



## Transcript of the Roundtable of the "World Capital Markets and Financial Crises"

University of Warwick, 24-25 July 1998.

### **Roundtable participants:**

(Chair: Jim Rollo, Foreign Commonwealth Office)

Richard Portes (London Business School) who will talk about early warning indicators and lender-of-last-resort. Philip Turner (Bank for International Settlements) will speak about risk in financial markets and the role of the public sector in that context. Charles Goodhart (London School of Economics) will then talk about the impact of external events on the exchange rate and also the treatment of foreign currency debt, which has implications for the IMF programs. David Vines (Oxford University) will follow with a discussion on minimising vulnerability. Finally, Vinod Aggerwal (BASC, University of Berkeley) will talk about the US as a political actor in the Asia crisis and the implications of that.

### **Richard Portes (LBS)**

Let's go a full circle. Bob Rubin quotes "The purpose of this [IMF packages] is to help Korea, a by-product is that we help investors and creditors"

Moral hazard. Start with Mexico. Of course it is impossible to demonstrate from the data that the Mexican bailout, through creating moral hazard, contributed to what we have observed in Asia. I believe this passionately. I would be delighted if anybody here could suggest ways in which we could observe in the data the effects of the moral hazard that

such rescues create. But what we have observed is the Asian sequence and the creation of further moral hazard.

Take the Korean bailout. What happened? At the end November/very beginning of December, IMF package, 10 billion dollars, put in by the IMF during December went directly into reducing the short-term exposure of the banks. That is demonstrable and the Fund itself at the highest level will concede precisely that. It was not until the orchestrated rescheduling that the banks stopped holding out their money to short term funds. In general these mega packages that we have observed just keep on growing, and it is very hard to figure out where they are going to stop.

Now the last time around, after Mexico, of course there was discussion on trying to make the creditors take a bigger hit. There was the work I did with Barry Eichengreen, followed by the G10 report in May 1996. But market participants reacted so strongly to what Barry and I had said that the G10 report pulled its punches. Indeed they surveyed market participants who said "Oh gosh! If you do what Eichengreen and Portes say, the debtors will just take that as an invitation to default." So the G10 said that markets had to do it themselves, had to come up with orderly work out arrangements, contractual changes in debt contracts, and so forth. Of course nothing has happened.

Now, it is said that this time around the creditors has taken some hits. This is not obvious to me. Of course equity investors took a hit, but they did in Mexico as well. No news.

Bond owners? Yes bond prices have fallen, but people are holding. You can hold bonds to redemption after all, and meanwhile they are getting paid. There have been no defaults as far as I know on bond interest.

In Indonesia we may see the banks finally taking some loss on loans to the private sector. They are not, of course, taking losses on loans to private sector banks in Korea, because the Korean government guaranteed all those. So all this, as I say, is evidence of considerable moral hazard, part of that created by intervention by the Fund and the International Community.

To move to the International lender-of-last-resort issue. Can the Fund be an International lender-of-last-resort? It cannot create money, it does not have a sustained supervisory presence in any of the countries that it deals with, and cannot do, and that is a very important element in exacerbating the moral hazard dangers arising from Fund bailout intervention.

Finally the Fund does not have the fiscal redistributive authority that a lender of last resort has to be able to call on if there are actually solvency issues, rather than merely temporary liquidity questions. So the Fund cannot deal with the cross-country incidence, creditor-debtor incidence, of loss. The Fund has therefore played International lender-of-last-resort, without the key supporting structures that are necessary to do so. I conclude from that that we need more market-based solution and we need more incentives for the

markets, and the market participants to come up with the solutions, such as changes in debt contracts, such as ex ante tiered debt instruments, credit insurance, that sort of thing. That will only come if the creditors have to take much more in the way of losses than they have done so far.

Early warning literature. I switch to that in my remaining three minutes. David Vines and I dealt with that in our Commonwealth Secretariat Paper over a year ago, and quoted Morris Goldstein, who at that point we noted as being rather sceptical about the indications. Now of course Morris is adding literature. It is a big literature, it dates back 25 years at least, to Frank and Klein in predicting debt rescheduling. It is as unsuccessful as ever- in my view.

If you take the latest papers and proceedings in the EI you get Goldstein and Mulder's paper saying "Real exchange rate misalignment is a good predictor, but further work should repeat the exercise, and actually from the perspective adopted in this paper exchange rate crises are largely unpredictable events". In fact further work shows that the real exchange rate is not much good.

Take Cosetti, Pesenti and Roubini's "Tigers Paper" article where we find that the real exchange rate taken alone does not work so well. So what do we do? We interact it with the current account and then we get a story. But that's exactly what all this literature does. We have some vague theoretical ideas that suggest what variables ought to go on the right hand side. Theory tells us nothing about lag structures, nothing about functional form, and permits us to do as much data minding as is necessary.

The results typically do not indicate vulnerability in advance, only as the crisis is about to occur. Of course some of the key variables are very slow moving variables anyway, relatively speaking, in terms of crisis prediction (current account, real exchange rate, non performing loans-if you can get that kind of variable- etc).

I think the bottom line of this is that every crisis is different. This explains why we get a new generation of literature every time we have a crisis, and a new set of theories about crises! I would have some observations about the Type 1 and Type 2 errors in the paper we heard this morning [Kumar et al.]. If we look at figures 4a and 4b, they are very instructive in that regard, but I have not got time and I will simply say that I believe that this sort of exercise, although it may be useful in marketing, and clearly the results in Kumar et al. show that it may be useful in helping marketing trading strategies, I don't think that it will be useful for policy proofing.

### **Philip Turner (BIS)**

I start with the observation that behind this [Asian] crisis there is a paradox. Which is that in theory we would have expected a big increase in capital flows to have made economies

more stable, because risks would have been better spread across different countries, but in practise they've made economies more vulnerable.

Now the answer to this paradox is not of course an autarchic solution, it is obvious that a case of sharing the risks involved in domestic investment with foreigners is clearly a strong one. Now the problem of course is that the market for risk is more difficult than the market for goods. Unlike the market for goods, when you are dealing in international transactions of risks you don't really get what you say, it depends how well risks are managed, and how well information is processed and so on, and it is here that there are major short comings.

The response to recent crises has been an enormous increase in resources devoted to quantifying risk, as we saw this morning. Quantifying risks: country risks, indicators of cartel trouble, other research examining correlations between different sectors of the market in order to design more efficient portfolios. Now this is fine, but I think one lesson taught by the crisis is how difficult it is to quantify risk with any degree of precision. The scale of the adjustment of the key variables, exchange rates, interest rates is almost always under estimated. Secondly the correlation between markets that can be established when markets are calm would be quite different when markets are under pressure. A common experience is that the correlation between markets tends to rise in a crisis, so that diversification possibilities (when imagined were there on the basis of correlation based on calm times) actually are not exactly there when markets most need them.

I think that one implication of the fact that risks are difficult to quantify is that there are needs to put in place in the financial system some kind of prudential buffers that protect the financial system against shocks that cannot be quantified with any degree of precision. In particular it is necessary to take measures to limit leverage in the economy. This can be done in many ways. It can be done in a regulatory way through higher capital ratio for banks, lower loan-to-value ratio that banks give to people who want to borrow. Or it can be done in a market orientated way by making "stress tests" more demanding by putting variables in stress tests that allow for shocks well beyond the size of shocks recently experienced. Getting the benefits of capital flow, and to make sure that risks are properly measured, means that a number of things that need to be done- if information is to flow properly, risks are properly internalised, and the demands of what needs to be done- are actually quite a long list of things. I will mention only three things.

The first one is that it is very important to avoid government policies that lead to risks being mispriced. There is a lot of discussion about implicit guarantees before the event, and I share Richard Portes' concerns about the effects of bailouts on moral hazard. Fixed exchange rates maintained for many years lead markets to systematically underestimate the risk of the exchange rate.

The second measure is that something must be done to prevent borrowers absorbing excessive risks and allow lenders to take some or more of the risks. In particular governments who borrow short term are exposing themselves to very large liquidity risks.

If short-term government borrowing had been limited, both in the case of Mexico and the case in a number of Asian countries, short-term capital inflows would have been less. Likewise banks should price exchange rates and interest rates risks properly. They did not in the Asian crisis and once again if banks had been pricing the risks they were running correctly, they would have been much less active in the interbank markets and the short term capital inflows would have been much less, so that the destabilising features of capital inflows would have been greatly reduced by putting in place simple credential measures.

The final thing that I will finish on is that you cannot have a proper market for risk unless you have full information. In particular two things are important. Firstly, there needs to be much fuller disclosure of foreign exchange liabilities, public and private, contingent and actual. This data should include information on the maturity of the claims, it should also include information on central bank forward obligations. Secondly there should be fuller information on public debt, in particular how much of it is short term. We do not have good information on very large numbers of emerging markets regarding these two sets of elementary sets of data. The IMF often does not have accurate data on these, and it is this aspect where an urgent start needs to be made.

### **Charles Goodhart (LSE)**

In my current work, I am trying to compare the Asian crisis with the nineteenth century financial crisis. In some ways what is surprising is how surprised everyone is being about the Asian crisis because they have an enormous amount of common ground with the nineteenth century crisis. Almost all the kind of preconditions, both empirical and as set out in Philippe Aghion's paper, occurred in the nineteenth century crisis as much as in 1997/98. Just to emphasise that this isn't something specifically, necessarily, to do with Asia or Asian characteristics, during the nineteenth century crises, you will recall, were more frequent and common in the United States than in any other single country in the world. I am looking for example at the crises in 1873, 1890, 1893, and 1907 and in every single case the USA was in a crisis situation. So that if we think about Asian virtue as not being so great in the twentieth century, we must remember the new American virtue was not so great in the nineteenth century. Not only were the preconditions really similar, but the actual context and arrangement of the collapse (we can down turn in housing prices, land prices, equity prices, impinging on the fragile banking system, with weaknesses and worse occasions or fraud and other failures in the banking system) occurring in both cases.

The key difference between the nineteenth century crisis and the 1997/98 crisis so far has actually been on the external side. What happened in the nineteenth century crises was that in most cases the countries were pretty firmly on the gold standard or, in the case of Australia in 1893, effectively on the sterling. This case was expected to revert very quickly although in several cases, again in Australia or in the USA for example in 1907, there was a temporary gold premium, which was expected to be short term. Now the combination of a belief that the exchange rate would revert to the underlying anchor, combined with

the temporary premium and a decline in asset prices, made it to a degree of bottom fishing. Capital inflows on a short term basis take advantage of what was seen as a temporary opportunity, with the result that in these countries there was a very large gold inflow, more or less immediately after the crisis. So that the monetary base expanded again really quite rapidly, and nominal interest rates that had been spiked upwards briefly, shortly reverted to levels that were actually lower than they had been previously.

That wasn't always the case. It was not the case, for example in Argentina which because of credibility problems of a well known form, you didn't actually expect, when the Peso went further away from gold, that it would come back.

What happened in the Argentinean case in the 1890's was that the Argentines repudiated. Now in that case the Argentinean repudiation meant that they neither paid interest nor reported principal. That meant that the underlying strong shift in the current account surplus (exactly the same as that happening in East Asia) led to very large, considerable gold inflows rebuilding the financial base and lowering the interest rates in those countries. Not of course that you didn't have very strong effects. Loans and loans of banks went bust, many more have gone bust, for example in Asia. Now that means that in the nineteenth century there was either a nominal anchor and expected reversion, or a repudiation.

Neither occurred in the Asian crisis. You have had neither a nominal anchor- people were worried that the Won and the Rupee would go on going down- nor was there effectively a repudiation and therefore a removal of the outstanding foreign currency debts. The combination of devaluation and the failure to repudiate the outstanding debt imposes a stronger burden on the Asian countries, which was never present in the nineteenth century, and which has made the whole situation so much worse.

How do we get away from this continuously worsening spiral? One of the suggestions is that you make the creditors lose money on the interbank debt. Now I think that there is a problem with that. If you start telling banks that they are going to lose money on the interbank debt then that drives contagion even faster from one country to another, and it could lead to collapse of an interbank market, which is generally highly undesirable. I would very strongly support the argument that there ought to be a supervisory capital adequacy requirement, which depends on the perceived and publicly known standard of regulation in the developing countries.

The private sector debt is a different matter. The only time when it looked, temporarily, like the Indonesian crisis was going to get resolved was when it appeared that there was going to be an orderly workout of the private sector debt, and this would impose very considerable losses on the creditors and it would reduce the out payments of capital flows from the Indonesians.

There is a problem there for the Fund, because if the purpose of the exercise is to reduce the outstanding weight of the debt of the private sector debtors, what can the Fund do to

help, as it finds itself in a very difficult problem? I think that: “how do you deal with the Fund or how should the Fund, if at all, deals with an overwhelming problem of private sector foreign currency debt?” is the particular policy problem that we have at the moment. Maybe the answer is that the Fund cannot deal with it, and when the problem is essentially private sector foreign currency debt the Fund ought to say, “Please sir, not me sir.” and allow the country to get on with whatever repudiation and workout is actually necessary.

As a final comment, when you are dealing with private sector net indebtedness do not expect information improvements to get you out of it. It just is never going to be possible to work out the net private sector indebtedness of a country. For example, if the US, the UK, or Germany was asked “what is your net private sector indebtedness, say of and under one year maturity?” The answer is, to all those three countries, “We have not got a single idea!”

### **David Vines (Oxford University)**

I want to talk about minimising vulnerability and also about crisis resolution, each of them in two brief parts. What I think we have learned about minimising vulnerability is that you must not liberalise until two things have been done. The first is to put in place much better kinds of financial structures than the Asia-Pacific countries had in place in the mid 1980’s when they liberalised. Philip Turner has talked about a large number of measures that could be taken, need to be taken, have to be taken to strengthen financial systems. This is really a shopping list of what needs to be done before liberalisation is undertaken. Joshua Eizenman’s paper is about the second best economics of liberalising when there are flaws in the financial system, and it is a straight “imiserising growth” argument that liberalising in those circumstances can make you worse off.

The second thing to minimise vulnerability is to have a macro economic strategy that is appropriate to open international capital markets. This is not fixed exchange rates. Here this story has lurked in various forms all the way through the conference. My own preferred version of it is that fixed exchange rates give you a short term stabilisation problem at precisely the time when you’re likely to have to deal with the biggest stabilisation difficulty that you have ever had, as a result of the big boom that liberalisation means. This means that on the shopping list before liberalising is establishing a whole new strategy of macro economic management, with a clear nominal anchor that is not the exchange rate, but that is some form of inflation target that is clear minded and operationally works well. This is very difficult. So these two things about minimising vulnerability says that ten years on we are much more cautious about moves towards open international capital markets, and the whole push that the Fund was engaged in only two years ago of capital account convertibility as an essential aspect of membership, now looks something that is extremely contingent on these kind of institutional developments.

Turning to crisis management. Again I want to say two things and they are about the financial system, and about macroeconomics.

Let me say the macro first. We haven't had any discussion during this conference about the burning issue at the moment- the interest rates defence in face of crisis. You all know that the positions that have been staked out. It does seem to me that there is no alternative to the interest rate defence. I stand on the side of Fischer and others in this dispute, but it seems to me that you can do it badly or you can do it well, and to simply spit into the wind with interest rate defence seems to be the worst way possible of conducting it. What you need is an interest rate defence in a structure where there is a clearly understood nominal anchor. If you are simply saying the currency is, as in Indonesia, a sixth of what it was, and you are going to arbitrarily raise real interest rates to 25-30%, and hope that it is enough and do no more, you are just not doing what is necessary. Similarly in Korea with real rates approaching that, to give no indication of what you think the exchange rate needs to come back to, and what the long run anchor that you are aiming at with this interest rate defence, is to cut off two thirds of your sword as you wave it in the air. You really do need to say "this is the nominal anchor that I am aiming, with my interest rate, for. This is the glide trajectory that I am working with, and this is the interest rate that I am pursuing along it". Without that statement about the future we really are, to use a metaphor, "half a sword".

Charles Goodhart has pointed out nicely the connection between this issue and the debt workout problem. He points out that either you can have a well constructed nominal anchor, in which case you can make the debt workout much more easy, because everyone knows that in the end the exchange rate will come back, or you can repudiate. So the macro and the microeconomics are very closely tied together here.

Clearly in Korea the decision has been made not to repudiate, and the issue at hand is the anchor question. In Indonesia it is much more a question of a bit of a one, and a bit of the other. I think we must have institutional structure that do more than is possible now. Lending into arrears is a modest beginning. Payment standstills by blocking capital flows in some way institutionally during the workout process, and finally a workout on asset values really does seem necessary in these circumstances. Richard Portes has been the foremost advocate of this strategy. Every one who looks at it, in the end walks away from the problem as being too difficult to actually put into place when you are on the ground and trying to make it work, and as Vinod Aggerwal said yesterday, we can see why the Latin American debt crisis was only really resolved when the hedger man said "this is number of cents in the dollar that you are going to get and this is how the settlement is going to be orchestrated". To demand an international financial architecture in which in the background there is some key player who is at the final result going to do this, is demand a large amount of the architecture.

Maybe in the end this is what we need to work towards. If we don't have this we have lender moral hazard, with the lenders always holding out to get their money back, and



making life difficult, and if we do have it we have all the financial system screaming, and all the US senators screaming “this is moral hazard”.

Orchestrated the other way round for the borrowers, what we need to find is an institutional structure that makes it possible to come down between the devil and deep blue sea on this issue. The prospects are not entirely hopeful, but it seems this is what we must work for. The history of the late eighties says that finally it happened, in Latin America because it was just too important to let Latin America go down. Perhaps Brazil and others looked in difficult circumstances that the US was just not able to let continue. Mexico later on was a much less difficult problem than that. The Indonesian one is of the similar order, and it seems to me, as someone from Australia, the obvious solution is for the Australians to volunteer to let the Indonesians invade in order to persuade the world that the situation is really so serious that the hedger man needs to solve it.

### **Vinod Aggerwal (BASC Berkeley)**

I am going to talk about the role of the United States as a hegemony, and depending upon how you look at the United States it is either a knight in shining armour, or a Dark Vader which is destroying the world and the universe.

Now I would like to say a couple of things about how I view the debt problem in terms of the negotiations. I have done this work in the nineteenth century/ twentieth century looking at debt rescheduling over almost 200 years and about seventy cases, so I’m not going to talk about the formal model I use at all, instead what I would like to do is talk about the sort of lessons that I see from this long period of rescheduling in Latin America and elsewhere.

What I find is the following. First is that leaving them alone works, but it takes sixty years or so for them to work out their debt which is costly and a long period of time. So that may work, but it is a very difficult avenue to pursue.

Second, I find that if you look at the role of the IMF it is not always as positive as some people say. It is not always as negative, but the IMF by itself has really never been able to resolve these crises ; it has always been with the backing of very strong predator governments who establish the point of view, and these points have already been raised to some extent. Let me just start with a discussion of Eichengreen and Fishler my former or current Berkeley colleagues in the Economics department who have had a different view. They say in the 1930’s there was not much intervention in debt rescheduling. They say in the 1980’s the IMF did a pretty good job of managing things and in the 1990’s the US was the key player. So these are the three points I mentioned earlier of letting them do it alone, letting the IMF do it, or having the US play a part in this idea.

The only problem with that is that there was no debt resolution in the 1930’s. There was no intervention, but there was no resolution. In fact all the debt resolution of all the Latin

American cases took place in the 1940's and 1950's. So yes, there was no intervention in the 1930's, but there was also no debt resolution.

In the 1980's, which I will talk about very shortly, basically the US again played a very active role. It really was not the IMF that resolved the problem, it was really the US taking on the Brady plan, which was based on the Miasawa plan, something that was suggested by the French and the Japanese together, and using that plan to promote debt write-downs. So how can we explain what is going on in terms of the US view. One can develop kind of a model of strategic views of the United States. That is how do creditor government act, and the act base meets logically on three things. They have strategic interests in the international system and the international financial system, and international strategic competition with other creditor governments, and so that is one factor that influence what creditor governments do.

Second factor is of course the financial interests, of their own banks, their own personal financial interests. How heavily exposed are their own banks? Are their banks in danger of going under? That often determine what they want to do, or in the case of the 19<sup>th</sup> century, their bondholders. How many bondholders are there at one kind of situation?

Thirdly of course is the political dimension, which has not been talked about much at this conference, but what are the political interests of the creditor government's in particular countries. We have seen that we Americans do Latin America, you Germans do Poland and Asia? Well maybe the Japanese and we know that that has not worked out terribly well either. So what are some examples?

Let's just go historically and see very quickly how intervention worked out. In the Mexican case the first rescheduling in the 19<sup>th</sup> century, it went from 1824, values worked out on the 1800's with Pathuna Diaz. It took sixty years. People got their money back, they made about 1.5% interest. They beat the consoles. It was a good investment if you were willing to wait sixty five years, that's a good long term investment. That worked out fine in that sense, but sixty years is a long time. Mexico went through a few things including Emperor Maximal who had to take over, and rule Mexico for a few years. So that wasn't ideal for Mexico I would say.

Then in the twentieth century what happened? There was the debt default in 1913 after the Mexican revolution. There was an effort to resolve it in the 1930's that essentially proved to be a failure. Then along come-to Mexico's benefit- World War II, and the sense that the US became very worried about World War II and what was going to happen, concluded all sorts of agreements with the Mexicans in 1940, and very clear signals were sent by the US to bond holders that "Okay folks, let's resolve this debt crisis" and debt was written down at 10%. Fifty million dollars of payment took care of five hundred million dollars of Mexican debt (those are not in current dollars, those are in 1940's dollars). So clearly that was a very good deal for the Mexicans, and that good deal was reflected by the fact that there was a very big problem for the US in terms of strategic insecurity interest.

Now by contrast the Peruvian case. Their rescheduling went on and on until the 1950's, and the US did have many strategic interests in Peru. In fact the US was quite happy to co-operate with the World Bank. When the World Bank was going to make Peru a loan the British said "they took violent exception to the loan", warning "the City will have nothing further to do with the Bank, if the Bank pursues such a course". So even if the Bank was trying to be the good guy, the Bank backed down immediately under British creditor government pressure. So what we see here is a very important dynamic interaction between the international institutions and the creditor governments.

Now you are not only familiar with the history of the 1980's, or quite familiar, where you had the Jumbo loans in the 1982 period to 1985. Did not do much, kept rolling over debt. It did prevent the crisis so it was probably a good immediate emergency action. Then you had the Baker plan in 1985, which was more of the same, which actually proved to not resolve the crisis at all. In 1987 the Brazilians declared a moratorium on debt. After they declared a moratorium, and the City responded by running down its debt, then we began to see much more concern on the part of the creditor governments. Then the Mexican government was in crisis in 1988. Deep political difficulties. At that point that's when we had the development of the Brady plan. What Brady planned was the write-down of debt. There were three options given to banks (I can talk about that later at a request for it but you probably know those three options) and that is what lead to resolution of the crisis.

A similar thing has happened in 1994-95. In the initial stages of the 1994-95 period the US did not take very dramatic action, the initial period meaning a couple of months. But then immediately moved very actively to develop a rescue package, and despite the fact that there was opposition by Congress, there was this \$50 billion put together and this clearly signalled that the US was heavily committed.

What was the context leading to that? The US had just negotiated this very important agreement between Mexico, Canada and the United States. The US could not afford to let Mexico down, there was a great concern about immigration pressures in California and elsewhere. The last thing the US would be willing to do is to let the Mexicans go under. So there again it really was not the IMF playing the crucial role, but the US putting together this large package.

In Asia we have seen very similar things, in Indonesia and a few other countries we have seen initially that the US did not do much. Then it did do a lot and put a lot of pressure on the banks. In the Korean case of debt rescheduling of January 1998, just a few months ago, it put on a lot of pressure.

This is all very ironic for someone who has made a career writing about international institutions. I write about how nice they are and how important they are, and my conclusion here is of course they are nice and they are important, but by themselves they just cannot do it. My view of the problem is that if you want to do institutional design,

(design institutions that are appropriate to deal with debt crisis), the design begins at home. You have to build a political coalition, not only in the United States, but in other countries as well, where you have a political coalition which will not be like the right wing of the Republican party and the left wing of the Democratic party, who make nice bed fellows and are all sitting together and talking about how the IMF are so evil. You have to build a larger political coalition, which will support these kinds of things. It is so difficult to get the IMF even additional money, can you imagine some of these ideas and the new architecture for Bretton Woods where the IMF will essentially run all the bailout packages? That is simply not going to happen.

So what we need to do is something that you were talking about, which is a need to really understand the respective roles that creditor governments and institutions will play, and design the institutions in such a way that in fact there will be a role played by the major creditor governments in resolving the debt. So that they are able to come up with additional Funds in crisis periods.