1. - Introduction

In my lecture today, I use the words «New Millennium» in order to emphasize that the international monetary system evolves slowly and that long-term predictions about it must be rooted in history. By looking at the evolution of the international monetary system in its historical context, we can find laws that inform us about the future. That is what I hope to accomplish in this Angelo Costa Lecture, named in honor of an Italian who made great contributions to the recovery of the economy of Italy in the post-war period.

In every stage of history, political and economic events have been intermingled, and nowhere does the link become more obvious than in the field of monetary actions. Actions affecting the international monetary system have been both cause and effect in political and economic events. The monetary world belongs to both politics and economics.

In this lecture I want to use theory, history and politics to uncover monetary changes that have produced interactions between
political and economic events and helped to uncover trends and forecast events that illuminate our understanding and point out desirable directions in the future. How is the international monetary system evolving and how can we expedite its progress into desirable channels?

2. - The International Gold Standard

My Nobel Lecture, presented in Stockholm on December 8, 1999, was entitled A Reconsideration of the Twentieth Century. It was the last Nobel Memorial Lecture in the twentieth century and that gave me license for the ambitious title and the first opportunity to speak about century as a whole. My basic thesis was that political and economic events had interacted with one another as both cause and effect and that this two-way interaction found its manifestation in the state of the international monetary system.

I divided the century into three almost equal parts. The first third was concerned with the gold standard, its successful operation up to World War I, its breakdown in that catastrophe, its revival in the 1920s, followed by its collapse in the 1930s. The second third was connected with the dollar standard, anchored to gold from 1934 until its breakdown in 1971. The last third encompassed the era of flexible exchange rates and ended effectively in 1999, when the introduction of the euro inaugurated a new monetary arrangement revolving around currency areas.

The international gold standard in force in most of the world at the beginning of the 20th century was a highly efficient international monetary system. Different versions of it or of bimetallism had been in force for over twenty-five centuries. Most of the great empires in history had used gold or silver in their monetary systems and their coinages had typically become the units most widely used in international trade.

The gold standard as it had developed at the turn of the 20th century gave the world a high degree of economic stability, high employment, low inflation rates and fairly rapid economic growth. It was globalization, with relatively free trade, substantial capital mo-
bility and an important degree of migration. It was rooted in the context of a long era of peace called the *pax Britannica*. It was highly Euro-centric with colonial empires managed from that continent, and Europe, as Max Weber put it, the «mistress of the world.»

The international gold standard could only be maintained on the basis of a few fixed points of policy. One was the requirement of fiscal stability. The main axiom of public finance was to keep the budget balanced; if the public debt had to be run up during a war, fiscal prudence dictated that it be brought down after the war. Two other dicta concluded the triumvirate of absolutes: don’t tamper with gold and don’t change exchange rates. The gold price, exchange rates and budget balance were parameters, not instruments of policy, and expectations about them were fixed.

Few international monetary systems have been war-proof. In fact it was widely believed that war was ruled out because it might threaten to upset the gold standard! None the less, it did break down, as an international standard, in World War I. Most of the belligerents went off gold, which came to and was monetized in the United States, leading to a doubling of the dollar price level between 1914 and 1920.

Despite a sharp deflation in 1921, the dollar price level in the 1920s was still 30% above its 1914 level. It was at that high price level that gold came to be restored-by all the major countries in the 1920s. The return to the gold standard increased gold requirements in the system and raised its value, i.e. it caused deflation. All the major countries suffered deflation in the order of 30% between 1930 and 1933, forcing most countries, including Britain and the United States off the restored gold standard, resulting in a new international monetary system.

3. - The Gold-Dollar Standard and Problem of Gold Convertibility

Long before 1934 the United States had become the largest economy in the world, and by 1914 it was larger than the next three largest economies, Britain, Germany and France, put to-
gether. With the creation of the Federal Reserve System in 1913, US monetary power became activated, and ever since the United States was able to play a determining role in the international monetary system. Dollar prices had become «world» prices and money increasingly came to mean the dollar. The gold standard that had been reinstated in the 1920s broke down not because of a mistake in setting the dollar-sterling exchange rate, but because gold liquidity at the post-war dollar price level, more than 30% above its pre-war level, was too low for the higher gold requirements of the restored system. The consequence was deflation on a scale never before experienced in the world economy.

The new international monetary system began in the years 1934-1936 when the United States in 1934 devalued the dollar, raising the price of gold from $20.67 an ounce to $35 an ounce. In the next two years a semblance of the international version of the gold standard remained, with France hanging on to an overvalued franc, but in 1936 France was forced to devalue. The Tripartite Agreement signed in that year by the United States, Britain and France specified that the three countries notify each other in advance of any change in exchange rates, and that agreement anticipated somewhat the arrangements made at the Bretton Woods conference in 1944. Significantly, however, it was now dollar, not gold exchange rates, that were relevant.

The United States fixed the price of gold but the new system was not a real gold standard. In the first place, it was not truly international. The United States was the only major country fixing the price of gold, and it was convertible only for foreign monetary authorities. Second, American citizens were prohibited from holding gold, which was now centralized in Fort Knox and the Federal Reserve Bank of New York. Third, US monetary policy was de-coupled from gold movements by sterilization operations, with the Federal Reserve Bank of New York matching gold purchases with sales of government bonds, and gold sales with bond purchases. This meant that there was no longer an automatic adjustment mechanism in operation. In the future gold convertibility could be sustained only if discretionary Federal Reserve actions were directed at maintaining gold equilibrium rather than the dollar price level.
The Bretton Woods conference put a legal veneer on the gold-dollar standard that had evolved. The unit of account of the International Monetary Fund was 1/35 of an ounce or .888671 grams of gold, equivalent to the "1944 gold dollar." Member countries were required to keep exchange rates within 1% of its established gold parity and, with the exception of the United States, all the major countries satisfied that rule by keeping their market exchange rates within 1% of the dollar parity. The United States, which historically had rarely intervened in the foreign exchange market, satisfied the requirement by stipulating that it was fixing the price of gold. It was an asymmetrical system, with the advantage that it took account of the dominant position of the dollar in the world economy, but the disadvantage that there was no mechanism that could ensure long run gold convertibility of the dollar.

The Bretton Woods agreement represented a compromise between a gold standard and a dollar standard, a hybrid system in which both gold and dollars were used as reserves and there was a division of commitments and power. The United States would commit to fix the dollar to gold (or gold to the dollar); the other countries would fix their currencies to the dollar. Power in the system lay importantly with the United States, but it was by no means unchecked. In the short run the United States could dominate the global inflation rate, the other large countries could exert control over the US gold stock and threaten US ability to maintain gold convertibility.

4. - The Breakdown of the Fixed Exchange Rate System

When monetary relations between America and Europe became tense in the 1960s—British Prime Minister Wilson called it a monetary war—it seemed that the threats might be played out. But there were great risks involved. As a consequence of the inflations of World War II, the Korean War and the Viet-Nam War, gold had become undervalued. Since 1950 the United States had become a net seller of gold from its stocks, which had peaked at about of 70% of world monetary stocks in 1948. Would the United States contin-
ue to honor its pledge to convert gold at $35? If Europe exercised its full power to convert dollars into gold, the United States might end its commitment and bring down the system. It seemed now unlikely that that outcome would benefit Europe.

In the late 1960s, the US inflation rate had increased, embarrassing Europe with the need to buy excess dollars, creating an «overhang» of dollars. The problem was aggravated by the US recession of 1970-1971, which brought about a large capital outflow from the United States, which, in turn fed an explosion of liquidity growth in the Eurodollar market. Germany tried to reverse the influx of reserves by investing dollars in the London market, but this only exacerbated the explosion of liquidity.

By the summer of 1971 what appeared to be a dollar crisis was emerging and the Joint Economic Committee of the US Congress recommended devaluation of the dollar. Some European countries asked to convert dollars into gold. The United States then brought the post-war international system to an end.

The systemic crisis of 1971 was met with inconvertibility of the dollar, a unilateral action of the United States, when President Richard M. Nixon took the dollar off gold. The other major countries then took their currencies off the dollar.

The United States had other options. One alternative would have been to double or (better) triple the dollar price of gold. Such a policy would have preserved the system — at least for a couple of decades or so. By this time, however, the United States had come to perceive that the international monetary system was now benefiting the rest of the world more than the United States. Europe was bent on creating a rival to the dollar in the form of a new European currency and that would be easier to do with the fixed exchange system intact. While the United States had not yet made up its mind whether it wanted to encourage or discourage a European money — the decision had been made to «benign neglect» the issue — why should it continue to smooth the path for it by keeping the system intact?

Of course there were other reasons for rejecting an increase in the price of gold. First, the United States had encouraged countries to hold dollars rather than gold, and an increase in the price
would seem like bad faith. Second, an increase in the price of gold would benefit the two biggest gold-producing countries: South Africa, with its noxious system of apartheid, and the Soviet Union, the US enemy in the Cold War. Third, an increase in the price of gold might create a new «Golden Avalanche» — the influx of gold to the United States of the type that occurred in the late 1930s — or, on the other hand, it might establish expectations that it might be repeated in a decade or so. While these arguments were not overwhelming — and Arthur Burns, the Chairman of the Federal Reserve Board, strongly believed in maintaining convertibility and raising the price of gold — it would have been difficult to get agreement among the major players in Nixon's cabinet. The decision to take the dollar off gold and risk floating seemed politically easier.

There are of course alternative views of the crisis. Many Europeans thought the crisis occurred because of the US balance of payments deficit. Yet the US deficit was itself part of the system. With little or no gold entering the system, an increase in foreign exchange reserves was needed to keep pace with non-inflationary growth and the dollar was the currency most needed in foreign exchange reserves.

5. - The Second Amendment to the Articles of Agreement

The demise of Bretton Woods and flexible exchange rates brought pressure on the international monetary authorities to announce that a new «system» had come into being to replace the one that had just been disbanded. This pressure led, in 1976, to the Second Amendment to the IMF Articles of Agreement endorsing managed flexible exchange rates — dirty floating. Ever since that date the International Monetary Fund has been waging a battle to destabilize the external values of the currencies of member countries.¹

¹ One of the first casualties of the new dispensation was Mexico, which had had a fixed exchange rate at 12.5 pesos = $1 from 1954 until 1976. The 1976 devaluation and flexible exchange rates inaugurated a period of monetary instability from which Mexico has not yet recovered. The destabilization of Mexico was soon followed by IMF-sponsored destabilization of the currencies of many other countries in Central America.
The IMF was not always so enthusiastic about flexible exchange rates. Before 1971 staff members were instructed to support fixed exchange rate systems. Fixed exchange rates were defended and flexible rates ridiculed in the IMF Annual Reports of 1950 and 1962.

The shift to flexible exchange rates did not occur as a result of any fundamental new idea or IMF study. Of course the idea itself of stabilizing some index of the price level instead of the exchange rate or gold has an old history, harking back to ancient times. In the modern era it started perhaps in Swedish history during and after the wars with Russia in the 18th century and in British history after the Napoleonic Wars. In the early decades of the 20th century, both Irving Fisher and John Maynard Keynes had supported price stabilization as a preferable target to gold or exchange rate stabilization and Keynes had constructed, in the pit of the great depression, an index of commodity prices that he thought could be used as a target for stabilization in an international monetary system. The emphases in these cases, however, were in finding an antidote to a potential or actual instability of gold.

Frank Graham, Charles Whittlesey, James Meade and Milton Friedman, writing independently in the 1940s and 1950s, brought the case for flexible exchange rates into modern literature, but for very different reasons: Graham and Whittlesey wanted to decouple the dollar from gold to prevent what they called the «Golden Avalanche». In the post-war world, Friedman argued for flexible exchange rates as a preferable alternative to exchange controls, and Meade argued for flexible exchange rates as a means by which a socialist government could better manage Britain’s economy.

2 Parenthetically, I should note that I was a member of the staff of the IMF when the 1962 Annual Report came out, and I objected to some of the arguments used to attack flexible exchange rates and support fixed exchange rates, largely because the drafters of the report had not taken into account the important issue of currency areas, along the lines of Mundell R., «A Theory of Optimum Currency Areas» The American Economic Review, LI, n. 4, November 1961, pp. 509-17.

3 Per Christiansen of Sweden in the 1760s and Thomas Attwood of Britain after 1815 both advocated stabilization of a domestic price level rather than the gold price.
None of these arguments were very relevant to the world economy and the international monetary system in the 1970s. Moreover, Milton Friedman rejected flexible exchange rates as unsuitable for the developing countries and Meade came to accept a European currency as a good idea.\footnote{For a fairly up-to-date review of Friedman’s (and my) view see «The Nobel Monetary Duel», a debate between Milton Friedman and myself in the 

Moreover, support for flexible exchange rates has dropped even by those most responsible for putting them into effect. The agreement to move to flexible exchange rates was a decision made in 1973 largely by three men, George Schultz, US Secretary of the Treasury, Giscard d’Estaing, Minister of Finance in France, and Helmut Schmidt, Minister of Finance in Germany. George Schultz was a distinguished labor economist and had been colleague of Milton Friedman (and myself) at the University of Chicago in the 1960s, and went on to become Secretary of Treasury and Secretary of State in the Nixon and Reagan cabinets respectively. Giscard d’Estaing and Schmidt went on to become, respectively, President of France and Chancellor of W. Germany. Subsequently, both Giscard d’Estaing and Schmidt have realized that the move to flexible exchange rates was a mistake.

A distinction here has to be made between the position of the United States and the countries in the rest of the world. It can be argued that a move to flexible exchange rates could benefit the United States and enhance the role of the dollar. Not so for Europe or the rest of the world. Already Europe had embarked on its project for monetary union, set to be achieved by the year 1980. The European economies in the 1950s, 1960s and early 1970s, with currencies fixed to the dollar, had achieved a high degree of economic convergence of inflation rates and interest rates. The abandonment of the dollar anchor for their currencies undermined progress toward monetary union. Monetary union in Europe, which was set to be a ten-year project, com-
pleted in 1980, took an additional two decades because of the break-up of the international monetary system\textsuperscript{5}.

The movement to flexible exchange rates in the 1970s was completely different from earlier episodes. In the past, countries have been forced off existing exchange rate parities because of external shocks, hyperinflation or fiscal instability. Some elements of flexible exchange rates are likely to be inherent in every pluralistic international monetary system. Neither the bimetallic or gold standard systems of earlier centuries nor the postwar economic system is an exception. But the 1970s inaugurated a new era. For the first time in world history, the absence of an international monetary system and exchange rate fluctuation came to be regarded as the norm of correct behaviour and the International Monetary Fund persists to this day in applauding countries that destabilize. This new norm of behaviour was developed without any coherent prior analysis or comprehensive economic theory. There was, indeed, a scramble of international monetary conferences to organize a consensus on how the arrangements could be expected to operate.

6. - Why Currency Areas Break Down

The post-war arrangements, like the gold standard, represented a currency area that broke down because the conditions

\textsuperscript{5} The answer was sought in a joint float of the European currencies against the dollar. This idea had been first broached after August 15, 1971, when President Nixon took the dollar off gold, but the European countries could not at that time agree on which of the European currencies — the major candidates were the pound, the mark and the franc — could act as a pivot. The issue came up again in the spring of 1973. But even at that stage the British and French were unwilling to acknowledge that the mark had become the second most important currency in the world and would be the natural and most effective pivot for a joint float. At that time an Economic Study Group (of which I was a member) had been set up in 1973 by the European Commission to advise on the monetary union project and we were asked whether a joint float could be organized without naming one of the three main candidates as leader. Our answer was yes, but while it was not incorrect as a theoretical matter, it was not a practical alternative in the time period involved. The major political problem, acknowledgement of the dominant role of the mark, was not finally acknowledged by France until the mid-1980s.
and consensus required for it to survive no longer existed. A currency area is by definition a zone of fixed exchange rates. What are the conditions for creating or maintaining a currency area? Six conditions are needed to maintain a currency area:

1) agreement on a common inflation target or on a mechanism (e.g., the gold standard, or the interests of a hegemonic power) for determining the inflation rate; 2) agreement on a common measure of inflation (a price index with common weights, such as the Harmonized Index of Consumer Prices (HICP) constructed by Eurostat for the EMU); 3) a mechanism for locking exchange rates, including a division of responsibilities for fixing and a commitment to use monetary policy to keep the exchange rate an equilibrium rate; 4) consensus on a common monetary policy (including the possibility of a dominated system); 5) fiscal solvency of each country in the currency area; and 6) consensus on the mechanism for dividing seigniorage.

Many currency areas have existed without specific agreements on a common inflation rate, accepting, sometimes out of inertia, the status quo with respect to the division of responsibilities or benefits. A currency area that is ranged around a strong anchor country, for example, may accept the monetary leadership of the pivot currency, while the small countries assume the responsibility of keeping the exchange rate fixed. Under these circumstances a currency area can break up because the inflation outcome is no longer acceptable.

There are many different types of currency relations within a currency area as there are political relations. But the viability of most currency areas can be discussed in terms of the above-mentioned six conditions. Let me here just note a few of the major systems.

The gold standard was a currency area in which the inflation rate was ultimately determined by conditions in the gold market, including the vicissitudes of gold mining discoveries and techniques, disturbances associated with countries going onto or off the gold standard. As it turned out, the real value of gold had a remarkable long-run stability in the five centuries up to the outbreak of World War I, but with troublesome long swings of in-
creases in the price level alternating with periods of decreases in
the price level.

Politically, the gold standard had the merit of being a sym-
mometric system, with no need for a dominant country. In practice,
one country might have turned out to have been «more equal than
the others» as was the case with Spain in the 16th and 17th cen-
turies, France in the 18th century, Britain in the 19th century and
the United States in the 20th century. The seigniorage issue was
not such a bone of contention under the gold standard because
much of it was dissipated in costs of production.

As the gold standard evolved in the twentieth century, its sta-
bility, as already noted, came to depend increasingly on the poli-
cies of the United States with respect to gold. The gold standard
could work with the «rules of the game» in force primarily be-
because the largest country, the United States, did not have a cen-
tral bank; US monetary policy was automatic. But with the cre-
aition of the Federal Reserve System in 1913, the United States ac-
tained the power to manipulate the system, decoupling, when nec-
essary, monetary policy from gold flows. In fact this possibility
became institutionalized after the devaluation of 1934 when the
United States began to sterilize the monetary effects of all gold
flows.

Under the post-war international monetary system endorsed
at Bretton Woods, there was no explicit agreement on a common
inflation rate, but it was hoped and perhaps expected that US
monetary policy, checked by the requirement that the dollar be
convertible (for foreign monetary authorities), would result in a
stable US price level that would set the standard for the rest of
the world. Although the arrangement was asymmetric, there was
an exchange of obligations. The other countries kept their cur-
currencies tied to the dollar while the United States formally com-
mitted itself to buying and selling gold freely at the official price.

In theory such an arrangement should have been self-equili-
brating. In practice, however, the United States had, by its steri-
ilization policy, divorced monetary policy from movements in its
gold stock. The Federal Reserve Bank of New York had been in-
structed to sterilize the monetary effects of gold sales by buying

Robert A. Mundell
an equivalent amount of domestic assets (government bonds), leaving its monetary policy to be entirely discretionary and, as it turned out, suited to the wishes of the US government. The monetary policy conducted by the Federal Reserve's Open Market Committee was entirely discretionary and, for better or worse, dominated by domestic objectives. In the absence of sterilization, the shoe would have been on the other foot and the Committee would have had to take explicit action to sterilize.

7. - Currency Areas and the Dollar

Few events in international monetary history were as poorly prepared as the move to flexible exchange rates. There had been little scientific work in theory, history or econometrics on how a generalized arrangement of flexible exchange rates would be likely to work. It was universally acknowledged that cleanly floating exchange rates would be a disaster, and the addition of the qualifying adjective «managed» turned out to be a diplomat's dream: «Managed flexible,» could be taken to mean anything at all.

It is a pity that before the Second Amendment was adopted endorsing managed flexible exchange rates, there was no large preparatory Bretton Woods style conference assessing whether it was a good idea and whether it suited the interests of any country except the United States. Repeated calls for a «new international monetary order» fell on deaf ears.

In the abstract, a move to floating exchange rates — however managed — could have led to chaos. How flexible exchange rate would operate in practice depended on the size configuration of economies. Imagine a world of two hundred economies of identical size! What a calamity for trade and payments and chaos to financial markets! There would be 1/2 x 200 x 199 spot exchange rates alone and complete chaos. The incentive to create a common international money, reactivate gold, or form large currency areas would be irresistible.

What saved the regime from chaos was the presence of the dollar, which, despite the resentment its dominance inspired, gave
coherence to the international payments mechanism. As long as
countries were willing to use the dollar as the international cur-
rency, they would have close to a universal unit of account. Were
it not for political considerations, seigniorage and the possibility
that the United States might impose an inflation tax on the rest
of the world, a world currency system based on the dollar would
be as close to an optimal system as a world lacking political in-
tegration could expect.

The *pons asinorum* of a global currency area based on the
dollar would be the choice of monetary policy by the United
States. Let us suppose the United States adopted an inflation tar-
get of, say, 1-3% for the United States and that the United States
represents one quarter of the world economy. Would that prove
to be acceptable to the rest of the world? It would be hard to
imagine a better international monetary system.

Of course there would be problems. If the US grew very rapid-
ly in its international sector relative to the rest of the world, its
real exchange rate would have to appreciate, and if the required
annual appreciation exceeded 3%, price levels would have to drop
in the rest of the world. In the opposite case, if the US real ex-
change rate had to depreciate, prices in the rest of the world would
have to rise more rapidly than in the United States. Yet these prob-
lems would be minor relative to those that have arisen due to
large gyrations in exchange rates.

By far the main problem, however, is the political issue of
dominance. A global dollar standard would involve a substantial
increase in the dominance of the US power position in the world
economy. Once on the dollar standard, countries would be more
vulnerable to small changes in US policy. It is conceivable that
the United States might take advantage of its quasi-monopoly po-
sition and raise its inflation rate, imposing an «optimal inflation
tax» on the rest of the world, as it arguably did, whether inten-
tionally or by inadvertence, in the 1970s.

Patterns of dominance lead to frictions, resistances and coun-
tervailing alliances. In the 1970s the United States, festering from
the psychological wounds of the Viet-Nam War, was not in the
mood for a cooperative solution even if one had been proposed.
Vexing under the dollar standard, the Europeans sought protection in a countervailing alternative, what became the euro.

8. - The Advent of the Euro

The significance of the euro lies in the fact that it has the potential to change the power configuration of the international monetary system and to vie with the dollar as an alternative unit of account and reserve currency. In this sense it might be more important than the breakdown of the system in the early 1970s.

Upon its creation in 1999, the euro was instantly the number two currency in the world. By the middle of 2002, the physical currency and coins will have replaced the currencies of the twelve countries that make up the euro area, countries with a combined GDP of $6 trillion. When Sweden, Denmark and especially Britain join the euro zone — as seems probable — the euro area will have a combined GDP of 75% of the dollar area (at current exchange rates). The admittance of the accession countries to the European Union and possibly the eurozone will probably mean another dozen countries added to the euro area in the next decade, not to mention thirteen CIA franc countries of West Africa that are already tied to the euro through the former connections of this currency with the French franc.

Counting a few other countries that are likely to tie their currencies to the euro zone in the coming decade, we could expect as many as 40-50 countries with a population approaching 500 million, with a GDP perhaps 20% larger than the United States, in the eurozone or tied to the euro within the next decade. This will produce a basic change in the power configuration of the system, with some shift of monetary and trade power from the United States to the EU. Although the United States, taking into account its military power and centralized decision-making process, will continue to be the only superpower for the foreseeable future, the euro area will grow in relative importance, creating the prospect of a shift from active unilateralism to a more coopera-
tive duopolistic relationship, with increased sharing of seigniorage and power. A multi-polar power system will have a chance to develop.

Is this estimate of the importance of the euro exaggerated? The euro has some defects to contend with. One is its weakness since it was introduced. A second is the reluctance of Britain to throw in its lot with its continental partners. A third is the problems of a system with one money but twelve governments. A fourth is the problem of decision-making and governance. A fifth is the weakness caused by the accession of low-income countries. A sixth is the sluggishness of structural reform of labor markets, competition laws and tax systems. A seventh is the relatively slow penetration of Information Technology throughout Southern Europe. The important truth in these objections provide an agenda for reform in Europe in the years to come.

There is, nevertheless, a bottom line that the euro was all but a political necessity. It is the only game in town. Whenever factors tend to make it weak, countervailing forces will at the same time be set in motion to help it recover. That has happened time and again over the past three decades since the process of monetary integration began. There will be crises in the future to deal with as well, but it is extremely unlikely that a solution will lie in disbanding an effort that has taken decades to build. The European Union is going to become bigger and more important for the world economy.

9. - The Demonstration Effect of the Euro

By 2012, the importance of the dollar and euro will probably be about equal and countries may want to hold about equal proportion of dollars and euros. What are the implications? Given that most of the existing reserves are now in dollars, a balance between dollars and euros would mean little if any growth in demand for dollars over the next decade but a substantial demand for euros. If the past is any indication, the global demand for reserves will double over the next dozen years, say from $1.6 tril-
lion to $3.2 trillion. With, say, three quarters of reserves in dollars today and in dollars and euro in 2012, there would be no room for dollar growth but a demand for euros of $1.2 trillion, or $100 billion a year. With unchanged capital movements, this would involve a substantial turnaround in current account and trade balances, with the United States generating a smaller deficit and Europe a larger deficit or smaller surplus. Most likely the change in reserve would be split between changes in current accounts and capital movements. In any case it would involve downward long-run pressure on the dollar and a factor making for the long-run strength of the euro.

Another consequence of the euro needs to be considered. The euro will have an important demonstration effect, changing the way people think about flexible exchange rates and currency areas. Consider the fact that the International Monetary Fund and the United States have together been preaching to countries throughout the world for two and a half decades about the importance of destabilizing their exchange rates, and the calamities visited on countries that failed to do so.

Then suddenly the euro emerges, and it is seen to be a great success. Instead of the fixed exchange rates in the euro zone creating speculative capital movements, they are eliminated completely; hedge funds can’t make a dime in the euro zone. Interest rates, which in several EU countries were between 10-15% ten years ago, suddenly dropped below 5%. Europeans suddenly had a capital market of continental dimensions and a currency that is the second most important currency in the world. The success of the euro zone has made smaller countries look freshly at the exchange regimes sponsored by the IMF. «If the euro is right for 11 (now 12) most advanced countries in the world, why not for oth-

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6 More probably, however, the demand for reserves will grow at a considerably slower rate if not absolutely decline. This is because the global demand for reserves is a function of the number of currency areas, diminishing as larger currency areas are formed.

7 Guillermo Ortiz, the Governor of the Bank of Mexico, when he spoke at the World Economic Forum in Davos in the year 2000, was only expressing the new conventional «wisdom» when he said something to the effect that if the Asian Crisis taught us anything, it is that fixed exchange rate systems don’t work.
er countries? If it is right for Europe to scrap its national currencies, why is it wrong for other countries to do the same thing?»

10. - Three Islands of Price Stability

The advent of the euro has brought about a change in the perception of the international monetary system. No one believes any longer in the likelihood of universal flexible exchange rates. We now have three dominant monetary blocs, the dollar area, the euro area, and the yen area, which together make up a transactions domain that represents well over half the world economy. It is not possible to talk about the architecture of the international monetary system outside the context of what happens to these three currency areas. It is more than likely that new currency areas will form, reducing the number of currency areas significantly and perhaps even reducing the number of currencies.

Of course currency areas are not fixed in stone. They evolve with economic and political changes. Down the road, other currencies will be important. The Chinese renminbi (RMB, or yuan) could at some point become a fourth currency if current expectations about growth in China materialize and convertibility is established. But at the present, we have to deal with the reality of these three important currency areas, and we also have to deal with the high degree of instability of the dollar, euro and yen exchange rates.

The instability of the exchange rates is in sharp contrast to the internal stability each of the currency areas has achieved. The U.S. inflation rate has been consistently below 3% over the past few years, there is no inflation problem in the euro area, and inflation in Japan has been negative. There seems little chance that any of the three large currency areas will lapse into monetary instability in the future. But why should there be such volatility of exchange rates between currencies each of which have achieved price stability?

The volatility of exchange rates is harmful for those blocs because it aggravates instability of exchange rates, discourages trade,
separates interest rates and reduces the gains from trade. But it is even worse for the other countries that have substantial trade with two or more of the three blocs. Look at the volatility of the dollar-yen rate over the past 15 years! In 1985, the dollar was around 250 yen. In April 1995, the dollar had fallen to 79 yen. Then, in only three years—from April 1995 to June 1998—the dollar soared to 148 yen. Recently the dollar has flopped down again to 105 yen. What is going on? Who gains from this volatility of the yen-dollar rate? Hedge fund operators may gain from the volatility but the people as a whole lose.

It is not any better when we look at the dollar-euro rate, even though we have had only a short time to look at it—not much more than a year. Since its inception the euro has depreciated by more than 20% and this involves a real depreciation since price levels in the dollar and euro areas have been stable. The predecessor of the euro was the ECU (European Currency Unit) and the mainstay of the ECU was the Deutschemark. Over the past 25 years, it does not look good. In 1975, the dollar was 3.5 marks. Five years later, it was down to 1.7 marks. Five years later, in 1985, the dollar soared to 3.4 marks. By 1992, at the time of the ERM crisis, the dollar flopped down below 1.4 marks, and now the dollar is up above 2 marks.

What is going on between zones that have stable prices? This is the major problem and defect of the international monetary system today. Do not think for a moment that the appreciation of the dollar over the period of 1995-1998 (combined, perhaps, with the devaluation of renminbi in 1994) did not play a key role in aggravating the so-called Asian IMF crisis. Volatility has become the enemy. That is the basic subject of my Wall Street Journal paper, «Threat to Prosperity».

Is volatility inevitable? There is an old saying that intervention in the foreign exchange markets is useless because the daily turnover in the foreign exchange market is so high that it would dominate any intervention by the central banks. Well, that is just not true. How much intervention was needed when Europe, in the middle of 1998, decided to prepare for their monetary union by locking bilateral exchange rates? The franc, the lira, the peseta,
the Deutschemark, the guilder, the Belgian franc, the Austrian shilling, the Portuguese escudo—all the exchange rates were locked together. There was no speculation because the market knew that the central banks were serious about the rates and would back them up with unlimited intervention. As a consequence, no intervention was necessary!

It was also true that it was not just spot, but also future exchange rates that were fixed. Interest rates converged throughout the area incredibly quickly. Is it not amazing that, for most of the 1990s up until 1997, the countries in the south of Europe, including Portugal, Spain, Italy, and Greece, had two digit interest rates, 10-13%, in many cases. When they decided to form a monetary union, however, interest rates converged down to about 5%, an instant benefit for their economies and capital markets and especially for public finances of heavily-indebted countries. A fall in interest rates lowers the interest cost of servicing the debt, and reduces the budget deficit. A five percentage point reduction in interest rates brings more than a five percentage point improvement in the deficit/GDP percentage in a country where the Debt/GDP ratio exceeds unity and the maturity of the public debt averages one year or less.

Another point I want to emphasize — because it has been so badly treated in much of the literature — is that capital movements are nearly always beneficial between areas with truly fixed exchange rates. Capital movements are in the right direction as long as there is complete confidence in the exchange rate. You never get bad capital movements from New York to California, because the New York dollar is the same as the California dollar. Nor are there bad capital movements within the European Monetary Union. Capital movements go in the direction where they yield the highest rate of return, which is the direction of efficiency.

Problems arise with capital movements only when the exchange rate is uncertain. For example, consider all those countries that had fixed exchange rates in the post-war period. Japan had an absolutely fixed exchange rate of 360 Yen to the US dollar from 1948 (the year of the 10-1 currency reform) until the 1970s. You never had problems of bad capital movements between
Japan and the United States. Nor was there between the United States and Germany. Since 1948, when Germany had its 10-1 currency reform, here was a fixed exchange rate of 4.2 DM to the dollar. In 1961, for reasons that in retrospect seem suspect, Germany decided to appreciate its currency, lowering the value of the dollar from 4.2 DM to 4.013M. That appreciation of the mark just whetted the appetite of speculators. They thought that, now that Germany had started to change exchange rates, it might continue. The revalorization created a great wave of capital movements and some instability.

Examples could be multiplied indefinitely. You have the case in 1983 when, as you know, Hong Kong adopted a currency board. Exchange rates were set at 7.8 HK dollars to the US dollars. According to many criteria, that system worked beautifully. Until the crisis period of the late 1990s, the Hong Kong currency board was run by three commercial banks. Just before the British left, however, they created the Hong Kong Monetary Authority. Governments got into the picture and made a mess of it. The Hong Kong Monetary Authority started to talk about supporting the stock market in Hong Kong, instead of following the strict principles of a currency board. Hong Kong therefore had a little bit of a crisis due to the inevitable uncertainty over the exchange rate, but it recovered quickly and it did not do much permanent damage. Confidence in the fixed rate was restored and, I hope, a lesson was learned.

11 - A G-3 Monetary Union?

I want to add something now about the volatility of the rates between the major blocs. What could be done about it? A monetary union would solve the problem. Put politics aside to look at the technical aspects of it. It will simplify things if we start from a two country monetary union, such as that between the dollar and yen areas, although the same principles would apply to a union between the dollar and euro areas. How could you go about creating a monetary union between the United States and Japan?
Leaving aside politics, a monetary union between the dollar and yen areas would be much easier than the monetary union formed by the eleven countries of the euro area. Let us consider a few of the options. The simplest would be to use an existing currency. Suppose Japan agrees to use the dollar. With its foreign exchange (mainly dollar) reserves approaching $400 billion, it could simply buy up all the outstanding yen notes. The public would have to shift the new unit of account, and to make the mental transformation easier it would be convenient to choose an exchange rate of 100 yen = $1. A joint Japan-US Monetary Policy committee would then be formed to make monetary policy much as the US Open Market Committee makes monetary policy today. A common agreed inflation target would have to be agreed upon, and a common way of measuring inflation would be required, much like Eurostat’s Harmonized Index of Consumer Prices (HICP). Next, a formula for dividing seigniorage (probably in proportion to GDP) would be needed. Finally, new paper currency notes reflecting the international character of the monetary union could be considered.

It is sometimes thought that differential growth rates would be a barrier to monetary union. What happens if growth in the United States exceeds growth in Japan, as it has in recent years? The effect of this on the real exchange rate would depend on whether growth biased toward the domestic or traded goods industries. If the former, the price level of US domestic goods would have to fall relative to Japan’s; if the latter, the reverse. But these differentials are not likely to create problems worse than that between, say, California and New York, or Illinois and Louisiana.

What would be the gain from that monetary union? First, the two countries would have a completely transparent pricing system so that the «law of one price» could more completely equalize prices in the United States and Japan. Second, interest rates would come together, probably an average of existing balance interest rates weighted by capital market sizes. Third, there would be no speculative capital movements between the US and Japan and hedge funds would no longer feed off this source of instability. Fourth, Japan’s macroeconomic policy would fall into place;
there would be no scope for Japan to follow the wrong policy mix as it has over the past few years.

A single-currency monetary union helps to illustrate the gains from monetary union in general. But from a practical point of view, both countries might want to keep their own currencies. The United States would probably not want to give up the dollar, the most successful currency of the twentieth century and the most important currency in the world today. Japan might not want to give up its yen especially if the US were to keep its dollar. But you could have a two-currency monetary union that has most of the advantages of a single-currency monetary union. Of the many alternative approaches, I will choose the easiest. The US is a bigger economy than Japan so use the dollar as the major operating vehicle and the Federal Reserve System as the agent of the union. Then have the Bank of Japan fix the yen to the dollar and do nothing else. Because it is convenient numerically, let us again make 100 yen equal 1 US dollar or 1 yen equal 1 US cent. The yen then becomes another denomination of the dollar. You are going to have to absolutely lock in the exchange rate. The Bank of Japan will stand ready to buy and sell dollars at 100 Yen to the dollar. Interest rates in the two countries would converge.

All the forward rates would be fixed too. This is a «permanent» deal, and you will get all the conditions of the single currency monetary union. Because of numerical coincidence, you maintain the valuable element of transparency, the notational convenience, and all the things that would be associated with it. You would then have the monetary officials from the Bank of Japan and the United States that form the open market committee use the indispensable common index of prices. The Fed would buy either US or Japanese bonds to expand the money supply. The policy committee would make policy according to their best judgment of how to hit their inflation targets. You would make an arrangement to divide up the seigniorage, probably in proportion to the GDP in the two different countries. You would then have a two-currency monetary union with absolutely fixed exchange rates that would operate for all practical purposes like a single currency monetary union.
Everything I have said about a dollar-yen monetary union would be applicable to a dollar-euro or a «G-3» (EMU, Japan and the United States) monetary union. In fact even without a formal monetary union the three areas could follow the principles I have outlined and get some of the advantages of a monetary union, at least in the direction of mitigating exchange rate volatility. The principal difference from current practice is that the three central banks would have to put aside the completely incorrect notion that exchange rates do not matter. One sees signs that the European Central Bank is starting to realize that overshooting of the euro in a downward direction builds up in the pipeline higher prices that would be more difficult to reverse later. More attention to exchange rate targeting should at the same time involve increased attention to monetary policy coordination to ensure that the G-3 price level is kept under control.

12. - The Asian Crisis

The currency crisis of the late 1990s has been called the «Asian Crisis». While attending a meeting of the APEC Study Group Commission in Korea in March 200, I heard a new phrase: the Asia-IMF Crisis!» Both adjectives need to be justified: Was it an Asian crisis? Was it an IMF crisis? I mentioned the culpability of the appreciation of the dollar against the yen as being a factor. But I myself do not like the term, the «Asian Crisis.» It was a crisis for just a few countries. It was, of course, a crisis for Thailand, Malaysia, Indonesia, and South Korea, but it was not a crisis for Singapore, China, Hong Kong, Taiwan or Japan except in the sense that no country can escape entirely events that affect their neighbors.

What did those five economies that did not have a crisis have in common? It was not fixed exchange rates. Singapore, Taiwan and Japan had inflation targets, China had a fixed exchange rate from 1994 to the present along currency board lines but, of course, with exchange controls on capital account. Hong Kong had a fixed exchange rate.
One thing these countries that escaped the crisis had in common was a clear-cut, specific target for monetary policy. Singapore had a currency basket (with unspecified weights) target that worked almost like inflation targeting. Hong Kong had a currency board system. China had a fixed exchange rate coupled with exchange controls. Both Taiwan and Japan had commodity basket targets.

A second feature these countries all had in common was a very large foreign exchange reserve, so they did not have to draw on the IMF or accept outside advice. Those large foreign exchange reserves represent a kind of protection and a warning to speculators not to speculate against their currencies. To me, those two things are principles that should be written on stone. There should be very clear-cut, explicit and transparent targets for monetary policy. You must have ample foreign exchange reserves, especially relative to the debt situation of the country. Higher debt situations dictate the need for high foreign exchange reserves.

Was it an IMF crisis? The IMF had programs in each of the countries at the epicentre of the crisis, but little or no exposure in the other countries. But this doesn’t prove causation! There are a lot of sick people in hospitals too! A serious case, however, could be made that IMF policies have led to the rejection of fixed exchange rates as an anchor without replacing that monetary rule with an equally satisfactory alternative.

13. - Currency Areas in Asia

I now must turn to the question of currency areas in Asia. Does Asia need a common currency. The answer depends on what is the alternative to it. If the alternative is the present system then my answer is «yes, Asia needs a common currency.» The present system has serious flaws. If, however, the alternative to it is a glob-

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8 It is true that Hong Kong got into a little trouble when the newly-created Hong Kong Monetary Authority threatened to depart from the rules of the system in order to support the stock market, but the punishment in the form of outward speculation was severe and the HKMA quickly corrected its mistake.
al currency, which I think would be the best solution, then my answer is Asia does not need a separate common currency.

To form an idea of the needs of Asia in the field of currency reorganization, we need to form a view of the outlook for Asia and its prospects in the world economy as it could conceivably evolve. A couple of years ago I wrote an article in the Wall Street journal outlining a plan for a world currency built on the platform of a three-currency (G-3) monetary union of the dollar, euro and yen areas. You can think of achieving this end by effecting the five steps leading up to the euro area (without the third phase in which national currencies are scrapped): 1) establish a common inflation target for the G-3 area; 2) establish a common price index to measure inflation; 3) lock exchange rates; 4) form a monetary policy committee to decide on the single monetary policy; and 5) create an arrangement to share seigniorage. Given the high degree of inflation convergence among the three currency areas, making monetary policy decisions should not be more difficult than for the European Central Bank inside the euro area. If that could be achieved, it would be a relatively simple matter to use the dollar-euro-bloc as the platform for a world currency produced by the members of the IMF.

There would be great advantages of such a monetary union for the world economy. Instead of having to cope with unstable exchange rates among the dollar, euro and yen, the rest of the world would have the option of stabilizing its own currencies relative to the mainstream of the world economy.

Of course, it is possible — some might say extremely unlikely — that an agreement to lock exchange rates and conduct a common monetary policy could be worked out among the United States, the EMU countries and Japan. The day is long past when all the major central banks — as in the post-war era — believed in a fixed exchange rate monetary system as an act of faith. The current fashion is to go the opposite extreme and praise policies of benign neglect of the exchange rate. For that reason, Asia could not count on such a large scale reform and should not reject more practical alternatives in Asia itself. The best may be the enemy of the better.
It is here that I think the solution would be a currency area in Asia. I have to say very quickly here that I do not mean a single currency for Asia. When I speak of the desirability of a world currency, I am not talking about a single currency. The distinction between a common currency and a single currency has given rise to difficulties elsewhere, so to avoid misinterpretation I want to underline the distinction.

14. - Single- vs. Multiple-Currency Monetary Unions

Let me refer again to The Nobel Monetary Duel, my debate with Milton Friedman. In the final episode, Friedman chastised me for advocating a single world currency. But I have never suggested a single currency for the world and, moreover, I have several times suggested there would be problems with it. Assuming the political conditions were appropriate, the optimal and equilibrium solution is for each (sufficiently-large) country to retain their national currencies but keep them fully convertible into the world currency.

In my vision for the world economy, every country can keep its own currency. All that is needed is for the currencies to be produced as if there were a single currency. What model would this be? Well, it could be the model of the Belgium-Luxembourg monetary union. Belgium and Luxembourg formed a monetary union in 1921. The Luxembourg franc has existed along with the Belgium franc all this time but monetary policy was (before the advent of the euro) conducted by Belgium. Luxembourg had no independent monetary policy but there are nevertheless a lot of Luxembourg francs in circulation, just as there have been Scottish pounds kicking around since the Act of Union with Britain in 1707. The equilibrium is stable as long as the supply of each national currency is kept below the global demand for it at the fixed parity by a margin large enough to discourage speculation.

So, to get back to the main theme, Asia needs a common currency, but it is not possible or desirable for it to have a single cur-
currency. Each state can keep its own currency but it should be kept convertible into the common currency organized and run by a consortium of relevant states. Such an arrangement would be highly desirable to avoid a repetition of the currency storm that struck several countries in Asia in 1997-1998, from which one or two countries have not yet recovered.

Remember the meeting of the IMF in Hong Kong in September 1997? At that time, Japan proposed the organization of an Asian Monetary Fund. This proposal was decisively rejected by the United States Treasury. The fear may have been that an Asian Monetary Fund would take decision-making power away from Washington and that decisions away would be worse than those made in Washington. What a pity! There followed in just a few weeks the so-called Asian crisis. Policy responses with an Asian solution could hardly have been worse than the solutions that emanated from Washington.

15. - What Anchor for an Asian Currency?

If there is to be an Asian plan — solution is too strong a word — for an Asian currency, it is natural to ask: what currency and what anchor? As already emphasized, the European model of a single currency would not work in Asia now because a single currency requires a substantial degree of political integration, much more than exists in Asia now or in the foreseeable future. The Asian currency would have to be a common parallel currency, used for international trade within Asia and with the rest of the world.

What would be the anchor for a parallel currency in Asia? At least at the beginning, it would have to be based one of the existing global currencies. The relevant choices are the dollar, euro and yen, and possibly the RMB. But the RMB would not suffice at the present because it is not a convertible currency. If China continues to grow as it has in the past, the RMB will be an increasingly important currency in Asia, but it would be a step backwards to use an inconvertible currency as an anchor, and this rules out the RMB as the anchor for the next several years.
What about the yen? Japan’s economy has got into trouble recently but its strengths are still legion. It has the world’s largest creditor position, a situation it has built up with a high savings rate that has led to huge current account surpluses. Japan also has been more successful (one could even say too successful!) than any other country in recent decades in keeping inflation under control.

But against these advantages, the choice of the yen as anchor has severe problems. Japan has not put its macroeconomic house in order. A first problem is that its banking system is in grave trouble, a problem that stemmed from the excessive appreciation of the yen in the late 1980s. A second problem is that its mix of monetary and fiscal policy has been wrong for several years: fiscal expansion coupled with a high degree of capital mobility and a flexible exchange rate (a straightforward conclusion, if I may say so, of the Mundell-Fleming model!). A third, related problem concerns the secular tendency of the yen to appreciate, reflected in long-term interest rates less than 2%. Until these problems are corrected, the yen could not be used as the basis for a currency area. In addition there are other difficulties, such as the perception of unfinished business left over from Japan’s role in World War II.

Because the euro is not a serious contender as an anchor for the Asian currency at the present, we are left with the dollar — or a basket of the dollar, yen and euro. But a basket of the three currencies, however, useful as a long-run unit of account, would not make a good medium of exchange. As long as the dollar, euro and yen rates fluctuate against each other, its value would be uncertain and it would not be an interesting anchor for the national Asian currencies.

We are left, of course, with the dollar. US GDP is, at current exchange rates, somewhat less than 2 1/2 times that of Japan and 10 times that of China. The dollar would be an excellent anchor for the Asian currencies. China already uses the dollar as its anchor as does Malaysia and of course Hong Kong.
16. - The Special Case of Hong Kong

Let me now turn to Hong Kong. This region has become an important feature of the economy of Southeast Asia, and outside Tokyo Hong Kong has the largest foreign exchange market in Asia. Even so, its policy could, in my opinion, be improved by a policy change that it would be better for itself, mainland China, the rest of Asia and the world economy.

I am thinking of a reform that would replace Hong Kong dollars with US dollars! What would be the costs and benefits?

Start with Hong Kong. There are about $HK100 billion in circulation that would have to be replaced, at the current exchange rate of $HK7.80 = $US1.00, by about US$12 billion. With Hong Kong's vast reserves of about $100 billion, it would be a simple matter to finance. The only cost to Hong Kong would be the interest receipts foregone on this $US12 billion. The benefits to Hong Kong would be enormous. The Hong Kong public would suddenly get a currency that is the most important in the world, with a history of stability stretching over the last century, second to none. Interest rates in Hong Kong would fall to New York levels. And Hong Kong would continue to get the rate of inflation of the United States, modified by a secular productivity-change factor: Hong Kong's financial center would suddenly dominate the rest of Asia.

China would benefit. The RMB has been fixed to the US dollar since 1994. China would have on its doorstep a region using the most important currency in the world and she would have access to a world-class capital market and financial center. The continued existence of the Hong Kong dollar is completely unnecessary for China. Other advantages would be that Hong Kong would become the focal point for the Asian Monetary Fund and the «Asian dollar».

The existence of a great financial centre based on the dollar and with dollar interest rates would be of immense benefit for the rest of Asia. The transformation of the Hong Kong currency into a rock of stability for all Asia would have far reaching — and beneficial — implications for the currency reorganization of the world.
In the long run, the formation of a dollar-based currency area in Asia, including China, Hong Kong and most Asian countries, could be used as the platform for an independent Asia currency that could become the standard unit of account of an Asian Fund.

17 – Currency Areas and Power Centers

International monetary relations straddle economics and politics. An Asian currency area cannot be considered in a political vacuum. I have argued that a single-currency monetary union cannot take place without a substantial degree of political integration. It must be a security area, in the sense that the states are friends rather than enemies and not likely to make war on one another. To a lesser extent the same argument holds for the formation of currency areas and multiple-currency monetary unions.

A necessary condition for the formation of a monetary union in Europe was the end of the Franco-German enmity that had soured relations for two hundred years. It could not be said that the European Union is tightly integrated politically, yet there is nonetheless a substantial degree of governance exerted by the European Commission, such groups as ECOFIN and the periodic intergovernmental meetings of heads of state. The degree of political integration is, moreover, increasing as a result of the pressure to create a governance system that will work with the additional accession countries.

Asia’s political integration is a long way from that of Europe. But it is surprising how quickly it can develop if the conditions are right. At the present time the most likely Asia currency area would start with the «APT» (Asean plus Three) group, made up of the (newly-expanded) ten Asean countries and Japan, Korea and China.

Another important issue in currency area formation is the system of governance, which is affected importantly by the relative power positions of the states involved. It goes without saying, for example, that the proposed North American Monetary Union comprising the same countries as NAFTA, would be dominated by the
United States, a country whose economy is at least eleven times larger than Canada's and twenty times larger than Mexico's. Mercosur is heavily dominated by Brazil, with 180 million people, checked by Argentina, with 35 million, and the two much smaller states of Paraguay and Uruguay.

In the APT area the dominant powers are Japan and China, complementary to one another in political as well as economic dimensions. The political viability of an APT currency area would depend critically on how well these countries got along, and on whether or how well the other eleven countries accepted their governance.

A key element in an APT currency area would be the choice of an anchor. For reasons already discussed, the only feasible single-currency anchor at the present time would be the US dollar. The currencies of China, Hong Kong and Malaysia are already fixed to the dollar so that if Japan were to fix the yen to the dollar, the most critical steps in forming an APT currency area would have been hurdled.

18 Conclusions

There is a gap in the world economy, an externality, that a world currency could close. It would be highly desirable to organize an international currency that could be used as a global unit of account and means of exchange. This currency should be given juridical status in a world constitution. A global economy needs a global currency.

\footnote{It would be a mistake, however, not to recognize that the dollar itself might not be a safe anchor in the long run. Over recent years it has been strong; in the future it could be weak. The fluctuations of the dollar against other major currencies pose a major problem for countries adhering to the dollar alone. Over the past 30 years the dollar has been involved in large fluctuations against the SDR. The dollar started out as 1 SDR in 1970; it fell to an average low of SDR.76 in 1980; it rose to SDR.98 in 1985; it fell to SDR.66 in 1995 and rose to SDR .99 in 2001. While a stabilization around the dollar would be the best step in the short run, the SDR might be a better long-run anchor. Currently the weights in the four-currency basket SDR are as follows: Dollar— 39%; Euro = 32%; Yen = 18%; Pound = 11%.}
My approach, outlined above, would be to build this world currency on the platform of existing currencies, the dollar, euro and yen currency areas. We may as well say the SDR, which is a basket of these three currencies and the pound sterling, with weights at present equal to 39% for the dollar, 32% for the euro, 18% for the yen and 11% for the pound. The weights would be changed as the importance of the currencies evolves and as new currencies become important.

The convening of a Bretton Woods style international monetary conference would be one institutional way of implementing the new arrangements. Yet it would be premature to begin the process with such an arrangement. The 1944 Bretton Woods conference succeeded because the fundamentals of the system had been worked out in advance. The task at Bretton Woods was mainly to finalize the institutional details of a structure that was already in place and obtain the endorsement of the smaller powers.

The first order of priority would be to establish more stable exchange rate arrangements. This could be achieved by introducing wide bands around the yen-dollar or dollar-euro rates, eventually squeezing these bands closer as experience proves them viable.

It is not necessary to establish a three-currency solution all at once. Agreement to fix any two of the currencies would be an inducement for the third to participate. Fixing the yen-dollar rate, for example, could help to launch an APEC currency area comprising $22 trillion worth of GDP that could become an attractive anchor for the euro as well.

Over time, an agreement could be made by the Board of Governors of the International Monetary Fund to use the large dollar-euro-yen currency area as the platform on which to build a new international monetary system and a global currency.

Thank you very much.

If political conditions made an Asian currency area based on the APT group unfeasible, an alternative might be available in the larger framework of APEC. This group, which has set a target of some kind of free trade area by 2015, comprises the entire Pacific Basin, including, among others, China, Japan, the United States, Russia, Canada, Indonesia, Mexico, Peru, Australia, New Zealand and Chile. Its combined GDP is over $22 trillion, over half of world GDP.