

Answer questions 1-3 (question 4 is optional) Try to keep your answers to 1-2 pages typed page per section adding graphs or equations by hand or using an equation editor. Cover key points first, refer to readings and use diagrams or model equations where possible. Always keep a copy of your exam, no matter how you turn it in. (Tirole chapters are on your CD, but I will post the relevant sections as well). Questions regarding this exam are welcome during class when everyone can hear the answer. Staple each question (#1 and #2) separately, putting your name and the question number on a header or footer – on every page if possible. I sort and grade each question separately, assigning grades across each group of Masters or PhD student answers. Hence, you can discuss issues/reading related to the exam, but it is not in your interest to share answers. If you have questions about a question or reading, please email me or ask during the next class. This exam is due Tuesday November 11th at 9pm, late exams will result in reduced grades.

1. IMF BOP adjustment programs evolved slowly and with much controversy. Started in 1953, originally conditionality programs lasted one year with a goal of maintaining the par value system of fixed fx rates and with preventing harmful competitive devaluations (“beggar thy neighbor” policies). The core “one size fits all” IMF program includes devaluation of the domestic currency tempered by monetary and fiscal restraint. (a) Why do countries turn to the IMF, typically? Given this motivation, use the financial programming framework explain and demonstrate the rationale for limiting net domestic credit or money growth. What are the short and long run objectives of slowing credit growth? Using the MABP model to explain [Mussa and Savastano’s \(1999\)](#) argument that standard IMF conditionality programs do not really require contractionary monetary policy (hint: Southern cone). Explain and qualify the rationale for limits on government spending (hint: food riots)? Should the IMF target the PSBR? Explain? (b) Assuming the IMF is not sadistic, why is stabilization policy a key tool of the IMF (i) today, (ii) pre and post 1973, and (iii) particularly in the 1990s? Why might developing country finance ministers occasionally welcome but not want to “own” IMF conditionality? (c) As in 1948 and 1954, Mexico’s 1995 crises led to major changes in IMF adjustment programs. Why was Mexico’s credit line so large (nearly \$60B, \$23B from the IMF)? Mexico’s repaid its IMF & Treasury loans early: the U.S. Treasury made \$275 million profit charging above market interest rates on its loans. Why doesn’t the IMF just offer to loan countries any amount they need, at above market interest rates? (see Tirole (2000) and Fischer on this LOLR function). (d) In late 1994 Mexico devalued, raised interest rates and tightened fiscal and monetary policy—a very traditional IMF program. GDP fell sharply in 1995 but recovered quickly. But later in the 1990s the IMF did not insist that Russia, Brazil and Argentina devalue their currencies as a condition for loans. Why this shift away from the traditional “one size fits all” program discussed above? [Mussa and Savastano’s \(1999\)](#) “new” more flexible IMF program consists of: (i) new external financing (ii) demand restraint (stabilization) and (iii) structural adjustment. What is new, what is missing? How does this new program reflect changing global economic realities of the 1990s? (e) Eventually Brazil and Argentina let their currencies go. Should the IMF have demanded both countries to devalue or float earlier? When might Mussa-Savastano “no devaluation” programs be warranted? (hint: 1989, 1991 and 1994)

2. Many blame volatile private capital flows for financial crises in emerging markets. (a) Use the TNT diagram to show how stabilization policy alone might improve the trade balance but raise unemployment. Show how an RER depreciation of the currency can fix this problem. With a floating exchange rate, employment should increase automatically when dollar shortages appear, unless a country has a large external dollar debt: discuss why this is relevant to the current crises in emerging markets. Why might the IMF want to step in and make loans to countries experiencing large private capital outflows, especially in the present global environment? How does a fixed exchange rate accentuate the boom and bust risk of large swings in private capital flows or sudden stops? When is inflation most likely in the CA cycle with a fixed vs. floating exchange rate? Assuming banks lend more when land prices are high but less when the economy is heading to recession, which exchange rate regime is likely to create the least economic volatility? (b) Tornell, Westerman and Martinez ([TWM \(2004\)](#)) argue that in countries with open capital accounts, portfolio flows but not FDI boosts investment in the non-tradables sector. Suppose as predicted by TWM, capital flows associated with capital account opening cause the TNT PPF to shift (why?). Given this shift in the ppf, will the same capital inflow have a greater or smaller effect on the RER? Draw a parallel with foreign aid: how might a surge in post-conflict or HIV-Aids related aid affect the TNT diagram? This may help explain why aid rarely causes the Dutch Disease (see [Chapter 4 of UNDP-CPR](#) pp. 123-126). Show this using the TNT diagram. If TWM are correct, capital inflows overall (portfolio + FDI) can generate more growth with less harmful effects on the traded goods sector. Explain. [Note that according their Table B-1 Korea and Thailand liberalized in the late 1980s—how do TWM determine when countries “open” their capital accounts?] Explain TWM’s argument regarding how portfolio flows

increase the risk of financial crisis? Does this seem relevant to the current crisis (a sudden stop in private credit flows starting in the U.S. and Europe)? *Suppose higher non-tradables sector growth leads to more rapid growth of private domestic credit, as banks lend for new building for example. Use the financial programming model/MABP to discuss the effects of a burst of domestic credit growth.* (c) Use elasticity approach, the TNT and Metzler S-I diagram to show how a sudden surge in capital inflows (or a fall in world interest rates) affects domestic output (employment) and inflation with a fixed and a flexible exchange rate (make two columns-- some models may have no predictions for inflation/employment). For example, use the equation at the bottom of the financial Programming handout (PhD students see Chapter 9, p.363) to discuss how a rise in foreign capital inflows F could might affect the money supply depending on what happens to R . Create a small table summarizing your results. Some of these CA models suggest capital inflows are contractionary while in others capital flows are expansionary. What accounts for this difference? Which of these potential inflation or unemployment problems does a flexible exchange rate mitigate? Explain. e) *Given the above arguments, what could the Asian countries have done to capture the benefits of capital inflows while making a crisis less likely? What have they done since the crisis? Has this helped them during the current crisis. Returning to the theme of 1(e) above, how might the IMF have reduced the “contagion” that followed the collapse of the Baht (suggestion:: answer within the confines of the demand for dollars diagram)? Why would this have made IMF critics such as J. Sachs and J. Stiglitz even more unhappy? Would instituting capital controls as Malaysia did (without the IMF’s consent or participation) have reduced or increased contagion? Would Tirole’s “new role” for the IMF have helped reduced contagion (given what cause Asia’s crises in the late 1990s)?*

3. In “[Managing the World Economy](#)” K. Rogoff (2002) argues “the IMF has not been a cheerleader for burgeoning current-account imbalances, especially when they start to look unsustainable... But at the same time, if we begin to think ahead, it becomes obvious that the real challenge is not to reduce current-account imbalances but to find ways to sustain bigger ones, albeit properly directed.” (a) Use the inter-temporal (c_1 vs. c_2) consumption or Metzler diagram to explain why capital mobility can especially important for poor countries, using the fact that poor countries usually have a scarcity of capital, high discount rates and export commodities What benefits do “properly directed” CA deficits provide to rich and poor nations alike? (b) Use the sustainable CA deficits handout to discuss why Asian current account balances looked very sustainable to investors and economists alike during the early 1990s (see Goldstein on the causes of the Asian crisis)? Should private lenders have realized these were transitory problems and continued to lend. Even if they think these problems are transitory, why is it difficult for them to continue lending in a crisis? (you might refer to Tirole’s 2000 [Intro-Chapter 1](#) arguments here—see question 4)? (c) *PhD students only: Use the sustainable CA formula with the RER, discuss how the Balassa-Samuelson effect turns “original sin” or dollarized liabilities into an advantage, raising developing country sustainable CA deficits.*

4. [[EC: involves reading chapters 2-3 and chapters 6-8 of Tirole 2000](#)] The role of the IMF has evolved, slowly, over time. Many argue more change is needed, especially now in the midst of a new crisis. Tirole (2000) for example offers quick summary of reform proposals and a proposal for IMF’s role. (a) Choose an IMF article you presented to the class or one of your own choosing and use Tirole (2000) arguments to support or counter some criticism of the IMF, proposal to reform its role (for example, LOLR, ownership, governance, etc.) (b) Tirole (2000) argues the IMF should become a representative of foreign creditors when bargaining with borrowing countries (Actionaid thinks this its role already). Is this role consistent with the new IMF program discussed by [Mussa and Savastano’s \(1999\)](#) above? Is it a role that would be helpful in the present crisis? What market failure would the IMF help overcome if it acted as Tirole suggests? Briefly, extend this argument to Aid agencies (official and NGOs) Why is serving as a representative of foreign creditors or Aid agencies in the interest of poor or EM countries? (c) *We are not quite ready for this question yet, but it is worth thinking about if you time: Since the 1998-2000 crises most emerging market economies (including Nigeria for example) have reduce external debt, increased FX reserves and moved more flexible exchange rates. Discuss broadly the how this should reduce their vulnerability to the current crisis and help them adjust to reductions in capital inflows, or even capital outflows. Do these measures obviate the need for an IMF operating as a representative of private creditors, as Tirole advocates? Distinguish between country specific (idiosyncratic) shocks and a global system meltdown like the one we seem to witnessing now.*