

Simon Johnson: One Page Summary

15.015, class #3: Exchange Rates for Emerging Markets

Warning: The simple frameworks we use in this class are intended to help develop your intuition. You always need to pick the right framework to answer the question at hand. None of them are complete pictures of reality. Overreliance on models is very dangerous.

The BBNN model is a simple way to diagnose the economic position of a country, in terms of (a) its current account balance, and (b) its level of employment. We can also use it to think about policy issues, but we have to be very careful not to oversimplify these.

On the vertical axis is the real exchange rate, written as e/w , where e is the nominal exchange rate and w is the nominal wage. When nominal wages go up and everything else stays the same, the real exchange rate appreciates (e/w falls) – and the country is said to become “less competitive”, meaning that exports will tend to fall and imports will tend to rise.

Remember that e is written here so that a higher value means more local currency is needed to buy one unit of foreign currency. A higher e is therefore a nominal depreciation which, other things equal, will cause a real depreciation and the country becomes “more competitive”.

On the horizontal axis is “domestic spending” ($C+I+G$). Fiscal policy and monetary policy can, in principle, affect this.

The BB curve, which slopes up, shows combinations of the real exchange rate (e/w) and domestic spending ($C+I+G$) at which the current account is balanced (exports equal imports). A more depreciated real exchange rate (higher e/w) will increase exports and reduce imports, which is an increase in the current account surplus (or a reduction in the current account deficit, if that is the starting point). An increase in domestic spending will tend to increase imports, pushing down the current account surplus.

The NN curve shows combinations of the real exchange rate and domestic spending at which there is “full employment” and slopes down. Full employment means that unemployment is at what is called the “natural rate”, where there is not pressure on wages to increase. If employment is above that level, we say there is “overheating” or inflationary pressure. If employment is below that level, we typically have too much unemployment.

When the real exchange rate appreciates (so e/w falls), this tends to reduce exports and increase imports – which will push up unemployment. An increase in domestic spending can, in this framework, move the economy back to full employment.

One easy way to remember the position of the curves and the policy issues is to think about where the US was in 2005 (i.e., before the financial crisis). It was on the NN curve (full employment, roughly) but below the BB curve (current account deficit).

For some countries, you can think of a “social peace” line that represents a minimum real wage below which people become very happy (this makes more sense in a country that imports a great deal of consumer goods and these are priced internationally in another currency, like the US dollar). Given the way we draw BBNN, this is a ceiling on e/w .

If you start with a current account deficit and full employment, but it suddenly becomes impossible to finance the current account deficit (i.e., no more capital flows into the country), you need a real depreciation and a reduction in domestic spending. Think Greece.

MIT OpenCourseWare
<http://ocw.mit.edu>

15.015 Macro and International Economics
Fall 2011

For information about citing these materials or our Terms of Use, visit: <http://ocw.mit.edu/terms>.