Global models of long term growth and capital flows

Comment on M. Aglietta "World Growth and International Capital Flows in the 21st Century: A Prospective Analysis with the INGENUE2 Model"

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The question of the appropriateness of global capital flows is examined here in the context of a global model of long-term growth prospects, capital requirements, and implied (net) capital flows. In this paper, the model used is essentially a production function incorporating detailed demographic changes and a "catch up" process for total factor productivity (TFP), taking the US as the benchmark for "best practice" TFP. Over time, developing countries become better off in terms of GDP/head thanks to the assumed TFP catch up effect as well by increasing capital/worker. For any particular country, total economy GDP rises faster if the population increases rather than falls. The argument put forward is that net capital flows from the developed to the developing countries should be positive – suggesting that the current position in which the US is a major net importer of capital is fundamentally flawed and should be changed.

In this type of model, it is clear from the theoretical framework that the results obtained will generate capital flows to developing countries in general. GDP increases obtained through the assumed rise in TFP will tend to make returns appear attractive versus developed countries and the gains from raising capital/worker will also be high. On average, relatively high population growth in developing versus developed countries only adds to the requirement for a rapidly rising capital stock and thus investment inflows in poorer countries. This outcome appears similar to the type of forecasts that may be obtained from rankings of "growth potential" and/or "potential FDI", e.g., using indicators such as those estimated by UNCTAD. These models largely rely on the concept that a very poor country has ample scope to "catch up" with the "leader economy" (say the US) and can therefore grow very rapidly from a low base, implying potential net capital inflows.

Fast growth spurts are possible for poor countries but such simplistic analyses/models tend to skip over practicalities such as the problem of maintaining balance of payments equilibrium, avoiding deteriorations in debt that cause risk premia and interest rates to rise sharply, achieving balanced and profitable investment growth across all sectors of the economy and keeping public finances on a sound footing. In contrast, evidence suggests that most bursts of rapid growth end in crises of one kind of another: the growth path is not so smooth after all. It therefore seems plausible to understand that over the course of a country's development, especially once the initial "take off into growth" is achieved, there may be cycles in which it moves in and out of trade deficit, sometimes acting as a net exporter rather than importer of capital.

For the "emergers" such as Asia that are well beyond the problem of the initial "take off", it may thus be plausible to consider that they may pass through a phase of reducing down debts and risk premia before embarking on any new phase of "catch up" and capital imports. The dash for growth seen in Asia up to the mid-1990s, involving substantial capital imports, was close to the model proposed in this paper. However, it ended in the Asian crisis of 1997-98. Given the problems encountered, these countries needed a period of consolidation and review of investment strategies and returns to get growth back into balance. Caution implies that it takes time to rebuild sufficient confidence to allow a dip into trade deficit financed by another burst of net capital inflows. Given the now large size of the "emerging" world, we should maybe allow for the view that net capital flows into this region from developed economies could be negative during some periods, without this being seen as perverse.

On a very broad long-run basis, the model ought to be right but we need to take account of cycles and

intermediate stages of development, especially as this matters for policy prescriptions. Of course, if the paper really has in mind net capital flows from the “more developed regions including emergers” to the very poorest nations, then this flow has remained positive and looks likely to remain so for many years – in compliance with the long-term model. There are a few technical issues that might be raised about the model and assumptions used (e.g., the lack of TFP convergence for the major developed countries even over 100 years and some of the demographic projects) but these do not change the main thrust of the argument.