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## DOMENICA TROPEANO

# **Financial Regulation After the Crisis**

Where Do We Stand?

Abstract: I critically discuss the main points in the financial reform legislation passed in the United States in 2010, with the adoption of the Dodd-Frank Act, and the planned reform proposals that are currently being drafted and discussed in the European Union. The general philosophy behind both reforms is similar. The inspiring idea is that financial innovation must be encouraged because it increases consumers' welfare and, by summing across all individuals, the whole of society's welfare. All the effort is concentrated in redesigning the regulatory and supervisory tools to deal with the whole range of new products and to be able to more accurately measure the risks arising from them than was done in the past. Once banks are ready to face those new risks, financial stability should follow. No structural measures aimed at changing the structure of financial markets or changing the business strategies of banking and nonbanking firms have been considered. The shadow banking system has not been explicitly addressed in the financial reform. Curiously enough, in the United States, regulators have succeeded in including a watered-down version of the Volcker rule in the approved reform, even though banks' share of the financial system's total activities is falling. On the contrary, in Europe, where banks are less disintermediated and have managed to reach leverage ratios higher than in the United States, no effort is planned to change their business strategy and to lower their leverage.

**Keywords**: Europe, financial crisis, financial regulation, financial structure, United States

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Many proposals have been made for changes in financial regulation after the financial crisis that started in July 2007 in the United States. To date the only project accomplished in this regard has been the approval by Congress of the Dodd–Frank Wall Street Reform and Consumer Protection Act, signed into law on July 21, 2010, which introduced several structural changes in the shape of financial markets in the United States. In the European Union, some changes have been introduced that the European Directory approved in 2009, but several legal proposals on financial regulation have been subsequently drafted and are planned to be discussed in the current year, 2011.

<AU: not nec to telegraph what you are going to do. Pls reduce this to a summary of the content, not the structure> In the section "The Recent Regulatory Reforms in the United States," I discuss the main features of the new legislation in the United States extensively. In particular, I discuss the new norms for regulating derivatives and the treatment of the Federal Reserve tasks. The neglect of the complex structure of the U.S. financial system and the dangers that it poses to systemic stability is the major point. In the section "The Financial Reform in Europe to Date and Its Repercussions on the Business Strategies of Banking Groups," I discuss the main features of the legal proposals on financial reform in the European. I argue that the proposed changes in regulation would not hinder big banks from seeking the same rate of profit they achieved before the financial crisis and from eluding capital regulations by extending their links to the shadow banking system. Further, I examine their likely effects on the business strategies of big banking groups in Europe. In the section "Alternative Proposals for a Reform of the Financial System," I critically discuss alternative reform proposals, pointing to the necessity of structural interventions in the financial system. I highlight that simply updating the existing regulatory framework to take into account new financial tools and the new risks emanating from them is not a winning strategy. A reform of derivatives markets that bans nonuseful and socially damaging products and a reform of securitization is needed. Other tools must be employed to change the business strategy of big banking groups, which led to a terrible high leverage and to losses paid with public money. A differential taxation of profits, higher for trading activity than for banking activity, may be a useful measure. In Europe, the lack of measures to reduce the leverage of the big banks may be more worrying than in the United States. Strangely enough, the separation of proprietary trading from trading on account of customers would have been more responsive to European institutions' needs than the proposed changes in capital regulations, according to the Basel Committee recommendations. Conclusions follow.

## The Recent Regulatory Reforms in the United States

Though many proposals for reforms were announced after the financial crisis, the main change in regulation has occurred in the United States with the adoption of the Dodd–Frank Act.

### The Modified Volcker Rule

The modified Volcker rule, named for Fed chairman Paul Volcker, was introduced in the Dodd-Frank Act and approved in an amended form. The main achievements of the Dodd-Frank Act on financial stability and consumers' protection recently approved in the United States are the separation of proprietary trading from other activities in the balance sheets of banks and the introduction of more stringent rules on the trading of derivative products.

A separation between banking activity, that is, the activity of issuing deposits and granting loans, and trading activity was introduced by establishing the principle that only a part of proprietary trading may come from banking activity income. The aim is to deter banks from using the deposits of customers insured by the state through the Federal Deposit Insurance Corporation (FDIC) from speculating, thereby either enjoying the gains from the speculation by adding these to profits (to be distributed or retained) or burdening the public with their losses in the case of the often necessary bailouts. The introduction of this rule, called the Volcker rule after its proponent, should mimic the reintroduction of the Glass-Steagall Act << which did what?>>, which has been judged too difficult to reintroduce in a financial environment completely different from the past. The Volcker rule, as Tatom (2010) observes, is somewhat different from the text of the approved law. In reality, the Volcker rule would have prohibited banks from conducting private equity, hedge fund, or proprietary trading businesses. The text of the approved law limits instead the first two business activities up to 3 percent of total assets while still prohibiting proprietary trading. Tatom (2010) observes that, because proprietary trading is usually conducted in many different sectors of the same banks, it is difficult to implement that rule and that its efficacy will depend on the degree of enforcement.

Moreover, this rule should apply to banks, but the latter are only a tiny portion of the current U.S. financial system. The institutions that have benefited from costly rescues by government were investment banks, which eventually changed their status after the rescue or to be eligible when insurance companies and even nonfinancial firms are involved. Thus, even if the law had existed before the crisis, it would not have prevented those costly rescue operations.

## On the Trading and Clearing of Derivative Products

Another important point in the recently approved law concerns the trading of derivative products. The main points of the approved law are the following: require clearing and exchange trading of many derivatives; impose additional margin and capital requirements on uncleared derivatives; establish a comprehensive framework for the registration and regulation of dealers and "major" nondealer market participants; prohibit proprietary trading in certain derivative instruments by some regulated financial institutions; and prohibit certain swap market participants from receiving federal assistance, a change that will force many derivatives activities to be conducted outside the banks by separately capitalized affiliates.

The first point means that those derivatives products that have the necessary characteristics to be traded and for which a clearing is accepted will be traded in exchanges. This will presumably happen for those products that are standardized products like single-name credit default swaps (CDS) and for which it is likely to find a clearing entity. In this case, the clearing house or the institution that makes that function will warrant that the transaction will be executed. In turn the institutions that do this job will have to be registered and will be regulated by some institutional body. The intermediaries will have to be registered and to be adequately capitalized. Moreover, they have to transmit data on the transactions executed to special repositories in order that the authorities have the information necessary to build the interconnections among financial institutions and judge over the dangers of systemic instability. The law foresees different conditions for those derivatives contracts that are not cleared by a central counterparty. In the latter case, regulators must impose margin requirements and collateral requirements on the deals. The idea behind this separation of cleared and uncleared contracts is to induce the operators in the market for uncleared products to transfer their activities in the cleared section if they find a clearing possibility for their products. The margins and collateral requirements will be established by regulators and, of course, the higher they are, the more likely those transactions will move to exchanges.

The second important point in the new law is that all swap dealers or major swap participants will be obliged to register with either the Securities and Exchange Commission or the Federal Trade Commission. These institutions in turn will have to establish minimum capital requirements and margin requirements. A third important point is that the law strictly forbids that any swap dealer or major participant in the swap market receive federal assistance. Federal assistance in turn is defined as the use of any advances from a Federal Reserve credit facility or discount window for the purpose of (1) making any loan to, or purchasing any stock, equity interest, or debt obligation of, any swaps entity; (2) purchasing the assets of any swaps entity; (3) guaranteeing any loan or debt issuance of any swaps entity; or (4) entering into any assistance arrangement, loss sharing, or profit sharing with any swap entity.

It is not clear to what extent this forbearance should apply also to clearing houses, because there is another article of the same law that declares that market utilities such as clearing houses may have access to Federal Reserve liquidity facilities in exceptional circumstances. Many scholars have pointed to the fact that, to warrant smooth functioning of the market, clearing houses should indeed have access to central bank refinancing. Duquerrois et al. (2009),<<AU: Citation has Duquerrois; references has Duquerroy. Which is correct?>> for example, write explicitly that access to central bank money and intraday and overnight credit with the central bank greatly reduces the CCP's<<AU: Please spell out CCP.>> dependence on bank refinancing lines, which are likely to dry up when money markets are under strain. The European regulation framework foresees that clearing houses may access

central bank refinancing. The eurosystem requires that clearing houses dealing in the euro be located in the euro area for this reason and also to ensure that central banks can effectively supervise them (see Duquerrois et al. 2009).<< AU: Citation has Duquerrois; references has Duquerroy. Which is correct?>> This point is not explicitly made in the Dodd-Frank Act.

## On the Role of the Central Bank and Systemic Risk

Neither in the Dodd-Frank Act nor in other regulation reform proposals put forth on the other side of the Atlantic is the problem of shadow banking, nonbank financial institutions, and securitization faced. In the Dodd-Frank Act, money market mutual funds and other institutions of the same type are not mentioned among those institutions that are eligible for central bank refinancing. The issue of excessive leveraging and the level of haircut, which actually determines the amount of reciprocal debt among banks, are also ignored. The main channels through which the subprime crisis spread to the other markets were the nonbank financial institutions that were managing a great part of savings no longer flowing to banks and that had, on the other side of their balance sheets, assets of dubious value. The widespread habit of using derivatives products as collateral in repurchase agreements contributed heavily to the freezing of the market for financial transactions among financial institutions. The reform of securitization and rating agencies has not been on the agenda either.

On the one hand, the powers of the central bank are reinforced insofar as the whole weight of supervision is placed on this institution. The already high number of regulatory bodies is still enlarged, and a new council is created that should take into account issues of systemic instability and should be able to take special measures toward those entities, which are relevant at the systemic level. The powers of this new supervisory authority, however, appear quite vague, and the coexistence of so many different regulatory bodies has made many scholars and practitioners skeptical of the efficacy of the new regulatory architecture. On the other hand, in the law there are no provisions to make the central bank effectively able to monitor and supervise the nonbank financial institutions that contributed so much to the last big crisis. No attention is devoted to the structure of the financial system and to ensuring that the central bank effectively controls the money market. No regulation is provided to avoid problems in the commercial paper, repo, and money market mutual funds markets.

As Pozsar et al. (2010) have discovered, the structure of the financial system has been dominated by the shadow banking system. The shadow banks were part of financial holding companies in which the banks had the task of originating the loans and ensuring that the whole structure had some access to the central bank's liquidity provision if necessary. All the other tasks, such as warehousing pricing transformation in marketable securities, were performed by other institutions, which often belonged to the same holding company. Pozsar et al. (2010) calls this type of interaction "internal shadow banking" as opposed to external shadow banking, which is carried out outside the financial holding company. In practice, except for the originating banks, all the institutions involved in the process of securitization were financing themselves on the market, and thus the whole pyramid rested on the smooth functioning of those markets. When the private markets for financing started to show signs of stress, the whole pyramid collapsed. No public liquidity provision reached the shadow banking system until the late months of 2008. Then the central bank started to use the special programs of asset purchases that were tailored to the shadow banking system's financing needs. Those programs provided a backstop to the system (see Pozsar et al. 2010). One might wonder why the central bank waited such a long time before introducing those necessary measures (see Tropeano 2010).

The law assumes that everything has returned to the situation before the crisis. The temporary measures are being retired, and it is foreseen that only in emergency situations will the Fed lend money to nonbank financial institutions too. Thus the problem of ensuring the liquidity provision to that large part of the financial system under normal conditions is not tackled. Neither is it discussed whether and how it is possible to restrain the extension of that system, if it is deemed to put in danger the stability of the whole economy. According to the philosophy of the drafters of the Dodd-Frank Act, the risk entailed in securities trading by nonbank financial institutions may have been checked by the requirement that derivatives be traded publicly and that clearing houses intervene to ensure liquidity and orderly trading. In the end, though nothing has been made to ensure stability of the financial system, the Fed is assigned the task of detecting the institutions that are potentially dangerous for financial stability and is given the power to dispose of them. The environment, as it is, will offer plenty of possibilities of making profits by engaging in activities that are potentially undermining the stability of the whole financial system, but the Fed should punish this behavior. The past history of proximity and complicity between the Fed's officials and the top management of big investment banks does not offer any assurance that this task will be performed well.

# The Financial Reform in Europe to Date and Its Repercussions on the Business Strategies of Banking Groups

#### Financial Reform Plans in Europe

Whereas in the United States financial reform was passed in July 2010, in Europe so far not very much has been adopted. The only big accomplishment has been that of establishing three new regulatory bodies at the European level, the first the European Banking Authority, the European Securities and Markets Authority, and the European Insurance and Occupational Pensions Authority. Many other legislative efforts were planned and were scheduled to be discussed at the European Commission during 2011 <has this happened?>. The most important are the following. The first is the draft of a law proposal called EMIR, European Market Infrastructure Regulation, whose content is very similar to the Dodd-Frank Act in the part relating to the regulation of derivatives. It is required that most over-thecounter derivatives be cleared through central counterparties. The second regards the revision of capital regulation according to Basel III. The latter is a revision of the Capital Requirements Directive II, approved in 2009 to incorporate some of the most important rules on capital requirements that have been drafted by the Basel Committee and accepted by government representatives at the Seoul Summit in November 2010 (see Basel Committee on Banking Supervision [BCBS] 2009a, 2009b). This reform has been converted into a law proposal called CRD4.<<AU: Please provide spelled-out form.>> The discussion of this law proposal is behind schedule. Some points contained in the Basel Committee proposal on capital regulation will be included in the new capital requirement directive (see BCBS 2009a).

The drafters of both reports on the reform of banking regulation seem to be inspired by the idea that capital weightings for financial assets, foreseen in Basel II, must be revised to take into account what has happened during the crisis. The obvious conclusion, then, is to increase the risk weightings for exposures on derivatives and securities financing. For the same reason, the regulators impose that, in the calculation of regulatory capital, not only their own banks' assets but also the assets of off-balance-sheet entities must be included. The general philosophy of regulation remains the same, and the regulators share with mainstream economics the faith in the measurability of risk by using standard statistical techniques. The only admission is that those techniques must be refined to include new sources of risk (see also Tonveronachi 2010). During the crisis, there has been an increase in counterparty risk, which was ignored in the framework of Basel II. This requires banks to assess the risk of loss arising from the deterioration of credit of counterparties. Moreover, a new type of capital requirement is added that should act as a buffer against cyclical fluctuations. In general, this aims at improving banks' resilience to crises by asking them to put aside a greater ratio of capital to assets; the quality of their capital should also improve, as new definitions for it have been drafted.

The Basel Committee report is introducing two further indicators of financial stability for banks: the liquidity coverage ratio and the stable funding ratio (see BCBS 2009b). The liquidity coverage ratio imposes a certain fixed relation between a part of total assets (those eligible to be included) and the estimated net cash flow over a monthly period. The idea is that the bank must have enough liquid assets to cover expected cash flow for a month. Problems arise as to which assets are eligible to be included in the eligible liquid assets and how to calculate expected cash flows. The draft suggests that banks use certain estimates of net cash flows related to the type of liabilities they hold.

The second metric is called the "stable funding ratio," and it is defined as the ratio of the available amount of stable funding to a required amount of stable funding. This ratio must exceed 100 percent. "Stable funding," in turn, is defined as "those types and amounts of equity and liability financing expected to be reliable sources

of funds over a one-year time horizon under conditions of extended stress" (BCBS 2009b: 20). The composition of the assets in the portfolios of financial institutions is relevant to establishing whether this ratio holds. The decision about how much the available funding must exceed required funding may be left to supervisors' discretion (see BCBS 2009b: 20, n22). There is a very different timing for the implementation of these measures. The capital requirements change should come into play January 1, 2013, whereas all the other indicators created in the second report by BCBS (see BCBS 2009b) should be implemented only very slowly from 2018 onward. The aim behind the liquidity and funding metrics is to give incentives to banks to use more reliable sources of funds and more long-term funds than they chose in the period before the crisis. The objective is to affect bankers' decision as to the source and the maturity of funds raised. As Tonveronachi (2010) observes, this amounts to using prudential regulation to induce a change in the composition of balance sheets of banks and the type of activities they perform without resorting to explicit structural regulation according to the type of institution. This, in turn, requires an enormous amount of work within the bank itself to calculate those ratios and very hard work by supervisors to enforce that regulation. Behind these efforts lies the illusion, typical of the mainstream approach to financial regulation, of being able to accurately calculate risks arising from future events within a small margin of error.

Although, on the one hand, the drafters of both reports are aiming at reducing the liquidity problems and counterparty risks arising from exposures to derivatives products through more accurate and complex supervision, on the other hand, they still blindly believe that those instruments effectively transfer and mitigate risk. A case in point is the inclusion, among the possible indicators of liquidity to be seen by supervisors, of CDS spreads on financial institutions (see BCBS 2009b: 4). Given the highly uncompetitive structure of this over-the-counter market, variations in spread cannot be considered a reliable indicator of either liquidity or insolvency problems. Another proof of this attitude is that they have retained the existing regulation that allows banks that have CDS coverage for some risky assets to put aside less capital for them to fulfill capital requirements. Markose et al. (2010) warn against the belief that the CDS market can provide the credit risk mitigation that banks are looking for in case a credit event occurs. They argue that, given the high concentration prevailing among the CDS financial network, the bankruptcy of a big CDS seller could cause the failure to complete the contracts. Thus they recommend that the Basel II provision for capital reduction on bank assets that have CDS cover be discontinued.

Like their U.S. counterparts, European regulators seem to underestimate the importance of shadow banking. The surcharge on capital for off-balance-sheet assets does not hinder banks from expanding their levels of leverage, as is clearly shown by Blundell-Wignall and Atkinson (2010: 12). They present the following example to explain how, under the current and future regulatory environment, banks can manage to reduce the regulatory capital they put aside and consequently

increase their leverage: If bank A lends to a firm by buying its bonds for an amount of \$1,000, it would then need to put aside \$80 as capital, which is 8 percent of 1,000 according to the Basel capital rules. But the same bank may engage in a series of transactions with other financial counterparts to save a part of that capital. At the end, it puts aside only 18.60 euro as capital, much less than it should have according to the simple arithmetic rule on risky assets. As Blundell-Wignall and Atkinson (2010) point out, there is no scope in imposing a 20 percent capital charge for risky assets if this requirement can be easily avoided by using the CDS market and thus ending up with a 70 percent discount on the required capital. The transactions described by Blundell-Wignall and Atkinson (2010) allow the banks to raise the leverage ratio from 12.5 to 53.8.

For this reason, among others, Blundell-Wignall and Atkinson (2010) are very critical of the Basel III regulatory framework. The new capital rules implemented in the system can be easily evaded by resorting to the derivatives market. In that way, banks may put aside much less capital than that required for risky assets. They simply transfer risky assets on that part of the financial system, which is not covered by the same prudential regulation as the banking system.

The size of the shadow banking system thus becomes relevant for judging the effectiveness of the banking system regulation.

Blundell-Wignall and Atkinson (2010) think that the leverage ratio should become the primary regulatory tool rather than being simply a backstop to other regulatory devices. This, in turn, should induce the authorities to consider the regulation of the shadow banking system as an urgent matter. One regulatory authority for the whole financial system would be needed (see Blundell-Wignall and Atkinson 2010: 21). Unfortunately, in the first months of 2011, the creation of three different supervision bodies for different types of financial institutions was announced by the European Central Bank and the European Community authorities.

In my opinion, the changes in regulation that have already happened at the time of writing and those that are planned to be discussed in the next months do not offer any guarantee of future financial stability. Increased capital charges may be easily evaded by expanding into the shadow banking system. No brake has been put on the possibility of increasing leverage, which is a multiple of the existing capital. Thus even if capital is effectively increased, the level of debt will always be too high. If banks have more capital, they are allowed to make more debts. The convenience to pursue this business strategy has not changed. The stress on a global leverage ratio, as Blundell-Wignall and Atkinson (2010) argue, would have been more able to put a brake to the expansion of banks' balance sheets. There are, however, issues in implementing such a measure related to how the leverage ratio should be calculated. The ratio should simply have as numerator capital and as denominator all assets. The difference with the main capital requirements is that all assets are alike and there is no need to consider how risky they are to calculate the capital needed.

What causes troubles is the definition of "gross assets before accounting net-

ting." The Basel Committee proposal deals with gross assets; thus a leverage ratio of 3 percent would mean that banks may borrow 33 times their capital, which is too much. The problem is that gross assets before netting are calculated in different ways according to the accounting schemes used. In the United States, for example, net assets of banks are calculated within a different accounting framework than in countries using the IFRS <<AU: Please spell out IFRS.>>(see Clifford Change 2010). Another important point is that financial derivatives, in contrast to other assets, are allowed to be netted and that off-balance-sheets items resulting from securitizations are not accounted for among the banks' assets even if the institutions that securitizes them belong to the bank and contribute to their consolidated accounts. This means, for example, that even if this leverage ratio had been applied in the period preceding the last big financial crisis, 2007–9, it would not have stopped the expansion of German banks in the U.S. securitization markets. The assets of the vehicles of German banks operating in the United States amounting (according to some sources) to many hundreds of billions of dollars, would not have been included in the calculations of those banks' gross assets and would not have required additional capital. The main transmission channel of the financial crisis from the United States to Europe would not have been affected.

# Did the Planned Reforms Change the Business Strategies of Big **Banking Groups?**

Although some big banking groups have already started raising capital on the market and others are waiting for the results of new stress tests to be conducted, no change has happened so far in the business strategy of the major European banks. From their profit disclosures, it is evident that they are more involved in dealing derivatives products than they were in the precrisis period. The proposed legislation on market infrastructure may have opened new business opportunities. They still use their proprietary desks to do this.

In Germany, which is one of the major countries in the European Union, the separation between banking activity and securities trading has never been realized. Thus the big German banks, which were at the center of the European banks' expansion in shadow banking activities in the United States, still manage huge proprietary trading desks and derive a big part of their profits from their own-account trading mainly in money and foreign exchange markets (see Deutsche Bank 2010: 21). The market for some derivatives products like CDS and interest rate swaps is gaining in depth and volume. The Germans have made a merger plan with the New York Stock Exchange public, not just to expand productive activities in the United States but also to enjoy the fees and profits deriving from derivatives trading. As Morley (2011) writes, this means that the stock exchanges in Amsterdam, Paris, Lisbon, Brussels, Frankfurt, and nine other European countries will all fall under the control of Germany's Deutsche Börse. This is, however, the least important part of this deal. The most important aspect regards derivatives trading. In fact, by concluding this deal, the Deutsche Börse will control the former Euronext derivatives unit LIFFE (London International Financial Futures and Options Exchange). The new company, which already owns the derivatives unit of Deutsche Börse, will thus become the leading derivatives trader at the world level (see Morley 2011).

There is the danger that the big European banks will replace the big American banks as major dealers in over-the-counter derivatives in the future. The Basel III capital charges, as we have already seen, do not hinder the banks from increasing their leverage by shifting the weight of the risky assets onto the shadow banking system. Moreover, the fact that Europe hosts one of the major financial centers in the world (London), where many United States-based financial institutions operate, means that the boundaries between the European and U.S. shadow banking system may be very thin. If big European banks decide to increase their leverage by shifting risky assets outside the system, they may choose among different types of institutions, either European or United States based in Europe. The globalization of the financial markets has increased the number of institutions among which it is possible to choose. Neither European nor U.S. regulators are worried about the size of the shadow banking system and its connections to the banking system. Sadly enough, nothing hinders European big financial institutions from expanding their unproductive and speculative activities, increasing their leverage, and continuing to have strong ties to the shadow banking systems. The regulatory changes implemented so far do not offer any guarantee in this respect.

Thus, even if all the proposals I have discussed in this article were implemented in due time, the changes in regulation would not hinder big banks from pursuing the same rate of profit they achieved before the financial crisis and evading capital regulations by extending their links to the shadow banking system. Although the banks in the United States may be a bit limited by the Dodd-Frank bill, the banks in Europe do not have such constraints. They may be affected in the future by the leverage ratio included as a backstop measure in Basel III. This measure, however, if implemented, would allow a very high leverage of 33. So European big banks are de facto free to pursue high profits by engaging in risky investment, as before the crisis, while enjoying the insurance of their liabilities by the state.

### Alternative Proposals for a Reform of the Financial System

Given the faults of existing regulatory changes, some proposals have been made to improve or replace them. The discussion deals with changes in the structure of financial systems that are more radical than those made until now to financial regulation. Some of these proposals ask for the state to come back heavily into the financial system in a way similar to the role it played in the period 1930–1960 and in strong contrast to the past decades' liberalized environment (see Goodhart 2010).

The state must be brought back into the financial system to change the corporate governance practice of financial firms that favor speculation and maximization of short-term profits and bonuses. Nonbank financial institutions must be tightly regulated, and the links between banks and nonbanks must be cut by hindering banks from purchasing assets issued by nonbanks. The state must warrant liquidity and insolvency provision only to those institutions that follow strict rules. In particular, pension funds and other financial institutions whose performance is crucial to the well-being of citizens should be run by public management and should invest in safe assets with low but stable returns. Incentives must be built to favor investment in specially needed sectors and to favor employment (see Wray 2010).

Other proposals aim at restricting the range of institutions whose liabilities are insured by the state and to create a sort of narrow banking system, thereby leaving the rest of the intermediation to the market (see Kregel 2010a, 2010b, 2010c).<sup>3</sup> It would amount to creating a department within the financial system in which the state warrants deposit accounts, while the rest of the system is left to the market. In any case, the market, even without explicit state warranty, may foresee that, in case of need, all financial institutions will be saved.

In a different strain of thought, Rossi (2010) also proposes a separation of functions within the same bank rather than a separation of financial institutions according to their different fields of activity. He proposes to separate the banking department from the issue department, the same way it was made in Great Britain in the second half of the nineteenth century. The difference, which should make this new experience luckier than the past one, is that we are now living in an endogenous money system. The issue of means of payments should not be restricted by gold reserves but should be strictly linked to the value of current production. I do not think this is feasible either, because capital values usually differ from just the values of produced goods insofar as they incorporate expectations of future revenue. Different opinions on the future may lead to different developments of the price of financial assets with respect to the prices of goods. It is thus difficult to link the quantity of money issued to the production of goods.

Nevertheless, a reform of the financial system as a whole is needed, which must start from the urgent question of the regulation of derivatives products and of both bank and nonbank financial institutions. The extension of the existing regulatory framework to take into account the new risks that have become known through the financial crisis is not sufficient. This approach assumes that risks are measurable with a small margin of error and that the only fault of regulatory authorities was to not have included all possible sources of risks or to have underestimated their attached probabilities. The revision of weightings and the new design of precautionary metrics should make banks more capitalized, more liquid, and safer. I do not believe that this result will be obtained without some structural intervention into the financial system, which must rely on the economic policy assessment of what the financial system should do. Although more structural reforms are needed, in the meantime it would be wise not to perpetuate past mistakes.

The current shape of financial regulation reform in Europe indeed does so by introducing just the new capital requirements as sketched by the Basel Committee. These requirements may easily lead to the expansion of shadow banking institutions and assets in Europe. A meaningful reform of both banking and nonbanking institutions is necessary. Leverage must be controlled and lowered in all institutions. The reliance on market insurance must be stopped because it only increases the cost of the bailout interventions by the state, as the state has to save both banks and nonbanks offering insurance to banks. There is no scope for the simultaneous existence of both public implicit insurance and private costly ineffective insurance through derivates instruments. Most of the market's activities, such as insurance through derivates products, were largely unnecessary and inefficient. The whole invention of CDS and the like as a replacement for state insurance to the liabilities of shadow banks does not make any economic sense.

It is clear that those financial instruments cannot provide any insurance against systemic events, and this is independent of whether or not they are cleared through clearing houses.

Clearing houses themselves may need to be rescued and may concentrate all the risks of the market in themselves. This is no shortcoming to banning dangerous products for financial stability. Moreover, under the new legislation, derivatives products still enjoy special treatment in the U.S. bankruptcy code. They are allowed to be liquidated even in case of bankruptcy. Chapter 11 foresees that bankrupt firms are prohibited from repaying their debtors immediately so that they may try to reorganize their business without immediately closing. This does not hold for debts and claims linked to derivatives transactions. The debtors in these transactions are free to "jump to the head of the bankruptcy repayment line" (see Roe 2010); so they bear less risk with respect to other creditors. This contractual advantage, in turn, will encourage new entrants into this market, which after the crisis experienced an increase in the volume of transactions. This will add to the systemic fragility of the system.

In addition, a reform of securitization should be undertaken. Securitization might help to make traditional banks' assets—loans—more liquid. Surely securitization as a means to avoid capital charges does not make sense. The actual model of securitization in theory should allow banks to get rid of the loans and not be responsible for the defaults of borrowers with their capital. In practice, being a very thinly capitalized special purpose vehicle, the risk of default is either shifted again on to the banks or on to society as a whole, as banks are rescued with public funds. Therefore, it is preferable that the bonds issued remain on the balance sheets of banks or, alternatively, that the intermediaries that sell the bonds be financial institutions with adequate capital. The special purpose vehicle has neither a normative nor an economic function except that of shifting on to public resources the cost of private defaults. The special purpose vehicle is thinly capitalized, and the task of ensuring a good rating of the bonds issued is in part shifted to a third party, which may be a traditional insurer or a nontraditional one through the selling of a CDS.

A model for securitization could be the German *Pfand-briefe*, bonds issued by banks that remain on their balance sheet. The are highly standardized and are claims of the holders against the issuing banks. For this reason banks have incentives to

care about the quality of the loans and the creditworthiness of the borrowers. Gorton and Metrick (2010) propose a plan for safe securitization. They describe three steps necessary for securitization to be "safe": senior tranches of securitization of approved classes should be insured by the government; the government must supervise bank securitizations rather than relying on rating agencies; and entry into securitizations should be limited, and any firm that enters should be subject to supervision. This means that, contrary to the whole financial liberalization philosophy, nonbank financial institutions must be regulated and entry limited. The extension of the central bank and of the state safety net to parts of the shadow banking system should be subject to the possibility of controlling the type of products that are on the active and passive side of their balance sheets. A brake to financial innovation, which often is detrimental for financial stability, should be introduced.

Further measures tending to limit the entry into the regulated part of the shadow banking system should be introduced. A charter for certain activities should be established that imposes a limit to entry and a selection of perspective entrants. The number of shadow financial institutions has greatly increased given the high rate of profit gained in this industry at the expense of the citizens. The rate of growth of value added in certain financial sectors has been bigger than that of traditional manufacturing sectors. This does not depend only on the widespread tendency in favor of expansion of the service economy but also on the high profits that for years this industry has been obtaining. Lowering those profits will help shrink the industry. At the same time if traditional banking activity must be encouraged, there should be subsidies to bank's financing particular projects that are beneficial to the economy—for instance, environmentally friendly transformations of economic activity or other socially desirable projects—while penalizing arbitrage and speculative activities. To do this, a differential tax treatment of banks' profits might be introduced. Taxes on income from trading activity should be higher than tax on income from intermediation. This would penalize banks that engage mainly in this type of activity as compared with traditional banks.

#### Conclusions

The main points in the financial reform passed in the United States last year and in planned reform proposals that are being drafted and discussed in the European Union are different. The Dodd-Frank Act focuses more on the separation of trading books from banking books and on market infrastructure, whereas the EU proposals are more directly aiming at a redesign of banking regulation according to the Basel Committee reports' prescriptions. However, the general philosophy behind both reforms is similar. The inspiring idea is that financial innovation must be encouraged because it increases consumers' welfare and, by summing over all individuals, also the whole of society's welfare. The reforms in market infrastructure are very similar; they require central counterparty clearing for derivatives products. In both reforms the efficacy of derivatives as a means to mitigate and transfer risk is not questioned. The whole effort is concentrated in redesigning the regulatory and supervisory tools to deal with the whole range of new products and to be able to more accurately measure than in the past the risks arising from them. Once banks are ready to face those new risks, financial stability should follow. To avoid the mispricing of risks, new, more reliable measures of financial health have been foreseen. After all this work has been done, and it will take years, the implementation of those measures will depend on the discretion of supervisory authorities. Their power has increased as well as their discretion.

No structural measures aiming at changing the structure of financial markets or changing the business strategies of banking and nonbanking firms have been discussed. The shadow banking system has not been explicitly considered in the financial reform. Curiously enough, in the United States, regulators have succeeded in including a watered-down version of the Volcker rule in the approved reform, even though banks' share of the financial system's total activities is falling in the United States. Conversely, in Europe, where banks are less disintermediated and have managed to reach leverage ratios higher than in the United States, no effort is planned to change their business strategy and to lower their leverage.

#### Notes

- 1. In 2009 there were some important changes in banking regulation, which amounted to the harmonization of the national deposit guarantees schemes and the introduction of the obligation for originators of securitization products to retain at least 5 percent of them in their portfolios. The last measure was contained in the Capital Requirements Directive 2 (see Véron 2010).
- 2. "Following the dramatic loss of 318.7 billion in 2008 due to the financial crisis, German credit institutions recorded a large profit again in own-account trading in securities [of the trading portfolio], <<AU: Did you add these parentheses or were they in the original quotation?>>financial instruments, foreign exchange assets and precious metals amounting to 36.9 billion. The only year since 1993 in which German banks achieved better own-account trading figures was 2005" (Deutsche Bundesbank 2010: 20-21).
- 3. It is not clear whether Kregel (2010a, 2010b, 2010c) advocates a narrow banking system in the usual meaning of the term. It seems, rather, that he proposes that the state should warrant the liabilities of institutions that run the payments system, whereas the lending business would be left to the market and the liabilities of lending institutions would not be insured by the state.

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