ACCOUNTING IN CROATIAN BANKS AND ITS COMPATIBILITY WITH INTERNATIONAL ACCOUNTING AND SUPERVISION REGULATION

Mira Dimitrić[1]

Abstract

International convergence of capital measurement and capital standards has two fundamental objectives: to strengthen the soundness and stability of international banking system and to diminish competitive inequality among international banks. Research results and facts presented and described in this paper are directed to the judgment of the level of changes introduced in the system of financial reporting in terms of: designing standard accounting information, determining the extent of involvement of international institutions and global markets, and the implementation of International Accounting Standards in the financial sector. Also, they are directed to evaluating the level to which new policies and processes or risk management contribute to the new wave of business efficiency of Croatian banks and the level of the changes that have taken place in the broader system of banking business governance and supervision.

Key words: bank's accounting, bank's supervision, risk management

[1] Associate professor, University of Rijeka, Faculty of Economics, 51000 Rijeka, Ivana Filipovića 4, Croatia, e-mail: dimitric@efri.hr

1. Introduction

After two big banking crises that have resulted in bankruptcy of several banks in Croatia and after the rehabilitation process of six big banks, the banking sector in Croatia started the process of restructuring. Mergers in Croatian banking sector and entering foreign banks introduced many changes in banking activities regulation. Compared to other industries, mergers and acquisitions in the banking sector were marked by superior performances concerning both financial returns and rate of change. The research aims of this paper are:

- to give the global framework of Croatian banking regulation and its compatibility with EEC's banking directives,
- to research the compatibility of Croatian banking regulation and practice with the Basel Accord and
- to research the compatibility of Croatian banking regulation and practice with International Accounting Standards, especially with IAS 39 – Financial Instruments: recognising and measuring.

2. Global framework of Croatian banking regulation

Croatian banking regulation is framed by Banking Act, issued two years ago and harmonized with EU banking directives more than any earlier act. Harmonization by EU directives includes the opening of domestic banking area to other countries implicitly, and working possibility for domestic banks by domestic authorization in other countries, in the first place. We find the first similarity in basic definitions. The same as the First Council Directive (77/780/EEC) defines credit institution as an undertaking whose business is to receive deposits or other repayable funds from the public and to grant credits for its own account, and the Second Council Directives (89/646/EEC) in annex list defines activities subject to mutual recognition, so Croatian Banking Act defines banking activities in accordance with the First EU Directive, and other financial activities, in global accordance with activities from the Second EU Directive[1]. Those activities, in accordance with model of universal bank by broadly including securities activities in banking sector, have meaningful consequences for the future development of financial sector in Croatia. Croatian National Bank gives the license to banks or to branches of foreign banks for banking and also for other financial services, separately. Other financial services may be given by business entities that are not banks or banking branches and they are not under Banking Act and Croatian National Bank interference. The process of basic EU principles implementation in Croatian banking sector will be easy because Croatian banking sector is in more than 90% property of foreign banks. Croatia has higher share of foreign ownership in banking sector compared with other transitional countries. For example, Hungary and Poland have almost 70% and other transitional countries less. The principle of mutual recognition is based on the attitude that all member countries recognize home member state legal regulation concerning foreign banks although it differs from national regulation. In addition, it includes the principle of home country control and the principle of the single banking license defined by the Second Banking directive since 1993.

Those principles open to future members, especially Croatia, some questions to be faced:

1. It can be expected that former domestic banks and actual subsidiary banks with the greater part of foreign ownership, now licensed in Croatia, will be reformed into branches without legal personality and completely out of domestic jurisdiction and supervision. Indeed, the Second directive permits the possibility of harmonization with host member national prescriptions in some cases. Host member states may require that branches of credit institutions from other member states provide the same information, as they require from national credit institutions. Where the competent authorities of a host member state ascertain that an institution having a branch or providing services within its territory is not complying with the legal provisions adopted in that state pursuant to the provisions of this Directive involving powers of the host Member State competent authorities, those authorities shall require the institution concerned to put an end to that irregular situation. Also, there are some national competencies over the foreign banks or branches in the area of liquidity risk regulation.
2. Directives put through the single license principle credit institutions into better competitive position than other organizations that make financial services and activities. Banks from member state that permits all financial activities from Second Directive can do those activities in all other members even if there are domestic banks that are not in that position and vice versa, banks from members with more rigid regulation are limited in other countries, where some activities are permitted. It will cause the pressure of all financial entities on domestic regulation not to be more restrictive than minimum EU requirements.

Close contact has been maintained between the Committee in Basle and the authorities of the Community in Brussels who are pursuing a parallel initiative to develop a common solvency ratio to be applied in credit institutions of the Community. The aim has been to achieve a maximum degree of consistency between the framework agreed in Basel and the framework to be applied in the Community. But, it has to be stressed that regulations in European Community are designed to apply in credit institutions generally, whereas the Committee's framework is directed more specifically to the banks. The agreed framework is designed to establish minimum levels of capital for internationally active banks. National authorities are free to adopt higher levels. For example, minimum level for capital adequacy solvency ratio in Croatia is 10%, although it is 8% according to Basel Committee.

Croatian Banking Act gives the global framework for the accounting consolidation in banking group, whose aim is to report on financial and economic facts and ratios of a group as an economic entity. Majority bank of a group is obliged to establish consolidated state of: guarantee capital, capital adequacy, risk exposure, open items and investments into non-financial institutions. Also, it is obliged to inform Croatian National Bank about all requested facts concerning the group. Subordinate banks are obliged to give all information necessary for financial statements consolidation. Depending on the level of dependence consolidation methods can be: full consolidation, proportional consolidation and share method. The accepted consolidation theory in Croatia is entity theory of consolidation, the theory that treats all group members in the same way. Assets and liabilities after mutual relations excluding, belong to majority and other owners.

In the area of financial statements Croatia has not adopted any scheme of balance sheet or profit and loss account prescribed in Banking accounting directive (86/635/EEC) directly, but its statements include all prescribed items, classified by the principle of declining liquidity on the active side, and by the principle of arising maturity timing on the passive side in the balance sheet, and by the principle of the vertical layout and separation concerning the kinds of activities in the profit and loss account. Contents of financial statements are harmonized with requests of directives and prescribed by Croatian Accounting Law.

3. Assessing capital in relation to credit risk

The Basel Committee[2] on Banking Supervision issued a capital measurement system commonly referred to as The Basel Capital Accord in 1988. It became a standard for more than hundred countries and it contributed to international competitiveness and stability of banking system at a global level. Croatia introduced basic elements of Basel's standard as long ago as 1993, when Central Bank enforced first instructions about guarantee capital (regulatory capital), capital adequacy and risk-weighted bank assets items measurement.

Then credit risk as the basic parameter for capital adequacy calculating was introduced in Croatian banking sector for the first time. Account methodology has been continuously improving since then by modifications of various kinds of regulatory capital elements and deductive items, as well as by off-balance sheet risk items treatment. In 1998 an important new issue was introduced caused by restructuring and merger process in banking sector that is guarantee capital and capital adequacy accounting on the consolidated and non-consolidated basis. Business entities (enterprises, corporations) outside the banking system are since that time not included in consolidated basis.

Number of deductive items in regulatory capital calculating was growing up continually, which means implementing more restrictive criteria in regulatory capital recognition. More and more asset items characterized by uncertainty in regard to future economic benefits acquisition capability were treated as deductive items. In 1998 all transactions covered by own shares and loans for own shares purchase were inhibited. All receivables and potential liabilities arisen till then became deductive items from regulatory capital.

All above-mentioned are aimed to the essence of guarantee capital affirmation. The essence is to guarantee unexpected losses covering. That is why its part cannot be something that contains any risk of future economic benefits achievement.

Basel's guidelines in the area of the supplementary capital as the basic element of regulatory capital accounting were incorporated in Croatian banking system in 1999. Supplementary capital contains special reserves for non-identified losses, not above 1.5% of weighted asset items, and hybrid and subordinate instruments to 50% of the basic capital. The most recent banking law from 2002 introduces conceptual differences between subscribed capital (achieved by shares issuing) and basic capital that contains profit brought forward and provisions, besides subscribed capital, and that is the main part of regulatory capital for capital adequacy calculating. An important step to Basel's standards adjustment process is the bottom level of regulatory capital limitation to a minimal amount of prescribed founding capital that is 40 mil kn (a little more than 5 mil EUR) according to a new banking law. Namely, according to former prescriptions only capital adequacy rate was regulated, but not the amount of minimal regulatory capital. That meant that regulatory capital could be lower than minimal founding capital.

Deductive items from gross regulatory capital were direct and indirect investment into shares participations of other banks. Nowadays, that prescription is being evaluated to the rule that deductive items include not only participations into other banks, but all investments into financial instruments of other banks that are included into their regulatory capital, that means investments into hybrid and subordinate instruments. According to that, no one item can be the element of regulatory capital of more than one bank.

Croatian regulatory rules in assets and off-balance sheets items risk weighting were developing on the following basis:

- base decreasing for weighting numbers application, from gross loans to loans decreased with special reserves for identified losses;
- abrogation of weighting numbers above 100%, by which no one risk assets item can contribute to the value of weighted assets in the amount above book-keeping value and
- introducing off-balance sheets items conversions factors.

Off-balance sheets items conversion factors referring to those items, as potential business events, have not the same risk treatment as balance sheets items that are referred to realized business events.

All mentioned changing directions in assets and off-balance sheets items weighting are in the function of risk level real expression. The described directions influence the increase of reported capital adequacy. On the contrary, the changes of regulatory capital accounting are directed to restrictive accounting of capital adequacy.

Nowadays, Croatia has three risk-weighting classes for assets items and off-balance sheets items harmonized with international directives. Criteria for items sorting into risk classes are: debtors' credit capability, debtors' regularity in debts settlement and security instruments quality. The object of sorting is not a particular debtor, as before, but a particular credit. That means that credits to one debtor must not be sorted into one risk class on the basis of the quality of the worst one, but can be sorted into different risk classes.

The agreed framework in the Basel Capital Accord and the New Capital Accord from 2003 is designed to establish minimum level of capital for internationally active banks. National authorities are free to adopt arrangements that set a higher level. For example, the minimum prescribed rate of capital adequacy in Croatia is 10%, which is higher than 8% prescribed by the Basel Capital Accord. Central bank can prescribe higher minimum for the bank that is recognized as unusually risky.

The New Basel Capital Accord permits banks to choose between three approaches for calculating their capital requirements for credit risk: Standardized approach, Foundation Internal Ratings-Based approach and Advanced Internal Ratings-Based approach. Internal credit risk models have first been developed in the area of physical persons credits (credit scoring models). There is intention to extend internal approaches to all credits to express individual risk profile. Institutions that move towards more sophisticated approaches are rewarded with some incentives and express lower capital requests for credit risk, compared to the use of standardized approach. Indeed, that free space is commonly substituted by other risks requests, what is implicitly included in such new approaches.

The biggest banks in Croatia that are members of international banking group are starting to develop internal models for credit risk management. For example Hypo Alpe Adria Bank has 25 internal credit classes that are internationally comparative. It uses logistic regression model in calculating the predicted probability of default as the most important input data in the calculation of the risk weighted assets.

It has to be stressed that capital adequacy measuring related to credit risk is only one of a number of factors to be taken into account when assessing strength of banks. Credit risk, due to uncertainty in a counterparty's ability to meet its obligations, is only the first and traditionally treated risk[3]. Other risks, notably interest rate risk and investment risk on securities, need to be taken into account by supervisors in assessing overall capital adequacy. Basel Committee is developing possible approaches in measuring other risks, while Croatian banks are at the beginning of implementing that process.

4. Supervision and other risks management

In Croatian banking sector Central Bank is only supervision authority. The new banking act includes provision that other institutions can operate banking supervision. Nowadays it is State Agency for Deposit Insurance and Bank Rehabilitation, but competencies are not clear yet. Division in banking supervision is in accordance with global processes in banking sectors. While in the USA there are four big agencies that are included in banking supervision, in Europe there is no unique attitude in that sphere. European Central bank makes efforts to strengthen its position and on the other hand British and German authorities strengthen the role of their own agencies and consider that supervision regulators have to be as close as possible to the reviewed institutions. In Croatia the question of supervision competencies appeared after the banks rehabilitation period. From 1995 to 2000 six big banks were rehabilitated according to Bank Rehabilitation and Restructure Act. The aim of that act was to ensure:

- operating costs, interests and commissions decrease,
- owners transformation into shareholders that are expected to be interested in business success of banks,
- banks capitalization in order to achieve successful performances and
- efficient operating and risk management.

Consolidated supervision means that parent bank and parent supervisory authorities supervise the risk exposure of the banks or banking groups for which they are responsible, as well as the adequacy of their capital, on the basis of the totality of their business wherever conducted. Objectives of consolidated supervision are: to prevent risk of supervisory gaps, to prevent double leveraging of capital and to ensure banks measure their risks globally.

Basel Committee issued a set of principles that provide a framework for the effective management and supervision of risks, for use by banks and supervisory authorities when evaluating risk management policies and practices.

The first and the most important is credit risk, followed by interest rate and market risk. But developing banking practices suggest that risks other than credit, interest rate and market risk can be substantial. Genesis of that process is connected with new processes in banking sector. Greater use of more highly automated technology and reliance on globally integrated systems bring along system failure risks. E-commerce brings about system security issues and internal and external fraud risks. The emergence of banks acting as large-volume service providers creates the need for continual maintenance of sophisticated internal control systems. Some instruments for market and credit risk mitigation, e.g. securitisations, collaterals, credit derivatives, produce exposure to legal and other risks. The growing use of outsourcing arrangements and the participation in clearing and settlement systems has the same consequence.

All mentioned activities and risks are included in new approach to so-called operational risk, as risk of loss resulting from inadequate internal processes, people and systems or from external events. Operational risk has become one of the most important risk components of today's banking industry[4] and the growing importance of operational risk has also been recognized in the literature[5]. In the past banks relied upon internal control systems, supplemented by the audit function to manage operational risk. Nowadays that risk is becoming more complex and requires distinct and integral approach, similar to credit or market risk.

Timely implementation of adequate operational risk framework as important part of New Basel Capital Accord is extremely important and at the same time also a difficult issue for banks in Croatia. Its concept of integral approach to operational risks exposures requests from banks to establish a very complex system of managing operational risk at all organizational levels. It includes a choice between one of the given approaches in operational risk measurement. The first possibility is Basic Indicator Approach that measures capital requirement as the average annual gross income over the previous three years, multiplied by a factor of 0.15 set by the Committee. In the second possibility, that is the Standardised Approach, banks must calculate capital requirement for each business line. The total operational risk capital requirement for a banking organization is the summation of the regulatory capital requirements across all of its business lines. As a condition for use of the standardized approach, it is important for banks to have adequate operational risk systems that comply with the minimum criteria outlined in Consultative Paper 3 (CP3) of Basel Committee, connected by organizational prerequisites supported by internal procedures, legislation, communication processes, internal data bases and internal systems of basic indicators of activities observation. And finally, internationally active banks and banks with significant operational risk exposure are expected to adopt the third possibility, Advanced Measurement Approach to operational risk measurement and management. In that approach banks may use their own method for assessing their exposure to operational risk, as long as it is sufficiently comprehensive and systematic.

Comparing with European countries the preparation of banks to given problems is generally approached in early stages in Croatia. Because of this National Bank prepares certain activities that would motivate processes in banks for further development of operational risk management. This process will be supported by a large international banking group, that present in Croatia through two biggest banks. Their experience in other countries would be very useful and helpful in Croatia.

Basel Committee made Quantitative Impact Study to research influence of the first pillar of New Capital Accord on bank capital adequacy. The aim was to harmonize different approaches in different countries to capital requirements measurement with methodological starting points of these approaches. That would make New Capital Accord more flexible and applicable, and, as the final aim, that would bring closer New Capital Accord to its own purpose. More than 350 banks in 43 countries participated in the exercise. It was the third quantitative impact study, after the first, that considered credit risk, and the second that considered operational risk in banks. Croatian banks were not included in this study and Croatia did not make quantitative studies in order to measure new rules and approaches influence to capital adequacy. However, we can presuppose that some results of Basel's study refer to Croatian banks like lower capital requirement for banks with developed more sophisticated methods, and strengthening of some risk activities as mortgage credits and indebtedness of households.

5. International accounting standards in banking sector

International accounting standards should provide a prudent and reliable framework for the generation of high-quality accounting information in banks. They should promote transparent financial reporting of banks' financial and economic position, risk exposures and risk management activities. They should not only have a sound theoretical foundation, but also be workable in practice. These criteria are crucial in emerging markets of developing countries like Croatia. Most of developing countries have national accounting standards that are more or less harmonized with IAS, but adjusted to their particular conditions and to the achieved level in accounting practice. Croatia proclaims using of IAS directly, as national standards, and it is generally faced with several problems in such implementation process: (1) difficulties connected with law prescriptions and regulations, (2) difficulties connected with concept, structure and contents of IAS, (3) difficulties connected with undeveloped capital and financial markets and (4) difficulties connected with insufficient experience and number of experts in the area of valuation and performance judgment. In the case of banking sector those difficulties are mitigated influenced by international banking groups that cover domestic banks.

IAS 30 – Disclosures in banks and similar financial institutions financial statements – regulates contents of basic financial statements, accounting policies and disclosures connected with risks. A bank's income statement should group income and expenses by nature and should report the principal types of income and expenses. Specific minimum line items for assets and liabilities in banks' balance sheet are prescribed. Disclosures are required of various kinds of contingencies and commitments, including off-balance-sheet items. Disclosures are required of information relating to losses on loans and advances and other required disclosures include: maturities of various kinds of liabilities, concentrations of assets, liabilities, and off-balance-sheet items, net foreign currency exposures, market values of investments, amounts set aside as appropriations of retained earnings for general banking risks and secured liabilities and pledges of assets as security.

Croatian Accounting Act prescribes the minimum items of balance sheet and profit and loss account of banks. The Act being out of date, Central Bank is revising the contents of financial statement continually and they are in accordance with IAS 30. The attitude of the Basel Committee is that IAS 30 has to be revised and updated until it is adjusted to new risk concerning issues that appear during the last ten years in banking and financial sector.

IAS 32 – Financial instruments: Presentation and Disclosures – regulates account of financial instrument in accounting books (presentation) and in financial statements (disclosures). Financial instruments should be classified by issuers into liabilities and equity, which includes splitting compound instruments into these components. Classification has to reflect substance, not form. Split accounting is required for compound financial instruments, such as convertible securities. The standard regulates the treatment of the cost of a financial liability and the cost of equity financing. It prescribes that offsetting on the balance sheet is permitted only if the holder of the financial instrument can legally settle on a net basis.

Disclosures rules require all information on financial instrument relevant to influence on financial position. They include information disclosure of all terms and conditions connected with financial instruments, interest rate risk (reprising and maturity dates, fixed and floating interest rates, maturities), credit risk (maximum exposure and significant concentrations), fair values of financial instruments, assets below fair value and hedges of anticipated transactions.

IAS 39 – Financial instruments: Recognition and Measurement – with an implementation date of 1 January 2001 is the newest of the "banking" international accounting standards. Compared to the national accounting standards and practical use of international standards in most countries, it increases the use of fair values in accounting for financial instruments significantly. It complies with the concept of fair values in a more comprehensive way than prescribed in IAS 32. IAS 39 supplements the disclosure requirements of IAS 32 for financial instruments. Under IAS 39 all financial assets and financial liabilities are recognised on the balance sheet, including all derivatives. They are initially measured at cost, which is the fair value of whatever was paid or received to acquire the financial asset or liability. Purchases and sales of financial assets in the market place are recognised either at trade date or settlement date. Croatian banks generally use settlement date. Transaction costs should be included in the initial measurement of all financial instruments. All financial assets are remeasured to fair value, except for the following which should be carried at amortised cost: (a) loans and receivables not held for trading; (b) other fixed maturity investments such as debt securities; and (c) financial assets whose fair value cannot be reliably measured, e.g. some equity securities, forwards and options on unquoted equity securities.

There is consensus at the EU level that IAS 39 has to be introduced in accounting system of member states till 2005[6].

Some financial instruments are not regulated by IAS 39, but by other international accounting standards. For example, IAS 27 – Consolidated financial statements - refers to parent and subsidiaries, IAS 28 – Investments in Associates – refers to equity instruments with significant influence, IAS 31 – Reporting of Interests in Joint Ventures, IAS 17 – Accounting for Leases – refers to instruments of finance leases, IAS 37 – Provisions, Contingent Liabilities and Contingent Assets – refers to future possible liabilities, such as financial guaranties, IAS 19 – Employee Benefits – refers to instruments connected with employees, and IAS 22 – Business Combinations – refers to instruments connected with unpredictable provisions.

According to IAS 39 all financial instruments can be categorized as being held for trading, available for sale, being held to maturity and loans that enterprise has originated. Instruments held for trading and available for sale are accounted for at fair value. Held to maturity assets and originated loans are carried at amortised cost. Banks have an option for the instruments available to sale to recognize unrealised profits or losses not only through profit or loss account, but through principal correction till the moment of realization. IAS 39 prescribes strong guidelines for the instruments being held to maturity. If bank decides to sell the instrument from that category or to move it into another category, it must move all instruments from that category into category of instruments being held for trading or available for sale and use fair value method for these instruments. After that, it must not through current year and another two years put the existing or new instruments into category being held to maturity. Such strong limitation prevents possible manipulation with financial result from unrealised profit or losses by moving instruments from one category to another and by changing valuation method.

IAS 39 also emphasises the need to revalue instruments at least once a year to check up the circumstances for instruments value mitigation. Such revaluation influences profit and loss account too. IAS 39 establishes conditions for determining when control over a financial asset or liability has been transferred to another party. For financial assets a transfer normally would be recognised if (a) the transferee has the right to sell or pledge the asset and (b) the transferor does not have the right to reacquire the transferred assets. With respect to derecognition of liabilities, the debtor must be legally released from primary responsibility for the liability either judicially or by the creditor. If a part of a financial asset or liability is sold or extinguished, the carrying amount is split based on relative fair values.

IAS 39 for the first time defines accounting for derivatives[7]. Derivatives have to be measured according to fair value until they are used as hedging instruments. Then they are accounted for in the same manner as the item hedged. Earlier, derivatives were the part of complex agreements, not disclosed as separate financial instruments and with hidden risk. Hedging accounting is also defined by IAS 39, but its application in practice requires coordination between accountants, treasurers and tax experts. Hedging, for accounting purposes, means designating a derivative or (only for hedges of foreign currency risks) a non-derivative financial instrument as an offset in net profit or loss, in whole or in part, to the change in fair value or cash flows of a hedged item. Hedge accounting is permitted under IAS 39 in certain circumstances, provided the hedging relationship is clearly defined, measurable and actually effective. Hedge accounting is permitted only if an enterprise designates a specific hedging instrument as a hedge of a change in value or cash flow of a specific hedged item, rather than as a hedge of an overall net balance sheet position.

In order to avoid some incompatibilities between IAS 39 and legal prescriptions in Croatia, Central Bank made the decision of direct use of International Accounting Standards in every case when there is discordance between prescriptions and standards.

Correlation between IAS and Croatian accounting practice in the area of securities is shown in the next figure.

Croatian accounting practice		International Accounting Standards		IAS No.
Trade portfolio of equity and debt securities	Fair value method	Assets being held for trading (trading book)	Fair value method	39
Investment portfolio of equity securities	LOCOM method	Assets available for sale	Fair value method (or historical costs if there is no market price and testing for mitigation)	39
Investment portfolio of debt securities	Amortised cost method	Assets held to maturity (banking book) Assets available for sale Originated loans (purchased debt securities from issuer directly)	Amortised cost method Fair value method (or historical costs if there is no market price and testing for mitigation) Amortised cost method	39
Shares with significant influence (more than 20 per cent)	Equity method	Shares with significant influence (more than 20 per cent)	Equity method	28

Figure 1: Correlation between IAS and Croatian Accounting Practice for securities

IAS 39 eliminates the profit and loss effect of internal transactions in banks' published financial statements. This follows normal consolidation practice where a group preparing financial statements is treated as a single entity and should not be able to generate apparent profits or losses through internal transactions. General accounting practice is for the financial statements only to reflect the effects of transactions with third parties. It requires ability to distinguish those from internal transactions through their accounting systems.

6. Provisions and reserves policy

Croatian banks calculate general and specific provisions according to majority of banking systems. General provisions are being formed according to legal prescriptions and other factors. One of them is necessity for supplementary capital concerning capital adequacy because general provisions are included in so-called tier two capital. Adjustment of provisions to credit risk level means that provisions are higher in economic recession and lower in prosperity phase. That also means that provisions, formed with time delay, have effect ex post on deepening the recession and encouragement of prosperity.[8]

Specific provisions are being formed in prescribed percents of risk weighted credit classes. While general provisions are named as provisions for non-identified losses, specific provisions are for identified losses. These provisions influence the profit and loss account and decline the value of balance-sheet active side. In last three years the value of specific provisions in Croatian banks was decreased, with exception of small banks. We have the same process with the capital adequacy rate.

Differences between countries in the fiscal treatment and accounting presentation for tax purposes of certain classes of provisions for losses and of capital reserves derived from retained earnings may to some extent distort the comparability of the real capital position of international banks.

The new concept of dynamic provisions is aimed at mitigating the unwanted consequences of the pro-cyclical behavior of the banking credit activities and significantly improves stability of individual banks and macroeconomic stability. Dynamic or statistical provisions do not replace but complete the existent provisioning practices in banks. Researches in developed and some transitional countries provided strong indications for the implementation of the dynamic provisioning system and probably Croatia would not be the exception. But there are no prerequisites for including dynamic provisions concept in Croatia yet because it requires the use of new approaches in credit risk measuring.

7. Results of statistical analysis

According to statistical analysis[9] provided by the staff team of the International Monetary Fund and the World Bank, credit risk is the main systemic vulnerability. Sensitivity analysis reveals that, assuming immediate provisioning, the two largest banks, accounting for almost half of the assets of the banking sector, would be able to absorb losses of about 5 percent of their respective risk-weighted assets before reaching the minimum statutory capital requirement, while the banking system as a whole would be able to absorb losses of almost 10 percent of risk weighted assets before reaching this requirement. The banking system is primarily exposed to risks stemming from macroeconomic policies and adverse external exogenous shocks, since these developments are likely to have the most significant effect on credit quality. The expansion of bank credit deserves closer monitoring, as experience of other countries shows that credit growth in excess of 15 percent can result in increased losses.

Sensitivity analysis points to considerable resiliency of the banking system in absorbing deterioration in credit quality. The change in the status of risk-weighted assets implies a change in the probability of moving an asset to nonperforming status.

Banks' direct exposure to exchange rate risk is limited, but there is considerable uncertainty about the extent of the credit risk stemming from unhedged foreign currency-based borrowing. The direct effect, estimated by analyzing the net open position, is relatively small for most banks; on average banks have a long position and would appear to benefit from a depreciation of the kuna. The indirect effects of exchange rate fluctuations on the banking system, however, can be considerable because of the widespread use of foreign currency-based borrowing. While it is difficult to quantify the indirect credit risk stemming from exchange rate changes, some statistical calculations indicate that an assumed depreciation or an appreciation in the 15-25 percent range, depending on indicated default and recovery rates, would result in decline of the capital adequacy rate of the banking system from 18,8 percent to the 7-12 percent range. Under these assumptions, the changes in the exchange rate can result in serious problems for the least capitalized banks.

Statistical analysis shows that most of the largest banks are less exposed to other risks, including interest rate, equity price, and liquidity risk, although there are significant differences among the individual banks. Based on partial information on repricing mismatches of credits, and deposits and borrowings, current profits can absorb the effect of minor interest rate changes for most banks. Banks are also exposed to liquidity risk, both in kuna and foreign exchange, but high reserve requirements, and the requirement to maintain at a minimum 53 percent of foreign currency liabilities with a maturity of less than one year in short-term foreign exchange claims, help in reducing these risks.

The supervision of banks is carried out by the Banking Supervision Division of Croatian National Bank through on-site and off-site examinations[10]. Although the supervision is quite efficient, the analyses are conducted on single entities only and not on a consolidated basis. The development of appropriate procedures to calculate and set limits for market and other related risks is in process. The existing legal framework does not allow the Central National Bank to formally establish international agreements, which would be very important due to the significant presence of foreign banks.

8. Concluding remarks

Mergers in Croatian banking sector and entering foreign banks introduced many changes in banking activities regulation, especially in areas of financial reporting, supervision and risk management. Principles defined in Second Banking Directive and other EU directives will become valid in Croatia with its entering the EU. In this way Croatian banking system will become fully open for the banks from other member states and Croatian banks will get the opportunity to provide services in the whole territory of the EU. Those principles that are already entering Croatia have consequences on banking supervision that is becoming harmonized with Basel's requests.

The minimum capital adequacy ratio is above the Basel recommendation and is set at 10 percent for all banks. However, the calculation of the capital adequacy ratio is based on credit risk only, and capital requirements for market and related risks still have to be developed. Banking supervision is being further strengthened by moving toward a more risk based approach. While market and interest rate risks seem limited, banks' attention to operational risk needs to be heightened.

Europe strongly supports efforts to harmonize accounting practice internationally. The growing interdependence of international financial and banking markets necessitates transparent and comparably published financial statements. Croatia has adopted International Accounting Standards for all companies and has gone further and faster than many of its Southern and Eastern European neighbors in reforming its legislation, but actual practices do not always comply with these requirements. In part, this is due to lack demand driven pressures given the small number of listed companies in the stock market, the use of other information sources for trade and bank credit decisions, a lack of experience and expertise on the part of users, and difficulties of access to audited financial statements.

New Banking Act in Croatia enacted in 2002, four years after previous act, is an important step in implementation of International Accounting Standards. Accounting standards should contribute to sound risk management practice through the ways in which trading and banking books are actually managed. Banks in Croatia use International Accounting Standards and their annual financial statements are examined by external auditors on both a single and a consolidated basis.

Fair vale measurement issues particularly arise in relation to certain non-marketable assets and liabilities previously held at cost. In the absence of active markets, like in Croatia, there are difficulties in obtaining or calculating reliable fair values. The significant interpretive and implementation guidance is necessary before business subjects are able to comply with IAS 39.

Notes

[1] Second Council Directive (89/646/EEC) – Annex list of activities subject to mutual recognition: 1. Acceptance of deposits and other repayable funds from the public, 2. Lending, 3. Financial leasing, 4. Money transmission services, 5. Issuing and administering means of payment (e.g. credit cards, travellers' cheques and bankers' drafts), 6. Guarantees and commitments, 7. Trading for own account or for account of customers in: (a) money market instruments (cheques, bills, CDs, etc.); (b) foreign exchange; (c) financial futures and options; (d) exchange and interest rate instruments; (e) transferable securities, 8. Participation in share issues and the provision of services related to such issues 9. Advice to undertakings on capital structure, industrial strategy and related questions and advice and services relating to mergers and the purchase of undertakings, 10. Money broking, 11. Portofolio management and advice, 12. Safekeeping and administration of securities, 13. Credit reference services, 14. Safe custody services; Including inter alia: consumer credit, mortgage credit, factoring, with or without recourse, financing of commercial transactions (including forfaiting).

[2] The Basel Committee on banking supervision was established by the central-bank Governors of the Group of Ten countries in 1974. United States, Canada and Japan are being associated to its membership later. Committee formulates broad supervisory, capital measurement and risk measurement standards and helps non-members to implement them in their own national systems.

[3] See: (1) Coyle G., A., B., 2000, Framework for Credit Risk Management, Glenlake Publishing Company, Chicago. (2) Caouette J., Altman E., Narayanan P., 1998, Managing Credit Risk: The Next Great Financial Challenge, John Wiley, New York.

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[6] Euronext, stock-market of Amsterdam, Brussels and Paris, requires IAS using for all companies included in indexes Next Economy and Next Prime.

[7] USA has in the frame of US GAAP (US Generally Accepted Accounting Principles) FAS 133 (Financial Accounting Standards) – Accounting for derivatives and hedging activities – it establishes similar principles like IAS 39.

[8] Mann, F., Michael, I., 2002, Dynamic provisioning: issues and application. Financial Stability Review, Bank of England, december 2002, pp.128-136.

[9] IMF Country Report No. 02/180., 2004, Republic of Croatia: Financial System Stability Assessment, Including Reports on the Observance of Standards and Codes on the Following Topics: Banking Supervision, Payments System, Security Regulation, Insurance Regulation, and Monetary and Financial Policy Transparency, p 15-24.

[10] On-site examination is based on direct insight into business books and original documentation in the bank, while off-site examination is based on indirect insight into statements, information and data required or prescribed by central bank and sent from banks to central bank.

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