

## **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. Social Security and Medicare are financed by payroll taxes and it is popularly claimed that these taxes are regressive. A Wall Street Journal opinion article argued differently:

“...studies show that the Social Security and Medicare programs, viewed as a whole, are anything but regressive.

“The payroll taxes that fund these programs are collected for the express purpose of providing income supplements and medical care during retirement. In the case of Social Security, earned income is taxed proportionately at 12.4% (split evenly between employee and employer) up to a cap that is currently set at \$110,100. Those who assert that the Social Security tax is regressive note that the income cap results in a decline in taxes paid as a percentage of income as income rises above the cap. But this observation omits three critical facts.

“First, the amount of one’s Social Security income at retirement is also capped. Second, higher-income workers receive less of a benefit as a percentage of their contributions than do lower-income workers. The

payouts to retirees are, and are intended to be, redistributive. Third, Social Security income is subject to the income tax – and the income tax is progressive.”

Provide a scholarly discussion of the vertical equity of the Social Security and Medicare programs (inclusive of the tax and expenditure components). Your response should provide elaborate and critique the passage above, and should include background information on equity based incidence as well as any additional considerations and context that are necessary to formulate a thoughtful response. You are expected to draw on theory and research as appropriate, such as in identifying important parameters needed to reach a conclusion.

2. Many scholars are placing increased importance on the location and size of cities. This is motivated by apparent trends in a couple key areas, notably climate change adaptation and agglomeration economies arising from spatial spillovers (i.e. increasing returns to scale in production among workers/firms living in close proximity to one another). Suppose 100 years from now, 99% of the population of the continental U.S. (not including Hawaii and Alaska) will only be living in twenty five “places” that resemble large cities or metropolitan areas, the remaining 1% scattered throughout the remaining rural areas.

Provide commentary on what you think will be some of the public finance implications of this hypothetical scenario. We place few restrictions on your response, but be clear in your discussion (e.g. if discussing tax policy, be clear if you are offering normative policy recommendations or predictions from positive analysis). Virtually any public finance topic you are familiar with would be impacted, so you should still demonstrate how your knowledge of literature informs your discussion.

### **Budgeting:**

3. The following is an excerpt from Ron Suskind’s *The Price of Loyalty: George W. Bush, the White House, and the Education of Paul O’Neill* (New York: Simon & Schuster, 2004):

“The package of tax proposals, led by the 50 percent cut in the individual income tax on dividends, had been all but buried before the midterm elections [of 2002]; it came up infrequently and always in the past tense – what George W. Bush wanted to do but couldn’t afford [to do].

But after the Republicans won the midterms, [U.S. Treasury Secretary] O'Neill could sense a change in the White House, a smugness, a sureness. Now [Vice President] Cheney brought up the tax proposal again, how they would provide [economic] stimulus...

O'Neill jumped in, arguing sharply how the government was 'moving toward a fiscal crisis' and 'what rising deficits would mean to our economic soundness.'

Cheney cut him off.

'Reagan proved [that] deficits don't matter,' Cheney said.

O'Neill shook his head, hardly believing that Cheney – whom he and [Federal Reserve Chairman Alan] Greenspan had known since Dick was a kid – could say such a thing.

He [O'Neill] was speechless. Cheney moved to fill the void [in conversation]. 'We won the midterms,' he said. 'This is our due.' “

Discuss the theoretical and practical soundness of both O'Neill's and Cheney's positions relative to U.S. federal deficits. We know which attitude prevailed in 2002; the Bush tax cuts were enacted into law. But, which attitude has greater theoretical and practical support?

4. Government budgets have been likened to a “household checkbook,” with the necessary outflows balanced by an equal (or greater) inflow of dollars, in order to ensure fiscal solvency in the long run. Is this an appropriate metaphor for government budgets? Are there any distinctions to be drawn as between national and sub-national budgets in the application of the “household metaphor”? That is, does the metaphor apply with equal force to, say, Delaware (or even a very large state, such as California), and the U.S. federal government? Explain as rigorously as you can.

### **Debt:**

5. Analyze the potential impact of Trump administration federal income tax and private activity debt reform proposals on the municipal securities market.

Changes to private activity bonds advanced by President Trump's FY18 budget proposal could have a significant impact on the municipal

securities market. The proposal reads as follows:

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## **FACT SHEET. 2018 BUDGET: INFRASTRUCTURE INITIATIVE**

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**Lift the Cap on Private Activity Bonds and Expand Eligibility to Other Non-Federal Public Infrastructure.** The Private Activity Bonds (PABs) program allows the Department of Transportation to allocate authority to issue tax-exempt bonds on behalf of private entities constructing highway and freight transfer facilities. PABs have been used to finance many Public Private Partnerships (P3s) projects, along with TIFIA. As of August 15, 2016, nearly \$11.2 billion in PABs have been issued for 23 projects. The Administration recommends removing the \$15 billion cap under current law to ensure that future P3 projects can take advantage of this cost-saving tool, and encourage more project sponsors to take advantage of this tool. The Administration also supports the expansion of PAB eligibility.<sup>1</sup>

In April 2017 the Trump administration presented to the American public the *2017 Tax Reform for Economic Growth and American Jobs* proposal. Wherein, President Trump called for reducing the 7 federal income tax brackets (10%, 15%, 25%, 28%, 33%, 35%, 39.6%) to 3 tax brackets of 10%, 25% and 35%.

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Both the above mentioned proposals, if enacted, are likely to have a significant impact on the municipal securities market. Craft an essay that describes in detail their likely impact on the municipal market? In your essay, be sure to cover expected changes in supply and demand; tax-exempt versus taxable yields; the supply of state and local infrastructure and the efficiency of the federal subsidy for infrastructure; and fiscal federalism issues.

6. In May 3, 2017 the Commonwealth of Puerto Rico filed for federal protection that would allow it to restructure its approximately \$70 billion in municipal debt. The filing is under Title III of the Puerto Rico Oversight, Management, and Economic Stability Act (PROMESA H.R. 5278, S. 2328), which establishes procedures for adjusting the debts of the Commonwealth in a federal court procedure similar to that of Chapter 9 and 11 bankruptcy procedures.

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<sup>1</sup> downloaded on May 30, 2017 from [https://www.whitehouse.gov/.../budget/fy2018/fact\\_sheets/2018%20Budget%20Fact%...](https://www.whitehouse.gov/.../budget/fy2018/fact_sheets/2018%20Budget%20Fact%...)

The Commonwealth of Puerto Rico quasi-bankruptcy filing, coming on the heels of the city of Detroit bankruptcy and several other relatively recent defaults in the municipal securities market, highlights the significance of moral hazard and adverse selection problems in financial markets in general and the municipal securities market in particular.

Describe the basic moral hazard and adverse selection problems in the municipal securities market. Analyze how such problems have manifested in the post-financial crisis municipal market. Analyze how the standard day-to-day operating procedures in the market are intended to ameliorate such problems, focusing on the theoretical rationale(s) behind market practices and institutions, and why such practices and institutions seem to be failing. Carefully justify your answer by demonstrating a thorough understanding of financial economic theory and outcomes as applied to the municipal securities market.

Finally, in order to provide a more efficient and effective market for municipal issuers going forward. What policies should be implemented throughout the market to eliminate adverse selection and moral hazard problems currently besetting the market?