Deposit Insurance, Banking Reform, and Financial Sector Development in Several Nations of Southeastern Europe

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Deposit insurance has spread to many sections of the world. In the newly formed nations of the former Yugoslavia, this has occurred under conditions of post-conflict reconstruction, hyperinflation, and several different governmental structures. Three cases are examined; Bosnia and Herzegovina, Croatia, and Serbia and Montenegro. They all have developed deposit insurance programs. The implementation process was compared to "best practice" recommendations. It is found that the situation in Bosnia and Herzegovina was difficult due to the fractured nature of the Dayton Accord government structure on the one hand but easier to the strong international presence supporting required actions. In the case of Croatia, a unified state emerged from the war, but it was somewhat isolated. Its bank restructuring was costly, and a fragmented deposit insurance program was introduced in the middle of a banking crisis. In the case of Serbia and Montenegro, the bank restructuring process is still underway, and implementation of a functioning deposit insurance program properly awaits its completion.

I. INTRODUCTION

In recent years, the process of transition in Southeastern Europe has received greater attention. There are several reasons for this:

- The area has lagged behind other parts of Central and Eastern Europe in making progress toward higher standards of living.
- The area has been subject to numerous wars, and there is concern that the region is a source of potential instability in Europe.

One source of difficulty is the underdeveloped financial and banking systems in the region. To this end, a number of organizations (European, United States, and international) have provided support for financial sector development. Within the context of financial sector development there has been a great deal of interest in the adoption and implementation of deposit insurance programs. The purpose of this paper is to examine the development and implementation of deposit insurance in three nations in Southeastern Europe; Bosnia and Herzegovina, Croatia, and Serbia and Montenegro. In all three cases, the deposit insurance programs are examined in the context of post conflict concerns, establishment of sovereign nations, achieving monetary stability, and reforming, rehabilitation, and restructuring of the banking system.

This paper contains the following sections:

- A brief review of the evidence on the process of transition in the former socialist economies of Central and Eastern Europe.
- A discussion of the particular situation in Southeastern Europe that has resulted in regional initiatives on the part of the European Union and the World Bank.
- Consideration of the special role of the European Union in the design of financial systems in Southeastern Europe.
- A review of the situation in banking reform in these nations.
- A discussion of the guiding principles (best practices) for successful implementation of deposit insurance programs as well as an evaluation of the European deposit insurance program.
- A section for each nation considered.
- A summary and conclusion.

II. A DECADE OF TRANSITION

In the past several years, there have been a number of articles, books, and papers reviewing the experience of the past decade since the fall of the Soviet Union, the decline of the single party socialist state, and the emergence of market oriented economies in the nations of Central Europe, Eastern Europe, and Eurasia. For example, Fischer and Sahay (2000) examine the output performance of 25 nations classified as transitional and attempt to determine those factors that explain the differential macroeconomic performance of these nations for the decade of the 1990s. They conclude that stabilization and reform are both necessary to achieve sustained economic growth, and that more and faster reform is better than less and slower reform. Wyplosz (2000) reached a similar conclusion indicating that the first priority is stabilization and control of inflation followed by rapid and substantial structural reform. He also found that a nation's exchange rate regime, a major concern in the early days of transition, was secondary to adherence to a strict monetary policy regime. In a rigorous econometric model, Berg, Borenstein, Sahay, and Zettelmeyer (1999) conclude that the early dramatic decline in output is attributable to initial conditions, but that initial conditions had a surprisingly minor impact on subsequent performance. However, they found that structural reforms were the most successful in explaining cross-sectional differences in performance and the timing of recovery from the initial decline in output. In an analysis of institutional indicators (many reflecting the results of structural reform), Weder (2001) conducts statistical tests of the indicators of institutional performance (many gathered from surveys of firms and other experts) that measure outcomes such as the rule of law, government effectiveness, graft and corruption, regulatory burden, and accountability. She finds that there is great variation among the transition nations, some having achieved much the same performance of industrial nations, and that those transition economies that are in the later stages of accession to the European Union are clearly distinguishable from the other transition economies. That is, a clear, externally determined goal that has political support seems to have a very favorable result when measuring institutional performance. The World Bank (2002) has produced a substantial document entitled *Transition, The First Ten Years: Analysis and Lessons for Eastern Europe and the Former Soviet Union*. This document is a comprehensive review of the evidence of the past decade. They conclude that market oriented policy reforms have played a significant role in promoting subsequent growth. This implies that significant restructuring and liquidation of old state owned enterprises must occur at the same time that new small and medium sized enterprises are encourage to grow. This combination, referred to as "discipline" and "encouragement" frame their determination of the reform agenda going forward.[1]

In most of these discussions, a well functioning financial system is considered an important part of the structural reforms and institutional development required for sustained economic growth. That is, efficient resource allocation, efficient restructuring, encouragement and financing of new enterprises, and good governance and accountability all require such a system. Also, as a practical matter, the financial system and the banking system are much the same in these countries as the development of money and capital markets are likely to be slower than the development of a banking system.

Transition in Southeastern Europe

It is generally agreed that the nations of Southeastern Europe have lagged behind other transition economies, especially those of Central Europe.[2] Most of the conditions, especially those pertaining to structural reform, have been slow in developing in the region, and this has been exacerbated by ethnic tensions and war. Because of these factors, the World Bank and the European Union have established a joint program designed to bring stability and prosperity to this area. The strategy for accomplishing this is contained in the World Bank report entitled *The Road to Stability and Prosperity in Southeastern Europe* (2000). The results of their first year of operation are given in their *Report on Activities of the European Commission/World Bank Office for South East Europe*, Volumes 1 and 2 (2001). The financial sector continues to be underdeveloped in

[1] See also Havrylyshyn and Nsouli (2002).

[2] For purposes of this section, Southeastern Europe is comprised of Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Federal Republic of Yugoslavia (Serbia and Montenegro), the former Yugoslav Republic of Macedonia, and Romania.

these areas resulting in a low level of financial intermediation and little support from the financial system for the growth of new small and medium sized firms so crucial to sustained economic improvement.

Hence, there is still room for useful policy analysis in the area of banking reform to enhance the process of financial sector development necessary to support the goals of stability and prosperity in this region.

III. THE ROLE OF THE EUROPEAN UNION IN DESIGNING BANKING REFORM

Since most of the countries of this region are or will become candidates for accession to the European Union (EU), it is necessary to keep EU financial and banking requirements in mind while designing reform strategies.[3] For purposes of this project, these requirements may be summarized as follows:

- All EU banks must meet the Basle Committee capital requirements.
- All member nations in the EU must allow free entry from banks in other member nations ("single passport"), and those banks that enter from another member nation are subject to the home country supervision and regulation ("mutual recognition"). Thus, at some point, these nations must have banking systems that are ready to meet competition from foreign banks.
- All member nations must have a "deposit protection" program with protection levels set at 20,000 euros or higher. Other aspects of the deposit protection program are left to the individual nations to work out.

Thus, banking reform and deposit insurance recommendations will be consistent with the required institutional arrangements for the EU.

IV. BANKING REFORM IN SEVERAL NATIONS OF SOUTHEASTERN EUROPE

For purposes of this project, it was decided to focus on three nations: Bosnia and Herzegovina, Croatia, and the Federal Republic of Yugoslavia. Each of these nations is in a different stage of financial development, and all of them involve U.S. policy interests.[4] All of these nations faced not only the challenges of post-communist transition, but they also had to deal with serious post-conflict situations.

In his recent review of banking reform in South East European transitional economies, Sevic (2002) indicates that the region is still plagued by large amounts of non-performing loans, non-competitive markets, high intermediation spreads,

[3] For a more thorough discussion of financial and banking developments in the European Union, see Murphy (2000).

[4] A more detailed discussion of the banking systems of each country can be found below.

connected lending to borrowers who are not credit worthy, and lack of adequate supervision. In her review of banking reform in Bosnia and Herzegovina (BiH), Tesche (2000) points out that reform is hampered by the governmental structure resulting from the Dayton Peace Accords. That is, BiH is a nation with two internal "entities," the Federation of Bosnia and Herzegovina (Bosniac and Croat) and the Republika Srpska, with a weak national (state) government. Nonetheless, the process of privatization and restructuring is ongoing, and many banks are small, undercapitalized, and not playing a meaningful role in financial intermediation in the nation and its parts. Jovacevic (2000) has shown that Croatian banks have faced similar difficulties; general transition problems made more difficult due to recovery from the Balkan War. Banks have been privatized, the role of state ownership diminished, some banks have been closed, and a limited deposit insurance scheme has been implemented. Since the Federal Republic of Yugoslavia (FRY) had been under sanctions since the early 1990s and at war during most of that time, it has made the least progress in reform. The combination of war, socialism, and corruption made reform virtually non-existent. In the wake of the demise of the Milosevic regime, there is now substantial reform activity underway. The FRY has been readmitted to major international organizations, and the major international, U.S. and European groups are present in the country attempting to spur reform. Sevic and Sevic (2000) note that a combination of rehabilitation/restructuring/privatization efforts is required to deliver the reform that is necessary to result in a financial sector that supports sustained prosperity in this nation.

It should be noted that one characteristic of all these nations was a unique Yugoslav institution, the payments bureau. In all these nations, a governmental monopoly on payments existed that made the banks' role in payments, and to some extent in intermediation, trivial. All three nations have reformed their payments bureaus.[5]

V. GUIDING PRINCIPLES FOR THE IMPLEMENTATION OF DEPOSIT INSURANCE

General Principles

The major focus of this study is the implementation of deposit insurance as part of the process of banking and financial sector reform in each of these nations. Prior to discussing the situation in each nation, some general principles for the implementation of successful deposit insurance are considered.

In the past several decades, deposit insurance has spread from the United States to over 70 countries. In the context of concern with the "international financial architecture" that arose following the 1997 Asian financial crisis, attention has been focused on the best way to implement such programs, and,

[5] See Cooke, Murphy, Silverberg *et al.* (1997) and Murphy, Ott, *et al.* (1998).

if they are not well designed, how they can be reformed. This concern has moved on several levels; partly on describing existing systems and developing "best practices," and partly on empirical studies of the impact of deposit insurance design features on the success of a deposit insurance program.

There appear to be several major factors behind the spread of deposit insurance programs. First, in 1994 the European Union (EU) implemented a directive requiring all member nations to have a deposit protection program, leaving the nations a great deal of latitude on how to design such a program.[6] There were 15 nations in the EU at the time, now expanded to 25. Moreover, there are a number of other nations in Central and Eastern Europe that will accede to the EU in the next several years, and they are designing and implementing deposit insurance programs in anticipation of acceding to the EU. Second, many nations view deposit insurance as a way to effect a transition away from a general guarantee that was put in place at the height of a financial crisis. In many nations a general implicit understanding existed regarding the authorities' willingness to provide official (taxpayer) support in the event of a banking crisis to avoid imposing losses on depositors and other bank creditors. This implicit guarantee was made explicit by many governments to see them through the crisis. When the crisis subsided, many nations decided to replace the general guarantee with a limited, bank funded deposit insurance program.

After the Savings and Loan crisis and the banking problems in the United States of the 1980s and early 1990s, it was clear that even a nation with many years experience in managing deposit insurance could encounter problems.[7] In the wake of financial crises associated with Southeast Asia in 1997 and Russia in 1998, there were numerous attempts to determine ways to avoid crises and, if a crisis did occur, ways to resolve them efficiently. One organization established to develop policy recommendations was the Financial Stability Forum (FSF). As part of its wide ranging program, the FSF established a Working Group on Deposit Insurance which reported in 2001 regarding the development of effective deposit insurance systems.[8] This Working Group consisted of officials from many nations as well as representatives from international financial institutions (the World Bank, the International Monetary Fund, and the Bank for International Settlements).[9] The *Guidance* report establishes an approach to developing and continually assessing the effectiveness of a deposit insurance system. This starts with a clear development of the public policy objectives followed by a situational analysis. A validation phase assures the consistency between the public policy objectives and the banking situation. This is followed

[6] For a discussion of banking and financial developments in the EU, see Murphy (2000).
[7] This is reviewed in detail in FDIC (1998a, 1998b, and 1998c).
[8] See Financial Stability Forum (2001).
[9] One outcome of that process was the formation of the International Association of Deposit Insurers (IADI) in 2002, dedicated to continued co-operation and sharing of experiences. The IADI has a Secretariat at the Bank of International Settlements, Basle, Switzerland along with other international banking groups such as the Basle Committee on Bank Supervision and the Committee of Payment and Settlement Systems.

by a strategic action plan and an implementation and acceptance phase. The *Guidance* may be summarized as follows:

- Explicit, limited deposit insurance is preferable to implicit protection.
- Deposit insurance must be properly designed, well implemented, and understood by the public.
- Deposit insurance must be supported by effective prudential supervision, sound accounting and disclosure regimes, and enforcement of relevant laws.
- Deposit insurance cannot be expected to deal with a systemic crisis by itself.
- Deposit insurance systems must recognize the potential for *moral hazard*, and the design features and supervisory and closure practices must be designed to mitigate moral hazard.
- The public policy objectives for deposit insurance must be clear, realistic, and well understood.
- Situational analysis must be done in a way that deposit insurance systems are not introduced when the conditions for success are not present.
- Relevant laws must exist, and enforcement procedures must be consistent.
- Prudential regulation and supervision must supply regulatory discipline with well capitalized banks that follow sound risk management, governance, and disclosure procedures.
- Transition from a blanket guarantee must be based upon the same situational process as a country moving from implicit protection to a deposit insurance system. Moreover, it should be accomplished a rapidly as circumstances permit.

For the past several years, the International Monetary Fund (IMF) has produced a number of studies on the international spread of deposit insurance programs. These studies have focused on "best practices." While the IMF has traditionally been concerned with macroeconomic phenomena, it has recognized the need for a sound, well supervised banking system if a nation is to have strong macroeconomic performance. Thus, it has conducted these studies to serve as the basis for the development of effective deposit insurance programs in its member nations.[10] A summary of "good practices" include the following:

- A deposit insurance system should have realistic objectives as well as good legal, judicial, accounting, financial, and political infrastructure.
- Moral hazard should be mitigated by having a system of prompt remedial actions, resolve failed institutions prompt, and provide low coverage.
- Adverse selection should be dealt with by imposing mandatory membership and implementing risk adjusted premiums when feasible.

[10] These studies go back to Kyei (1995) and include Garcia (1996), Garcia (1999), Garcia (2000), culminating in Garcia (2001).

- Agency problems should be handled by creating an independent but accountable deposit insurance agency and make sure that there are close relations with the bank supervisor and the lender of last resort.
- Financial integrity and credibility can be demonstrated by starting the deposit insurance agency when the banking system is solvent, by assuring the adequate funding sources are available, by wisely investing funds generated by premiums, and by quickly paying out, or transferring, insured deposits in failed financial institutions.

These conclusions are broadly consistent with the recommendations contained in the Financial Stability Forum's *Guidance* document.

Another set of studies were undertaken by the Word Bank. Starting in the late 1980s, the Word Bank had determined that a nation's financial development was conducive to sustained economic growth. In that way, a nation's financial system could be considered part of a nation's infrastructure, and the World Bank devised programs to support the development of the financial sector. As part of its research program regarding financial sector enhancement, the World Bank conducted a number of empirical studies regarding the effect of deposit insurance on financial sector stability and growth. That is, rather than duplicated the work of the IMF and the Financial Stability Forum, the Bank utilized econometric techniques to investigate the impact of deposit insurance design features on the performance of the deposit insurance system.

The results of these studies are generally consistent with the *Guidance* and good practices recommendations. That is, researchers attempted to link deposit insurance program characteristics to success in two areas; enhancing financial development and aiding financial stability.[11] In the first case, all countries that adopted deposit insurance systems from 1960 to 1997 were examined. Measures of financial development were related to deposit insurance design features as well as the usual macroeconomic indicators. It was found that when design features approximate the recommendations that deposit insurance has a positive effect on financial development, but, deposit insurance alone, without the accompanying design features, had a negative effect on financial development. In the second case, a banking crisis event was related to the existence of deposit insurance (including design features), and it was found that a poorly designed deposit insurance program actually increases the likelihood of a crisis. Again, well designed programs fared better. It should be indicated that these studies are not without problems. First, it is assumed that a poorly designed deposit insurance system does not mitigate moral hazard problems and leads to excessively risky lending and investing by banks. While this concern with moral hazard is certainly correct, it is not always clear that absence of a formal deposit insurance system connotes an absence of moral hazard. Indeed, it can be argued that implicit, open ended, non-transparent deposit guarantee arrangements have

[11] See Cull, Senbet, and Sorge (2004), Demirguc-Kunt and Detragiache (2000), and Demirguc-Kunt and Kane (2002).

more moral hazard than a limited, bank financed, explicit, transparent deposit insurance program. For example, in a recent study, Gropp and Vesala (2001) find that the introduction of deposit insurance programs in the European Union in 1994 led to a reduction in moral hazard as they replaced implicit, non-transparent, unlimited guarantees with limited exposures for member governments. Notwithstanding any measurement problems, all the empirical studies are consistent with the notion that deposit insurance programs require careful design and implementation considerations. The fact that the World Bank studies find variation in design features that are associated with performance indicates that many countries introduced such programs without the necessary preconditions.

The International Association of Deposit Insurers (IADI) recently released a summary of responses regarding design features of deposit insurance systems (IADI 2004). This summary includes responses from 13 different deposit insurance agencies representing a diverse set of economic and financial circumstances, design features, maturity of program, etc. The results of the questions posed to these countries indicate that there is a great deal of variation in the design features, many of which deviate from best, or even good, practices.

Deposit Insurance in the European Context

As indicated earlier, explicit deposit insurance became a requirement in the European Union only in 1995.[12] Since the nations of South East Europe in general, and Bosnia and Herzegovina, Croatia, and Serbia and Montenegro in particular aspire to accede to the European Union, it is necessary to understand the EU rules on deposit insurance. First, deposit insurance in the EU is a responsibility of each member. Thus, the EU as presently constituted has at least 25 deposit insurance programs. This represents a compromise between the desire to have a single, competitive banking and financial market in the EU and the desire to avoid over centralization at the supra-national level. Second, there is great latitude on how each member is to accomplish this. The Directive sets a coverage floor of 20,000 euro per depositor. Each member decides whether the coverage is more generous, how the deposit insurance program is funded, whether it is privately or publicly owned and operated, and what the governance structure is. The only other restrictions are an upper bound of 3 months for the length of time that payment can be made to an eligible depositor following the failure of a financial institution and a requirement that banks not be allowed to use deposit insurance coverage as a marketing tool. The 3 month lag seems overly long, and the no advertising rule seems to be at odds with the notion that all participants have a clear understanding of the risks involved in doing business with a bank as a depositor.

[12] The Deposit Guarantee Directive was dated 1994 to be implemented in 1995. See European Commission (1994).

There have been a number of reviews of the EU deposit protection regime. The European Commission commissioned a study of European deposit insurance programs (including all 15 EU member states as well as Iceland, Lichtenstein, and Norway). The intent was to determine whether the programs enacted by the legislatures complied with the Deposit Guarantee Directive (DGD).[13] The study found that the schemes were largely in compliance with the DGD, in some cases addressed in the deposit insurance legislation and in some cases addressed in other legislation. However, the authors (Maxwell Stamp PLC) indicated that some of the provisions of the DGD did not require the member states to adopt best practices. The *Study* states a preference for prefunded, *ex ante*, funding arrangements and notes that this is not required by the DGD. Several member states have *ex post* funding of their programs. The *Study* also criticizes the DGD position on the speed of payment to depositors in the event of failure. A final point is the existence of a "too big to fail" problem in the EU. That is, in a single market in the EU, banks are not limited by the size of their domestic market. For example, there are large banks in The Netherlands, with offices throughout the EU (as well as offices in the transition nations of Central and Eastern Europe). However, The Netherlands is a relatively small country. If the member state governments are explicitly or implicitly backing up their deposit insurance programs, then the Dutch taxpayer has a relatively large contingent liability. Moreover, the *Study* indicates that there is doubt that losses associated with the potential failure of the largest bank in a member state could be covered by insurance fund resources no matter how the losses are funded (*ex ante* or *ex post*). This is the classic "too big to fail" problem. Of course, there is a fundamental question regarding DGD placing the deposit insurance program at the member state level. A highly concentrated banking system in the context of a small country is much less concentrated in relation to the entire EU. That is, pooling of risks over a large base is generally considered the best way to manage insurance or guarantees. From this perspective, it would seem sensible to place the deposit insurance program at the EU level.[14] This would have the maximum diversification of risk and would be consistent with the notion of a single integrated financial market. However, the political climate in the EU would have to change for this to be seriously considered.

In another paper, Hall (2002) goes through a similar exercise and scores the EU deposit insurance programs on a scale of 1 to 5 on the best practices as articulated by Garcia (2001). He ranks each program on each element as well as a composite score. In summary, he finds that the average composite score is 3.64 with a low score of 3.5 and a high score of 4.0. By comparison, the Federal Deposit Insurance Corporation (FDIC) has a rank of 4.57. It should be noted that Hall also criticizes the EU schemes for not being bound by a regime of prompt corrective action. Some EU member states are reviewing their deposit

[13] See European Commission (1999).

[14] For a recent review of the integration of banking and financial markets in the EU, see Dermine (2003).

insurance programs with a view to strengthening them.[15] In addition, the European Forum of Deposit Insurers was recently formed to exchange information and experience of all European deposit insurers, in the EU or outside.

In summary, the EU deposit insurance regime as articulated in the DGD does not require a member state (or a state aspiring to membership) to adopt all best practices. Some of the requirements are indeed best practices, but some are not. That is, using the Hall scoring approach, based upon existing programs, a country could be in compliance with DGD and have a composite score of 3.5 out of a possible 5. Nonetheless, a nation in Central or Eastern Europe could adopt best practices and satisfy most of the DGD requirements. The only requirement that seems problematic is that regarding communication with the public. That is, best practices are generally more rigorous than those required by DGD. Since it is likely more difficult to change a newly implemented deposit insurance program after it is in place, it makes sense to start with a goal of adopting best practices confident that they also meet DGD standards.

VI. BOSNIA AND HERZEGOVINA

The Founding of the Nation of Bosnia and Herzegovina

The discussion of the monetary situation in BiH begins with a brief description of the unique governmental arrangements that resulted from the Dayton Peace Accords in late 1995. Bosnia and Herzegovina was one of the republics of the former Yugoslavia. In the early 1990s some of the other republics, notably Croatia and Slovenia, declared independence and were recognized by the international community. Shortly thereafter, BiH held a referendum on independence that resulted in a strong majority of those voting being in favor of independence. However, Bosnian Serbs boycotted the referendum. BiH subsequently declared itself independent, and, almost immediately (in 1992), war broke out. It should be noted that BiH was always the most ethnically diverse republic within Yugoslavia with a large proportion of Bosnian Muslims (hereafter referred to as "Bosniacs,") a large proportion of Bosnian Serbs, and a substantial minority of Bosnian Croats. These breakdowns closely reflect religious affiliations; Bosniacs being Muslim, Bosnian Serbs being Orthodox Christian, and Bosnian Croats being Roman Catholic.

The ensuing war was a confusing combination of external aggression and civil war with the bordering states, Croatia and Yugoslavia (comprised of the remaining Yugoslav republics, Serbia and Montenegro) supplying Bosnian Croats and Bosnian Serbs, respectively with support. For a time, that meant that Bosnian Croats were engaged in combat with both Bosniacs and Bosnian Serbs while Bosnian Serbs were battling Bosniacs and Bosnian Croats, and the

[15] See Garcia and Prast (2002, 2003a and 2003b) for reviews conducted by the Dutch central bank (De Nederlandsche Bank).

Bosniacs, with no outside sponsor, were fighting with both Bosnian Croats and Bosnian Serbs. In 1994, an uneasy alliance was formed, with international backing, between the Bosnian Croats and Bosniacs, and the rest of the war was fought between this alliance and the Bosnian Serbs.

After a devastating war in which the term "ethnic cleansing" came to be distressingly commonplace, Western military forces intervened, and all parties to the war, led by the Presidents of Yugoslavia, Croatia, and Bosnia and Herzegovina, met at Wright Air Force Base in Dayton, Ohio (USA) to work out a cease fire and peace arrangements.[16] The result of these meetings is the Dayton Peace Accord which laid out the structure of the government of BiH in late 1995. While Bosnia and Herzegovina is to remain a nation with internationally recognized borders, the internal government structure reflects an uneasy truce among factions that are deeply suspicious of each other. There are two components of the nation of BiH that are known as "entities" and are best viewed as "statelets." The entities reflect the groups that were at war with each other after the Bosniac-Croat alliance was formed. One is known as the Federation of Bosnia and Herzegovina and is composed of those areas controlled by the Bosniac-Croat alliance at the time of the Dayton Peace Accords (DPA). The other entity is the Republika Srpska (RS) and is that area controlled by the Bosnian Serbs at the time of the DPA. Within the Federation, things are a bit more complex as there are "cantons" that stand between the entity and the municipal governments. These cantons reflect the ethnic diversity within the Federation and, in this way, is different than the RS. At the national level there is the State government with is concerned primarily with international affairs and has its own complex structure in which offices are held by a group of individuals reflecting the various internal ethnic groups. There is, however, one very important State level institution. That is the Central Bank of Bosnia and Herzegovina (CBBH).[17]

Monetary Conditions in Bosnia and Herzegovina

The unusual circumstances of BiH from its inception in 1992 until the DPA gave rise to monetary chaos. There were five currencies in use in the nation; the Bosnian Dinar issued by the National Bank of Bosnia and Herzegovina, the Bosnian Serb Dinar issued by the National Bank of the Republic Srpska, the Yugoslav Dinar issued by the National Bank of Yugoslavia, the Croatian Kuna issued by the National Bank of Croatia, and the Deutschmark (DM) issued by the German Bundesbank. The latter currency had circulated in that entire region for many years as a sound currency in which citizens had great confidence. In essence this meant that there were five monetary policies extant in one war torn

[16] For a first hand view of the peace process, see Holbrook (1998).

[17] For a view that the Bosnians of all ethnic persuasions can work out their differences among themselves if only left alone by outside parties (notably Serbia and Croatia), see Malcolm (1996). For a somewhat less optimistic view see Bose (2002).

nation of somewhat more than 4 million citizens. Moreover, given the levels of hostility and distrust among the former combatants, it was not clear exactly how to proceed with developing monetary discipline. Indeed, it wasn't even clear that the nation would have a single central bank but rather two; one for the Federation and one for the RS. However, for a number of reasons the framers of DPA insisted on a single monetary policy for the nation.

There were several options that might be considered along a continuum of monetary policies reflecting how much discretion was available in conducting monetary policy. One choice was to create a central bank with the usual powers assigned to central banks with substantial discretion in formulating and executing monetary policy. That is, such a central bank could create money through a number of means including direct lending to commercial banks (lender of last resort function). It was difficult under the circumstances to envisage such a central bank exercising judgment responsibly. On the one hand there was little experience in former Socialist countries in conducting monetary policy and on the other hand there was little confidence that the formerly warring factions could agree on how to proceed. Thus, the option for a central bank with discretion in conducting monetary policy was not pursued.

Another approach to monetary policy under such a condition is the adoption of another country's currency. Since this has occurred in Latin America using the U. S. dollar, this process is sometimes known as "dollarization" although the currency adopted need not be the dollar. In this way, a nation has no monetary policy, essentially importing policy formulated elsewhere. The other nation's currency circulates, it is considered "legal tender," and the assets and liabilities of the banking system are in this currency. Under such circumstances, the central bank is usually involved in running the payment systems and supervising banks. This is generally considered an admission that the nation cannot conduct its own policy, and, if it did, its citizens would have little or no confidence in such a policy.

A third option is the adoption of a national currency that is rigidly tied to another currency, maintaining full convertibility with that other currency by having all central bank liabilities (in the domestic currency) being set equal (at some fixed exchange rate) to central bank assets in the chosen foreign currency. That is, the central bank's ability to create money is exactly limited by the amount of foreign currency assets it holds. This is a monetary policy that severely restricts central bank discretion. Note that the central bank cannot extend credit to commercial banks under this arrangement nor can it underwrite the government deficits by investing in domestic government securities. What are the benefits to such an arrangement? The nation gets to have its own currency with the symbolism associated with that. In the case of BiH, it was considered important for the fledgling state to be able to point to something that is associated with a true nation-state. There is also a financial benefit. Since central banks, even under this type of arrangement, hold earning assets and they issue liabilities with little or no interest cost, they receive net income from their activities. This is known as "seignorage," and a nation that chooses another nation's currency gives up this net revenue.[18] An arrangement whereby a nation has its own currency but ties it to another nation's currency is known as a "currency board."

In Dayton, it was decided to place the central bank at the State level and designate it as a currency board.[19] The CBBH was to issue the currency of the nation to be known as the "convertible marka" or KM to be tied directly to the currency accepted for years in the region, the Deutschmark, or DM. To make the whole arrangement easy to understand, the ratio was fixed at 1:1. That is, one KM is equal to one DM. [20]The governance structure for the CBBH is also unusual and reflects the situation in BiH. There is a governing board on which there will be one Bosniac, one Bosnian Croat, and one Bosnian Serb. However, the governing board and the CBBH are run by a single person known as the Governor. In an odd arrangement, the Governor is chosen by the International Monetary Fund (IMF) and *cannot* be a citizen of BiH nor any bordering state (Croatia or Serbia). The management of the CBBH is left to the Governor and three Vice Governors who are, as one would expect, representative of the three ethnic groups in BiH.[21] The currency board arrangement was to last for six years.

The new CBBH started operations of August 11, 1997. It started as an interbank currency for settlement among banks of payments made primarily by business and governmental units in BiH. That is, there were no notes and coins at the outset of operations. These interbank payments were processed through an institution unique to the former Yugoslavia where it was known as the SDK (*Sluzba drustvenog knijgovodsiva*). There were three versions within BiH known as the ZPP (*Zavod za Platni Promet*) in Bosniac areas, the ZAP (*Zavod za Platni Promet*) in Bosnian Croat areas, and the SPP (*Sluzba za platni promet*) in Bosnian Serb areas. These "payments bureaus" were monopoly institutions through which all business and financial transactions *had* to be cleared and settled. Thus, a business paying a vendor for supplies was required to go to an office of the payments bureau with a payment order. The payment bureau checked the amount in the business's current account and then debited the bank account of the business and credited the bank account of the vendor. Note that even though both parties hold bank accounts, the banks are not involved directly in the transaction. The banks are notified at the end of the day when all incoming and outgoing payments for a customer, as well as for the

[18] For example, it is estimated that over 60% of all U. S. currency circulates outside the United States. Since the U. S. Federal Reserve System does not pay interest on these pieces of paper, and holds government securities in its portfolio, the net interest margin accrues largely to the U. S. government.

[19] According to Holbrook (1998), this idea was set forth at Dayton by then Deputy Assistant Secretary of the Treasury David Lipton.

[20] When the Euro replaced the DM as the currency of Germany (and the rest of "Euroland"), the KM was pegged to the Euro at a ratio of 1 KM equals.51129 Euro which reflects the ratio of the now defunct DM to the Euro.

[21] For a review of the difficulties in setting up the CBBH, see Coats (2004).

banks, are netted. The net amount is then settled. This makes the banks marginal players in the payments process and is not consistent with usual practice in market economies in which the banks and the central bank interact in managing the payments process.[22] This was made all the more difficult and complex because the payments bureaus settled in other currencies besides the domestic currency (the KM). That is, payment and settlement occurred in DM, Kuna, and Yugoslav dinars as well. Added to this is the additional complexity of the ZPP, ZAP, and SPP clearing amongst each other. Thus, a payment from, say, Banja Luka in the RS to a vendor in the Federation had to go from the payer to the SDK (and deducted from the payer's bank account), from the SDK to the ZPP (for the Bosniac areas) and credited to the vendor's bank account, and from the ZPP to the vendor. All of this was costly, cumbersome, and time consuming.

The CBBH began issuing notes in June, 1998 and coins in December 1998. Hence, a full range of monetary instruments were now available to citizens and businesses from that point on.[23] In October, 1999, the payments bureaus ceased operations in other currencies, and all interbank payments were in KM.[24] Hence, BiH citizens and business firms were able to conduct all their business in domestic currency, the KM. However, the strict convertibility feature of the currency board arrangement meant that they could, at any time with little or no transactions cost, transfer out of KM into DM. Hence, the use of the domestic currency was completely voluntary. Another major step in the process of transition was the elimination of the payments bureaus. This step was long recommended by the World Bank, the International Monetary Fund (IMF), and the United States Agency for International Development (USAID).[25] Since the payments bureaus had many public finance functions such as tax collection, it was a difficult and complex matter to assign their functions to other agencies. Nonetheless, all payments functions of the payments bureaus were transferred to the banks and the CBBH which established two systems, a Real Time Gross Settlement System (RTGS) for large value transactions and a giro retail system in which settlement occurs three times a day. Banks were required to show that they could handle all aspects of the process and were then granted a license to

[22] Numerous missions to BiH recommended closing the payments bureaus and moving their payments functions to the banks and the central bank. This was accomplished in 2001. See for example, Murphy, Ott, *et al.*, (1998).

[23] Issuing of the currency notes was delayed in what seems to be typical Bosnian fashion. Currency notes were designed that were identical except for a picture of an individual who was considered to be historically distinguished within each of the nationalities. These distinguished individuals were not supposed to be controversial, and all parties were to agree on those designated. None of the groups could reach agreement delaying the issuing of the new notes. The Office of High Representative (OHR) intervened, unilaterally chose those individuals whose images would appear on the currency, and went ahead with the process.

[24] See Central Bank of Bosnia and Herzegovina, *Annual Report*, 1999.

[25] See Cooke, Murphy, Silverberg, *et al.* (1997), and Murphy, Ott, *et al.* (1998). Dismantling of the payments bureaus was adopted as a high priority by the Peace Implementation Council (Office of High Representative, 1998).

engage in payments operations for their customers. These systems were operational on January 5, 2001.[26]

Thus, in a little more than 3 years, a central bank and a strong currency were established and a number of impediments to monetary, financial, and payment system efficiency were removed. There were a few early difficulties in which the "cover" was broken due to unforeseen leakages attributable to financial transactions between the old National Bank of Bosnia and Herzegovina and the payments bureaus.[27] However, once those problems were resolved the currency board arrangement has been strictly observed by the CBBH, and, indeed, the cover now exceeds 100%. The KM was well established in the first few years of its existence and was accepted in all areas of BiH, even those that had been using the Yugoslav Dinar or the Croatian Kuna. In addition, the CBBH arranged for a number of foreign banks to exchange KM for their local currency so that Bosnian citizens traveling abroad could easily obtain local currency (mostly Euro).

In April 2003, the CBBH held a conference on "The Monetary Policy Role of Currency Boards: History and Practice." In his contribution (Nicholl, 2004), "Five Years of the CBBH," Governor Peter Nicholl summarized the results as follows:

- In five years, the total KM liabilities (currency and bank reserves) increased from 236.5 million KM to 2,228.5 million KM, reflecting acceptance of the KM in all parts of BiH.
- There were many reasons for this including stability in value, the issuance of notes and coins, and the exclusive use of KM in the payment and settlement of interbank payments.
- The introduction of Euro notes and coins brought forth a substantial amount of DM notes that needed to be converted. Most of it was converted to KM notes or KM bank deposits in BiH banks.
- The plunge in the value of the Yugoslav dinar made the KM more attractive to citizens of the RS. Apparently ethnic solidarity can be too expensive.
- The CBBH currency board arrangement has achieved low and stable inflation and stability in foreign exchange values with neighboring countries which have also linked their currencies in various ways to the Euro.

The country has also achieved substantial real economic growth during this time period. However, it should be noted that, while low inflation and financial stability are conducive to sustained economic growth, they do not guarantee it. BiH still has many obstacles to achieving sustainable economic performance beyond the monetary success it has enjoyed.[28]

[26] See Central Bank of Bosnia and Herzegovina, *Annual Report*, 2002.
[27] See Coats (2004).
[28] It should also be noted that BiH has decided to extend the currency board arrangement, but they will end the requirement that the Governor not be a citizen of BiH or a neighboring country. This time the rationale is that it has worked well on the one hand and provides a logical basis for meeting the conditions for joining the European Union.

Banking in Bosnia and Herzegovina

In pre-war Yugoslavia, banks were primarily linked to business enterprises. These banks served primarily as conduits for directed credits from ministries and from the central bank. Hence, these banks were not involved in any serious credit decisions regarding their customers. Recall also that throughout all of Yugoslavia the payments functions normally handled by banks were the monopoly province of the payments bureau, the SDK in the former Yugoslavia. As a consequence, these banks were owned by the state although in the former Yugoslavia this was called a "socially owned enterprise." As a practical matter, the banks were socially owned enterprises attached to socially owned business. Hence the banking system was made up of a large number of small banks whose assets were advances to business firms (state owned). The advances were not made on the basis of commercial criteria and would have been suspect under usual circumstances. However, in BiH, the situation was even worse because most of the assets of the firms were destroyed in the war.

There were other considerations that were unique to the former Yugoslavia that had a detrimental impact on the banks. One was the practice of having citizens deposit their foreign currency earnings with the banks. The banks were then obliged to deposit the foreign currency with the Bank of Yugoslavia in Belgrade. Hence, the local banks had foreign currency deposits payable to their customers and foreign currency receivables from the Bank of Yugoslavia. However, when BiH declared its independence and the war started, the Bank of Yugoslavia refused to honor the claims, and the banks froze the deposits of their customers, which were effectively lost. As a consequence, the balance sheets of the banks contained many assets, the foreign currency receivables and credits to firms whose assets were destroyed, and liabilities, the frozen foreign currency deposits that had little or no chance of being recovered. The result of this situation was a banking system with little in the way of deposits available for financial intermediation. The reported ratio of bank deposits to GDP was less than 10% while most transition nations had ratios approaching 50%. Moreover, when the nonperforming assets and frozen foreign currency deposits are "carved out" the effective ratio of bank deposits to GDP was probably closer to 2%–3%. Of course, the monetary chaos of the war time period with the 5 different currencies in circulation did not help either.

The CBBH was a State level institution, but banking regulation and supervision were assigned to the entities so there are two banking agencies within a country of 4.4 million citizens; the Federation Banking Agency and Agency for Banking of the Republika Srpska. Each entity has its own banking law, its own privatization approach, its own regulations, and its own bank supervision. Indeed, at one point the banking law in the Republika Srpska treated banks from the Federation as foreign banks. The CBBH has responsibility to attempt to coordinate the activities of the two agencies. To summarize, the banking system in BiH had the following characteristics:

- There was a large number (approximately 70) small banks operating in the nation.
- The larger banks were primarily state owned while the newly formed private banks were small and undercapitalized.
- The balance sheets had uncollectible loans and frozen deposits, and the true net worth of the banks was difficult to compute and, in many cases, likely to be negative.
- With good reason, citizens had no confidence in the banks.
- There were governance problems since the enterprise owners/managers that in turn owned the banks had conflicts of interest that led them to value the credits the banks could extend (which they would not likely be able to repay) over the value of owning the bank.
- The banks could not offer the payments services that are part of the normal operations of a banking system since this was the monopoly province of the payments bureaus.

Thus, the development of the banking system required a great deal of effort and reform. As noted above, the development of an effective central bank has resulted in monetary stability, low inflation, and a currency (the KM) that has been widely accepted in the nation. In addition, the payments bureaus were replaced by a bank/central bank dominated payments system in early 2001. Hence, some of the preconditions for the development of an effective banking system were accomplished.

The next steps to developing the banking system were conceived early in the period following DPA. These steps required legislative action followed by supervisory steps. Recall that these steps were required in both entities. The general program was as follows:[29]

- A process of consolidation would be necessary to develop a viable, competitive banking system.
- State owned banks would need to go through a process of determining the exact value of assets, liabilities, and net worth ("Opening Balance Sheets").
- After the process of determining the opening balance sheets, those with positive net worth would be privatized while those with negative net worth would be liquidated.
- Privatization should lead to breaking the link between enterprise managers and the banks mitigating the conflict of interest problem. Of course, this would be supplemented by regulations regarding bank dealing with related parties.

[29] For a discussion of this process, see Cooke, Murphy, Silverberg, *et al.*, (1997). This process was supported by donors through grants, credits, and technical assistance.

- Foreign banks would be encouraged to enter the market. This should improve confidence and provide effective competition for domestic banks, improving both prices and service availability.
- After progress is made in dealing with privatization and liquidating insolvent banks, a deposit insurance program should be implemented. This should apply only to privately owned banks. The intent here is to improve confidence in the banking system.

Since the launch of the Central Bank of Bosnia and Herzegovina, there has been substantial progress in all of these areas. The number of banks in BiH has declined substantially. There were 70 banks operating at the end of 1998. In 2003, the number of banks had declined to 38, (27 in the Federation and 11 in the Republika Srpska). Combined with the increase in deposits discussed below, this has resulted in an increase in the average size of bank. Another development has been the inter-entity establishment of branches. Banks licensed in the Federation have established branches in the RS while some banks licensed in the RS have established branches in the Federation.[30] This is welcome consolidation that will likely continue for several reasons. First, the minimum capital requirement for a bank was increased from 5 million KM to 15 million KM. This means that several small banks will not meet these requirements and must be merged or liquidated. In addition, as discussed below, all banks must meet the requirements for deposit insurance by August 23, 2003. Those that do not will have their licenses suspended.

The process of privatization is well underway after a slow start. At year-end 2000, there were still 19 banks (out of 55) that were state owned. Moreover, these banks accounted for 53% if the total capital of all banks in BiH. At year-end 2002, there were only 6 state owned banks (out of 40) and these banks accounted for only 10% of the total capital of all banks.

In discussions with foreign banks, it became apparent that the payments bureaus were an impediment to their entering the BiH banking market. As indicated above, the payments bureaus were eliminated in 2001, and foreign banks have entered the market since then. Indeed, as of the end of 2002, foreign ownership had progressed to the point where 74% of the total capital in banks in BiH was supplied by foreign banks. Such banks also have at least a two thirds (2/3) market share for most deposit and loan categories. In addition, as indicated above, these banks have brought new services and enhanced competition in BiH.

How have the citizens of BiH responded to the changes noted above? Examination of deposit data indicates that the banking system has seen

[30] This has led to viewing the nation as a "single economic space," and the inter-entity branching activity raises the question of the appropriate location for banking regulation and supervision; the entity level or the State level. There are discussions underway to have bank regulation and supervision migrate to the State level under the umbrella of the Central Bank of Bosnia and Herzegovina.

substantial growth since the inception of the Central Bank of Bosnia and Herzegovina and the Convertible Mark (KM).[31] In this analysis, the deposits of governments are excluded since the behavior of households and businesses appears to best reflect confidence in the banking system.[32] In August 1997, total KM demand deposits in BiH banks were 117.3 million KM. In contrast, demand deposits in foreign currency amounted to 368 million KM, more than twice the amount of domestic currency demand deposits. KM demand deposits grew rapidly for two years, reaching 205.2 KM in August 1999. Foreign currency demand deposits grew as well, reaching 492.3 million KM in August 1999. While both types of demand deposits had grown, the ratio of domestic to total demand deposits had risen from 24% to 29%. However, in two months time (October 1999), demand deposits in KM had risen to 440.4 million KM while foreign currency demand deposits had fallen to 397.7 million KM. In just two months the ratio of domestic to foreign currency demand deposits had risen from 29% to 53%. It is interesting to note that the payments bureaus ceased clearing and settling payments in Deutschmarks, Croatian kuna, and Yugoslav dinars at that time. Domestic currency demand deposits continued to rise rapidly and, in May 2003, they reached a total of 1,381.6 million KM. At that point, the ratio of domestic demand deposits to total reached 65%.

Foreign currency time and savings deposits have an interesting pattern of growth during the same period. These deposits dominate the time and savings deposits during the entire period. It appears as though citizens and businesses in BiH are content to dramatically increase their use of domestic currency demand deposits but prefer to keep the majority of their time and savings deposits in foreign currency. Indeed, the smallest of the four categories is time and savings deposits in domestic currency (KM). There is also a very interesting "euro effect" in the foreign currency account data. The Euro was adopted as interbank and financial market currency in eleven members of the European Union (later expanded to twelve). However, the "legacy currency" notes circulated until 2002. At that time, all of those notes needed to be turned in to receive the new Euro notes, domestic currency notes, or bank deposits (KM or foreign currency). Evidently a large proportion of household wealth in BiH was held in Deutschmark notes. An enormous inflow of these notes occurred, and many citizens chose to hold their wealth in bank deposits, albeit foreign currency deposits. In June 2000, foreign currency time and savings deposits were 501.6 million KM. By February of 2001, foreign currency time and savings deposits exceeded 1,031 million KM. Hence, the deposit categories are dominated by domestic currency demand deposits and foreign currency time and savings deposits. The domestic currency time and savings deposits seem to have the

[31] All deposit data were obtained from reports of the Central Bank of Bosnia and Herzegovina.

[32] Also, public deposits do not represent potential intermediation to businesses and households since such deposits must be fully collateralized with approved government securities. See *Law on Banks* (2003).

same pattern, although not as pronounced, as the domestic currency demand deposits. Likewise, there is a distinct "euro effect" in the foreign currency demand deposits not found in domestic currency demand deposits. Indeed, it appears as though the euro effect for foreign currency demand deposits had two parts; first a shift from D-mark notes to foreign currency demand deposits and second a shift from foreign currency demand deposits to foreign currency time and savings deposits.[33]

Hence, the banking systems has seen substantial change during the time that the CBBH has been the central bank for the nation and the KM was established as the national currency for BiH. The banking system is largely privatized, needed consolidation has occurred and will likely continue, foreign banks have entered the market, the currency has been very stable, and deposit growth has been far in excess of GDP growth since 1997.

Deposit Insurance in Bosnia and Herzegovina

The genesis of deposit insurance for BiH goes back at least to 1997. At that time, a World Bank privatization mission recommended, *inter alia*, that a modest deposit insurance program be implemented.[34] While deposit insurance programs have been implemented in many countries, the rationale in BiH was viewed differently. That is, households had *rationally boycotted* the banking system even though insolvent banks had not been closed. Due mainly to the frozen foreign currency accounts, citizens had lost a great deal of wealth. While in some countries this has occurred as a result of hyperinflation, this has not been the case in BiH. Mobilization of funds was the primary rationale for the early recommendations for deposit insurance in BiH.[35] In the 1998 Madrid Declaration of the Peace Implementation Council and its subsidiary documents, deposit insurance was granted a high priority (along with abolishing the payments bureaus).[36]

Consistent with the delegation of responsibility in bank regulation and supervision, the early recommendations envisioned two deposit insurance agencies, one in the Federation and one in Republika Srpska. The agencies would receive initial capitalization of the DI funds from donors. Participating banks would be assessed, and membership would be confined to privately owned banks that had sufficient capital. Membership would be voluntary.[37]

[33] A regression analysis of time series patterns of the data shows that there is a statistically significant shift in the KM series in October 1999 and a "euro effect" shift in the foreign currency series in late 2001.

[34] See Cooke, Murphy, Silverberg, *et al.* (1997).

[35] It was also recognized that banks didn't offer much in the way of services due in large part to the role of the payments bureaus in BiH and the other nations emerging from the former Yugoslavia.

[36] See Office of High Representative (1998).

[37] As time passed, EU membership became more likely, and the EU required all member nations to have a deposit protection program. This became further motivation for development and implementation of deposit insurance. See Murphy (2000) and Garcia (2003).

The development of parallel programs in both entities ensued, and there was a program operating in the Federation in August 1999, and in late 1999, a program had been approved but not implemented in Republika Srpska.[38] However, rather than discuss these two programs in detail, it is important to note an important development in 2002. That is, the deposit insurance program migrated from the entities to the State level, the first time that a program or activity has been voluntarily moved in this direction since the implementation of the Dayton Peace Accords in 1995. Hence, the DIA will now be at the State level as is the Central Bank of Bosnia and Herzegovina. Indeed, as will be discussed below, the Governor of the CBBH is an *ex officio* member of the Management Board of the DIA, and, in addition, the CBBH appoints one other member of that Board.

The new State level deposit insurance agency (DIA) is called *Agencija za Osiguranje Depozita Bosne i Hercegovine*. The BiH Parliament (State level legislative body) passed the DIA law on July 18, 2002, effective August 12, 2002.[39]

Each of the following areas of the new program will be discussed in turn:

- Participation by banks.
- Coverage of deposits in banks.
- Funding of the program.
- Assessment of banks.
- Standing of DIA in resolution.
- Payment of depositors in case of insurance event.
- Governance.
- Relations with bank supervisors.

Regarding participation by banks, it is mandatory that all banks operating in BiH become members of the DIA. That is, any bank licensed by an entity banking agency, Federation or RS, or its successor(s) must participate. This is in contrast to the earlier law in the Federation in which participation was voluntary. It is generally believed that universal participation by all depository financial institutions in a country is beneficial since it avoids the problem of *adverse selection* in which financially strong banks have an incentive for remaining outside the program and financially weak banks have an incentive to participate. It also implies that the pool of total assets of the participating banks will be as large as possible. A problem with the DI agencies being on the entity level was the fact that there were two smaller pools of assets in each program which could lead to difficulties as the risks were not spread sufficiently.[40]

[38] There were two problems; first, not many banks in RS would qualify for deposit insurance and second, there was no fund in the RS.

[39] Discussion in these paragraphs is based upon the *Law on Deposit Insurance* and the *Law on Banks*.

[40] Whether BiH as a whole is large enough to permit efficient spreading of risk is an open question. However, it is unambiguous that one larger pool is better than two smaller ones when considering the financial viability of the program.

There are several other important membership criteria. First, private ownership of each bank must exceed 90%. Thus, remaining state banks must find private owners, merge with other, larger banks that have little or no state ownership, or give up their banking license. Second, members must meet the financial requirements established by the Law on Banks and all other safety and soundness criteria established by the banking agencies, mostly related to capital adequacy. One of the most important of these requirements is the minimum size of bank as measured by its capital. Each bank must have at least 15 million KM in capital. This implies total assets for such a bank in the 150 to 180 million KM range. Since several banks do not meet requirements regarding private ownership or minimum size, this is likely to result in a further consolidation of banks in BiH.[41]

Coverage is limited to 5,000 KM per depositor in each insured bank. That is, depositors can effectively increase their coverage by keeping deposits in several banks. This amount is the equivalent of 2,556 euros. The requirement for nations in the European Union is 20,000 euros. Hence, the BiH program is designed to meet the needs and financial capabilities of the banking system and economy at the present time. The coverage will be reviewed from time to time with the EU requirement as a target. At the present time, this level of coverage is less than twice the per capita GDP which is fairly conservative. Unfortunately, the banks in BiH do not have the data in their systems to estimate what proportion of their accounts are completely covered and what proportion of the KM amounts of deposits are covered. It is desirable to have a large proportion of deposit accounts completely covered, say 95% of all accounts, and a much smaller proportion of deposit liabilities, say 50 to 60%, covered. In that way, the customers that have the small proportion of accounts have the incentive and ability to exercise market discipline on the risk taking activities of the banks. Coverage, of course, determines the contingent liabilities of the DIA while the initial funding, size of the DIA fund, and ongoing assessments determine the financial viability of the program.

The DIA fund has initial capitalization exceeding 30 million KM provided by the governments of the United States and Germany. This will be invested under strict guidelines set forth in the Law on Deposit Insurance and augmented by an investment policy approved by the Management Board of the DIA. These rules limit the investment to fixed income securities issued or guaranteed by European Union governments or the United States government. Also, deposits in banks in the EU or US that meet credit standards are eligible investments for the DIA fund. At the present time, the fund is managed under contract with an investment management firm. Of course, the fund will be augmented by assessment income from participating banks.

Finally, the fund will receive income from the periodic assessments paid by banks. There are two types of such assessments; first, an initial membership certificate fee at the time that the deposit insurance contact is signed, and,

[41] It should be noted that a smaller number of viable banks would result in a stronger industry on the one hand while on the other hand an insurance event is likely to be more difficult to handle in a more concentrated banking system.

second, the annual fee based on eligible deposits and paid quarterly. The assessments are based on the average eligible deposits in the previous quarter. Each year the DIA will review its finances and decide on the assessment rate for the next year. The DIA has the right to adjust the rate at any time according to its financial needs. The Law on Deposit Insurance allows the DIA to establish a risk based rating system to alter the assessment rate for each bank to reflect the risk exposure to the DIA from that bank. At the present time, the assessment rate is 30 basis points, or 3/10 of 1%, of total eligible deposits. By international standards, the rate is on the high side, but it is to be expected at the outset of the program to build up the fund.

The financial viability of the DIA program depends in part on how much is recovered from a failed bank in an insurance event. That is, after the insured depositors are reimbursed, how much is recovered from disposing of the failed bank's assets and where does the DIA stand in the priority list of claimants? In the *Law on Banks*, it is indicated that the standing of the DIA is very high. That is, after receivership expenses and secured creditors, the DIA is next in line and is paid off in full before any other creditors receive anything from the receivership. This is referred to as *insured depositor preference*, and it results in the lowest cost to the DIA from an insurance event.[42] It also follows that this puts uninsured depositors and other creditors at much greater risk. This could result in more such creditors seeking secured status as part of the desired process of imposing market discipline, a possibility that apparently has not been considered at this time.[43]

In the case of an insurance event requiring payouts, the DIA must begin the process "–without undue delay and to start the process not later than 60 days from the day the license of the former Member Bank was revoked. All payments for reimbursement of Insured Deposits must be completed within 90 days from the day the Member Bank's license is revoked."[44] An insurance event is triggered by actions of the Entity banking agency or its successor(s). That is, except for nonpayment of assessments, the DIA reacts to decisions made by the appropriate banking regulators. Of course, the banking agencies act on the basis of their duties as spelled out in the *Law on Banks*.

The DIA is a State level agency in BiH. It is an independent, nonprofit legal entity with full authority under the law of the State. The DIA has a management board which is the sole governing body of the Agency. There are five members:

[42] For a discussion of the effect of depositor preference laws, see Marino and Bennett (1999),

[43] In a small country like BiH, the number of large, uninsured depositors and other creditors is relatively small and can be readily contacted by the DIA (or the banking agencies) to gain valuable information about perceptions of the risk involved in being a deposit customer with any particular bank. Also, banks' attitudes toward funding another bank in the interbank market are another source of such information.

[44] See *Law on Deposit Insurance*, Section 12.2.

the Governor of the Central Bank of Bosnia and Herzegovina, or his/her nominee; the Minister for Treasury of the Institutions of Bosnia and Herzegovina, (both of these State level officials are *ex officio*); the Governing Board of the CBBH appoints one member; and the Ministers of Finance of each Entity appoint one member. The management board of the DIA appoints its own Chairman and Vice Chairman with the proviso that, through appointment by an Entity Minister of Finance, the head of an Entity banking agency may not also serve as the Chairman or Vice Chairman of the managing board of the DIA. The managing board of the DIA oversees the activities of the DIA and appoints the Director of the Agency. The Agency is financially independent and does not obtain its funds from the legislative appropriations process. The Agency's operating expenses are met from the return on investments while all assessments go directly into its fund which is available to reimburse depositors.

Upon request, the DIA must provide information to the Banking Agencies, and the Banking Agencies must provide information to the DIA. The DIA is also required to cooperate with the Central Bank of BiH. The DIA does not have the authority to conduct an independent inspection of member banks. That is, it is totally dependent upon the Banking Agencies. Moreover, except for nonpayment of assessments, the DIA cannot close a member bank. This is the sole province of the Banking Agencies.

A review of the financial viability of the DIA was undertaken recently.[45] The following characteristics of the program were noted:

- The coverage limit was modest.
- There were funds available at the outset from donors.
- The DIA has a preferred standing in the case of an insurance event in which payments had to be made.

These factors are all favorable in attempting to conduct an analysis of the financial viability of the DIA. That is, the contingent liability is limited by the modest coverage, there is no need to start the operation with no funds available which would create doubt regarding the ability to meet any obligations arising from an insurance event, and the insured depositor preference law limits the total cost to the DIA of any resolution. Using reasonable assumptions regarding the structure of deposits, future deposit growth, and returns on DIA investments, deterministic simulation was conducted for a number of scenarios. The outcome was one of cautious optimism indicating that the arrangements were prudent and that the DIA was "—a promising start to a viable institution and a positive influence and a positive influence in the continuing repair of confidence in the banking sector in Bosnia and Herzegovina."[46]

[45] See Hand (2002).

[46] See Hand (2002). It was noted that the DIA should resist attempts to increase the coverage and reduce the premiums. It was also noted that it would have been preferable to utilize Monte Carlo simulation techniques, but data limitations and resource constraints precluded such an application.

VII. CROATIA

The Creation of the Sovreign Nation of Croatia

Croatia was one of the Republics of the Former Yugoslavia. In late 1991, it was recognized by the Federal Republic of Germany as a sovereign nation. Recognition by the rest of the nations of the European Union followed early in 1992. A war ensued between the new Republic of Croatia and Yugoslavia. The pattern was similar to that seen in Bosnia in that regions of Croatia with substantial Serb populations declared themselves to be statelets known as "Serb Republics." These statelets were often assisted by the largely Serb Yugoslav army which was called in to "keep the peace." At the height of their success, these areas had as much as 26% of the territory of Croatia. In these areas, the process of "ethnic cleansing" started and resulted in a massive flow of refugees into the safer areas of Croatia. These "Serbian Republics" would have formed the basis of a Greater Serbia, leaving Croatia a smaller nation. In 1992, the parties to the war agreed upon a plan by which the United Nations (UN) would be involved in guaranteeing safe areas as part of a cease fire plan. From the perspective of Croatia, this had the advantage of stopping the war and allowing them to consolidate their new (albeit smaller) nation while the Serbs saw it as confirmation of the existence of these "statelets" on what was previously Croatian soil. The Croatian government used the time to build its military to the point that they could reclaim this area. The UN was not effective in peacekeeping in Croatia or in Bosnia, and the warring parties kept on fighting. Indeed, some of the UN troops from Slavic countries like Russian and Ukraine were openly supportive of the statelets of the Serbs within Croatia. When it became clear that the UN would not be effective in allowing Croatia to regain its territory and it could not guarantee the safety of refugees attempting to reclaim their property in "cleansed" areas, the Croatian citizens and government became disillusioned with the UN peace plan. As a result, the Croatian army launched an offensive that completely defeated the Serb forces in their "statelets" and led to regaining all the territory that was within the borders of the former Yugoslav republic. Moreover, the Serb residents fled the area which resulted in a massive refugee problem in Serbia and a more ethnically homogeneous population in Croatia. In 1995, Croatia had realized its "one thousand year old dream."

The new nation was involved in the Bosnian conflict as well. Some of the most ardent nationalists in the Croatian independence movement were from the Herzegovina region in Bosnia, near the city of Mostar. This group was not only antagonistic to the Serbs, but it was also hostile to the Bosnian Muslims. There were battles between the Bosnian Croats (especially those from the Herzegovina region) and the Bosnian Muslims that went on for several years. With the support of the international community, and the knowledge that the biggest gains from their combat went to the Serbs, the Bosnian Croats and Muslims formed an uneasy alliance to fight their common enemy in 1994, an agreement that was signed by the presidents of both Bosnia and Croatia. The ferocity of some of the early confrontations between Bosnian Croats and Bosnian Muslims shocked world opinion which had sympathy for the Croatian cause when they appeared to be the victims of aggression. The perception that the new nation was meddling in the affairs of their fragile neighbor, Bosnia, led to difficulties in dealing with the international community for a number of years after Croatia had achieved and consolidated its sovereignty in 1995.[47]

The new nation paid a heavy price for its independence, but the outcome resulted in a single nation without the internal "statelets" that occurred in Bosnia after the Dayton Peace accords. In addition, the nation had a single currency, which started as the Croatian dinar and was changed to the Croatian kuna in 1994. The result of the Croatian war of independence was a single central bank and a single currency for the nation, although many citizens historically held German Deutschmarks as a hedge against inflation or appropriation.

Monetary Conditions in the Nation of Croatia

The immediate concern of the Croatian National Bank (CNB) was hyperinflation. This was partly inherited from pre-war Yugoslavia and partly the result of war time conditions and an accommodative monetary policy. In pre-war Croatia, prices increased by 609.9% in 1990. By 1993, the inflation rate was 1,516.6%. (IMF 1994). War is usually associated with high rates of inflation. However, in addition, it is reported that almost all the nations that entered transition in the 1990s suffered from an early bout of very high inflation (Fischer and Sahay 2000). Thus, the new nation had to deal with both fighting a war and entering transition. In this regard, several of the new nations of the former Yugoslavia were different from the other nations in Central and Eastern Europe that entered a period of transition. Finally, nations such as Poland and Hungary were recognized sovereign states prior to emerging from socialism. The former republics of Yugoslavia were establishing new sovereign states at the same time as some of them were fighting a war and entering a period of transition.

It was apparent that the first order of business for the CNB was control of inflation. Accordingly, the CNB initiated a stabilization policy in October 1993. Since hyperinflation was so bad, the new policy had broad political and popular backing. The CNB announced that it would conduct its operations in such a way as to stabilize the value of the currency in relation to the deutschmark (DEM). Since Croatia had a successful tourist industry on the Adriatic coast as well as a large number of citizens who emigrated or worked abroad, there was a supply of foreign currency available to use in monetary policy operations.

[47] For a discussion of the breakup of Yugoslavia and the creation of the sovereign state of Croatia, see Tanner (2002). The role of Croatia in the Bosnian war and the Dayton Peace Accords is discussed in Holbrooke (1998).

Moreover, there were no money and capital markets developed to a level at which monetary operations could occur in those markets. At the same time, the CNB was constitutionally limited in how much credit it could make available to the government. In that way, it would not be pressured to monetize the government deficit. In addition, the CNB changed the rules under which banks could borrow. Under the Yugoslav system, the central bank would make selective loans to banks which funded industries and sectors that were favored but not profitable. Since the lending was at negative real rates, this type of lending is a method of implementing a policy of soft budget constraints on such enterprises which implies both a lack of fiscal discipline and a monetization of enterprise debt. Under the new CNB rules, the CNB attempted to limit advances to banks by requiring the banks to post collateral. Since the purchase of foreign exchange by the CNB, in order to maintain the value of the currency to the DEM, may result in excess liquidity in the domestic banking system, the CNB developed an instrument, the CNB bills, which were auctioned by the CNB and purchased mainly by the banks. This was done to sterilize the effect of foreign currency operations. Finally, after the stabilization policy was introduced, a new currency, the Croatian kuna was adopted, and the Croatian dinar was redenominated at a ratio of 1,000 to 1 in May of 1994.[48] Hence, shortly before the new republic stabilized its own borders and participated in the Dayton Peace Accords to end the fighting in its neighboring country, Bosnia and Herzegovina, the central bank had implemented a stabilization program, new procedures for implementing monetary policy operations, and a new currency.

The results of this policy can be viewed as having been successful. Inflation immediately dropped off after the introduction of the stabilization policy. Consumer price inflation dropped from a monthly rate of 38.7% in October 1993 to 1.4% in November. For 1994, consumer prices fell by 3%. In the ensuing decade from 1994 to 2004, the annual inflation rate has always been below 10%, reaching a maximum of 7.4% in 2000. In 2001, inflation fell to 2.6% followed by inflation rates of 1.8% and 1.7% in 2002 and 2003.[49]

The "anchor" for monetary policy for the CNB was and is the link to the dominant European strong currency. For many years, citizens in all parts of the former Yugoslavia regarded the DM as that currency in which they had confidence. When currency substitution occurred in response to inflation in the region, it manifested itself in holdings of the DM. As the DM was completely replaced by the euro in 2001, this became the anchor at that time. Since there is a fixed relationship between the DM and the euro, it is possible to restate the kuna/DM exchange rate in terms of the euro to give a sense of how well the

[48] For a discussion of the implementation of these policies by an "insider," see Skreb (1998). One of the interesting results of a successful stabilization and lopping off three zeros from all prices was the reintroduction of coins which had disappeared from circulation in the hyperinflation of Yugoslavia and were never introduced in the few years of the Croatian dinar.

[49] See *CNB Bulletin No. 93* (2004).

CNB achieved its goal over the past decade. As the stabilization program succeeded in bringing down inflation, there was an appreciation of the kuna/DM rate from 7.087 to 1 in 1994 to 6.757 to 1 in 1995. The kuna depreciated over the last several years of the decade of the 90s (at least partly in response to a recession triggered by a reduction in tourism due to the Kosovo conflict in 1999). It has settled near 7.5 to 1 over the past several years.[50] In his review of the experience of countries seeking to control inflation, Fischer, Sahay, and Vegh (2002) notes that "We also believe that the evidence supports the idea that the nominal anchor matters and that, other things being equal, exchange-rate-based stabilizations are more likely to be expansionary." This seems to be the case for the stabilization program in the Republic of Croatia.

In addition to reviewing the data on inflation and exchange rates to gauge the success of stabilization, it is useful to review external assessments. The Republic of Croatia joined the International Monetary Fund in December 1992. In a series of reports reviewing economic performance by the Republic of Croatia, the IMF has acknowledged the success of the stabilization program (IMF 1995, 1997, 1998, 1999, 2000, 2003). While the Republic of Croatia was a member of the IMF at the time of the stabilization program in 1993, it was not implemented as part of an IMF program.

Banking in Croatia at the Time of Independence

The banking system of Croatia resembled that of the other republics in Yugoslavia. That is, Yugoslavia had adopted a two tier banking system in the 1960s, differentiating itself from the monobank model of the other former socialist nations of Central and Eastern Europe. However, this difference did not imply that banks played the role of financial intermediary in a market economy. That is, the banks were owned by companies that were in turn "socially owned." As a practical matter, the banks played much the same role that the monobank played in the other socialist nations. The banks were viewed as supporting the achievement of the plan that was formulated by the government. The banks did not make loans based on commercial criteria. Rather, they advanced funds to their affiliated companies based upon the needs of the plan. The banks did not impose a "hard budget constraint" on the enterprises, and the central bank regularly made loans to the banks on the basis of the need to meet plan goals. Hence, both the central bank and the banking system were adjuncts to meeting the goals of the plan. If the firm was not meeting its goals in a way that generated sufficient cash flow to pay its obligations, then the system of bank loans funded by central bank advances implied that the firm's deficits were effectively monetized. It should also be noted that while there was a two tier banking system, there was a one tier payment system. The SDK (*Sluzba drustvenog knijgovodsiva*) was the monopoly state owned and managed payments bureau for all of Yugoslavia. In Croatia, it became known as ZAP (*Zavod za*

[50] *CNB Bulletin No. 93* (2004).

Platni Promet). Therefore, two primary aspects of a banking system in a market economy were absent; a credit culture in which loans were made on strict commercial grounds and a payment system operated by the banks as part of their normal banking activities. In 1989, prior to independence, all banks were transformed into joint stock companies. However, as with the switch to a two-tier system, this was a change that was more form than substance since the socially owned enterprises became the owners of the banks.

Hence, the banking system had little or no experience in making credit judgments, was owned by its customers who had little experience in submitting to any repayment discipline, was supervised by the Croatian National Bank which had little or no experience or institutional capacity in supplying regulatory discipline. Moreover, the ZAP processed all payments which meant that the banks were passive recipients of information regarding payments initiated by their customers at the offices of ZAP. Indeed, the customer records were maintained at the ZAP office. As indicated above, the new nation suffered greatly as a result of the war and the ensuing hyperinflation.

Another aspect unique to the nations formed out of the former Yugoslavia was the treatment of foreign currency accounts of citizens. Due to both attractiveness of Croatia to tourists and the number of Croatians working abroad and remitting foreign currency, Croatian banks received substantial foreign currency deposits from it citizens. The banks were required to deposit these funds in the National Bank of Yugoslavia. Hence, the banks had a foreign currency deposit liability to its customer and a foreign currency receivable from the National Bank of Yugoslavia. However, upon independence, Yugoslavia indicated that it would not honor the foreign currency claims of the Croatian banks. This was one of the costs of independence for the new nation. Thus, the banks had to "freeze" the deposits of its customers. The citizens then saw their domestic currency deposits reduced in value due to the wartime hyperinflation and their foreign currency accounts frozen. It is little wonder that citizens lost confidence in the banking system.[51]

Number and Ownership Structure of Banks in Croatia

There were 43 banks in the Republic of Croatia in 1993. Of those, twenty five were state owned banks and eighteen were private domestic banks. At that time, there were no foreign owned banks in Croatia. The state owned banks dominated the industry with over 78% of assets in 1996. As time passed, the ownership structure changed. New banks were chartered in the 1994 to 1997 period, and the number of banks increased substantially to sixty. In addition, by 1997, the number of state owned banks declined from 25 to 7 as the privatization process proceeded. Also, by 1997, 7 foreign banks were present in Croatia. Nonetheless,

[51] For a discussion of the conditions of the Croatian banking system at the time of independence, see Jovancevic 2002 and Sonje, Kraft, and Dorsey 1999.

state owned banks were still quite large with almost 42% of assets and less than 12% of the number of banks. Hence, most of the new banks were quite small.

In 1998, there was a banking crisis, discussed below in greater detail, and the number of state owned banks increased slightly as some private banks were taken over as part of the rehabilitation process, and state owned bank assets increased their share of total assets to almost 46%. After this, the process of privatization proceeded rapidly, and by 2004, the number of state owned banks had fallen to only 2 with a market share of less than 3.5% in September 2003.

Starting in 1998, there was a major transformation of the Croatian banking industry that follows trends observed in other transition nations. That is, the number of banks declined to 41 in 2004 as banks were rehabilitated, closed, and merged over the 1998–2004 period. However, the most dramatic change was in the growth of foreign bank presence. In 1998 there were 10 foreign owned banks in Croatia with a share of total assets of 6.7%. In 1999, there were 13 foreign owned banks with a share of total assets rising to 39.9%. The number of private domestic banks peaked in 1997 at 46 and declined to 30 by 1999. The share of private domestic banks in total bank assets peaked at over 54% in 1997. This share fell to approximately 10% by 2000 as the combination of rehabilitation, bankruptcy, and merger had an impact on this sector. By 2003, the structure of ownership had been completely transformed with only 2 remaining state owned banks, 21 private domestic banks, and 20 foreign owned banks. However, the sector is dominated by the foreign owned banks with over 90% of total industry assets.[52,53]

Banking Crises, Bank Rehabilitation, and the Cost of Bank Restructuring

A recent assessment of the financial sector by a team of International Monetary Fund (IMF) and World Bank analysts indicated that the Croatian financial system was resilient, the banks were well capitalized, risks were limited, and supervision was consistent with core principles for bank supervision and payment systems. (IMF and World Bank 2002) Another report reviewed the strategy of growth through European integration as Croatia has taken steps to join the European Union (EU). It concludes that the "—Croatian banking system has now achieved stability after five years of intensive rehabilitation and the disappearance (at great cost to the State) of domestic private banks as a major factor in the market." (World Bank 2003). These favorable assessments are misleading since they mask a substantial cost to the taxpayers of the nation over successive waves of costly rehabilitation and restructuring. Indeed, the cost of restructuring (as a proportion of Gross Domestic Product) was among the highest in the world.[54]

[52] In many countries there is an initial resistance to large scale foreign ownership of banks, but acquiescence after difficult, expensive, and multiple rehabilitations and restructurings. Such was the case in Croatia as well.

[53] All data are from the Croatian National Bank *Annual Reports*, *Bank Bulletins*, *Bulletins*, and CNB web site.

[54] See Jankov (2000), Skreb and Sonje (2001), *CNB Surveys* (2000), Kraft, Curaviae, Faulend, and Tepus (1999).

The first phase of the process occurred as a result of the treatment of the foreign currency deposits the books of the Croatian banks at the time of independence. The receivables on the books of the banks had become worthless, and the banks were technically insolvent.[55] In order to address the solvency problem of the banks and the loss of the savings of the citizens, the Republic immediately decided to issue bonds to the banks and "froze" the deposits of the citizens. Hence, the banks were restored to solvency and the citizens would be able to recover their funds, albeit over a longer period of time than was expected when the deposits were originally made.[56] The new assets on the books of the banks had some drawbacks as they were unmarketable, and the banks had continuing liquidity problems.[57]

As a result of an assessment by Coopers and Lybrand in 1989, it was determined that there were large losses on the books of many of the banks as a result of "selective" loans made by the Yugoslav central bank to the banks for the purpose of advancing loans to favored enterprises that were not commercially viable, the "soft budget constraint." At the time of independence, it was decided that the central bank would not continue its policies of selective lending and pursue the monetary policy discussed above. Hence, there was a decision to issue bonds and use them to replace the loans on the books of the banks. In return for the funds, the state's ownership of the firms was increased. These bonds were known as "big bonds." The original issue did not have an explicit fixed interest rate, but rather it was to be revalued periodically based on the change in producer prices. The revaluation of these bonds were responsible for the return of the banks to a strong financial position, solvency and a strong capital position, with capital ratios increasing from less than 2% to almost 15%.

The combination of the frozen foreign currency bonds and the "big bonds" resulted in the restoration of solvency to the banks. These bonds amounted to 22.6% of GDP at the time. On the face of it, it would seem that the banks were now positioned to perform the functions of financial intermediation in a market economy. The macroeconomic stabilization was successful, the citizens' confidence had been restored as a result of the new Republic assuming the debt of the Yugoslav central bank, and the uncollectible loans made to the former recipients of selected credits had been replaced by the "big bonds." However, the same management stayed in place, the same links between management and ownership of banks and their customers remained in place, and the supervisory regime did not change very much. The pattern of restoring bank solvency, at great cost to the taxpayers, without changing the management, the incentives, or the supervisory regime led to future losses in many transition countries. Croatia was no exception.[58]

[55] At the time of implementation the bonds and the foreign currency deposits exceeded 40% of the assets and liabilities of the banks.

[56] As an alternative to being paid over time, citizens could transfer the frozen foreign currency accounts to vouchers to be used to acquire either apartments owned by the state or shares in newly privatized firms.

[57] See Jankov (2000), Skreb and Sonje (2001), and Croatian Ministry of Finance, *Annual Report 1994–1997*.

[58] See Jankov (2000).

With bank management intact and substantial state ownership of banks, it was only a matter of time until problems reappeared. In 1995 and 1996, several large, state owned banks were rehabilitated. These were banks that had close ties to their founding firms, also state owned enterprises. Loans had been made by the banks in question to these state owned enterprises without regard to the ability of the borrower to repay, or "business as usual" in the days before the founding of the nation. In this case, unlike the "big bonds" and the frozen currency deposits, the rules of the game had changed, and the policies did not allow management and ownership to stay in place. First, some assets were transferred to a new state agency, the State Agency for Deposit Insurance and Bank Rehabilitation. These assets were replaced by government bonds issued for the purpose of cleaning up the balance sheets of the rehabilitated bank. It should also be noted that the Law on Banking and Bank Rehabilitation required that the Croatian National Bank apply to the Ministry of Finance to permit the rehabilitation (and the issuing of bonds by the government) to occur. Second, some of the bad loans were written off against the banks' capital and reserves. Following that, the shares of the previous owners were invalidated, and the State Agency for Deposit Insurance and Bank Rehabilitation became the sole owner with the intent of privatizing the banks as soon as possible. Management was replaced by special trustees who were responsible to the Agency. These banks were the largest in the nation, accounting for almost 50% of total banking assets at the time. The cost of this rehabilitation has been estimated to be 6.1% of the nation's Gross Domestic Product (GDP).[59]

The "second banking crisis" in Croatia occurred in 1998. This followed stabilization, the "big bonds" and frozen foreign currency, the rehabilitation of the large state owned banks. In all of these cases, the costs of dealing with problems were largely borne by taxpayers and the general population through early hyperinflation, fiscal costs, and the misallocation of resources due to lending to support activities that were not adding value. In the rehabilitation of 1996, shareholders were displaced in the process, the first instance of the costs being borne by a specific claimant on the assets of the banks involved in the various crises. That is, depositors and those who supplied funds in some other form did not share in the costs of recapitalizing and restructuring the banking industry. This leads to several problems. First, there is the question of equity. That is, why should taxpayers bear the costs associated when depositors supply funds to banks who subsequently lend money that is not repaid? With the rehabilitation process, some of the costs are borne by the shareholders, but the depositors bear none of these costs. Second, in more importantly in the long run, there is the problem of *moral hazard*. That is, depositors and other fund suppliers who never bear the consequences of their decisions will have no

[59] See Jankov (1999) and Skreb and Sonje (2001). Most of these estimates are based upon the fiscal costs of rehabilitation. Even at that, the estimates vary from 29% to 31% of GDP for all the Croatian banking crises. None of these estimates compute the opportunity costs due to the misallocation of resources that occurs when a large portion of the banking system is making loans to enterprises that are effectively wasting resources.

incentive to monitor the risk taking activities of their banks and take the necessary action to safeguard their funds. Recent discussions of best practices in both bank supervision and deposit insurance stress the importance of market discipline in supplementing capital rules and supervisory activities as one of the three "pillars" required for stability in the banking system.

The Law on Banking was changed to give the CNB more flexibility in dealing with banks facing financial difficulty. Among the tools available were appointing a special commissioner, appointing a temporary administrator, proposing a bank for bankruptcy procedures, and bank rehabilitation. In the 1997–1999 banking crisis, there were a number of banks which were new and had been offering very high interest rates to attract deposits from consumers. These high deposit rates resulted in high rates of asset growth without sufficient risk management in the lending of funds acquired. The result was a situation in which these banks faced liquidity as well as solvency problems. In this case, the problems did not arise from the heritage of the former Yugoslavia such as frozen foreign currency deposits, favored lending to state owned enterprises with little chance of repayment, or post-conflict hyperinflation. Since such a large proportion of the nation's internal debt was attributable to the costs of resolving these early banking problems, it is understandable that transition to a less costly method of resolving bank insolvencies was appealing. Yet on the other hand, one of the consequences of this round of failures was the removal of deposits from banks by consumers that were fearful of losing their funds if banks were not rehabilitated but went through bankruptcy. In that environment, the Croatian government introduced legislation establishing a deposit insurance program in late 1997. The deposit insurance program has the following characteristics:

- All deposit taking banks are required to participate in the deposit insurance program. Savings institutions are not included.
- Only the deposits of individual citizens are covered. Moreover, only the time and savings deposits are covered. That is, current accounts are not included in the program. Foreign currency accounts are included based on the exchange rate on the date of the declaration of bankruptcy.
- The maximum amount covered is prescribed by the Ministry of Finance. At the present time that amount in 100,000 Croatian Kuna. The Ministry of Finance makes these decisions without consulting the deposit insurance agency. Indeed, the original amount of coverage was 45,000 Croatian Kuna[60], and, as fears of bank runs emerged, the Ministry of Finance raised the limit.
- The deposit insurance program was to be financed by assessments on the banks based upon their insured deposits. The current system is a flat rate of

[60] Indeed, this was composed of two parts; the first 30,000 Croatian Kuna were fully covered while the next 20,000 Croatian Kuna were covered up to 75%, for a total of 45,000 Croatian Kuna.

80 basis points. The agency has the capability of making risk based assessments, but has not done so yet.

- According to the law, the deposit insurance agency was to begin payment in domestic currency 30 days after bankruptcy was declared. This was changed by the agency to 180 days in light of the difficulties in meeting a 30 day deadline. The difficulties were both financial and administrative[61].

As in many cases, this deposit insurance program can be viewed as part of a transition from a complete guarantee (de facto) arising from rehabilitation efforts to a limited guarantee, financed by the banking industry, and thus limiting the costs of resolution to the taxpayers of the nation. It is generally agreed that a deposit insurance program is not likely to function smoothly in a crisis environment nor is it likely to be successful if initial capitalization does not give it sufficient funds to deal with payouts required by bankruptcy of a member bank. In the case of Croatia, the law gives the deposit insurance agency little flexibility, and major decisions are outside its control. Moreover, the decisions were not related to the financial realities facing the deposit insurance agency. That is, the agency has no say in when a bank is to be subjected to bankruptcy proceedings. This is determined in the first instance by the Croatian National Bank which applied to the courts to begin proceedings, and the court must agree. Thus, if the deposit insurance agency knew that delay in recognizing a bank's insolvency would only increase the cost of the resulting payout, it could not take action on its own to minimize the cost to its fund. Indeed, it would not be privy to the bank's financial status since it had no authority to conduct its own examination. A further difficulty occurs when a bank is illiquid and cannot meet its obligations to its depositors but is not declared to be insolvent or bankrupt by either the Croatian National Bank or the courts. In such a case, there is nothing the deposit insurance agency can do, and the delays will almost certainly increase the costs of resolution when the bankruptcy is eventually recognized the CNB and the courts.

The deposit insurance agency also has no control over its contingent liability as a result of the coverage decisions made by the Ministry of Finance. When the coverage maximum was lifted from 45,000 HRK to 100,000 HRK, this was done without regard to the impact on the financial viability of the deposit insurance fund. This enormous increase had a major impact on the ability of the agency to meet its payout obligations.

This would lead to a situation of great difficulty for the new organization as several banks were declared bankrupt in April, May, and June of 1999 (ten months after the banks were illiquid). The resulting payout obligation to the deposit insurer was approximately 3.1 billion HRK, ten times greater than the resources available to the agency. Under conditions of extreme financial stress,

[61] The official documents were reviewed for this section, and the author is grateful to Mr. Tomaslav Galac of the Croatian National Bank for translation and interpretation.

the agency decided to allocate its available funds to pay off in total the largest number of customers as possible. This was a very low ceiling, and it meant that large numbers of customers who should have been paid were required to wait. In 1999, there were budget allocations (485 million HRK) by the government to the deposit insurance agency to continue the process. While this process was underway, four more banks were declared bankrupt, and depositors reacted with anger. In 2000, 210 million HRK were transferred, and a higher limit (65,000 HRK) was determined. All customers with balances less than or equal to that amount were paid if full. As this was all the government felt it could afford, there were still unpaid obligations to depositors, and no funds were available to the deposit insurance agency. The final solution was to give the agency the legal authority to issue bonds, with a government guarantee, to complete the process. In December 2000, bonds worth 330 million EURO were issued, bought largely by commercial banks and tradable on the Zagreb Stock Exchange.

Final Phase of the Transition-Foreign Ownership

After a decade of one form of crisis or another affecting the banking industry, it was evident that the banking industry could not be restructured, rehabilitated, and privatized at great cost indefinitely. It was essential that the banks be well capitalized and that owners have incentives to prosper from the cash flows generated by the business rather than by having access to the bank's funds. Moreover, bank owners should have the knowledge, skills, and risk management capabilities to avoid the recurring crises. It would be beneficial also if the banks were able to bring to bear both the "best practices" and the latest technology to make the banking business responsive to needs of both businesses and households in the nation.

The recurring crises and large costs of resolving crises suggested that the supply of domestic capital and skills was somewhat limited. Due to the immediate post-war security situation and the suspicions of the international community regarding the intentions of the nationalist government that was in power during and immediately after the establishment of the Republic of Croatia, there was limited foreign direct investment into Croatia. However, following the election of a reform government in 2000, foreign direct investment picked up somewhat. Of course, as noted above, the Croatian National Bank had been reasonably successful in creating monetary stability and establishing its independence. As a consequence, the supply of capital that would accommodate foreign bank entry into Croatia increased as the crises subsided. To address potential fears that might occur as a result of foreign ownership of a significant proportion of the Croatian banking industry, the CNB undertook a number of studies on the impact of this phenomenon. In a study published in 2000, it was noted that foreign bank ownership had been limited (as of 1999), and that the activities of the foreign banks did not have any discernible negative impact on either the remaining domestically owned banks or the overall economy.[62]

[62] See T. Galac and E. Kraft (2000).

Indeed, given the modest penetration of foreign banks at the time, this is not surprising. However, events moved quickly, and the modest penetration was succeeded by foreign ownership of the majority of the assets of the Croatian banking system. As a result, the CNB undertook another study published in 2002.[63] In this case, the author examined not only the Croatian case but also compared the domestic situation to other transition nations as well as those in Latin America. The results of this study may be summarized as follows:

- Foreign banks now control the overwhelming majority of banking assets in Croatia.
- Their arrival has contributed to a higher level of competition, improved efficiency, and better quality of products and services.
- Foreign banks have been profitable, had lower operating costs, and better quality assets.[64]
- Since most of the foreign investment in Croatian banks has come from nearby EU countries, there is presently limited opportunity for diversification gains to both the foreign banks and the Croatian economy. That is, as Croatia becomes more integrated into the EU, cyclical movements will be highly correlated.
- There is no evidence of foreign banks "cherry picking" good customers and ignoring the remainder of the economy, and it appears as though credit has expanded to small and medium sized enterprises, an area of concern.

To be sure, there is no guarantee that domination by foreign owned banks will by itself relieve all problems. Indeed, there was an example of a situation in which the purchase of a rehabilitated bank, sold by the State Agency for Deposit Insurance and Bank Rehabilitation in 2000, resulted in the foreign bank purchaser selling it back to the agency for a symbolic price of $1.00. The foreign bank parent "walked away" from its Croatian bank subsidiary. What had happened was that it was revealed that the bank's main currency trader had engaged in fraudulent transactions resulting in losses of $98 million. These transactions had occurred both while the bank was owned by the State Agency for Deposit Insurance and Bank Rehabilitation and during the period that it was owned by the foreign bank. Through a series of efforts by other banks and the CNB, this bank was given liquidity support, and, after the original foreign bank sold it back to the State Agency (effectively losing their original investment), another foreign bank strategic investor was found. The original losses were due to internal controls not being enforced, and a rogue trader was able to both initiate trades and book them into the bank's system, a violation of the bank's stated procedures and accepted methods of internal governance. In fact, the original owners, the supervisory officials of the CNB,

[63] See E. Kraft (2002).
[64] An econometric study of bank costs and efficiency in Croatia supported the finding that efficiency gains are strong for foreign banks. See E. Kraft, R. Hofer, and J. Payne (2002).

the State Agency for Deposit Insurance and Bank Rehabilitation, the subsequent owners and all those employed to conduct examinations, external audits and due diligence did not detect a fraud of substantial proportions.[65] Hence, this may be viewed as a failure of governance procedures and a costly embarrassment for CNB bank examiners, the State Agency for Deposit Insurance and Bank Rehabilitation, the original bank management, the accounting profession, and the management of the acquiring foreign bank which conducted "due diligence" prior to acquiring the bank from the State Agency for Deposit Insurance and Bank Rehabilitation. From the perspective of dealing with foreign banks, the State Agency can be criticized for not recognizing that the acquiring bank may not have been a "fit and proper" buyer. That is, once the problems surfaced, the bank was having significant problems in its domestic environment having to due with large loan losses to a particular borrower and uncertainty regarding its ownership status. The bank was not in a position to recapitalize its Croatian subsidiary preferring instead to absorb the loss of its original investment. Fortunately, the State Agency was able to find another buyer willing to do so.[66]

Deposit Insurance in Croatia

In reviewing the implementation of deposit insurance in Croatia, the following should be considered:

- The deposit insurance program was established in the midst of a banking crisis that followed a costly initial recapitalization of the banking system with "big bonds" and frozen foreign currency deposits.
- The deposit insurance program has unusual coverage, excluding demand deposits and the deposits of businesses. If deposit insurance is to play a role in maintaining confidence in the payment system, it is difficult to see how the demand deposit exclusion furthers this. The limitation of business deposits seems arbitrary.
- The deposit insurance agency has little power to take actions that would protect the financial viability of its fund. The decision on when and how to resolve bank insolvencies is out of their hands.
- The deposit insurance fund must be invested in securities of the Croatian government. While this is not unusual, the deposit liabilities have a

[65] See *CNB Annual Report*, 2001 and E. Kraft (2002).

[66] One of the arguments in favor of foreign banking is that such banks are usually subsidiaries of large foreign banking organizations that have the capability to absorb losses and recapitalize such subsidiaries. However, this will only happen if the foreign banking organization sees a long run economic benefit to doing so. While it may be true that such banks have a strong incentive to protect their reputations and avoid an embarrassing failure, it is possible that circumstances are so bad that it is prudent for them to "walk away" from their ailing foreign subsidiaries. Such was the case in Argentina when it was decided by the courts to allow borrowers to repay their dollar loans with pesos on a one to one basis while forcing the banks to value dollar deposits at 1.4 pesos per dollar. See E. Kraft (2002).

substantial foreign currency component, and the fund is exposed to foreign exchange risk.

- When faced with problems, the deposit insurance agency had insufficient reserves and had to adopt arbitrary criteria for making payments. Delays in payment are unfortunately quite common in many deposit insurance programs.[67]

In summary, the Croatian experience with deposit insurance has not been positive. At the present time, the current program is under review in light of the nation's efforts to qualify for membership in the European Union.

VIII. SERBIA AND MONTENEGRO

Federal Republic of Yugoslavia-(Renamed Serbia and Montenegro from February 2003)

As indicated above, Bosnia and Herzegovina and the Republic of Croatia declared independence and wrestled with the problems of war, post war reconstruction, inflation, transition to a market economy, monetary stabilization, and bank rehabilitation. In addition, several other former Yugoslav republics declared independence with less conflict: Slovenia and Macedonia. What remained in Yugoslavia were the two republics of Serbia and Montenegro. Serbia was much the larger part of Yugoslavia with Montenegro having a population of approximately 650,000.

While the other new nations quickly addressed problems of nationhood and reconstruction, with the participation of the international community, the Federal Republic of Yugoslavia (FRY) was isolated as sanctions were imposed by the international community based upon the role of the FRY in the Balkan wars, primarily in Croatia and Bosnia and Herzegovina. As part of the sanctions, the FRY was not a member of the international financial institutions such as the International Monetary Fund (IMF) and World Bank. Therefore, during the time that the new nations were coping with problems and implementing stabilization and reform programs, the FRY continued the old system whereby the central bank made directed (on the basis of political rather than commercial criteria) credits to banks (owned by their customers) which then lent to socially owned firms. These firms were not able to make their payments to employees and suppliers based upon their revenues. This process of monetizing the "quasi-fiscal" deficits of such firms resulted in massive misallocation of resources and rampant inflation. Total output in 2000 stood at about 40% of its level in 1989.

While there was some relief from isolation following the Dayton Peace Accords in 1995, there was no change in the economic, monetary, or financial

[67] See G. Kaufmann and S. Seelig, "The Post Resolution Treatment of Depositors at Failed Banks: Implications for the Severity of Bank Crises, Systemic Risk, and Too-Big-to Fail," *IMF Working Paper No. 01/83*, International Monetary Fund, 2001.

arrangements in the FRY. Moreover, the start of the Kosovo crisis ended any tentative links between the FRY and the international community. The NATO bombing campaign destroyed much of the FRY infrastructure while placing Kosovo under United Nations administration effectively reduced the population of the FRY by almost 2 million people.

Hence, in the year 2000, the FRY faced enormous problems:

- The nation had faced rampant inflation for over a decade, having reached a monthly rate of *3 billion per cent* in March 1994.
- The external indebtedness of the FRY stood at 140% of its GDP, clearly unsustainable.
- The nation's infrastructure had been devastated by 10 years of wars, especially damaged by the NATO bombing campaign.
- As a result of the conflicts in Bosnia and Herzegovina, Croatia, and Kosovo, the FRY had over 900,000 refugees, creating massive humanitarian problems.
- As a result of the long term inflation, citizens had lost confidence in the currency and the banking system. The FRY had essentially been demonetized.

The FRY, as constituted in 1992 as what remained of the former Yugoslavia, had two republics: Serbia and Montenegro. While Montenegro was a small "statelet," it created an opportunity for the United States to try to pry it away from the rest of the FRY to reduce the power of the Milosevic regime. To that end, the United States Agency for International Development (USAID) rendered technical assistance to the Republic of Montenegro in the area of monetary policy and banking. During that period, the Republic of Montenegro remained part of the FRY, but it effectively declared monetary independence by adopting the Deutschmark (DM) as its currency. Of course, the DM became a legacy currency in the European Monetary Union and was replaced by the Euro. Hence, Montenegro took the step beyond the notion of a currency board, as adopted by Bosnia and Herzegovina, and just adopted the currency of another entity, in this case the European Union. The central bank of Montenegro had no power to implement monetary policy, and it focused on bank regulation, bank supervision, and managing the payment system.[68] Thus, while still technically part of the FRY, the Republic of Montenegro effectively took on many of the responsibilities of a nation-state, including monetary policy, customs, and foreign relations.

[68] The author participated in a USAID technical assistance (TA) mission to Montenegro in 1999. Since Montenegro was still part of the FRY, it was necessary to stay in the coastal city of Dubrovnik, Croatia and travel by auto to the coastal town of Igalo for meeting with Montenegrin counterparts. The TA focused on monetary policy (use of the DM), bank regulation and supervision, and payment system reform.

In February 2003, the FRY was reconstituted as the nation of Serbia and Montenegro. While Serbia had attempted to establish Serb "statelets" in Croatia and Bosnia and Herzegovina (BiH), it is interesting to note that the effort was unsuccessful in Croatia and only partly successful in BiH. However, the Serbs became victims of the same process when Kosovo was placed under UN administration and Montenegro established its own monetary system disavowing the use of the Yugoslav dinar and assumed other responsibilities usually assigned to a national government. Not even in BiH, the closest to a partitioned nation, is there a situation in which one part of the nation chooses another currency.[69] While still a relatively large country within the region, Serbia was a much smaller, weaker, segmented nation than was expected in the late 1980s when Serbian nationalism surged and Slobodan Milosevic rose to power.

In October 2000, sanctions were removed as a result of elections held in September 2000. This has been followed by speedy acceptance of FRY into the international community including membership in the United Nations, the Organization for Security and Cooperation in Europe, the International Monetary Fund, and the World Bank. For this reason, the analysis will be confined to the period from 2001 to the present time. Moreover, the focus will be on the Republic of Serbia which has its own monetary authority (the National Bank of Serbia, or NBS) and severe problems of bank recapitalization and rehabilitation.

Monetary Conditions in Serbia

Immediately upon taking office, the reform government in the FRY petitioned the International Monetary Funds (IMF) for membership, succeeding to the membership of the former Socialist Federal Republic of Yugoslavia. As part of that application, the FRY requested emergency post conflict assistance from the IMF. After making arrangements for the unpaid obligations of the Socialist Federal Republic of Yugoslavia, the IMF accepted the membership application and approved the request for emergency post conflict assistance.[70]

The first order of business was the implementation of a monetary policy to bring inflation under control. To that end, the National Bank of Yugoslavia (NBY) agreed to a program involving a managed float, using the euro as an anchor currency. Monetary expansion would occur only to the extent that the NBY had foreign assets on its balance sheet. Thus, the NBY was not able to either fund the debt of the government or, more importantly in the context of the FRY, the quasi-fiscal deficits of the state owned enterprises. In the FRY, there was a consistent policy of the NBY making directed loans to the banks to loan to companies. Such loans were decided on the basis of political

[69] While some of the citizens of the Republika Srpska in BiH may have preferred using the Yugoslav dinar, it was a choice between a currency that was losing value rapidly or the stable Bosnian konvertible marka.

[70] See International Monetary Fund, *Country Report No. 01/07*, (2001a).

considerations, and credit analysis of the borrowers was not undertaken. Hence, there was over a decade of allocation of credit designed to fund the operating losses of state owned companies, effectively monetizing the losses and contributing to the hyperinflation of the period. The deficits of the government itself were quite modest, although this was somewhat misleading as the government simply stopped paying its bills, essentially funding its deficit by creating substantial arrears. A condition of the stabilization program was a prohibition of the NBY extending credit to either the government or state owned enterprises (through the banking system). Of course, if the monetary policy of the NBY was to be tied to the value of a foreign currency, it was necessary to end the administered multiple exchange rate system that existed up to 2001. The exchange rate regime was unified, and the foreign exchange market was liberalized so that monetary policy operations could be conducted.[71]

As in the other new republics, the implementation of monetary policy (and banking reform) was complicated by the existence of the "frozen" foreign currency accounts. In the 1990s, during the time of sanctions and war, the effective confiscation of the citizens' foreign currency deposits was not limited to the breakaway republics. Citizens (and banks) of the FRY suffered the same fate as those in BiH and Croatia. Thus, the hyperinflation reduced the value of the citizens' dinar deposits while the freezing of the foreign currency accounts reduced the effective value of the remainder of the savings of the population.[72] As a consequence, the economy was effectively demonetized, and there was definitely a constraint on the ability of the NBY to implement policy. Effective monetary policy assumes that participants in the economy use the nation's currency, and bank deposit growth can be influenced. Since the level of bank intermediation was so low, it made implementation of monetary policy all the more difficult.

To summarize, the first task was the implementation of a stabilization policy, approved by the IMF, to bring inflation under control. This policy was comprised of the following:

- Limiting the ability of the central bank to create money by restricting monetary expansion to foreign currency assets on the books of the NBS.
- By limiting asset growth on the books of the NBS to foreign currency assets, this implied that the central bank would not provide credit to the government, the banks, or state owned enterprises.
- The NBS policy was anchored to a managed float, tying the dinar to the DM, followed by the Euro.
- Ultimately, the frozen foreign currency deposit problem would have to resolved if citizens were to have any confidence in the banking system.

[71] See IMF *Country Report No. 01/93*, (2001b).
[72] In addition, banks making up the majority of the assets of the banking system were deeply insolvent, adding to the citizens' lack of confidence in the banking system.

- The nation would need to negotiate with the Paris and London clubs to deal with the problem of unsustainable foreign debt levels.
- Banks were deeply insolvent, and ultimate remonetization of the economy would require that the banking system be rehabilitated.

It is understandable that citizens would not have confidence in their banks when their domestic currency deposits had been ravaged by hyperinflation, the foreign currency deposits had been frozen for a decade, and the banks were known to be deeply insolvent.

The Results of Monetary Stabilization

The stabilization program was implemented in 2001 with the support of the IMF. In addition, substantial support was available from the World Bank, the European Bank for Reconstruction and Development, and various bilateral donors, including the United States.[73]

At the end of the first year of the stabilization program, it was noted that the inflation rate had fallen to 40%, a decline from 113% in 2000. Furthermore, the targets for monetary management regarding NBS foreign currency asset growth were met. The inflation performance and targets were subject to problems due to the necessity to raise administered prices, such as that for electricity, which were artificially low. The low administered prices caused the operating deficits of state owned enterprises which were subsequently funded by selective credits issued by the National Bank of Yugoslavia. This monetization of the "quasi-fiscal" deficits contributed to the hyperinflation of the 1990s. Clearly, the source of the quasi-fiscal deficits had to be removed if monetary control were to be established. Hence, in the adjustment period, prices in general were declining in response to monetary policy while administered prices were raised to avoid further monetization of enterprise operating deficits. The IMF estimated that about half of the inflation in 2001 and that projected in 2002 was attributable to the raising of administered prices.[74] In May of 2002, the IMF affirmed its satisfaction with the progress made in controlling inflation and stabilizing the exchange rate leading to a decline in inflationary expectations and a significant decline in interest rates, all favorable developments.[75]

At year end 2002, the inflation rate subsided to 14.2% with projections (then) for inflation of 9–11% in 2003. Monetary policy in 2003 was focused on a combination of safeguarding the external balance of payments position of the nation while continuing to support disinflation.[76] Later in 2003, this policy

[73] The stabilization program was adopted very quickly as the new government sought to end international isolation. A request for IMF membership and emergency post conflict assistance was processed by December 20, 2000. (IMF *Country Report No. 01/07*, 2001) A Stand-By Arrangement was approved in June 2001 including the monetary policy described above.

[74] See *IMF Country Report No. 02/12* (2002).

[75] See *IMF Country Report No. 02/103* (2002).

[76] See *IMF Country Report No. 03/151* (2003).

view was again reaffirmed by the IMF. It was also noted with satisfaction that there was substantial remonetization of the economy as a result of improved stability of the dinar and the conversion of the DM to the euro. That is, as the DM notes were converted, many citizens chose to maintain the amounts converted as bank deposits rather than euro notes.[77] In 2004, it was noted that these trends continued with inflation in 2003 being in the high 7+ % area. The authorities are still balancing the satisfactory inflation performance with modest increases in output and relatively weak export growth, leading to the problem of balancing the external position and maintaining vigilance in restraining inflation.

In summary, in a relatively short period of time, the Serbian monetary policy has been successful in bringing down inflation from unsustainable levels in the 1990s. The technique was to use a managed float tied to the DM (euro) that allowed for the programmed inflation arising from raising administered prices of the output of state owned enterprises, mainly electricity, balancing external competitiveness on the one hand and inflation control on the other. The policy was similar in some respects to both Croatia and Bosnia and Herzegovina in that the policy anchor is a foreign currency, but the nature of the tie is different. Indeed, in BiH, there is no management of the link as it is established by law in the currency board arrangement. One of the benefits of the stabilization was the remonetization of the economy although many citizens chose foreign currency deposits as their method of maintaining a store of value.

Banking in Serbia

As indicated above, after a decade of conflict (wars in Croatia, Bosnia and Herzegovina, and Kosovo), international isolation, hyperinflation, freezing of citizen's foreign currency deposits, and directed lending by the central bank through state owned banks to state owned enterprises, it is hardly surprising that banks did not prosper in Serbia.

While the form of the banking system in Serbia appeared to resemble a market oriented system with a central bank and a system of banks that were separate corporations, as in the other nations discussed here, the situation was one of form over substance. There was common ownership of state owned enterprises and banks, meaning that banks were owned by their customers. All of the problems arising from this situation were worse in Serbia than in either BiH or Croatia because the situation lasted longer under more trying circumstances. That is, while BiH and Croatia were establishing monetary stability with support from the international community, Serbia was still experiencing hyperinflation and isolation. Both BiH and Croatia went through the difficult (and expensive) process of bank rehabilitation and restructuring, consolidation of the industry, and establishment of supervisory regimes that were appropriate and strong while

[77] See *IMF Country Report 03/296* (2003).

Serbia had not confronted any of these problems until the overthrow of the Milosevic regime and subsequent re-entry into the international community.

In a document prepared by the World Bank in July 2001, shortly after Serbia and Montenegro began the process of integration into the international community, it was noted that "FRY's financial sector is in a very profound crisis."[78] At about the same time, the IMF concluded "—the banking system is largely insolvent and unable to perform its intermediation function."[79] Faced with a problem of this magnitude, the authorities had to take forceful action if the financial sector was to contribute to sustained economic development. To that end, the National Bank of Yugoslavia (NBY) began a process of review of the situation regarding individual banks and what could be done to rectify the situation. In a sense, the situation couldn't be much worse than it was in early 2001.[80]

In December 2000, there were 86 banks in Serbia (including banks in the territories of Vojvodina and Kosovo but not Montenegro). Quickly it was determined, as a result of diagnostic examination conducted with the support of international consultants, that the overall banking industry was in dire financial conditions and that the largest banks in the nation, accounting for 57% of the total assets of the banking system, were deeply insolvent. During 2001, an enormous consolidation and restructuring of the banking industry occurred. By December 2001, the number of banks had shrunk to 49 and the size of the sector shrunk from over 704 billion Yugoslav dinars to just over 291 billion Yugoslav dinars at a time when the inflation rate exceeded 10%. The major driving force behind this consolidation was the decision to the largest 4 banks and put them into bankruptcy.[81] Initially, the banks were placed under the administration of the Agency for Deposit Insurance, Rehabilitation, Rehabilitation, Bankruptcy, and Liquidation.

As closing the largest 4 banks in a nation, and shrinking the banking sector by over 63% in real terms, is unprecedented, some further discussion is appropriate at this point. The decision was courageous and was bound to be controversial and difficult. However, there was not much choice at this point:

- There was little in the way of fiscal resources available to recapitalize the banks.
- The banks were so deeply insolvent that there was little likelihood that rehabilitation could result in viable institutions.

[78] See World Bank, *Breaking with the Past: The Path to Stability and Growth*, 2001.
[79] See International Monetary Fund, *IMF Country Report 01/93*, 2001.
[80] It should be noted that the FRY had the same payment system arrangement in which a government monopoly processed all payments in the same way as described above for Croatia and BiH. In the FRY, it was known as ZOP, and it was reformed in 2002 with payments operations migrating to the banks. See International Monetary Fund, *IMF Country Report 03/296*, 2003.
[81] See NBY, *Annual Report 2001* (2002) and International Monetary Fund, *IMF Country Report No. 02/103* (2002).

- The banks had been deserted by many customers and hence played a minor role in the processing of payments; accounting for less than 15% of payments processed while representing 57% of assets.

In early 2002, the process of winding down the assets and liabilities of these banks began. First, it was decided that all depositors who were natural persons would be compensated in full, and their deposit accounts would be transferred to the Postal Bank. Also foreign embassies and public entities such as schools and hospitals were fully compensated. Enterprises were to have their deposit and loan accounts netted, and they would be compensated 100% up to 200,000 Yugoslav dinars and 20% of any remaining net deposit amount. It is to be emphasized that this was not a deposit insurance payout, but the result of decisions taken by the Ministry of Finance which would take the place of the compensated depositors in the process of settling claims on the bankrupt estate. It should be noted that these bankrupt banks employed 8,000 people. As might be expected, labor unions objected to this process, and there were major disruptions and demonstrations against closing these banks, causing those involved in the process to have legitimate fears for their physical safety. There were many technical difficulties that occurred in the process including lack of understanding on the part of the courts administering the bankruptcy, political interference, concern over the control of assets that did have value (fixtures, office equipment, etc.), unrealistic expectations regarding the value of financial assets to be disposed by the Agency, and legal difficulties with frozen accounts in foreign countries dating back to the sanctions as well as concerns regarding money laundering and terrorist financing. Notwithstanding these difficulties (nor downplaying their serious nature), the process resulted in a cleansing of the banking system that was necessary to move forward.[82]

During 2002, a number of other developments occurred while the number of banks remained largely unchanged. Some banks were party to transactions that were subject to negotiation by creditors represented by the Paris Club and the London Club. Claims held by these creditors were transformed to shares, removing them as liabilities and facilitating the privatization process. Moreover, a number of banks were placed under the ownership of the Republic of Serbia and control of the Agency for the purpose of making these banks available for private ownership. In addition, several banks were closed, several banks were merged, and another new license was issued to a foreign bank. As a result of this process, the ownership structure of the system had changed while the number of banks remained constant. A larger share of the banking system was owned by foreign interests and the proportion of banks that were either socially or state owned (not counting those under temporary state ownership awaiting privatization) declined. Assets of the banking system grew

[82] Much of this discussion is based upon documents prepared by U.S. Treasury advisors to the Agency (George Mullinax, William Thomas, Jack Gushee, Valerie, McNevin, and David Parker).

by a net amount of 25 billion dinars, or an annual rate of 8.6%. However, this is somewhat misleading since it represents a combination of 95 billion dinars of growth and a decline of 70 billion dinars as a result of moving the frozen foreign currency deposits off the books of the banks, shifting both the claims and the liabilities to the Federal Republic of Yugoslavia. Hence, the banking system growth of about 33% represents renewed confidence by the citizens.[83]

In 2003, the process continued as assets of the banking system grew at a rate of 16% per year. Banks were broken down into three categories: foreign owned banks, privately owned banks, and those banks owned by the Republic of Serbia in the process of privatization. The number of foreign owned banks increased from 12 to 16, privately owned banks increased by 1 to 16 banks, and 15 banks were state owned. The nation maintained its policy of not allowing "Greenfield" or *de novo* entry by foreign banks while they are still in the process of completing the privatization of a substantial number of banks. Foreign bank ownership accounted for 38% of the assets at the end of 2003. Hence, the banking system has undergone enormous change from a situation of deep and fundamental crisis. A World Bank assessment published in November 2003, following up on its June 2001 diagnosis entitled *Breaking with Past: The Path to Stability and Growth*, concluded that "The reform process has made significant progress in many areas, particularly in *macroeconomic stabilization*, trade liberalization, privatization, *bank resolution*, pension reform, and social protection."[84] However, it is noted that further progress is needed.

Deposit Insurance in Serbia

Actually, before the breakup of Yugoslavia, there was a deposit insurance program that was implemented in 1989 and still exists for Serbia. However, as a practical matter it never functioned as such for a number of reasons:

- The hyperinflation of the 1990s reduced the value of the coverage to miniscule levels.
- The fund had never accumulated sufficient balances to deal with insolvencies and payments to depositors were decided on an *ad hoc* basis and funded from budgetary sources.
- Banks paid the premium on an irregular basis, and the agency never followed up to collect when banks did not make payments.
- Collections from the banks were commingled with all of Agency funds making it difficult to determine the adequacy of the fund to meet potential obligations.
- There was no investment policy for the funds collected, and the Agency deposited funds in the banks they were insuring.

[83] See National Bank of Serbia, *Bank Supervision Department: Annual Report, 2002* (2003).
[84] See World Bank, *Serbia and Montenegro: Recent Progress on Structural Reforms*, November 2003.

The Agency is currently in the process of trying to tighten up the procedures, segregate funds, collect from banks on a consistent basis, and invest funds according to a better investment policy. However, it is now necessary to start from the beginning and establish a deposit insurance program based on the principles discussed earlier. It is important that the remaining state or socially owned banks be privatized before a new program is implemented for several reasons. First, many of these banks have substantial financial problems that would be a drain on any new program. Second, such banks could be seen as having an implicit guarantee from the government that would distort competition and resource allocation.

IX. SUMMARY AND CONCLUSIONS

In this paper, the role of deposit insurance in three South East European nations is reviewed. Each nation was part of the former Socialist Republic of Yugoslavia, and they all emerged from the conflicts related to that breakup. While there were some similarities in the situations, there were also important differences:

- In the case of BiH, a nation was created with a severely divided population and internal government structure. Moreover, there was an international peace keeping presence and a foreign overseer who could unilaterally veto or implement policy. Since the implementation of the Dayton Peace Accord, there has also been substantial international (donor) involvement in BiH.
- In the case of Croatia, a relatively homogeneous nation and government emerged from a long war. However, there was some international isolation for a time due to the perceived role of the Croatian independence movement in the war in BiH. With the accession of a reform government, international participation in Croatia has accelerated, and the nation is moving toward full membership in the European Union.
- Serbia and Montenegro suffered from international isolation and sanctions as well as several wars for a long period of time. Moreover, it was fragmented into different pieces, especially with the Kosovo crisis of 1999. Hence, Serbia and Montenegro lost effective control over Kosovo, and the link between the Republic of Serbia and the Republic of Montenegro, the constituent parts of Serbia and Montenegro, is tenuous. From the perspective of the financial and banking system, Montenegro declared monetary independence by adopting the euro as its currency, effective outsourcing its monetary policy to the European Central Bank.

The similarities are as follows:

- All three nations suffered from hyperinflation in the 1990s, with Serbia suffering for the longest period.

- All three nations embarked upon an IMF supported monetary stabilization program in which monetary policy was anchored by a foreign currency, the DM (and the euro). In the case of BiH, the link was strongest by the adoption of a currency board arrangement.
- In all three nations the banking systems started out identically due to their common heritage.
- In all three nations, the banking systems were effectively not functioning since the savings of the citizens had either been ravaged by inflation (dinar denominated savings) or expropriation (frozen foreign currency savings). As a result, citizens had little or no confidence in the banking systems. The economies were effectively demonetized, and citizens only had confidence in foreign currency, primarily the DM.

In all three cases, the banking systems needed to be recapitalized and rehabilitated. In the case of Croatia, this was done at great cost with the final outcome being the entry of foreign banks which now dominate the banking system. A similar pattern emerged in BiH. Serbia is still in the process of rehabilitation with a substantial number of banks available for privatization. In all cases, the banking industry underwent consolidation.

All three nations have experience with deposit insurance. In Croatia, it was introduced in a crisis environment, did not have sufficient resources to effectively reimburse depositors, and had some unusual coverage arrangements. The eventual stabilization of the banking system, largely through foreign ownership, is a good sign for the future health of the program, but it definitely needs review. For BiH, the deposit insurance arrangements initially reflected the fragmented governmental arrangements arising from the Dayton Peace Accord. That is, each entity had its own deposit insurance arrangement, either enacted in the Federation of Bosnia and Herzegovina (the Bosniac/Croat federation) or proposed in the Republika Srpska. However, as the banking system consolidated across both entities, it became apparent that the only sensible way to design a deposit insurance program was to have it migrate to the State level, the same level as the Central Bank of Bosnia and Herzegovina. The program was enacted and is now being implemented. It should also be noted that very recently the bank supervisory function was removed from the entities and consolidated at the State level in the Central Bank of Bosnia and Herzegovina. Both of these developments are major events in the evolution of the nation. In Serbia, the process of monetary stabilization (inflation control) has been relatively successful but still has a ways to go. Also the bank rehabilitation and consolidation process must still be completed. The non-functioning deposit insurance program should then be evaluated, and the process of drafting, enacting, and implementing a well structured program can begin.

It is important to note that the design of financial sector reform and deposit insurance programs must take into account the particular situation in a country. While the ultimate objectives and design elements may be agreed upon, the ultimate enactment and implementation must recognize the situation in each case. In this study, all three nations had some similar initial conditions; wartime destruction, hyperinflation, flawed banking systems (ownership, governance, supervision, etc.), and a demonetization of the economy, at least with the domestic currency. However, the differences in terms of the political outcome of the breakup of Yugoslavia and the involvement of the international community were substantial, having a definite impact on the cost and effectiveness of reform programs.

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