

The quality of money

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The quantity of money

“Money matters”, but: “What really matters is the *quantity* of money.” These two expressions from the monetarists’ academic work were very popular in the early 70’s².

The endemic inflation that afflicted Latin American economies for several decades and that, towards the end of the 60’s and throughout the 70’s, appeared in the USA and in most industrialized economies, was explained by the persistent increase in the quantity of money. Some countries, like Germany and the Switzerland, maintained lower inflation rates thanks to a better control over their money supply growth.

During the 80’s in North America, Europe, East Asia and Oceania and the 90’s in Latin America, there was a generalized reduction in inflation rates that monetarist analysts attribute to a lower rate of money supply growth. The currency crises in Europe in 1992, in Mexico in 1995, in South-East Asia in 1997, in Russia in 1998 and in Brazil in 1999 are blamed on the practice of over-expansive macroeconomic policies, both in the monetary and fiscal areas, within the framework of exchange regimes that had little flexibility³.

Those who adhere to the modern quantity theory of money and give this interpretation to inflation and stabilization, formulate a simple recommendation for international monetary arrangements: each country should have its own currency controlled by an independent Central Bank, so as to ensure stability in the general price level, and the value of that currency should emerge from a free floating exchange rate regime. There would be no need for monetary policy coordination or for restrictions on capital movement. Price stability in each national economy would be ensured as well as in the world economy. There would be no monetary crises.

Stabilization Policies

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² See Friedman (1968,1969,1970,1971,1972); Allais (1962,1969,1970,1972)

³ See IMF (1996)

An evaluation of the achievements of the national stabilization policies towards the end of the 90's shows that price stability has been achieved in the USA and Germany and in most of Western Europe; in Canada, Panama and Argentina in America; in Singapore, Hong Kong and Taiwan in Asia and in Australia and New Zealand.

Throughout the rest of the economies (above certain size, and excluding Japan) annual inflation rates remain above 3%. Some countries like Chile, Israel, Colombia and Bolivia have managed to maintain their stabilization policies without major surprises since the mid-80's. The same has happened in Peru, Poland and Hungary since the beginning of the 90's. Yet, in none of these cases was it possible to create an atmosphere of permanent stability in the general level of prices, and consequently, inflation is still an unresolved issue.

Other countries managed to achieve, for a few years, some success in their fight against price instability but they ended up in monetary or financial crises which, in turn, reignited inflation. Mexico, Thailand, Philippines, Malaysia, Korea, Indonesia, The Czech Republic, Russia and Brazil fit into this category.

There is, finally, another group of emerging economies, such as Turkey, Venezuela and Ecuador that have yet to succeed in implementing lasting stabilization plans.

At the other extreme, and breaking the rule, is Japan, undergoing a deflationary episode unseen since the 1930's.

The question that naturally arises from the different experiences of the last two decades is: why do we observe such radically different results? Monetarists have a very simple answer: "Countries that persevered in the quantitative control of the currency achieved price stability. The others, did not."

I hold a different view: what separates these two groups is an institutional trait. Successful countries were able to develop a high quality currency. A currency that managed to remove inflationary expectations in the long term and allowed its national economy to maintain an effective commercial and financial relationship with the global economy.

The second group of countries based their stabilization policies on the control of lower quality currencies, this is, currencies that continued to convey some long term inflationary expectations, and whose fluctuations affected the financial and commercial relations with the rest of the world.

In the case of Japan, the currency is not tainted by inflationary expectations, but its value greatly fluctuates relative to the rest of the Asian currencies, that by and large remained tied to the dollar. The fluctuations have not facilitated an effective functioning of the industrial and commercial system structured around the Japanese economy.

My experience, as a policy maker in my country, has convinced me that at the national level, as well as in the global economy, achieving price stability is not so much related to

the *quantity* but rather to the *quality* of money. And this emphasis on the *quality* of money leads to a set of provoking propositions regarding the international monetary system.

Towards a more complete monetary theory

The monetary theory of the 70's and that is still taught today at university does not pay much attention to the institutional aspects of money. It does not hold the *quality* of money as an important issue.

It is based on the premise that every economy has a currency and a Central Bank that issues and manages it. Most of the attention is focused on the Central bank's management of the national monetary policy, the quantity of money, the interest rate level and the exchange rate policy. Yet, the departing point is not exactly correct. My experience leads me to conclude that monetary theory should start with a discussion of how can an economy achieve a high quality currency.

This discussion must precede that of monetary policy. Remarkably, in order to develop a high quality currency, oftentimes the economy will have to set aside the possibility of conducting monetary policy, at least for a while.

It will be precisely in the chapter on currency as an institution, and not in the one on monetary policy, that answers will be found to most of the economic instability problems that currently beset the world.

Currency as an institution

Money is one of the most important economic institutions, both for the working of a market economy and for public finances. Prices of goods and services are valued in money. Governmental budgets are approved and controlled in monetary terms. Most of the property rights enjoyed by people are defined and enforced in monetary terms.

When a currency loses value, that is, when the price level increases, the functioning of the market economy deteriorates thus those who buy and sell goods and services cannot easily distinguish between changes in relative prices and changes in absolute prices. In other words, a currency that lacks a stable value deteriorates the informational content of prices and the functioning of the price system as allocator of resources. The formulation and control of public budgets, and particularly of tax collection, become increasingly uncertain and complex in inflation-ridden economies. When a currency changes value in an erratic way, there is an arbitrary violation of monetary-defined property rights.

In short, a currency unable to preserve a constant value worsens the functioning of the two fundamental mechanisms of economic coordination in modern economies, the market and the budget, turning property rights more uncertain.

A currency's quality resides in its ability to safeguard price stability in the long run and in

the degree of acceptability that the currency generates among economic agents for their commercial and financial transactions.

The best indicator of a currency's quality is the long-term interest rate. The closer the interest rate is to the economy's growth rate, the greater the currency's quality. This is so for a simple reason: the disappearance of inflationary or deflationary expectations is reflected in the level of interest rates, which ensure the economy's long-term equilibrium under a stable price level. Another indicator of the currency's quality is the intensity with which it is used in transactions beyond its national borders.

The quality of a currency deteriorates when the government abuses it to finance the fiscal deficit or to increase the economy's external competitiveness. If instead of standing by a quantitative rule, such as the one proposed by monetarists, allowing interest rates and the exchange rate to be freely determined by the market, the government decides to use monetary policy to influence interest rates or the economy's external competitiveness, economic agents will quickly begin to expect higher rates of inflation.

They will notice that the government will only be able to produce real transfers towards debtors and tradable goods' producers if it succeeds in collecting the inflation tax. Paradoxically, long-term interest rates will end up rising as a consequence of the growing uncertainty about money defined property rights, typically labeled currency risk. In the medium and long-term, debtors and tradable goods' producers, at least those who make intensive use of capital, will see their relative position deteriorate.

When monetary policy is discretionary, it results in divergent movements between short and long term interest rates as well as on external competitiveness. Such an economy no longer has a high quality currency. When that conclusion is reached, the fundamental concern becomes how to recover credibility in the currency.

Monetarists insist: it's a matter of abandoning discretionary measures and permanently adopting a quantitative rule. Again, I reach a different conclusion: policy makers must take advantage of the existence of other high quality currencies to recover trust in the deteriorated local currency. As a matter of fact, both approaches would, at the end of the day, yield the same results, but during the period when credibility is limited the outcomes differ.

Once the currency recovers its quality, monetarists' prescriptions will become relevant again and the economy will have regained the possibility of implementing an independent monetary policy. In the meantime, in order to recover the quality of its currency, the government must refrain from conducting an independent monetary policy and must accommodate to whatever decision is taken by the patron currency's country.

Currency Boards and Central Banks

A Currency Board is a monetary institution aimed to ensure the local currency's convertibility in terms of another of higher quality, considered the patron or supporting

currency. It gives up the ability to conduct an independent monetary policy.

A Central Bank, on the other hand, is an institution that creates and manages a fiduciary currency and has the capacity to implement an independent monetary policy.

A sound institutional sequence for the monetary organization of an open economy is a Currency Board that successfully turns into a Central Bank. This will only happen when the convertible currency appreciates vis a vis the supporting currency. If this appreciation originates in deterioration in the quality of the supporting currency, the Currency Board is usually kept and the patron currency changed. But, if the appreciation is the result of a higher rate of growth in productivity in the local economy relative to that of the patron currency's economy, then the real side of the economy will push for an appreciation of the local currency. At that point, the national currency will, most likely, be allowed to float freely and the Currency Board transformed into a Central Bank ready to conduct an independent monetary policy.

The sterling pound and the US dollar were convertible currencies into gold since 1821 and 1879 respectively. The Bank of England functioned, in practice, as a Currency Board until the pound became inconvertible in 1913. The dollar's fixed parity to gold convertibility regime was kept during the First World War and was only dropped in 1933, during the Great Depression. When the sterling pound was used as the basis of an active monetary policy, frequent and severe monetary crises followed. These crises ended its role as reserve currency. It was precisely the accumulation of gold by the Federal Reserve's Bank that led the dollar to become the anchor of the monetary system created at Bretton Woods, after the end of the Second World War. Consequently, both the sterling and the dollar went through two stages: Currency Board and Central Bank. In the second stage, the dollar was less affected than the pound by monetary crises and hence it gained an increasingly important role as a reserve currency⁴.

Since the end of the Second World War, the history of the yen and the Deutsche mark can also be observed in terms of this typical institutional sequence. Under the Bretton Woods Arrangement, all national currencies, including the yen and the Deutsche mark, had a value determined in dollar terms, but they could be "adjusted" in case of a "fundamental imbalance" in the balance of payments. Neither the Germans nor the Japanese devalued their currencies, rather they advanced towards the convertibility of their current accounts. As a consequence, towards the end of the Bretton Woods System their currencies were almost fully convertible into dollars at a fixed parity and their respective monetary authorities were virtual Currency Boards.

For over twenty years both economies witnessed higher productivity gains than those of the US economy. Thanks to that, when the dollar weakened as a consequence of the expansive policies practiced in the 60's, they abandoned the dollar anchor. The yen and the Deutsche mark started floating freely, with a clear tendency towards appreciation.

⁴ See Eichengreen (1996)

Thereon, the Bank of Japan and the Bundesbank began to operate as Central Banks responsible for their respective independent monetary policies⁵.

Moreover, the clearest examples of the institutional sequence from Currency Board to Central Bank are seen in the Singaporean and Malaysian economies. The Malaysian Confederation's Currency Board ceased to exist in June 1967, following the rupture between Singapore and Malaysia. Singapore established its own Currency Board using the pound Sterling as its reserve currency. In Malaysia, the Malaysian Negara Bank played the same role. Both countries' currencies were freely interchangeable during this period. In 1972, after the pound floated, Malaysia and Singapore fixed their currencies against the dollar. In this way, they tried to maintain parity and avoid following *pari-passu* the sterling depreciation.

In 1973, the dollar began to devalue. The ringgit and the Singaporean dollar followed suit, speeding up the process known as "imported inflation". The Singaporean and Malaysian governments allowed their currencies to float freely and a quick appreciation ensued. The solid position of both economies allowed a successful exit from the system⁶.

Fixed exchange rates and Currency Boards

Emerging economies have frequently chosen to fix the value of their currencies to a patron currency, even without full convertibility. Fixing the value of the currency is an imperfect institutional arrangement. It doesn't grant absolute protection to those who will use the local currency that, under any circumstances, they will be able to purchase the patron currency at the preset fixed price. Restrictions to convertibility and to capital flows usually lead to the emergence of a parallel market where currencies are traded informally at a different value than that officially set.

Under this system, Central Banks often believe they have a certain margin to conduct an independent monetary policy, and as a matter of fact, capital flows restrictions allow for a considerable difference between interest rates on domestic and external currency transactions. Consequently, in the short term, variations in the domestic credit growth rates allow for changes in the domestic interest rate, even when the exchange rate is fixed⁷.

Sooner or later restrictions on capital markets and on the currency's convertibility begin to relax (because agents find more efficient ways of evading rules or because the authorities decide to remove restrictions) when that is the case, any Central Bank attempt to defend the fixed parity results in a restrictive monetary policy, with increases in domestic interest rates, reflecting inflationary and high devaluation expectations. What this shows is that by just fixing the exchange rate level of a non-fully-convertible currency little has been achieved in quality improvement.

⁵ See McKinnon (1996)

⁶ See Bercuson (1986)

⁷ See Honohan (1994)

The same effect does not come about when the monetary regime operates under a Currency Board, so that the economy is allowed to work with two currencies: the local one and the patron currency. Under this institutional arrangement, the interest rate differential tends to disappear, since the possibility of conducting an independent monetary policy has been eliminated. With no monetary policy, local economic agents cease to expect a different inflation rate to that of the patron currency.

In synthesis, it is not the exchange rate but the convertibility of the local currency and the economy's bimonetary character, which allow for a recovery of the local currency's quality. The radical contrast between both arrangements is that a properly operated Currency Board regime comes to an end not through a monetary crisis, but rather via the appreciation of the local currency when it begins to freely float.

In contrast to bimonetary Currency Boards, the simple fixing of the exchange rate, preserving the Central Bank's ability to conduct an independent monetary policy, almost always ends in a monetary crisis.

The Lender of Last Resort

The main reason why countries prefer to omit the Currency Board stage and go directly to the Central Bank one, even when they wish to maintain a fixed exchange rate, is because they believe it is crucial to have capabilities to operate a lender of last resort during financial crises.

Yet, if the currency is of low quality, when a banking crisis breaks out, the currency that people demand is not the local one, but rather gold or a foreign currency that offers them security. In that case, the Central Bank cannot act as lender of last resort in an effective way because it can only issue domestic currency. Remarkably the pursuit of this path, rather than reversing the financial crisis, leads to capital flight to foreign countries and a deteriorated monetary picture.

It is precisely this feature that enriches the traditional interpretation of the Great Depression.

With the arrival of the 1929 crisis, countries like Argentina, Australia, Brazil, Canada, Austria, Hungary, Germany and even Great Britain attempted to bail out local commercial banks through Central bank intervention. The problem was that people demanded gold or strongly backed currencies. Therewith governments had to apply strict exchange controls or allow their currencies to devalue heavily. As a consequence the international trading system was seriously disrupted.

History would have been different if liquidity had come early from the Federal Reserve Bank, the only Central Bank capable of issuing currency without the risk of losing all its gold reserves. Unfortunately, the Federal Reserve Bank only reversed its 1929

contractionary mistake as late as 1933, when it started injecting liquidity, at a time when the crises were very deep and the world had already sunk into depression⁸.

A loss of liquidity can only be neutralized by issuing high quality currency. The attempt to do so from Central Banks that control low quality currencies can only worsen the crisis.

Common Currency⁹

The creation of a common currency following a period of relatively fixed parities among the different national currencies was Europe's strategy to achieve a high quality currency. In practice, the European Monetary System was created in 1979 as an effort to anchor European currencies to the one that had managed to inspire, at the time, greater confidence the Deutsche mark. The European Monetary System was not exempt from monetary crises, because Currency Boards did not accompany the establishment of exchange parities. On the contrary, some national Central Banks continued conducting their monetary policies independently of the German Bundesbank, and because of this, interest rates did not converge until 1992, reflecting devaluation expectations that finally materialized in July 1992.

The December 1991 Maastricht Treaty created the concept of the Euro and a set of macroeconomic criteria that countries should follow, in order to adopt the common currency. Driven by the wish to enter Euroland at the earliest possible opportunity, eleven nations straightened out their monetary and fiscal policies along those lines and the Euro is a reality today, with member countries enjoying the same level of interest rates of the Deutsche mark's.

The benefits of replacing weak national currencies with a higher quality one is particularly clear for countries like Spain or Italy. Both of them, only four years earlier, had interest rates twice as high as the German ones. In the Italian case, the common currency has meant a reduction in its public expenditures due to the lower financial costs representing approximately 4% of the country's income.

Currency Boards and a Common Currency

Recent experiences in Europe and Argentina allow us to forecast an interesting complementary relationship between Currency Boards and common currencies, as institutional arrangements capable of contributing towards an improvement in the quality of national currencies. If already exists a high quality currency within a potential monetary region, the first stage towards the creation of a common currency could consist in the establishment of Currency Boards for each national currency in terms of the higher quality currency. After a reasonable period of time, when countries would agree upon the terms of the future common currency and its monetary authorities, all of these convertible

⁸ See Eichengreen (1996)

⁹ See Mundell (1961)

currencies would be replaced by the common one. The system's patron currency, or a new one, would become the common currency, managed by a regional Central Bank rather than by national Central Banks.

The greatest advantage of combining Currency Boards with the future common currency lies in the elimination of monetary crisis risks during the transition phase between the independent national currencies system and the common currency.

Japan and East Asia

The yen is a high quality currency if it is judged by long term inflation expectations that are reflected in its interest rates. Monetarists insist on recommending the Bank of Japan a much more expansive monetary policy than the one undertaken in previous years, in order to reverse the deflationary climate and economic depression betting that economy. The Japanese and the Chinese however, fear that placing more yens into circulation will only lead to that currency's depreciation and not to the recovery of domestic Japanese demand, currently depressed due to the uncertainty the Japanese feel about the future of their income. The devaluation of the yen could unleash a new wave of competitive devaluations, starting with the Chinese renminbi. This new wave of devaluations would only worsen the crisis in East Asia.

When matters relative to the quality of the Asian currencies and to the regional payments system are considered in the analysis, an institutional solution to the crisis emerges. Japan could increase the issue of yens in order to lend each one of the nations in East Asia the reserves they need to set up Currency Boards for each of the national currencies, so as to create a regional monetary system anchored to the yen. Asian trade would be boosted with the eradication of the uncertainty attached to the floating exchange rates between the region's currencies. Moreover, factor productivity would be boosted through a better use of the region's complementary productive structures. A recovery in the demand for Japanese goods and services would start with its neighbors' expansion, as they would benefit from monetary stability and lower interest rates. Domestic Japanese demand would turn around when, under the new reality, the generalized pessimism of the Japanese reverts itself.

In the future, Asia could agree upon the creation of a common currency. This would naturally follow if Japanese leaders adopted the same attitude towards their neighbors as German leaders did towards other European nations. Geopolitical problems inherited from past wars and occupations are no greater in Asia than they were in Europe.

Russia and the former Soviet Republics

Since the beginning of its transformation into a market economy, Russia went through an initial stage during which the Central Bank did not hesitate to issue rubles in order to finance government expenditure. A strong inflationary process developed. As from 1994 the Central Bank started controlling the issue of rubles and the currency's value stabilized

at the expense of extremely high interest rates.

When the internal debt problem became unsustainable, in large measure due to the government's high financing cost, authorities decided to declare a unilateral moratorium and stopped supporting the ruble. Since then, inflation has increased, though fortunately not at a hyperinflationary level, because the Central Bank still controls the issue of rubles. This is achieved at the expense of accumulated arrears in state payment to its employees, pensioners and suppliers. Monetary policy is apparently avoiding hyperinflation, but the Russian economy functions basically as a non monetary economy, that is, it is based on barter. Financial intermediation has practically disappeared and the population keeps its savings in goods or foreign currencies. Naturally there is no tax collection system since in a barter economy evasion routes multiply rapidly.

The Russian economy will not solve its problems by changing its monetary policy. What it needs is a monetary reform, that is, it needs to create a quality currency, capable of inspiring confidence in the maintenance of its value, thus allowing financial intermediation and credit. This could be achieved through a Currency Board, transforming the ruble into a convertible currency, for example to Euros, at a fixed parity. The use of the Euro instead of the dollar as the patron currency would make great political and economic sense. Russian citizens should also be given the choice to use other currencies: the Euro, the Deutsche mark, or the dollar, if only for financial transactions, so that freedom of choice helps to recreate confidence in the ruble's convertibility.

With such a monetary system, both a gradual monetization of the economy and a development of bank intermediation will reappear. If the fiscal system and the budget management are rebuilt at the same time, monetary and price stability can become a reality for the first time since the Soviet Union disintegrated. With monetary and price stability it is possible that Russia will create and respect a property rights system and a market economy. This is impossible to achieve without a quality currency and the recreation of domestic credit. This is the only institutional change worthy of western financial support. Without quality monetary and financial institutions the Russian economy cannot make any headway in solving its problems and will continue to represent a threat to the global economy.

To a lesser or greater extent, the monetary and fiscal reality of the former Soviet Republics does not differ much from the Russian scenario. The way to recreate their currencies and financial intermediation should be similar.

In the future, Russia and its neighbors could negotiate their entry into Euroland, or even replace their national currencies with a regional one. The latter choice will only happen once the convertible ruble has become a sufficiently high quality currency that it can abandon the fixed parity vis a vis the Euro without a monetary crisis. This in turn would only happen when the Russian economy achieves a sufficiently long period of sustained productivity growth.

Brazil and Latin America

Only two countries in Latin America managed to eliminate inflation from their economies: Argentina and Panama. No other country, not even Chile, following two decades of reforms towards a market economy with significant fiscal discipline, has succeeded to achieve annual inflation rates below the 3% mark. This is explained by the fact that, even in the most orderly Latin American countries, a history of inflation is coupled to the power of interest groups to influence monetary policy. Those forces still induce long-term inflationary expectations.

The only two exceptions are explained by a complete absence of an independent monetary policy. In Panama, because the dollar is used as its currency, and in Argentina, because since 1991 there is a Currency Board for the peso with a fixed relation to the dollar that allows for the indiscriminate use of both currencies¹⁰.

Brazil has just succumbed to a monetary crisis following an attempt to eradicate inflation called the Plan Real. It consisted in a pre-announced exchange rate band, but without the complete resignation of the monetary policy that a Currency Board would demand. Although inflation rates fell rapidly, at a quicker pace than the one experienced by the Argentine economy at the start of the Convertibility Plan, Brazilian savers and foreign investors demanded higher interest rates in order to keep their savings in Brazil. The high interest rates interacting with a heavy debt burden augmented the fiscal deficit.

In January 1999, the Central Bank could not resist successive speculative attacks against the real, precipitating its devaluation through a disorderly process that ended in the free floating of the currency three weeks after the monetary crisis had begun. In order to avoid the inflationary effect of the devaluation, the Central Bank has announced that it will control monetary aggregates so as to ensure inflation no higher than 15% a year. As a reaction to these announcements interest rates have remained at higher levels than those have seen in the period preceding the monetary crisis.

If a monetarist policy is maintained, Brazil's perspectives are of a prolonged recession and in the best of cases an inflation rate considerably higher than the one promised by the Real Plan. Mexico's experience following the 1994 crisis when similar policy announcements were made is not encouraging. Having witnessed a drop of over 6% in GDP in the crises year, today it still boasts an annual inflation rate of 18%, following a peak of 52% in 1995.

If Brazilian authorities would focus on the quality rather than the quantity of their currency, they would be able to overcome the crisis almost immediately. The solution is the same as the one implemented by Argentina on April 1st, 1991. Brazil has even more favorable initial conditions than those that existed in Argentina in the first quarter of that year.

Brazil has enough reserves to support its monetary base at an exchange rate between 1.5 and 2 reales per dollar¹¹. Its financial system is solvent and more developed than its

¹⁰ For a description of the Argentine experience, see Cavallo (1992, 1995, 1996, 1997^a y 1997b)

¹¹ The exchange rate was at 2.20 on March 2.

Argentine counterpart was in 1991. A generalized use of information technology by the banks would make it easier to use both currencies immediately.

Another advantage Brazil has over Argentina in 1991 is the significant amount of savings in the banking system. Convertibility would stop these savings from fleeing the country. Furthermore, Brazil must avoid making the same mistake Argentina made in 1990 when it produced a forced restructuring of the domestic public debt. This would destroy its financial wealth¹². Under a convertibility system, Brazil would keep these assets by allowing their voluntary dollarization.

Once the currency is convertible, the budget could be balanced since the new fiscal package recently ratified by Congress set a primary surplus of 2.5% of GDP. Under convertibility, the cost of public debt would fall from over 8% of GDP to around 4%. Expenditure cuts could be achieved by changing public sector financing from reales (currently at an annual interest rate of 40%) to dollars (between 10 and 12%). With this drastic cut, the total fiscal deficit would fall to a manageable level of 1.5% of GDP, and it could fall further still following a far-reaching privatization plan. In addition, Argentina's experience, and Brazil's with the Real Plan, prove that a reduction in inflationary expectations and currency stabilization lead immediately to the recovery of economic activity and tax collection.

If Brazil were to adopt a monetary regime like Argentina's, it would surely convince the remaining Latin American countries about the benefits of having a high quality currency.

Mexico, for instance, is the country that would benefit the most from such a regime. Given its strong commercial integration with the USA, there would be a phenomenal increase in Mexican productivity that would come from a reduction in the cost of capital.

In a second stage, Latin American countries, together or within regional subgroups (i.e. South America, Central America, etc.) would have two choices for the further improvement of their currencies' quality: to move towards one or two common regional monetary unions or to negotiate a monetary union with the USA¹³.

The future of the International Monetary System

The preceding discussion suggests that in the future, the transformation of the International Monetary System will be driven by the different countries' search for quality currencies.

¹² On January 1 1990, the Argentine Government faced a situation similar to that of Brazil today. The economy minister at the time, Erman Gonzalez, implemented the so called Plan Bonex, that consisted in the forceful transformation of 30 day banking deposits into 10 year maturity tenures dollar denominated bonds. This compulsory exchange that affected savers' confidence in the financial system with strong losses to those in need of liquidity, could have been avoided with the Convertibility Plan that I implemented as of April 1, 1991.

¹³ See the case of the Eastern Caribbean Currency Association in Nascimiento (1994).

If the International Monetary System's future structure develops in this way, it will not be a complete novelty in history. In a recent book, the transformation of the bimetallic system in the gold standard regime between 1880 and 1914 is explained in the following way¹⁴: "The greater number and size of domestic and international transactions which resulted from economies undergoing an industrial revolution gave an advantage to gold over silver. Since the value per bulk of gold was roughly fifteen times greater than that of silver, gold would naturally become more important as a medium of exchange in environments where the size and frequency of transactions and incomes were growing. The greater internationalization of economies in Europe and the US made the standard which was practiced by Britain all the more compelling, since the international capital market and more specifically the international market for commercial debt (i.e. bills) were dominated by sterling. Finally, the spectrum of domestic politics changed significantly in the developed world in the XIXth century. The rise of political liberalism was a manifestation of the political rise of an urban-industrial class and a challenge to the traditional dominance of an agricultural class. With the shift in the political balance of power came a concomitant shift in monetary preferences from a standard oriented around a bulky and inflationary metal (i.e. silver) to one oriented around a light and non-inflationary metal (i.e. gold)."

If the reasoning that I have presented throughout this conference is correct, we can foresee that nations, in their search for a higher quality currency, will decide to set aside independent monetary policies and this decision will eventually reduce the number of currencies in the global economy.

As long as the formation process of large monetary areas lasts, the IMF should be the institution in charge of determining when a country is capable of transforming its Currency Board into a Central Bank. This means that in practice, the IMF would judge the quality of currencies. Access to a window of last resort loans while their currencies have not passed the quality test, should be the incentive to stop countries from conducting independent monetary policies prematurely. In sum, the IMF would have a very similar role to the one it was created for at the start of the Bretton Woods system¹⁵.

I have belabored here to convince you of a very synthetic idea. "Money matters", but: "what really matters is the *quality* of money."

¹⁴ See Giulio Gallarotti (1994).

¹⁵ The fact cannot be discarded that, even with a reduced number of better quality currencies and with the respective Central banks' perseverance in the implementation of monetary policies aimed towards price stability in each monetary area, there will be a lack of stability of each currency vis a vis the others. If this were to happen, it is likely that the same forces that today provoke the increase in the size of the monetary areas will trigger the creation of a single world currency in the future. At that time, the central banks of the large monetary areas and the IMF should be replaced by a World Central Bank. In any case, at the current pace of events, this is merely a conjecture.

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