importers will join BOTAŞ in primary supply to the market, new wholesalers will be able to purchase from those importers or from BOTAŞ State Gas Import Corporation, market risk will be shared across the system by operating contracts, and the Turkish government's contingent liabilities will be proportionately reduced. Regulation is needed to support the opening of transmission with the development of regulations on third party access, network codes and balancing agreements and transmission tariff regulation. Probably because of Turkey's unfavourable geology gas storage will likely remain in the hands of one company, in a natural monopoly, in which prices will be regulated through EMRA.

Conclusion

Efficiency in a natural gas market requires that: (1) there is full competition in the production, wholesaling and retailing of natural gas, in which gas can be freely traded between producers, wholesalers, retailers and consumers, and markets are liquid, (2) the interconnected transmission and distribution system has clear rules for access for all prospective participants, and the pipeline capacity is in competition, capacity is tradable and transmission prices are set by reference to the market and (3) the arrangements in the transmission, distribution and retail sectors provide confidence in the market and cross-subsidizing is not occurring in vertically integrated organizations. Most countries in the world cannot satisfy these conditions; some exceptions are the United States and the United Kingdom.

In the case of Turkey, a crucial impediment for efficient functioning of the natural gas market is the fact that much of the commodity must be imported via pipelines from Russia and through the state-controlled company Gazprom. To satisfy the efficiency conditions Turkey needs to increase the natural gas supply from alternative sources. It needs to create a level playing field of rules to be observed by all participating governments. Achieving cooperation in future through, for example, WTO negotiations would be a big step in the right direction. Although Turkey faces difficulties satisfying the efficiency conditions on the production side, it tries to satisfy the remaining efficiency conditions by adopting the EU's natural gas sector *acquis* and liberal FDI policies in the sector.

7 Liberalization of banking services

(co-authored with Hakan Berument and Hasan Ersel)

In a large number of low- and middle-income countries, entry into the banking sector was for a long time tightly controlled by regulatory boards that limited the ability of providers to offer a full range of banking services and limited market access. In those countries, banks were the main source of domestic financing for governments. Many developing countries had high reserve, liquidity and portfolio requirements that necessitated significant holdings of cash and government bonds. Banks were used to finance government expenditures directly and to direct credit to preferred ends, which often included the political supporters of government circles. Lately, objectives such as boosting economic development, preventing and mitigating costly crises and protecting consumers became important policy goals, and the liberalization of banking services is considered an essential tool to achieve these objectives. We emphasize that an efficient and well-regulated banking sector leads to the efficient transformation of savings to investment, ensuring that resources are deployed wherever they have the highest returns, and facilitates better risk sharing in the economy. It also enhances efficient capital reallocation, bringing tremendous benefits to consumers.

Complete liberalization of banking services entails domestic financial liberalization, internationalization of financial services and capital account liberalization. Domestic financial liberalization allows market forces to work both by eliminating controls on lending and deposit rates and on credit allocation and, more generally, by reducing the role of the state in the domestic financial system. The internationalization of financial services eliminates discrimination in treatment between foreign and domestic financial services providers, removing barriers to the provision of cross-border financial services. Finally, capital account liberalization removes controls on the movement of capital in and out of a country and facilitates the convertibility of currency.

Internationalization and domestic deregulation are said to be mutually reinforcing. Increased foreign entry from countries with no gaps in regulation and supervision bolsters the financial sector framework by creating a constituency for improved regulation and supervision, better disclosure rules and improvements in the legal and regulatory framework for the provision of financial services. It also adds to the credibility of rules. Although the two reform processes are mutually reinforcing, they need to be supported by an appropriate regulatory and supervisory framework. Having a supportive institutional framework is more important in the case of capital account liberalization. Experiences in the past have shown that achieving the potential gains and avoiding the risks of capital account liberalization depend largely on whether domestic institutions and prudential authorities have developed sufficiently to ensure that foreign finance is channelled in productive directions.

The chapter is structured as follows. The first section considers bank regulations and the second section studies global regulation of the banking sector within the framework of the Basel Committee and negotiations under the World Trade Organization (WTO). The next section discusses bank regulations in the European Union (EU), which is followed by a study of bank regulations in Turkey. Finally, the chapter ends with some concluding remarks.

Bank regulation

The banking system is critical for the sound functioning of a market economy as it performs the function of channelling funds from savings to those individuals and firms that have productive investment opportunities.[1] If the banking system does not perform this function well then the economy cannot operate efficiently, and economic growth will be hampered. A crucial impediment to the efficient functioning of the banking system is asymmetric information, a situation in which one party to a financial contract has much less accurate information than the other party. It is well known that asymmetric information leads to adverse selection and moral hazard.[2]

Banks have particular advantages over other financial intermediaries in solving asymmetric information problems. Banks' natural advantages in collecting information and reducing moral hazard explain why banks have such an important role in financial markets throughout the world. When the quality of information about firms is worse, asymmetric information problems will be more severe, and it will be harder for firms to issue securities. Thus the smaller role of securities markets in emerging economies leaves a greater role for financial intermediaries such as banks.

Because, in general, depositors in banks lack information about the quality of loans made by the banks we end up with another asymmetric information problem leading to two reasons why the banking system might not function well. First, in the absence of government intervention, a bank failure means that depositors have to wait to get their deposit funds until the bank is liquidated and its assets turned into cash, and at that time they will be paid only a fraction of the value of their deposits. Unable to learn if bank managers are taking too much risk or are crooks, depositors may be reluctant to put money in the bank.[3] Second, depositors' lack of information about the quality of banks' assets can lead to bank panics, which can have serious harmful consequences for the economy. Such panics may reduce the amount of financial intermediation and so lead to a decline in investment and aggregate economic activity.

A government safety net can short circuit runs on banks and bank panics. This can be achieved through deposit insurance, by providing funds to troubled institutions through the central bank acting as the lender of last resort, and/or by taking over the troubled institutions and guaranteeing that depositors will receive their money in full. But there are serious drawbacks of government safety nets, the most serious of which stems from moral hazard. Banks with a government safety net have an incentive to take on greater risks then they otherwise would. A further problem with the government safety nets arises because of adverse selection. Because depositors who are protected by a government safety net have little reason to impose discipline on the bank, risk-loving entrepreneurs might find the banking industry a particularly attractive one to enter.

When banks are large, governments are in general reluctant to allow them to fail. But this kind of behaviour on the part of government, in turn, increases the moral hazard incentives As a result of the too-big-to-fail policy big banks might take on even greater risks, thereby making bank failures more likely.

Because of the above reasons governments establish regulations to reduce risk taking and to reduce the risk of bank failures. In other words, governments are expected to take proactive measures to prevent such problems. Supervisors monitor banks to see that they are complying with these regulations and not taking excessive risk. Hence supervision is required to ensure the safety and soundness of the banking system. Regulation and supervision, therefore, are considered necessary to control and contain systemic risk in the banking system.

Banking regulations can be analyzed under nine headings:[4]

1 *Restrictions on banks, and on links to commerce*. Banks may engage in financial activities such as securities underwriting, insurance or real estate, which may involve more risk than traditional banking activities; however, governments may restrict banks from entering into these businesses.
2 *Entry restrictions and exit rules*. By screening bank entry, governments can try to promote bank stability and protect the economy from the negative effects of bank failure. Thus, overseeing who operates banks is an important method for reducing the adverse selection problem created by the government safety net. Furthermore, governments may also protect banks from increased competition through entry restrictions on domestic and foreign banks, restrictions on branching, and ceilings on rates charged on loans and on deposits.

   Thus, licensing, transfer of ownership and bankruptcy rules are vital in keeping unfit companies out of the financial sector. If banks are not licensed properly or if they cannot go out of business, unsound institutions are likely to emerge. This can create a moral hazard problem. If banks or other financial institutions are in difficulty, corrective measures or, in the worst case, liquidation must be regulated.
3 *Reserve requirements*. Reserve requirements force banks to hold a portion of their assets in liquid form that is easily mobilized to meet sudden deposit outflows.

4 *Capital requirements*. It is widely accepted that banks can be discouraged to undertake undue risks by requiring them to hold an appropriate amount of capital. Governments, therefore, may require banks to have sufficient capital. Prudential rules help financial institutions to measure and manage their exposure to risk.

5 *Supervisory powers*. Typically, regulators focus on assessment of the quality of the bank's balance sheet and loans at a point in time and determine whether the bank complies with capital requirements and restrictions on asset holdings. They evaluate the quality of a bank's loans and classify them into problem categories whenever loans are unlikely to be repaid. This information is crucial to limiting the moral hazard created by the government safety net. Recently, there has been a major shift in thinking about the bank supervision process. In the new approach, there is more emphasis on the soundness of a bank's management practices with regard to controlling risk.

An important element of prudential regulation is the assessment of and provision for non-performing loans. Once non-performing loans are discovered, adequate reserves to cover them must be established. In addition, excessive exposure to single borrowers can also cause difficulties for financial institutions. If exposure to one particular borrower is large and if this borrower becomes insolvent, a domino effect can occur, causing insolvency of the bank itself. Lending to related parties such as bank managers or employees is often restricted as well. Furthermore, the supervision of multinational institutions poses particular challenges in both the home and the host countries of such institutions. Normally the 'home country rule' should be applied, in which the country of registration supervises all operations worldwide. Global consolidated supervision, therefore, requires the application of prudential norms to the domestic and foreign operations of financial institutions. In the host country, foreign operations should also be subject to similar prudential inspection and reporting requirements as domestic institutions, recognizing obvious differences such as branches not being separately incorporated. Contact and exchange of information between the supervisory authorities in home and host countries is crucial to successful cross-border supervision.

6 *Safety net support*. Failure of financial institutions can occur despite adequate rules and effective supervision. If one bank fails, depositors may lose confidence in other banks as well. This can result in a chain reaction and even affect institutions that are healthy under normal conditions. A deposit insurance scheme can help prevent such a chain reaction. However, deposit insurance can also cause, as emphasized above, moral hazard problems. Depositors may be less likely to scrutinize their banks, and banks could take on excessive risks if monitoring by customers weakens. 'Co-insurance' schemes, which still leave some risk with depositors, could limit this problem. Thus, governments provide a safety net for the purpose of lender of last resort and as an explicit deposit insurance scheme.

7 *Lender of last resort*. Because the central banks have the ability to create currency they can lend it to banks facing massive deposit outflows to satisfy

their depositors' claims. When a central bank acts in this way it is acting as a 'lender of last resort' to the bank. But if banks think that the central bank will always bail them out they may take excessive risks.

8 *Market monitoring*. Market-based monitoring of banks can increase their stability and complement government supervision. If, for example, private rating agencies regularly rate banks, this provides valuable information to customers and regulators on their soundness. Banks then have an incentive to improve their performance to maintain business. Thus, regulators can require banks to obtain and publish certified audits or ratings from international rating firms. International monitoring and assistance are also beneficial. For example, International Monetary Fund (IMF) surveillance of member countries' macroeconomic and financial positions and the recent introduction of data dissemination standards increase transparency. These mechanisms facilitate the 'early warning' of financial sector problems.

To insure that there is better information for depositors and the marketplace, regulators can require that banks adhere to certain standard accounting principles and disclose a wide range of information that helps the market assess the quality of a bank's portfolio and the amount of the bank's exposure to risk.

9 *Government ownership*. The most complete form of government control of banks is outright ownership.

In general, each country has a different set of regulations and supervisory practices in place, and countries often have little interest in each other's regulatory regimes or have little confidence in the quality of such regimes. If each country has different regulations in place and does not recognize qualifications in a foreign bank's home country then the national qualification costs become cumulative costs, as banks intending to establish abroad incur costs to comply with the qualification criteria of each country. We now consider how these qualification costs could be lessened if countries would accept some international norms as regulations.

Global regulation of the banking system and regulatory convergence

Turning to the role of international forces for achieving regulatory convergence, we first consider the Basel Committee and thereafter the negotiations under the WTO.

The Basel Committee

The Basel Committee was established at the end of 1974 by the central bank governors of the Group of Ten countries. The Committee formulates broad supervisory standards and guidelines and recommends statements of best practice in the expectation that individual authorities will take steps to implement them. Its initial focus was primarily on the gaps in international regulation and supervision, specifically how branches and subsidiaries of foreign banks should be regulated and supervised. Over time, its area of responsibility and influence expanded with the increase in foreign bank entry and as the goal of establishing a level playing field became accepted.[5]

Basel I

In 1988, the Committee introduced a capital measurement system commonly referred to as the Basel Capital Accord (Basel I). Basel I primarily focused on credit risk, the risk of loss due to a debtor's non-payment of a loan or other line of credit, and required banks with international presence to hold capital equal to 8 per cent of the risk-weighted assets.

The purpose of having the minimum capital adequacy ratio is to ensure that banks can absorb a reasonable level of losses before becoming insolvent, and before depositors' funds are lost.[6] Thus, applying minimum capital adequacy ratios serves the purpose of promoting the stability and efficiency of the financial system by reducing the likelihood of banks becoming insolvent. It also gives some protection to depositors. In the event of a winding up, depositors' funds rank in priority before capital, so depositors would lose money only if the bank makes a loss that exceeds the amount of capital it has. The higher the capital adequacy ratio, the higher is the level of protection available to depositors.

Basel I defines a standard methodology for calculating the capital to assets ratio. The ratio consists of a numerator that represents the amount of capital in a financial institution and a denominator that represents the asset classes, by various risk categories, that a financial institution holds. The calculation of the capital adequacy ratio requires first the calculation of capital, which is defined as the sum of tier 1 and tier 2 capital. Tier 1 capital consists of the types of financial capital considered the most reliable and liquid, primarily shareholders' equity. It is the part of capital that is permanently and freely available to absorb losses without the bank being obliged to cease trading. The economic meaning of tier 2 capital was made more explicit when its name was changed to 'supplementary capital' under Basel II. It is that portion of capital that generally absorbs losses only in the event of a winding up of a bank, and so it provides a lower level of protection for depositors and other creditors. Tier 2 capital consists of undisclosed reserves, asset revaluation funds, general provisions/general loan loss reserves, hybrid (debt/equity) capital instruments and subordinated debt. Tier 2 capital is further subdivided into upper and lower tier 2 type of capital. Upper tier 2 capital has no fixed maturity, whereas lower tier 2 capital has a limited life span, which makes it less effective in providing a buffer against losses by the bank.

A credit exposure arises when a bank lends money to a customer, buys a financial asset or has any other arrangement with another party that requires that party to pay money to the bank under, for example, a foreign exchange contract. A credit risk is a risk that the bank will not be able to recover the money it is owed. The calculation of credit exposures adjusts for two factors: on-balance

sheet and off-balance sheet exposures. On-balance sheet credit exposures differ in their degree of riskiness. In Basel I, countries have been divided into two groups. The first group, referred to as the Organization for Economic Co-operation and Development (OECD), consists of full members of the OECD and countries that have concluded special lending arrangements with the IMF associated with the Fund's General Arrangement to Borrow. All other countries are called 'countries outside the OECD'. Claims on the central government within the OECD are assigned a zero weight. A 20 per cent weight is applied to claims on all banks, wherever they are incorporated, with a residual maturity of up to and including one year. Longer-term claims on OECD incorporated banks are weighted at the rate of 20 per cent and longer-term claims on banks incorporated outside the OECD are weighted at the rate of 100 per cent. Loans fully secured by mortgage on occupied residential property are weighted at 50 per cent, and all claims on private sector and claims on central government outside the OECD are weighted at 100 per cent.

As off-balance sheet contracts such as loan commitments, letters of credit, interest rate swaps and trading positions in futures and options also carry credit risks, off-balance sheet credit exposures are first converted to a 'credit equivalent amount'. This is achieved by multiplying the nominal principal amount by a factor that recognizes the amount of risk inherent in particular types of off-balance sheet credit exposures. After deriving credit equivalent amounts for off-balance sheet credit exposures, these are weighted according to the riskiness of the counterparty, in the same way as on-balance sheet credit exposures.

The minimum capital adequacy ratios set by the Basel Capital Accord are as follows: (1) tier 1 capital to total risk-weighted credit exposures to be not less than 4 per cent, (2) total capital (i.e. tier 1 plus tier 2 less certain deductions) to total risk-weighted credit exposures to be not less than 8 per cent, (3) tier 2 capital to not exceed 100 per cent of tier 1 capital and (4) lower tier 2 capital to not exceed 50 per cent of tier 1 capital.

Although Basel I was intended for internationally active banks, it quickly became a de facto standard around the world. Developing country regulators, who were actively attempting to move away from direct controls to a more modern system of prudential regulation, began to follow the evident best practice in industrial countries embodied in Basel I.

Market risk

In 1996, an important amendment to the framework took place, when an additional capital charge was introduced to cover market risk in banks' trading books.[7] To calculate regulatory capital requirements, banks classify their assets and off-balance sheet items under one of the two following categories: banking book and trading book. Most medium- and long-term transactions are held in the banking book, and it is subject to regulatory capital requirements for the credit risk arising from these transactions. On the other hand, the trading book consists of positions in financial instruments and commodities held either with the intent to trade or in order to hedge other elements of the trading book. The trading book includes most derivatives such as financial futures, interest rate and currency swaps and options on securities, and it is subject to capital requirements for market risk.

With the 1996 amendment to the Capital Accord, banks were required to measure and apply capital charges with respect to their market risks in addition to their credit risks, and market risk was defined as the risk of losses in on- and off-balance sheet positions arising from movements in market prices. The risks subject to this requirement are those pertaining to interest rate-related instruments and equities in the trading book and to foreign exchange risk and commodities risk throughout the bank. The capital charges for interest rate-related instruments and equities apply to the current market value of items in banks' trading books.

Banks must therefore back the following risks in their trading book with regulatory capital: (1) interest rate risk, (2) equity position risk, (3) foreign exchange risk and (4) commodities risk. In addition, capital charges are applied on options of all kinds. Here, interest rate risk refers to the risk of holding or taking positions in debt securities and other interest rate-related instruments in the trading book. The instruments covered include all fixed rate and floating rate debt securities and instruments that behave like them, including non-convertible preference shares. Equity position risk refers to the risk of holding or taking positions in equities in the trading book. It applies to long and short positions in all instruments that exhibit market behaviour similar to equities, but not to non-convertible preference shares. The instruments covered include common stocks, whether voting or non-voting, convertible securities that behave like equities and commitments to buy or sell equity securities. Foreign exchange risk refers to the risk of suffering losses due to adverse exchange rate movements. Finally, commodities risk refers to the risk of holding or taking positions in commodities, including precious metals, but excluding gold, which is treated as a foreign currency.[8]

According to the 1996 amendment, banks are permitted to use either the standardized approach or the model approach to calculate their market risks. In the standardized approach, as in the case of credit risk calculations, fixed risk weights are used. Therefore the outcome is sensitive to the assumptions made concerning these weights and not to the variations in markets. The internal model approach, on the other hand, calculates market risk-based capital requirements on the basis of their value-at-risk figure. The value at risk, or VaR, is a measure used to estimate how the value of an asset or of a portfolio of assets could decrease over a certain time period (usually over one day or ten days) under usual conditions.[9] VaR is not only a risk measurement tool, but also facilitates risk management. Banks are also required to conduct a regular stress testing programme.[10] Whether a bank can use the model approach is determined by compliance with the qualitative and quantitative criteria defined in the regulation.

The principal form of eligible capital to cover market risks consists of tier 1 and tier 2 types of capital. However, banks may also, at the discretion of their national authority, employ a third tier of capital called tier 3 capital, consisting of short-term subordinated debt.[11] To be called tier 3 capital, the short-term subordinated debt must meet the following criteria: it must be unsecured, subordinated and fully paid up; have an original maturity of at least two years; not be repayable before the agreed repayment date unless the supervisory authority agrees; and be subject to a lock-in clause that stipulates that neither interest nor principal may be paid (even at maturity) if such payment means that the bank falls below or remains below its minimum capital requirement. Banks are entitled to use tier 3 capital solely to support market risks, and tier 3 capital is limited to 250 per cent of a bank's tier 1 capital that is required to support market risks.

To ensure consistency in the calculation of the capital requirements for credit and market risks, an explicit numerical link is created by multiplying the measure of market risk by 12.5 (i.e. the reciprocal of the minimum capital ratio of 8 per cent) and adding the resulting figure to the sum of risk-weighted assets compiled for credit risk purposes. The ratio is then calculated in relation to the sum of the two, using as the numerator only eligible capital. In calculating eligible capital, it is necessary first to calculate the bank's minimum capital requirement for credit risk, and only afterwards its market risk requirement, to establish how much tier 1 and tier 2 capital is available to support market risk. Eligible capital will be the sum of the bank's entire tier 1 capital and its entire tier 2 capital under the limits imposed in the 1988 Accord. Tier 3 capital will be regarded as eligible only if it can be used to support market risks under the conditions stated above.[12]

Basel Core Principles

In the wake of the Mexican crisis of 1994, it was realized that capital requirements alone were not sufficient to ensure safe and sound banking. As a result, the Basel Committee issued its Core Principles for Bank Supervision in 1997, summarized in Appendix Table A7.1. Over time, the Basel Core Principles (BCP) became accepted as best practice for bank supervision around the world. The core principles, 25 in total, are grouped under the following headings: (1) preconditions for effective banking supervision (principle 1), (2) licensing and structure (2–5), (3) prudential regulations and requirements (6–15), (4) methods of ongoing supervision (16–20), (5) information requirements (21), (6) formal powers of supervisors (22) and (7) cross-border banking (23–25). The principles, regarded as minimum requirements, are to be supplemented when necessary by other measures and should be applied with respect to the supervision of all banks. The core principles propose minimum standards for licensing, ownership transfer and liquidation. They also suggest prudential rules and requirements, supervision methods, and information and disclosure requirements for both domestic and cross-border activities.

To facilitate implementation and assessment, the Basel Committee developed the Core Principles Methodology in October 1999. In June 1999, the Committee issued a proposal for a revised capital adequacy framework. The proposed capital framework consists of three pillars: minimum capital requirements, supervisory review of an institution's internal assessment process, and effective use of disclosure to strengthen market discipline as a complement to supervisory efforts. The Core Principles and the Methodology were revised and released in October

2006. The crises in East Asia led to the creation by the IMF and the World Bank in May 1999 of the Financial Sector Assessment Program (FSAP), whose goal is to assess the primary stability and developmental issues in countries' financial sectors. Virtually all FSAPs have included an assessment of countries' compliance with the BCP.

Basel II

Notwithstanding consensus among regulators, shortly after its completion, Basel I began to be criticized because of its narrow focus. First, it was emphasized that Basel I focused on arbitrary assignment of risk weights. Moreover, the risk weights did not differentiate between loans to small, risky firms and those to large, highly rated multinationals. In Basel I the requirement on credit exposure is the same whether the borrower's credit rating is triple-A or triple-C. Thus, the degrees of risk exposure are not sufficiently calibrated to differentiate adequately between borrowers' differing default risks. Furthermore, Basel I originally dealt only with credit risk, the risk that loans might become non-performing, and, later, with market risk; however, banks are also confronted with operational risks. A third set of critiques addressed the approach more broadly. Rather than setting minimum capital requirements on a loan, by loan criterion, what matters for the riskiness of a bank is its diversification or the covariation in its portfolio – yet Basel I made no adjustment for these factors, as the risk buckets were completely independent. Finally, a fourth set of critiques concerned the inappropriate treatment of sovereign risk. It was emphasized that Basel I's capital treatment for sovereign exposures made little economic sense and that the mechanical application of Basel I rules often created perverse incentives and led to the mispricing of risks. For example, lending to OECD governments became more attractive because it incurred no regulatory capital charge, even though this group included countries with substantially different credit ratings such as Turkey, Mexico and South Korea. Claims to the national central government also enjoyed a zero risk weight, encouraging many banks to ignore basic diversification principles and lend heavily to their sovereigns, thereby reducing financial intermediation. Both in response to these critiques, and in recognition of the changing financial markets, the Basel Committee devoted several years to revising the Capital Accord, announced Basel II in June 2004 and stipulated its implementation by the end of 2006 in G10 countries. Basel II consists of three pillars: (1) minimum capital requirements, (2) supervisory review process and (3) market discipline.

Basel II assumes that consolidated supervision is performed. Although consolidated supervision is included in the BCP, data on principle 20 and principle 23 indicate that many countries fail in this area, as shown by the IMF (2002). Indeed, principle 20 has the highest percentage of countries in either non-compliance or material non-compliance compared with any other principle.

Basel II, pillar 2 (Supervisory Review) is largely encompassed by the BCP and, hence, there is little new in pillar 2. It starts with four key principles, which commence with the responsibilities of the banks and then the responsibilities of the supervisor. Next, pillar 2 states that supervisors should normally 'expect' banks to operate with capital above the regulatory minimum and should have the ability to require banks to have more than any standard minimum amount. Lastly, it states that supervisors should seek to intervene at an early stage in the case of problem institutions. Following the four key principles, pillar 2 lists a set of 'other risks' that banks and supervisors need to consider (that did not make it into pillar 1) regarding actual quantitative requirements. Here, emphasis is to be placed on interest rate risk, credit concentration risk and liquidity risk. To a large extent these 'other risks' are what banks need to monitor carefully, but there is not yet agreement on whether or how quantitative requirements can be developed. Pillar 2 is particularly relevant for two main reasons. First, many countries fall short of complying with the key principles of supervision and, second, 'other risks' turn out to be particularly important for developing countries.

Basel II, pillar 3 (Market Discipline) focuses largely on the appropriate disclosure of bank capital and capital adequacy. While Basel I and the BCPs did not specifically refer to what banks must disclose to the public, the focus of pillar 3 is on reporting rather than disclosure to the market. Thus, it is a novel approach. First, it dictates how a banking group should disclose figures, depending on how that group is consolidated. Second, pillar 3 includes disclosure requirements on capital structure and on capital adequacy, in the aggregate, by portfolio and by type of risk, thus reflecting the different portfolios and 'risks' as defined in pillar 1. There are also disclosure requirements for credit risk, the risk of equity investments, credit risk mitigation techniques, securitization risks, market risks, operational risk and interest rate risk in the banking book.

Most of the innovation of Basel II lies in pillar 1 (Minimum Capital Requirements). In Basel II, the minimum capital to risk-weighted asset requirement of 8 per cent remains unchanged. The numerator that defines the acceptable types of regulatory capital (i.e. tier 1 and tier 2 capital) is also largely unchanged. The core modifications in Basel II are to the denominator, which defines risk-weighted assets. The credit risk measurement methods are more elaborate than in Basel I. The new framework proposes, for the first time, a measure for operational risk, while the market risk measure remains unchanged. When all of these are taken into account it can be safely argued that Basel II has a much more risk-sensitive framework than Basel I.

Basel II provides different approaches that can be used to obtain a risk weighting of assets. The menu of approaches to measure the associated risks include the standardized approach (SA), foundation internal rating-based (IRB) approach and advanced IRB approach.

The SA uses both private credit rating agencies and export credit agencies to establish credit risk assessments and feed those into capital requirements. As credit rating agencies rate corporations and banks as well as sovereigns, this approach adds the possibility of using these assessments to link the capital to risk more finely. For credit risk, the SA is similar to the approach of Basel I in that it requires fixed risk weightings to be applied to different types of assets. It prescribes, as in Basel I, specific risk weights for certain types of credit exposures, such as 0 per cent, 20 per cent, 50 per cent or 100 per cent of the 8 per cent standard, and there is now a weight of 150 per cent for borrowers with poor credit ratings. The risk assessments under the SA depend heavily on the ratings assigned by external rating agencies in the individual risk groups, as shown in Table 7.1.

Most pages of the pillar 1 proposals are devoted to the more advanced IRB methodologies. IRB gives a significant degree of autonomy to banks to define their own rating scales and to use those scales in determining the default probabilities.[13]

Basel II contains a new capital requirement for operational risk, defined as the risk of loss from fraud, computer failures and poor documentation. As operational risk differs greatly from credit risk and market risk, it is far more difficult to capture because it is inherent in many activities. Banks usually set aside one-fifth of their internal capital for operational risks, as concepts for delineating, quantifying and controlling operational risk are not as well developed as in the other risk categories. As operational risks can be significant, and the resulting losses can even threaten a bank's existence, the Basel Committee on Banking Supervision decided to introduce capital requirements for operational risk and to offer three levels of approach in this context. First is the basic indicator approach, in which a bank's operational risk is estimated as a percentage (alpha factor) of a single indicator. Next is the standardized approach, which uses a set of indicators and factors (betas), based on the bank's business lines. Hence, this approach can be seen as a basic indicator approach applied to each business line. Finally, the internal measurement approach requires banks to utilize their internal loss data and a model-based approach in the estimation of required capital. These data always form a matrix of business lines and loss events, based on which banks, depending on the detailed approach chosen, are to determine the probability of event and loss given event for potential operational losses. Based on work to date, the Committee expects operational risk to constitute approximately 20 per cent, on average, of the overall capital requirements under the new framework.

Basel II no doubt constitutes a major achievement towards harmonizing bank regulation on the global scale. However, as can be expected, it is far from perfect. First of all, although pillars 1 and 3 of Basel II, in principle, imply homogeneous practices for all countries, pillar 2 does not. In fact, by keeping a sufficiently broad playground for national supervisory authorities, Basel II implicitly accepted the continuation of differences in implementation among countries. This is more a logical requirement than a choice. The Basel II approach is based on the idea of developing criteria for banks to deal with risks that they face. By requiring banks to comply with these criteria, the Basel II approach also aims to enhance risk management practices and competitiveness. It is well known that, although this is a necessary condition for the stability and soundness of a financial system, it is by no means sufficient. In the Basel II framework, such measures to deal with systemic risk are left to the discretion of the national authorities. Basel II, therefore, by design, was not aiming to provide a completely homogenized system for all. It confines itself to the broad acceptance of the minimum requirements of risk management and competitiveness.

Table 7.1 Risk weights under Basel II standardized approach (%)

	AAA to AA–	*A+ to A–*	*BBB+ to BBB–*	*BB+ to B–*	*Below B–*	*Unrated*
Claims on sovereigns	0	20	50	100	150	100
Claims on banks option 1 (rating refers to sovereign)	20	50	100	100	150	100
Claims on banks option 2 (rating refers to bank)	20	50	50	100	150	50
Claims on banks option 3 (preferential treatment for short-term claims)	20	20	20	50	150	20
	AAA to AA–	A+ to A–	BBB+ to BB–	Below BB–	Unrated	
Claims on corporations	20	50	100	150	100	

Source: Basel Committee on Banking Supervision (2006).

Second, the Basel II approach itself is not immune from criticism. Therefore, it is natural to observe a cautious or, occasionally, even overcautious approach on behalf of national authorities at the implementation stage. It is universally recognized that Basel II indeed increased the risk sensitivity of minimum capital requirements and enhanced risk management of banks. However, these visible improvements at the micro level may still create problems for the system as a whole. There are concerns that market-sensitive risk systems may amplify shocks and lead to macroeconomic instability.[14] On the other hand, as pointed out by Tarullo (2008), the rather complex structure of the Basel II rules can hardly prevent and in fact may even encourage regulatory arbitrage. Finally, the cost of administrating Basel II rules may also be prohibitive for some countries. These factors may explain the slowness of the implementation of the Basel II process and the reluctance of national authorities to go beyond accepting the core points.

Recent Developments

During 2007–8 a worldwide financial crisis of enormous magnitude rooted in industrial countries' financial systems unfolded. Defaults on securitized subprime mortgages as a real estate market bubble burst led to failures or near failures of several large financial institutions. First, they sought new capital to support their strained balance sheets. But with the crisis accelerating, and most providers of capital retreating to the sidelines, banks had to sell assets and/or dispose of businesses. However, this accelerated the downturn. To deal with financial strains, public authorities had to act. They reduced the benchmark lending rates, injected massive amounts of government money into the financial sector, and in some cases they even adopted full-scale nationalization to restore the failing solvency of banks and insurance companies.

The financial crisis has exposed major weaknesses in the current regulatory and supervisory frameworks, and has generated a growing debate about the role that these weaknesses may have played in causing and propagating the crisis. As emphasized by the Financial Stability Board (2009) the Basel Committee has been working to build stronger buffers into the financial system. In this context it has been agreed that: (1) the level and quality of minimum capital requirements will increase substantially over time, (2) capital requirements will operate counter-cyclically, so that financial institutions will be required to build capital buffers above the minimum requirements during good times that can be drawn down during more difficult periods, (3) significantly higher capital requirements for risks in banks' trading books will be implemented, with average capital requirements for the largest banks' trading books at least doubling by the end of 2010, (4) the quality, consistency and transparency of the tier 1 capital base will be raised and (5) a leverage ratio will be introduced as a supplement to the Basel II risk-based framework with a view to migrating to a pillar 1 treatment based on appropriate review and calibration.

World Trade Organization

The WTO General Agreement on Trade in Services (GATS) is the first multilateral trade agreement to promote the liberalization of services in countries around the world. After an exhausting negotiation process that failed to reach full agreement at the end of the Uruguay Round in 1993, negotiations on financial services were extended, and WTO members reached an interim agreement in 1995 and a final permanent agreement on services at the end of 1997.[15]

The GATS contains certain obligations, the most important of which is the most favoured nation (MFN) principle. The MFN imposes the obligation on member countries not to discriminate among foreign services and service suppliers.[16] However, an exception to this general principle is that members have the right to enter into economic integration agreements, such as the EU, and accord preferences to other participants without extending those preferences to the entire WTO membership. The other two key principles are market access and national treatment, which are negotiable principles, meaning that WTO members can decide voluntarily to what extent they will allow foreign participation in their markets and under what conditions, with respect to the four modes of supply: (1) cross-border, (2) consumption abroad, (3) commercial presence and (4) temporary movement of natural persons. Agreements to eliminate or reduce limitations to market access or to provide national treatment are voluntary, applying only to those banking services included in a member country's schedule and to the extent specified therein.

The national treatment principle imposes the obligation not to discriminate between foreign services and service suppliers and national services and service suppliers. Subject to any conditions or qualifications that are negotiated and become part of a schedule of commitments, it requires that host regulators treat foreign banks no less favourably than domestic banks. This means that member countries cannot erect barriers to entry or operation that discriminate against foreign banks. In contrast, market access is not defined in GATS. Instead, a list of six measures restricting free access to domestic banking markets is provided. A country that does not impose any of these restrictions is regarded as providing full market access. The list includes numerical quotas on the number of foreign banks or their total assets, limitations on the type of foreign bank entry, limitations on the percentage of ownership in domestic banks and limitations on the total number of natural persons that may be employed in the host country's banking sector or which the foreign bank itself may employ.

Like any other trade agreement, GATS contains exception provisions, which allow WTO members to depart from their obligations or commitments under the agreement in specific circumstances. One of those exception-type provisions is the so-called 'prudential carve-out', which allows WTO members to take measures for prudential reasons, including the protection of investors and depositors and preserving the integrity and stability of the financial system.

Under GATS, prudential regulations are dealt with in paragraph two of the Annex on Financial Services, and non-prudential regulations to pursue various public policy objectives other than those falling under trade restrictions concerning market access or national treatment are dealt with in Article VI. Trade restrictions concerning market access or national treatment are dealt with in Articles XVI and XVII. Thus, GATS allows members to take measures for prudential reasons. Under GATS, members can take their own measures regarding capital adequacy ratios, limits on risk concentration and the risk management system, liquidity requirements, prohibitions on insider trading and transactions giving rise to conflicts of interest, rules on the classification of and provisions for non-performing assets, and 'fit and proper' tests for directors and managers, as well as transparency and disclosure requirements. Furthermore, non-prudential regulatory measures such as lending requirements to certain sectors or geographical regions, restrictions on interest rates or fees and commissions, and requirements to provide certain services may also exist. Services related to the issuance of public debt are often subject to special rules and standards. Some of these measures may be subject to scheduling under GATS as limitations on market access or as limitations on national treatment, particularly when they are applied in a discriminatory manner. They may also necessitate MFN exemptions if applied in a discriminatory manner between trading partners.

Regulatory regime in the European Union

In the EU, progress in harmonization came in 1973 with the adoption of the directive on the abolition of restrictions on freedom of establishment and freedom to provide services for self-employed activities of banks and other financial institutions. This document contributed to establishing a single banking market. It required member countries to comply with the national treatment principle. This means that member states are to provide equal regulatory and supervisory treatment for all banks, both domestic and foreign. However, despite this effort toward harmonization, the existence of capital controls and a lack of coordination among the different bank regulatory and supervisory authorities meant that banks operating in different member countries remained subject to different rules. This situation led to further attempts to achieve greater harmonization of bank regulations and supervisory practices among member countries. In 1997, the first directive on the coordination of laws, regulation and administrative provisions relating to the taking up and pursuit of credit institutions was adopted. Essentially, this directive set the rules for expansion across national boundaries within the European Community (EC) by adopting the concept of 'host country rule'. Under host country rule, expansion is possible. However, a foreign bank or branch is required to have permission from the supervisory authorities in the host country before they are allowed to operate in the host state. According to the First Banking Directive, banks and branches were typically regulated by each host country's regulatory agency. Under this regime, banks involved in cross-border expansions were required to operate under multiple regulatory and capital standards, that is, one for their home country and another for each host country in which they operate. Furthermore, in most countries, branches had to be provided with earmarked

endowment capital as if they were new banks, and the supply of cross-border services was impaired by the restrictions on capital flows.

In April 1983, a White Policy Paper on financial integration called for further work to achieve a better allocation of savings and investment in the EC. Following various European Councils, the Commission (1985) proposed its White Paper on the completion of the internal market. The Paper called for the removal of physical, technical and fiscal barriers in all industries by 1 January 1993. The content of the White Paper was incorporated into the 1986 Single European Act, which called for the effective integration of markets. In the context of banking, the White Paper called for a single banking licence, home country control and mutual recognition. To establish the single market in banking services, the EU introduced a series of key directives, which can be considered under five headings: barriers to trade and establishment, capital adequacy, deposit protection, consolidated accounts and supervision, liberalization of capital movements and interest rate deregulation.

Barriers to trade and establishment

The cornerstone of the single market programme is the Second Banking Directive, which was adopted in 1989 by Council Directive 89/646/EEC. The Second Banking Directive has three major features. First, it defined exactly what is meant by 'banking'. The banking activities permitted in the EU cover all major commercial and investment banking activities, requiring the endorsement of universal banking. Thus, according to the Second Banking Directive, besides the traditional commercial banking activities, credit institutions can engage in all forms of transactions in securities, including transactions for their own account or for the account of customers in all types of security, participation in share issues and portfolio management and advice.

The second component of the directive is the principle of home country control, or mutual recognition. According to this principle, each country acknowledges the regulation of its partners and accepts service provision by foreign institutions as if they were domestic entities.[17] Hence, banks are governed by and conform to the regulations and legislation of their home country. If a bank does business in another EU nation, the regulatory authorities of the host nation must recognize the primacy of the home nation.

The third component of the Second Banking Directive is the concept of a 'single passport'. Mutual recognition of the single banking 'licence' eliminates the need for EU banks to get a local banking charter from the host country for branches and/or bank products that are permitted by their home country bank regulations. A bank licensed to do business in any EU nation is allowed to do business in any other EU nation on whatever basis it considers most advantageous. The host nation is not allowed to impose any barriers to such action.

To ensure that the single passport does not lead to a situation in which the regulations and supervisory practices in a member country are so lax as to undermine the safety and soundness of the entire banking system in the EU, the Second Banking Directive also limits the scope for regulatory competition among countries. Therefore, the Second Banking Directive introduces essential supervisory requirements related to sound administrative and accounting procedures, the initial capital necessary for authorization and for the execution of activities, and the supervision of holdings of banks in sectors outside the banking business. Under this principle, banks operating in more than one EU member state are entitled to comply to a great extent with a set of uniform standards and capital requirements. However, for gold-plating cases or in cases of breaches of the law by operating institutions, possible risks can be eliminated via close cooperation of the supervisory authorities.

Concerning the banks' holdings in non-banking institutions, we note that the Second Banking Directive introduces two limits. First, a credit institution may not have a qualifying holding in excess of 15 per cent of its own funds in such an undertaking. Second, the amount of all holdings in such undertakings may not exceed 60 per cent of the funds of the credit institution. However, member states need not apply these limits to holdings in insurance companies.

Directive 2000/12/EC relating to the taking up and pursuit of the business of credit institutions consolidated various directives, including the Second Banking Directive, with the aim of compiling them under a single publication. According to the directive, these are the essential requirements for authorization (subject to exceptions set out in the directive): (1) the existence of separate own funds, (2) the existence of initial capital of at least €5 million, (3) the presence of at least two persons who effectively direct the business of the credit institution (and who are of sufficiently good repute and experience to perform such duties) and (4) notification to the competent authorities of the identities of the shareholders or members that have qualifying holdings and of the amounts of those holdings. Applicants must be notified whenever an authorization is refused, and the reasons for refusal must be given. The competent authorities may withdraw an authorization, subject to the conditions set out in the directive, in particular when the above conditions are no longer fulfilled. The parties concerned and the Commission must be notified when authorization is withdrawn, and the reasons for withdrawal must be given. The competent authorities of the home member state must require that all credit institutions have sound administrative and accounting procedures and adequate internal control mechanisms. Furthermore, the directive states that supervision, in principle, is carried out by the home member state, while the competent authorities of the member states concerned cooperate closely. In particular, they supply each other with any information necessary for effective supervision. Such information exchanges are protected by professional secrecy.

Capital adequacy

Because of the crucial role of capital in banking, the EU promulgated a series of directives intended to ensure that all banks in the EU had the same capital standards. The Own Funds Directive (89/299/EEC) harmonized the definitions of own funds for all credit institutions in the EU to ensure the comparability of prudential ratios of EU banking organizations, and the Solvency Ratio Directive (89/647/

EEC) harmonizing minimum solvency requirements for credit institutions in the EU addressed the issues related to credit risk. The requirements of Directive 2000/12/EC, which has replaced, among others, the Own Funds Directive, are consistent with those of the 1988 Basel Committee Capital Accord (Basel I) on international banking capital adequacy.

The directive on the capital adequacy of investment firms and credit institutions, called the Capital Adequacy Directive (CAD) (93/6/EEC), sets out the minimum capital requirements for credit institutions and investment firms for the market and the risks associated with their trading activities. CAD was amended by Directive 98/31/EEC (CAD2), extending the concept of 'trading book' to positions in commodities and commodity derivatives that are held for trading purposes and are subject mainly to market risks. With CAD2, there has been no change in the CAD regime. But parallel to CAD2 principles, the communiqué on capital adequacy was amended in February 2001 to cover market risks, and further amendments were made in January 2002 to include options and to address specific issues such as the inclusion of tier three capital and structural positions. Recently, the directive was amended by the Capital Requirements Directive, comprising Directive 2006/48/EC and Directive 2006/49/EC, translating Basel II into EU legislation. It applies Basel-type provisions to investment firms and domestic credit institutions as well as to international banks. The directive took effect in 2007, with the most sophisticated approaches being available from 2008.

An unacceptable concentration of risk can occur if a bank has what is deemed to be an excessive degree of exposure with a client or group of connected clients. The Directive on Monitoring and Controlling Large Exposures of Credit Institutions (92/121/EEC) regulates the supervision of large exposures of credit institutions, sets limits on exposures of credit institutions and sets limits on exposures as a large percentage of reserve funds. It requires that the maximum lending exposure to a single client or to a group of connected clients not exceed 25 per cent of a bank's own funds; a bank must report to its supervisor any exposure greater than 10 per cent of capital, as it is defined as a 'large exposure'; and the total of large exposures extended by a credit institution not exceed 800 per cent of its own funds.

Deposit insurance

With Council Directive 94/19/EC, the EU issued a Deposit Guarantee Scheme Directive, effective 1 July 1995. The directive, designed to increase the confidence and stability of the financial system, made it compulsory for every EU member state to establish a deposit insurance fund and for credit institutions to join this insurance plan. In this context, the deposit insurance scheme was regarded as being as essential as the prudential rules for the completion of the single banking market. The directive set the coverage of the aggregate deposits of each depositor, in the event of deposits being unavailable, up to ECU 20,000. The directive explicitly allowed the member states to provide a higher cover for deposits over this determined amount. Although no indication is given as to which public (or private) authority would be responsible for the guarantee scheme, the spirit of the directive ensures the public character of the whole scheme. On the other hand, the opening paragraphs indicate that the cost of financing the scheme falls to the credit institutions. The directive also indicated that depositors should be paid within a short period following the unavailability of the deposit. Furthermore, the directive allowed a bank with a low-coverage home country scheme to enter a high-coverage market and join the host country scheme for the difference. According to the directive, the host country scheme provides deposit protection coverage in excess of what the home country provides.

Consolidated accounts and supervision

The harmonization of legislation governing companies that are members of the bodies of undertakings was necessary both to ensure that consolidated accounts are drawn up so that the financial information concerning such bodies is conveyed to members and third parties and to achieve comparability and equivalence in the information that companies must publish within the EC.

The Council Directive on the supervision of credit institutions on a consolidated basis (92/30/EEC), which replaced the previous Directive 83/349/EEC and was integrated into the text of Directive 2000/12/EC of the European Parliament and of the Council on 20 March 2000, provided a framework for the supervision of the consolidated financial situation of a credit institution, the parent undertaking of which is a financial holding company. The consolidated accounts must give a true and fair view of the assets and liabilities, the financial position and the profit and loss of all undertakings consolidated, taken as a whole.

The Council Directive on the annual accounts and consolidated accounts of banks and other financial institutions (86/635/EEC) provided special accounting rules for the financial sector. It described the standardized form of balance sheet and profit-and-loss accounting as well as rules for the valuation of certain assets.

According to the capital adequacy directives integrated into Directive 2000/12/EC, credit institutions are subject to prudential requirements with respect to supervision of solvency, adequacy of their own funds to cover market risks and large exposures calculated on a consolidated basis, where the relevant company has a credit institution subsidiary or an interest in such a company, or if the parent group is a financial holding company. Generally, the supervisory authority of the member country that authorized the parent company of this group is responsible for the consolidated supervision of the group, although CAD permits delegation to other competent authorities in certain circumstances. Other provisions permit the offsetting of requirements that would otherwise apply individually to each group company.

The Council Directive 2000/12/EC was lately amended by the Council Directive 2002/87/EC, which introduced specific prudential legislation for financial conglomerates so as to amplify the sectoral prudential legislation for credit institutions, insurance companies and investment firms.

Liberalization of capital movements and interest rate deregulation

Freedom of movement of capital was seen as one of the essential elements of a fully integrated European single market. With regard to legislation on the liberalization of the movement of capital, a final directive was adopted in 1988. This directive stipulated that freedom of capital movement should exist, in principle, by 1 July 1990. Only Greece, Ireland, Spain and Portugal could apply derogation provisions until 1 January 1993. This deadline was extended to 1 January 1994, which was the start of the second phase of the European Economic and Monetary Union (EMU) as implied by the Treaty of Maastricht of 1992.

From the early 1970s onwards, government regulation of the financial sector shifted from the restriction of market forces to more market-oriented systems. Although there is no specific EU legislation relating to deregulation of interest rates, interest rate controls were gradually disbanded. By 1993 interest rate determination was fully deregulated in the EU.

Later developments

A further step towards a single market in financial services was taken on 1 January 1999 with the launch of the third stage of the EMU. Since the irrevocable fixing of exchange rates and the introduction of the euro, the 12 current member states of the EMU have enjoyed cross-border access to the euro zone's financial markets without the risks and costs caused by exchange rates. Thus, measured in terms of criteria such as the free movement of capital and payments, the freedom of establishment, the free movement of services and facilitation of cross-border transactions as a result of the principles of home country control, minimum standards at the EU level and the single European passport with mutual recognition, the single market in banking seemed a reality at the end of the twentieth century. But despite this progress, there are still barriers to cross-border financial transactions within the EU. Although the EU has managed to create single submarkets in banking, insurance and investments, it does not yet have a single market in financial services as of the beginning of the twenty-first century.

Just before the introduction of the euro, the European Council in June 1998 asked the European Commission to prepare a report on financial services. Upon this mandate, the Commission proposed a framework for action by means of a report entitled 'Financial Services: Commission proposes Framework for Action', which included suggestions on the need for the effective enforcement of financial services legislation without radical surgery, the adaptation of new and flexible methods vis-à-vis changing market conditions and the introduction of new legislation especially in the fields of pension funds and consumers (Commission of the European Communities 1998b). In May 1999, the Commission, furthering the previous year's work on financial services, published a comprehensive document called the 'Financial Sector Action Plan', which has since functioned as a basic framework for new political initiatives concerning.[18] The Financial Sector Action Plan distinguishes between strategic objectives concerning a single EU wholesale market, open and secure retail markets, prudential rules and supervision and general objectives concerning wider conditions for an optimal single financial market. The aim was to provide guidelines for financial services policy at the EU level and to set out a framework for an integrated capital market by 2005, while the target date for the integration of the securities and the risk capital markets was pronounced to be the end of 2003.

To attain the first strategic objective concerning a single EU wholesale market, according to the Financial Sector Action Plan, it is necessary to take action, among other things, to enable companies to raise capital on an EU-wide basis, to establish a common legal framework for integrated securities and derivatives markets and to enhance the comparability of financial reports issued by listed companies. To attain the second strategic objective concerning retail markets, the Financial Sector Action Plan proposes actions to bring about the convergence of rules on business-to-consumer marketing and sales techniques for financial services, to facilitate the free provision of services by insurance intermediaries and to improve the quality of information for consumers of financial services. With respect to the third strategic objective, prudential rules and supervision, the plan contains proposed actions concerning the winding up and liquidation of financial institutions, disclosure of financial instruments, the capital framework for banks and investment firms, solvency requirements for insurance companies and prudential rules for financial conglomerates. Proposed actions concerning wider conditions for an optimal single financial market comprise a directive on savings tax, a review of the taxation of financial service products, proposals for coordinating the tax arrangements governing supplementary pensions and a review of EU corporate governance practices.

Over the past few years the EU has been very active, and the Financial Sector Action Plan has strongly boosted the integration of the financial markets. Moreover, the EU has made considerable progress in giving the single market for financial services a more efficient institutional framework. The 'Lamfalussy process' helped make the legislative process more flexible so that regulatory authorities could respond more quickly to events in the rapidly changing markets. According to the Financial Sector Action Plan evaluation of 24 January 2007 prepared by the European Commission, 39 of the 42 Financial Sector Action Plan measures proposed have been adopted (Commission of the European Communities 2007f). The list of adopted directives, amendments and regulations cover areas such as fair value accounting, the application of international accounting standards, financial collateral arrangements, the European Company Statute, the undertaking of collective investment in transferable securities (UCITS), the distance marketing of financial services, insurance intermediaries, the winding up and liquidation of insurance undertakings and banks, electronic money, money laundering and solvency requirements for insurance companies.

The Financial Sector Action Plan, as emphasized above, has strongly boosted the integration of financial markets in the EU. However, a number of issues exist. In its 'White Paper on Financial Services 2005–10', the Commission set out its objectives in the area of financial services policy for the period up to 2010

(Commission of the European Communities 1999). These objectives aim to build on the Financial Sector Action Plan to achieve an integrated, open, inclusive, competitive and economically efficient EU financial market by: (1) implementing, enforcing and continuously evaluating existing legislation and ensuring future initiatives are backed up by rigorous impact assessment and thorough consultation, (2) removing remaining barriers so that financial services can be provided and capital can circulate freely throughout the EU at the lowest possible cost, resulting in high levels of financial stability, consumer benefits and consumer protection and (3) enhancing supervisory cooperation and convergence in the EU, deepening relations with other global financial marketplaces and strengthening European influence globally.

The above considerations reveal that a substantial degree of harmonization has been achieved in the banking sector through the adoption of the various banking directives and the Financial Sector Action Plan. The European Commission, moreover, established the Committee of European Banking Supervisors (CEBS) in 2004. Its role is to contribute to the consistent implementation of Community directives and to the convergence of member states' supervisory practices throughout the Community.

The 2007–8 financial crisis revealed the weaknesses in the current regulatory and supervisory frameworks of the EU. How to improve regulation was central to the discussions. As a result of these considerations the EU has adopted a comprehensive set of new rules for the financial sector to avoid the repetition of the crisis: control over credit rating agencies, stronger capital requirements on complex products such as securitization, and strengthened deposit guarantee schemes. The EU has agreed on a more efficient system for supervision of the financial sector within Europe to better monitor systemic risks, to ensure that EU regulation is applied consistently, to settle disagreement between national supervisors and to deal with crisis situations. Banks must now hold sufficient capital, ensure liquidity, and reward only genuine value creation and not short-term risk-taking (see Brown and Sarkozy 2009).

Regulatory regime in Turkey

During the 1990s, Turkey lacked competent supervisory authorities, a regulatory framework and legal and institutional infrastructure; in addition, the prevailing prudential regulations were poorly enforced. In February 2001, the country faced a financial crisis. The loss of income and wealth and the associated social and political stresses created in the country were unprecedented. The gross domestic product (GDP) contracted in 2001 by 5.7 per cent, and the loss in employment was put at more than 1.4 million. The cost of the crisis in the banking sector alone has been estimated as US$53.2 billion by Steinherr *et al.* (2004), that is, 33.3 per cent of Turkish GDP. The restructuring cost to the Treasury of state banks and of banks taken over by the Savings and Deposit Insurance Fund (SDIF) made up the lion's share of the costs of the crisis.

After the crisis, the Banking Regulation and Supervision Agency (BRSA) announced the Banking Sector Restructuring Program. The main objectives of the programme were the elimination of distortions in the financial sector and the adoption of regulations to promote an efficient, globally competitive, sound Turkish banking sector. The restructuring programme was based on four main pillars: (1) restructuring the state banks, (2) seeking prompt resolution of the intervened banks, (3) strengthening the private banks and (4) strengthening the regulatory and supervisory framework.[19]

In the aftermath of the banking crisis, efforts were directed to introduce a new legal framework for the banking system. Turkey passed a new banking law, Law No. 5411, on 1 November 2005. The purpose of the new law was to bring the regulatory framework closer to international and in particular to EU standards. Law No. 5472 of 8 March 2006, which amended Law No. 5411, was aimed at clarifying certain articles, rather than changing its structure and vision. Recent changes in the regulations are studied below within a comparative framework, the comparator being the EU banking *acquis*.

Barriers to trade and establishment

The new banking law brings the scope of the permitted banking activities in Turkey in line with those in the EU.[20] Although the EU definitions are more general, the Turkish legislation, on the other hand, prefers to define the activities in more detail. However, in order to have room for initiative for further actions, an open end was introduced by allowing activities determined by BRSA. Two additional types of activity expressed in the Turkish law are the insurance and private pension scheme agencyship and banks' activities pertaining to interbank transactions and market making.

Regarding home country control, we note that, in the EU, actions and applications to be taken by the banking institutions in other member states are initiated through the competent authority of the home country. However, in Turkey such actions are initiated and completed through the BRSA. Similarly, regarding the single passport issue, we note that, in the EU, after a bank acquires a licence of operation in a member state, the bank is free to establish a branch in another member state unless the related authority of the host state gives a refusal notice to any communication by the home member state. However, in Turkey such a request is subject to licensing procedures by the BRSA.

In Turkey, banks are not allowed to hold more than 15 per cent of their own funds as shares in non-credit and financial institutions, and the total amount of shares held in such institutions may not exceed 60 per cent of their own funds (Article 56/1 of Law No. 5411). Thus, Turkish regulations on holding shares in non-credit and financial institutions conform to the regulations in the EU.

Capital adequacy

Article 43/1 of the new banking law states that the BRSA is:

> authorized to make the necessary regulations and to take any measure regarding banks in order to specify, analyze, monitor, measure and evaluate the relationship and balance between the assets, receivables, own funds, debts, liabilities, commitments of banks, revenues and expenses of banks, all other factors affecting their financial structures, and the risks encountered, by setting limitations and standard ratios as well.
>
> (Banks Association of Turkey 2008: 23)

Banks are required to maintain and keep an 8 per cent capital adequacy standard ratio on a consolidated (applicable for banks and their financial subsidiaries combined) and unconsolidated basis, in order to ensure that banks maintain an adequate amount of capital to cover losses that may result from existing and potential risks. The consolidated financial reporting requirements allow quarterly verification of a bank's compliance with the consolidated capital adequacy requirement. When evaluating the capital adequacy ratio, banks are required to take capital charges for market risks such as foreign exchange risk, interest rate risk and securities price fluctuation risk.

Although Turkish regulations satisfy Basel I standards, this is not the case with Basel II standards. Complete adoption of the Basel II framework within Turkish legislation needs extensive work. Regarding the solvency ratio, the constituents of own funds, and risk weighting applications, we note that the rules in the EU and Turkey are essentially similar. However, the writing technique and technical approach show differences in the main directives of the two legislations. The EU directive prefers defining every instrument in more detail. On the other hand, the Turkish case prefers to define the whole calculation procedure as a continuous process and defines the instruments in a more general sense. Regarding the credit risk, market risk and operational risk, we note that they are defined in detail in the EU legislation, whereas the Turkish regulation gives only a concise definition of them. In fact, the detailed regulations for each of them must be published following the document on the road map of Basel II published by BRSA (Banking Regulation and Supervisory Board 2005). In the Turkish legislation, risks on foreign exchange positions and open position limits are elaborated in depth. Similarly, specific reserves to be put aside against credits in accordance with their performance classifications are defined in detail in the Turkish case. These concerns reflect the bitter experiences of the latest Turkish banking crisis. Regarding the derivative instruments, we note that they are not covered extensively in the Turkish legislation. As the use of these derivative instruments will become more widespread, the definitions and procedures will be covered extensively in the future.

Deposit insurance

In 1994, the government took drastic measures to save the economic system from collapse during the banking crisis. The most controversial of these was the introduction of a full (100 per cent) state guarantee on deposits. Introduction of a full guarantee on deposits was effective in ending bank rush and the drastic shifts in deposits from private banks to state-owned banks. However, fear of the renewal of the banking crisis prevented the authorities from abandoning this supposedly temporary measure in favour of a reasonable deposit insurance scheme. The decision by the government to provide full guarantee on deposits led the banks to take higher risks and stimulated moral hazard. After experiencing the 2001 financial crisis the country removed the state guarantee on deposits only in 2003. According to the new scheme, all depositors and creditors are totally protected in the case of intervened banks, whereas only individual depositors, but not commercial deposits, are fully protected in the case of banks being liquidated without intervention. A limited savings deposit insurance system replaced the previous guarantee scheme on 5 July 2004. Simultaneously, the savings deposit insurance was limited to TL50,000 (around €28,300). With these amendments, the Turkish scheme converged with that of the EU.

Consolidated accounts and supervision

According to Article 66 of the new banking law, the parent undertakings are subject to limitations and standard ratios on a consolidated basis. Their domestic and foreign subsidiaries, their jointly controlled undertakings and their branches and representative offices are also subject to consolidated supervision. These institutions shall keep their information and documents regarding their internal control, risk management and internal audit systems, accounting and financial reporting units, and financial statements and reports, as well as loans extended to risk groups, ready for consolidated supervision. The consolidated supervision of subsidiaries and jointly controlled undertakings shall be performed together by the officials of the BRSA and other authorities who are legally authorized for the regulation and supervision of institutions subject to consolidated supervision. Thus, full convergence has been realized between Turkish and EU legislations regarding consolidation of accounts and supervision. Although it is the responsibility of the home member state's competent authority to supervise in the EU, as emphasized above, supervision is carried out by the BRSA in Turkey.

Liberalization of capital movements and interest rate deregulation

Capital movements were liberalized in Turkey in 1989, and the Turkish lira became convertible in 1990. The coverage of the term 'capital' is the same in both the Turkish legislation and the EU *acquis*, and the maximum amount of money transfers allowed without any need for notification is US$50,000 in Turkey and €50,000 in the EU. In contrast, deregulation of the interest rates was realized in Turkey in the 1980s, after successive efforts. By the launch of Decision No. 32 on liberalization of capital movements in 1989, this issue was settled.

Finally, we note that internal control and the internal audit system are elaborated more in the Turkish law than in the Banking Directive of the EU. This parallels the detailed approach of the Turkish code. Aside from this, the Turkish code

necessitates banks to follow accounts according to international standards. In the EU legislation, no such statements exist, as the EU has a dominant say at the international standard setting bodies. Basically, it is the responsibility of banks to establish sound accounting procedures and adequate internal control mechanisms. In addition, the Turkish law mandates the creation of two control divisions: internal control and risk management. In both legislations, competent authorities are allowed to supervise the financial reports. In Turkey, if the BRSA detects a failure in the accounts, it is authorized to take necessary measures. In the EU legislation, this responsibility lies with the home country's competent authority.

Epilogue

Although Turkey introduced major changes in banking law with the intention of bringing the regulatory framework closer to EU standards, and tried to implement these changes, it is still far from satisfying the international standards specified by the BCP. Recently, the Turkish financial system was assessed within the context of the FSAP of the IMF and the World Bank. According to the IMF (2007), Turkey fails to satisfy compliance with the BCP for effective banking supervision in a number of cases, analyzed below.

According to BCP 1, an effective system of banking supervision has clear responsibilities and objectives for each agency involved in the supervision of banking organizations. Each agency will possess operational independence and adequate resources. A suitable legal framework for banking supervision is necessary, including provisions relating to the authorization of banking organizations and their ongoing supervision, powers to address compliance with laws and safety and soundness concerns, and legal protection for supervisors. Arrangements for sharing information between supervisors and protecting the confidentiality of such information should also be in place. The IMF (2007) states that the BRSA lacks full operational independence in regulatory and budgetary matters. BRSA has difficulty recruiting and retaining staff with expertise in areas of banking supervision, information technology, stress testing, the assessment of banks' contingency planning and the evaluation of financial models. Furthermore, cooperation among regulators needs to be further strengthened. Thus, preconditions for effective banking supervision are generally not satisfied.

BCP 5 states that banking supervisors must have the authority to establish criteria for reviewing major acquisitions or investments by a bank and ensuring that corporate affiliations or structures do not expose the bank to undue risks or hinder effective supervision. According to the IMF (2007), the banking law or subregulations need to be amended to empower the BRSA to require prior permission if a bank wants to establish or acquire a financial institution such as an insurance company or an institution operating in capital markets as a subsidiary. The BRSA should continue to assess whether the bank has the financial and managerial capabilities to handle the new subsidiary. It should also continue to ensure that the new structure would not impede effective supervision.

BCP 7 states that an essential part of any supervisory system is the evaluation of a bank's policies, practices and procedures related to the granting of loans and making of investments and the ongoing management of the loan and investment portfolios. The IMF (2007) stresses that BRSA should rigorously assess a bank's credit policies and the implementation of them. Furthermore, BRSA should ensure that banks have appropriate standards and credit information when lending to the household sector and to small and medium-sized enterprises and conglomerates and should require them to act appropriately to correct deficiencies in this area.

According to BCP 8, banking supervisors must be satisfied that banks establish and adhere to adequate policies, practices and procedures for evaluating the quality of assets and the adequacy of loan loss provisions and loan loss reserves. The IMF (2007), on the other hand, states that the subregulation on loan classification and provisioning of loans should be amended to provide for specific provisioning for loans in the special category mentioned. The BRSA should encourage its supervisory staff to further the use of 'forward looking' criteria for classifying loans, and more internal guidance on the use of such criteria should be developed to support on-site inspectors' efforts. The BRSA should also continue to ensure that supervisory staff retain up-to-date skills on loan evaluation techniques.

BCP 9 states that banking supervisors must be satisfied that banks have management information systems that enable management to identify concentrations within the portfolio, and supervisors must set prudential limits to restrict bank exposures to single borrowers or groups of related borrowers. The IMF (2007) highlights potential weaknesses in the capacity of banks and supervisors to identify the full extent of any excessive concentration of credits. BRSA should ensure that banks implement risk management procedures to identify all beneficial owners and effectively monitor concentrations of credit and adherence to prudential risk limits.

According to BCP 10, banking supervisors, to prevent abuses arising from connected lending, must have in place requirements that banks lend to related companies and individuals on an arm's-length basis, that such extensions of credit are effectively monitored, and that other appropriate steps are taken to control or mitigate risks. The IMF (2007) maintains that the BRSA should ensure that banks implement risk management procedures to identify all beneficial owners of other financial and non-financial companies and to monitor concentrations of credit and adherence to prudential risk limits. To meet the additional criteria for this BCP, the banking law should be amended to ensure that the aggregate limit for exposures to a bank's insiders should not be higher than the 25 per cent limit set for exposures to other groups of connected borrowers. The recently enacted sublimit of 20 per cent for exposures to large shareholders and other connected parties should be maintained.

Regarding country risk, market risk and other risks, BCP 11 states that banking supervisors must be satisfied that banks have adequate policies and procedures for identifying, monitoring and controlling country risk and transfer risk in their international lending and investment activities and for maintaining appropriate reserves against such risks. According to BCP 12, banking supervisors must be satisfied that banks have systems in place that accurately measure, monitor and adequately control market risks; supervisors should have powers to impose specific limits and/or a specific capital charge on market risk exposures, if warranted. Finally, BCP 13 states that banking supervisors must be satisfied that banks have in place a comprehensive risk management process to identify, measure, monitor and control all other material risks and, when appropriate, to hold capital against these risks. The IMF (2007) notes that the effectiveness of prudential regulation is limited by the absence of certain subregulations on country and transfer risk and on interest risk in the banks' books. It states that the BRSA should issue explicit regulations and guidelines that address gaps in the supervisory framework for country risk and fully implement them. Furthermore, the BRSA should continue to improve its capacity to monitor the complex market activities of banks through additional training opportunities for supervisors in assessing market risks and validating banks' VaR models. The BRSA should proceed to inspect the implementation by banks of the new market risk subregulations. It should introduce computer-assisted supervision tools and train personnel accordingly. Finally, the BRSA should issue specific subregulations for legal risks and interest rate risks in the banking book.[21]

BCP 15 states that banking supervisors must determine that banks have adequate policies, practices and procedures in place, including strict 'know-your-customer' rules, which promote high ethical and professional standards in the financial sector and prevent the bank from being used, intentionally or unintentionally, by criminal elements. According to the IMF (2007), the BRSA should ensure that its regular activities address anti-money laundering-related risks as a major element of operational risk on a systemic basis. Bank reports on suspicious activities of material amounts concerning the safety, soundness or reputation of the bank should always be submitted not only to the Financial Crime Investigation Board (MASAK) but also to the BRSA.

BCP 16 states that an effective banking supervisory system should consist of some form of both on-site and off-site supervision. According to the IMF (2007), the main inspection report should contain the findings of other examinations of the same bank conducted during the same supervisory cycle. This is necessary in order to present a complete picture of a bank's soundness. The off-site analysis should be fully integrated with the on-site process. The enforcement of supervisory orders and recommendations should also be fully integrated with the on-site process.

BCP 18 states that banking supervisors must have a means of collecting, reviewing and analyzing prudential reports and statistical returns from banks on a solo and consolidated basis. The IMF (2007) maintains that the BRSA should advance its recent work to enhance off-site supervision. This would include expanding its information base to collect, review and analyze unconsolidated information on non-bank financial subsidiaries and affiliates. The BRSA should also periodically collect and analyze information on banks' parents and, when relevant, their affiliates. The BRSA should begin planning for the collection and analysis of additional information of, for instance, banks' off-balance sheet operations, as new markets develop, and market-based indicators of financial soundness.

BCP 19 states that banking supervisors must have a means of independently validating supervisory information through either on-site examinations or external auditors. The IMF (2007) states that the BRSA should fully implement ongoing efforts to enhance the information technology inspections of banks and should improve staff capacity in this area. Over the next one or two years, the BRSA should consider adopting a work standard that requires a report to be issued within 60 days of the completion of an examination visit and following the exit review at the end of on-site exercises.

BCP 20 states that an essential element of banking supervision is the ability of supervisors to supervise the banking group on a consolidated basis. The IMF (2007) maintains that the BRSA should adopt a general practice to conduct an 'integrated' supervision inspection of the entire group, assessing the potential effects on the bank emanating from the other entities, financial and non-financial. When securities firms, mortgage finance companies or insurance firms are regulated by other supervisory agencies, the BRSA should always proactively request to see inspection reports and other relevant documents. The BRSA is encouraged to plan and conduct simultaneous on-site inspections of such groups in concert with other domestic regulators. The BRSA should issue specific subregulations requiring banks to adopt appropriate risk management procedures to ensure the proper identification of beneficial owners and cross-holdings of other financial and non-financial companies. Such powers would also contribute to compliance with large exposure and connected lending principles. The BRSA should also be prepared to conduct on-site visits of banks' parent companies, be they financial or non-financial, focusing on the relationship between the parent and the bank and, when relevant, the parent's affiliates.

The discussion on methods of ongoing banking supervision as summarized by BCP 16–20 indicates that compliance with the principles needs to improve over time. In the authorities' response to the assessment in the IMF report (2007), supervision is emphasized as one of the main functions of BRSA, and BRSA gives significant importance to strengthening its supervision capabilities.

BCP 21 states that banking supervisors must be satisfied that each bank maintains adequate records, prepared in accordance with consistent accounting policies and practices, enabling the supervisor to obtain a true and fair view of the financial condition of the bank and the profitability of its business, and that the bank regularly publishes financial statements that fairly reflect its condition. The IMF (2007) maintains that the BRSA should proceed with its plans to assess a bank's implementation of the updated Turkish accounting standards.

BCP 22 states that banking supervisors must have at their disposal adequate supervisory measures to bring about timely corrective action when banks fail to meet prudential requirements, when there are regulatory violations or when depositors are threatened in any other way. In extreme circumstances, this should include the ability to revoke the banking licence or recommend its revocation. The IMF (2007) maintains that the BRSA's enforcement process should not

reassess nor reprioritize the recommendations of the supervisors, unless it finds material evidence of mistakes or if the BRSA Board makes such a decision. The inspection reports should clearly spell out the recommendations, in priority order, and measures for taking corrective actions. The BRSA review processes should be accelerated both in the first internal review phase by the supervision departments and in the enforcement phase. A formal 'exit meeting' involving on-site and off-site supervisors as well as the Enforcement Department, at the end of a supervisory cycle for an individual bank, could assist in ensuring timely and comprehensive follow-up of supervisory inspection findings. Over the next one or two years, the authorities should adopt guidelines that activate a progression to more severe supervisory and enforcement measures, according to objective and consistent criteria. This does not exclude taking additional action if the situation warrants.

BCP 23 states that banking supervisors must practice global consolidated supervision over their internationally active banking organizations, adequately monitoring and applying appropriate prudential norms to all aspects of the business conducted by these banking organizations worldwide, primarily at their foreign branches, joint ventures and subsidiaries. The IMF (2007) maintains that the BRSA should include in the supervision of a bank group its foreign affiliates of supervised entities on a fully consolidated basis, including assessing the potential risks, such as reputational and legal risks, on the parent bank emanating from the foreign operations.

BCP 24 states that a key component of consolidated supervision is establishing contact and information exchange with the various other supervisors involved, primarily host country supervisory authorities. According to the IMF (2007), the BRSA should develop informal or formal arrangements with foreign supervisors to ensure ongoing cooperation and information sharing.[22]

In short, the IMF (2007) indicates that vulnerabilities remain in the Turkish financial sector. The main risk factors relate to macroeconomic volatility, especially because of large current account deficits; risks from rapid credit expansion into new activities, such as housing, lending and credit cards; banks bearing large interest rate risk; banks bearing large sovereign risk; and lending in foreign currency, which still accounts for almost one-third of bank loans, exposing banks to foreign currency risk indirectly via credit risk. Thus, effective regulation, supervision and supporting infrastructure are needed to reduce the systemic impact of any shock that may impinge upon the financial system. We stress that supervision must keep up with rapid advances in banking practice, such as in risk modelling, and cover new forms of business, such as that of mortgage companies. The growing international connections of banks operating in Turkey may increase the need for domestic supervisors to cooperate intensively with counterparts abroad. As a result, the IMF (2007) recommends implementing all of the regulations of the new banking law; developing and implementing a comprehensive plan for the BRSA to supervise banks in line with the new legal and regulatory framework, including their risk management; reviewing and amending procedures for handling failing banks and ensuring active involvement of all relevant agencies, to guarantee timely and cost-effective action; and ensuring that foreign currency-linked domestic currency loans are subject to similar constraints as foreign currency loans.

During the 2008 crisis, Turkish banks seemed rather robust to unfavourable external shocks. This is neither surprising nor contradicts the validity of the points raised in the IMF report (2007). It should be pointed out that both the BRSA and the banks followed rather conservative strategies in the aftermath of the 2001 crisis. Banks were quite reluctant to take risks by broadening their corporate credit customer base, and securing conforming capital to risk-weighted assets ratios became their major concern. This behaviour was in line with the BRSA's intentions. As can be expected, when this 'recovery from crisis' attitude of the banking system was coupled with a rather positive global financial environment, the Turkish corporate sector increased its external borrowing considerably, notably after 2005. Banks responded to the 2008 crisis by further curbing their credits to the private sector, which may have contributed to the rather dramatic decline in Turkey's GDP in the first half of 2009. The sharp increase in the budget deficit coupled with central bank's policy of reducing interest rates, on the other hand, helped banks to sustain their profitability.

Conclusion

A crucial impediment to the efficient functioning of the banking sector is asymmetric information, which leads to adverse selection and moral hazard. The sector needs to be regulated. But, in general, each country has a different set of regulations and supervisory practices in place, and the countries often have little interest in each other's regulatory regimes or have little confidence in their quality. Thus, banks intending to establish abroad in different countries will have to incur the costs of complying with the various regulatory regimes of those countries. Because international norms can help reduce the costs of compliance, the Basel Core Principles for effective banking supervision were developed. Thus, countries intending to liberalize their banking sectors should give priority to achieving compliance with the Basel Core Principles for effective banking supervision. After achieving such compliance, a country could adopt at a later stage the EU banking legislation. The main reason is that this part of the *acquis* is highly complex and geared towards sophisticated financial markets.

In the case of Turkey, the analysis reveals that there is tremendous scope for the country to benefit from adopting and implementing first the Basel Core Principles for effective banking supervision and thereafter the legislative, regulatory and institutional framework of the EU banking system. If Turkey had adopted the Basel Core Principles for effective banking supervision after 1997 and had enforced these rules, the cost of the banking crisis faced in 2001 would have been much smaller than the estimated US$53.2 billion.

The 2008 crisis on the other hand led to the questioning of not only the ability of the supervisory authorities, especially in financially advanced economies as in the EU, but also the adequacy of the existing regulations and the theoretical

ideas behind them. Although there is widespread agreement on the questions being asked along these lines, at this point of time the interested parties are far from coming to an agreement on a new regulatory framework and a new set of principles for coordinating the supervisory activities on the global scale.[23]

Appendix

Table A7.1 Basel Core Principles

Preconditions for effective banking supervision	
1	An effective system of banking supervision will have clear responsibilities and objectives for each agency involved in the supervision of banking organizations. Each such agency should possess operational independence and adequate resources. A suitable legal framework for banking supervision is also necessary, including provisions relating to authorization of banking organizations and their ongoing supervision; powers to address compliance with laws and safety and soundness concerns; and legal protection for supervisors. Arrangements for sharing information between supervisors and protecting the confidentiality of such information should be in place
Licensing and structure	
2	The permissible activities of institutions that are licensed and subject to supervision as banks must be clearly defined, and the use of the word 'bank' in names should be controlled as far as possible
3	The licensing authority must have the right to set criteria and reject applications for establishments that do not meet the standards set. The licensing process, at a minimum, should consist of an assessment of the banking organization's ownership structure, directors and senior management, its operating plan and internal controls, and its projected financial condition, including its capital base; where the proposed owner or parent organization is a foreign bank, the prior consent of its home country supervisor should be obtained
4	Banking supervisors must have the authority to review and reject any proposals to transfer significant ownership or controlling interests in existing banks to other parties
5	Banking supervisors must have the authority to establish criteria for reviewing major acquisitions or investments by a bank and ensuring that corporate affiliations or structures do not expose the bank to undue risks or hinder effective supervision
Prudential regulations and requirements	
6	Banking supervisors must set prudent and appropriate minimum capital adequacy requirements for all banks. Such requirements should reflect the risks that the banks undertake, and must define the components of capital, bearing in mind their ability to absorb losses. At least for internationally active banks, these requirements must not be less than those established in the Basle Capital Accord and its amendments
7	An essential part of any supervisory system is the evaluation of a bank's policies, practices and procedures related to the granting of loans and making of investments and the ongoing management of the loan and investment portfolios

Continued on next page.

8 Banking supervisors must be satisfied that banks establish and adhere to adequate policies, practices and procedures for evaluating the quality of assets and the adequacy of loan loss provisions and loan loss reserves

9 Banking supervisors must be satisfied that banks have management information systems that enable management to identify concentrations within the portfolio and supervisors must set prudential limits to restrict bank exposures to single borrowers or groups of related borrowers

10 In order to prevent abuses arising from connected lending, banking supervisors must have in place requirements that banks lend to related companies and individuals on an arm's-length basis, that such extensions of credit are effectively monitored, and that other appropriate steps are taken to control or mitigate the risks

11 Banking supervisors must be satisfied that banks have adequate policies and procedures for identifying, monitoring and controlling country risk and transfer risk in their international lending and investment activities, and for maintaining appropriate reserves against such risks

12 Banking supervisors must be satisfied that banks have in place systems that accurately measure, monitor and adequately control market risks; supervisors should have powers to impose specific limits and/or a specific capital charge on market risk exposures, if warranted

13 Banking supervisors must be satisfied that banks have in place a comprehensive risk management process (including appropriate board and senior management oversight) to identify, measure, monitor and control all other material risks and, where appropriate, to hold capital against these risks

14 Banking supervisors must determine that banks have in place internal controls that are adequate for the nature and scale of their business. These should include clear arrangements for delegating authority and responsibility; separation of the functions that involve committing the bank, paying away its funds, and accounting for its assets and liabilities; reconciliation of these processes; safeguarding its assets; and appropriate independent internal or external audit and compliance functions to test adherence to these controls and to applicable laws and regulations

15 Banking supervisors must determine that banks have adequate policies, practices and procedures in place, including strict 'know-your-customer' rules that promote high ethical and professional standards in the financial sector and prevent the bank being used, intentionally or unintentionally, by criminal elements

Methods of ongoing banking supervision

16 An effective banking supervisory system should consist of some form of both on-site and off-site supervision

17 Banking supervisors must have regular contact with bank management and thorough understanding of the institution's operations

18 Banking supervisors must have a means of collecting, reviewing and analyzing prudential reports and statistical returns from banks on a solo and consolidated basis

19 Banking supervisors must have a means of independent validation of supervisory information either through on-site examinations or use of external auditors

20 An essential element of banking supervision is the ability of the supervisors to supervise the banking group on a consolidated basis

Information requirements

21 Banking supervisors must be satisfied that each bank maintains adequate records, drawn up in accordance with consistent accounting policies and practices that enable the supervisor to obtain a true and fair view of the financial condition of the bank and the profitability of its business, and that the bank publishes on a regular basis financial statements that fairly reflect its condition.

Formal powers of supervisors

22 Banking supervisors must have at their disposal adequate supervisory measures to bring about timely corrective action when banks fail to meet prudential requirements (such as minimum capital adequacy ratios), when there are regulatory violations, or where depositors are threatened in any other way. In extreme circumstances, this should include the ability to revoke the banking licence or recommend its revocation

Cross-border banking

23 Banking supervisors must practice global consolidated supervision over their internationally active banking organizations, adequately monitoring and applying appropriate prudential norms to all aspects of the business conducted by these banking organizations worldwide, primarily at their foreign branches, joint ventures and subsidiaries

24 A key component of consolidated supervision is establishing contact and information exchange with the various other supervisors involved, primarily host country supervisory authorities

25 Banking supervisors must require the local operations of foreign banks to be conducted to the same high standards as are required of domestic institutions and must have powers to share information needed by the home country supervisors of those banks for the purpose of carrying out consolidated supervision

Source: Basel Committee on Banking Supervision (1997).