7 International imbalances balance risk

Michael Dooley and Peter Garber
UCSC; Deutsche Bank

This chapter proposes an alternative view of international capital flows that can explain what has occurred in the international macroeconomy in the past fifteen years. It argues that successful economic development is powered by net savings flows from poor to rich countries. The current account imbalances of rich countries do not pull the periphery along by providing global net aggregate demand; they push the periphery by securing efficient capital formation. The US current account deficit is an integral and sustainable result of its role as the center country in the revived Bretton Woods system.

Because the US has been the dominant net importer of savings from international capital markets, conventional analysis suggests that this is an unnatural and unsustainable regime. The idea that capital should flow downhill from rich to poor countries seems to be an obvious theoretical result as well as appealing to normative opinions about the fair or proper role for international capital flows.

Nevertheless the performance of surplus Asian emerging markets in terms of economic growth, low inflation and financial stability has been remarkable under this "unnatural" regime. In a series of papers we have tried to understand the origins of this success and the stability of what has come to be known as Bretton Woods II.

In our framework a current account balance is not a measure of the change in a country's international risk position. A balance of trade in assets creates an imbalance of risks for residents of the rich and poor countries. The rich country is not likely to seize foreigners' assets. In fact, it probably got rich by respecting property rights. Governments of the poor countries often will be tempted to exercise their sovereign power to expropriate foreign investment for populist or geopolitical reasons.

Since a well-intentioned poor country government cannot be readily distinguished from a populist expropriator or prevent the future emergence of one, this creates a distortion that blocks the path to large gross capital inflows and rapid development. The system has to overcome this distortion before residents of poor countries can benefit from fully efficient international financial intermediation.

It is useful to compare the implicit contract between the center and the periphery to a standard derivative contract: a total return swap. A total return swap is a promise by one party to pay the total return (capital gains plus dividends)

on the notional amount of an asset such as an equity or equity index for some future interval in exchange for receipt of fixed income on notional principle over the same interval. The interesting aspect of such contracts for our argument is that the less creditworthy party to the contract is required to post collateral for actual and potential mark to market losses. Failure to provide the collateral terminates the contract, effectively a cancellation of principal on both sides and a taking of collateral to cover at least the current market value.

The application of this contractual arrangement to the international monetary system is straightforward. The emerging country receiving equity investment promises to pay the total return on the equity investment. Since there is a net capital outflow from the emerging country, the equity inflows are more than financed by a claim against the balance sheet of the rest of the world. In the simplest case, these claims take the form of fixed income liabilities of the rest of the world. This produces exactly the basic structure of a total return swap on equity.

The "original sin" of the emerging country is that it is born being a credit risk and that the expected present value of the swap will have to be matched by collateral, as well as some additional coverage for future valuation risk. But how much collateral is needed, and what form does it take?

In typical private sector total return swaps, collateral is determined by multiplying potential volatility of the underlying asset over the next ten days by a factor dependent on the credit risk of the counterparty. For a total return swap on a highly liquid US equity, a hedge fund (less creditworthy) would be asked for 15%, for the S+P index 10% collateral would be required, for swaps involving China equities 50% initial margin would be required.

But this is only the initial collateral required for new investment when the initial value of the swap contract is zero. If, as seems likely, the total return on direct investment exceeds the return on the fixed interest leg, 100% of the mark to market gain on private contracts must be collateralized every day. The implication is that, in addition to the collateral required for the new flow of direct investment, the mark to market gain on the stock of direct investment requires additional variation margin.

The temptation to seize foreign assets actually grows with the success of the investments associated with those assets. While an initially balanced trade in assets would be less of a target for seizure, the very success of a rapidly growing emerging market country creates an imbalance of claims and therefore credit risk as the equity grows in value. Hence, a balanced trade in assets means a growing imbalance in risk to the detriment of the industrial country.

The mechanical but important implication is that a successful development strategy—where investment pays off with large returns—generates capital gains on direct investment and therefore rapid growth of collateral balances. We can get a feel for the economic importance of these effects by estimating what collateral would be required by private investors for direct investment in China and other emerging markets. Our calculations (Dooley, Garber, Folkerts-Landau, 2008) suggest that in 2006 90% of China's international reserves and 98% of the

reserves of all other emerging markets would have been required as collateral for gross inward direct investment.

The nature of the collateral is so obvious it is hard to see. If the center cannot seize goods or assets after a default, it has to import the goods and services *before* the default and create a net liability. If the periphery then defaults on its half of the implicit contract, the center can simply default on its gross liability and keep the collateral. *The periphery's current account surplus provides the collateral to support the financial intermediation that is at the heart of development strategies*. The interest paid on the net position is nothing more than the usual risk free interest paid on collateral.

A country that has not generated a net international investment position cannot offer collateral. Argentina for example clearly defaulted on its international obligations to private and official creditors yet none of its assets were seized. Why not? At the time of default the government's liabilities to foreign governments, largely in the form of liabilities to the IMF, exceeded the Argentine government's foreign assets. Argentina had no collateral.

Conclusion

Contrary to almost universal opinion, successful economic development is powered by net savings flows from poor to rich countries. The current account imbalances of the rich countries do not pull the periphery along by providing global net aggregate demand; they push the periphery by securing efficient capital formation. Seemingly balanced shifts within a country's capital account actually drive its current account through a need to collateralise resulting risk imbalances. The US current account deficit is an integral and sustainable result of its role as the center country in the revived Bretton Woods system.

We believe that this view of international capital flows is far more satisfying than the standard inter-temporal consumption theory of imbalances. This view has the advantage of actually explaining what has occurred in the international macroeconomy in the past fifteen years, while the textbook theory has nothing to say about this epoch other than that the reality got it wrong. Moreover, this view generates a number of testable hypotheses relating the size of net capital flow imbalances to the size of gross capital flows and the articulation of gross flows into equity and fixed income components, a subject on which the textbook model is silent.

Reference

Dooley, Michael, David Folkerts-Landau and Peter Garber, (2008) Asia, Interest Rates and the Dollar, Deutsche Bank collected volume.

About the Authors

Michael Dooley joined the faculty at UC Santa Cruz in 1992 following more than 20 years service at the Board of Governors of the Federal Reserve System and the Research Department of the International Monetary Fund. His published research covers a wide range of issues in open economy macroeconomics including work on crises in emerging markets, capital controls, international capital movements, debt restructuring, capital flight, and liberalisation of financial markets.

Peter Garber is Global Strategist at Global Markets Research of Deutsche Bank.