EMBA 2018 Macro: Final Exam

Due by e-mail (ploungani@imf.org) and in hard copy at the start of class on July 14.

*Instructions: This is an open book exam. You cannot consult your classmates. Before you search the web, you should look at the lecture slides, the notes you took in class and the assigned readings. Try to answer the questions as much as possible based on class materials, do not just go on a rant. Cite your sources, whether class material or outside sources (you do* ***not*** *have to do this for question I.). Start the answer to each question on a new page.*

1. **(30 points, 2 points each. Please use the space below each statement to provide your answer.)**

State whether the following statements are ‘True’ or ‘False’. For statements you label ‘False’ point out the error(s).

1. Lagging economic indicators are ones that are too lazy to move.
2. Faster productivity growth boosts employment and income in the long run because the increases in total factor productivity outstrip the decline in capital deepening.
3. The two main driving forces of fluctuations in the U.S. government debt-to-GDP ratio have been (i) spending on curbing illegal immigration and (ii) which political party was in power in Washington, D.C.
4. In the United States over the past 100 years, nominal GDP has grown at an annual rate of about 10 percent, reflecting inflation.
5. The unemployment rate is the ratio of people who are seeking jobs to those finding jobs.
6. When the central bank sells government securities, that puts money into the system and allows the policy interest rate to rise.
7. Fiscal policy is the official name for the “Let’s Move” program to control the childhood obesity epidemic.
8. Monetary policy refers to the central bank’s investment strategy to finance government spending.
9. The Taylor Rule states that, holding other things constant, the Fed should respond to an increase in real GDP above potential by raising the real fed funds rate.
10. The fiscal deficit and the current account deficit are different names for the same thing.
11. The production function says that output depends on inputs (capital and labor) and efficiency.
12. The U.S. natural rate of unemployment has declined to about 3.8 percent in 2018 as Obamacare has provided an attractive benefit to pull job-seekers into the labor force.
13. Japan’s government-debt-to-GDP ratio is well below that of the United States, reflecting both the prudence of Japan’s government and the spendthrift ways of the U.S. government.
14. In 1875 the U.S. government debt-to-GDP ratio was 25 percent, which means that it would have taken 25 percent of one year’s tax revenues to pay off all the debt.
15. In 2016, government spending accounted for over half of U.S GDP.
16. **(10 points; 300 words maximum)**

What policy actions will the following central banks take at their upcoming meetings? In each case predict the action and write 1-2 sentences stating the main considerations behind the action.

|  |  |  |  |
| --- | --- | --- | --- |
| 24-Jul | y     | Hungary | Central Bank of Hungary |
| 24-Jul | y     | Chile | Central Bank of Chile  |
|  |  |  |  |

1. **(10 points; 400 words maximum; 4 charts maximum).** Consider the following blog post by economist Jim Hamilton of Econbrowser.

“U.S. debt averaged 45% of GDP over 1990-2012. We'll be entering the next decade with a debt-to-GDP ratio 30 percentage points higher than that. There are those who argue that the interest rate is below the GDP growth rate at the moment, so why worry about it? Here’s why. Consider the historical episode over the last two generations for which the U.S. was most successful in bringing its debt load down, namely the 8 years when Clinton was president (1993-2000). Over this period, the primary surplus averaged 2.1% of GDP. Given Clinton's starting debt load of 49%, those primary surpluses were big enough to bring debt down to 35% by 2000. But if Clinton had started out with debt at 100%, and had exactly the same success with raising tax revenues and reducing non-interest spending relative to GDP, those same policies would have accomplished nothing in terms of reducing the debt burden. Next time we're going to be running the race with a bigger fraction of the population in retirement and with much higher medical costs than under Clinton. Here's my advice: try not to start the race owing 100%.”

Do you agree with the views expressed by Hamilton? Why or why not?

1. (**10 points; 400 words maximum; 4 charts maximum**) Read these excerpts from a 2008 article by Eamonn Fingleton.

"Ordinary Americans know in their bones that their nation's soaring indebtedness to a not-overly-simpatico China betokens devastating policy failures in Washington. The rising popular alarm is amply borne out by the facts. Foreigners now own a staggering $13 trillion worth of American assets. From a negligible position fifteen years ago, China has now emerged as America's largest creditor. Without constant massive Chinese purchases of U.S. Treasury bonds and other American assets, the U.S. dollar would long ago have collapsed, U.S. interest rates would have gone through the roof, and the federal government would be more or less bankrupt. America's fast rising foreign indebtedness stems from an inexorably weakening trade performance. Every dollar of current account deficit the United States incurs constitutes one more dollar that has to be borrowed abroad. Expressed as a percentage of gross domestic product, America's current account deficits in the last two years have been the worst of any great power since the huge deficits incurred by the devastated economies of Japan, Germany, and Britain in the immediate wake of World War II. Compared to the plight of these nations in the late 1940s, America's trade problem today may not seem so troubling but actually it is far less easily remedied.”

Do you agree with the views expressed by Fingleton? Why or why not?

1. **(5 points; 200 words maximum; 2 charts maximum)**

If China’s real GDP grows at 8 percent a year and U.S. real GDP grows at 2 percent a year over the next 40 years, will the level of Chinese real GDP catch up with the level of U.S. real GDP at some point over that period? In which year?

1. **(5 points; 200 words maximum; 2 charts maximum):** U.S. politician Alexandria Ocasio-Cortez wants to provide Americans with a “jobs guarantee” under which everyone would be assured of having a job if they were seeking work. What would be the impact of such a guarantee on (i) the natural rate of unemployment; (ii) the Okun coefficient?
2. **(5 points; 100 words maximum):** For the U.S. economy over the last 50 years (roughly from 1960 to the present), what has been the (i) average annual growth rate of real GDP per capita; (ii) the average annual unemployment rate; (iii) the average annual inflation rate; (iv) the average annual nominal interest rate; (iv) the average annual real interest rate. (Rough numbers based on class discussions are fine; you not have to do your own calculations if you don’t have the time).
3. **(5 points; 200 words maximum)**: The elevator pitch: If you had to justify to your boss, while you were riding up with him in the elevator, that spending some time learning Macroeconomics had been a good use of the company’s money, what would you say?