciary relationship between the institution or entity referred to

(e) liabilities to institutions, excluding entities that are part of the same group, with an original maturity of less than seven days; (f) liabilities with a remaining maturity of less than seven days, owed to systems or operators of systems designated according to Directive 98/26/EC or their participants and arising from the participation in such a system. (Regulation no. 2014/59 EU, Article 44(2))

There is a long list of securities that are excluded from the conversion, and thus are not subject to the bail-in. Most of them are related to hedging and netting processes. It is an explicit goal of the regulation to not split netting and hedging sets, as they are shaped by the following existing rules in force:

In order to preserve legitimate capital market arrangements in the event of a transfer of some, but not all, of the assets, rights and liabilities of a failing institution, it is appropriate to include safeguards to prevent the splitting of linked liabilities, rights and contracts, as appropriate. Such a restriction on selected practices in relation to linked contracts should extend to contracts with the same counterparty covered by security arrangements, title transfer financial collateral arrangements, set-off arrangements, close out netting agreements, and structured finance arrangements. Where the safeguard applies, resolution authorities should be bound to transfer all linked contracts within a protected arrangement, or leave them all with the residual failing institution. Those safeguards should ensure that the regulatory capital treatment of exposures covered by a netting agreement for the purposes of Directive 2013/36/EU is not affected. (Regulation no. 2014/59/EU, Recital (95))

If this nonsplitting principle prevails, then the derivatives, securities lending and repo contracts will be either transferred to the new institution and thus be “saved” or, theoretically, they could also be written down but on a net basis (Ashurst, 2016). If, instead, they are left in the old bank, the usual safe harbour rules will be reactivated after the 2-day stay so they will be able to exercise their termination rights. The whole structure of contracts designed by private institutions such as the International Swaps and Derivatives Association and the International Capital Markets Association will remain untouched, even during the resolution processes. Other contracts like deposits and bonds may be broken, that is, converted into equity in the new institutions or cancelled outright.

In practice, securities lending and repos with a short maturity (the majority of repo contracts) are excluded from the bail-in. Other long-term repos and derivatives may be subject to it, but only on a net basis, given that any linked contracts must not be split up. This contrasts with the treatment given to other investors and even depositors.

The differences and similarities in the treatment of insured deposits, uninsured ones and short-term repos are summarized in the following table:

The first row of Table 1 deals with the treatment of repo liabilities and deposits in case of resolution. The main difference between the two in case of insolvency and resolution is the size. Deposits are formally insured up to a certain threshold, whereas repo liabilities and liabilities with a maturity of <1 week in case of resolution cannot be written down or converted into equity in the new institution, irrespective of their size.

In the second row of Table 1, the difference in liquidity between deposits and repo liabilities in normal conditions are summarized. Deposits are always convertible into coin and notes at par. Liquidity of repo liabilities, instead, depends on the market conditions and institutional arrangements. Liquidity backstops for repo in the European Union are provided by the European Central Bank. Indeed, the clearing houses for repo and securities lending are entitled to get credit from the central bank (Mancini, Ranaldo, & Wrampelmeyer, 2015). Thus, in normal situations, liquidity problems at the clearing houses are solved by

TABLE 1 Comparison of characteristics of short-term liabilities

	Uninsured deposits	Insured deposits	Repo liabilities, short-term maturity
Bail-in ability	Yes	No	No
Central bank liquidity in normal conditions	Yes	Yes	Yes
Central bank credit line to insurance funds	No	No	

International Organization of Securities Commissions, 2016). However, in the case of insolvencies and resolution of counterparties such as banks and nonbank financial institutions, clearing houses are protected because their claims cannot be written down or converted into equity. Therefore, their claims benefit from a certain “seniority” with respect to those of depositors and bondholders.

The third row of Table 1 highlights the effectiveness of deposit insurance beyond the legal arrangements. In the institutional context of the Eurozone, deposit insurance funds at the state level do not have access to central bank liquidity (see Kregel, 2013). However, the common deposit insurance scheme is still in the project (design) phase.

In 2015, the European Commission made a new proposal for a European Deposit Insurance Scheme (European Commission, 2015a), which was to be rolled out in three successive steps: a reinsurance stage, a co-insurance stage and a European system of deposit guarantees. The last step should be completed in 2024. There have been many problems associated with following that blueprint. Germans and other core countries' politicians make a point that to share a common deposit insurance scheme, the banks of peripheral countries should first derisk their balance sheets. Derisking means getting rid of the riskier assets that are a legacy of the past. They should quickly dispose of nonperforming loans by packaging them and selling to market bidders, and they should get rid of the exposures to their own sovereignty through the holdings of government bonds. Either or both of those actions, however, would worsen the macroeconomic situation in their countries and, in turn, cause another wave of nonperforming loans that would have to be dealt with. Quick disposal of nonperforming loans would lead to the expropriation of real estate and production sites that constitute the collateral that secures the loans. The resulting fall in value would mean that those firms may not be able to recover enough to repay the loans. Selling large quantities of government bonds would lead to a fall in the value of the stock of bonds and an increase in the cost of financing for the core countries, which would in turn exacerbate the macroeconomic conditions. The ensuing fallout could ultimately lead to never achieving the goal of derisking.

4 | EFFECTS OF THE BRRD ON PERIPHERAL COUNTRIES' BANKS

The BRRD, along with the other banking regulation measures implemented after the global financial crisis, will not favour retail banking over other types of business models. In peripheral countries, the current macroeconomic situation is characterized by a slow recovery from the global financial crisis and from the European sovereign debt crisis. The implementation of the measures foreseen by the BRRD in case of distress of banks may simply start a feedback chain of recapitalization requests, a fall in the market value of shares, renewed recapitalization requests and flight of depositors; the whole process may lead to the insolvency of institutions that may only have liquidity problems. The prospect of resolution will cause a depositors' flight, and this in turn will accelerate the resolution. Bank runs have already occurred in some countries (e.g., Italy, Spain) and may occur again (Boccuzzi &

refinancing operations launched since the crisis. In short, the ECB has been using monetary policy to directly long-term finance the banking system and replace the private, unsecured interbank market, where volumes have drastically declined since the crisis (Tropeano, 2018).

Although the issue of bonds and other securities to accomplish the goals set by the total loss absorbing capacity (TLAC) and minimum required eligible liabilities regulations (ECB, 2016, p. 123) may, indeed, make the banks be perceived as safer, it increases the cost of funding for peripheral banks more than it does for core countries banks. A recent episode makes that evident. To comply with the new rules on crisis avoidance, Unicredit Bank, an Italian bank, issued bonds in accordance with the TLAC regulation. The bonds pay a very high interest rate of 7.2% (*Il Sole 24 Ore*, 2019). So, even if the regulatory toolkit is the same for every bank, the costs are very different; they are a reflection of the country's rating rather than of the single bank's risk assessment, thereby causing an inequitable burden for peripheral countries' banks. In contrast, core countries' banks are enjoying very favourable conditions on the issue of bonds, owing to the very low and even negative interest rates on their government bonds.

The authorities at the European level (see ECB, 2016, p. 130) are worried that the new forms of capital and bonds issued not only create cross-exposures among banks but also cause contagion, so they discourage the selling of these tools to peer banks. However, they are not concerned about the contagion to the real economy that would occur if those that would lose their money were families and/or firms that hold accounts at banks. Insolvencies of families and firms would create nonperforming loans on the banks' balance sheets, and this would, in turn, require still more capital. The consequence would be a spiral of increasing costs.

Ignoring the consequences of the new rules on retail banking that serves the productive structures of peripheral countries may be part of a general strategy that aims to develop financial markets and downsize the role of banks in the financing of firms. There has been much emphasis on the goal of achieving a Capital Markets Union (European Commission, 2015b). It seems that the development of a Capital Markets Union could solve the problem with banking by providing to all Eurozone entities, corporations and families alike, financing from financial institutions, though not necessarily domestic ones. This would mean that national banking systems that deliver services and loans to domestic entities would no longer be needed.

In addition, a Capital Markets Union would be helpful in achieving more risk sharing in the European Union and in the Eurozone, in particular. Researchers at the ECB calculated the risk sharing provided by different sources to shocks to consumption in the time span 2008–2016 (ECB, 2018, chart 2, p. 14). They found that, during the years of the crisis, the contribution of credit markets, that is, of banking, to consumption smoothing was negative, whereas the contribution of capital markets was positive. Therefore, the aim to improve consumption smoothing across nations and regions in Europe justifies the push towards more integrated banking systems and, more important, towards more integrated capital markets. All this should replace risk sharing through fiscal policy (Braun & Hubner, 2018), as is explicitly stated in the five Presidents' Report (European Commission, 2015b).

5 | CONCLUSIONS

In the overhaul of financial regulations after the crisis, it was agreed that the risk mitigation technique through financial collateral and derivatives should not be penalized by the new measures. This favoured banking business models related to trading and wholesale activities, but it created several problems and added costs for banks specialized in retail activity. The legislation on bank recovery and resolution further increases these costs. The principle of not splitting hedging sets and still preserving all financial collateral arrangements and the contracts on which they are based creates

viable. Ultimately, all these rules aimed at avoiding financial market instability caused by the unwinding of short-term debt contracts through margin calls end up resurrecting bank runs.

In the absence of credible deposit insurance, the most likely event in case of perceived distress of a bank is a flight of depositors to banks considered to be in better financial condition. This, in turn, will cause a fall in the value of the bank's shares, an increase in the cost of issuing equity and bonds, and, in the end, the need for a resolution. Thus, a liquidity problem may easily be transformed into an insolvency problem. To avoid runs on repo, the new legislation resurrects runs on banks.

The theory underlying all these rules is that markets are better than banks, as is often repeated in many official European Central Bank and European Commission research studies. They are based on the evidence that, over the time period 2008–2016, credit contributed negatively to risk sharing, whereas capital markets contributed positively. This has seemed to provide a sufficient reason to overlook or even ignore the contribution made by banking and particularly, by retail banking, to the productive structures of peripheral Southern European countries.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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Non-technical Summary

The paper investigates how the introduction of the Banking Recovery and Resolution Directive (BRRD) in European Union legislation has affected (and will affect in the future, also) the retail banking business model, which is the prevailing model in Southern European countries. The paper challenges the main narrative on the evolution of business models in the European Union. That narrative is that the changes in regulations that were implemented and designed after the global financial crisis have induced banks to revert to a more retail-based business model. Data are provided supporting the conclusion that there has been no conscious decision to return to retail banking, but rather, various coincidental events such as the changes in the interbank market in peripheral countries and the transfer of other activities to non-bank entities for the big banks in core countries that mimic that result. In this context the treatment of deposits in the BRRD will be discussed. This treatment is not very favourable compared to that for other short term liabilities, such as repo liabilities and liabilities related to derivatives and secured borrowing, that are more widely used in wholesale and investment banking. It will be argued that the application of the BRRD in banking systems with a strong retail banking component, like those prevailing up to now in peripheral countries, may risk causing the resurgence of bank runs.

How to cite this article: Tropeano D. Does the BRRD affect the retail banking business model in the Euro area? *Economic Notes*. 2020;49:e12162. <https://doi.org/10.1111/ecno.12162>