CONFERENCE: EXCHANGE RATE REGIMES

FREDERIC S. MISHKIN

Today, I will be basing my remarks on a recent paper that I have written with Guillermo Calvo and which will be published shortly in the *Journal of Economic Perspectives.* Let me give you some background on why this paper has been written. Guillermo Calvo is considered to be someone who is very pro hard-pegs while I am considered to be someone in the opposite camp, someone who advocates floating exchange rates with some kind of nominal anchor, like inflation targeting. Both Guillermo and I have come to the view, and particularly in our discussions with policy makers, that there is far too much focus on exchange rate regimes rather than thinking about how countries should do policy. As I found frequently when I visited some Central Banks in crisis situations, they expect me to tell them what to do with inflation targeting and I say: "That is the least of your problems, you have to focus on other things mucho more strenuously." So that, one of the reasons why we decided to write this paper is because we felt a switch in focus was needed.

A second very important issue is the influence and advice of International Financial Institutions (IFI) on macroeconomic policy design in emerging economies. The IMF particularly, but also the World Bank, frequently focuses on exchange rate regimes and has very strong recommendations on that matter. This has become a big issue in the context of Uruguay where the IMF put forth policy advice to in fact encourage the country to move towards a float, and you will see that, in the context of the analysis that we will talk about here, I think that this was a terrible mistake. If we take into account the Uruguayan context on June 2002, going to a float was probably not the right thing to do. Even if you are sure that floating is the right way to go in the long run, the answer is not necessarily the same in the short run: timing matters.

I will start by analyzing the way people talk about exchange rate regime choice, and I will try to convince you that most of this literature just misses the boat completely for emerging market economies, just doesn't get it right. And the reason is that emerging market economies are very different from the idealized view of the optimal currency area literature. That is one of the key things I want to talk about: that you are very different from a developed economy and very different from the ideal in neo-classical economics.

Clearly, once you think about it, all the discussion that the literature does on exchange rate regime selection does not take into account the institutional framework of the country of reference. So, the basic theme of this talk is going to be a paraphrase of an important campaign slogan of the election where Bill Clinton ran for president: "It's the economy stupid!" The big theme here is going to be: "It's the institutions stupid!" and that is what I really want to focus on.

So, let us start by talking about the standard theory of exchange rate regimes. The standard theory focuses on issues such as optimal currency areas, but the problem here is that that literature does not deal with all the particular aspects of emerging market economies. It is not enough to look at it in a neoclassical framework. You have to actually realize —this is true for all Latin America — that emerging economies are very different from the Northern part of the Americas and that, actually, it is critical in thinking about how you do an economic analysis and how you advise emerging countries **about policy.** What is so different in emerging market economies? A key issue is weak fiscal institutions. This is clearly a problem that's endemic in Latin America in general and in Uruguay in particular. Other very important topics are the quality of financial institutions and, particularly relevant for the latest Uruguayan crises, the quality of prudential supervision. Last, but not least, monetary institutions may be weak and, as a consequence, the credibility of the monetary authorities may not be very strong.

This type of institutional weakness leads to features that are very different from those that can be found in United States. A particularly relevant and negative one is currency substitution and, more specifically, liability dollarization. This is not true of every emerging market country and not true of every Latin American country. So, for example, Chile has very little liability dollarization as does Brazil. However Uruguay fits very much into this category since almost all its debt is denominated in US dollars. When you mix this kind of balance sheet problem with the occurrence of sudden stops of capital flows, like the one Uruguay had recently, you have the makings of a disaster.

When a country has big fiscal imbalances, they eventually are going to lead to high inflation and to depreciation of the currency. So, if you have a fixed peg it will break down and if you have a floating exchange rate it is going to have a very sharp depreciation.

This is what in the literature its called " unpleasant monetarist arithmetic" or "the fiscal theory of price level". Everybody knows this is a very serious problem and Uruguay is dealing with this right now and of course Argentina has dealt with this problem very much recently.

Financial institutions: why are they so important? Because if the financial system breaks down the exchange rate regime will, most probably, collapse, i.e. you are going to blow up your monetary policy. This is a fact that leads to the issue of the twin crisis: If a country has a weak financial system, it would be impossible for them to defend the currency in the event of a big **shock**. Similarly if there is a bail out in your financial system, at some point the debt that is created is going to be monetized; so again it leads to problems in terms of inflation and on the monetary **front.** So, if a country has serious banking problems like the ones Uruguay faced last year, as meny other emerging economies did in the past, leads to disaster.

And finally there is the issue of the monetary institutions. If a country does not have institutions that make credible a monetary regime, then achieving succes on the conduct of monetary policy is, to say the least, an adventurous endeavour. Of course, in order to have credible monetary institutions first it is necessary to have both strong fiscal and financial institutions.

These weak institutions result in very low confidence levels in the domestic currency and, as a result, the debt is denominated in foreign currency. In Uruguay the dollarization of liabilities goes over 90%. Why is it such a problem? Because it makes a country very financially vulnerable. Because if you have a currency crisis and, by the way, this can happen in a floating exchange rate regime, that causes a sharp depreciation of the domestic currency, that means that your debt, which is denominated in dollars becomes much more burdensome in pesos. As a result, any firm that has a lot of dollar debt and whose goods are priced in pesos is going to be broke. In the case of Uruguay the depreciation reached 50%, which means that a private firm with a currency mismatch in its balance sheet, even if prior to the crisis it was considered to be a model of good management, is likely to be insolvent after the float. And why is that so serious? Because when you destroy balance sheets of firms and banks, the financial and payment system **cease to function**, they can no longer allocate capital because one of the rules of lending and giving money to people is "never lend to anybody with a bad balance sheet", even if they are good investment projects, because of the tremendous issue of adverse selection and moral hazard.

The economic and social impact of sharp depreciations on economies with big levels of liability dollarization lead to fear of floating. If you know you have a lot of dollar debt on your balance sheets you can't allow a very sharp depreciation of the currency because that will actually destroy the balance sheets of the economy, creating the mess that I just described and that you are currently experiencing. Then, a country in this situation is much more likely to actually smooth exchange rates and even if you are committed to floating, you are going to limit the float. This is a very strong feature of many emerging market economies — not all, for this is not a problem for Chile, for example — but it's a big problem in the Uruguayan context.

The other negative feature observed in countries with weak institutions is sudden stops in which all of a sudden people decide that they are no longer going to give you capital. And that capital flows, which might have been inward and substantial, become outward and substantial. In some cases sudden stops arise because the country has not done things properly, but sudden stops can also occur even when countries have been doing things right. One example can be the reaction of portfolio managers to the crisis in Russia, when they decided to pull out money from emerging market countries. Even though there were no changes in policy management in emerging countries that justified the change of strategy, a sudden stop occurred. Another example can be the sudden stop that Uruguay has suffered since the beginning of the Argentinean crisis.

Why are sudden stops so serious? Because they require a large change in relative prices, a large adjustment of the real exchange rate; and that actually means that you are going to get a very sharp fall in growth and very much affect income distribution and wealth. It is important to recognize that liability dollarization is very important in affecting the impact. When you have a sudden stop that leads to an exchange rate depreciation, that creates severe problems in terms of balance sheets and that is why you have such devastation. And this is exactly the case of Uruguay.

By the way, sudden stops can still be serious for countries that don't have liability dollarization but their effects are milder than the ones countries with liability dollarization experience. Chile, which you know has been basically conducting its macroeconomic policy properly, had a sudden stop in 1998 that hurt the country with a recession. But the depth of recession was firly minor and then they started to grow again in 2000.

One of the key issues here when we think about the choice of exchange rate regimes is that there ***are*** five institutional frameworks or five institutional issues that are talked about, which are really much more important. So that when you talk about exchange rate regimes it's second order: it's not the key thing to focus on. When you talk about policy advice, . The key issue here is: "It's the Institutions, Stupid!"

So let's actually talk about some of these issues in terms of choosing between exchange rate regimes to illustrate this point about how important institutions are. Just to get the taxonomy correct, the first thing you have to talk about is that there are two types of exchange rate pegs: we call soft peg to regimes where the commitment to the exchange rate system (fix, target zone, crawling peg) is really a verbal one. There are no institutions that really back it up in a strong way. Then we can find regimes with varying degrees commitment that determine harder pegs, until you reach the benchmark of a hard peg, namely the currency board, where a country passes a law that the domestic currency has to be exchanged at a certain fixed exchange rate. There are even varying degrees of currency board, by the way, depending on the nature of the rules that have been set up. An even harder peg is full dollarization where a country resigns to the right of having a currency of its own.

The alternative is to have some kind of float, but does that really mean anything? First it is necessary to define how the float is being done. One way to go would be to follow a model like the one used in the U.S., a float with pure discretion. However, this kind of model works well in environments where the institutional framework is strong, implying a strong credibility of the monetary authorities. In countries with weaker institutional backgrounds, the use of a target, among whom the inflation target I think is the best, should help to establish confidence in monetary policy. Monetary targeting is not as good a choice because the relationship between monetary aggregates and the things we care about, like inflation and nominal spending, actually tends to be very weak. When we talk about these issues we also have to think about the context in which the choice of exchange rate regime, fix of float, is done.

What is the problem with having a fixed rate regime? The inmediate answer is that, when fixing, the country cannot **do** monetary policy. A country with a floating regime can do monetary policy. However, the fact that you have the ability to do something doesn't mean that you can do it well. In particular, the ability to conduct **an efficient** monetary policy requires really quite good fiscal and financial institutions. But, even if those are good, monetary institutions with a very strong public commitment to price stability are still required. This means the Central Bank should be independent, something that is not true for many emerging market economies. In order to achieve independence of the Central Bank it is not enough to pass a law with the right wording.

An example that nicely illustrates this this is Argentina versus Canada. Argentina's Central Bank under its previous law was extremely independent. Now, it did not do monetary policy because it had a currency board, but even in practice it behaved very independently in the conduct of prudential regulation and supervision. However, when the crisis arose, the Government didn't like the fact that the Central Bank was actually doing a good job in that regard because it had a fiscal problem and wanted the banks to buy up government bonds to solve the fiscal difficulties. So what did they do? Despite the fact that the law stated the independency of the Central Bank, the government put on political pressure on the board until it achieved the resignation of the president of the Central bank. They had to get rid of him in order to put in office somebody who was much more amenable to Government pressure. So, this is an example of a Central Bank that appeared to be independent but on the other hand that independence was actually very weak. The political system was perfectly happy to see the attack and destruction of the Central Bank and even if the law said they could and should not do so. Canada is interesting because if you look at the charter of the Central Bank of Canada, it does not look very independent. The ultimate responsibility for doing monetary policy in Canada resides with the Government. However, in order for the Government to take over the decisions on monetary policy, it has to overrule the Bank of Canada very publicly. If the Canadian government tried to overrule the Central Bank, the public would think that the government was being politically venal. In this case the intention to overrule the Central Bank would end up hurting the government so seriously that it would never ever think of doing it. So, the Bank of Canada looks as if it is not as independent as Argentina's Central Bank, but in practice is much more independent. There is something deeper in the political structure that is very important. The idea that in an industrialized country like the US or Canada that you could have gotten rid of the Central Bank President with the kind of process they used in Argentina, is just unthinkable. Any Government that tried to do that would have been immediately destroyed in the polls and as a result would have been out power. In emerging market countries experience shows that it can happen with low or no political cost.

When you look at the empirical evidence and whether fixed or floating exchange rates do better in terms of stabilization, the evidence is not clear. What I am saying here is that this is not a puzzle since, that is exactly what you would expect if the issue is not exactly whether you are fixed or floating but how strong the underlying **i*nstitutions are.***

Just as the main advantage of a floating exchange rate may be that it allows the monetary authorities some discretion and flexibility to use monetary policy to cope with shocks to the domestic economy, the main weakness of a floating exchange rate may be that it allows too much discretion to monetary policy and so may not provide a sufficient nominal anchor.

Of course, many emerging market countries have been able to keep inflation under control with flexible exchange rate regimes and this is why the evidence on whether fixed versus floating exchange rate regimes are associated with lower inflation rates on average is not clear cut. But a central bank can only work to reduce inflation if it is supported by the public and the political process. In some countries, giving the central bank an explicit focus on inflation targeting can help focus the public debate so that it supports a monetary policy focus on long-run goals such as price stability. However, these benefits require excellent communication skills on the part of the central bank in what can be a swirling political environment in emerging market countries.

One danger of a hard exchange rate peg is the risk of being locked into a misaligned exchange rate, which can be defined as a sizable difference between its actual level and the one to which "fundamentals" would dictate. This possibility supports the case for flexible exchange rates, but again the situation is more complex than it may at first seem.

Even in a country with a fixed nominal exchange rate, it is possible to use taxes and subsidies on imports and exports to alter the effective real exchange rate. For example, a uniform tax on imports accompanied by a uniform subsidy on exports of the same size is equivalent to a *real* currency depreciation – even though the nominal exchange rate stays unchanged. Moreover, a tax-and-subsidy-induced fiscal devaluation has one built-in advantage over nominal denomination. The fiscal devaluation has an upper bound, determined by the fact that beyond a certain point tax evasion becomes rampant. Nominal devaluation, on the other hand, has no upper bound and can lead to high inflation.

But fiscal devaluation may be difficult to implement in a timely and effective manner without well-run fiscal institutions. For example, politicians may be quick to impose a tax on imports out of protectionist sentiment, happy to use a fiscal devaluation as an excuse, but then slow to remove that import tax later when the reason for the devaluation has evaporated.

A hard exchange rate peg will tend to promote openness to trade and economic integration. For example, an exchange rate fixed to the U.S. dollar will likely promote trade with the United States and other countries tied to the U.S. dollar. Fixed exchange rates or even a common regional currency as in the European Monetary Union (EMU) may help regional economic integration in the context of a common currency may be an attractive project (this point is also discussed further below in connection with the effect of exchange rate regimes on institutions). Thus, countries which are seeking to expand trade would naturally place a higher value on some form of a fixed exchange rate with a trading partner..

Along with gains from trade, an economy that is more open to trade may also be less susceptible to sudden stops. An expansion of trade means that a greater share of businesses are involved in the tradable sector. Because the goods they produce are traded internationally, they are more likely to be priced in foreign currency, which means that their balance sheets are less exposed to negative consequences from a devaluation of the currency when their debts are denominated in foreign currency. Then, a devaluation which raises the value of their debt in terms of domestic currency is also likely to raise the value of their assets as well, thus insulating their balance sheets from the devaluation.[1] Moreover, the more open is the economy, the smaller will be the required real currency depreciation following a sudden stop.

In the case of Uruguay it is a little different, because your tradables sector is very integrated with Brazil and Argentina. This doesn't solve your problem when your debts are denominated in dollars. But, in general, if you have a large tradable sector whose goods are sold internationally, your goods are actually sold to Europe and the United States and then they are priced in the foreign currency of your debt. Now if there is a depreciation of your currency, even though your balance sheet has debts that you denominated in foreign currency, your goods are denominated in foreign currency and you don't have nearly the same impact in terms of your balance sheet than if your goods are priced in domestic currency, like pesos.

One of the things that people focus on when choosing exchange rate regimes is that it can affect the risk premium for interest rates. There are advocates of fixed exchange rates who say that if you put in a hard peg, interest rates would fall because depreciation risk is not there any more. That claim does not find support on the data. Country risk tend to be associated to other fundamentals, like the fiscal situation. If the market is concerned about the risk of a government's default, then that is going to have a large impact on interest rates. In Latin America, particularly in Argentina, it is not farfetched to think that when the government has fiscal problems the risk of confiscation increases. That was the case in the Bonex

1 If traded goods are not denominated in the same foreign currency as the debt, then this insulation may be incomplete unless the currency used for denominating debt moves very closely with the currency used for denominating traded goods.

plan. In Ecuador when they first put in dollarization country risk did not go down. Only after they completed the debt swap did a reduction of the interest rate occur. Chile has a floating system and the lowest interest rate spreads in Latin America, even lower than Panama, a fully dollarized economy.

The standard theory however does have something to say which is important: the more flexibility you have in terms of wages and prices, the easier it is to have a hard peg because the real exchange rate can fluctuate even with a fixed nominal exchange rate.

However, when you have liability dollarization, again, this might not be such a strong argument. As I previously argued, if you have a lot of debt denominated in foreign currency then it actually makes it much more troublesome to experience large changes in the value of domestic currency: any time your currency changes in value it affects balance sheets

Why do countries have liability dollarization? Some people claim that it has to do with exchange rate regimes: when a country fixes the exchange rate it would be providing a warranty that would promote liability dollarization. I think the evidence points much more strongly to the weakness of basic institutions as the source of liability dollarization. Work by one of my students, Adam Honig, shows that what exchange rate regime a country has does not seem to be the key determinant of whether there would be liability dollarization or not. Rather the type and quality of government institutions is far more important. Why does Brazil not have liability dollarization while Uruguay does? It has a lot to do with their basic institutions.

Since liability dollarization is a problem, there is a strong case for prudential regulations limiting liability dollarization. Why does liability dollarization occur? Because the market wants it. But, this doesn't mean that the market is producing the optimal outcome. We have to understand that there are externalities which actually encourage people to issue debt in dollars even though in fact it doesn't make sense from a social viewpoint. One kind of externality is the existence of public warranties on the financial system. If everybody goes broke, the Government is going to step in. So that is a case where, for the individual it is advantageous to issue debt in dollars and for the society it is not. This kind of problem provides support for prudential regulation that discourages liability dollarization.

One of the supposed advantages of a float is that countries need less international reserves. The evidence does not entirely support this claim. Even with floating exchange rate regimes you see that countries build up huge war chests because they still need credibility.

What about the lender of last resort? It has been said that if you have a fixed exchange rate or a hard peg the Central Bank no longer has the ability to conduct monetary policy. They cannot print money, therefore they cannot provide liquidity when it is needed in the system. But Guillermo and I for years have been saying this is an issue that should really be off the table for many emerging market economies, particularly those that are liability dollarized. Why? Because even though the Central Bank supposedly has ability to provide liquidity, in practice it cannot do it. If the Central Bank tries to provide liquidity this is actually going to lead to a lack of confidence in domestic currency and, eventually, to a sharp depreciation. And of course when the currency blows up and a currency crisis arises, liability dollarized countries would experience a huge financial crisis. Ecuador provides a hard learnt lesson about this. During their recent financial crisis, for six months their Central Bank tried to save the banks by injecting liquidity and that actually made things much worse in terms of the eventual crisis. And indeed this even happened to some extent in Argentina where their currency board had a lot of slippage, and the central bank was actually doing a lot of expansionary monetary policy towards the end, which in fact made things much worse. The bottom line is that an emerging market economy with liability dollarization cannot perform lender of last resort functions anyway.

One of the most important things that should be considered when choosing whether to float or to stay on a fix is timing. Even when, after considering the institutional framework of the country, it appears to be optimal to float in the long run, choosing the right moment to do so is key. The IMF believes that crises are much worse in countries with fixed exchange rate regimes that in those with floating regimes. Stan Fisher pushed this line of thought and it has become part of the IMF's dogma. As much as I agree with that general assestment in the long run, in the short run it can be a disaster to move to a floating rate regime during crises. The worst advice you can give a country when it has the characteristic of being in a currency crisis and also being heavily liability dollarized, is to tell them that they should float the exchange rate during a crisis. I understand this was part of the policy advice and pressure the IMF put on Uruguay on

2002. And, again, even if Uruguay would be better off with a floating exchange rate regime in the long run, the move to a float should have been done after the pressure for a sharp depreciation had passed. Because if you allow the currency to depreciate sharply you are going to blow up all your balance sheets and you are going to have a major twin crisis. That's exactly what happened in Uruguay. The issue here is not whether you can escape any shocks – after all, you are in a bad neighborhood — but then the question is how do you make sure that the shocks are minimized.

I have argued that better institutions are basic when choosing between a fix or a float. However, the literature has pointed out that the reverse might also be the case. Some people say: "a hard peg is a great thing because it takes away the ability of the Central Bank and the Government to print money and that means they will impose fiscal discipline on the country." And, in fact, that was one of the great hopes of the convertibility plan in Argentina. They hoped this would fix the fiscal problems. Well, you look at the reality and it turns out that that just doesn't seem to be the case, that Argentina did not fix its fiscal problems. Panama actually has one of the worst records in Latin America in terms of fiscal policy. This is an indication that the hard peg not only does not bring about fiscal discipline,but also it can even make things worse. Argentina may have been worse off with the hard peg, because a hard peg actually made it easier to borrow abroad so if you have a fiscal problem now you can push it into the future. And, of course, politicians love to push problems into the future. Then having a hard peg may actually be a disadvantage. A float actually has a possibility of helping fiscal stability if it's set up with the right institutions, particularly a credible monetary policy with an inflation target, that can actually help constrain the politicians, even more so if the politicians are part of the inflation targeting process. In that case they will have to confront the contradiction between their expenditure adventures and their inflation target. And in fact, many industrialized countries have found that an inflation target has helped constain fiscal policy. Once more, this need not to be the case in weak institutional environments.

Some advocates of hard pegs have said that hard pegs lead to healthier financial systems. Ricardo **Hausman** is one person that has made this argument. I disagree with this point too. If anything, it is likely to do the opposite because a hard peg may promote dollarization.

What about monetary institutions? Well, I think inflation targeting might help to improve monetary institutions. However, just saying you are doing inflation targeting does not mean very much. The institutional framework, in terms of the Government's role and also the Government interaction with the Central Bank are going to be very relevant in determining the credibility of monetary announcements. Successful inflation targeting countries are the ones that have given the Central Bank autonomy with respect to the Government, and have changed the interaction of the Central Bank with the public and the political process. Increased transparency and accountability of Central Banks have fortified monetary institutions. However, in order to achieve those transformations, strong support from the Government and the political structure is needed, and that is not an easy task. In emerging market economies it is a lot harder to do.

Let me give you a conclusion to all of this. What I am really getting at is that a exchange rate regime is just not the key. Emerging market economies are so different from the idealization of the standard neoclassical literature, that the exchange rate regime is really a second order issue. What is really important is the issue of institutions. This is whate the international financial institutions like the IMF and the World Bank should be focusing on. They are starting to do that, but then they still can say "just choose this exchange rate regime" as if it's going to solve the problem.

The point we've made here is that there is always a lot of subtlety here, that each country is different, that you have to balance the risks in terms of the exchange rate regime but then really actually say ***what*** we really want to think about is the deeper underlying institutions more than the exchange rate regime. And just looking at what it is written in the law is not enough. It is important to take into account the political culture.

We hope that this work will generate discussion, and would lead people to say: "Let's worry less about the exchange rate regime and much more about the things underlying the exchange rate regimes." And, if that happens, we hope that it will help emerging market economies to reduce the likelihood of financial crises.