Economics 103, Fiscal Policy Module Key

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Bates College

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To complete this assignment, you should:

1. Watch the recorded lecture on Fiscal Policy, Deficits, and Debt. This will provide you with much of the necessary background.

2. Research the recent $2 trillion U.S. fiscal stimulus bill, officially known as the Coronavirus Aid, Relief, and Economic Security Act (CARES). There are many summaries of this bill. Here is one from from *Marketwatch*. Here is an op-ed from Nobel prize winning economist Joseph Stiglitz on the bill.

3. Here is a new research paper on the macroeconomics of the covd-19 pandemic by Veronica Guerrieri and co-authors. Please read the abstract of this paper.

4. Read this new research on tax multipliers by several economists, including Bates Professor Daniel "The Executioner" Riera-Crichton.

Instructions: Answer all parts of all questions. You are expected to independently craft your answers. Answers which incorporate current macroeconomic data are especially encouraged. The assignment is due by 11:59 PM on Monday, April 13.

1. How might the CARES law increase output, and what is the most likely impact on inflation?

Sample Answer: CARES is expansionary fiscal policy and includes a mix of tax cuts and new government spending. This works to boost aggregate demand. If the AS curve is upward sloping, then it aims to boost both output and inflation.

Since the crisis began, expectations of inflation have fallen. It is thus important to note that boosting inflation is not relative to its levels before the crisis. Instead it is compared to its levels if

CARES ere not enacted. Policies should be compared to the counterfactual of the economy absent that policy, not what happened just before or just after they were out into place.

2. The CARES act entails major economic traedoffs. How should policy makers evaluate these tradeoffs to determine if the bill if a net positive?

Sample Answer: The benefits of CARES are 1) that increases to output and inflation are both desirable under present circumstances, and 2) that most people believe that providing aid to groups adversely affected by the crisis (*e.g.* unemployed workers, small businesses) is worthwhile.

Quantifying these benefits is important. Institutions like the Congressional Budget Office are charged with estimating how big the increase to aggregate demand is. Obviously, the bigger the increase, the more likely one should be to support the policy.

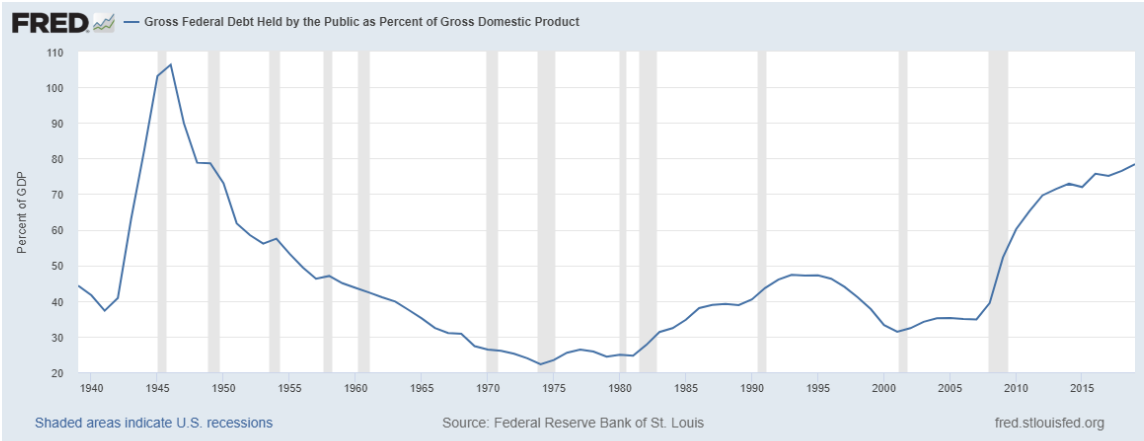
These benefits should be weighed against the costs. The biggest is a roughly $2 trillion increase in the U.S. national debt. In the medium term, this will require the U.S. government to pay a higher share of its revenues on interest payments instead of government services and may reduce private investment.

Whetehr the benefits outweigh the costs is subjective. A proper cost-benefit analysis tries to proponent quantify both sides and argues that one outweighs the other. Be suspicious of those who instead work to deny that one sides of the ledger exists (*e.g.* tax cuts or spending pay for themselves).

3. True or False? The expansion of the national debt because of CARES makes an imminent U.S. sovereign debt crisis quite likely.

Sample Answer: False. While U.S. sovereign debt crisis could happen in the distant future (depending partly on future fiscal policy), it is not imminent. This type of crisis occurs when a government can no longer find buyers for its debt. There are no signs of this happening for the United States.

Figure 1: U.S. Federal Debt Held by the Public/GDP



The best measure of the U.S. national debt is the debt held by the public (which excludes intragovernmental that that the government owes to itself) as a share of GDP. This figure is high, as shown below, and will emerge from this crisis at concerning levels. The To say that a sovereign debt crisis is not imminent does not imply that the debt is not a concern.

4. What is the economic rationale for providing several hundred billion dollars in small business loans as part of CARES?

Sample Answer: In addition to humanitarian motives (providing relief to those affected by the crisis), this aid is also intended to boost aggregate demand. In several aspects of the crisis, policy makers must consider the distinction between illiquidity and insolvency. The latter means that a firm is fundamentally unprofitable. The former means that it simply lacks the cash to continue operations. Allowing these firms to fail if they are solvent is usually seen as inefficient and an unnecessary reduction to aggregate demand that makes the economic situation worse.

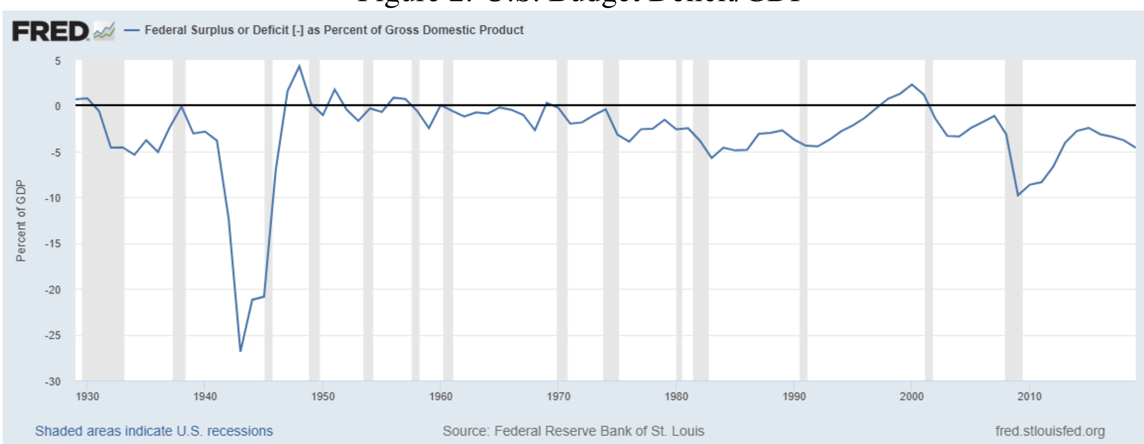
5. CARES includes $400 billion to facilitate up to $4 trillion in Federal Reserve lending? How does this program work and what are its possible economic benefits? Will it increase the U.S. national debt by $4 trillion?

Sample Answer: Historically, the Federal Reserve only extends credit when it is not risky (by law, it ordinarily cannot extend credit to insolvent firms). CARES authorizes the Fed to make loans to riskier firms and this $400 billion is intended to cover the losses that the Fed expects to take. The Fed estimates that it will be able to make $4 trillion in loans (*i.e.* about 90% of these loans will be repaid). The exact cost of the program is, however, uncertain because the Fed's losses can only be estimated.

6. Was the 2019 U.S. budget deficit the biggest in the country's history?

Sample Answer: False. Even in simple dollar terms, the $984 billion budget deficit in 2019 was less than 2009's $1.4 trillion deficit. Like debt, deficits should be measured as a share of GDP.

Figure 2: U.S. Budget Deficit/GDP



As a share of GDP, upcoming budget deficit's may reach 15%. While large, these are smaller than those during the Second World War which reached 27% of GDP.

7. Read the abstract of Guerrieri *et al.* (2020). Using our AS/AD model, explain the authors' novel explanation of the current crisis?

Sample Answer: This paper posits that the crisis began as an aggregate supply shock which, by itself, reduces output and increases inflation. But this shock does not affect all parts of the economy equally. The resulting loss of jobs then causes a reduction in aggregate demand which makes the drop in output even worse and may offset the initial decline in inflation.

8. What fiscal policy recommendations do Guerrieri *et al.* (2020) for the current crisis, and how well do these match the CARES bill.

Sample Answer: The authors claim that ordinary fiscal stimulus, which may include general cuts in taxes or increases in spending, is less effective because of the reduction in aggregate supply. The best policy makers can do is to close down affected sectors and provide more generous unemployment benefits. This is a reasonable description of CARES.

9. According to Riera-Cricton *et al.* (2019), which types of countries have larger (in magnitude) tax multipliers?

Sample Answer: Here, larger in magnitude means that increases in taxes cause larger reductions. Wealthy countries with high tax rates tend to have the most negative tax multipliers. Examples include much of Western and Central Europe, as well as Scandinavia.

10. Why can some countries have positive tax multipliers where higher taxes actually increase output? Is this likely for the United States?

Sample Answer: The countries with the smallest multipliers, and thus the most likely to be zero or positive, are those with low levels of government services. In these cases, higher taxes can be used to finance worthwhile public goods which improve GDP.