

Practice Old Exam Questions and Sample Answers

From the year 2001

1) What monetary regime do you expect Argentina to have in a year? Are there any lessons to be learned for Argentina from the EMS countries?

A: This is a more speculative question without a single correct answer. To answer it correctly, you should certainly consider assessing the current situation. Argentina right now is locked in a 1:1 fix with the US through its “law of convertibility” currency board. Argentina cannot change its nominal exchange rate within this framework to improve its competitiveness, and it is proving difficult for Argentina to depreciate the real exchange rate by inflating more slowly than the US. As its largest trading partner Brazil had its currency crash in January 1999, Argentina has seen its competitiveness suffer even further. This has exacerbated a recession that has been going for three years, resulting in a (partly cyclic) fiscal deficit, a current account deficit, and high unemployment. One easy solution (at least in principle) to the problems would be devaluation, which would allow looser monetary policy, much as the UK did in 1992.

Thus Argentina is facing almost the same problems faced by the EMS in 1992. If it plays by the rules of the game (as France did), it will likely face continued slow growth. If it changes the rules (as the UK and Italy did), it may be able to grow faster. But don’t forget that rich OECD countries typically do well after devaluations (in part since their debts are denominated in their own currency), whereas developing countries (with “original sin”) have debts denominated in foreign currencies. Thus many of the Asian countries (and e.g., Mexico in 1995) had sharp recessions following devaluations, before growth resumed. The question is: how much speculative pressure will Argentina have, and will the authorities have the will (and political backing) to withstand the pressure? If the former is high and the latter is low, Argentina may well be floating with a completely new monetary policy within a year (or so).

2) Give a plausible circumstance under which you would expect EMU to break apart. Be specific!

A: EMU is the Economic and Monetary Union in Europe that began in 1999; the euro will be physically introduced in 2002. All the EU countries except the UK, Denmark and Sweden are currently “in” after an arduous process in meeting the “convergence criteria.”

It is conceivable though very unlikely that countries will leave EMU because average Euroland inflation rises (or falls) to unacceptable levels. It is much more likely that a country will choose to leave (through some unspecified process) if average EMU inflation is reasonable, but conditions within a single country are poor.

To understand the latter, think of Mundell’s optimum currency area criteria. Mundell argued that regions should share the same currency if: a) there is labor mobility between them; b) their business cycles are tightly synchronized; c) their prices and wages are flexible; d) there is some method of sharing risk between them (e.g., through a series of fiscal transfers); and e) there are lots of gains to sharing a single money because international trade is deep.

Most agree that Europe does not currently share most of these characteristics. Since integration is likely to grow over time and the ECB is still a young and relatively untried institution, the risks are sooner rather than long-term. A country which is growing quickly (because of a positive idiosyncratic shock) is one that will experience inflation if Euroland-monetary policy is too slack for it (e.g., Ireland). As (German) workers are not flowing to Ireland, and there is no supra-national fiscal authority of any size in Europe, Ireland may decide that in order to reduce inflation to acceptable levels, it will have to re-establish domestic monetary sovereignty. A more realistic scenario is probably one where a country is hit by a bad shock, and is growing more slowly than it would like, since monetary policy that is fine for Europe is too tight for it.

Another scenario for disaster is where there is a financial crisis which spreads from one country to another since there is no Europe-wide lender of last resort, and the individual central banks which are currently in charge of regulation their financial sectors may not be all acting appropriately.

3) Are open economies more prone to large business cycle swings than closed countries? Should they be?

A: This is an interesting idea that Dudley implicitly considered in his talk. His view was that the openness of the economy acted as a shock absorber; he justified that thought with the idea that the current account moves counter-cyclically. That is, since the current account turns into deficit when the economy grows quickly (compared to trend) means that the current account acts a shock absorber. His conclusion was that since the US and other economies were growing more open, business cycles would become smoother in the future (the opposite of the first statement of the question).

It's easy to understand this with the Mundell-Fleming model. We argue that the current account is a function of three things: the real exchange rate, domestic output and foreign output. When domestic output rises, domestic demand for imports rises and the current account deteriorates. Hence the "automatic stabilizer" role that implies that closed economies are more prone to large business cycles than open ones.

Of course one problem with this view is that Dudley (and the preceding paragraph) considered only the response of the external sector (the current account) to domestic shocks. But more open economies may be hit by external shocks that wouldn't affect them if they were closed. For instance, Mexico fixed to the US before 1994, and was then hit by the shock of rising American interest rates. This gave rise to the Mexican crash and the subsequent Tequila attacks. Ditto with the numerous contagious currency crises that have followed. Currently, Mexico is being hit by slowing American growth; Europe is being affected by the real depreciation of the euro. More generally, open economies are probably hit by more shocks than closed ones, and may thus be more prone to large business cycles.

The empirical evidence is very weak either way; if there was a "big fact" we'd know it by now. So the answer to both parts of the question is "no."

From year 2000

1) Should large countries like Japan and the US sterilize their interventions? Do they?

A: Sterilization is offsetting foreign exchange intervention by offsetting open market operations so that the monetary base and hence the money supply do not change. It's unlikely to be an effective strategy for very long given the high level of capital mobility for large OECD countries like the US and Japan. Nevertheless, essentially all intervention is in fact sterilized in practice since these countries are basically floaters; they only intervene occasionally and almost never change the money supply or interest rates when they do. If you have any doubts, think of the last time you heard of a country like Japan or the US changing interest rates in response to a foreign exchange development!

2) What do you expect to happen to Japanese interest rates and inflation over the next three years? What should?

A: The big question is: what is going to happen to the liquidity trap situation that Japan currently finds itself in? If they pursue more of the same – insignificantly changed fiscal policy (or fiscal tightening), and no change in monetary policy, then there is no reason to expect much to change. Monetary policy is constrained by the near-zero interest rates (though foreign exchange market intervention is possible); fiscal policy is constrained by the high and rising level of national debt. Indeed, given the lags in both monetary and fiscal policy (especially outside for the former and inside for the latter) mean that little will probably change for the next year or so. If the Bank of Japan remains conservative (to guard it's newly-won independence) and the Ministry of Finance does too (because of debt worries), then little may happen to end the deflation. But the standard Keynesian argument for a large fiscal stimulus, money-financed to stimulate inflationary expectations, seems like the reasonable way to go. Referring to Krugman's arguments will help you in this case.

3) Since recent currency crises, many developing countries have shifted from fixed to floating exchange rates. Why? Do you think that this is in their best interests? Do you expect the trend to continue?

A: Most countries changed exchange rate regimes in the middle of a crisis, so that they probably did not choose the new regime carefully and optimally. Examples would include Mexico ('94), Thailand and Korea ('97), Russia ('98) and Brazil ('99). Standard theory says that the sources and frequency of shocks should dictate the exchange rate regime. If shocks are mostly real, then a floating rate regime provides

income stability; there may also be an argument to float if the central bank has “improved” (become more stable/trustworthy/competent, etc.). The latter may be true (certainly there has been a world-wide trend towards more independent central banks), though it’s probably an effect of the new regime, not a cause. But it’s hard to think that the basic underlying economic shocks have changed that much. Rather, increasing capital mobility makes it harder to maintain fixed rates, hence we see more crises in fixed exchange rate regimes. If this trend continues (as seems likely) and crises remain painful (ditto), it’s likely that we’ll see more floating even if it’s a shift away from fixing rather than towards floating.

4) Brazil floated the real in January 1999 and immediately began to go into recession. Why did the authorities choose not to respond with expansionary monetary or fiscal policy?

A: Inflationary expectations are key. Brazil had used the fixed exchange rate (unsuccessfully) to tame its untrustworthy central bank and to force fiscal policy to become restrictive. The former worked; the latter didn’t. Expansionary monetary policy has few results if people’s expectations are very rational (i.e., expected inflation moves quickly in response to developments), since the aggregate supply curve becomes vertical even in the short run. With a floating exchange rate, fiscal policy is hobbled for Mundell-Fleming reasons. Further, money-financed expansionary fiscal policy often leads to hyper-inflation, as it is in fact in Brazil as recently as the early 1990s.

5) Consider a small open economy with a floating exchange rate. Suddenly, for some exogenous reason, foreigners lose confidence and demand a risk premium to hold domestic bonds. Describe the effect on the economy and give the intuition. Can you think of a country that fits this scenario?

A: Mundell-Fleming with floating exchange rates and perfect capital mobility leads to a conclusion that is, at least initially, non-intuitive. In particular, capital flees the country unless the domestic interest rate rises. But since the money supply is exogenous, the new equilibrium is established where the LM curve intersects (i^*+RP), that is, at a higher output level. This is because there is an enormous depreciation, so that the country gains competitiveness and net exports rise enormously, shifting the IS schedule out and leading output to rise. Many of the countries hit by the Asian crisis fit the scenario (e.g., Korea or Thailand). Of course, the model predicts a continuous increase in output that didn’t happen, probably because the model ignores any bad effects of “original sin” i.e., the inability to issue domestically denominated debt; countries with original sin have financial systems that often collapse when a currency crisis hits.

From year 1999

1. Was Brazil right to float the real?

A: The consensus thus far is pretty positive. Brazil floated when it still had a lot of reserves so that it has been able to avoid a liquidity crunch in rolling over short-term debt, such as the one that affected Korea in 1997. (A caveat: gross reserves seem reasonable; since foreign liabilities are unknown, we don’t really know the state of their net reserves.) Thus far it has continued to pursue tight monetary policy (real interest rates remain very high), inflation has remained low thus far and the economy is going into recession as potent contractionary monetary policy starts to bite. This is causing domestic pain, though it does restore international investor confidence (Brazil has been able to return to the international capital markets). In the absence of internal political will *before* January 1999 to tighten fiscal policy, Brazil’s exchange rate switch seems sensible. Under floating rates and capital mobility, monetary policy is potent and fiscal policy is not; it’s hard to argue that Brazilian fiscal policy has been more responsible than Brazilian monetary policy of late.

But it’s early days yet: Brazilian monetary policy under a float is not yet established as credible. As a result, it has to pay for a risk premium (so that $I=I^*+RP$) and suffer a worse domestic recession to compensate investors for the possibility of a return to the bad old days of Brazilian fiscal profligacy, loose monetary policy and hyper-inflation.

2. After the EMS crisis of 1992, the UK did well. After the peso crisis of 1994, Mexico did poorly. Why?

A: Both countries did indeed suffer speculative attacks on fixed rates and undergo large depreciations as a result of their decisions to float. For the UK, this meant a reduction in interest rates and looser monetary policy (LM curve shifting right). That, combined with the competitive advantage gained by the devaluation, made for a British recover. But Mexico's banking sector had large un-hedged foreign debts (unlike the UK, which borrows in pounds like most rich OECD countries). When the peso crashed, these remained constant in dollar terms, but rose when measured in pesos. The banking sector was hard hit, and stopped extending credit; this led to a collapse in Investment (both the IS and the LM curves shifted left). Hence the short but very sharp Mexican recession of 1995.

3. Russia is currently pursuing expansionary fiscal policy without obvious effect; Korea's expansionary fiscal policy seems to be having a strong (positive) effect; Canada is contracting fiscal policy without visible negative effects. What's going on?

A: Treat the statement as basically true (which it is). All three countries have floating rates, so it can't be the exchange rate regime that explains the difference. Rather, the difference is in the way that government expenditures are financed. You may recall that I promised a question in this area.

Russia is financing its expenditures at the margin with money finance (seigniorage). In the context of a low-inflation OECD country, this would shift both IS and LM curves out, raising output. But if prices and inflationary expectations rise quickly (as is true in such circumstances), these shift back the IS and LM curves. Fiscal policy and printing money only then has inflationary effects, a la Fisher Effect.

Korea is pursuing deficit-financed fiscal expansion, so its IS curve is shifting in the conventional way. Canada is working hard to maintain a balanced budget and is adjusting both taxes and spending approximately equally at the margin. This makes for very small shifts to goods market equilibrium and hence output.

From year 1998

1. Do you expect Brazil to devalue within a year?

A: The betting would have to be against a devaluation (or flotation). Cardoso is running for re-election as the man who conquered inflation is likely to take further steps towards protecting the currency, and Brazil has over \$50 billion in reserves. On the other hand, most other Brazilian stabilizations have ended in failure. The fiscal deficit is large and not shrinking as a result of constitutional conflicts between the central and state governments. The current account deficit is large and the real exchange rate looks over-valued relative to PPP. A number of the standard "early warning indicators" are flashing already. Unless a monetary contraction, firmly backed up by a fiscal contraction, is undertaken soon, the prospects look bad (though not in the short-term). Since this may be politically unpalatable in the short run, a good bet is that they will occur shortly after the election.

2) Why was there a Korean financial crisis in December 1997?

A: It's impossible to understand the timing of the Korean attack. Thailand, the Philippines, and Indonesia had been attacked much earlier – in July 1997; so why the lag? Also, Korea doesn't compete much with those countries, and is much wealthier and larger. And the SE Asian attacks were currency crises, whereas the Korea crisis was a financial panic of an illiquid (but not insolvent) country.

The answer has to lie in long-term problems which came to a head when there was an excessive amount of short-term foreign debt that was due to be rolled over in late

December. The long-term problems had to do with excessive lending of banks to Korean conglomerates (chaebol) for unprofitable projects. This excess investment was driven by some corruption and the implicit under-writing of private sector debt by the government, much as in the American S&L crisis.

3) Will EMU make financial crises more or less common in the future?

A: It will certainly eliminate intra-European currency crises such as the currency crises of 1992-93 and their predecessors. On the other hand, it will do little to eliminate currency crises between the dollar and Europe. But the latter are rare; there have only been two in the post-war period (the dollar over-valuation of the mid-1980s which was resolved at the 1985 “Plaza” Agreement, and the dollar over-valuation of the late 1960s which was resolved by the breakup of Bretton Woods).

The bigger issue is the effect of EMU on panics such as bank runs. The ECB will not be a lender of last resort (as the Federal Reserve is in the US). So banks which operate in Europe will be more vulnerable, and Europe may end up with more financial crises. On the other hand, this may force banks to take fewer risks (or government to supervise and regulate banks more effectively). As an independent central bank oriented towards price stability, the ECB may create a more stable economic background, tending to reduce financial mis-calculations and bankruptcies. And don’t forget, (small) banks go bankrupt all the time in the US with little or no effect on the macro-economy; it’s a by-product of competition.

4) What is the economic rationale for the “Growth and Stability Pact”?

A: The pact limits expansionary fiscal policy for “ins” after entry into EMU, and imposes penalties on most countries which violate the 3% limit (of budget deficit/GDP) after entry.

There is a (mostly German) fear that excess budget deficits raise the potential for inflation. Of course, the driving force should really be the level of government debt, since “surprise” inflation reduces the debt/GDP ratio if the debt is nominal (and the inflation is unexpected; otherwise the Fisher Effect kicks in to raise the nominal interest rate). This is the standard “dynamic consistency” argument discussed in chapter 12; the pact is a rule to reduce the incentives for European inflation. Given that the tool of domestic monetary policy will be lost after EMU, one might think that domestic fiscal policy should be allowed to play a bigger role after EMU. And one might also argue that private capital markets will charge risk premia which differ by country after EMU, thereby providing market incentives for governments to conduct reasonable fiscal policy (much as American states and municipalities pay different rates for their bonds). Still, paying for government expenditure can always be pursued by: a) taxes; b) debt; and c) seigniorage. Reducing the debt option may provide fewer incentives for governments to encourage the ECB to engage in a “surprise” inflation to reduce debt (i.e., exercise option c); that is, the ECB may be more politically independent because of the pact.