

## **Public Finance Doctoral Examination**

### **Ground Rules:**

- Answer one (1) question from each of the three sections, plus one (1) more question from any section of your choosing. This means you will have answered four (4) questions in total.
- You are permitted a bibliography or list of references to bring with you into the exam. Otherwise, no notes, articles, books, internet, or any other supporting materials are permitted during the examination.
- You should not identify yourself in the exam, so as to assist in making this a double-blind grading process.
- You are not to discuss the questions with your colleagues as you prepare your answers.
- Your answers are to be turned in by 5:00 PM.

You should have sufficient time for the examination. Before you begin to write, it would be helpful for you to spend some time on reflection and on organizing your thoughts.

### **Taxation:**

1. For decades, states were required to rely on a “physical-presence” – based on employment of physical capital - definition of nexus to require out-of-state vendors to collect sales and use taxes for purchases made by in-state residents. This definition of nexus did not foresee the rise of e-commerce. In June 2018, the Supreme Court of the United States ruled in favor of South Dakota in a case against Wayfair (a large e-commerce vendor) that overturned this precedent to allow for an “economic presence” that could be defined by the volume of sales that occur to residents of the state (as measured by number and/or value of the sales transactions).
  - a. Outline the stylized facts you are familiar with on the subject. While more is better, we don’t expect you to know everything, just give us a primer on what you do know. E.g. What are sales and use taxes? Who levies them in the United States? Who collects and remits them? Where did the previous precedent for the definition of nexus come from? How “well designed” are American sales taxes against that which is advised by public finance experts?

- b. Discuss “the economics” of the subject. What distortions existed in the pre-Wayfair ruling regime? What is fixed or remains uncorrected by the shift in standards?
  - c. States have been quite varied in their response to the Wayfair ruling. Some have quickly copied or made South Dakota inspired changes to requiring collection under an economic-nexus standard, others have quickly moved towards bans on such required collections. Provide some political-economy discussion that you think is relevant to the Wayfair saga with appropriate citations to the theoretical literature (e.g. special interest group theory, bureaucracy theory, median voter theory, etc.).
- 2. The ongoing debate about income and wealth inequality has triggered a push for more progressivity in the federal tax system by candidates seeking to be the presidential nominee for the democratic party. For example, Senator Warren is proposing a national wealth tax of 2% to 3% on net-wealth, and there is also talk of adding an additional tax bracket with marginal tax rate of 70%.
  - a. Please discuss the effectiveness of increased tax progressivity as a means of improving income inequality in the US. Your response should demonstrate an understanding of relevant theoretical and empirical taxation literatures as well as the equity and efficiency canons of a good tax.
  - b. Furthermore, Warren has likened her proposal to the more familiar-to-Americans property tax. Discuss this comparison in how Senator Warren’s proposal and the real property tax are the same or different in the American experience. What lessons (economically or politically) from the real property tax would you share with Warren?

### **Budgeting:**

- 3. Human beings appear naturally drawn to "rational" (i.e., logical, means-ends oriented) decision making processes. It seems to be the predominant way that we explain ourselves to others, and that extends to accounting for budget proposals. That is, budget justifications are recommended to be clear, logical, free of jargon, and containing a coherent rationale in terms of the expected outcomes. Comprehensiveness appears to be the underlying principle in budgeting. Yet, it has been pretty well understood for some 75 years that there are limits, or "boundaries", to human rationality (cf. H. Simon, various citations). Limited as to attention spans, information, time, political will, and sheer calculating capacity, humans operate more in a mode of "bounded rationality." While they may be

intendedly-rational, actually, they are boundedly-rational. Bounded rationality argues for a pragmatic approach to budgeting, one that focuses on annual incremental changes. Rather than concentrate on justifying and building budgets from "the ground up" each fiscal year, political authorities and administrators focus on the annual change; mainly, this is to economize on their scarce resources (attention spans, information, time, political will, and sheer calculating capacity).

Other research (Jones & Baumgartner, Ryu, among others) has revealed that there tends to be a great deal of inertia in various elements of both federal and state budgets over time. In "normal" periods, budget elements grow apace, more-or-less in line with overall budgetary growth. But there are noticeable, and significant, "lurches:" thresholds are crossed where certain elements of budgets will change rapidly for a limited time, the return to a more normal growth path. This pattern of budgetary change has been termed "punctuated equilibrium," after the evolutionary theory that also bears that name.

Which theory appears to better describe budgetary change: incrementalism or punctuated equilibrium? Are the two competing theories, or are they actually complementary to one another? Cite the appropriate literature in support of your response.

4. On July 24, 2019, the Co-chairs of the Washington, DC based Committee for a Responsible Federal Budget released a statement that is provided in Attachment 1 at the end of this exam. Please read the statement.

These statements are reflective of mainstream economic thought: that the growth of the national debt is unsustainable, will burden future generations with higher taxes and debt repayments, and that the federal government already may be, technically, "bankrupt." These views are based on neoclassical economics notions of the budget as a "household checkbook," the public debt as a future burden which must be repaid, and the scarcity of funds available for investment purposes (the so-called "loanable funds" doctrine).

An alternative view which has been gaining adherents in academe, the financial community, and among certain political leaders, holds that the public debt is private wealth in the hands of those who hold it, that government debt is different than private debts, and that the limits of debt affordability actually are more elastic than the mainstream view would have it.

Prepare arguments for both sides of the issue of national debt sustainability. Make every attempt to provide the best rationale for the two points of view. Cite appropriate literature in support.

### **Debt:**

5. Both the Tax Reform Act of 1986 (TRA) and the Tax Cuts & Jobs Act of 2017 (TCJA) contain several provisions affecting the municipal securities market. Which provisions of the Tax Reform Act of 1986 and the Tax Cuts & Jobs Act of 2017 had a significant impact on the municipal securities market? Why and how did they affect the market? Make sure your response demonstrates a thorough understanding of the theoretical and empirical literature on taxation and municipal securities.

Finally, some analysts have used the phrase “back to the future” to describe the post-TCJA municipal market. Use your analysis to project the future state of the municipal market along several important dimensions (e.g., supply and demand factors, credit quality, debt structures, debt types, tax-exempt versus taxable securities, etc.), and the sufficiency, cost and allocation of public capital investment in the United States.

6. Analyze the role of bond insurance and credit ratings before, during and after the financial crisis and Great Recession. In terms of financial economic theory and practice, what is the role of the credit rating industry? Why do issuers purchase credit ratings? In terms of financial economic theory and practice, what is the role of bond insurance? Why do issuers purchase bond insurance? Why don't corporate bond issuers typically purchase bond insurance?

Some municipal analysts have argued that bond insurers and credit rating agencies contributed to the financial crisis. Is this an accurate statement? Justify your answer.

Finally, since the financial crisis and Great Recession, the bond insurance and credit rating industries have gone through substantial reforms. Describe the regulatory reforms and major internal changes to the industries, and analyze their impact on several aspects of the municipal securities market, especially supply and demand, and risk and return.

## **ATTACHMENT 1: Statement from Committee for a Responsible Federal Budget**

### **For Immediate Release**

*Committee for a Responsible Federal Budget Co-Chairs Governor Mitch Daniels, Secretary Leon Panetta, and Congressman Tim Penny issued the following statement about the budget agreement reached this week by Congressional leaders and the White House:*

Governor Daniels:

Our national debt has never been this high when the economy was this good, and instead of coming down as theory suggests, it's headed for totally unprecedented, unsustainable levels and a tragic day of reckoning. It's apparently futile to hope for positive leadership from today's elected officials, but the least they could do is to stop making things worse.

Secretary Panetta:

During past bipartisan budget negotiations, leadership from both parties sat down and agreed that everything would be on the table. It was a long and tough process, but we reached truly bipartisan agreements that led to positive fiscal outcomes. Both sides this week so easily agreeing to fiscal defeat isn't bipartisanship, it is broken governance. A deal of this size rushed to passage in only a few days doesn't lead to responsible policy – it continues a cycle of governing by crisis and passing off the tough choices to the detriment of our nation. If Congress cannot fulfill its duty, then a new bipartisan commission should be formed with real enforcement abilities to deal with our nation's fiscal challenges.

Representative Penny:

Following trillions added to the debt through unpaid-for tax cuts, lawmakers are now adding trillions more in spending increases all while scrapping a budget law meant to curb the unsustainable growth of our national debt. We need an agreement that deals with our trillion-dollar deficits, not one that pours fuel on them. It seems virtually all support for fiscal responsibility has evaporated in Washington, and the debt binge continues unabated.

The Committee for a Responsible Federal Budget strongly encourages Congress to offset this budget agreement and pass a clean debt ceiling increase. We also recommend Congress form a bipartisan taskforce to deal with our mounting long-term debt and fiscal challenges.