IS THERE A VISION BEHIND BANKING SUPERVISION?

Bogdan Glăvan*

Abstract

Banking supervision has attracted considerable attention in the last decades, as attempts to prevent the occurrence of financial crisis have intensified. We argue that past regulations have had unintended negative effects, which because of a lack of clear understanding of the fragility of banking activity and the mechanism of political decisions, will continue to contaminate the results of present, upgraded regulation. Thus, a reorientation in thinking about banking supervision is necessary in order to build a safer financial system.

Introduction

Banking supervision has been one of the fastest growing pieces of regulation in the last decades. Its latest achievement, Basel II, has been discussed at length by many economists. Despite the amount of literature on the subject, the most fundamental question of all has remained relatively untouched: is the Basel Accord – that is, the international harmonization of capital standards – necessary or desirable to have a stable financial system? This paper attempts to provide an answer to this issue. The article is structured as follows. The first section explains the fragility of banking organization. The next section presents the attempts to solve this issue by international banking supervising authorities. Then, we turn our attention to the critique of baking regulation and explain its failure to manage the fragility of banking systems. The final section concludes the paper.

Banking and financial stability

Traditionally, banks have been subject to greater government regulation than most other sectors of the economy. Regulation of banks has historically come in the form of entry restrictions, limits on activities, geographical restrictions, reserve requirements, and capital requirements (Rodriguez 2000, p. 116). This raises the question about what makes banking so special to deserve the attention of public authorities.

At the origin of government's interference in this field of business is the special status of banking. This special character attracted the attention of early economists, including A. Smith, who was alluding to the inherent instability of banks operating in a fractional reserve system, which, if true, merits their regulation (Smith [1776] 1937: 285, 308). Banks are financial intermediaries that take in deposits, which they then use to make loans and to invest in marketable securities and other financial assets. In the process, for the system as a whole, there is a multiple expansion of the money supply. Because banks' liabilities (i.e., the deposits they take in) are usually fixed in value and

* Bogdan Glăvan is Associate Professor of Economics at Romanian American University in Bucharest.

payable on demand, while banks' assets (i.e., the loans they give out and the securities in which they invest) are of variable value and not collectable on demand, it has generally been believed that banks are prone to failure and runs – the sudden withdrawal of funds by a large number of depositors who have lost confidence in the bank. In turn, this has the potential of negatively affecting solvent institutions through a contagion effect, which could adversely affect the entire financial system.

This was the main rationale behind the adoption of a safety net to protect depositors. Traditionally, private banks themselves have attempted to deal with this inherent fragility of fractional reserve banking. First, they included an "option clause" in their contracts (mainly banknotes) that allowed them to suspend payments for a (in)definite period. Alternatively, they created private clubs, then clearinghouses and, eventually, a bankers' bank centralizing the reserves of the entire system in order to respond more effectively to potential bank runs. However, given that total reserves are only a fraction of banks demand liabilities, central banks are able to contain only localized panics, not systemic crises. Moreover, central bank, by its mere existence, creates a "climate of credibility", which encourages private banks to take more risks than before – the so-called moral hazard problem. This, in addition to the government's scheme of deposit insurance, determined banks to behave even more irresponsibly, increasing the danger of systemic crisis.[1]

As Stevens (2000, p.1) states, "The moral hazard of a safety net as well as prudent scrutinity of the central bank's customers provide a rationale for regulating and supervising banking organizations – to curtail risk taking." However, banking supervision has the potential of creating a vicious circle: banks have fewer incentives to adopt a prudent behavior to the extent that public supervision and control replace private risk management. Put it differently, there is an attempt to circumscribe moral hazard by a policy which has the result of further enhancing the moral hazard problem.[2]

With no supervising authority, lender of last resort and government guarantees, bankers bear exclusively the risk of their activity. In the absence of a safety net, banks are stimulated to preserve a higher amount of capital, in order to cover potential losses and remain in business. State intervention has the unintended effect of substituting public responsibility for private responsibility, creating incentives for banks to keep a lower capital. From that moment, responsibility in case of failure is shared by bank and its supervisors, while profit in case of success is retained by the bank (Oatley, p. 36).

As one can see from the figure bellow, during the 20th century, the banks' capital ratio has continued to decrease. This is perhaps the most significant aspect of the fragility of banking system and, has attracted the attention of monetary authorities.[3] Stabilizing the capital ratio – or, the adequacy of capital ratio – became, in the last decades, the target of official regulators throughout the world.

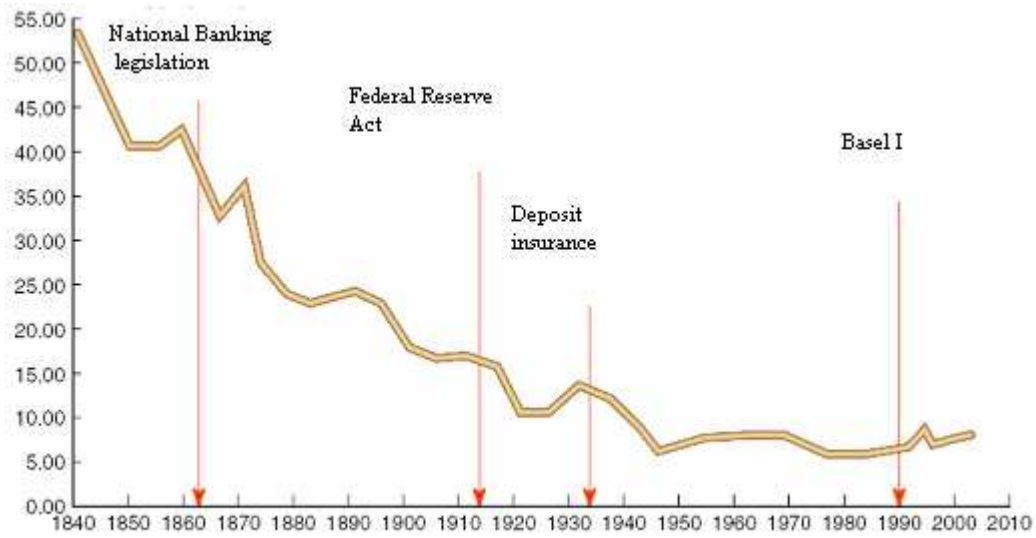
---

[1] Insolvent as they were, "the threat of bank run served as a powerful source of market discipline. At the turn of the century, capital ratios at banks were closed to 25 percent" (Kaufman 1988, p. 17). The practical result of protecting fractional reserve banking has been a decreasing in banks' capital relative to their liabilities.

[2] We can speak of a dynamic of interventionism. For a comprehensive discussion of the consequences of interventionism, see Mises (1996; 1998).

[3] See Dowd (1993) for a larger discussion.

The evolution of banks' capital rate



At the beginning of the regulatory movement, the capital banks were required to maintain was usually calculated as a certain proportion of their total assets (Machlachlan 2001). This measure induced banks to alter their portfolio in favor of riskier investments, which if successfully fulfilled have a higher return.[1]

Moreover, disparities in banking regulation across countries led banks to adjust their policy in order to reap the benefits of more permissive countries. Soon, it became obvious that differences in legislation could provide a source of competitive advantage, as well as a potential generator of financial instability.[2] To contain this phenomenon,[3] representatives of developed countries agreed to harmonize their legislation concerning bank's capital. Thus, the Basel Committee has issued the famous Basel Accords, the effects of which will be analyzed in the next section.

From a more broad perspective, Basel Accords are specific cases of regulation, and consequently present all the weaknesses of regulatory policy in general. Regulations are by their nature static prescriptions, virtually senseless in a dynamic world. Regulators have neither proper incentives nor adequate information to establish adequate "rules of

[1] The famous "regulatory capital arbitrage" generated by Basel II Accord is only a higher-level case of the same attempt to avoid the impact of regulations (known as "gaming the system".

[2] As a practical matter, the demands of American banks in the 1980s for an elimination of cross-countries differences in bank capital regulations in order to resist better foreign competition, especially Japanese banks, constitutes one of the factors that led to the adoption of Basel I Accord. See Oatley (p. 37).

[3] As BIS (1988) put it explicitly, one of the main goal of the arrangement was to obtain "a high degree of consistency in its application to banks in different countries with a view to diminishing an existent source of competitive inequality among international banks"

the game". Furthermore, Basel II's overly prescriptive approach could end up stifling market-based innovation in risk-management practices, which are still in their early stages of development.

Basel Accords: mission impossible I and II

The Basel Committee on Banking Supervision was established in 1974 by a number of developed countries (G-10),[1] primarily in response to banking problems in Germany that contaminated other foreign banks and foreign exchange markets. As losses at some large international banks from loans to less developed countries mounted in the late '70s, the Committee became increasingly concerned that the potential failures of one or more of these banks could have serious adverse effects not only for the other banks in their own countries, but also for banks in other countries, through cross-border contagion.[2] In the '80s, governments became concerned especially about Japanese banks, which were rapidly expanding globally based on valuations of capital that included large amounts of unrealized capital gains from rapid increases in the values of Japanese stocks that they owned.

After years of deliberation and the unpleasant experience of the Latin American default in 1982, the Basel Committee on Banking Supervision completed the Basel Capital Accord in 1988. The Basel Accord was established with two fundamental objectives: to strengthen the soundness and stability of the international banking system and to obtain "a high degree of consistency in its application to banks in different countries with a view to diminishing an existing source of competitive inequality among international banks" (Basel Committee on Banking Supervision 1988). To that end, the accord requires that banks meet a minimum capital ratio that must be equal to at least 8 percent of total risk-weighted assets.

Base I incorporated off-balance sheet assets in the base as well as on-balance sheet assets and weighted individual assets by a risk factor. However, the formula constructed was simple and treated all banks equally ("one size fits all" method). Individual assets were divided into four basic credit risk categories according to the identity of their counterparty and assigned weights ranging from 0 to 100 percent (0%, 20%, 50% and 100%). Cash and government securities get a risk weight of zero, claims on banks in OECD countries, 20%, fully secured mortgages on residential property, 50% and all other claims on business have a 100%. The weighted values of the individual on- and off-balance sheet assets were then summed and classified as "risk-weighted assets". Banks were required to maintain capital of no less than 8 percent of their risk-weighted assets.

Many economists maintain that Basel I has contributed to those crises, because of its

[1] Currently, the Committee's members come from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, the Netherlands, Spain, Sweden, Switzerland, United Kingdom and United States. See BIS (2004)

[2] In the 1980s, many large American banks have incurred heavy losses on their loans to developing countries, especially in what has become known as the Latin American debt crisis. Thus, "the dozen largest American banks lent between 83 percent and 263 percent of their capital to five heavily indebted Latin American countries that latter announced they were incapable of servicing their debts" (Oatley, p. 37).

many weaknesses, which in the long run, lead to a classical case of unfortunate "unintended consequences". Let's mention them briefly:

1. The use of arbitrary risk categories and arbitrary weights that bear no relation to default rates, which incorrectly assumes that all assets within one category are equally risky or that one type of asset is, for instance, 100 percent riskier than another.

2. The risk assessment methodology is flawed in that it assumes that a portfolio's total risk is equal to the sum of the risks of the individual assets in the portfolio. No account is taken of portfolio effects that can greatly reduce the overall risk of a portfolio, or the size of the portfolio, which can greatly influence its total risk profile.

3. The accord gives preferential treatment to government securities. With respect to credit risk, the Basel categorizations have been criticized as arbitrary. They also do not take account of market risk (i.e., long-term government bonds are viewed as riskless). That means that banks need not hold any capital against those securities, if issued by OECD countries, or less capital than against loans to corporate borrowers, if issued by non-OECD countries. "But as the sovereign defaults of Russia in the summer of 1998 and Argentina in early 2002 show, government debt is not a risk-free investment. Nor is a loan to many developing countries safer than a loan to a "Blue Chip" company" (Rodriguez, 2003, p. 120).[1]

Finally, the existence of risk categories that create a divergence between economic risks and measures of regulatory capital has led to widespread regulatory capital arbitrage—that is, the assumption of greater economic risks without an increase in regulatory capital requirements. Two main techniques were used to undermine the regulation.

The first confirms the principle that if a certain class of assets requires a given level of capital, the incentive is to adjust the portfolio in favor of the highest-yielding (also highest-risk) assets in that class. This behavior is also known as "cherry picking". It refers to the practice of choosing, among a number of loans considered by regulators in the same risk category, the riskier loan which also brings, if successfully, the highest return.

Banks also shift risk off the balance sheet by means of an ever-expanding array of new financial contracts – technique that is called "securitization". For example, a bank can lend to business units indirectly, thus avoiding the capital requirements. In practice, it can create an independent financial institution, which issues securities in order to fund the loans it, grants to its clients. While the bank provides guarantees to the buyers of these securities, thus facilitating the financial intermediation process, it avoids being considered a direct originator of the loan and is consequently able to calculate a lower risk-adjusted assets. Other more complex methods of disguised lending were used, according to the particular circumstances of its customers.

"In sum, Basel I, already adopted by more than 100 countries, failed to achieve its main goal and may have made the international financial system less, not more, stable. Indeed, it is widely acknowledged that assigning a 20 percent weight to short-term bank lending (as opposed to the 100 percent that lending to most private nonbank institutions carries) led to an increase in lending to Asian banks, which in turn contributed to the Asian crisis of 1997–98. Sixty percent of the $380 billion in international bank lending to

[1] To all these we may add the notorious example of Korea in 1997, not to mention the developing countries debt crisis in the 1980s.

Asia at the end of 1997 had a maturity of one year or less" (Rodriguez 2003, p. 120).

Aware of this bad record, the Basel Committee has started to work on an upgraded Basel accord, in order to "align regulatory capital requirements more closely with underlying risks and to provide banks and their supervisors with several options for the assessment of capital adequacy." The result is Basel II, a piece of legislation which will be implemented in a number of countries, including Romania (starting with January 2007).

Basel II is based on three mutually reinforcing pillars: capital requirements, supervisory review, and market discipline.

The structure of the Basel II Accord

Pillar 1 Minimal capital requirements	**Pillar 2** Supervisory review	**Pillar 3** Market discipline

Risk-based capital requirements, however, continue to be the major focus. In particular, Basel II will add a new charge for operational risk and allow some banks to use their internal risk-measurement models to determine capital costs. Under the advanced Internal Ratings-Based (IRB) approach, banks supply their estimates of the probability of default, exposure at default, loss given default, and maturity to come up with the risk weight associated with a particular asset. That option, however, could turn into a regulatory nightmare, even in industrialized countries for at least three reasons. Although banks are in a better position than regulators to estimate their risk exposure, giving them that option presents them with obvious conflicts of interest when the government acts as the ultimate guarantor of deposits.

The issue of complexity is one that remains. The Basel Committee on Banking Supervision has characterized the complexity of Basel II as a natural reflection of the developments that took place in the financial marketplace. Undoubtedly, the financial marketplace is far more complex than it was 15 years ago when Basel I was being framed, and banking organizations are also more complex in their activities and in the ways in which they manage their risks. However, as Rodriguez (2003, p. 122) has pointed out, this "is not a justification for making the *rules* under which those large complex banking organizations operate equally complex". For any sensible economist, it is clear that a good deal of the present sophistication of banking activity is the result of past external interventions upon the financial market, rather than any inherent feature of the latter.

As Kaufman (2003, p. 10) pointed out, "While market discipline is likely to encourage disclosure, disclosure per se is less likely to encourage market discipline in the absence of a significant number of at-risk stakeholders. Because of the fear of substantial economic harm caused by the failure of large banks, governments and bank regulators in almost all countries have tended to avoid failing such institutions and, where they have, protected all depositors and other creditors in a de-facto policy termed 'too big to fail'. Thus, few de-facto at-risk stakeholders have existed in even privately owned banks, no less state owned banks."

Criticism and an alternative solution

The goal of Basel Accords is to increase the capital ratio of banks. While adequate capitalization is an essential attribute of a sound banking system, the Accords have not (and will not) succeed in their intentions because they fail to address the root of the problem. By focusing on the consequences of lower capitalization, supervising authorities to forces private banks adjust their capital to their portfolio of assets. The only problem (for which Basel I apparently failed to deliver the promised improvement in financial stability) seems to be improper calculation methods used in evaluating the riskiness of various assets.

The main problem with this approach is that it depends on bank regulators to identify undercapitalized banks, and to enforce regulatory accounting standards. There are many examples (the US in the 1980s is a prominent one, as are Mexico and Japan in the early 1990s) of a government conspiracy not to report inconvenient facts associated with declines in bank capital. Government regulators are not immune to political pressure or to bribery by banks. In the US, supervisors were bribed by bankers and regulators were pressured by politicians. Critics of the FDICIA reforms have argued that nothing in FDICIA will prevent this from happening again when the stakes once again become large. Chilean regulation attempts to get around this problem by requiring independent private audits of banks. But this is an unlikely solution since private auditors face incentives similar to those of government supervisors.

The possibility that a highly risk-sensitive capital requirement will reduce the supply of loans in a recession and therefore amplify cyclical fluctuations is a very real one. It is easy to see that if all loans were initially equally distributed among the rating classes and they all migrated to the class immediately below because of a generalized increase in the probability of default, the total capital requirement will increase approximately by considerably.

Another critical aspect of the proposed regulation is that it may deliver significantly different results as a consequence of the many alternative rules banks are allowed to choose among, of differences in banks' internal methodologies, of subjective judgements in the validation of such methodologies by supervisors and of the ample discretion implied by the supervisory review process. By giving the national supervising authorities a lot of discretion, the new accord may possibly lead to two negative outcomes. First, it will fuel corruption and rent seeking, as each bank – or nation banking system – will try to derive as many privileges as possible from their relation with monetary authorities. Secondly, this process will undermine the most basic objective that Basel Accord intends to reach, namely harmonization of banking regulation.

The moral hazard problems associated with the safety net are widely recognized (Short and Robinson 1998). In relation to deposit insurance, the problem is that depositors no longer discipline the banks by refusing to place their money in risky institutions. The lender of last resort further insulates banks from the downside consequences of risky activities. The traditional approach to dealing with moral hazard involves a combination of supervision, regulation of bank activities, and capital standards. Each component poses problems. Regulations are static, but the financial environment is dynamic. For example, regulations put in place at the time deposit

insurance was adopted in the United States in the 1930s created serious problems for banks when economic conditions changed and interest rates rose to unprecedented levels in the 1970s and 1980s. Regulations restricting the range of assets prevented banks from taking advantage of the principle of diversification. Savings and loan (S&L) institutions, in particular, ran into trouble because their lack of diversification led to substantial interest-rate risk exposure. Interest-rate ceilings gave rise to disintermediation as depositors pulled their money out of banks in search of market rates of return. Supervisors may not have incentives to do an adequate job—the same principal agent problem that arises whenever government agents are given the responsibility of acting in the public interest. Typically, supervisors do not bear the cost when they do a poor job of discovering excessive risk and of forcing banks to take corrective action. Bankers, on the other hand, may attempt to hide their exposure to excessive risk, and in some cases they may reward regulators who turn a blind eye to it. The S&L crisis brought to light the related problem of regulatory forbearance (Kane 1989). When regulators close an institution, they effectively admit that they did not do their job properly by dealing with the institution's problems earlier. They were tempted to allow the bank to stay open, hoping that the situation would right itself. Regulators have a bias toward keeping banks open (even under the more stringent rules of the FDIC Improvement Act), and an appreciation of that bias encourages bankers to take on more risk than they otherwise would.

Basel II introduces a two-layer framework for the calculation of the capital requirement for credit risk: (i) a very risk-sensitive internal ratings-based (IRB) approach that will be used by large sophisticated banks and (ii) a standardized approach, much less risk sensitive, which will be used by smaller, less sophisticated banks. We show that because the two bank types compete in the loan market, Basel II may induce sophisticated banks to specialize on low-risk borrowers and unsophisticated banks to specialize on high-risk borrowers. As a consequence, we may face a trade-off between the capital adequacy of the two types of banks, with an ambiguous net effect on financial stability: the risk sensitivity of the IRB approach improves the capital adequacy of sophisticated banks, but it deteriorates the capital adequacy of unsophisticated banks, as their increased risk taking is not appropriately reflected by the standardized capital requirement.

Still another objection against Basel II is that it affects companies doing business in developing countries, because their activity is by definition riskier. This argument applies also to smaller companies in developed countries, because it is generally assumed that small enterprises' operations carry a greater risk than big firms.

Basel II is already a very complicated regulation but suggestions are that it should be even more complicated![1] In fact, the entire philosophy underlying Base Agreements and much of their criticisms is fallacious, because it does not address the roots of the moral hazard problem. One can only expect that this problem will exacerbate even more in the future. Knowing that they can rely – now more than ever – on the supervision of monetary and banking authorities, private banks will have less incentives to watch for themselves. The heavier external supervision, the greater is the temptation for economic agents to incur higher risks.

[1] Indeed, one commentator has pointed that the need for Basel II arose because Basel I was not complex enough to deal with the specific problems of banking. See Georgescu (2005).

A system that relies more on competition among different national regulatory regimes, not the harmonization of those regimes, is likely to produce more stability and soundness, and be fairer, than the current approach. Thus, at the national level, the trend should be toward *regulatory simplicity* because regulators are unlikely to be able to keep up with the rapid pace of innovation in financial markets.

Conclusions

Capital requirements are necessary because in the presence of a safety net, bank owners are tempted to leverage their stake. In the absence of a safety net, banks would maintain an adequate cushion of capital because, without it, they could not borrow. The attempt stabilize the banking system by legislating a capital ratio has failed in the past and will continue to do so in the future.

References

Bank for International Settlements, 2004, History of the Basel Committee and its Membership

Bank for International Settlements, 1988, "International Convergence of Capital Measurement and Capital Standards", www.bis.org/publ/behs04A.pdf

Calomiris, Charles W., 1999, "Building an Incentive-Compatible Safety Net", *Journal of Banking and Finance*

Carrosio, Giovanni, 2001, The New Basel Capital Adequacy Framework, *Economic Notes by Banca Monte dei Paschi di Siena* 30(3)

Dowd, Kevin, 1993, *Laissez-Faire Banking*, London: Routledge

Georgescu, Florin, 2005, *Basel II – O nouă etapă pentru modernizarea sistemului bancar românesc*, www.bnro.ro

Griffith-Jones, Stephany and Persaud, Avinash, The Procyclical Impact of Basle II on Emerging Markets and its Political Economy

Kaufman, George, 2003, "Basel II: the Roar that Moused", unpublished Paper

Kaufman, George, 1988, "The Truth About Bank Runs", in C. England and T. Huertas (eds.) *The Financial Sevices Revolution*, Norwell, Mass., Kluwer Academic Press

Maclachlan, Fiona C., 2001, Market Discipline in Banking Regulation. Panacea or Paradox?, *The Independent Review* 6(2)

Mises, Ludwig von, 1996 [1929], *A Critique of Interventionism*, Foundation for Economic Education, Irvington-on-Hudson, N.Y.

Mises, Ludwig von, 1998 [1940], *Interventionism: An Economic Analysis*, Foundation for Economic Education, Irvington-on-Hudson, N.Y.

Oatley, Thomas, 2000, "The Dilemmas of International Financial Regulation", *Banking Regulation* 23(4)

Rodriguez, Jacobo L., 2003, Banking Stability and the Basel Capital Standards, *Cato Journal* 23(1)
Smith, Adams, 1998[1776], The Wealth of Nations,Oxford, Oxford University Press
Stevens, Ed, 2000, "Evolution in Banking Supervision", Federal Reserve Bank of Cleveland *Economic Commentary*