Negative Net Resource Transfers as a Minskyian Hedge Profile and the Stability of the International Financial System

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1. From IMF exchange rate stabilisation policy to IMF international stability policy

The response of official financial institutions to the 1980s debt crisis produced an important change in the impact of their support to developing countries for adjustment to external imbalances. Before the breakdown of the Bretton Woods fixed exchange rate system, IMF lending was to support exchange rate stability. Countries could draw against their quota funds to meet external claims on domestic residents at its par rate (or at the newly agreed par rate) if they had insufficient foreign exchange earnings. In exchange the country agreed to adjust domestic economic policies to eliminate fundamental disequilibrium and bring a return to external balance. The policies that were the condition of the lending had as their basic objective the creation of an external surplus that would allow the support to be repaid within a relatively short period.²

The causes of the external imbalances were usually identified as excess domestic absorption due to a fiscal imbalance created by excess government spending, or exchange rate overvaluation due to a domestic inflation differential created by excess government spending. As a result the policies sought to reduce absorption by reducing domestic incomes. This was achieved by creating a fiscal budget surplus supported by monetary restriction. If the excess demand had also produced an inflation differential an exchange rate adjustment sought to change relative prices of traded goods to restore international competitiveness. The adjustment lending was close to what are called "bridging loans" that allow the borrower short-term funding until a more permanent financing solution can be found. In the case of IMF adjustment lending the funds were to allow the borrower to maintain external commitments at the existing, or the newly

¹ UN Financing for Development Office. The views expressed here are the personal views of the author and do not represent the official or unofficial position of the United Nations on these issues.

² In the discussions at Bretton Woods Keynes had argued against conditions on drawing from the Fund and programme conditionality was only introduced somewhat later in a 1952 Amendment to the Articles of Agreement. See A. Buira, "An Analysis of IMF Conditionality," in *Challenges to the World Bank and IMF*, A. Buira, ed., London: Anthem Press, 2003, pp. 82-5.

devalued, exchange rate for the period required to bring the external account back into surplus. The surpluses thus become the more permanent financing solution that allowed the bridge loan to be repaid to the IMF. The typical adjustment period was expected to be relatively short, the size of the funds required relatively modest, and the interest rates charged concessional, with the IMF the sole major creditor. In this system, large debt stocks could not be built up or maintained on a permanent basis.

After the breakdown of the fixed-rate international financial system in the early 1970s the need for IMF adjustment lending to support stable exchange rates disappeared. In theory, under flexible exchange rates central banks no longer needed to hold exchange reserves since adjustment to external imbalances would take place through the impact of appropriate market adjustment of exchange rates producing changes in the relative prices of tradeable and non-tradeable goods.

However, the breakdown of the Bretton Woods System of stable exchange rates brought with it a fundamental change in international financial markets. From a system that had been based on official capital flows and limited foreign direct investment flows, overseen by the Bretton Woods institutions, private bank loans and portfolio flows came to dominate in the 1970s. The large imbalances generated by the external disequilibria of the petroleum and non-petroleum producing countries were intermediated through private banks lending internationally, usually through syndicated loans without any policy conditionality aimed at eliminating them. The increased availability of private financing made it possible for countries to undergo external disequilibrium for more extended periods without recourse to the IMF or to the policy conditions attached to official lending. But it also meant that the sustained imbalances created increasing stocks of external indebtedness dominated in foreign currencies.

At the same time, since imbalances were created by a good with low price elasticity, priced in dollars, the relative price adjustment that was to be produced by flexibility in exchange rates was slow to operate. However, when exchange rates did adjust this made the domestic costs of petroleum imports even higher and increased the domestic costs of debt service. This was not a problem as long as the dollar was weak and international interest rates were low. Indeed, for much of the 1970s they were negative, supported by the expansion in international lending due to the expansion of the Euro-Dollar market. But in the aftermath of the change in US monetary

policy in October 1979 many developing country borrowers had insufficient foreign exchange earnings to meet their increased debt service as interest rates rose on their dollar denominated bank loans. The result was a sharp decline in the willingness of foreign lenders to continue to roll over exiting loans.

Thus, in need of foreign exchange that they could no longer borrow from private lenders countries again looked to the IMF to provide short-term adjustment lending and the Fund found a new role, now as guarantor for the policies to be applied by developing countries to ensure private lenders of their creditworthiness. In the words of its new Managing Director, Rodrigo de Rato, "The shift to a system in which member countries choose their own exchange rate regimes brought a new mandate for the Fund to exercise firm surveillance over members' exchange rate policies, and their macroeconomic policies more broadly, in order to ensure the effective operation of the international monetary system."

But, in a world of flexible exchange rates dominated by private capital flows the external disequilibria facing countries were more the result of volatility in private capital inflows and interest rates making it impossible to meet their debt service than of excessive domestic absorption making it impossible to finance their deficit on goods and services trade. It also meant that the when capital inflows stopped, countries could have repayment commitments on principle that exceeded both their existing foreign exchange reserves and the amounts that the Fund could officially lend. In this case failure to achieve sufficient short term funding did not mean failing to meet the existing parity. Under flexible rates, this was not the concern. However, it was possible that the imbalance was sufficient to cause a country to have to suspend convertibility and close foreign exchange markets as the excess demand for foreign currency drove the exchange rate to zero. Since the amounts that the Fund could officially lend were designed to meet the much lower amounts associated with temporary trade imbalances they were insufficient to meet the amounts of the excess demand for foreign exchange. To keep foreign exchange markets open it thus became necessary for the Fund to find ways to supplement their own resources. In addition

³ "The IMF at 60: Evolving Role, Current Challenges," Remarks by Rodrigo de Rato Managing Director of the International Monetary Fund at the Breakfast Meeting with the Council on Foreign Relations New York, September 20, 2004, (http://www.imf.org/external/np/speeches/2004/092004.htm).

to lending beyond official quota limits, this was done by associating other official lenders, such as the IBRD and regional development banks, as well as governments in mobilising the resources necessary to meet the capital outflows at a positive exchange rate. But, in these conditions the only way to preserve convertibility and open foreign exchange markets was to convince foreign borrowers to continue to lend. From the point of view of IMF stabilisation policy it thus became as important to restore borrowing countries' access to private capital markets as correcting their trade imbalance. As a result the conditions that the Fund required of countries seeking support shifted to include policies to convince private lenders to continue to lend to countries in disequilibrium.

However, the objective of policy, to generate the foreign exchange earnings necessary to meet outstanding commitments remained the same, only in the new circumstances this included the necessity to convince creditors to participate in debt restructuring programs and to continue to lend to distressed borrowers. The introduction of tight fiscal and monetary policy that had been used to reduce absorption was now viewed as the appropriate policy to convince foreign lenders to continue to provide the capital inflows that would allow the borrower to repay the Fund and other official lenders and to provide sufficient additional inflows to allow existing creditors to exit if they so desired. Thus even though the Fund's resources were insufficient to meet the borrower's full financing needs, the existence of a Fund lending programme was considered to provide the guarantee of recovery that would convince private lenders to restructure existing debt and for new lenders to commit fresh funds to insolvent countries that allowed them to keep exchange markets open. In the words of the IMF's Deputy Director "the 'seal of approval' provided by IMF lending also reassures investors and donors that a country's economic policies are on the right track, and helps to generate additional financing from these sources. This means, of course, that the Fund has to be careful to maintain its credibility: if we lose that credibility, by lending in support of inadequate policies, such catalytic, complementary support would not be forthcoming." ⁴ This view echoes that of the IMF's own Independent Evaluation Office, "creditors ... tended to link increasing parts of their financing flows to the

⁴ Remarks by Agustín Carstens, Deputy Managing Director, International Monetary Fund, at the WCC-World Bank-IMF High-Level Encounter, Geneva, October 22, 2004 (http://www.imf.org/external/np/speeches/2004/102204a.htm).

existence of an IMF lending arrangement acting as a "seal of approval" on recipient country policies."⁵

Rather than providing bridging finance, under its new mandate the Fund was providing an implicit guarantee, through the conditionality on its lending programmes and their surveillance, to external creditors concerning the probability of repayment. It was this new role in providing a "seal of approval" that created an implicit moral hazard that was reinforced by the various IMF rescue packages provided to countries experiencing financial crisis after the Mexican declaration of default in 1982.

But there was an additional dimension to this new approach – to the extent that a Fund lending programme succeeded in convincing the private sector to continue to lend it implied that the debt would not be reduced, it would only be refinanced by allowing new lenders to bail out old lenders.⁶ For this to be the case it also implied that the borrowing countries' domestic policies would be more or less permanently governed by IMF surveillance and conditionality, creating the need for a much more prolonged commitment of IMF funds.⁷ From being a temporary lender of bridging funds in support of a short-term adjustment programme the IMF became the permanent supplier of "seal of approval" conditional loans that ensured the viability of long-term debt rollover and debt service. This in effect meant virtually permanent restrictive fiscal policies and tight monetary policies to ensure external borrowing to finance debt service.

The result has been a wide divergence between the financial performance of indebted developing countries and their real performance in terms of real per capital income growth and employment. Under the initial IMF mandate, growth rates and inflation rates tended to be higher than under the new mandate. However, under the new mandate while most countries have been

⁵ Independent Evaluation Office, "Evaluation of Prolonged Use of IMF resources" Washington, D.C.: International Monetary Fund, 2002. ISBN 1-58906-205-1

⁶ For example in the solution to the Latin American crisis provided by the Brady Bonds, bank loans were repaid by selling bonded debt to institutional investors.

⁷ Indeed, the Report on Prolonged Use of IMF resources (op. cit.) notes that the increased commitment period for IMF funding programs was in part due to a shift from its traditional balance of payments lending to developed country borrowers to lending to developing country borrowers.

able to reduce extremely high inflation rates and to create primary fiscal surpluses and external surpluses to allow them to regain access to private international capital markets these conditions have been associated with low domestic demand growth, high real interest rates and appreciation of real exchange rates that have produced disappointing real growth performance.

2. The IMF "seal of approval" and Negative Net Resource Flows

Part of this lack of real growth has been due to the fact that despite the success of these policies in ensuring being able to attract substantial net capital inflows – in 2003 the net private financial inflow of \$93 billion to developing countries was the highest level since the Asian financial crisis – when these flows are adjusted for net capital factor service payments and financial outflows, including increases in foreign reserve holdings, the figure becomes a net resource outflow of nearly \$280 billion. This figure, more commonly known as the net transfer of resources is the approximate counterpart of the balance of goods and services trade. ⁸ A negative value means that developing countries have reduced the domestic resources available to finance their own development and placed them at the disposition of developed countries.

Under the IMF's new mandate negative net resource transfers characterised most of the 1980s in Latin American countries recovering from the 1982 debt crisis under IMF adjustment programmes. They have again been negative in every year since 1997. This pattern of financial flows reflects the cost of the IMF "seal of approval" in the form of policies to restrict demand that produce a surplus on trade in goods and services that is not sufficient to cover the negative net capital factor services balance due to the servicing of the existing debt stock. As a result countries continue to depend on new external private capital inflows to remain current on their

⁸ An annex to the United Nations Secretary General's Report on the Net Transfer of Resources for 1996 (A/49/309) makes a distinction in "The concept of net transfer" between "transfer on an expenditure basis" and "transfer on a financial basis", defining the former as the payments balance on goods, non-factor services and labour factor services earnings such as remittances, and the latter, which attempts to distinguish changes in foreign currency reserves from other financial flows, as the net flow of all financial assets less changes in reserves. The figures reported here are on an expenditure basis.

external payments commitments. And, to maintain the Fund "seal of approval" to ensure these flows it requires continued policies of monetary restraint, high real interest rates and primary fiscal surpluses that make return to rapid domestic growth difficult.

As noted above, negative net resource transfers are usually considered to have a negative impact on domestic growth since they represent the export of real goods and services they reduce the resources available for domestic consumption and investment, lower real per capita incomes. However, it is important to distinguish between the impact of the negative transfers and the policies that cause them. It might be more correct to note that policies that reduce domestic demand will in general have a negative impact on domestic growth and employment.

At the same time this means that the transfer of real resources abroad may be part of a rational development plan if they are the result of policies to support domestic income growth and increased domestic savings. In such conditions it is possible to maximise domestic per capita incomes by investing resources abroad if the returns are higher than from using them at home. The possible benefits to growth from negative net resource flows arise from the fact that they create claims on foreigners that can be used to acquire foreign assets that will produce additional foreign claims. Alternatively, the foreign claims can be used to extinguish foreign liabilities which reduce debt service. Both reduce the size of negative net resource flows.

The importance of domestic policy and the use of net resource outflows may be seen in the behaviour of Asian economies in the aftermath of the 1997 financial crisis compared to the experience in Latin America after the 1982 debt crisis in that region. Many crisis stricken economies in the Asian region have used negative net resource transfers— averaging well over \$100 billion per year for the region as a whole since the crisis— to reduce their private sector liabilities to foreigners and have started to use their negative net resource flows to make foreign investments. In Latin America, on the other hand the increase in claims on foreigners during the 1980s was used primarily to cover debt service and to repay arrears. In Asia the rise in net exports has allowed repayment of IMF lending and the possibility of using expansionary domestic policies so that economic growth and domestic savings rates have increased, while in Latin America the net outward transfer of resources has been the result of continued compression of domestic expenditure and continued implementation of IMF conditionality of domestic policy that brought the lost decade of declining per capita incomes and falling savings rates.

This comparison between the behaviour of Asia and Latin America, suggesting that the former policy provides the potential for higher growth. However, this conclusion must be approached with caution. In particular this is because rather than being invested in productive activities abroad, the counterpart to strengthened commercial account positions and rising net private capital flows in the Asian region was an accumulation of international foreign exchange reserves in the order of \$364 billion in 2003.

The accumulation of reserves has been mainly in low-risk and comparatively low-yield government securities of developed countries, primarily the US. Not only do these purchases reflect the net transfer of resources from developing to developed countries, they are a major component of the financing of the increasingly large external account imbalances of the United States. But more importantly, just as the holding of any liquid asset has a cost, these reserve holdings represent an investment which has a negative return. This is the result of the attempt by central banks to maintain control over domestic monetary conditions by sterilising the financial inflows that are the counterpart of the real resource transfers. It is often thought that sterilization is an optional decision, but it is not.9 In the absence of sterilization the net foreign earnings of domestic residents will be converted into domestic bank reserves which will either provide the basis for additional lending by the banking system or, since they represent a net increase in supply of bank reserves to the banking system as a whole, will drive the rate on interbank lending to zero. Thus, if the central bank wishes to retain control over its domestic monetary aggregates or its policy interest rate, sterilisation is required. Since sterilisation requires issuing a domestic claim in exchange for the foreign claim, and since the domestic claim will in virtually all cases carry an interest rate higher than the rate paid on short term investments in the US dollar or the Euro, this represents an investment with negative carry – the rate of interest paid to fund the foreign reserve position is greater than the rate of interest earned on the position. This translates into lower central bank earnings and a higher fiscal deficit since such earnings are usually transferred to the Treasury. Reserves thus not only represent a negative transfer of resources, they have a negative impact on growth if the government is pursuing a fixed fiscal target since fiscal expenditures will have to be cut to offset the decline in central bank earnings' contribution to fiscal resources.

⁹ See L. R. Wray, *Understanding Modern Money*:, Edward Elgar Publishing, 1998.

However, it is clear that for many developing countries the costs of holding large international reserve balances are more than offset by the benefits they perceive from being able to use them to smooth sharp reversals in private capital flows and to provide a guarantee of solvency. These liquidity balances may thus be seen as the alternative to the IMF "seal of approval" in an active Fund borrowing arrangement and conditionalities on domestic policy. Clearly, comparing the growth performance of the Asian economies who emerged as rapidly as possible from Fund programmes with the performance of Latin American economies who have been subject to IMF "seal of approval" programmes virtually continuously since the 1982 debt crisis, the relative cost is much lower.

3. Negative Net Resource Flows as a Form of Hedge Finance

It is also possible to view the buildup of foreign exchange reserves in Asia as a form of hedge against capital flow reversal to ensure domestic and external stability. This can be done by making reference to the analysis of Hyman Minsky on financial instability. Minsky defines a debt repayment profile based on the balance sheet position of a private firm with incomegenerating capital investments on the asset side financed by liabilities carrying cash payment commitments on the liability side. The repayment profiles classify the relation between the future debt service flows generated by the liabilities and the expected future income flows from operating the capital assets. The most conservative financing profile – hedge finance – is one in which in every future period the firm has a large cushion of expected cash flow receipts over debt service even in the presence of an "external shock" such as chance rise in interest costs or decline in sales or prices or increases in wage costs. The firm with a "hedge" financing profile is thus virtually a risk free borrower. ¹⁰

But, a capitalist system is one in which firms borrow to finance investment and thus a majority of firms employ what Minsky calls a "speculative" profile in which cash flows in some periods may not be sufficient to meet payments commitments in some future periods, but over the life of the investment project the firm will have earnings excesses that enable it to make good

¹⁰ Minsky formulated these profiles as part of his financial instability hypothesis based on the idea that financial crises are endogenous events inevitably generated by periods of financial stability. See, for example, Hyman Minsky, *Stabilizing and Unstable Economy*, Twentieth Century Fund Reports, New Haven: Yale University Press, 1990.

any shortfall – in the language of managerial finance the net present value of the investment is positive.

The third profile arises when some unexpected and unforeseen shock occurs to a firm with a speculative financing profile and makes it impossible to meet current or future cash commitments – the net present value of the investment being financed by the lender becomes negative since its liabilities could not be met by liquidating its assets at their current fair market value – the firm is insolvent. To stay current on its commitments and remain in operation the firm has to attract new lending to pay what it owes in debt service each period. It thus has to convince the original lender to increase the size of the existing loan, or get new loans from other lenders, even though it has little prospect of being able to service its existing loans – unless it is successful in getting additional funding in the future.

The profiles provide a ranking of the potential for a financial crisis of the borrower and the impact on the lender when there is a change in external factors, such as interest rates. A hedge profile requires the largest changes in receipts or commitments to become a speculative profile, while a firm that starts out in speculative financing may become a Ponzi financing profile with a much smaller variation in internal or external conditions since its margin of safety represented by the excess of expected receipts over certain commitments is lower.

We can transfer this framework to the international context by noting that countries also borrow and lend and have external earnings generated by net exports and cash commitments generated by debt servicing created by net capital inflows. The former is roughly the balance on goods and non-factor services plus net labour earnings from abroad and remittances from emigrants, while the latter is composed of the net balance on capital factor services. Thus, a hedge profile for a country would be one in which it has a sufficiently large surplus on goods and services and other non-capital factor service earnings that it will always be a large multiple of its debt service commitments. This definition fits a country with a large negative net transfer of resources. The cost of holding the financial counterpart represented by the negative net carry represents the cost of the hedge against a random external event causing a failure to meet external payments or a withdrawal of foreign assets. Alternatively, it represents the cost of avoiding the acquisition of an IMF "seal of approval".

On the other hand, the Latin American economies in the 1980s can be represented by a Ponzi financing scheme. They did not have a sufficiently large cushion of negative net transfers and thus had to purchase insurance in the form of an IMF "seal of approval" to convince lenders to continue to lend to them even though there was little real evidence of any ability to repay debt. The cost of this insurance was the difference between potential growth and the actual lost decade of growth in the 1980s and appears far higher than the cost of holding excess reserves. It is paradoxical that the IMF was originally to provide a low cost source of adjustment financing based on the principle of pooling of resources through the quota system..

4. Does Hedge Finance Provide Domestic and Global Stability?

As a result of the reduced costs that appear to attach to the strategy of being a "hedge" country most developing countries are now trying to emulate this strategy in order to increase financial stability. However, in an interdependent international trade and financial system it is not clear that this is a viable policy for all developing countries and whether it has a positive impact on global stability.

The first question can be answered by reference to historical precedent. In the immediate post war period the US had a large external trade surplus and some economists suggested that it could be permanent, creating a situation of dollar scarcity. Others argued that it could provide the basis for generating the demand necessary to keep the US from returning to the recession of the 1930s. As noted above, the trade balance is roughly the counter-part of what we have been calling the net transfer of resources and is balanced by the capital account plus the capital services account. Maintaining a constant trade surplus (or a constant trade surplus as a share of national income) requires an equivalent capital outflow (or share of income), given exchange rates. However, the increasing foreign lending that is required generates a return flow of debt service payments that produce a surplus on the capital factor services balance. In the absence of any change in the absolute amount of capital outflows the trade surplus thus has to fall to accommodate the increased factor services balance without exchange rate adjustment.

¹¹ It also provided to conservatives a more acceptable alternative policy for full employment than the Keynesian proposals for deficit financing.

One possible solution would be for foreign lending rise each year by an amount sufficient to cover the increasing debt service payments. Now, instead of the trade balance, and the positive impact on demand, disappearing capital outflows would have to increase without limit. Evsey Domar provided an answer¹² to whether this process could be sustained: as long as capital outflows increase at a rate equal to the rate of interest received in debt service from the rest of the world on the outstanding loans, the rising inflows on factor service account are just offset by the rising capital outflows and there is no net impact on the trade balance and thus on demand. On the other hand, if interest rates are higher than the rate of increase in foreign lending the policy becomes self-defeating and the trade balance eventually become negative to offset the rising net capital service inflows. Eventually the continually rising factor service flows would turn the trade balance negative and the negative net resources flows turn positive.

Thus, the sustainability of the hedge profile is similar to the problem analysed by Domar – it can only work if the rate of interest on foreign assets is equal to or below the rate of increase of the negative net transfers. As long as the foreign assets acquired are highly liquid, with low interest rates, the more likely it is that the policy can be maintained.

However, with respect to the stability of the financial system, it is interesting to note that the Domar conditions for a sustained long-term development strategy based on external financing, on sustained positive net resource transfers are the precise equivalent of the conditions required for a successful Ponzi financing scheme. As long as the rate of increase in inflows from new investors in a pyramid or Ponzi scheme is equal or greater than the rate of interest paid to existing investors in the scheme there is no difficulty in maintaining the payments promised to prior investors in the scheme. However, no such scheme in history has ever been successful – they are bound to fail, eventually by the increasing size of the net debt stock of the operator of the scheme. On the other hand, if the rate of interest on foreign lending is greater than the rate of increase of foreign lending then the system is absolutely unstable and cannot be sustained on even a short-term basis.

¹² Evsey Domar, AThe Effect of *Foreign* Investments on the Balance of Payments,@ *American Economic Review*, Vol. 40, Dec. 1950, pp. 805-26.

In the present case, it is the US that is the counterpart of the Asian developing countries accumulating dollar claims, so it is the US that is operating the Ponzi scheme. Any move to increase interest rates on US dollar claims thus increases the fragility of the scheme because it means that the US has to increase the rate of increase of its foreign borrowing and by implication the rate of increase in its trade deficit. On the other hand, any action to bring about a rapid reversal of the US deficit, or a contraction in US growth would quickly counter Domar's stability conditions and make the system locally unstable, negating the hedge protection of developing countries with large negative net resource transfers invested in dollar claims.

Thus, while the hedge country strategy may provide liquidity protection for a single country, as Keynes warned, there is no such thing as liquidity for the system as a whole, and there is no such thing as a perfect hedge in an interdependent international trading and financial system. The provision of global liquidity requires a global institution based on symmetrical adjustment through automatic provision of liquidity such a proposed in Keynes Clearing Union.