

**THE GHOST OF BANCOR:**  
THE ECONOMIC CRISIS AND GLOBAL MONETARY DISORDER  
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1. *Summary.* In this lecture I shall be addressing the monetary aspect of the present economic crisis. My argument can be summed up in the following few propositions. The deep causes of this crisis include the dollar policy and, in a broader sense, the monetary regime that has been in force in the world for almost 40 years. Like the Bretton Woods system, it is incapable of imparting an acceptable macro-economic discipline to the world's economy because, being devoid of collectively accepted anchors, it encourages the persistence of unsustainable dynamics which spawn increasingly serious crises. Triffin's criticism of an international monetary system based on an exclusively national monetary policy is still valid, although today it demands a broader formulation, capable of taking into account the exchange rate anarchy and a multiplicity of influential monetary policies. The issue of international monetary order is not being afforded due attention and it needs to be addressed. Paths of reform for the future are difficult to identify and even more difficult to pursue. That is precisely why it is urgent for the academic and scientific communities, and indeed for all of those who harbor concern for the future of the global economy, to explore them.

So much for the summary. I shall now address my theme.

We do not know what historians and economists are going to be saying in 50 years time about the new storm currently rocking our world, but that does not make it any the less urgent for us to understand the crisis *today*, because any action taken to govern and to overcome the current crisis demands a prior interpretation of the crisis, and its effectiveness will depend on that interpretation. So we have to start by trying to interpret it.

2. *Unsustainability.* In the following essay I shall be using the adjective 'unsustainable', which is commonly used by economists. As Herbert Stein once said, 'that which is unsustainable comes to an end'. In actual fact, there is no stringent and generally applicable notion of unsustainability – a fully fledged key to understanding the crisis that began in 2007 – comparable to that of, say, equilibrium. Unlike equilibrium, unsustainability is intrinsically dynamic by nature. A dynamic based on factors that do not allow it to last over time is unsustainable. Today, life on earth is itself an unsustainable dynamic. We might say that unsustainability is to dynamic what imbalance is to static. When an unsustainable process 'comes to an end', variations in price and quantity are of a magnitude and a drama incomparably greater than one sees in the healthy conduct of economic life on a daily basis. The 'end', the breaking point,

often occurs at an unexpected moment and in an unexpected way. And the further down an unsustainable path we are, the more painful and costly it then becomes to readjust.

3. *The monetary aspects of the crisis.* What is known as the ‘subprime crisis’ is actually a great deal more than simply the predictable bursting of a typical speculative bubble akin to many others that we have seen in past years. Nor is it a mere accident along the way in the globalization of the economy. Technically, a 4.7 percent drop in output and a 17 percent drop in trade over five quarters in the OECD zone are called a recession. But the terminology typical of the economic cycle hides the fact that what is taking place is a structural upheaval. The globalization of finance and monetary systems has excessively prolonged the duration of unsustainable trends which a different form of governance could have resolved far earlier and far more painlessly. The term ‘subprime crisis’ is as much of an understatement as it would be to call World War I ‘the Archduke's War’.

While a great deal has been said regarding *financial* factors, the specifically *monetary* factors that triggered the crisis have not yet been afforded the attention they deserve. Now, as I see it, these factors are of crucial importance *before, during* and *after* the crisis. To overlook them would prevent us from understanding exactly what is going on. And even more worryingly, it would prevent us from fostering the right conditions to ensure that such a disaster cannot recur.

4. *During the crisis.* I subscribe to the widely held positive view of the way in which the central banks acted *during* the crisis. They provided extremely abundant liquidity in order to counteract the collapsing velocity of circulation money. They showed no hesitation in massively expanding their institutions' budgets or in offering money at zero interest. As bankers with a long-term view but also capable of bold moves, they purchased financial instruments to which the market no longer assigned any value. They realized that the systemic risk had also put down roots in non-banking institutions which the banks either could not or would not sustain singlehanded. Thus the central banks broke through the boundary that demanded that they act solely as a counterpart to the banking system. The European Central Bank understood that the drop in confidence might overwhelm not only markets and banks, but even sovereign states, and that it might damage the European currency.

We were not exactly in the situation described by Joseph Conrad when he remarks on the pointlessness of instruction manuals in the midst of a typhoon, because decades of study devoted to the crisis of 1929 and to the mistakes made back then have taught us certain lessons. The Captain MacWhirrs in Frankfurt, Washington, Beijing, Tokyo and London knew that it would be a mistake to apply in exceptional circumstances rules devised for normal circumstances. The typhoon arrived unexpectedly, and in some cases the sails were raised after it had already begun (I am referring to the rate increase decided on by the ECB in July 2008). Yet overall, the

central banks proved capable of recognizing it in time, and they steered their way through it with the necessary degree of reactivity, determination and imagination.

Some people may consider the central banks' true merit to lie in their failure to heap the damage of a mistaken response on top of the damage already perpetrated by the crisis. But that in itself would be no mean feat. If the terrible moments of 2007 to 2009 have passed and the financial circuits have started working again, if credit has started flowing again and output is on the rise, we unquestionably owe all of this also to the way the central banks acted *during* the crisis. So, all honor to them.

5. *Before the crisis.* If we now turn to the monetary aspects *before* the crisis, our judgment becomes far more complex because it impacts all of the components of the 'monetary regime' within which the crisis ripened. I include in the term 'monetary regime' not just the specific *decisions* made by the central banks (for instance, the choice of policy stance under given circumstances), but also the *paradigm* used to prepare and to make those decisions (the choice of goals and operational objectives, commonly known as strategy) and the institutional *architecture* within whose framework monetary policy is conducted (mandate, independence and so forth). Our analysis needs to stretch from the central bank to embrace also the other players who help in devising and implementing policy: the scientific community, the political system, lawmakers and the executive. It needs to go back decades in order to identify the origins of the system. It needs to look beyond individual countries toward the horizon of the global economy. In a word, we need to reread monetary systems' recent history in its entirety.

It is easy to argue today that, if the monetary regime had sounded the alarm bell and triggered an adjustment in time, the crisis would have been either averted or, at the very least, mitigated. And if we ask ourselves what factors prevented that from happening, then we need to give the dollar a special place, both from a *domestic* American perspective and in terms of *global* monetary relations. Let us see how.

6. *The dollar in the United States.* The long boom in real estate prices developed in a context marked by overabundant liquidity, exceptionally low interest rates, inflation so low that it prompted some people to warn of the danger of deflation, and monetary policy's declared lack of interest in the price of *assets* and the formation of speculative bubbles.

In *economic* terms, deregulation and budget deficits were peddled as magic formulas for unlimited expansion. In *social* terms, access to real estate ownership by the poorer classes (the unreliable clients known as *subprime* debtors) seemed to be the achievement of the American dream. In *technical* terms, there were simply no long-term statistics for assessing whether there were any real grounds for arguing that real estate prices would continue to rise. And finally, in *political* terms, uninterrupted growth was crucial for the survival of a government engaged in two wars and inclined to foster fiscal redistribution in favor of the higher income brackets rather than the lower and medium brackets.

Numerous economics courses still teach that money is neutral in the long term and that an excessively long-lasting overabundance of money in circulation triggers inflation: *too much money chasing too few goods*. But prior to the crisis, the two key terms in this old maxim – money and inflation – had long since lost their meaning. *Money* was no longer a crucial focal point for the dollar's central bank, and as for *inflation*, those prices that monetary policy felt committed to maintaining at a stable level failed to go up thanks to the ‘Asian price ceiling’ guaranteed by the low cost of educated labor capable of manufacturing such technologically advanced goods as television sets, automobiles, computers, cameras and so forth.

Thus monetary oversight headquarters' alarm systems and *internal* adjustment mechanisms were switched off. Such mechanisms were based on a policy focusing exclusively on the purchasing power of money in terms of goods and services bought by (even if not produced by) residents, and on its attendant system of indicators and targets.

Clearly, this circumstance was closely linked to the globalization process. Globalization is indeed what allowed American families to buy manufactured goods and services at prices determined not by *their own* salaries but by the far lower salaries of Asian workers or Indian computer programmers. Thus the economies' *open* nature had a crucial impact also on the *domestic* aspect, due to the paralysis of the domestic monetary policy indicators in the country issuing the international currency.

*7. The dollar in the international arena.* Two crucial factors made it possible to protract this navigation far beyond the point at which a route adjustment could still have been painless: the fact that it was the world's leading economic power sailing that route; and the fact that that economy, being the world's central banker, was exempted from any external monetary discipline. In no other country in the world could we have seen the public sector and private households forgo every kind of saving and start building up massive debts as easily and for so long without suffering the consequences of their action. In any other country we would have witnessed crises in creditor confidence, rating agency alerts and downgrades, plummeting exchange rates and warnings from international bodies. If none of that actually occurred, it is because the dollar was in demand as an international reserve currency

It is true that the G7 and the international institutions kept pointing out year after year that the imbalances were unsustainable. Yet they could do nothing to correct them or to prevent the crisis because they had neither **the** specific international tools nor the authority to force the use of domestic measures to address the problem. Thus the shock came from the market, and given its belated arrival, it was extremely painful.

From the perspective of the global economy, the crisis was the work of two false idols to which, for too long now, we have been making sacrifices that they did not deserve: the infallibility of the market and the self-sufficiency of national monetary sovereignty.

8. *Asia's fault?* I am familiar with the arguments used to counter this interpretation. One of them suggests that the real fault lies not with the American deficit but with excessive savings in Asia. Given that we are talking about symmetrical quantities, we have no elements allowing us to issue an unambiguous verdict. Statistically speaking, both are totally abnormal in terms of their size. It is true that the Chinese economy's exceptional savings rate is also permitted by the country's social structure and by its political system, both of which are not without their shortcomings. But the fact that such a wealthy country as the United States should consume the real resources of the poorer countries in the world and get into debt while doing so is equally unusual, and it reflects in turn a specific social and political condition which many judge severely. Using the categories of right and wrong is questionable and may not even be relevant.

In strictly economic terms, there is no system of ground rules, either subscribed to by all or acknowledged as being 'optimal', on the basis of which we can demand that the adjustment come from Asia rather than from America. On the other hand, it is relevant for us to hark back to the time-honored contention that the debtor is the weaker party because he suffers the constraint of his paucity of means of payment, and thus has the stronger incentive to correct the imbalance. This contention makes even more sense if we consider that China's dollar buildup is due not only to an economic and financial evaluation, but also to strategic considerations concerning the potential political advantages to be gained from being the global superpower's biggest creditor.

One thing is undeniable: any country pursuing a strong expansion without worrying about the consequences that policy might have on its own currency's *domestic* spending power, would soon be called to order by the drop in its currency's value on the *foreign* markets. But for the global currency's central bank, and for it alone, that call to order never came.

Another argument, for which we have to thank Richard Cooper, denies that there was a negative buildup of savings in the private sector in the United States: families are in debt because of investments in human capital (children in college) and in their homes, while businesses have invested in research and development, thus building up their intangible capital. Cooper claims that official statistics have underestimated the amount of private savings and investment. Thus in light of a rapidly increasing capital stock, the United States' growing overseas indebtedness is totally sustainable. This analysis, which dates back to before the crisis, offers an important correction to the interpretation of events, but I do not think that it has the strength to overturn the argument of unsustainability. Even before the crisis, it would have been extremely risky to downplay the burden of the United States' foreign debt based on values inflated by the effect of a bubble and to take it as read that the world was prepared to finance that debt at a low interest rate for ever. And it would have been even more risky to do so after the crisis. At best, Cooper's theory helps us to understand why it took so long for the moment of adjustment to come, but it does not overturn the structure of our reasoning.

9. *Monetary nationalism.* An analysis of monetary factors prior to the crisis, however, cannot be confined to what I have just mentioned. The notion of unsustainability applied to the monetary regime demands a broader interpretation calling into play the history of monetary orders.

In the last century this history was marked by a fundamental shift in relations between money and the two entities to which it had been anchored from time immemorial: a *commodity* (mainly gold) and the '*sovereign*' or, to put it another way, intrinsic value and political power. Over the decades, the commodity anchor was relaxed while the political anchor was correspondingly strengthened.

Under the influence of deep-seated forces ranging from technology to the rise of the nation state and to the growing political influence wielded by the masses, the creation of money was freed from the blind influence of gold discoveries and entrusted to human discretion. This permitted greater progress toward more rational policies, but also a surrender to the temptations of nationalism and demagoguery. New risks arose, in the form of instability at the domestic and the international levels.

Not surprisingly, the final de-linking from gold shifted monetary management away from international constraints toward domestic priorities. Monetary nationalism took over. The transition to floating exchange rates was seen as a way of insulating national economies against external influences. Meanwhile, the main source of inflation became itself primarily domestic, in the form of wage pressure and its repercussions on prices. The floating exchange rate allowed virtuous countries such as Germany to pursue price stability in a strictly domestic context, and even to use currency appreciation to achieve (rather than merely to ratify) greater price stability. But floating exchange rates also drew less virtuous countries, like my own, into wage-price-inflation-devaluation spirals which lasted until the advent of the euro.

In spite of the first oil shock, those were years of low and stable commodity prices. Consequently, the nationalization of monetary policies dovetailed perfectly with the need to address the domestic origin of inflationary risks

It is in this context that the search began for a new anchor, a new ultimate standard to replace the standard (gold) selected at Bretton Woods. Not so surprisingly, the choice fell on an exclusively national anchor. A new concept of central banking's role emerged from the experience of the country (Germany) that had been most successful in protecting the value of its currency during the long inflation era of the 1970s and '80s. After a long search, a consensus was forged around a doctrine whose most complete implementation is enshrined in the Maastricht Treaty and in the Statutes of the Euro-system: a good central bank should be independent and its mission should be to pursue domestic price stability. Allow me to say in passing, how ironic it was that the purest example of the 'national' type of central bank should have been provided by a 'supra-national' one.

10. *The international dimension of money.* From the standpoint of the order of public policy, the problem inherent in this solution was that it was incomplete because it disregarded, or dealt inadequately with, the international aspect of money. This,

because the demise of the Bretton Woods system was not accompanied by the adoption of robust alternative tools or shared rules for managing the global economy. No equivalent to the pre-World War I Gold Standard or the post-World War II Fixed-Rate Dollar Standard was created.

The post-Bretton Woods ‘order’ had two features: first, it made the market responsible for determining *exchange rates*; second, it installed the *dollar* (a purely ‘national’ currency from that time on) as the global standard. On the one hand, the currencies of the key economic regions and countries were floating, before China and Asia rose to prominence as major global economic players. On the other, most reserves continued to be invested in dollar-denominated assets; most prices of internationally traded goods continued to be quoted and invoiced in dollars; and most managed currencies continued to be pegged to the dollar. The world's monetary policy was still being forged in Washington.

These two features – exchange rates left to the market, and the dollar as the global standard – were not introduced by design; they were not based on a body of economic research comparable to that underpinning domestic monetary policies, nor had they been stipulated by international agreement. Both were largely adopted by default. At least three significant attempts at building a more consistent system had, in effect, been made and failed: the Committee of Twenty in 1972-74, the substitution account project in 1978-80, and the Plaza-Louvre Accord in 1986-87.

As none of these attempts succeeded in rebuilding a consistent and universally accepted monetary regime, the global economy was simply left without any monetary order at all. In this vacuum, money's basic functions (*numéraire*, medium of exchange and store of value) were performed by a random combination of local arrangements and tools, market mechanisms and initiatives, loose cooperation between national authorities, occasionally by coordinated action, and by the disorderly interplay of national policies.

Naturally, the tumultuous globalization process could not be halted pending the arrival of better arrangements. It was driven by such powerful forces that it continued to move forward for years in spite of the existing framework's shortcomings. Corporations, financial institutions and national authorities failed to build a new system. They simply struggled with the available tools, arrangements and institutions. In reality, the fact that so many of the functions of money were performed by a purely national currency like the dollar, while hampering and distorting the globalization process, also allowed both public and private players to use the fact to their advantage in several ways.

11. *After the crisis : order and disorder.* Let us now turn to the monetary aspects *after* the crisis. The fundamental flaw in the ‘order’ that I have just described lay in its failure to meet the global economy's vital need to be grounded in a degree of macro-economic discipline. Discipline can only be assured by correction mechanisms that kick in whenever that discipline is breached and for this to happen two conditions have to be met: first, *exchange rates* must be consistent with economic fundamentals;

and second, the *monetary policy* stance of the global standard's issuer must be stably anchored. In the event, neither of the two was in fact met.

*Exchange rates* were determined by a bizarre combination of market behaviour and of policy actions vis-à-vis the dollar. Floating European currencies (and later the euro) were at the mercy of the waves of a market prone to prolonged misalignments; while Asian currencies were largely sheltered from the vagaries of the market and subjected to intense management by the authorities.

The global *monetary policy stance* was set, or at least strongly influenced, by the Federal Reserve on the basis of exclusively domestic considerations. The indifference displayed for such variables as the dollar exchange rate, the amount of international liquidity and the boom-bust cycles of asset prices simply confirmed that the international currency and the global stance of monetary policy were no one's responsibility. When looked at from the standpoint of US economic needs, the Fed's policy appeared to be guided by a certain logic and was indeed the object of a sophisticated apparatus of analyses and procedures in both its preparation and the public explanation and accountability of decisions. When looked at from the global economy standpoint, however, the policy appeared to be a randomly determined affair, inasmuch as it completely failed to take into consideration the need to keep the global economy on a sustainable course.

For several years, it could be said that a *government-led* international monetary system had been replaced by a *market-led* system. In the past decade, however, the features that I have just described became so pronounced that it became impossible to speak of an 'order' or a 'system' at all. The global economy had been left without any monetary anchor and without any universally accepted rule: the gate was wide open to macro-economic and financial disorder and instability. And this was happening at the very moment when economic globalization was picking up speed, making national borders increasingly irrelevant not only for trade in primary commodities and manufactured goods but also for production processes, labour mobility, saving-investment allocation and financial transactions.

In 1972, Robert Mundell defined a 'monetary order' as 'the framework of laws, conventions, regulations and mores that establish the framework of the system and the understanding of the environment by those taking part in it'. Unfortunately, the 'framework' in which the players have been operating over the past couple of decades has been such a chaotic and internally inconsistent jumble of elements that Mundell's use of the word 'order' sounds ironic if we compare it with the definition offered by the Oxford Dictionary: 'the condition in which every part is in its right place' or 'a state of peaceful harmony under a constituted authority'.

Thus I would suggest that all those eager to envisage the post-crisis era in constructive terms need to promote the reconstruction of a fully fledged international monetary order. And they need to be fully aware of the fact that this does not just entail questioning what I have called the *international* monetary system; it also demands that they take a fresh look at our domestic monetary orders, at their 'nationalism' – if I may

be forgiven for using the term again – and at the intrinsic weakness of their aspiration to independence of the outside world.

12. *The illusion of flexible exchange rates.* Many people consider today that if every country allowed its currency to float freely, a genuine order would emerge of its own accord. They suggest a broad system of floating exchange rates, in the belief that the market itself would then become the guarantor of discipline in macro-economic policies, and that at the same time those policies would be able to hold on to the independence to which national authorities aspire. This position claims to combine the *optimal* in economic terms with the *possible* in political terms. In actual fact, it achieves neither the optimal nor the possible. Sadly, it is nothing but an illusion; and this, for a number of reasons.

The *possible* in political terms is in fact impossible. Drafting and enforcing a rule obliging all countries to abstain from interfering with exchange rates would be a constraint on national sovereignty no less radical, in fact possibly even stronger, than a rule based on fixed, or ‘fixed but adjustable’, exchange rates. And to propose the obligation of universal flotation in order to safeguard the various national sovereignties is quite simply a contradiction in terms.

That argument alone would be enough, but there are others that concern the *optimal* in economic terms.

It is an illusion to think that a flexible exchange rate would effectively enforce discipline on national economic policies and ensure the rapid correction of imbalances, both because the market is not always ‘right’, and because its signals are in any case insufficient to trigger ‘good responses’ from economic policy. Let us address these two aspects.

The market is not always right. Sure enough, even in a perfect world, the way it acts in concrete terms is neither constant nor predictable. Naturally, this is due in part to the objective difficulty inherent in assessing fundamentals. But it is due also to the fact that economic players themselves pay unequal attention to fundamentals, affording priority to only one of them at a time and alternating moments of overestimation and underestimation of the attendant risks. Even with flexible exchange rates, imbalances tend to build up and to get worse over time, because the market considers them to be sustainable for too long and finances them accordingly, until it suddenly changes its mind and adopts sharp corrections (what is known in jargon as a ‘sudden stop’). Thus the market ‘makes mistakes’ too often and for too long for it to be an effective and credible guide in the service of macro-economic stability.

This consideration, too, would be enough on its own to allow us to draw a conclusion. But we have to add another, equally important, consideration to the equation.

Even when the market is right, it only *corrects* imbalances in part. For the rest, it merely *signals* them. If the imbalance has been caused by a given economic policy (which happens to be the most frequent case), then the policy is what needs to be changed in order to restore a balance. However, there is nothing to suggest that a mere

signal from the exchange rate market has the strength to trigger a change of course in such essentially political decisions as those that concern public budgets, employment, pension, health and the public sector. The exchange rate market demands that economic policy adopt corrective measures, but economic policy does not implement such measures either systematically or at the best time.

And lastly, the supposed optimal in economic terms has another shortcoming. Even if all of the larger countries (whether industrially advanced or emerging, including China) were to accept the flotation rule, it is hard to believe that a world with 100 or 150 floating currencies would be a rational place. The rule would be hypothetically optimal for only a few countries. For most of the others, particularly for smaller and very open economies with a limited money market, a certain degree of exchange rate stability is not only preferable in theory but has also been shown to be preferred in point of fact.

The requirements underpinning ‘fear of floating’ (to use Calvo and Reinhart’s definition), which is both widespread and justified, should be taken into account in any proposal for the reform of the international monetary system. A regime of generalized floating would be a complete nonsense. But taking these situations into account might mean maintaining a far vaster dollar zone than the United States alone, and thus strongly eat into the supposed benefits of universal floating. It would also mean triggering a difficult debate over such issues as defining the monetary regime for those who are not floating, and where to draw the line between those who are and those who are not.

The conclusion is simple. Economic interdependence is a fact. The sovereignty which governments consider to be inalienable is no longer absolute, because it has been removed by economic interdependence itself rather than by any specific monetary regime. There is no monetary regime capable of rebuilding it while maintaining the benefits of interdependence. The foreign exchange market is incapable either of eliminating or of governing interdependence because it is too slow in detecting the imbalances that require correction, and when it does detect them, it is incapable of enforcing decisions on the public players who are responsible for those imbalances.

13. *Triffin’s ‘general’ dilemma.* Almost 50 years ago, Robert Triffin shed light on the congenital flaw in the monetary system of his day, based on the dollar and on fixed exchange rates. He explained that if the global currency is a national currency, there is an irremediable contradiction between the issuing country’s *internal* domestic requirements and the external requirements of the world using it. Borrowing our terminology from the theory of relativity, we might talk about a ‘special dilemma’ – special inasmuch as it applies to a given regime.

In order to provide the global economy with all the money required to sustain the growth in trade associated with the globalization process, it was crucial for the United States to accept a balance of payments deficit so huge as to become unsustainable in the long term. The world was caught in a dilemma between two macro-economic pathologies, each as damaging as the other: global deflation, or the

destabilization of the major economy. What Triffin feared more than anything was the rarefaction of the global currency, and – remembering the proposal that Keynes made unsuccessfully in 1943 in favor of the creation of world currency called Bancor – he pleaded the case for the creation of a reserve tool disconnected from the US balance of payments, which was what the Special Drawing Right was subsequently intended to be.

It hardly matters to us here, in the context of this dilemma, that things later panned out in a different way than Triffin feared they would. The object of his analysis was unsustainability. The value of his analysis lies not so much in its ability to predict the course of events that were to lead to the crash, but rather in its demonstration of this system's inability to give the global economy the stability it needed.

The central role that the dollar still plays in today's system is basically due to the choice made by a large number of countries to stabilize their currencies in relation to it, and in holding dollar reserves for that purpose. This role is the main source of instability in the international monetary system: on the one hand it transmits the direction of US monetary policy to a large part of the world, but on the other, it exempts the United States from the discipline with which the other countries have to comply.

We can safely state today that Triffin's analysis transcends the particular system for which it was formulated and applies to every possible system in which the global economy does not have a genuine monetary order. All the arguments I have illustrated so far are simply a reformulation or a reinterpretation of Triffin's basic critique for today's world. What we might call Triffin's 'general dilemma' can thus be expressed as follows: the stability requirements of the system as a whole are inconsistent with the pursuit of economic and monetary policy forged solely on the basis of domestic rationales in all monetary regimes devoid of some form of supranationality.

14. *European paradoxes.* Robert Triffin would have watched today's crisis with as strong a passion for the world as for Europe. Just like Jean Monnet, whose pupil and adviser he was, he would have seen the European microcosm as an experimental workshop for a future global order. And in the path that it has trodden to date, Europe would have looked to him like a territory criss-crossed by paradoxes.

The first paradox is that we Europeans are not responsible for the crisis, yet we are in danger of becoming its chief victims. When all is said and done, unlike the regions of North America and East Asia, Europe benefits from a basic macro-economic balance: its external accounts are substantially in order, it has only a moderate deficit and public debt, its families are not heavily indebted and its financial regulation is stringent. Europe can sail through this crisis propped up by a social security system unparalleled in the world. Its house is in order thanks to the macro-economic constitution of Maastricht that rests on the two pillars of the Euro and the Stability Pact. It is true that not every region and not every field of activity enjoys the same balance, but then the same is true in all of the other major regions of the world. The Union's overall good health means that if it is capable of pursuing appropriate policies, it has the means to absorb and to compensate internally for any tensions, imbalances or pathologies that might emerge in some of its regions.

Yet despite all of this, Europe is in danger – today and even more so in the future – of becoming the chief victim of the storm currently under way. *Today* because, lacking its own powers to manage the crisis, it suffers from a plethora of uncoordinated, insufficient national responses that tend toward protectionism and undermine the integration which is the very foundation stone of its prosperity. And *in the future* because, in the monetary regime whose features and shortcomings I have just illustrated, any depreciation of the dollar's real exchange rate would inevitably have the greatest impact on the euro.

A major drop in competitiveness could rapidly turn Europe into a fully fledged crisis zone in the global economy, into a source of instability, and into a hotbed of international tension. Heavily involved in the production of manufactured goods and yet devoid of the strategy and tools of a genuine industrial policy, the European Union certainly cannot consider itself out of harm's way. It vitally – and I stress the word ‘vitally’ – needs a global monetary order. Otherwise, Europe's paradoxes could well turn into catastrophes.

15. *The European repertoire.* Luckily for the world and thanks to its own merits, Europe has the necessary *technical* experience to set global monetary relations on a sustainable basis. Also, thanks to its position as the world's leading economy in terms of the production of wealth and in terms of trade share, it potentially has also the political strength to launch a monetary reforms process that virtually the whole of the emerging world, from China to Russia and Brazil, is calling for today.

And yet – this is the second paradox – Europe is oddly unaware of this and shows reluctance to exercise any form of responsibility. It appears to have forgotten that over the past 40 years it has addressed and successfully resolved, at the regional level, a monetary challenge identical to the one we see today at the global level and in Asia. This challenge consists in setting up a monetary order entailing supranational disciplinary elements consistent with the growing interdependence of a group of countries that style themselves ‘sovereign’.

The path that the Europeans have followed since the end of the fixed exchange rate system, began with the decision to combine internally controlled exchange rates with external flotation. That path never denied the need for a strong and credible anchor of stability. It proved capable of breaching the taboo of nation states' monetary sovereignty. For a long time it even succeeded in benefiting from an intermediate ‘fixed but adjustable’ exchange rate system, managing it better than the world had done from 1950 through 1970. It created a currency basket that won a place for itself on the market, thus transcending the limitations of its statute as a mere unit of account.

Of course, the goal ultimately achieved by Europe – a single currency with a single central bank – cannot be reproduced on a global scale. What Europe has managed to create is not so much an instruction manual as a repertoire of experience, of formulas, of experiments and of solution. That repertoire is an immensely valuable asset to which we need to refer if we are to overcome the boundaries of monetary

nationalism and to forge a healthy basis for international monetary relations, be they worldwide or continent-wide.

16. *What should we do?* Convincingly identifying the shortcomings of the current system and the features of a sustainable system is admittedly a limited step, yet only if we take that step once and for all, so to speak, can we adopt the right frame of mind to move beyond it.

Once we have taken that step, we then need to ask ourselves: what should we do? Some time ago I was asked by a journalist to whom I had been explaining that a global monetary standard is a necessity: ‘what exactly do you have in mind? A global euro? A fixed exchange rate? Special drawing rights? A return to the gold standard?’ I dodged the question by answering thus: ‘I don't know yet. For the time being I think we can conclusively prove that we need a flying object; inventing the airplane is a different matter altogether’. It is possible to reach a conclusion on the former point before resolving the latter. And besides, if man had not spent centuries trying to fly since Icarus made the first attempt, we might never have invented the airplane.

I am well aware of the two greatest hurdles: first of all, the absence of a consensus within the expert community on what a sustainable monetary order should be; and second, the tireless resistance proffered by nation states (convinced as they are that they are the repositories of effective and untouchable sovereignty) against the supranational elements that such an order demands. If we look more closely, the arguments put forward by those who reject the analysis that we have conducted hitherto and claim that the current state of affairs can carry on the way it is today (with the modest palliative of a revaluation of the renminbi at most), amount to capitulation before these two hurdles. They also rest on a rationalization of the current difficulty deriving from them: it would be too hard to create a different system because the *conceptual* difficulty in devising it and the *political* difficulty in implementing it are, they argue, insurmountable. Those who defend the current system do not do so in a positive manner, by highlighting its benefits. They do so in a negative fashion, by criticizing the proposals for reforming or changing the current system, checking them off one by one using either economic or political arguments as appropriate.

Do we know anything at all about the airplane? For instance, do we know the ratio of weight to engine power or wingspan required to keep it in the air? We do know a couple of things: first, that the exchange rate and the ‘fundamentals’ have to be mutually consistent; and second, that the monetary policy of the player issuing the global currency needs to have an anchor of stability. These are the two conditions I mentioned previously that are required to ensure that the mechanisms reestablishing monetary discipline kick in whenever that discipline is breached.

17. *The exchange rates.* I shall not return to dwell on the crucial arguments proving that universal flotation, which many consider to be the most effective and most feasible solution, is in fact neither effective nor feasible.

But that begs the question whether, at the opposite end of the spectrum, we should not be thinking of establishing irrevocably fixed exchange rates, a single global currency, a 'globus' that would also be the currency used inside the various countries. I would suggest that the answer to that question is 'no'. I would tend to rule out both the possibility and the desirability of a single currency with a single central bank – the finishing line of the path that Europe has trodden – being the goal of any future global monetary order.

So, having discarded these two extreme solutions, we inevitably find ourselves looking at intermediate solutions, where the exchange rate is determined jointly by the market and by economic policy. That demands that economic policymakers recognize exchange rates as being one of the quantities steering their policy, and that they forge agreements and cooperation over exchange rates with other countries. On the basis of this premise, intermediate systems attempt to reconcile the need for certainty with an acknowledgment of the different dynamics and policies from one country to another.

This terrain, the terrain of a 'fixed but adjustable exchange rate' system, has already been visited on two occasions: from 1950 through 1970 on a worldwide scale, and from 1979 through 1998 at the European level. These two experiences imparted a long period of monetary order to the economic zone concerned; they were accompanied and facilitated by major restrictions on capital mobility; but finally, they were overwhelmed by the force of the free market.

I think that a genuine international monetary order will have been achieved only when a common exchange rate mechanism has been put in place in which every country, bar none, agrees to shoulder its responsibility and to enter into a commitment with the other countries regarding its currency's external value; and in which the exchange rate is determined by interaction between the market and economic policy. In Europe, the commitment enshrined in the Treaty of Rome from the start to consider economic policy and, in particular, exchange rate policy as being matters of 'common interest' was inspired precisely by the acknowledgment of our countries' close economic interdependence.

I shall not venture to conduct an overview of the various ways in which such a system could be structured. Frankly, I must confess that I have no clear preference. Rules and discretion can be combined in various ways: public policy can make its weight felt either continually or only under given circumstances; the relationship between the government and the central bank can differ from one country to the next; and an agreement can apply to all currencies or only to the most important ones. These are questions that need to be asked and answered at the hypothetical conference that people often choose to call Bretton Wood II.

I think I know the difficulties. We need to recognize them, and we have to be aware that an intermediate system may be of only limited duration. But we also need to recognize that we are *already* in an intermediate system, and one which, moreover, has not been planned, has not been thrashed out in the context of any agreement, is totally devoid of rationality and is incapable of ensuring order and discipline.

Regional monetary arrangements could facilitate the path toward reconstruction. If the exchange rate system has to be consistent with the degree of integration of the economy to which it applies, then we cannot overlook the fact that the globalization process is to a great extent a galaxy of regional integration processes. It is more than likely that vast regions with strong local interdependence will move toward regional monetary arrangements comparable to those which Europe sought when the Bretton Woods system came to an end. East Asia appears to be heading in that direction.

18. *A global standard.* In the past, the number of currencies ( $n$ ) exceeded the number of countries by one. The so-called  $n$ -th currency, the ultimate standard, was gold, the scarcity of which could not be countered by any national bank bill printing press.

Could a man-made standard fulfil at least some of the functions of a global currency? Interest in this question has revived in the aftermath of the crisis and attention has naturally turned to the Special Drawing Right (SDR).

Obviously, the condition *sine qua non* for SDR's to play a greater role in the international monetary system and to become a global standard is that they be able to circulate in the economy, that they be used by a broad spectrum of public and private economic players. The thing that is preventing this from happening is neither a lack of attractiveness nor any technical constraint. The sole impediment lies in the absence of a critical mass, in the difficulty inherent in getting out of a typical 'chicken-and-egg' situation.

Where the *attractiveness* factor is concerned, in a highly integrated global economy a basket containing the main currencies would be appealing in and of itself both for the denomination of assets and liabilities and for other purposes as well. SDR's could play precisely that role. Their appeal is so strong that in the very temple of national central banks, the BIS (Bank for International Settlements), the SDR has been adopted as unit of account.

Where technical workability is concerned, nothing would prevent SDR or an SDR market from being endowed with ordinary, properly functioning market infrastructures.

The crucial hurdle standing in the way of a developed, diversified and liquid market for SDR's is well known: it consists in finding the players prepared to bear the *initial cost* of reaching a critical mass.

Here is where the decisive role of public policy comes into play. Several public players could conduct such a policy jointly. The IMF is committed by its Articles of Agreement to 'making the Special Drawing Right the principal reserve asset in the international system'; to this end, it could provide legal certainty regarding its value. National legal systems could thus accommodate tools indexed to a unit clearly defined by the international institutions. National governments could start issuing SDR-denominated debts on a regular basis. The international institutions, working with private banks, could foster the creation of a *clearing system*.

Once again, the EU's experience comes in useful here. In the 1980's a market for a European unit of account, the ECU, developed successfully in spite of the fact that it set out from a less favourable position because, unlike the SDR, it had no official issuer.

Initially SDR's might suffer from a weak business case, but they have a strong policy case which public institutions should identify and tackle. Then, once that hurdle had been overcome, the business case would materialize on its own and the unit's attractiveness would naturally become the driving force behind subsequent developments.

Central banks would build up reserves in SDR's by intervening in the foreign exchange markets. The offset would take the shape of SDR borrowing by private and public players. There would soon be 'inside' SDR reserves alongside the 'outside' SDR reserves allocated by the IMF.

The SDR could play a role as a store of value and unit of account for exchange rate policies, intervention, and the management of official reserves. Today, many of the countries that do not accept free floating, manage their currency with reference to a basket of other currencies that often reflects the composition of their trade. If SDR's were to become a genuine *reserve asset*, those countries would have an incentive to set or to manage their exchange rates with reference to a ready-made basket broadly representative of the composition of world trade, directly usable in intervention, and complemented by a whole range of derivative cover tools. Apart from smaller countries closely integrated in one particular region, which may choose to form a regional system, many countries would define their exchange rate policy using the SDR as the standard.

SDR's could also play a *numéraire* role to price primary commodities and to invoice internationally traded goods and services. Over time, producers would themselves have an incentive to set prices in a unit that would reflect the composition of their imports more accurately than the dollar. This, in turn, would encourage trade invoicing in SDR's, creating a further inducement to hold reserves in SDR's and to use the SDR as a standard for stabilising national currencies.

19. *An anchor of stability.* All of this is possible and offers a number of benefits, but the crucial question is this: would an SDR endowed with a well developed private market, and used as a store of value and unit of account by private and public players, help to correct the fundamental flaw in the present system?

My answer is positive, but sobering: yes it would, but only to the extent to which the *average* is better than the *dominant* component; beyond that limit, a global standard requires its 'own' policymaker mandated to pursue the global interest if it is to become a full fledged anchor of stability.

The positive part of this answer is based on the consideration that any removal of the perverse incentives which exist in the system today is likely to generate a more appropriate global monetary policy stance. In particular, the arrangement described would diminish the 'exorbitant privilege' that allows the United States to run large external deficits while financing them with its own currency. The demand for dollar

assets would be less elastic, and large US deficits would translate sooner rather than later into a downward pressure on the dollar and an upward pressure on US interest rates.

It is worth repeating, as I said, that this prudently positive conclusion holds true if, and only if, the ‘average policy’ is better than the ‘dominant policy’. But that is where the comparison between the European experience and the global experience is relevant. In the European Union the dominant policy of the Bundesbank was more stability oriented than the average policy, which explains the stabilizing role of the Deutsch Mark anchor and German hostility toward the ECU or toward a more symmetrical system. At the global level, on the other hand, the dominant policy has been destabilizing and the transition toward an average would improve the overall situation.

A system where large countries allow their currencies to float while smaller countries have a choice between pegging (or managing) their exchange rates to the SDR or being part of a regional currency arrangement, would be more balanced than the present one.

But let us turn now to the sobering part of the answer. This is based on the fact that Robert Triffin's ‘general dilemma’ would not simply disappear in the wake of the development, however successful, of the SDR's circulation and use. In the absence of a policymaker pursuing ‘what is beneficial for the world’, a mere average of policies driven by national objectives cannot produce the global public good of a stable monetary anchor on a global scale.

In conclusion, there is no way to get round the requirement of a *policy* framework anchoring the global standard to an objective of global stability.

You may object that, in a world of decentralized monetary policy decisions, effective coordination among the main monetary areas could, in theory, meet this requirement. And you might add that the institutional framework for this coordination already exists in the shape of the IMF, the BIS, the G7 and the G20. This, however, holds true only in theory. All past and recent experience suggests that, in practice, coordination fails precisely when it is most needed, i.e. when policy preferences are most divergent.

While it is far-fetched to expect coordination to work, many (though I suspect, not Robert Triffin if he were here today) consider the only conceptually viable alternative to be even more far-fetched. That alternative would consist in managing the creation (allocation) of ‘outside’ SDR's with a view to meeting the global demand for reserves. The scarcity of SDR's would determine the global standard policy stance.

I shall stop there, but I would issue a word of warning: I have merely described an aeroplane that flies. I have not provided the blueprint to build it. The Wright Brothers are not here with us this evening.

20. *The ghost of Bancor*. Murdered in Bretton Woods 67 years ago, Bancor has returned to claim his due. It had been foretold, just as it had been for his ancestor Banquo, that it would be his descendants rather than Bancor himself who would ascend

the throne. Thus, just like his ancestor, he too fell victim to the envy and fear of another pretender to the throne. Certain Shakespearian critics go as far as to suggest that Banquo – whose descendants, the Stuarts, were indeed to subsequently rule over the British Isles – was in favor of a union based on justice and balance, or what economists today would call a symmetrical system.

We do not know whether these analogies inspired Keynes in his choice of a name for the embryonic world currency that he proposed in Bretton Woods. A quarter of a century later, when Bancor's descendant was christened with the unexciting acronym 'SDR', the poetry of names had been lost and bureaucrats had regained the upper hand.

At the time, it would have been relatively easy to meet Bancor's aspirations. The system under construction, which provided for fixed exchange rates and restrictions on capital movements, only required a tool to set up a multilateral trade and payment mechanism, the real goal of the 1940's reform. Bancor, the global currency which was called artificial because it was 'conceived by man', had no need to actually circulate. It had no need for a market of its own nor was it threatened by the market. It adopted the modest garb of a steward of the true king, gold, which was still the central element in the monetary order. But it is worth pointing out that the word 'steward' is the origin of the name Stuart. And Keynes foretold that it was Bancor's descendants who would ascend to the throne, just as the three witches in *Macbeth* had prophesied for Banquo.

Today, a multilateral trade and payment system already exists. It is not a matter of rebuilding it but of defending it against the constant and lethal dangers to which unsustainable monetary disorder exposes it. This disorder lies at the bottom of the crisis and no reform of finance failing to remedy it can provide a solid foundation for stability. The elements that are helping to keep this disorder alive are robust political and economic interests but also, and above all, the inertia of the practices currently in use and widespread intellectual inertia. The thoughts that I have expounded to you here tonight are an invitation to overcome that inertia.

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