The Development of the Hungarian Banking Sector Prior to Basel II

Csizmazia, Roland Attila

Kwangwoon University

15 February 2014

International Journal of

Knowledge and Innovation in Business (IJKIB)

'The Development of the Hungarian Banking Sector Prior to Basel II'

Roland Attila Csizmazia

February 2014
Volume 1, Number 1
Pages 53-70

ISSN: 2332-3388 (print)
2332-3396 (online)

SAPIENTPRESS

International Journal of Knowledge and Innovation in Business **ISSN:** 2332-3388 (print)
February, 2014, Volume 1, Number 1, pp.53-70 2332-3396 (online)

The Development of the Hungarian Banking Sector Prior to Basel II

Roland Attila Csizmazia*

Abstract

Although the economic transition started in the early of 1990s, Hungary had a pioneer role in introducing the two-tier banking system within the former Soviet Eastern Block. The modernization of the banking system was unexpectedly far-reaching as Western banks were allowed to participate in the market. The Hungarian banking system was widely government run before the first commercial bank was opened by the National Bank of Hungary and five foreign commercial banks were established in 1979. The pioneer role was maintained even during the transition years when foreign-owned commercial banks could establish their subsidiaries. This paper attempts to examine the performance of the Hungarian banking sector once foreign investments occurred, and its functions as well as its stability in the transition period before the implementation of the Basel II Accord. It also reveals the doubts policy makers had about the Basel II Accord and its affect on the lending behavior of banks.

Keywords Basel II, Hungary, privatization, foreign ownership, banking stability, pro-cyclicity

Acknowledgements The author would like to gratefully acknowledge the financial support granted by Kwangwoon University.

* Assistant Professor, Business Administration, Kwangwoon University, Seoul, South Korea, Email: csix@gmx.at

Introduction

Hungary was among the pioneers in the Eastern Block to attempt to develop a healthy bank system from its “mono-bank system” of the late regime. This “mono-bank system” represented the financial sector within the boundaries of the block broadly. Due to its inherent importance in a country’s economy, the financial sector has always been influenced by politics considerably. The state has started to open up its economy and its close business relations with Western Europe early. It has received extensive foreign direct investments from the 1970s. Inevitably, such activities have led to a larger foreign bank involvement. To enable investments of foreign banks, reforms had to be introduced. Surprisingly, the state could introduce its two-tier banking system – as the first Central and Eastern European country – in an early stage long before the political change could happen following the fall of Iron Curtain. Accordingly, the Hungarian National Bank (also Central Bank of Hungary or MNB) proactively established a bank – Central-European International Bank Ltd or as widely known CIB – together with five renowned international commercial banks in 1979 (Majnoni et al., 2003). CIB was an offshore-like dollar based bank prior to political opening and carried out corporate banking functions in convertible currencies, but not in domestic currency, Hungarian Forint (Abel and Polivka, 1997). At the end of 1980s the increasing demand pushed the bank forward to establish an onshore bank to become capable to perform commercial banking services also in Hungarian Forint.

Various financial intermediaries and quasi banks were founded which could carry out bank-like functions, but their significance remained low in a transition economy. Still, many of them gained importance when they converted into banks, e.g., Inter-Europa Bank of which the predecessor in title was a limited partnership – founded 1982 – with the objective to support incentive investments into the development of foreign trade (Abel and Polivka, 1997). The modernization has not stopped by then. The foundations of current financial system were established by 1989. Even though the functions of financial intermediaries were more and more realized, the healthy competition within the sector lagged behind. This was also underpinned by the lack of statistical correlations between the price of bonds, the coupon on them and the actual risk and profit position of the issuing corporations (Murphy and Sabon, 1992).

At the beginning of 1990s structural changes were faster than the state could have reacted and an early destabilization showed importance of a regulatory framework. The stability of financial sector has continuously seen as a necessary precondition for development. Accordingly, regulations and reforms were introduced and enforced by law. Privatization of banks and foreign ownership in banking sector contributed largely to a successful transformation of the planned economy. Besides, Hungary could pursue the membership in the EU and became a member state in 2004. As a result Hungary has to standardize and align its regulations which needed to become EU-conform.

Transition of financial system

As the banking functions have been liberalized the competition has intensified. After the enormous Soviet impact on the Eastern European Block has diminished it could relieve from the long period of regime regulations. Most countries of the block, among them Hungary, could push forward for democratization and opening of their markets unrestrictedly. The 1996 Act on Credit Institutions allowed banks to conduct more services, such as investment transactions which were restricted by the Act on Securities earlier. From 1999 commercial banks could obtain license to transact government securities and also to offer full range investment banking (Majnoni et al., 2003).

The privatization began and the framework for a new economy order was created along with the political transformation. Consequently, foreign banks could establish their fully owned subsidiaries. The liberalization of banking activities – such as facilitating loans, investment banking and foreign exchange trades – process followed the political changes. Hungary pinned down itself to join the European Union by the fastest feasible time and attempted to implement regulations to conform the prerequisites set by the EU. However, Hungary could enter the EU in 2004, numerous decision makers warned from an early joining of Euro zone as the country's economy remained fragile as a strong currency has not been yet desired. Although the following years were represented by sometimes accelerating and sometimes slowing growth mostly, a few setbacks were unavoidable inherent to the system. Regional discrepancies appeared and the speed of growth halted or even took an unwanted direction, thus turned into recession especially as the region was highly influenced by the financial crisis of 2008.

As mentioned above the decentralization of functions such as foreign exchange banking activities, took several years. Till 1992 the foreign currency was limited by the Central Bank, but the purchase of foreign currency became free to trade. From this time the banks could trade in foreign currencies with each other. Consequently, a new instrument could be applied by the Central Bank – the intervention in foreign exchange market.

Inflation and foreign exchange

From the beginning of transition Hungary needed to consider methods to stabilize inflation and introduce monetary policy strategies to drastically slash the extremely high inflation rate. In comparison to the years before the stabilization policy of 1995 the inflation has declined permanently although it still remained at a double-digit before 2000 (as described by Figure 1). Furthermore, the policy has helped to create internal and external equilibrium with wider flexibility of exchange rate. To control foreign exchange, Hungary used a crawling band for the nominal system and its currency basket was adjusted periodically. In 1995 the forward exchange rate – thus previously announced rate – was implemented. The band width was one of the narrowest in the region, but as it could be widened more sterilized foreign exchange interventions were facilitated (Blejer and Skreb, 1999). The Central Bank initiated an exchange of foreign exchange deposits that targeted the transformation of the long-term credits from abroad and the short-term exchange sources into long-term credits based on the domestic currency – also the main target was reached because the exchange risk could be terminated. All these regulations aimed to decrease the rate of inflation that has been successfully reached by the end of the 20th century.

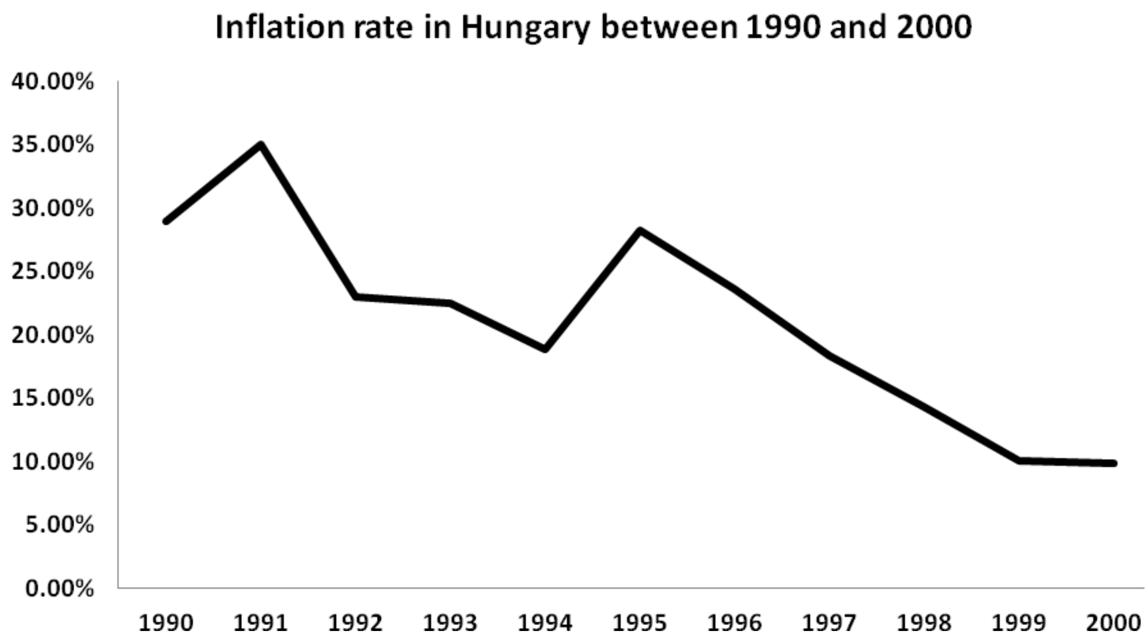

Figure 1: Inflation rate in Hungary between 1990 and 2000 (KSH, 2009)

Hungary needed sufficient funding for successful transition of its economy. As this was not available domestically, the foreign capital inflow was inevitable for the country's development. Companies which invested in the country usually trusted their own banks long-term. Obviously, the state needed to allow the entrance of financial institutes and had to create an environment that preferred both green-field investments and investments into banks which were sold through privatization.

Fears vs. positive contribution of foreign ownership

The labor market has undergone a massive modification parallel to the radical changes in economy. Based on the structural deficiencies, the more and more noticeable distortions in economy caused rapidly increasing unemployment that was an unknown phenomenon before 1990s. The unemployment rate of over 12 per cent was reached in 1993. From that peak the rate fell again, but remained high during after the turn of century (Felkai, 2011). Consequently, it is well understandable that not each of the former Eastern Block members has welcome foreign investments without doubts.

A centrally planned economy or a concentrated financial sector can successfully hinder the easy entrance of foreign corporations and the competition among the functioning participants which then remain protected. They also lack of incentives for innovation and development of services to customers lack. Besides, the banking sector is highly regulated due to the fear of bankruptcy effects potentially caused by the entrance of new or foreign corporations. These and similar actions usually have detained banks from entering the transition economy countries. Once again, Hungary showed a different picture being the most hospitable country at the time of the transforming economy. The entrance of banks which found their subsidiaries in the country is characterized by negative assumptions and fears as well as – fortunately – by positive effects. The latter ones could be observed in Hungary predominantly.

Wachtel (1997) stated that the liberalization of market was so rapid that regulations could not be introduced effectively before the entrance of foreign banks. While in a few countries the new entrants were a source of speculations, in Hungary many of them faced losses. Accordingly, legislation was forced to work out stringent conditions for new entrants.

Obviously, there is a wide range of reasons why foreign banks enter the markets. Legislation must consider and prepare for the danger of the entrances, such as a high probability of foreign influence over capital flows and high competition within the financial sector. Besides, there might be an interest conflict between legislation and foreign entrants as well as existent participants and entrants which also are characterized by distinct corporate culture. The fears of foreign influence are related to both financial colonization and the opposition of foreign participation in economic activities and processes. Often these fears are aggravated by nationalism. It is rather the inflow of working capitals that could lead to foreign dependency and not the functions of foreign banks. The lack of sufficient savings characterized the countries of once Eastern Block. Thus, there was no accumulated capital that could have contributed to the rapid development and could have been spent to finance it. Therefore, it would not have been reasonable to restrict or even stop the capital inflow. Nevertheless, legislation had to resist and had to inspect portfolio investments as danger has been inherent in their functions. They could become the source of potential macroeconomic destabilizations. There was a need for finding the way to fix investments – especially in privatization this supported those mainly strategic investors who offered and promised not only a preferable purchase price but also capital injections (Várhegyi, 2002 and Majnoni et al., 2003). Wachtel

(1997) argues that the second argument likewise stands on no solid ground. Thus, protection of developing sectors do not refer to banks since they do not import products – and consequently do not compete with domestic manufacturers – but provide financial services in the host country. Besides, if foreign entrance would not have happened no domestic bank would have been squeezed to raise its service quality. The other fear related factors – such as conflicting interest and regulatory differences – have not been as significant based on the intension of joining the EU as the ones described above.

Certainly, foreign banks had a few advantages against the domestic banks in transition economies due to their lasting functions in their domestic markets. They could contribute with early development of services, while the domestic banks of host countries had problems with bad performing loan portfolios. Additionally, the existent personnel were not interested in innovating services. The entrance of Citibank provides a good example based on the fact that they could introduce ATM networks to wealthy clients before other banks followed (Wachtel, 1997). Besides, their size and technological advances contributed to their economies of scale and wide diversification, while Hungarian banks could not compete based on their inefficient and costly transaction processing. As examples Budapest Bank with its technology import and Creditanstalt with the largest transaction of Budapest Stock Exchange are worth to note (Wachtel, 1997).

Among the primary drivers for establishing presence – by founding subsidiaries – the demand of banks' original domestic clientele for transaction and lending services and the growing number of expatriates with a demand for quality services were perhaps the most significant. Later, in addition to the domestic exporting sector the quality – high yield – clients were targeted by the foreign banks with their more and more differentiated products and services. The impact of liberalization brought euphoria and tens of new financial institutions, branches of banks were established. Due to the early high yields banks increased their total assets rapidly. The soft and improper or even deficient regulations have not hindered this hazardous development in Hungary. The bank sector accounting for the largest part of financial sector was enjoying an extensive competition with intensively widening range of services till 1993 (Ábel and Polivka, 1998).

Reforms in banking system

Through the extensive structural changes large banks lost approximately one third of their clientele. Despite the shrinking market share of large banks they further dominated the market. The euphoria allowed an unforeseen excessive risk-taking. This directly has led to imminent instability which could be solved only with radical intervention and support by the legislation. Thus, there has been an urgent demand for a proper legal framework. At the beginning the juridical environment was incredibly poor. The Bankruptcy Act was enacted in 1992. Instead of solving issues it aggravated them. Accordingly, more than 4,000 bankruptcy cases were opened. Therefore a prompt amendment was necessary which was introduced in 1993 and has led to sharp decline in number of cases (Eros et al., 2006). Yet the regulations and the “loan consolidation program” have still remained deficient and have brought only short term improvement (Balassa, 1996). Banks continued to be disadvantaged in liquidation processes and as a result corporate loans were not provided at all. However, the capital adequacy ratios were increased; the issues about the banks’ under-capitalization have not been solved. There was an inevitable need for recapitalization by the government – completed by 1994 – in over 75 per cent of the concerned banks (Majnoni et al., 2003).

In the Central and Eastern European region three methods of privatization of banks were applied: (1) the sale of shares via public offerings on the domestic stock exchange targeting small investors, (2) through the search for strategic foreign investors and (3) through voucher privatization in that local citizens could purchase a book of vouchers that represent potential shares in any state-owned company inexpensively (Várhegyi, 2001a). In Hungary the first and second methods of privatization were deployed. The initial step was launched following the political change and it created an environment that allowed foreign strategic investors (with a share of over 25 per cent) to participate in the market. Consequently, the state’s share in banking sector declined sharply reaching a 39 per cent share (Majnoni et al., 2003). Meanwhile, new banks were founded by foreign and domestic entities. Within the frames of the second method the partial transfer of ownership was carried out – 25 per cent remained in public hands – whereas the state preferred domestic ownership and did not allow any other strategic ownership, but basically highly diversified ownership structure. The privatization can be regarded as completed since 1997.

Even though the development has continued and the performance of financial sector has increased, the role of financial sector could not increase its significance and could not become stronger. The average income of households has been limited compared to banks in the EU and Hungary has had to fight with a huge size of black and grey economy. The effect was two-fold: on the one hand, the state has been unable to increase its tax income and on the other hands, the deposit rate in the financial sector could not have been increased easily. New subsidiaries and branches needed vast investments in technology which meant high reserves for the participants.

Stability in the system

The role of foreign investors has been extremely significant. Banks with foreign ownership have controlled over 90 per cent of assets in banking sector in 1999 and 2000. The domination banking sector within the entire financial sector became similar to the EU average. At the beginning of the 1990s loans given by resident banks to non-financial corporations and households account for 27 per cent of GDP the while this ratio was around 90-100 per cent during the examined period of time (Várhegyi, 2002). The obvious reason is that the transition economy showed unpredictable creditworthiness as no statistical data was available.

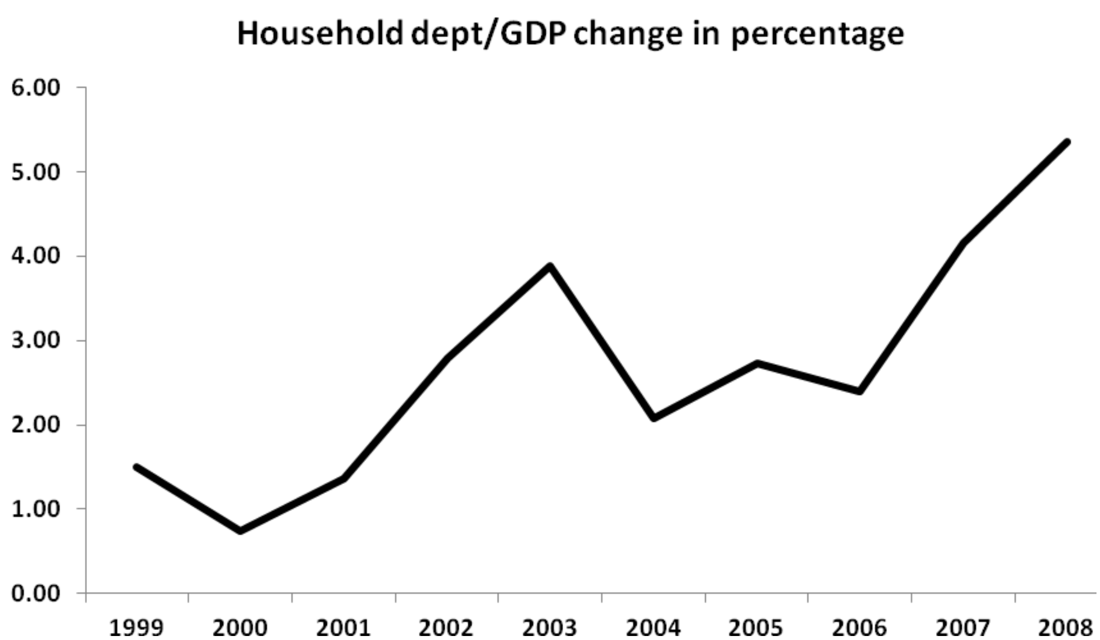

Figure 2: Household debt to GDP change in percentage, (MNB, 2010)

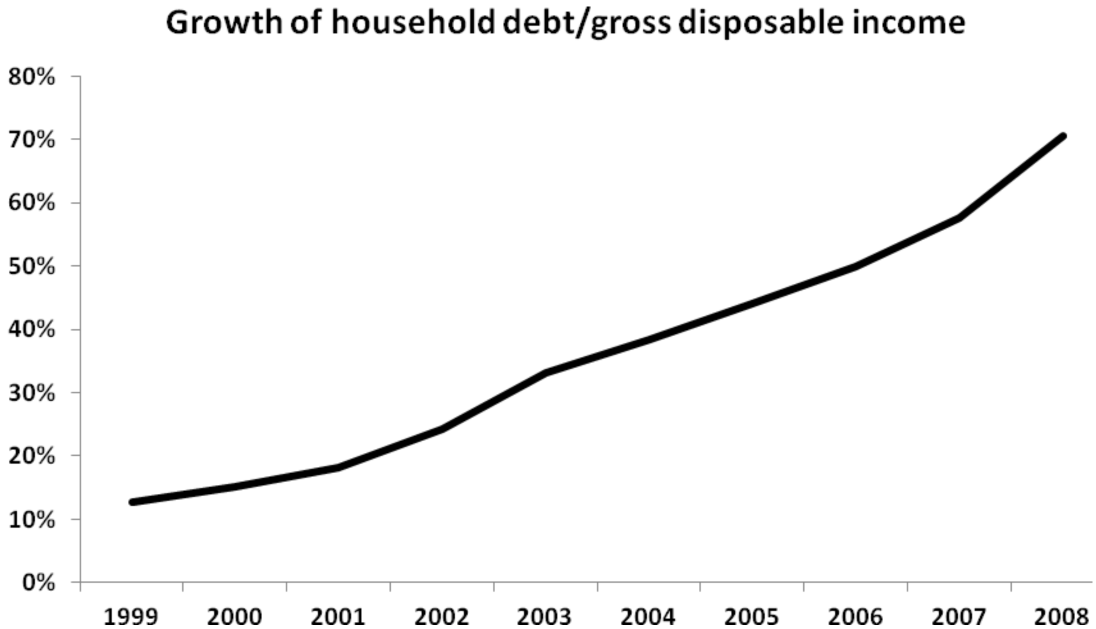

Figure 3: Growth of household debt to gross disposable income in percentage, (OECD, 2012)

While Várhegyi (2002) argues that the loans of households were low, the data both from Central Bank of Hungary (2010) in Figure 2 and from OECD (2012) in Figure 3 represent a more or less steep increase in the comparison of GDP and gross disposable income (OECD 2012 and MNB 2010). Moreover, the problem of larger loans in foreign currencies amplified the lurch of instability.

Table 1: Stability of Hungarian bank sector (Várhegyi, 2002)

Year	1995	1996	1997	1998	1999	2000
Non-performing loans (in percentage of assets)	7.4	4.0	3.2	1.8	2.6	2.0
Capital adequacy ratio	18.3	18.9	17.3	9.9	15.0	15.2

The balance sheet structure in Hungarian banking sector has developed from the second half of 1990s and the quality of asset portfolio has largely improved. By 2000, the analysis depicts that the capital adequacy ratio has been around 15 per cent that represented a stable and well-capitalized sector (see Table 1). It is notable that the importance of client – both corporate and household – deposits has increased to a cumulated level of around 50 per cent within the structure of resident banks' liabilities (Várhegyi, 2002). These improvements – although problems mentioned in the above paragraph destabilized the sector later again – reflect a more and more stable financial sector.

Table 2: Market concentration in bank sector (Várhegyi, 2001b)

Year	1995	1996	1997	1998	1999	2000
HHI	1235	1139	997	953	922	888

According to Várhegyi (2001a) the concentration in the Hungarian banking sector is moderate and has decreased through the time. Based on HHI (Herfindahl-Hirschman Index) the calculations show (in Table 2) that the Hungarian banking sector was characterized by moderate concentration and has become non-concentrated in 1997. As no significant mergers and acquisitions occurred on the market the concentration remained low before the implementation of Basel II Accord. It is to be mentioned that the calculation of index excluded he largest domestic bank, OTP, has dominated the household deposits and loans, even though its market share significantly declined – by about 10 per cent by 1997. If concentration and competition are measured it is important to measure the distance of market shares between the first and second largest banks in the market (Molyneaux, 1999). In the light of this result, the concentration seems to be much higher and the competition for household clients seems to be much lower, especially if the third largest bank will be observed for its market shares. The distance can be measured by approximately 30 per cent (Várhegyi, 2001b).

Referring to the performance of banks the banking sector the early years the key indicator such as return on equity and return on assets provide – although the values fluctuated to some extent – a favourable trend. The loss-making year excludes two loss-making banks that had state interventions (liquidation and bail-out). It is worth to note that the profitability of

Hungarian banking sector has remained adequate since privatization – see Table 3 – despite of early developments and structural deficiencies of the changing economy (Várhegyi, 2002).

Table 3: Efficiency in Hungarian bank sector – values are pre-tax in percentage (Várhegyi, 2002 and Central Bank of Hungary)

Year	1995	1996	1997	1998	1999	2000
Return on Assets	1.5	1.7	1.3	-2.1	0.6	1.3
Return on Equity	18.2	20.6	14.3	-25.4	6.3	15.1

Further, the green-field foreign banks have been more profitable in average than those which were privatized due to their consequent early cost-efficiencies. Green-field investments successfully transferred the parent company's culture and the already created products and services (Várhegyi, 2002). The lower than expected performance of the majority of privatized banks can be regarded as a consequence of the bad legacy originating from high operating and transaction costs, inefficient branch networks, low application of IT and technology as well as low-quality clientele (Majnoni et al., 2003).

The members of Eastern Block have decided to pursue entering the EU to enjoy the advantages of free the three basic principles – free move of capital, of people and of labor as well as of services, and beyond. As Hungary has started the negotiations in 1998, the legislation had to align the regulations to get them EU-conform. The banking sector was one of the first that had been largely covered before the negotiations were opened.

Adoption of international regulations

Risk is generally influenced by different complex factors in the financial sector. Among the factors, the most significant ones are: the general economic trend, modifications in organizational structure of the bank, adopting financial decisions and directives, political and economic circumstances. The Basel Committee has identified eight categories of risks: credit risk, country risk, transfer risk, market risk, interest rate risk, liquidity risk, operational risk, legal risk and the reputation risk. To ensure higher stability, regulations were introduced and adopted. Among these the most relevant regulations have been CAD I (along with Basel I), CAD II (as an extension) and Basel II prior to the crisis of 2008.

While Basel I of 1988 has not been extensive at all, CAD II and Basel II were. Basel I primarily focused on credit risk and related risk-weighting of assets. The assets of banks had to be classified and arrange into five categories according to their credit risk. International banks have been required to hold capital at least at a level of 8 per cent of their risk-weighted assets. It was enforced by law in G-10 countries in 1992.

The Capital Adequacy Directive or CAD was elaborated by the European Union which aimed to establish minimal uniform capital requirements for both banking firms and investment firms. The first directive was issued in 1993 and then was revised in 1998. As fundamental reasons the following points can be considered:

- EU is set of countries with many different regulations. Again and again a standardized approach was required especially as the number of foreign direct investments increased rapidly following the political changes in non-EU member countries;
- lack of definitions and regulations characterized the financial sector, e.g., risks for various investments had to be defined, capital requirements needed to become uniform;
- to reach common standard for both monitoring and managing lending engagements;
- demand for common rules related to market consolidation and market risk;
- the effort to remove barriers between investment banking and commercial banking in the interest of individual approach.

CAD I has basically set fundamental conditions for capital adequacy requirement of investment and securities firms. The capital requirement for general risk was set at 8 per cent, while for specific risk at 4 per cent (Horvátová et al., 2005). CAD I also stipulated the initial capitals required to establish investment companies. The initial capital was set to be EUR 125,000 for investment firms with functions to receive, transmit and execute investors' orders for financial instruments and to manage individual portfolios of investments. The initial capital requirement was EUR 50,000 for those investment firms which were not authorized to hold clients' money and securities. All the other institutions should had an initial capital of EUR 730,000.

CAD II was adopted in 1998 with the focus on two main areas: (1) internal models of banks and (2) commodity risks. The regulation allowed financial institutions to deploy their own risk management and risk measurement models to calculate risk probabilities more accurately. The participants could evaluate their gold positions, derivatives and foreign currency positions. It modified some of the non-balance items and improved the OTC derivative regulations to target risk mitigation, etc. In comparison with CAD II, Basel II accords are recommendations on the regulations of financial sector worldwide and have a broader view. Besides, Basel II accords introduce operational risk. The intension was to create an international standard for banking regulators to control the amount of capital that banks need to reserve to defend themselves against the various types of financial and operational risks.

The Capital Adequacy Directives were replaced by Capital Requirements Directives starting in to comply with Basel II Accord throughout the EU. Table 4 provides a snapshot of international regulations and the time when they were adopted.

Table 4: Regulations and their adoption in overview (Mérő, 2002)

International Regulation	***Adoption in EU***	***Adoption in Hungary***
Basel I.	1989	1992
CAD I.	1993	-
CAD II.	1998	2001
Basel II.	Q4 of 2006	Q4 of 2006

The Hungarian authorities have broadly agreed with the main objective of the Basel II Accords, namely to strengthen the relationship between regulatory and economic capital while ensuring and maintaining the average level of capital in the financial sector. Still, the authorities (Central Bank of Hungary) have raised concerns on a few points of the directives of Basel II. Due to the greater risk-sensitivity based on Basel II, there has been a need for an additional analysis of the impact on pro-cyclicality of the banking activity. Pro-cyclicality refers to the strong correlation between the real-economic and lending cycles. Hungarian authorities believe that this existent cyclical behavior will be even strengthened. Consequently, this may lower lending possibilities and the pro-cyclicality of capital adequacy would be intensified. Besides, the Hungarian financial sector has just gone through a huge structural change that may influence transparency between possible pro-cyclical banking behavior and structural changes. The Basel II Accord with intensifies the work with internal rating rather portfolio based and not on an individual basis, whereas small economies such as the Hungarian economy, may not be sufficient to prepare risk classification, if no adequate data is available and the number of members within the portfolio remains insufficient for the calculations. Therefore, it would be essential to carry out a domestic impact analysis of the preferential treatment of SME loans (Mérô et al., 2003).

Moreover, authorities argued that the risk weighting should not rise from 0 to 20 per cent, but the EU member states should generally maintain the 0 per cent risk weight for the standardized approach to calculate risk. The IRB (Internal Rating-Base) approach has seemed to be difficult and its complexity has not allowed any simple explanation even for its application. Thus, a partial use of IRB approach might be satisfactory in practice. These are just a few of the criticisms which have been recommended to reach reasonable amendments of Basel II. It remains to be seen if any of them would have been considered to be implemented in the directive.

Conclusion

Hungary has been successful in creating a comfortable environment for foreign investments not just in production but also in service sector, such as the financial sector. The authorities could use instruments to combat the danger of freely fluctuating foreign exchange by gradually freeing the currency trade. Additionally, disinflationary measures were introduced to decrease inflation. However, the foreign ownership in a banking sector is not always welcome based on its outstanding role in the economy, the state believed that the fears related to foreign influence may not be justified largely, if the entrance is well regulated. The successful change of economy structure needed the capital inflows, which were positively affected by the activities of banks, especially those with foreign ownership.

Through the liberalization of the market green-field investments and privatization could be carried out. To protect the state interest, the privatization followed a two-step strategy. First, strategic investors could gain at least 25 per cent stake in the sold banks. During the second round of privatization, the largest domestic bank OTP was sold to no strategic investors. This created a well diversified ownership structure for the bank.

While foreign ownership accounted for about 90 per cent of assets of banks the domination of banking sector has reached a level similar to the EU average. The household debt remained low during the 1990s, but grew continuously after the century turn. The loans in foreign currency – due to their low interest rate – were attractive for households. Unfortunately, the growth became a destabilizing factor during the crisis of 2008. The performance of the banking sector has also been satisfactory, although it was not characterized by high competition and – if excluded the OTP – by high concentration.

The capital adequacy ratio remained high that enabled banks to comply with international directives – enforced by law in Hungary as well – easily. Hence the market size may complicate the adoption of directives such as Basel II in the future; constructive criticism was created by the authorities to depict problems of regulations

References

Ábel, I. and Polivka, G. (1998) A bankpiaci verseny Magyarországon a kilencvenes évek elején Közgazdasági Szemle, Volume 45., 1998. June.

Ábel, I. and Polivka, G. (1997): Final Report: A versenyképességet befolyásoló tényezõk a bankrendszerben – A bankszektor és a pénzügyi közvetítés jellemzőinek hatása a vállalati versenyképesség tényezőire - alprojekt zárótanulmánya. Budapest: Budapesti Corvinus Egyetem, Volume 18.

Balassa, Á. (1996), "Consolidation of the Hungarian Banking system and its present situation" (in Hungarian). Külgazdaság No.4. and 5.

Blejer, M. I., Skreb, M. (1999) Central Banking, Monetary Policies, and the Implications for Transition Economies (Eds.) 1999, Volume 11, pp. 250-252.

Dr. Eros, A., Vari, Cs. and Salerno J., T. (2006) Hungary's proposed insolvency law reforms – hope for the future? In: Global *Insolvency and Restructuring Yearbook 2006/07.* Euromoney Institutional Investor PLC, pp. 91-95.

Felkai, R. (2011) Hungary: A Country Hit Hard. In: Jungmann, J. and Sagemann, B. (eds.) *Financial Crisis in Eastern Europe*. Wiesbaden: Gabler Publishing House, pp. 177-256.

Horvátová, E., Makúch, M., Podoliaková O., K. (2005) Banking and financial risks management - The evolving, implication and importance of CAD I, CAD II, CAD III. Proceedings of University of Economics, Department of Banking and International Finance, pp. 285-293. http://www.opf.slu.cz/kfi/icfb/2005/proceedings/2005_p02.pdf, accessed 12 January 2014.

KSH (2009) Hungary between 1989-2009. In light of changes. Hungarian Central Statistical Office. https://www.ksh.hu/docs/hun/xftp/idoszaki/mo/mo1989_2009.pdf, accessed 10 January 2014.

Majnoni, G., Shankar, R., Várhegyi, É. (2003). *The dynamics of foreign bank ownership: Evidence from Hungary*. Washington, DC : World Bank, Financial Sector Operations and Policy Department.

Mérő, K. (2002) Hungarian Approach to Basel II. Central Bank of Hungary. http://www.isda.org/educat/ppt/Katalin-Mero-ppt.ppt, accessed 12 January 2014.

Mérô, K., Zsámboki, B., Horváth, E., Naszódi, A., Bethlendi, A., Szombati, A., dr. Czajlik, I. (2003) Studies On The Potential Impacts Of The New Basel Capital Accord. MNB Occasional Papers, pp. 9-15. https://felugyelet.mnb.hu/data/cms1309613/pszafen_hunauth.pdf, accessed 10 January 2014.

MNB (2010) Magyar háztartási hitelállomány/GDP arány éves változás (százalékpontban). http://.mnb.hu/Root/Dokumentumtar/ENMNB/Kiadvanyok/mnben_konvergenciajelentes/mnben_konvjel_20100519/3.1_fejezet_abrai_konvjel201005.xls, accessed 10 January 2014.

Molyneaux, Ph . (1999) Increasing concentration and competition in European banking: The end of anti-trust? EIB Papers, Volume 4. No. 1.

OECD (2012) OECD Factbook 2013 – Household Debt, http://www.oecd-ilibrary.org/sites/factbook-2013-en/03/03/02/index.html?itemId=/content/chapter/factbook-2013-28-en, accessed 12 January 2014.

Várhegyi, É. (2001a) Reforms and Development of the Banking Systems in Transition Economies. In: MacDonald, R. and Cross, R. (eds.) *Central Europe towards Monetary Union: Macroeconomic Underpinnings and Financial Reputation*, pp 89-120.

Várhegyi, É. (2001b) Foreign ownership in Hungarian bank system (in Hungarian). Közgazdasági Szemle, Volume 48, 2001. July-August, pp. 581-598.

Várhegyi, É. (2002) Hungary's banking sector: achievements and challenges, EIB Papers, Vol. 7, Issue 1, pp. 75-89.

Wachtel, P. (1997) The role of foreign banks in Central European transition economies (in Hungarian). Közgazdasági Szemle, Volume 44., 1997. June, pp. 13-30.