European Research Studies
Volume III (1-2), 2000, pp. 11-28

Strengthening The Global Financial Stability: Lessons From The European Monetary Union

Kondonassis J. Alex* and Malliaris A. G**
The University of Oclahoma and Loyola University

Abstract

The purpose of this paper is twofold. First, we illustrate the difficulties of the current global monetary system by reviewing its recent historical record and second, we argue that its stability can be strengthened by implementing the lessons learned from the European Monetary System. In section 2 we review the performance of the managed float from the early 1970s with special emphasis in section 3 on the recent Asian Crisis. Both the occurrence and the management of the Asian crisis have highlighted the stylized approach to crisis followed by the IMF and have induced global policy makers to offer a new architecture for the global monetary system. These ideas are discussed in section 4. Yet, despite the rhetoric, it appears that the policy recommendations of the IMF and the World Bank have not radically changed thus far. Some recent concrete proposals that have been circulated address the reorganization of the IMF and the World Bank. This discussion is presented in section 5. We then review the experiences of the European Monetary System from its beginning to the recent formation of the European Monetary Union (EMU). This analysis leads to the main contribution of this paper that is this: the global monetary system can learn some valuable lessons from the European Monetary System and the EMU. The last section is devoted to the recommendations suggested by the European experience and a summary of the main conclusions.

1. Introduction

In his Nobel Lecture, Professor Robert Mundell (2000) argues that although the 20th century began with a highly stable global monetary system in the form of the gold standard, it ends with ample evidence of dysfunctional volatility of exchange rates that have occasionally caused global monetary crises. Mundell concludes his remarks by claiming that the 20th century closes with a global monetary system inferior to that with which it began, but much improved from that prevailed only two and a half decades ago. Thus, the real challenge to economists and global policy makers is to design a global monetary system that offers greater exchange rate stability without sacrificing either free capital mobility or the independence of national monetary policies.

* David Ross Boyd Professor of Economics, The University of Oklahoma
** The Walter F. Mulludy Sr. Professor of Economics and Finance Loyola University Chicago

The purpose of this paper is twofold. First, we illustrate the difficulties of the current global monetary system by reviewing its recent historical record and second, we argue that its stability can be strengthened by implementing the lessons learned from the European Monetary System. In section 2 we review the performance of the managed float from the early 1970s with special emphasis in section 3 on the recent Asian Crisis. Both the occurrence and the management of the Asian crisis have highlighted the stylized approach to crisis followed by the IMF and have induced global policy makers to offer a new architecture for the global monetary system. These ideas are discussed in section 4. Yet, despite the rhetoric, it appears that the policy recommendations of the IMF and the World Bank have not radically changed thus far. Some recent concrete proposals that have been circulated address the reorganization of the IMF and the World Bank. This discussion is presented in section 5. We then review the experiences of the European Monetary System from its beginning to the recent formation of the European Monetary Union (EMU). This analysis leads to the main contribution of this paper that is this: the global monetary system can learn some valuable lessons from the European Monetary System and the EMU. The last section is devoted to the recommendations suggested by the European experience and a summary of the main conclusions.

2. From Bretton Woods to the Current System

The current global monetary system has been described as the managed float. It was introduced abruptly on August 15, 1971 when the U.S. chose to discontinue the exchange of dollars for gold with foreign central banks. With the breakdown of the Bretton Woods system of fixed exchange rates, national monetary policies in the U.S. and elsewhere became more focused on domestic issues and exchange rates became flexible. This in turn caused exchange rate volatility, which among other reasons induced the European Union (it was called then the European Economic Community) to plant the seeds of European monetary integration.

Mundell (2000) brilliantly describes the performance of the managed float during the last third of the century by citing some partial statistics: Between 1971 and 1980 the German mark doubled against the U.S. dollar; between 1980 and 1985, it halved: between 1985 and 1992 it more than doubled again: since 1992 it has dropped by a third. This is very sizable volatility.

The international monetary order established at Bretton Woods was the last conscious attempt to reconcile credibility and flexibility at the world level. The aim of the agreement was not to reverse the shift towards purely fiduciary money, which had gained momentum in the period between the two world wars. Rather, it was to make the independent conduct of national economic policies compatible with the maintenance of stable international economic conditions. Restricting short-term capital movements was an essential element.

As already mentioned, the Bretton Woods system collapsed at the beginning of the seventies when the two conditions that had ensured its success in the preceding three decades ceased to obtain; stable macroeconomic policies in the

country issuing the reserve currency and capital mobility that was effectively controlled.

The oil crisis and the accommodating monetary policies by the U.S. Federal Reserve Bank led to the high and persistent inflation during most of the seventies. Exchange rate flexibility restores the effectiveness of subsequent tight monetary policies by Volker in controlling inflation but did not prevent the emergence in the late 1970s and early 1980s of severe unemployment, economic stagnation, and losses of economic welfare. The restrictive monetary policies pursued since the 1980s have allowed a lasting reduction in inflation and a curbing of wage pressures. The conviction has grown that the internal and external value of each currency depends on the confidence of investors in the economy's ability to grow and prosper.

It is nonetheless wishful thinking to imagine that each country's «putting its own house in order» is sufficient to ensure stable economic and monetary conditions at the international level. An important part of the international banking system, and more generally of the financial markets, operates outside national borders. The quantity of money and credit created and exchanged is beyond the direct control of any national or international authority.

Uncoordinated national policies find it hard to prevent the fluctuations in the prices of financial assets from imparting destabilizing impulses to the real economy. The high degree of financial and trade integration means that every country can be hit by the shock waves emanating from other regions, including those that are far off or apparently of limited economic significance.

Instead of further reviewing reasonably well known events of the recent history of the global monetary system, it is informative to concentrate of the recent Asian crisis. There are two reasons for doing so. First, the crisis reveals the inherent instabilities of the managed float. Second, the response to this crisis has brought to the attention of the world the need to find a better global monetary system.

3. The Recent Asian Crisis

It has been argued by Radelet and Sachs (1998) that most market participants and analysts did not anticipate the Asian crisis. Data on capital flows, credit ratings, IMF reports, and other indicators support this observation. The biggest warnings came from Thailand, where the expectations of currency depreciation grew markedly in 1996 and early 1997. Korea also gave off increasing warnings. There were few, if any bells in Indonesia, Malaysia, or the Philippines. Certainly, traditional warning signs, such as current account deficits, overvalued exchange rates, diminished export growth and industrial excess capacity gave some reasons for concern, but the signals were muted and generally ignored. While East Asian currencies had appreciated in real terms in the 1990s, the real appreciation was considerably less than in most of Latin America. Current account deficits were very high in Thailand and Malaysia in 1996, but considerably lower in Indonesia and Korea. Malaysia's current account deficit had declined markedly in 1996 compared with the preceding year.

The biggest indicators of risk were financial, but were generally ignored. Short-term debts to international banks had risen to high levels relative to foreign exchange reserves in Indonesia, Korea and Thailand. Domestic claims on the private sector, measured as a percent of GDP, had also risen significantly, suggesting growing strains in the banking sector. This was especially true in the case of Malaysia, the Philippines, and Thailand, and much less so in Indonesia and Korea. These indicators showed some growing weaknesses, and pointed to the need for moderate adjustments in the Asian economies by mid-1987. These imbalances, however, were not large enough to alert economists to the magnitude of the subsequent crisis.

Perhaps the most notable fact, however, is that the various financial indicators mentioned above pinpointed the vulnerability of the Asian economies to possible economic problems but did not guarantee the onset of crisis. In other words, all the factors commonly cited such as overinvestment, heavy indebtedness to foreign banks, low foreign currency reserves, high degree of nonperforming commercial loans, excess supply of real estate construction, among others, seem to be necessary but not sufficient conditions for a major financial crisis. In 1994, Indonesia, Korea, and Thailand already had ratios of short-term debt to foreign exchange reserves well in excess of 1.0, but they were not hit by a crisis. These patterns may indeed be the best confirmation of the multiple-equilibrium character of financial panics; we can identify conditions of vulnerability, and the need for modest adjustments may be identified, but we cannot predict the actual onset of capital flight by international investors and speculators.

There are at least two theories that can explain the Asian crisis. One theory is based on economic fundamentals and the other on financial panic. The theory based on economic fundamentals argues that weak domestic macroeconomic factors precipitate a balance-of-payment crisis. A country under a fixed exchange rate regime with weak macroeconomic fundamentals becomes vulnerable to a speculative currency attack. Defense against speculation drains the troubled country's foreign reserves, and an economic crisis ensues.

In contrast, theories based on financial panic attribute the crisis to an exogenous change in investor confidence, leading to liquidity problems. This loss of confidence among investors leads to a sudden withdrawal of short-term capital from the troubled countries. In East Asia, this difficult situation was exacerbated by the highly leveraged state of these economies, which held a large amount of short-term debt denominated in foreign currencies. As capital flight led to severe currency devaluation, it became more difficult for these countries to cover their foreign denominated liabilities, and they plunged into financial crisis.

In deciding which theory best explains the onset of the financial crisis in Asia, one must reconcile a number of inconsistencies between theory and reality. For example, many economic fundamentals in Asia were incompatible with an impending crisis. Many Asian economies were characterized by low inflation, above average GDP growth, fiscal budgets that appeared to be in balance or surplus, and high rates of investment. Inconsistencies also exist regarding the applicability of financial panic theories. The dramatic shift in investor confidence required by the theory is unlikely to have been completely exogenous. Economic fundamentals must have played a role in investors' minds. Furthermore, why did investors sud-

denly experience a loss of confidence? After all, investors knew the economic status of these countries well before the onset of the crisis.

The financial turmoil in Asia is ongoing and its impact is more severe than originally thought. Countervailing factors served to obscure the origins of the crisis. Although signs of weakness were apparent, such as high current account deficits, high debt leveraging, and fragility within the banking and corporate sectors, other signals, such as low inflation and high saving rates, pointed to economic good health.

Although it is difficult to determine the exact causes of the debacle and their significance, most authors, such as Radelet and Sachs (1998), cite the following reasons; weak economic fundamentals, poor governmental policies, banking and corporate fragility, weak financial infrastructure, moral hazard, lack of transparency, dependence on short-term debt, and fixed exchange regimes. What remains a puzzle is why did these factor cause financial panic and what is the degree of instability of the global financial system.

4. Coping With the Crisis: The Role of the IMF

In the years prior to the crisis, observers marveled at the phenomenal economic growth the Asian «tigers». The abundant flow of the foreign capital seemed to support the political, economic and cultural systems in these countries. However, as capital flows began to dry up and these countries plunged into crisis, public perception turned against the IMF for its ineffectiveness to contain the crisis. Recent assessment of the IMF's actions in Asia has had many calling for reform of the organization. The Asian crisis has been a crucial test of the IMF's functions and, in the opinion of many, the organization has been slow to act.

Critics argue that the IMF policies are inconsistent with the current global economy. The IMF policies are inconsistent with the current global economy. The IMF was created as part of the 1944 Bretton Woods agreement, when major economies were converting to a fixed exchange rate regime. The IMF was given the charge of maintaining fixed exchange rates and providing loans to member countries undergoing temporary current account balance-of-payments difficulties. After the collapse of the Bretton Woods System in 1971, most countries abandoned fixed exchange rates and adopted instead a floating exchange rate. Therefore, the role of the IMF to maintain fixed exchange regimes has arguably become obsolete.

From another point of view, the IMF prematurely rushed to extend funds to troubled countries, rather than waiting to see if funds could be acquired from private financial markets. Such actions worsened the situation by providing a signal that the IMF would always come to these countries' rescue. The IMF was naove with its agreement with Asian countries as it released funds with few guarantees that countries would comply with its suggested reforms, and its enforcement of such agreements was especially weak. Rather than maintaining the traditional roe of lending, the IMF has become involved in mandating structural reforms for borrowing countries.

In addition to accusing the IMF of prescribing ineffective and perhaps inappropriate reforms, some in the international community have questioned the

IMF's monetary policy recommendations to Asian economies. Several observers argued that the IMF's policy recommendations and reforms worsened the crisis. As a result, there appears to be a growing belief that the IMF must redefine its purpose and policies to remain effective under contemporary economic conditions.

However, the IMF was not always to blame for not anticipating the crisis. The governments of some of the countries involved also withheld information from the IMF. The IMF was unaware of these governments' costly attempts to defend their exchange rates, which soon depleted the bulk of their foreign reserves. By the time the IMF was asked for assistance, these economies had reached a critical stage of vulnerability. The nature of these countries' hedging of currency risk was also hidden from the IMF. Such strategies to offset risk, including volatile derivatives and other instruments, are very difficult to monitor because they are off-balance-sheet transactions. Prior to the crisis, there was little hedging of currency risk by Asian financial institutions. Thus, the Asian financial institutions were unprotected from currency risk. The collapse of these unhedged institutions during the crisis worsened the financial contagion. Besides, IMF's recommendation to tighten fiscal policy was a consistent response to an «overheated» economy. As such fears became unwarranted, the IMF abandoned those recommendations in favor of a looser fiscal stance.

The true downfall of the policy, however, was its inconsistency. Asian governments confused the international community by pursuing erratic monetary policy, which undermined its effectiveness. In contrast to the erratic monetary policies, the IMF declared nine main goals: (1) to prevent an outright default on foreign obligations; (2) to limit the magnitude of currency depreciation; (3) to preserve a fiscal balance; (4) to control inflation; (5) to rebuild foreign exchange reserves; (6) to restructure and reform the banking sector; (7) to remove monopolies and otherwise reform the domestic non-financial economy; (8) to preserve confidence and creditworthiness, and finally, (9) to limit the decline of output, that is, avoid an economic recession.

To achieve these objectives, the programs have been based on six key policy components:

Fiscal Policy. The IMF placed fiscal contraction at the very heart of the programs. The objectives of fiscal contractions were to (i) support the monetary contraction and defend the exchange rate, and (ii) provide for funds necessary to inject into financial system.

Bank closures. In Thailand, 58 out of 91 finance companies were immediately suspended, and 56 of these were eventually liquidated. In Indonesia, 16 commercial banks were closed. In Korea, 14 out of 30 merchant banks were suspended. The goals of these actions were to limit the losses being accumulated by these institutions, and to send a strong signal that governments were serious about implementing reforms in order to restore confidence in the banking system.

Enforcement of capital adequacy standards. While banks were facing rapid reduction in capitalization because of losses on foreign exchange exposure and an increase in non-performing loans, the initial IMF programs pushed for a rapid recapitalization. The goal was to return the banking system to solid footing as quickly as possible.

Tight domestic credit. The IMF programs raised interest rates and reduced domestic credit availability. The purpose was to defend the exchange rate.

Debt repayment. Foreign exchange targets in each program provide for full payment of foreign dept obligations, backed by «bailout funds» mobilized by the IMF.

Non-financial structural changes. IN each program, structural reforms were included that were aimed at reducing tariffs, opening sectors for foreign investment, and reducing monopoly powers.

5. Lessons From the Managed Float

This brief overview of both the Asian crisis and the policy recommendations of the IMF lead to two straightforward conclusions: first, the current global monetary system is not functioning very smoothly, and second, the policy decisions to stabilize the system are retroactive instead of being proactive. A more detailed overview and evaluation of the managed float during the last third of the century would reinforce these conclusions.

Economists have debated for a long-time the advantages and disadvantages of floating exchange rates. We do not wish to revisit this debate here. Rather, we wish to take a selective approach and ask the question: how can we improve the stability of the flexible exchange rate system?

Some modest proposals have been offered by the U.S. Treasury Secretary Lawrence Summers. It was reported that in the new architecture of the global monetary system the World Bank should specialize in offering long-term loans for economic development and growth, while the IMF should concentrate in offering short-term loans whose primary purpose would be to stabilize the country's exchange rate. While these suggestions are sketchy and a great deal of detail needs to be added, we wish to argue that during the last third of the 20th century, in contrast to the managed float, a great effort has been put forth by the European Union towards stabilizing the currencies of its members. These efforts were at times questioned and the record shows that the EMS has had its share of crises, yet it is fair to conclude that it has ultimately triumphed in the establishment of the EMU. Next we highlight the main characteristics of the EMS to draw few lessons we believe can be applicable in stabilizing the managed float.

6. The European Monetary System

The European Monetary System (EMS) was established in 1979. It was designed to provide a tool, the Exchange Rate Mechanism, for exchange rate stabilization and convergence of economic and monetary policies. The EMS was born partly as a reaction to inflationary monetary policies in the United States and the depreciation of the dollar. Because of the dominant position of the German economy within the region, the group of countries that adhered to the ERM of the EMS became in effect a currency area anchored to the mark, with the monetary policy of the Bundesbank setting the pace of inflation in the European currency area. Whereas the other countries in the ERM focus their monetary poli-

cies on exchange rate targeting, the Bundesbank focuses on price stability, much like but even more so than the United States.

The EMS provided an important foundation for the EU: relative exchange rate stability. Its mechanisms ensured that EU currencies fluctuated only to a very limited extent against one another. This decreased fluctuation has resulted in economic growth and stability in Europe and has given new input to the process of integration. It has also made business transactions involving several EU currencies more predictable and has helped limit exchange rate losses.

The history of the EMS begins in the early 1970s when problem with the international monetary mechanism forced the EU to find alternatives to ensure greater monetary stability and solidarity. The EU established the EMS and introduced the European Currency Unit (ecu) as a unit of account for the EMS. A simultaneous agreement between the EU central banks set forth the operation procedures, the EMS mechanisms and the features of the ecu.

The EMS began to operate on March 1979 with three basic purposes: (i) to provide a zone of monetary stability (ii) to support closer monetary cooperation and (iii) to foster economic and monetary unity in Europe. The EMS operated under the auspices of the European Monetary Cooperation Fund (EMCF). It was based on agreed exchange rates for the participating currencies. A «parity grid» assigned individual central rates in ecus to each currency. These central ecu rates then determined the bilateral exchange rates between any two currencies. The currencies were thereby linked to each other through the ecu. If and when the exchange rate between any two EMS currencies crossed the divergence threshold or maximum fluctuation limit, the central banks would first attempt to intervene. If such intervention failed to bring the currencies within the fluctuation margins set around the central bilateral exchange rates, the central rate of the affected currency or currencies would be realigned. Realignments were changes in the fixed ecu central rates of the EMS currencies. They became necessary as a result of economic disparities, mostly in terms of inflation, of the individual economies of the member states.

The EMS facilitated the interdependence of European economies by providing a tool for exchange rate stabilization and for encouraging convergence of economic and monetary policies. This tool was called the Exchange Rate Mechanism (ERM) and it consisted of four major components: the ECU, the parity grid, the divergence indicator and the credit facilities.

The ECU was created as a new monetary reference unit in the system, superseding the previous European Unit of account. The ECU was made up of a basket of specified amounts of each community currency and was the precursor of the current Euro. Even countries that did not participate in the ERM had shares in the ECU basket. Since the number of units of each currency in the Basket was fixed, the weights of the various currencies changed over time with variations of intra – European exchange rates. Obviously, the larger the weight of one currency, the larger is the impact of exchange rate variations of this currency on the value of the ECU.

In the EMS, the ECU fulfilled four functions: it was a reserve asset between European central banks and also a settlement instrument for transactions be-

tween them. The ECU also provided a numeraire for the exchange rate mechanisms and was the basis for the indicator of divergence.

The parity grid consisted of the central rate, the bicentral rate and marginal intervention. Subject to agreement of all ERM participants, each member had a central rate. The central rate was expressed as the amount of that nation's currency equal to one ECU. The central rates were fixed and revised only with a realignment. These rates were used in the parity grid to monitor currency fluctuations relative to each other. The ratio of one country's central rate to another's formed the bicentral rate. From this bicentral rate, the value of this ratio was allowed to fluctuate up of down 2.25% (for Italy 6%). When the ratio reached the allowable margin, action was taken by both countries. The weaker currency's central bank was expected to sell the stronger currency, and the stronger currency's central bank bought the weaker currency.

The divergence indicator was designed to give a country a warning when its currency was nearing the divergence of the ECU central rate. When the divergence indicator crossed a certain threshold, the country was expected to act in a variety of ways, such as intervention in the currency markets, changes in domestic monetary policy, changes in central parity, or other general measures of economic policy.

There were three financing facilities in the EMS: the Very Short Term Financing Facility (VSTF) the Short-Term Monetary Support (STMS) and the Medium Term Financial Assistance (MTFA). The first two were administered by the central banks and the third by the EU's council of ministers.

7. Lessons Learned From the EMS and the EMU

The EMS functioned very well between 1979 and 1992. During the second half of 1992, however, it came under significant pressure because of certain financial crises among the EU currencies.

The first currency crisis in the EU directly followed the negative outcome of the first referendum on the Maastricht Treaty in Denmark on June 2, 1992. The no vote by the Danish people triggered a series of reactions on the international financial markets as it questioned the entire process leading toward the European Union, including the introduction of the single currency.

The Italian lira, Spanish peseta, Portuguese escudo and British pound were the most negatively affected currencies. Italy, Spain, Portugal and Great Britain were considered to be the member states that would have the most difficulties in meeting the convergence criteria set forth in the Maastricht Treaty. They, however, had found an anchor and guarantee in the timetable and the conditions set forth in the Treaty. In addition, the currencies in the EMS had not been aligned since January 1987. This very stability of the system allowed internal tensions to build up between the national economies and currencies of the EU Member States.

The discussions on the future of the Treaty in combination with these internal pressures consequently decreased the values of the pound, peseta, lira and escudo. This also included significant sales of securities in pounds, peseta and ecus, whose future was equally uncertain to the markets. This situation was ag-

gravated by the announcement of the French government on July 1, 1992 that a public referendum for the ratification of the Maastricht Treaty would be held in France on September 20, 1992. This provided a three-month interval in which the uncertainty about the future of the European Union provided ample room for speculation.

By August 1992, Italy, Great Britain and Portugal experienced major difficulties. In addition, the Deutsche mark gained strength from a declining dollar and increasing German interest rates. The mark and the Belgian franc reached their ERM-ceilings against the Italian lira on several occasions, forcing the central banks to intervene in support of the lira.

On the weekend of September 12 and 13, 1992, the parity of the lira in the ERM was decreased by 7%. In addition, the German Bundesbank apparently refused to support the lira with larger decreases in the German interest rates while the British and Spanish governments refused to devalue their currencies in tandem with the lira. The final blow to the system occurred on «Black Wednesday». The British government announced the temporary withdrawal of the British pound from the ERM. The EU monetary committee also decided to suspend the obligatory interventions in support of the lira and to devalue the peseta by 5%.

Another crisis in the EU resulted from the severe recession in most of the EU Member States and the Unexpectedly high costs of German unification. On July 29, 1993, the German Bundesbank increased its discount rate at a higher level than expected to contain domestic inflation in Germany. Following this decision by the Bundesbank, the higher rates increased the value of the Deutsche mark, already strong within the ERM, against other EU currencies. Even with interventions worth an estimated ECU 100 billion, the EU central banks were unable to maintain the fluctuation margins of + 2.25% between the mark and the effected currencies.

While these crises were occurring, the EU demonstrated exceptional commitment to the Maastricht Treaty and its implementation. In particular, the economic effort exerted by several EU members during the period 1993 to 1998 was both remarkable and quite effective in leading most of the countries to economic convergence as defined by the treaty. As is well known, since January 1, 1999, the European Monetary Union with its single European currency, the Euro, and a unified monetary policy under the discretion of the European Central Bank is a reality. Thus, unlike the rest of the world that continues to face currency fluctuations, twelve European countries have now achieved fixed rates among themselves, after great efforts that were put forth over a period of forty years. The lessons that can be drawn from the European experience are as follows.

First, EU recognized in the early 1970s that stable exchange rates would contribute core towards economic cooperation and eventual integration among its members than flexible ones. Put differently, although the EU begun as a customs union, its members realized that economic gains beyond those associated with trade were possible provided they were willing to go beyond economic integration to monetary union. Thus, unlike the global monetary system with its financial instabilities, the EU was willing to promote currency stability, initially with its EMS and later with the convergence criteria of the Maastricht Treaty.

Second, it may appear in retrospect that the EU marched towards monetary integration firmly and swiftly. Obviously this is not the case. The road to monetary integration was both long (it took about thirty years) and also filled with ambivalence (even today three EU members are not in the EMU).

Third, the EU debated both politically and economically the advantages and disadvantages of monetary union with fixed exchange rates among its members. One of the major features of the EMU is the common currency – the EURO. Having a common currency has several significant benefits such as the elimination of transaction costs, elimination of information costs, dynamic efficiency gains, need for less official international reserve and stronger European presence in the international monetary system and in global financial markets. Using a single currency totally eliminates all exchange rate related transactions costs. The direct savings of these transaction costs arise form the bid-ask spreads and other commission on foreign exchange rate transactions.

An even more speculative reason to expect large economic gains from a common currency derives from the dynamic effects. Economists have long recognized that the most valuable benefits from integrating markets are of a dynamic nature. However, until recently these dynamic effects were difficult to measure since there did not exist an adequate theoretical framework to explain continuing growth that was not simply the result of exogenous technological progress. While it seems difficult to assess the exact magnitude of the increase in the growth potential of the EMU, it is clear that these dynamic effects could easily dwarf the once and for all efficiency gains. Such efficiency gains can be more easily assessed because even a small increase in the growth potential has an exponentially-increasing effect on the level of income over time.

A more macroeconomic source of benefits is the savings in terms of international reserves. As long as national currencies continue, notional monetary authorities have to keep large foreign exchange reserves to be able to defend their exchange rates. The direct cost of holding reserves should be small, since they can be invested in interest bearing assets, but the cost of acquiring and maintaining confidence in the exchange rate commitment might be large, especially for countries without a history of stable exchange rates.

Another potentially important source of benefits from a common currency is external. A single European currency would at least partially replace the US dollar in some retail transactions around the world. The direct seigniorage gain for the European central bank that would result from this would be difficult to estimate. Much larger indirect effects could, however, result from large-scale international portfolio substitution away from the US dollar into the Euro. This might be a mixed blessing, however, since it could have an undesirable effect on the exchange rates of the Euro against the dollar, causing the latter to move temporarily below a longer run sustainable level.

Fourth, the EU has learned that it is very hard to find a stable, intermediate position between floating exchange rates and permanently fixed rates as represented by a full monetary union. Also, the transition road from a managed gloat to a fixed exchange rate regime among the member counties could be quite difficult, as the crises of 1992-93 have demonstrated.

8. The Three Major Currency Blocs

What can we say about proper exchange rate policies in the new millenium among what have now become the three major industrialized «blocs»: The United States, Europe, and East Asia? Having reviewed both the current global monetary system and the European experience, we now focus on the three currency blocks to obtain further insights about the functioning of the global monetary system.

The traditional role of the U.S. dollar as the world's central currency – as the invoice currency for world commodity trade, as the dominant vehicle currency in the world's spot and forward foreign exchange markets, and as the official exchange reserve asset of choice – remains, much as it was before the collapse of the Bretton Woods in 1971. However, in contrast to the Bretton Woods regime with complete stability in the foreign currency markets, we are currently in the midst of wide currency fluctuations both for the euro and the yen vis-ŭ-vis the U.S. dollar. Furthermore these fluctuations have different implications: the dollar/euro exchange rate volatility needs to be differentiated from a more purposeful policy toward East Asia – where much greater exchange rate stability is required.

One may argue that because the Euro now establishes a large zone of monetary stability in the continental western Europe and its periphery, the Best near-term strategy is a hands-off, laissez-faire policy over a wide range of values for the dollar/euro exchange rate. The dollar is no longer needed in Europe as the common monetary anchor as it was in the 1960s. Indeed, the euro's fall from $1.18 in January 1999 to about $1.0 in February 2000 is not out of line with similar fluctuations in the «synthetic euro» –weighted by the importance of its constituent currencies- from 1980 through mid 1999. In the euro's shakedown phase, however, the two central banks need intervene only if obvious panic develops, for example, if the euro started plunging instead of just drifting down.

In judging the euro's impact on the dollar, consider two competing economic interpretations of the its potential future role in the world economy. The first focuses on economic integration in goods and factor markets within Europe and with surrounding countries: an extended optimum currency area. Because of the EU's huge economic size and far-reaching trade connections, this interpretation suggests a wider influence for the euro well beyond the current political borders of the European Union.

The EU countries will constitute an economic mass slightly larger than that of the United States and European exports to the rest of the world will be similar in magnitude to American exports. Many eastern European countries will opt to peg the euro because they are so open to EU trade – as are many former European colonies in Africa. For both types of countries, the new euro could well dominate as an intervention and reserve currency.

The second interpretation focuses on the need for international money beyond that associated with unusually close trade linkages. The world economy itself needs a unit of account, means of payment, and store of value for both governments and private firms. In the absence of a generally accepted metallic money such as gold or even a dominant country like the United States, one of

the national currencies would still be selected by habit or custom. Once selected, however, this national currency's role as international money becomes a natural monopoly. That is, the scope for more than one national currency to serve in a dual role as international and domestic money is limited.

In contrast to the EU whose currency has dropped by 20% against the dollar without any traceable macroeconomic consequences in Europe, economic recovery in East Asia requires different and stronger medicine. Because no region-wide «Asian euro» exists or is in prospect, the dollar is the only plausible anchor for creating an East Asia zone of monetary stability in price levels and exchange rates. In order to prevent competitive devaluation and inflationary upheavals in the future, this zone would cover both the smaller East Asian countries that fell victim to the great 1997 currency crisis as well as China and India, which did not. The advantage to Japan of being part of the dollar zone is somewhat different. Prolonged stability in the yen/dollar exchange rate is the key to quashing the deflationary expectations that have gripped the Japanese economy for almost a decade.

9. Towards a Global Monetary Reform

The present configuration of international monetary relationships has no parallel in history. Never before have purely fiduciary currencies co-existed with such a high degree of capital mobility, vast global markets beyond the direct control of the authorities, flexible exchange rates between the major currencies and far-reaching economic integration.

The need to promote adequate forms of international cooperation on institutional structures, economic policy making and specific measures to safeguard market stability has become urgent in the new context. In order to restore orderly conditions during the Mexican and Asian crises, the international community made a financial effort of unprecedented proportions. In the past, the primary concern was that borrowers, often sovereign states, might come to have excessive expectations concerning international protection against the risk of insolvency. The recent crises have reminded us that it is just as important to promote prudent and far-sighted behavior on the part of creditors. The creation of an international bankruptcy law or the rapid convergence of national practices and regulations are currently beyond our reach. Nevertheless, there is ample room for improving the existing situation.

It is important to enhance the soundness of national financial systems, fill the gaps in banking regulations and generally increase the effectiveness of supervision. There is growing awareness that capital mobility is not a good in itself, and end to pursue without conditions or caution. The main lesson of the Mexican and Asian crises is that when opening up the financial system, it is necessary to ensure a stable domestic environment by strengthening the technical aspects of supervision and prudential controls, with complete independence from political influence. The international Monetary Fund vow tends to pursue the more pragmatic objective of ensuring an orderly process of liberalization.

The most urgent requirement in dealing with the recurrent risks of endemic or systemic instability is to extend and strengthen action to prevent instability

and make effective instruments available. The first requirement for such action is that information on economies be timely, transparent and reliable. But it is also necessary to interpret with reference to well-tested models the behavior and prospects of economic systems in which macroeconomic variables, prices, exchange rates, financial variables and structures, and political or administrative measures interact to produce stability and growth or instability and crisis. It is important to reinforce the Fund's analytical capabilities and give it a more open and direct advisory role where countries are prone to crises. In other words, the Fund should have a role similar to that performed by national central banks in individual countries. We must address the problem of permanently strengthening the Fund's resources, to be used for «lending of last resort».

The strengthening of the Fund must be accompanied by the assignment of a larger role to the World Bank in the systematic monitoring of conditions in the banking and financial systems of the developing countries and the economies in transition in order to reinforce them and forestall instability that could originate in these sectors. We have already commented that these reforms have been proposed. Here we wish to go beyond them and place the reform of the global monetary system as a trilemma: could a global monetary system be designed that allows for autonomy of national monetary policies, stability of foreign currency rates and freedom of capital mobility? The answer is no. The best the international community could do is to choose any two of these three goals. Volcker (1999) eloquently argues for currency stability. His thoughts are summarized next.

The desirability of currency stability. Classic economic analysis suggests that swings in exchange rates that depart radically from equilibrium values must give misleading price signals and add to uncertainty. Those factors must in turn inhibit investment and reduce efficiency. We are told that our large multinational businesses have learned to live with these currency fluctuations by dispersing investments, producing locally for local markets. But measures against the concepts of comparative advantage, that obviously carries real costs. While such costs are significant, why is currency volatility accepted so passively among the key currency countries?

Three factors contribute importantly to that passivity. First, as a matter of economic analysis, it is well known that, in a world of capital mobility, fixing exchange rates implies lack of autonomy in monetary policy. It appears that the independence of the national monetary policy is valued more than the stability of the foreign currency rates.

Second, exchange rates involve more than one nation. In the face of unwanted changes among major currencies, the contentious question inevitably arises as to which country assumes the «burden» of initiating appropriate policy changes. The answer is seldom clear cut, and its resolution entails sensitive political as well as difficult economic judgements. Whatever so-called objective indicators are brought into play, the differing preferences of different countries will lead to delay and weak responses.

The third difficulty is a narrower political question. The traditional strong constituency for stability – the financial community – has effectively reversed its position. That shift no doubt is related to the fact that financial institutions op-

erating internationally have today developed a substantial vested interest in market instability. Traders are in a strong tactical position to sense market pressure and psychology and to act immediately to take advantage of emerging movements and even to amplify them. Those that bear the cost in the first instance are the importers and exporters and the international investor. But for them, the currency and hedging costs are part of much larger and presumably profitable transaction. And the ultimate costs of uncertainty and lower productivity are buried among the population at large. Analogous to the politics of protectionism, the gains from instability are concentrated while the losses are diffused.

Discouraging as all that may be to would be reformers, there are solid grounds for thinking the quest for greater stability is not quixotic. We have before us the evidence that few countries are willing to leave their exchange rate entirely to undirected market forces, given the volatility of the response to those forces. The pattern of smaller countries stabilizing exchange rates with major trading partners is clear. There is also the remarkable evidence of the EMU.

Global Capital Mobility. Stiglitz and Krugman have argued that global capital mobility is less important than both the independence of national monetary policy and currency stability. However, there is by now a considerable body of experience which suggests that, outside of authoritarian or paternalistic political systems, virtual openness of capital accounts is inevitable because of an unwillingness by electorates in most countries to accept regulatory constraints on their search for optimal investments. Available risk-adjusted yields, both in industrial and developing countries, are seen as simply too attractive. Enforcement of capital controls has therefor been highly problematic and discriminatory in practice, while prudential regulation of banks' foreign exposures is microeconomic rather than macroeconomic in its purpose.

If substantial capital account convertibility is inevitable, then both the theory and a growing body of practical experience suggests that capital convertibility should be accompanied by a generalized exchange rate float. Unless domestic policies are harmonized to a very high degree with those of the country to whose currency the exchange rate is pegged, pegs and even bands or crawls are accident-prone, and thus a liability in establishing policy credibility. Such harmonization becomes automatic under a currency board arrangement, but has proven difficult to maintain under independent central banking arrangements. An exception to such a generalized regime of capital convertibility coupled with fixed exchange rates may be possible to the extent that a country chooses an EU-type regional arrangements involving a high degree of effective policy harmonization with neighboring countries.

10. Recommendations and Conclusions

The central question is whether among the key countries with globally important currencies that same urge for stability exists to the degree necessary to support a broad reform effort. The answer is clearly «no» if reform is posed in terms of a system of fixed parities like Bretton Woods. Nor are there practical possibilities of moving to a gold standard or a common and stable world currency

under the aegis of a world central bank. But, the other extreme – freely floating rates – has also been found wanting, and in practice abandoned. To be sure, internationally coordinated approaches among the major powers toward exchange market management have been episodic, provoked only by extreme fluctuations that seems to threaten growth, market access, and the very fabric of international cooperation. Out of these experiences, we may draw some conclusions about what approach may be followed to reconcile the needed flexibility of domestic monetary policy, with a greater sense of foreign currency stability and free capital mobility.

There are useful lessons for broader application in what has been accomplished in the EU. We have in Europe a group of countries dedicated to the idea of a true single market with a single currency. At the same time, the member countries obviously differ in economic structure and circumstance, and in the degree to which they are willing to surrender perceived autonomy in economic policy. Despite those differences, a remarkable degree of stability gas been achieved in most European exchange rates during the last two decades, excluding the currency crises of 1992-3.

By the rules of both the European Monetary System and the convergence criteria of the Maastricht Treaty, short-term credit lines have been available to support intervention to defend exchange rates. But maintenance of the designated central rates at times of persistent pressure has required more than intervention. Monetary policies have been tightened more than might otherwise have been the case in the face of domestic political and economic circumstances. No doubt, fiscal policies in some member countries have also been more disciplined. Evidence is clear that inflation and interest rates have converged dramatically around the DM, the operational anchor of the system, even though significant differentials have remained for Italy, Spain, and the United Kingdom as well.

This experience suggests several points of wider application. Intervention alone, however large the supporting lines of credit, is not sufficient in itself to maintain exchange rate relationships. Sovereign nations are simply not prepared to lend or borrow indefinitely, and market speculation will persist in the face of perceived misalignments. It follows that a commitment to stabilize exchange rates requires sustained evidence of political will – the will to give strong emphasis to that objective in the conduct of economic policy generally and of monetary policy in particular.

The three polar financial centers of the United States, Europe, and Japan have substantially converged toward price stability but the sense of commitment with respect to exchange rate stability has obviously not been present to anything like the same degree. It is also true that even the most reluctant and passive of governments with respect to exchange rates, typically the United States in recent years, have recurrently found it necessary to take a stand, to indicate however vaguely which exchange rate levels are reasonable and appropriate and which are not, and when the market has moved too far to act.

Typically, that action has taken the form of intervention. But it is also clear that the response has been most effective when accompanied by signals that the major countries were in agreement, by evidence they were willing to act in unison, and by signs of coordination with respect to monetary policy as well. The

issue now is whether we are ready to build constructively upon all this experience.

What we need is an approach that will moderate and reverse exchange rate fluctuations among the key currencies before they become extreme, rather than being forced to respond defensively, after substantial risk to the world economy is already evident. This approach would require agreement in several broad and interrelated areas: First, the major countries, in consultation with the IMF, would need to reach a consensus on broadly appropriate equilibrium values for their currencies. The choices would necessarily imply a fairly wide range of values. They would have to be expressed as ranges, much in the spirit of the EMS. Intervention would be required at or near the margins, but could be tactically desirable will within those limits.

Intervention will be reliably effective only to the extent that, in the extent of persistent pressure, the participating countries are prepared to modify their monetary policies in support of the exchange rate objective. Reasonably prompt adjustments could well forestall the need for stronger action in the face of strong speculative pressures. To clarify choices, promote consensus, and help influence expectations, the IMF should be involved in the discussions when the need for policy action arises. The IMF management should be prepared at its own initiative and confidentially to propose an appropriate course of action.

The global monetary system may actually follow the path of the EMS and establish Maastricht-type convergence criteria for the three dominant currency blocks. Theoretically, it is not clear that the economies of Europe, U.S., Japan and its satellites, form an optimum currency area. However, well-coordinated monetary and fiscal policies over long periods of time would contribute significantly to the reduction of global currency volatility. Of course, such reduction in volatility is not a goal in itself; it is desirable for its contribution to global growth and prosperity.

Acknowledgment: We are thankful to Ms Ben-Dor Hagit for extensive research assistance.

References

Gray, Peter and Scheherazade S. Rehman, editors, 1999, *The Quest for Exchange Rate Stability in the Next Millennium*, JAI Press, Inc., Stamford, Connecticut.

Gross Daniel and Niels Thygesen, 1996, *Towards Monetary Union in the European Community: Why and How*, Springer, New York.

Kondonassis, Alex and A. G. Malliaris 1994, «Toward Monetary Union of the European Community: History and Experiences of the EMS», *American Journal of Economics and Sociology*, 53, 291-301.

Krugman, Paul and Maurice Obstfeld 2000, *International Economics: Theory and Policy*, Fifth Edition Addison, Wesley, Longman, Reading, Massachusetts.

McKinnon, Ronald 1988, «Monetary and Exchange Rate Policies for International Financial Stability: A Proposal», *Journal of Economic Perspectives*, 2, 83-103.

Mundell, Robert 1995, «The Future of the Exchange Rate System», *Economic Notes*, 24, 453-478.

Mundell, Robert 2000, «A Reconsideration of the Twentieth Century», *The American Economic Review*, 90, 327-340.

Quirk, Peter 1999, «Performance of Exchange Rate Systems in the Face of Capital Mobility» in Gray, Peter and Scheherazade S. Rehman, editors, *The Quest for Exchange Rate Stability in the Next Millennium*, JAI press, Inc., Stamford, Connecticut.

Radelet, Steven and Jeffrey Sachs, 1998, «The onset of the East Asian Financial Crisis», *National Bureau of Economic Research Working Paper #6680.*

Rogoff, Kenneth 1999, «International Institutions for Reducing Global Financial Instability», *Journal of Economic Perspectives,* 13, 21-42.

Stiglitz, Joseph, 1999, «Reforming the Global Economic Architecture: Lessons from Recent Crises», *The Journal of Finance*, 54, 1508-1521.

Volker, Paul 1999, «The Quest for Exchange Rate Stability: Realistic or Quixotic?», in Gray, Peter and Scheherazade S. Rehman, editors, *The Quest for Exchange Rate Stability in the Next Millennium*, JAI press, Inc., Stamford, Connecticut.

Welfens, Paul 1996, *European Monetary Union: Post-Maastricht Perspectives on Monetary and Real Integration in Europe*, Springer, New York.