

Simon Johnson: One Page Summary

15.015, class #7: Japan's Lost Decade

RECAP: BBNN, with a focus on the BB curve

We live in a world of “open economies,” meaning that trade – imports and exports – are large relative to GDP. We have also witnessed an increase in net capital flows – this is the counterpart of current account imbalances – and an even bigger increase in gross capital flows across borders.

We use the BBNN framework to diagnose where a country is, with regard to (a) distance from “full employment” (sometimes called “internal balance”) and (b) its current account deficit or surplus (sometimes called “external balance”). No model should be used in a mechanical manner – but rather to guide our basic intuition and to create the basis for a more organized discussion about potential complications.

The real exchange rate is on the vertical axis, written as e/w where e is the nominal exchange rate (in local currency per unit of foreign currency, so an increase is a nominal depreciation of the exchange rate) and w is nominal wages in local currency (but we could include other labor costs, including payroll tax). “Nominal” means not adjusted for inflation.

Think of the decision by a multinational corporation regarding where to locate a new plant or to sign up a supplier – you compare across countries by converting wages and other labor costs into a common currency (often US dollars). We tend to think in terms of US dollars because that is the unit of account for many international transactions.

We often talk about non-US countries, so “the dollar” is a short-hand for their trade-weighted nominal exchange rate against all trading partners. For the US, the same logic applies but now the dollar is the domestic currency. As long as you think and talk in terms of “depreciation” and “appreciation” – and remember what those means – you will not go wrong.

Domestic spending ($C+I+G$, sometimes known as absorption) is on the horizontal axis. This is what domestic residents – households, firms, and government – actually spend. When domestic spending is higher, all other things being equal, imports will be higher. During a domestic boom, imports tend to increase; in a recession, imports fall.

When nominal wages (or total labor costs) go up (higher w) or the nominal exchange rate appreciates (lower e ; cheaper to be a tourist overseas but more expensive to export), this will reduce exports and increase imports. Starting at a point of current account balance, such a “loss of competitiveness” – using the term in a specific economic sense – will tend to push the country into a current account deficit. To maintain a current account balance, $C+I+G$ must fall – as this will reduce imports. So the BB curve slopes upwards -- showing combinations of e/w and $C+I+G$ that will produce current account balance.

If a country is below the BB curve, it has a current account deficit – imports are greater than exports. When the exchange rate is floating, a current account deficit must be financed by a net capital inflow (e.g., for the US in recent decades). When the exchange rate is fixed, a current account deficit may be financed by a net capital inflow (which is what the European periphery had in the past decade; Greece, Portugal, Ireland) or by running down foreign exchange reserves.

If a country tries to hold a fixed exchange rate while it has a current account deficit and net capital outflows (or insufficient inflows), it will tend to lose its reserves. Eventually, it either has to cut spending (reducing imports) or devalue the exchange rate.

If a country moves from one fixed exchange rate to another, we call that devaluation. If a country moves from a fixed exchange rate to a floating exchange rate “regime”, we usually call that a depreciation.

Countries with a current account deficit frequently face “pressure to adjust” – meaning to cut spending and/or have a real depreciation (lower wages or a more depreciated nominal exchange rate). Countries with a current account surplus face less pressure – if they hold their exchange rate fixed, they will accumulate reserves (China in recent years).

The NN curve shows combinations of real wages and domestic spending for which the economy is at “full employment” – meaning that if employment is any higher in the short-run, we would expect overheating and inflation.

Japan

During the long post-war boom Japan had rapid productivity increases in the traded goods sector, i.e., in firms that were exporting or competing against imports. Think of this as a shift down in the BB curve. If the economy starts roughly at the intersection of BB and NN and e/w did not change, the country now has a current account surplus.

Over time, real wages increase (through nominal wage increase and/or nominal appreciation) and living standards rise. This is consistent with continued current account surplus if labor productivity continues to keep pace. “Unit labor costs” as labor costs adjusted for productivity.

Japan had a big credit boom in the 1980s, increasing land prices and also large investments in plant and equipment. With the collapse in the stock market after 1989, other asset prices fell, including land – this is a “negative wealth effect”. Corporations wanted to save more, in order to pay down their debts. Households continued to save a great deal.

The government attempted to offset this by “saving less,” i.e., running budget deficits. But this did not bring Japan back to rapid growth. Monetary policy was also not effective.

In terms of the ISLM framework, think of the LM curve as being flat at near zero over the relevant range. In principle, the IS curve can be shifted to the right to boost the economy – and this was the US advice to Japan. But we should not assume that increasing government spending or cutting taxes will always and everywhere stimulate the economy.

It probably would have help to “recapitalize” the banks earlier. Banks with little capital (i.e., little shareholder equity) relative to potential losses are less inclined to lend or to take reasonable risks. This may have been a constraint on the recovery – if it prevented firms from borrowing and investing. But many firms had too much debt already and wanted to pay it down.

Japan did not have high unemployment. There was moderate deflation, but not the massive collapse of credit that was seen in the Great Depression. Growth in output *per working age population* since 1990 has been similar to Europe and the US. Population is declining.

Japan naturally slowed down, as it approached the “technological frontier”. It is easier to catch-up in terms of technology than it is to create new technologies – and the catch-up phase, if you can pull it off, is typically associated with faster growth.

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