Keynote Address: The Disappointments of Financial Globalization

Dani Rodrik

Good morning, Governor Tarisa, all the distinguished guests. Let me begin by thanking the Bank of Thailand and Madame Governor for this kind invitation. It is indeed a very timely meeting. We do not know what will come out of this current crisis, whether we are in for a substantial rethink of financial globalization as it exists currently or simply some minor patches. I think a lot will depend on the way that the crisis actually plays out. We have not yet seen the end of it. But in either case, I think it is the right time to be thinking about the world of finance we have created and where we have gone right, where we have gone wrong, and how we can reinvent it to provide a more sustainable and more stable, more enabling environment for all the countries of the world.

I think that the main contours of financial globalization are well known so I do not have to spend a lot of time on it. There has been a major explosion in financial flows, as shown in Figure 1. Gross inflows to the developing countries have moved from about the six, seven percent of GDP range to almost double. What is a little bit more interesting is to look at the actual policies that underpin this explosion in flows. A summary index of those policies is shown in Figure 2. What we see is a general increase in the degree to which countries have opened up their capital accounts with some interesting variations across different parts of the world.

Figure 1: Gross private capital flows to developing economies
(% of GDP)

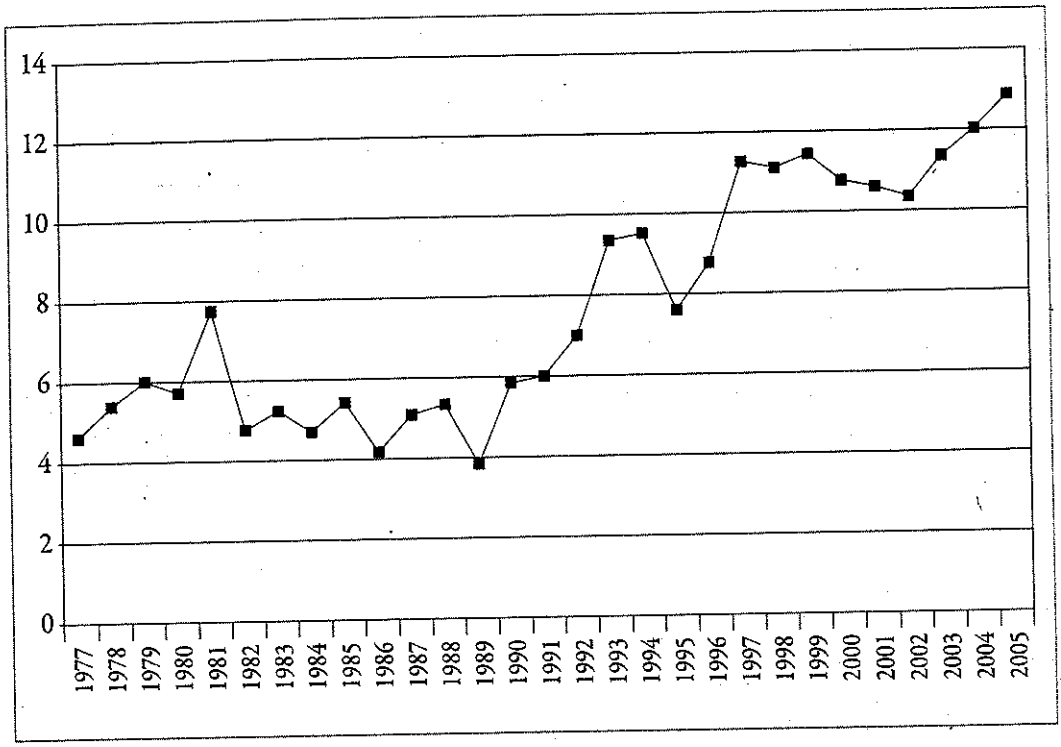
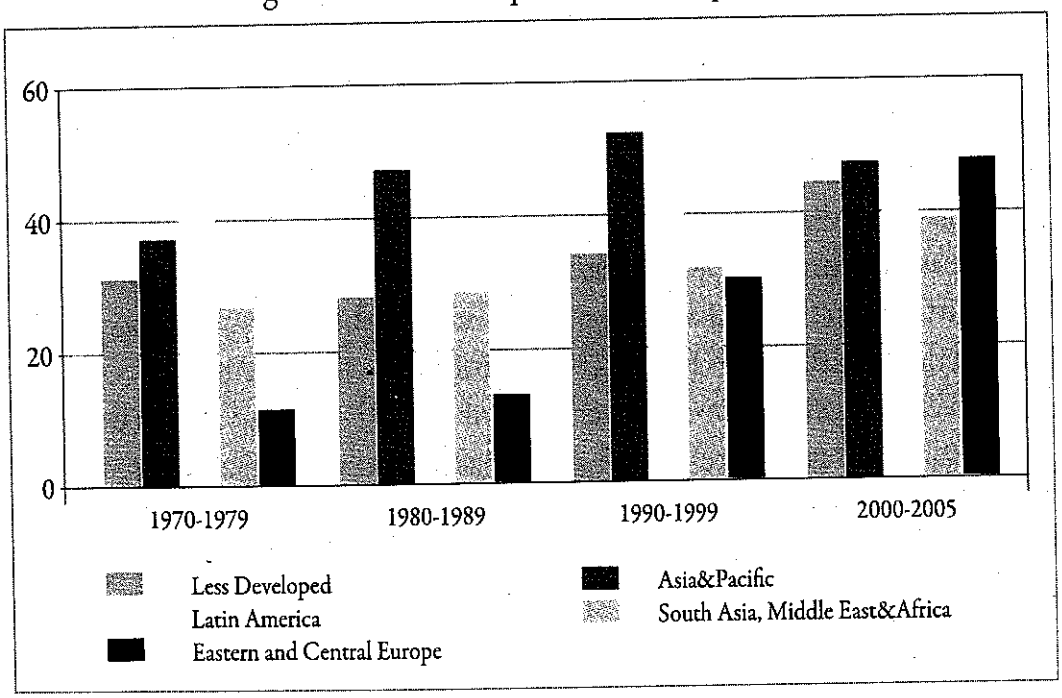


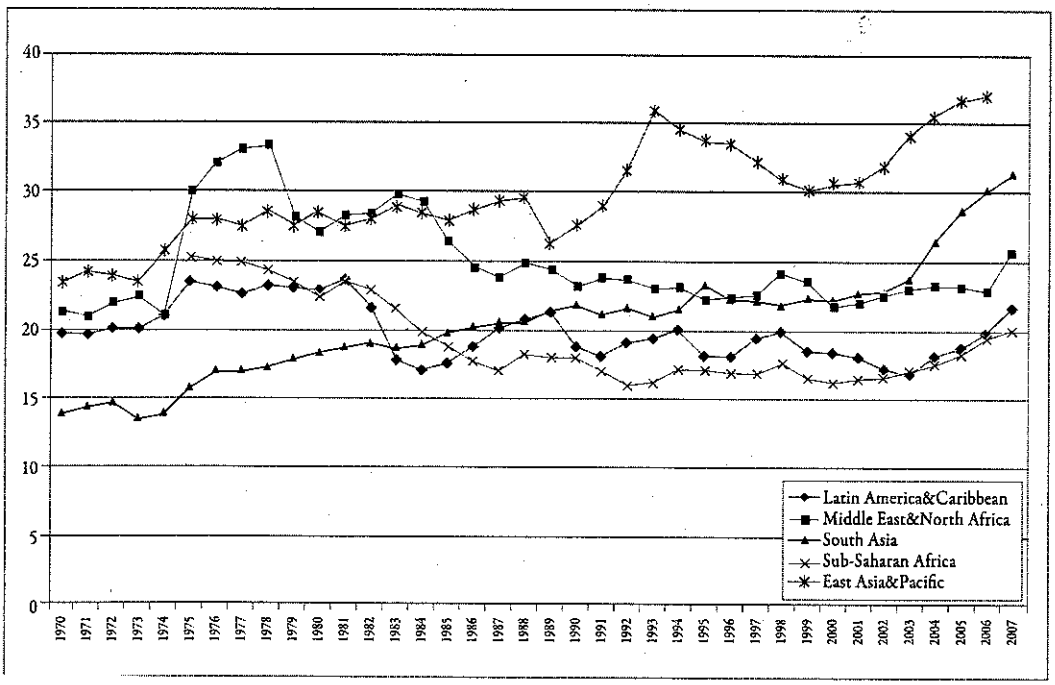
Figure 2: Index of capital account openness



Source: Chinn and Ito (2007)

Figure 2 comes from an index that two economists (Chinn and Ito) have put together relying largely on the IMF's measures of capital account restrictions and what you see there is what has happened in different regions with regard to the openness of their policy regime with respect to capital flows. The most striking increase of course has come in countries in Central and Eastern Europe, countries that were essentially closed to capital flows during the long years of socialism and they have opened up quite rapidly which incidentally is not entirely unrelated to the fact that they have been at the front ranks of countries that have been most severely affected by the current crisis. I think that Latin America has had an interesting experience. Latin America first during the 1980s went through the debt crisis and a process of closing down and then opening up but has embraced financial globalization with abandon since then and I think right now in terms of looking across different regions is the part of the world that is the most open to capital flows. The bar is the tallest for the Latin American region. This part of the world, Asia, which is shown with the black bar, has had sort of steady increase in openness to capital flows with a bit of a reversal after the Asian Financial Crisis and you see that the black bar is a little bit shorter in the most recent period compared to the 1990s. I think we are going to be hearing a little bit more about that later in the symposium with regard to what Asian countries have been doing in the arena.

Figure 3: Investment rates, by region



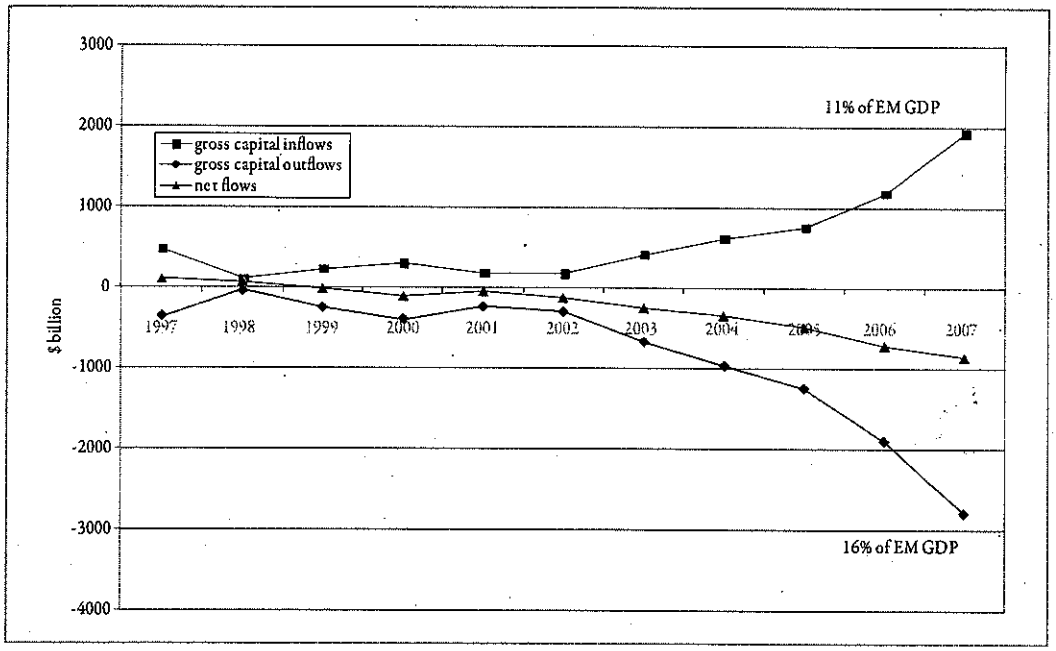
Now let me turn to what some of the immediate outcomes of this process have been (see Figure 3). Of course, the most immediate promise of this process of financial globalization was that it was going to enable a much larger share of the world's savings to go to low income countries, developing countries, therefore facilitating a process of increased investment. This, by and large, has not happened which is to say that there is very little evidence to suggest that financial globalization has induced higher rates of investment in developing countries. You can see that perhaps most clearly for the Latin American region—the dark blue diamonds on this chart. Latin America's investment remains at lower levels than prevailed during the 1970s. The highest investment rates of are observed in this part of the world (Asia) as well as a rapidly rising investment rate in South Asia of course led by India. And if you ask the question: which are the countries that lie behind that rapid increase in investment, of course those are countries like China and India which have not been leaders in terms of opening themselves up to financial globalization. So there is a poor correspondence between which are the countries that have been able to stimulate investment and which are the countries that have partaken the most enthusiastically in financial globalization.

When you look at the actual flows themselves, it is a little bit easier to understand what has been happening: even though the gross flows, that is the gross inflows and gross outflows have risen very rapidly, the net flows have actually remained relatively low until very recently. As of last year in 2007, the net inflow of capital to the developing world was actually negative 5% (see Figure 4) so that means that basically the developing world as a whole was making a transfer to the richer parts of the world of the order of 5% of GDP. Of course gross flows have been very large, 11% of inflows, and 16% of outflows so it was not just that the net flows have been small, it has also been the case that they have been going in the wrong direction from the poorer countries to the rich, rather that the other way around.

There has been a lot of variation across different developing countries, and this is an important point that has been underscored in a paper by two of the scholars who will be speaking later Raghuram Rajan and Arvind Subramanian. But this picture also makes it clear that whenever we are going to be talking about the consequence of financial globalization, it is not enough simply to focus on

net flows. Net flows are what finance investment but the instability has to do with the gross flows and those gross flows are in fact quite huge. In fact one of the big issues that I think we need to be concerned about is not just dealing with the consequences of imbalances in the sense of net flows but actually these gross flows which are the source of a lot of instability and the turbulence.

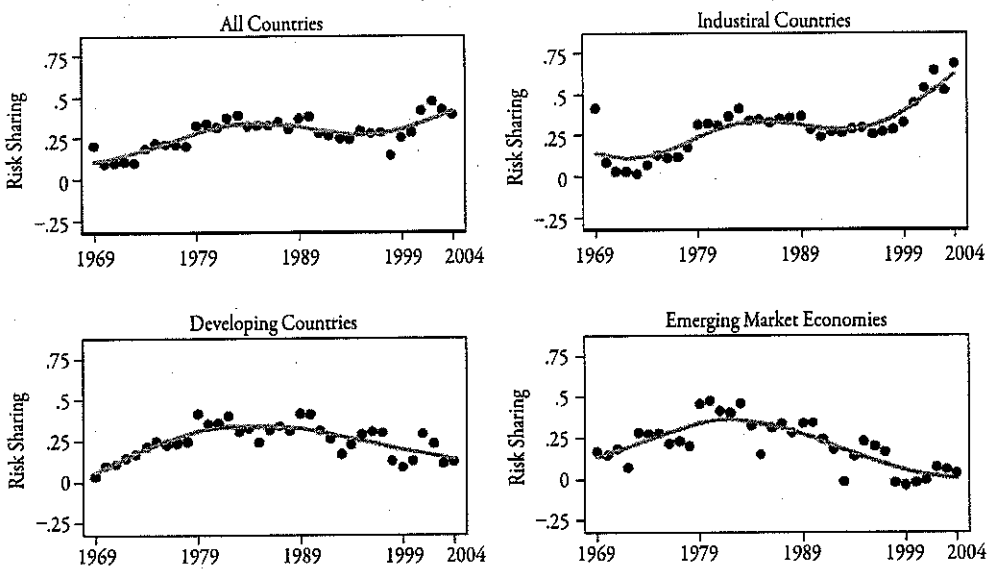
Figure 4: Small net flows, often in the "wrong" direction



Now you can look at this picture—the simultaneous explosion of inflows and outflows—and say okay, maybe what has really happened is that financial globalization has not had a significant impact on transferring savings from rich countries to poor countries and stimulating investment in the poorer parts of the world, but what it has done is to enable better risk sharing across countries. Risk sharing comes from diversification of assets and from gross flows. There again, I think there has been a major disappointment. The evidence in Figure 5 comes from some work at the International Monetary Fund, undertaken by Ayhan Kose, and his colleagues. What this work does is look at what has happened to the degree of risk sharing that different parts of the world have experienced since the early 1970s. Basically the measure of risk sharing here is a very simply one, that is to say that, through international portfolio diversification and integration into financial markets, countries would be able to diversify

risk and better engage in risk sharing. What you would expect to see is that their consumption growth would follow much more closely world output growth rather than domestic income growth because they would be less tied to what happens to domestic output and they would be able to smooth their consumption growth and that indeed seems to be the largely the case for the industrial countries. So if you look at Figure 5 for the industrial countries which is at the top right hand side scatter plot what you see is that risk sharing has gradually improved for industrial countries. But the picture for the developing countries and the emerging market economies tends to go in quite the opposite way. In fact, risk sharing has, quite surprisingly actually, actually tended to be reduced so there is less evidence that countries are able to manage the risks that arise from idiosyncratic shocks to their own sources of income through these huge gross flow.

Figure 5: risk diversification and consumption smooothing



*Notes: World aggregates are calculated using industrial-country data. Nine-year rolling window, medians for each group of countries. The continuous line indicates the HP filter trend. Emerging Market Economies are part of the group of Developing Countries.

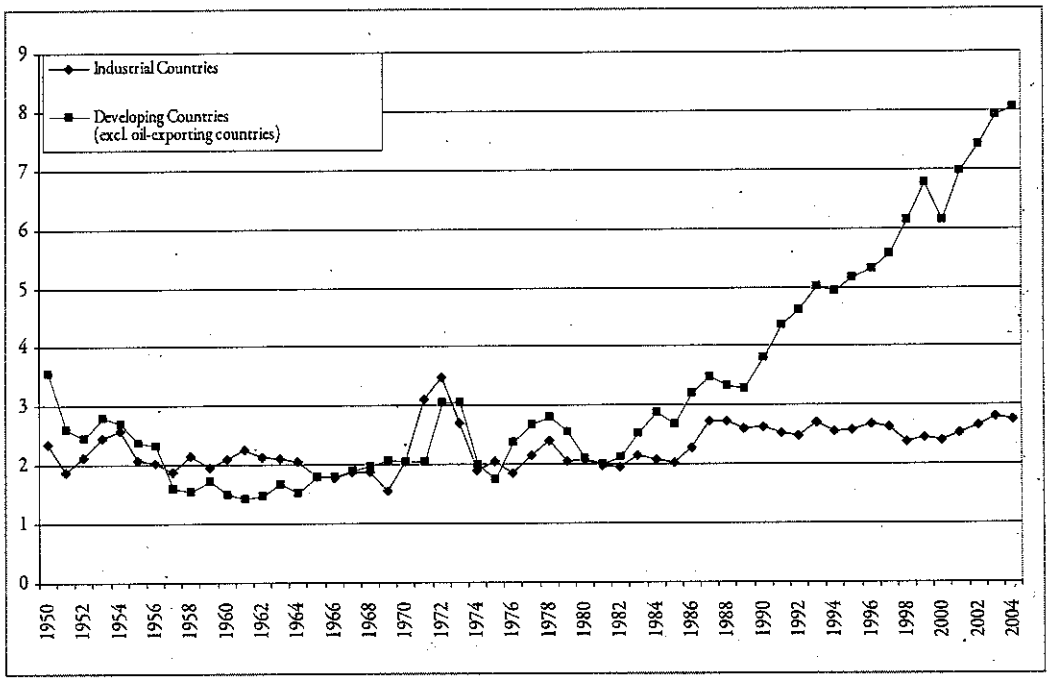
Source : Kose et al (2007), Figure 6: Risk Sharing—Time–Series Regressions

One particular manner in which this lack of risk sharing exhibits itself in the extreme form is of course the prevalence of financial crises, which is shown in the next slide and we're all very familiar with these and of course, this part of the world and this country was particularly bad hit in the last round of financial crises in 1997/1998 and the most recent round of financial crises or sudden stops are not included on this list. The point is there have been a lot of these, many more than we had anticipated and these have been extremely costly for the countries that have been going through them. And that we are now in the midst of another round of these and we do not know how many emerging markets are going to be ultimately affected very severely by the current crisis. With very few exceptions, like maybe most notably Iceland, that the crisis really originates from problems that have nothing to do with their own policies or nothing to do with what was happening at home but entirely due to the fallouts from the subprime mortgage crisis that has at its center, of course the United States.

Now, one result of this prevalence of financial crises is that countries have engaged in recent years in tremendous amounts of self insurance and that is shown most clearly in the huge run up of foreign reserves in different parts of the world which actually is quite common across developing countries. It is not just East Asia or Latin America, even Africa has had an increased build up in reserves. What Figure 6 shows is the volume of foreign reserve assets that developing countries have accumulated in recent years, expressed in months of imports. So the old standard was that you had had to have foreign reserves equivalent to about 3 months of imports and up until the mid 1980s, that was pretty much what countries did, regardless of whether they were developing countries or they were industrial countries. But look at what happens starting some time in the late 1980s, early 1990s. There is a significant divergence between the amount of reserves that industrial countries hold and the amount of reserves that developing countries have begun to hold. The last time I made this calculation, the developing countries as a whole held reserves equivalent to about 8 months of imports and of course, this is significantly higher in a number of countries. The main reason for this is that as the financial liabilities have accumulated, countries have tried to neutralize the potential fallout from those things by building up war chests in the form of official reserve assets trying to fulfill this golden rule that you should hold reserves assets equal to at least

your short term liabilities so that ratio of foreign reserve assets to your short term liabilities should not fall to less than one. In fact, this is what this build up really reflects.

Figure 6: Foreign reserves (excluding gold) in months of imports in industrial and non-oil developing countries



I think even though the evidence on this is not fully in, one of the surprising aspects of this current financial crisis, the current round, has been how undiscriminating markets have been with respect to different countries with different levels of reserves so for example, Korea and Brazil, which were two of the countries outside of Central and Eastern Europe which were extremely badly hit by the financial turbulence with runs on their currencies and stock markets, both of them had reserves that comfortable exceeded their short term foreign liabilities. Russia, which is a country that has been extremely badly hit as you all know, had sat on top of a mountain of reserves that not only could cover all of its foreign liabilities, but could also actually buy back its entire broad money stock. Yet it totally made no difference in terms of the aftermath of the shock. So I think this self insurance policy has been extremely costly because as we know, there are costs to holding these short term reserve assets given the opportunity cost and it is not entirely clear whether they are really paying off in

terms of what an insurance policy actually pays off. It turns out that Korea still needs to rely on a swap facility from the United States and potentially relying on the IMF as well.

So, what is going on? The big picture is that we live in a "second best" world and we need to apply the theory of the second best. Here is what the theory of the second best says from our most authoritative source these days, Wikipedia, and this is how the theory of the second best is explained which essentially says two points; one is that if you are in an economic environment where there are some irremovable, unavoidable, market imperfections, in some part of the system, then if you move in a direction with the rest of the system, in the direction of liberalization, in the direction of removing obstacles to market efficiency, it may turn out that the system taken as a whole actually ends up performing worse. That is removing one distortion in the presence of another does not make you necessarily better off. The second aspect, the second element in the theory of the second best which is a closely allied point is that if you are in these kinds of environments then it may very well be optimal in a second best sense for a Government to intervene in a way that is actually contrary to laissez faire. Introducing some restrictions may actually make the system work as a whole better and with the implication of course if that you live in a second best world then in fact, the simple logic that increasing reducing impediments to financial globalization will make the system work better as a whole cannot be a direct conclusion. We need to study the actual details of the situation before we can jump to these broad conclusions.

So what I want to argue is that financial markets operate in a highly second best environment and this is true at three different levels so I will make three different sets of arguments as to why financial markets operate in a highly second best environment. The first level really is true even for domestic financial systems which is something that I think is very well recognized but there are some inherent market imperfections, with regard to the operation of domestic financial systems. Some of those have to do with information asymmetries that any time there is a financial transaction going on, you're lending money to somebody whose characteristics, whose projects, whose behavior you can actually not observe and that leads to adverse selection, moral hazard. These are all problems that are very well recognized information asymmetries. A second

one which maybe we have underplayed it up to this point but I think after the current crisis it will be hard to underplay is agency problems, which is that people who are actually making the decision with respect to making financial investments, deciding where capital goes, where money is put are agents of those who actually own those assets. Often there is going to be a divergence between the interest of those people who actually make the decisions and those who actually own the assets and in a world with limited liability it is very difficult to design contracts that will make the agents behavior perfectly consistent with the desires of the principal. And a third important source of failure is of course systemic spillovers, which is that in a financial system based on intermediation and leverage when part of the system collapses and a financial institution goes into difficulty, the costs are borne not just the owners of that financial institution but more broadly, by the rest of the financial system as well. There are these systemic spillovers that we need to take into account.

Now none of this is new. We have known all this for a very long time and I think there was a belief that regulatory policies, appropriate supervision and regulation would actually take care of most of these things and I may confess that if I were giving this talk six months ago, I would not have spent a lot of time talking about problems with domestic supervision and domestic regulations as the key part of this story. But I think what we have learned is that domestic policies or supervision and regulation can target these inherent market imperfections only imperfectly which means that these market imperfections, their effects, cannot be fully neutralized even under the best of circumstances as I think the financial crash of 2008 has made painfully clear. It is worth taking a little bit of a detour of maybe a couple of minutes to go through the subprime mortgage meltdown to see some of the details of this a little bit more clearly.

After all, I think if the crisis had not yet actually happened we might have made the argument that in fact the financial innovation around the subprime mortgages was one of the most important ways in which financial innovation was contributing to the well-being of not just a tiny minority of financiers but a large majority of ordinary people in the United States and other advanced countries who were able to afford home ownership which in the absence of this financial innovation they would have been unable to. What did this system do? It did a lot of things which ex-ante on the face of it looked like

it was a good thing. So it introduced real competition into mortgage lending, it allowed non-bank actors to come and make mortgage loans to home owners; it let lenders, particularly new lenders and non-bank lenders offer creative and therefore much more affordable mortgages to prospective home owners which were not being, one would have argued, ex-ante, well served by conventional mortgage lenders. Then of course we had this process of securitization, enabling these loans to be pooled and packaged into securities, which could then be sold off to investors and therefore presumably reducing risk in the process. We further went and divvied up this stream of payments on these home loans into various different trenches of risk so allowing potential investors to sort themselves according to their risk characteristics into the kinds of investments, that they wanted to make. We then relied on credit rating agencies to certify that the less risky of these tranches, of these mortgage bank securities were safe enough for pension funds and other large investors to invest in. Furthermore, in case we did not think this was enough, we also created this market of derivatives which provided insurance against default by issuers of these kinds of securities.

This seemed *ex-ante* like not a bad system at all but of course we know that it failed very badly and it resulted in the crisis that we are still experiencing. Who are the culprits? It is not at all clear, because if it were I think it would have been very easy to get the lessons and then say we will solve this and next time around this is not going to happen. The problem is there are many different potential culprits here. We could blame the mortgage lenders, we can say that they were unscrupulous providing the kind of credit terms that they did, taking advantage of the ignorance or the irrationality of the borrowers. But presumably these loans were being made because of the belief that the price of houses would keep on rising and so we might say that the real problem was actually the bubble that developed in the early 1990s and the reluctance of the Fed, Alan Greenspan, to burst it. But then it is hard to make sense of the explosion in the securities, the CDOs and other securities that were tied to the subprime mortgage market as something that was directly tied quantitatively to the amount of mortgage lending that was going on. It was also presumably the case, that we were dealing with a number of financial institutions which for agency and other problems or for regulatory arbitrage reasons were involved in all types of excessive leveraging in the pursuit of higher profits. Then, of course, we can say even if that was going on maybe the problem is with the

credit rating agencies, why did not they do their job? Of course we cannot stop there because we can go back a couple of steps further and say well may be the whole problem was instigated because of these global macro economic imbalances having to do with very high saving Asian countries and increasing build–up of foreign assets by Central Banks which I have talked about which many people claimed created this global saving glut which lowered real interest rates to levels that both made the housing bubble more likely to take off and also resulted in pushing the financial institutions to look for return opportunities that inevitably meant taking on more and more risk.

So we can blame macro economic policy makers perhaps because they did not get their act together and act in time to unwind larger and unsustainable current account balances. We can blame the US treasury perhaps for not having managed the crisis as it was developing. Many people say that Lehman Brothers should have been saved just as AIG was, just immediately afterwards. And of course maybe it was all of these things together or maybe none of them. The point is that none of this really should give us confidence as we go forward that we have a good enough fix on the sources of failure in the system that next time around we are going to have the supervisory framework and the regulatory framework that is going to prevent a similar kind of recurrence somewhere else in the financial system. Unless we intervene directly in a somewhat coarser, rougher way in the process of leverage directly, intervene directly to manage the process of borrowing to prevent institutions from taking too much leverage which actually means reducing financial intermediation in the system. We have to face up to that. But that in the absence of that, it is very hard to make a case that we have a good enough fix on where the market failures are and we can target our interventions to fully neutralize those financial market imperfections, and therefore that we can make at least domestic financial systems work in sort of nearly text book first best kind of a fashion. I do not think that we will ever be in that kind of environment. That is the major lesson that I have learned from this current crisis.

But with financial globalization, that is not at all the only level of financial market imperfections that we're talking about. We have a second very important feature and I think the feature that we often overlook when we think about international financial architecture; the very political geography

of the world economy. The fact that we live in a world which is fragmented into different political sovereigns, that this is an irremovable part of the system in which we find that this fragmentation of the world into different political sovereigns implies a series of transaction costs that arise from the discontinuities in political and legal and jurisdictional boundaries. So the second best environment in which financial globalization operates, now having moved from the domestic level to the global level, also arise from the political fragmentation of the world economy. That for example, is what creates the problem of sovereign risk. Sovereign risk arises from the fact that if you lend to a government or in fact to a bank or a corporate in a different national environment, you may actually not have the ability to enforce that contract in any kind of international court because sovereigns are after all sovereigns. Even when they do try to bind themselves under international agreements that ultimately they are not bound by those and can walk away from that. The importance of sovereigns risk varies from setting to setting; we see its effect most clearly in some cases like Argentina today where investors literally fear on a day to day basis that the Government might actually default. But in different situations, depending on the severity of the risks, it can be a much more widespread fear.

We further have the difference that financial markets domestically are embedded within a supervisory and regulatory system—imperfect as it may be as I have just discussed—while internationally they are by and large not. We do not have a global regulator and no matter what the French think, I do not think we are going to have one and I think that this is the reality in which we are going to be living. We do not have an international lender of last resort which of course is the counterpart to not having a global regulator. If you do not have global regulation, you cannot have a global lender of last resort, just by analogy with the domestic financial markets and we have ad hoc arrangements just as the new short term liquidity facility of the fund of institutions trying to fill that void but they are ad hoc measures and we still actually do not know if that is going to do the job or not. So these problems, these facts that we have if you will, inability or infeasibility of providing globally any semblance of the type of supervisory or regulatory approaches that we have in the domestic setting compound the problem of second best that we observe. I think this combination of transaction costs explain why in most cases, in most settings, we actually have small net flows as opposed to large ones: we do not get enough

of a transfer of resource flows from rich to poor countries. This is what explains incomplete risk sharing. This is also what accounts for the amplified effects of subprime crisis on emerging markets. We have had a lot of trade in toxic assets. This is exactly analogous to the case of trade in damaged goods when we talk about international trade; so when India exports drugs to the United States and it turns out, as it has just turned out, that there were severe problems with the manufacture of those drugs, then the United States can actually impose controls at the border, say these are unsafe drugs to enter into the United States. This is perfectly well understood in the case of international trade but we actually have no equivalent in the case of international finance with the trading of toxic assets, damaged assets, and therefore you have as a result institutions in, say, Germany going bust and not being able to pay their teachers and their nurses because of the investments that they undertook in mortgage based assets.

The third level of imperfection which I want to mention, has to do with the process of development, economic development itself, and this is something that is of significant concern to developing counties in particular. So far I have talked about two levels; the standard asymmetric information, agency problems in the domestic setting; and the international transaction cost created by political and jurisdictional boundaries. The third level has to do with market failures within the developing countries themselves, market failures not associated with financial market but market failures associated with the entire development process. Developing countries are poor. They are called developing because they have not managed to get rich. They have not managed to get rich because they face a lot of obstacles. A lot of those obstacles have to do with obstacles that involve the structural transformation process and I think there is now a growing literature that focuses on the importance of tradable sectors, tradable economic activities as the key engine of economic growth, as the most dynamic part of developing countries. Those tend to be industrial activities although not always. Some non-traditional agricultural exports often play a role too but in this perspective, non-traditional tradable economic activities in particular manufacturing industrial activities are really the dynamic source of economic growth. The central challenge of economic growth in settings like these is really to facilitate the shift of resources from traditional, or from non-tradable economic activities, to tradable modern economic activities and here is where the real exchange rate really comes to play a very significant role, because the

real exchange rate is the fundamental determinant of the relative profitability of investment in tradables. So if you have an overvalued real exchange rate, that is going to squeeze your tradables, it is going to bring your rate of economic growth down. Everything else being the same, an undervalued real exchange rate will increase production investment in tradables and will tend to increase growth. The problem is that capital inflows cause appreciation, they cause real exchange rate overvaluation. They effectively move the real exchange rate in the wrong direction, exacerbating this problem of structural transformation in the developing countries.

On the real exchange rate and economic growth, some important evidence is emerging although it is very distant from consciousness of those people who are going to be charged with redesign of the international financial system. Because of this disconnection between sort of thinking about the financial world and what really goes on in the real economy, this is a very important source of interconnection between those two so we need to understand that. I just want to run through just a few shreds of evidence on what I have said before which is the relationship between real exchange rates and economic growth. This is some cross section evidence on the relationship between undervaluation and economic growth for the last roughly quarter century, from between 1980 and 2004 (see Figure 7), it shows that countries that on average maintained more undervalued real exchange rate grew more rapidly controlling for some other standard determinants of growth. This is cross sectional evidence, with all the problems of cross-country regressions but it turns out that you get pretty much the same result when you do the analysis within countries as well. This is the sort of a scatter plot that shows the same relationship but effectively looking at not across countries but looking at what happen over time within countries—in other words in a panel setup with country fixed effects going from some time in the 1950s through the recent years and looking at 5-year averages (see Figure 8). What you see very clearly is a very strong relationship over time over a five-year subperiod between periods of undervaluation and periods of economic growth. You can also look at the evidence somewhat differently. Look at the relationship between episodes of undervaluation and episodes of economic growth in Figure 9 for a few countries. Moving clockwise from the top left panel, the top left one is China where you see a very clear relationship between a measure of

undervaluation and the average growth rate over a five-year subperiod. The second picture to the right of that, is India which is of course another case of a rapid increase in economic growth since the early 1980s. There the relationship is a little bit more jagged largely because growth rate has picked up but the pick up has not been nearly as smooth but there too you see a very clear association between a measure of under valuation and the rate of economic growth.

Figure 7: Undervaluation is good for growth: cross section evidence

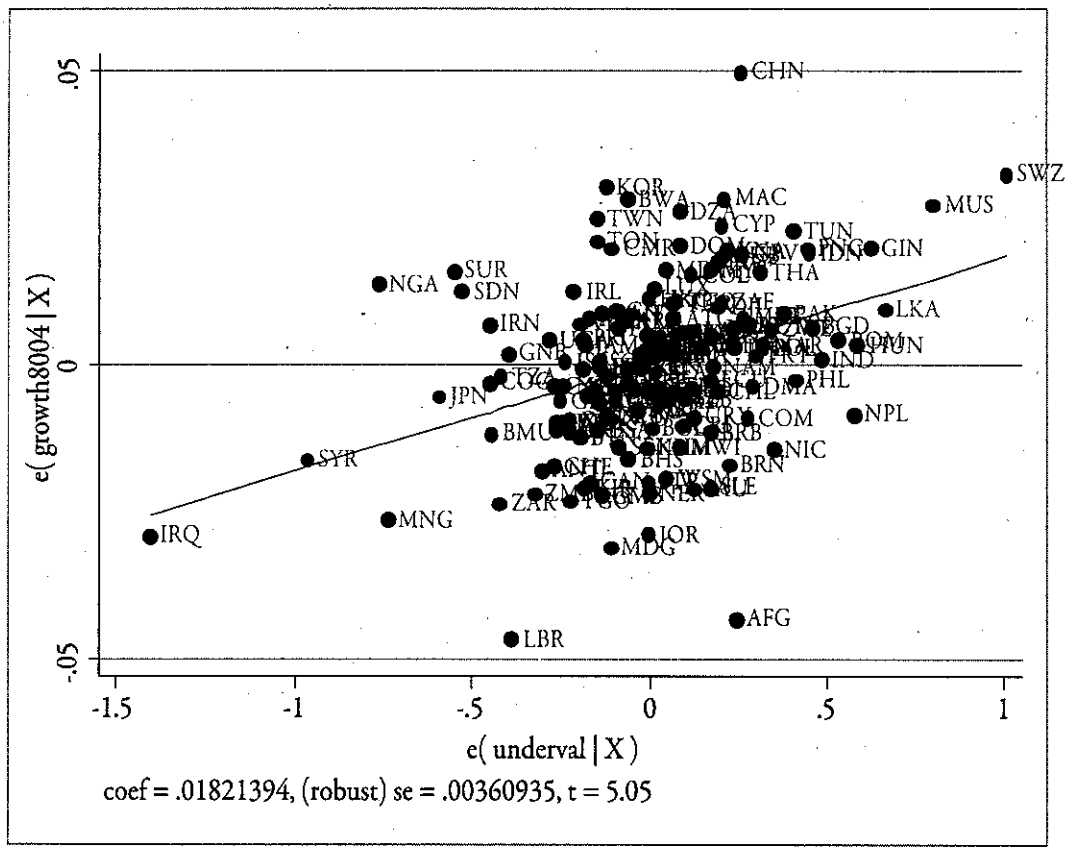
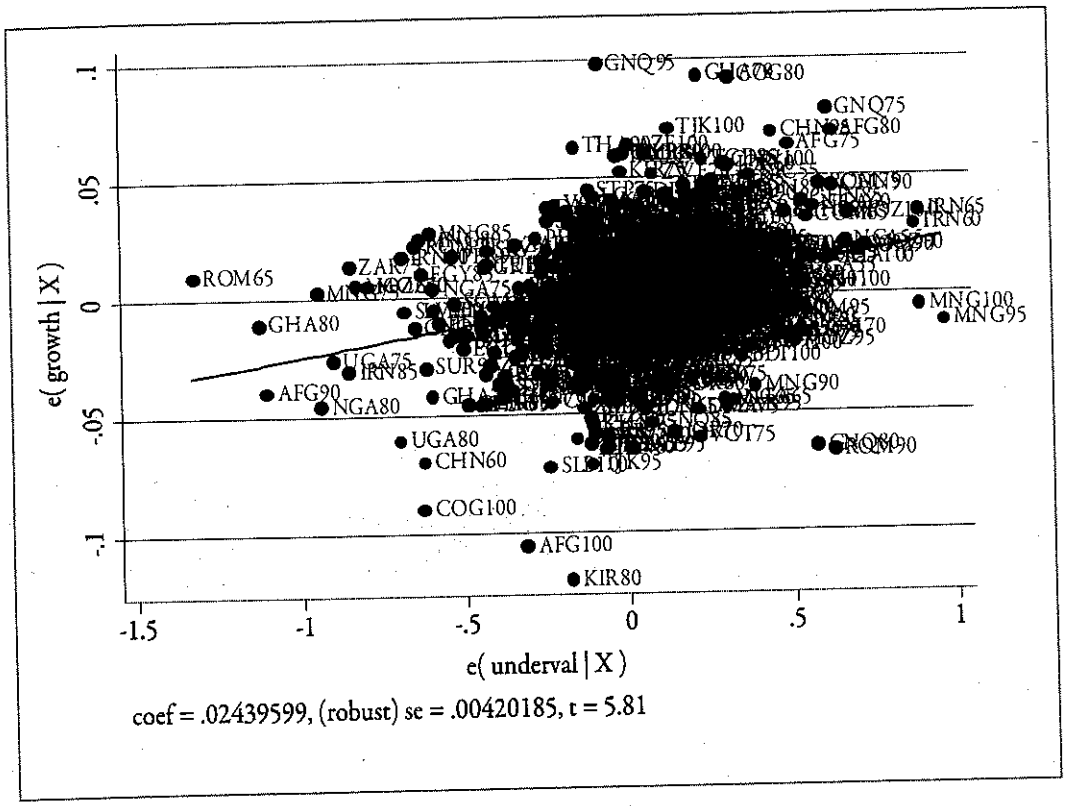
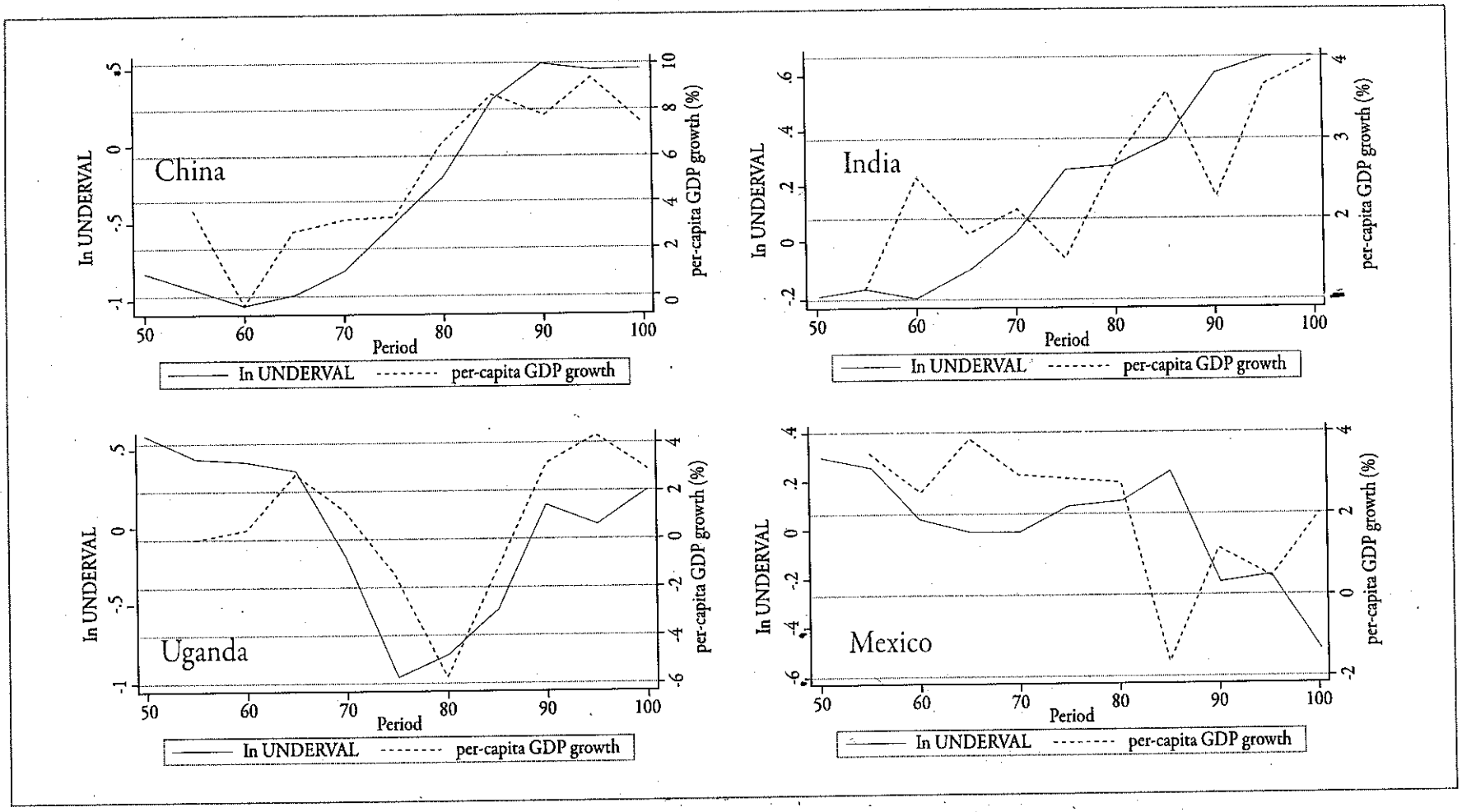


Figure 8: Undervaluation is good for growth: within-country evidence



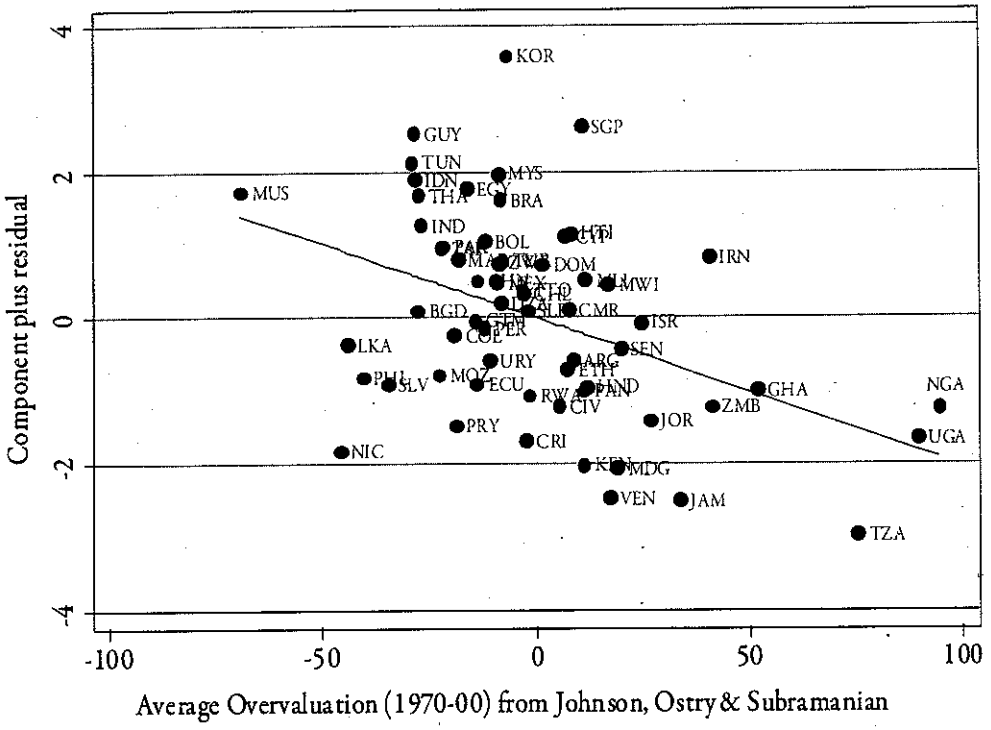
This is not limited to East Asia, or Asia. If you move to the bottom left quadrant what you see there is an African country, Uganda, where you see over the long term, the relationship between economic growth and real exchange and undervaluation has been quite similar. Just to show that this is not a universal relationship or a statistical quirk, the last case show in the figure is a Latin American country, Mexico. If you look at what has happened to Mexico in the last quarter century from about sort of the middle of the picture till the end, what you see in fact is a negative correlation between undervaluation and economic growth and those of you who know Mexico, will know what is going on. That is a very different pattern of growth. It is a capital inflows driven pattern of growth and for that reason is highly subject to a stop– and–go kind of a pattern. You have these episodes of capital inflows coming in, boosting consumption leading to unsustainable current deficits and then the collapse of the real exchange rate and, the re–establishment of current account balance; slowdown in growth and then the restarting of that process. So that is, in many ways, the sort of Latin American capital inflow driven pattern of growth and you see that the relationship is actually the opposite.

Figure 9: Undervaluation is good for growth: sustained real depreciations as a precondition to growth



What lies behind overvaluation? Capital inflows and the capital account regime have a lot to do with them. Figure 10 comes from some work by Arvind Subramanian with colleagues that looks at the relationship between capital inflows and overvaluation and you will not be surprised that of course capital inflows are related to overvaluation. The next figure (Figure 11) is from some of my own recent work that looks at what are some of the determinants of undervaluation, not just across countries but once again over time within countries. I want to draw your attention to two things in Figure 11. Two lines with the arrows point to them; one is the relationship between capital account openness, your policies with respect to capital account and the extent to which your real exchange rate is undervalued. This capital account openness measure is the same one that I showed you at the beginning that comes from Chinn and Ito's work. You see that there is a very significant (negative) relationship between the extent to which you have opened up your capital account and the undervaluation. The more open you are to capital flows, the more overvalued your exchange rate is going to be. The second is a related finding with respect to your exchange rate regime, that countries that are in neither extreme, that is neither have a pegged exchange rate nor in a pure float, that is somewhere in the intermediate where they have either a crawling exchange rate regime or a managed float are much more likely to be able to achieve undervaluation than countries that do not. So these are very clear, not just theoretical expectations but also clear evidence in the data that capital account openness and the degree to which you manage your exchange rate are predictably linked with respect to the real exchange rate outcomes.

Figure 10: Capital inflows cause overvaluation



Note: Partial relationship between a measure of overvaluation of the real exchange rate and net private flows, comprising portfolio equity, debt, and FDI, (controlling for demographics and a dummy for oil exporting countries. Reproduced from Prasad, Rajan and Subramanian, 2007.)

Let me recap this part before I conclude with a couple of slides. What I have argued is that the best way that we can understand these various financial globalization syndromes—the absence of international risk sharing, the fact that foreign finance tends to be fickle, that it is least available when most needed and most available when you least need it, the frequent runs on countries, and the fact that capital inflows are often bad news for development—we can understand all of these facts by applying straight forward second-best thinking to the manner in which financial markets interact with the particular second-best features of our economies.

So what do we do with all of this? What I have said essentially is that the theoretical benefits of financial globalization presume essentially a first best setting, in the absence of which we are going to get these multiple complications arising from second best interactions which I have tried to explicate and to demonstrate here in the last half hour or so. So what should be the policy makers' reaction to this? What are the implications for policy? I think we can have a very long conversation about that but I think we need to very clearly distinguish between two types of advice. Second best economists are those who presume that the second best complications that I have talked about are really an irremovable, a here-to-stay part of the landscape and therefore their policies. Their approach will typically favor introducing some kind of sand in the wheels of finance because they will understand that in this kind of setting, capital account openness, policies that enhance financial globalization, are problematic for all the reasons that I stated. So if you want to think about some real names associated with this approach, here are some names; Keynes, Tobin, Stiglitz (of course Jim Tobin is the original source of the term "sand in the wheel of finance" and Joseph Stiglitz of course and then unlikely ally Jagdish Bhagwati who has this perspective in finance). The second type of advice comes from first best economists who either ignore the type of second best interactions that I have talked about, or much more commonly, these days presume that market imperfections can be removed through complementary reform so the typical advice here is going to be "it is not that we disregard all these problems that you have talked about but we still can presume through appropriate policy we can take care of all these other problems at the same time as we are enhancing the financial globalization of the world economy." And probably the majority of professional economists are in this camp so it is not necessarily very productive to name names here but some of the key names—people who made this kind of argument would be for example Stanley Fischer from whom I will give a quote in a second and Rick Mishkin, who has a very nice book on the benefits of financial globalization that unfortunately came out a year or so ago.

So let me just point as a sort of example to the second best kind of a thinking. A couple of quotes from Keynes, and both of these come from around the time of the discussion of the Bretton Woods System and

Figure 11: Policy and other determinants of UNDERVAL (full sample)

	(1)	(2)	(3)	(4)
	dependent variable ln *UNDERVAL*			
ln terms of trade	-0.139**	-0.164**	-0.167**	-0.115**
	(-3.52)	(-4.14)	(-4.09)	(-2.86)
government consumption (share of GDP)	-0.793**	-0.680**	-0.519**	-0.045
	(-4.35)	(-3.53)	(-2.61)	(-0.23)
→ capital-account openness (KAOPEN)	-0.031**	-0.029**	-0.026**	-0.031**
	(-5.70)	(-5.39)	(-4.56)	(-5.98)
→ Exchange-rate regime: crawl/managed float	0.068**	0.065**	0.065**	0.071**
	(4.86)	(4.64)	(4.47)	(4.87)
float	0.027	0.028	0.058†	0.026
	(0.85)	(0.89)	(1.83)	(0.82)
free fall	0.161**	0.158**	0.172**	0.162**
	(4.97)	(4.86)	(5.21)	(4.80)
dual market with missing parallel market data	0.065	0.067	0.063	0.021
	(1.12)	(1.19)	(1.17)	(0.39)
gross domestic saving (share of GDP)		0.310**	0.355**	0.492**
		(3.55)	(3.80)	(5.10)
FDI inflows (share of GDP)			-0.376**	-0.382**
			(-3.11)	(-3.04)
ln (1 + inflation)				0.039
				(1.10)
Year dummies	yes	yes	yes	yes
Country dummies	yes	yes	yes	yes
Observations	3153	3147	2994	2757

Note: Annual data, excluding outliers noted in Table 1. Robust t-statistics in parentheses. See text for sources of KAOPEN and exchange-rate regime classifications.

** Significant at 1% level
* Significant at 5% level
† Significant at 10% level

Keynes was very clear that he actually did not believe that there is some self equilibrating mechanism in finance, in global finance; in particular, that one could not as a matter of neither theory nor empirical evidence that you could rely on this notion that financial markets would be self adjusting and work smoothly and that as he called this was a doctrinaire delusion. The second quote comes from a statement in the House of Commons in 1944 when he was explaining the Bretton Woods Regime and he says that it was very clear that it is a permanent arrangement, not just as a feature of the transition that the Bretton Woods Regime provides to every member government the right to control all capital movements. As he says, what used to be heresy is now endorsed as orthodox.

Keynes thought capital controls were an appropriate part of the arsenal of policies that Governments have at their disposal. And I think partly because of the success of the Bretton Woods Regime, we forgot some of the inherent logic of why the Bretton Woods Regime had actually been so successful. I want to contrast the Keynes position with a typical first best kind of an argument. This one comes from Stan Fischer, the date is September 1997, so just a couple of months after the Thai Baht has collapsed and he is making the case for capital account convertibility and giving an important role to the IMF in shepherding countries towards capital account convertibility and what it says is something very simple. It says benefits of liberalizing capital accounts outweigh the costs, but this is an account that is fully cognizant of at least some, if not all, of the second best interactions that I have talked about here as being important determinants of the syndromes. It says it is important for countries to prepare well for capital account liberalization so you need to undertake the economic policies and institutional reforms particularly in the financial system needed to operate in a world of liberalized capital markets. So in other words, you need to do all these things to operate well in a globalized financial system so this is a typical statement of this first best view which presumes that you can do everything else that is needed. All those other complementary reforms needed in order to ensure that financial globalization will work smoothly. To me, this is a funny way of putting the problem. It is almost like sort of turning the real economy to the benefit of financial economy rather than the other way around. But I think I wanted to put those two quotes to you to ensure that you understood that neither one of my two positions of the first best and second

best economists are really caricatures; that this is a prevailing tension in the way that we think about the international financial architecture.

And there is not a clear cut answer here. I myself as I think I will have made clear during this presentation, lean very much towards the second best camp. Whether you call it capital controls, whether you call it sand in the wheel, whether you call it capital account management—I think it has got to be part of our thinking, it has got to be part of our arsenal in a world where in fact we are unable to build the kind of international institutions that will operate in anywhere near the kind of efficacy that they operate domestically—and even with domestic institutions we have seen some of the problems that exist there. But I think we need to bear in mind that the right solutions will differ from country to country, obviously within Europe, there is a role for much greater financial integration internationally. Within South East Asia and East Asia there may be similarly a potential path towards much greater financial integration regionally, with some degree of insulation from the rest of global finance.

But I think the important questions that each group of advisors and economists have got to ask are the following: The second best economists need to ask themselves the important questions of whether there will be instances in the real world when the remedy of capital account management or direct intervention in the intermediation process in international flows is going to be worse than the disease because of potential problems created by corruption, rent-seeking and other complications we associate with such interventions. And the first best economists need to ask themselves, the key question: How prudent is it to assume that we can actually undertake the complementary reforms that are needed to make financial liberalization and global financial integration work in the first best way when those in fact comprise a very long list of pre-requisites. A list which by the way keeps on growing after each successive crisis.

So thank you very much for listening to me. I hope that these comments will stimulate some discussion as we discuss each one of these issues in greater detail over the next two days. I look forward to the discussion.

Thank you.