United Nations University
WIDER
World Institute for Development Economics Research

Discussion Paper No. 2002/61

Bank Lending to Emerging Markets

Crossing the Border

David Lubin*

June 2002

Abstract

This paper has two aims. The first is to provide some explanation for the extraordinary collapse in cross-border bank lending to developing countries which has taken place since 1997. The second is to argue that it might be too simplistic to characterize banks' behaviour in the past few years as a pure withdrawal from emerging markets. Instead, it is more appropriate to think of banks as being engaged in a *redistribution* of their emerging markets' portfolios, from cross-border lending – the traditional form of banks' engagement with developing countries – to *in-country* lending. In effect, it makes sense to think of banks as 'crossing the border' in order to substitute onshore for offshore exposure. Obviously, the questions that arises from this are a) whether such behaviour could make emerging markets financial crises any less likely to happen; and b) whether crises would be any less severe if and when they do happen. The tentative conclusion is that this process of 'crossing the border' could prove to be a reliable way for developing countries to reduce their vulnerability to crisis. The critical caveat to this, however, is the recent experience of international banks operating in Argentina. While it is still far too early to draw any conclusions, one dangerous possibility is that banks experience some kind of 'revulsion' at the idea of owning domestic balance sheets in developing countries. Should that be the case, the consequences could be grim for developing world, which would have to suffer not only the large collapse of cross-border lending, but also the consequences of falling direct investment in their financial sectors.

Keywords: developing countries, bank lending, foreign direct investment, Argentina

JEL classification: F32, F34, F21

*Emerging Market Economist, HSBC

This study has been prepared within the UNU/WIDER project on Capital Flows to Emerging Markets since the Asian Crisis, which is co-directed by Professor Stephany Griffith-Jones and Dr Ricardo Ffrench-Davis.

UNU World Institute for Development Economics Research (UNU/WIDER) was established by the United Nations University as its first research and training centre and started work in Helsinki, Finland in 1985. The purpose of the Institute is to undertake applied research and policy analysis on structural changes affecting the developing and transitional economies, to provide a forum for the advocacy of policies leading to robust, equitable and environmentally sustainable growth, and to promote capacity strengthening and training in the field of economic and social policy making. Its work is carried out by staff researchers and visiting scholars in Helsinki and through networks of collaborating scholars and institutions around the world.

UNU World Institute for Development Economics Research (UNU/WIDER)
Katajanokanlaituri 6 B, 00160 Helsinki, Finland

Camera-ready typescript prepared by Jaana Kallioinen at UNU/WIDER
Printed at UNU/WIDER, Helsinki

ISSN 1609-5774
ISBN 92-9190-246-2 (printed publication)
ISBN 92-9190-247-0 (internet publication)

1 Reflections on the collapse of short term lending

Without question it has been the world's banks that have been the largest net taker of funds from emerging markets since the 1997 Asian crisis. From Table 1 it is clear that between the end of 1997 – when banks' exposure peaked – to the end of 2000, banks' net claims on developing countries fell by a massive US$ 292.8bn. Moreover, it is clear from the same table that banks actually became *net debtors* to the developing world during the same period. Whereas in 1997 the banks' had a net credit position of US$ 147bn, by December 2000 this had turned into a net debtor position of US$ 145bn. It is common enough for the world's banks to be net debtors to the Middle East and Africa region, primarily due to the assets owned by oil-exporting countries. Yet for developing countries overall, it is quite unusual for the world's banks to be net debtors to the developing world. On the face of it, these data make a mockery of the idea that banks ought to be used as a way of channelling foreign savings to developing countries.

Three points are worth making in order to help understand why the banks' net exposure to developing countries has collapsed so thoroughly during the past five years:

The fall in net claims on developing countries is half-explained by a rise in developing countries' foreign exchange reserves. Table 1 shows that there was a US$ 147bn increase in banks' liabilities to developing countries between 1997 and 2000, and this accounts for roughly half the US$ 292bn fall in net claims. The reason this is interesting is that it casts a slightly different light on the reason why net exposure is falling. If banks are reducing their gross exposure to emerging markets – which of course they have been doing – then that suggests an increase in risk aversion on the part of the banks. Yet at the same time, if developing countries themselves are increasing their holdings of foreign exchange reserves, that suggests that there is an increase in risk aversion within the developing world. In other words, it is not just banks who are more risk-averse, but countries themselves. In many ways this is ironic, given the widespread switch which has taken place in emerging markets from fixed exchange rate regimes to floating regimes. In principle one would expect a country which adopts a floating rate regime to want to hold *fewer* foreign exchange reserves, not more, since shocks can be absorbed by changes in the exchange rate rather than changes in the quantity of reserves. The fact that reserve holdings have risen so sharply seems on the face of it to suggest that developing countries are not entirely happy with the comfort provided them in having flexible exchange rates as a means of absorbing international shocks. This could mean either one of two things. Either countries have a 'fear of floating',[1] – in other words, they want to minimize exchange rate volatility in order, for example, to improve control over inflationary expectations. Or, it means that countries are concerned about the potential reversibility of capital flows, which requires them to hold a greater cushion of reserves on the realistic assumption that the exchange rate cannot be expected to absorb the entire shock of a sustained net capital outflow.

The fall in exposure is massively concentrated in Asia. Table 1 shows that the fall in net claims to developing countries between 1997 and October 2001 was some US$ 363bn, but that over 70 per cent of this fall was explained by a fall in net claims to Asia.

---

1 See Calvo and Reinhart (2000).

Table 1

Banks' net cross-border exposure to developing countries in 1997 and Q3 2001

US$ bn	1997	Q3 2001	Change
Banks' international assets	1,051,206	874,512	-176,694
Africa & Middle East	141,026	141,151	125
Asia & Pacific	449,913	273,308	-176,605
Europe	156,237	165,985	9,748
Latin America	304,030	294,068	-9,962
Banks' international liabilities	903,934	1,090,001	186,067
Africa & Middle East	267,088	329,932	62,844
Asia & Pacific	285,476	369,104	83,628
Europe	106,053	131,551	25,498
Latin America	245,317	259,414	14,097
Banks' net exposure	147,272	-215,489	-362,761
Africa & Middle East	-126,062	-188,781	-62,719
Asia & Pacific	164,437	-95,796	-260,233
Europe	50,184	34,434	-15,750
Latin America	58,713	34,654	-24,059

Source: BIS.

Indeed, gross claims to non-Asian developing countries were rather stable during the 1997–2001 period, remaining close to US$ 600bn throughout the period.

The fall in banks' exposure is largely explained by a fall in short-term exposure. Table 2 shows that gross cross-border bank exposure to developing countries fell by US$ 146bn between the 1997 and Q3 2001; yet the fall in short term exposure was US$ 128bn. In other words, the collapse in cross-border lending by banks to developing countries was very largely a fall in short-term exposure.

So, in many ways this is a story about a sharp fall in *short term loans to Asian borrowers*. Yet this in itself should be put into context, since the unwinding of these positions in the 1997–2000 period is simply the counterpart to a very sharp increase in short term lending to Asia which took place during the late 1980s and early 1990s. For example, short term loans as a share of total lending to the Asian region rose from 47 per cent in the late 1980s to 63 per cent in 1997. The repayments that banks have received since the Asian crisis is best described as a process of balance sheet consolidation which has reduced the banks' short-term loans to a more acceptable level. What has happened since the Asian crisis, in effect, is that banks have reduced their short-term claims back towards the 'normal' level of 47 per cent of total loans. In other words, the banks' reduction in their gross short-term exposure since 1997 looks like the 'revulsion' which often characterizes creditor behaviour in the aftermath of a debt crisis. Revulsion, of course, is the flip side of 'exuberance' – the period of excessive optimism, which precedes a crisis. In this context, it is worth bearing in mind that the gross repayments that have been made to banks in the past four years is in many ways simply the unwinding of an increase in exposure which took place in the run up to the crisis.

Table 2

Accounting for the fall in banks' gross cross-border exposure to developing countries

US$ bn	
Total change in banks' exposure, 1997–2001 Q3	-146.4
Africa & Middle East	5.0
Asia & Pacific	-167.4
Europe	6.9
Latin America	9.1
Change in short term exposure, 1997–2001 Q3	-127.9
Africa & Middle East	-0.9
Asia & Pacific	-110.1
Europe	-1.6
Latin America	-152.5

Source: BIS.

Gross cross-border bank exposure to Asia reached US$ 423bn in December 1997, and this level of exposure was reduced to US$ 270bn by March 2001. Yet this level of exposure is still massively larger than it was in the early 1990s: in December 1993, banks' exposure to Asia was US$ 190bn.

One of the main consequences of this 'revulsion' is that the problem of short term debt – which has been a principal theme running through each of the emerging markets crises of the past 8 years – is largely no longer a problem for developing countries as a whole. There has been such a huge repayment of short-term debt to the world's banks that short-term debt poses little threat these days to the health of developing countries' balance sheets. A useful indicator of this is the ratio of short-term debt to foreign exchange reserves, which has collapsed during the past several years, as both debtors and creditors have moved to consolidate their balance sheets. According to data derived from the Institute of International Finance, in 1996 there were 14 large developing countries whose stocks of short term external debt were greater than their foreign exchange reserves: Argentina, Brazil, Bulgaria, Indonesia, Israel, Korea, Mexico, Pakistan, Philippines, Romania, Russia, South Africa, Thailand, and Turkey. By the end of 2000, that number had dwindled to just 6: Argentina, Brazil, Mexico, Pakistan, South Africa and Turkey. Table 3 shows the big improvement in developing countries' balance sheets on a regional basis: the ratio of short term debt to fx reserves has collapsed both in Latin America – where it fell from 83 per cent in 1996 to 33 per cent in 2000 – and, more spectacularly, in Asia, where it fell from 83 per cent in 1996 to 33 per cent in 2000.

The process of unwinding the short-term debt overhang of the mid 1990s has been reinforced by the switch from fixed to floating exchange rate regimes which has been evident in many countries over the past few years. The point is that the accumulation of short-term debt in the 1990s was at least partly a by-product of the pervasiveness of fixed exchange rates. This encouraged both borrowers and lenders to imagine that currency risk had disappeared. This in turn made room for the accumulation of large

stocks of short-term external debt in order to finance local currency assets, in order to take advantage what was perceived to be a 'risk-free' interest arbitrage. Now that many large emerging economies have abandoned fixed exchange rates for floating ones, there are fewer incentives for institutions to create short-term liabilities in foreign exchange. In other words, the switch to floating exchange rate regimes has gone hand in hand with the collapse in overall levels of short-term debt.

In view of all this, one question that might be worth asking is whether there are any ways in which the world's financial regulators might try to avoid the excessive build up of short term lending in the future? Should there be a prudential limit on the amount of a bank's lending which is less than one year? Prudential limits on short-term debt are normally expressed in relation to a country's level of foreign exchange reserves. The best known expression of this is the 'Guidotti Rule', which suggests that a prudently managed economy will have short term external debt no greater than its stock of fx reserves. In other words, the Guidotti rule focuses on the maturity structure of a developing country's balance sheet. This is all very sensible. Yet at the same time it might also be worthwhile to focus on the maturity structure of the banks' collective balance sheet.

The reason for this is that it makes sense to think that the incentives for herd-like behaviour on the part of banks might be greater, the larger the ratio of short-term loans to total loans. The intuition here is simple. If creditor A is the only short-term lender to country 1, while the rest are longer-term lenders, then the incentive for that creditor to roll over its short term loan will be relatively high, since there won't be so many banks scrambling for access to country 1's reserves in the event of a deterioration in country risk. This will remain true regardless of the country's Guidotti Rule ratio. Other things equal, it is better to have a low ratio of short-term debt to total debt than a high one. The situation is summarized in the following quadrant-diagram. What the diagram does is to show combinations of two ratios: the short-term debt/reserves ratio (which is essentially a measure of the quality of a country's liquidity in foreign currencies); and the short-term debt/total debt ratio. The important aspect of the latter ratio is that it helps to see things from the point of view of the creditors' balance sheet as opposed to the debtors' balance sheet. Because of the possibility of herd-behaviour by commercial creditors, a country should not only try to minimize its short term debt/reserves ratio; but should also try to minimize its short term debt/total debt ratio, for any given level of reserves.

Table 3

Yesterday's problem: the ratio of short-term debt to foreign exchange reserves

	1996	2000e
Asia	83%	33%
Latin America	83%	54%

Source: Derived from Institute of International Finance databases.

It may even make sense to set a prudential limit on the ratio of short-term debt as a share of total debt. At what level should it be set? One way of thinking about such a ratio is to look at the experience of Asian countries during the 1990s. At the start of the 1990s, the ratio of short-term debt to total external debt for the region was 50 per cent. This ratio then grew during the course of the early 1990s to peak at 65 per cent in 1995. Since the crisis, lenders' revulsion has pushed the ratio down to levels well below 50 per cent (it is currently 47 per cent). Arguably, therefore, a convenient prudential measure for the ratio might be set at 50 per cent. This would be no more than a rule of thumb to coexist with the Guidotti rule regarding the ratio of short-term debt to fx reserves.

Ratio of short term loans to total loans to country x	Ratio of short term debt to fx reserves of country x: Low	Ratio of short term debt to fx reserves of country x: High
Low	Best	
High		Worst

It is short term debt that has been a central indicator of risk in emerging markets, it is also worth pointing out that it is far from being an infallible indicator of risk, particularly if a country's stock of short term debt fulfils certain qualitative criteria. Put flippantly, 'there's short term debt and there's short term debt'. Consider South Africa, which consistently has been the economy with the highest ratio of short-term debt to foreign exchange reserves. The important question is why South Africa managed to survive the 1990s without a debt crisis when the existence of large stocks of short term debt appears to have been such a reliable indicator of crisis in Mexico, Asia, Russia, Brazil and, more recently, Turkey.

Two features of South African experience help explain why the country managed to avoid crisis. The first is the existence of a floating exchange rate regime, which helped to minimize the accumulation of a big stock of short-term liabilities which was merely financing a cross-border interest arbitrage, or 'carry trade'. The second (related) feature is that South Africa's short-term debt stock is widely regarded to be related to trade finance. This type of lending, of course, bears no currency risk (for lender or borrower), and is related to an underlying transaction of real economic resources. All in all, then, South Africa's experience suggests that early warning indicators of crisis in emerging economies are likely to be more useful to the extent that they try to capture qualitative aspects of short term debt stocks rather than simply assessing the size of those stocks. Trade-related debt stocks are likely to be more stable than stocks of debt, which are being used to finance cross-border interest arbitrage. Arguably, Mexico's stock of short-term external debt is these days of a similar nature.

Table 4

Foreign ownership of banking sector assets in selected emerging markets

	1994		1999	
	Total banking sector assets	Share owned by foreign controlled banks	Total banking sector assets	Share owned by foreign controlled banks
Central Europe				
Czech	46.6	8.3	63.4	49.3
Hungary	26.8	23.8	32.6	56.6
Poland	39.4	2.3	91.1	52.8
Total Central Europe	112.8	9.9	187.1	52.3
Latin America				
Argentina	73.2	16.5	157	48.6
Brazil	486.9	12.2	732.3	16.8
Chile	41.4	17.6	112.3	53.6
Colombia	28.3	5.4	45.3	17.8
Mexico	210.2	0.9	204.5	18.8
Peru	12.3	2.9	26.3	33.4
Venezuela	16.4	10.4	24.7	41.9
Total Latin America	868.7	9.7	1302.4	25
total ex Mexico and Brazil	171.5	13.3	365.6	44.8
Asia				
Korea	601.1	0.8	642.4	4.3
Malaysia	148.1	6.8	220.6	11.5
Thailand	192.8	0.5	198.8	5.6
Total Asia	942	1.7	1061.8	6

Source: Mathieson and Roldos (2001).

2 Banks 'crossing the border'

While it is clear that banks have been net takers of cross-border funds from emerging markets over the past four years, it is not true to say that this behaviour necessarily shows that banks have withdrawn from emerging markets. While *cross-border* exposure has fallen, *in country* exposure has risen. In other words, what we have seen is better described as a redistribution of banks' overall emerging markets portfolios, in which banks have substituted onshore for offshore lending. The question, which arises from this, is whether this portfolio shift brings any benefits to developing countries, and in particular whether it will end up reducing countries' vulnerability to crisis.

What is beyond doubt is that foreign banks have massively increased their ownership of developing countries' banking sectors, and that this has happened precisely during the

'crisis period' of the late 1990s. The increase in foreign penetration of emerging markets' financial systems is clear from Table 4, which shows the what percentage of banking sector assets are owned by foreign-controlled banks (defined in these data as banks which are at least 50 per cent foreign-owned). Since 1999, there were further large increases in foreign ownership, e.g. in Mexico. The most dramatic increase in foreign penetration has been in central Europe, where the share of banking assets controlled by foreign-owned institutions rose from 9.9 per cent in 1994 to 52.3 per cent in 1999. Meanwhile, Latin America saw foreign penetration of its banking system rise from 9 per cent to 25 per cent during the same period. Foreign entry to Asia has been more limited, with external ownership rising from only 1 per cent of assets in 1994 to 6 per cent in 1999.

(The relatively small increase in foreign ownership of the Asian banking system suggests that it would be dangerous to overemphasize the idea that banks have simply substituted local exposure for cross-border exposure. Clearly, banks taking repayments of short-term loans to Asian borrowers did not simply channel those payments into the purchase of Asian banks. So, the idea that banks have been engaging in some redistribution of their portfolios must be understood in an aggregate sense).

Foreign ownership of developing countries' banking systems is not just evident from the perspective of the share of assets owned by foreign institutions. It is also evident from the perspective of the lenders themselves. What Table 5 does, is to look at the change in banks' cross-border lending between 1995 and September 2001, and compare it with the change in foreign banks' onshore lending in local currency during the same period. What it shows is that BIS-reporting banks' onshore local currency lending rose from a total of US$ 123.9bn in 1995 to US$ 490.7bn in September 2001. Not only did banks' local lending increase in absolute terms, but it also increased substantially as a share of banks' overall emerging markets' portfolios. In total, foreign banks' local lending in local currencies in developing countries rose from 12 per cent of banks' total exposure in 1995 to 36 per cent in September 2001. This phenomenon evidently confirms a point made by Peek and Rosengreen (2000): 'As foreign banks get established with brick and mortar operations, an increasing share of the lending moves from offshore to onshore' (p.57).

Of course, one must bear in mind that when an international bank takes ownership of a stock of onshore loans in a developing country, this is not equivalent to a flow through the balance of payments. In other words, the increase in a bank's consolidated balance sheet, which results from an acquisition of a loan book, may or may not result in a capital inflow. This depends entirely on the cost to the bank of acquiring the equity in the local institution. This point is critical to any discussion of what benefits a foreign bank brings to a developing country's financial system, since clearly banks' FDI flows into developing countries are not replacing their cross-border flows of lending. The best way to think about the idea of 'replacement' is that a stock of onshore loans is replacing a stock of cross-border loans.

In addition, it is also worth bearing in mind that there is some degree of connection between, on the one hand, banks' withdrawal from short-term cross-border lending in the late 1990s, and on the other hand, their increasing penetration of developing countries' financial systems. The connection arises, of course, because the crises which have been associated with the failure to roll over short term cross-border loans – Mexico, Asia, Russia, Brazil, Turkey – have had the effect of substantially reducing the entry cost for foreign banks. This reduction in the entry cost is achieved not only

through the effects of currency devaluation, but through the extent to which crises have led to an erosion of net worth in developing countries' financial systems. This reduction in the entry cost may partially explain the motivation for the 'redistribution' of banks' emerging markets' portfolios towards local currency lending and away from cross-border short-term lending.

Another incentive which encourages the process of 'crossing the border' is that the capital required to support a given stock of onshore lending in a developing country may be smaller than that required to support cross-border lending. The reason for this is the provisioning regime that banks face in their cross-border lending (or their in-country lending in foreign currencies). If cross-border lending to a particular country requires provisions to compensate for the risk of exchange controls, this 'tax' on cross-border lending is avoidable to the extent that banks' book assets in local currencies onshore.

The question which arises from all this is whether the process of 'balance sheet redistribution' that seems to have taken place over the past few years has had any identifiable impact, either on a) developing countries' vulnerability to financial crisis; or b) the severity of financial crises in developing countries when they do occur.

This question is important, since both the probability of crisis and the severity of crisis in a particular developing country are universally thought to be positively correlated with the fragility of the domestic banking system in that country. Indeed, while an overhang of short-term debt might have been the best single predictive indicator of currency crisis in developing countries over the past few years, financial system weakness is usually high on the list of indicators of vulnerability to crisis. This is true to the extent that a poorly regulated and poorly managed financial system will have relatively few ways of exercising discipline over the structure of banks' balance sheets, which can in turn leave them with burdened by the two balance sheet mismatches which have proved so painful in recent crises, namely a currency mismatch – foreign currency liabilities used to finance local currency assets – and a maturity mismatch – short-term liabilities used to finance longer term assets. This latter mismatch was particularly evident in the recent Turkish crisis, and certainly contributed to the unsustainability of the exchange rate regime.

Table 5

Banks' in-country lending vs cross-border lending (US$ bn)

US$ bn	Cross border exposure	Local exposure in local currencies	Total exposure	Local exposure as a share of total
Total emerging markets				
December 1995	868.7	123.9	992.6	12%
September 2001	874.5	490.7	1365.2	36%
Asia				
December 1995	373.3	56.5	429.8	13%
September 2001	273.3	118.9	392.2	30%
Latin America				
December 1995	247.1	33.9	281.0	12%
September 2001	294.0	269.0	563.1	48%

Source: BIS.

In addition to this, fragile banking systems are also thought to bear responsibility for perpetuating crisis, since a) the weaker the financial system, the greater the public sector resources needed to recapitalize the system in the aftermath of the crisis; and b) the weaker the financial system, the less able it will be to help trigger the post-crisis recovery, since capital flight will be maximized and intermediation minimized.

So, if it can be shown that foreign ownership helps make financial crises either less probable or less severe, the process of 'crossing the border' ought to bring long run benefits to developing countries. What, then, is the case for suggesting that foreign ownership can help?

First, consider the case that foreign ownership makes crises less severe.[2] Foreign ownership can help to diversify the capital base of a country's banking system, improve the pricing of risk, improve regulation, accounting, information technology and the level of transparency. The value of these benefits in making a crisis less severe is that it can help create a situation where foreign-owned banks continue to lend in an economic downturn – primarily because foreign-owned institution have a more diversified funding base. As Goldberg et al put it: 'If domestically-owned banks rely more heavily on local demand deposits and cyclically-sensitive sources of funds, basic aggregate demand shocks should generally lead to more volatile lending by private domestic banks than from their foreign-owned counterparts' (p.6). Indeed, Goldberg et al. show that foreign-owned banks in Argentina and Mexico exhibited in the mid nineties higher rates of loan growth with lower volatility than domestically owned banks, either private or state-owned. This suggests at least that the presence of foreign-owned banks can make developing country financial crises less severe than they would otherwise be.

Could foreign ownership of a developing country's banking system make crisis less probable? There are two possible ways in which this might happen. The first is that a better-capitalized and better-regarded banking system could lead to an increase the amount of a country's savings which is actually intermediated through the financial system, rather than held under mattresses. If foreign-ownership of a banking system reduces the proportion of savings which is held as 'mattress cash', then foreign ownership could be thought of as reducing the probability of crisis, since the economy's reliance on foreign savings will have been reduced. A second way in which foreign ownership might reduce the probability of crisis is by providing a mechanism by which depositors can engage in what might be called 'internal capital flight'. In a financial system where there is no foreign ownership, a depositor who fears both currency risk and country risk has no choice but to liquidate his deposit and remit dollars offshore: pure capital flight. By contrast, in a financial system where foreign ownership exists, there is likely to be a non-zero probability that a foreign-owned bank will support its depositors even during a 'country risk event'. This is a form of the 'deep pocket' argument, which suggests that subsidiaries are capable of being recapitalized even at a time of serious deterioration in country risk, on the grounds that a foreign-owned institution runs a reputational risk by letting a foreign subsidiary fail. What this means is that the liabilities of a foreign-owned bank in a developing country could be thought to bear less 'country risk' than the country itself. If this is the case, capital flight will be

---

2 Probably the best statement of the pros and cons of foreign ownership in a developing country banking system is contained in the paper by Golderg et al. (2000).

minimized in an economy with foreign-owned banks. This in turn ought to reduce the probability of crisis in emerging markets.

Yet all this clearly fails to describe what happened during the course of the past several months in Argentina, when a persistent flight of depositors from a substantially foreign-owned banking system ultimately forced a government to devalue the exchange rate, default on its public debt, and impose draconian restrictions on the public's access to deposits, in an effort to preserve what remained left of the central bank's foreign exchange reserves. On the face of it, the failure of the Argentine financial system to prevent crisis suggests that developing countries may have little to gain by encouraging foreign ownership in their domestic financial systems. Equally, it may also mean that banks find that the attractiveness of 'crossing the border' diminishes, since Argentina has proven that there may be little to gain from substituting cross-border exposure for onshore exposure. It is still far too early to draw conclusions from the Argentine experience. The two critical but unanswerable questions are a) would Argentina's financial crisis have happened more quickly if the financial system had not been substantially foreign-owned? and b) would the crisis have been more severe?

3 Conclusion

Although banks have without question been the largest net taker of cross-border funds from developing countries since 1997, this phenomenon is primarily a net repayment of short-term loans by Asian borrowers, who have also substantially increased their asset positions in BIS-reporting banks. Yet even to the extent that banks' net cross-border exposure has fallen, this has to be explained alongside another phenomenon, which is the very large increase in foreign penetration of emerging markets' banking systems. This paper has tried to argue that these two phenomena – cross-border 'revulsion' as well as a large growth in onshore exposure – are connected to each other. In effect, the process of 'crossing the border' constitutes a redistribution of banks' emerging markets portfolios. Moreover, the very process of crossing the border can be thought of as reducing the risk of financial crises in developing countries – although the case of Argentina strongly suggests that having a foreign-owned banking system provides no guarantees against crisis.

Bibliography

Calvo, Guillermo A. and Carmen M. Reinhart (2000), 'Fear of Floating', mimeo May.

Goldberg, Linda, B. Gerard Dages and Daniel Kinney (2000), 'Foreign and Domestic Bank Participation in Emerging Markets: Lessons from Mexico and Argentina', National Bureau of Economic Research, May.

Hawkins, John and Dubravko Mihaljek (2001), 'The Banking Industry in the Emerging Market Economies: Competition, Consolidation and Systemic Stability – An Overview', BIS Papers No.4.

Mathieson, Donald J. and Jorge Roldos (2001), 'The Role of Foreign Banks in Emerging Markets', IMF, presentation material, April.

Peek, Joe and Eric. S. Rosengreen (2000), 'Implications of Globalisation of the Banking Sector: The Latin American Experience', *New England Economic Review*, September/October.

Pomerleano, M. and G. Vojta (2001), 'What Do Foreign Banks Do in Emerging Markets?', presentation material, April.