Public Finance

90-736

Syllabus

School of Public Policy and Management
Heinz College

Carnegie-Mellon University

Fall 2020

©Professor Robert P. Strauss
RPStrauss@gmail.com
www.andrew.cmu.edu/user/rs9f

Revised RPS May 12, 2020

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Mon-Wed: 1:30-2:50	Hamburg Hall 2011
Friday: 1:30-2:50 (occasional)	Hamburg Hall 2011
Office Hours: 3-4:30 PM Monday and Wednesday and by appointment	Hamburg Hall A118B

The purpose of this course is to provide an introduction to the theory and practice of how government finances itself from both positive and normative points of view. To accomplish this, the course reviews rationales for government intervention in the marketplace, analyzes methods of resolving conflicts over the size of the public sector's budget, extensively analyzes the rationales and issues of various sources of public revenue, and reviews the effects of public sector spending and taxes on the aggregate economy. While the examples are largely drawn from the United States, examples will be used from other industrial democracies and non-democracies. The positive and normative frameworks in public finance, coupled with many examples, help organize one's thinking about the modern public sector and its interactions with the private and non-profit sectors.

Because the subject matter of public spending and revenues can easily consume an entire academic year of study, *Public Finance* focuses mainly on the revenue side of the public budget. Two courses typically offered by Professor Strauss in the spring build on *Public Finance*; *Public Expenditure Analysis* (90-774) deals with techniques for evaluating private and public expenditure and capital spending decisions. *Education Finance and Policy* (90-817) deals in-depth with issues surrounding multi-level government finance with a focus on education finance from U.S. and international perspectives. *Education Finance and Policy* presumes the material covered in *Public Finance*; students interested in taking *Education Finance and Policy* should take *Public Finance*. It is suggested that students interested in *Public Expenditure Analysis* also take *Public Finance*. Students who do this get good jobs in the public, private, and non-profit sectors[1].

There are three items that you must obtain and two (*) that you must purchase to take Public Finance:
1)   The textbook*;
2)   *The Little SAS Book: A Primer** and
3)   The bound lecture notes and additional required readings.

The required[1] text for the course is Richard A. Musgrave and Peggy B. Musgrave, *Public Finance in Theory and Practice*, New York: McGraw Hill Book Company, 5th edition (1989) which went out of print a while ago but is still a classic. This year, students are expected to obtain both this textbook and *The Little SAS Book* themselves since the bookstore and campus printing are no longer able to deal with McGraw-Hill to get reprint rights. I suggest you go to www.amazon.com to find and purchase them. You are expected to bring both the first day of class You will be given access and training for the Commerce Clearing House Omni tax system which is a business strength federal, state, and local tax services database. Through the generosity of an initial grant from the Eden Hall Foundation[2], Carnegie Mellon has enabled permanent access to Omni tax.

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[1] Students taking at least one of my three courses have secured jobs at: Deloitte-Touche, Grant Street Associates, the American Enterprise Institute (2), Bloomberg (Hong Kong), Pennsylvania's Local Management Fellowship among others. Some have gone on to doctoral programs in economics at Tepper, Michigan State University; political science at the University of Rochester, and environmental policy at EPP. Also, my former students have also demonstrated strong career trajectories. Dan Hassell is Pennsylvania's Secretary of Revenue, John Raymond is Pennsylvania's Deputy Secretary of the Budget, William Joraskie is the lead analyst for the Pennsylvania Senate Appropriations Committee (R). Doctoral students of mine have gone on to academic careers at Duke, Texas A&M, University of Illinois-Springfield, University of Virginia, University of Georgia, as well as public service careers at the US Bureau of Labor

The bound lecture notes and additional readings and Strauss Bucks will be handed out in class, and are free of charge.

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[1]   Periodically students ask me if there is a more basic public finance text that they can read in conjunction with Musgrave and Musgrave. Harvey Rosen's *Public Finance* is an easy read that you may find helpful. Also, students may be interested to learn that several publishers, John Wiley, and Blackwell Publishers, have expressed an interest in my authoring a textbook with Professor Marcus Berliant of the Economics Department at Washington University, St. Louis.

[2]   Also supported through a generous grant from the Eden-Hall Foundation.

Students in *Public Finance* are expected to read and annotate my lecture outlines and read the required reading materials and ***bring them to class*** each session. Students are also expected to own and know how to operate an electronic calculator (other than those contained in a cell phone[3]) that is capable of doing $x^{a/b}$. Please be sure you bring such a calculator with you to class each session and bring your Strauss Bucks[4] to each session as well.

In addition, it is strongly recommended that you read *The Wall Street Journal* in order to keep abreast of economic, financial and fiscal events. The *Wall Street Journal* is available through the CMU library portal. [5]

The format of the course is lecture/discussion. Students are encouraged to ask questions by proceeding as follows: 1) the interested student will raise his/her hand to be recognized by me, and then 2), if so recognized, will be invited to ask their question or make a comment. Students who ask that the obvious be explained or simply make speeches and filibuster will not be recognized for comment.

The Musgrave and Musgrave text (MM) is self-explanatory but extremely terse; the text *and* footnotes require careful reading. Lectures will typically involve elaboration of key points in the text, contain complementary examples drawn from the real world, and empirical material that I routinely accumulate. Each lecture is designed to bring together the world of theory and the world of actual public financial practice, and to develop each student's analytical skills in the domain of public finance. Students are encouraged to have read the assigned material *prior* to lecture and will be asked questions about the assigned material. Because the text is dated, the institutional material about, for example, the details of the US personal income tax will be out of date. Current institutional information is contained in the bound readings and will also be provided in the lectures. The course has been designed so that the student synthesizes the theory and institutions that are provided in the textbook and lectures, while the problem sets are designed to provide meaningful professional experiences for each segment of the course. Student learning takes place as a result of this synthesizing process and will help students how to think more clearly. Please be sure to take the time requirements of the problem sets seriously.

We will be using Canvas for a variety of purposes. You access it by setting your browser to www.cmu.edu/canvas.
Class will be held Monday and Wednesday. On Friday September 6, the class will meet for a presentation by Hunt Social Science Reference Librarian Ms. Sarah Young, about resources available at Hunt Library. There will be SAS tutorial on at least one Friday, occasional guest speakers, review sessions, or an occasional makeup or catch-up class if we are unable to meet MW. Friday sessions will be held on Friday from 1:30-3:00PM in the same classroom.

Office hours are after class Monday and Wednesday from 3 to 4:30 PM and by appointment. You may wish to communicate with me via email (rpstrauss@gmail.com or RS9F@Andrew.cmu.edu) as I am usually logged in from somewhere in the world around the clock.

Evaluation of student performance is based on written essay examinations, problem sets, class participation. Identification of each student on problem sets and examinations is solely through the last 4 digits of his/her Social Security Number, Student ID or ID used; you will be asked to provide this in class on August 31, 2020 and were already asked to provide this in conjunction with the optional student questionnaire. [6]

Answers to each of the problem sets **must be word processed**, and must contain written, verbal explanations of all numerical results**. Problem sets 2-7 are to be turned in paper form. Handwritten answers to problem sets will NOT be accepted. Problem sets 2, 3, 5, and 6 are to be worked on and answered separately and independently by each student.**

Problem Sets 1, 4, and 7 may be completed in groups.

[3] Thanks to Christine Alagara (still at Moody's) for pointing this out one day in class several years ago.
[4] See http://www.andrew.cmu.edu/user/rs9f/pf04.html for a photo of them.
[5] There are rumors that they are freely available across the street somewhere in the new Tepper building.
[6] This means you are **NOT** to put your name on any problem set answer or examination answer booklet. Any problem set or exam that is personally identifiable will not be graded and the student will receive a zero score.

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There will be three examinations: at six weeks, at twelve weeks, and at the end of the semester worth respectively 20%, 20%, and 30%. You may drop the lowest score of the two midterm exams and the respective weights then become 35% for each exam. The final examination will cover the entire course and must be taken, while the two mid-term exams will cover the material in the immediately preceding six weeks. There are seven problem sets, each worth 4%. You may drop the lowest problem set score if you wish so that t h e 6 t ha t are counted are wo r t h 28 / 6 = 4 .667 % each.

Class participation is worth 3%.

If you believe that you have been unfairly graded, the procedure for appealing a grade is to put a post-it with a request for re-grading and give it to me; I will re-grade it privately and return it to you with the revision, if any, in your grade. Please be advised that in submitting a problem set or exam for regarding, I reserve the right to re-grade other parts of it.

The grading scale, stated in Points, is: A+

	> 100.0
A	95.0-100.
A-	90-94.9
B+	85.0-89.9
B	80.0-84.9
B-	75.0-79.9
C+	70.0-74.9
C	65.0-69.9
C-	60.0-64.9
D+	55.0-59.9
D-	50-54.9
R	< 49.9
Pass/Fail 70 or better	

Finally, a few reminders about ***decorum, and classroom procedures.***

The class begins at 1:30 PM Eastern Standard Time.[8]

Given the amount of material in the course, there is substantial merit in starting at 1PM. This will be discussed in class. Students are expected to be in the classroom, ready for the class on **or before** the appointed time. The room will be closed upon the beginning of class, and students who are not in the room on or before the start of class (say, 1:30 PM), that is they arrive after 1:30 PM, will not be allowed into the room unless a majority of already present students vote to allow each late student in. Students who leave the classroom after the class begins will **not** be permitted back in unless a majority of present students vote to allow such students back in. Punctuality and planning are important professional skills, and it is suggested that if you need to use the lavatory, do so before the start of class. While class attendance is not required, it is fair to say that attending class will materially improve your learning about public finance, and better prepare you for exam questions, since topics discussed during class session are, by definition, fair game for being on any exam.

(1)   Portable or cellular telephones, beepers, pagers, televisions, radios, hand-held video games, iPods, other MP3 players, CD, radio headsets, and virtual reality headsets are **not** permitted for use in the classroom. If you wish to record the lecture with a digital audio device, please inform me of your intention, and I will place it so that it operates properly.[9] Laptops, notebooks etc., and other electronic devices are only for note taking related to class, and are permitted. Any student who uses his/her laptop etc. in class for emailing, Instant Messaging, music, browsing the net etc. on matters unrelated to the course will be asked to leave the classroom. Since class lecture outlines and associated required and optional readings will be provided the first day of class, you are best advised to bring your binder to class and use that for note taking.

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[8]   My cell phone clock, which is set via an atomic clock somewhere, is the official arbiter of what time it is.

[9]   Several international students have found that making an audio recording of lectures improves their understanding. This may hasten the development of these lectures into a textbook which a variety of publishing houses have expressed interest in.

(2) Students are **not** permitted to eat food in class (coffee, water, juice and sodas only).
This is the no distraction, good manners rule.

(3) Any student who engages in physical contact with another student in the classroom, invited or uninvited, will be asked to leave the classroom. **This is the no touching rule.**

(4) Students may not put their feet up on the table or desk they are sitting at and should generally conduct themselves in an orderly and professional manner. **This is the professional behavior rule**.

The course calendar is below. Please note I distinguish between a Meeting and a Lecture.

Meeting	Lecture	Date	Topic	Required Reading
1		Aug 31 (M)	National Debt Clock, Blues Brothers video, Course Overview	Course Syllabus, *A Free Nation Deep in Debt: Chapter1*
2	1	Sept 2 (W)	The Public Sector: Functions and Institutions	MM 1-3, 8, see tables in notes*
		Sept 4 (F)	No class	
		Sept 7 (M)	LABOR DAY: NO CLASS	
3	2	Sept 9 (W)	Public Goods	MM 4, 5
4		Sept 11 (F)	Using Hunt Library from Afar: Introduction to CCH Omnitax, government documents, online newspapers (Wall Street Journal, Economist)	Virtual Hunt Library Expedition in our classroom (Sarah Young instructing, **bring your laptop)**
5	3	Sept 14 (M)	Public Choice: Mechanisms and Dilemmas	MM 7
6	4	Sept 16 (W)	Introduction to Taxation: Equity and Efficiency	MM 6, 12-14
7		Sept 18 (F)	SAS Tutorial 1, 2: Will begin at 1PM. (**bring your laptop,** it is suggested you install SAS on your laptop **prior** to meeting)	
8	5	Sept 21 (M)	Tax Incidence and Excess Burden I	MM 15-16, see graphs in notes*
9	6	Sept 23 (W)	Tax Incidence and Excess Burden II	MM 16-17
10	7	Sept 28 (M)	Taxation of Individual Income I	MM 19-20, article in notes*
11	8	Sept 30 (W)	Taxation of Individual Income II	MM 19-20, see tables in notes*
12	9	Oct 5 (M)	Sales and Gross Receipts Taxation I	MM 23
13		Oct 7 (W)	**Review**	
14		Oct 12 (M)	**Exam 1: 10 ESSAY QUESTIONS (20%) 1.5**	
15	10	Oct 14 (W)	Business Taxation I: Rationale, Classical System	MM 21-22
16	11	Oct 19 (M)	Business Taxation II: Federal and State Issues	MM 21, 22, article in notes*
17	12	Oct 21 (W)	Foreign Tax Issues	MM 33
18	13	Oct 26 (M)	Gift and Estate Taxation	MM 25
19	14	Oct 28 (W)	Property Taxation I	MM 24, article in notes*
20	15	Nov 2 (M)	Property Taxation II	MM 24
21	16	Nov 4 (W)	Social Insurance and the Payroll Tax	MM 26
22	17	Nov 9 (M)	Other Transfer Programs	MM 11, see tables in notes*
23	18	Nov 11 (W)	Fiscal Federalism: Revenue Sharing Formula Design	MM 28-29, article in notes*
24		Nov 14 (Sat)	Homecoming Tailgate Party	(empty stomach required)
25	19	Nov 16 (M)	Fiscal Federalism: Revenue Sharing Civil Rights	Article in notes*
26	20	Nov 18 (W)	**Review**	
		Nov 23 (M)	**Exam 2: 10 ESSAY QUESTIONS**	
		Nov 25 – 27 (W-F)	No Class: Thanksgiving Break	
27		Nov 30 (M)	Fair Model Tutorial	
28	21	Dec 2 (W)	Tax Administration and Simplification	Articles in notes*
29	22	Dec 7 (M)	Stabilization Policy I, II	MM 30-32
30	23	Dec 9 (W)	Stabilization Policy III, IV	MM 30-32
31		Dec 11 (F)	**Review**	
32		(TBA)	**Final Exam: 15 ESSAY QUESTIONS**	

* The titles of the required and elective readings are listed in the table below

Key:
*   denotes required close reading
**   denotes required skim
***   denotes optional reading

Note: All readings may be found on Canvas, either in the lecture packets or as a separate hyperlink.

Lecture	Readings in the Notes: Required =*; Optional = **
1	A CBO Study: 1. *The Budget and Economic Outlook: 2017 to 2027,* CBO, January 2017 (Exec. Summary, Chapter 1). * (NOTE: Closely read the summary, pages 1 – 6, skim chapter 1.) 2. *Forecasting* by Rudolph G. Penner. * 3. *The Pension Rate-of-Return Fantasy* by Andy Kessler. **
2	1. Japanese Reform: *Sinking, not Flying.* * 2. The Wall Street Journal: *The Other Pension Crisis.* **
3	N/A
4	1. Estimates of Federal Tax Expenditures for Fiscal Years 2017-2021, JCT, January 30, 2017. * (NOTE: Closely read the introduction and section 1, we will look at tables in class.) 2. *Chinese Dilemma: 170 Auto Makers.* ** 3. *Rethinking Energy Subsidies* by David Wessel. ** 4. *U.S. Steel to keep Slovakian plant in return for energy* subsidies by Len Boselovic. ** 5. *Novel Relief for China Woes* by Michael Rapoport. ** 6. Shultz and Becker, *Why We Support a Revenue-Neutral Carbon Tax.* **
5	Berliant & Strauss Journal Article* (see hyperlink on Canvas)
6	N/A
7	1. 2017/8 Tax Forms 1040, Schedules A, B, C Tax Computation Worksheet, Tax Rate Schedules, AMT (6251). ** 2. *A Handy Summary of the Capital Gains Arguments* by Walter J. Blum * 3. Mathur, Slavov, and Strain: *Should the Top Marginal Income Tax Rate Be 73 Percent?* ** 4. *The Revenue Deficit from Progressive Tax Rates* by Michael Solon. ** 5. *Raising and Redistributing Taxes in a Token Economy: Winners and Losers.* *
8	1. Leiserson and Rohaly, *The Individual Alternative Minimum Tax.* ** 2. Leonard E. Burman testimony: The Individual Alternative Minimum Tax. ** 3. Special Report: *The Earned Income Tax Credit and the Child Tax Credit Under the Tax Act of 2001.* ** 4. *The AMT Trap that Caught Teresa Heinz Kerry in 2003* by Gregory Geisler. ** 5. A CBO Study: *For Better or for Worse: Marriage and the Federal Income Tax.* * (NOTE: Read summary closely.)
9	1. Special Report/Viewpoint: *The Effects of a Flat Federal Consumption Tax on the States* by Robert P. Strauss. * 2. *Federal Tax Mechanisms to Enable State Taxation of Final Consumption* by Strauss. * 3. *A Primer on Changing Information Technology and the FISC* by Jon M. Peha & Robert Strauss. * 4. *One Simple Rate,* Steve Forbes. **
10	1. *Federal Tax Policy and the Market for Corporate Control: Relationships and Consequences* by Robert P. Strauss. * 2. *A New Era in Corporate Taxation: Testimony Before the Committee on Finance* by Martin A. Sullivan. ** 3. *Memorandum on Inventory Accounting Methods* published by Joint Committee on Taxation. ** 4. *Present Law and Legislative Background Relating to Depreciation and Section 179 Expensing,* the JCT. ** 5. Testimony of George A. Plesko. *** 6. Mills, Newberry, and Trautman: Trends in Book-Tax Income and Balance Sheet Differences. ** 7. 2010 Depreciation Guide featuring MACRS. **
11	N/A
12	1. *The Case Against Taxing Citizens* by Reuvan S. Avi-Yonah. ** 2. Double Irish arrangement, Wikipedia. **
13	1. *The Curious Story of Erehwemos (With Apologies to Samuel Butler)* by Harold Pepperell. * 2. Jenny Bourne et al ** 3. *The Estate Tax: Ninety Years and Counting* by Darien B. Jacobson, Brian G. Raub, and Barry W. Johnson. **

Lecture	Readings in the Notes: Required =*; Optional = **
14 & 15	1. *Property Taxation in the United States Today.* * 2. State Education Finance Communications: *Why Call for Property Tax Relief?* By Robert Strauss. * 3. *The Assessment of Residential Property in Allegheny County – Report 2: Sources of State Variations in Assessment Quality* by Robert P. Strauss. * 4. Pa. State Tax Equalization Board Common Level Ratios: 1982 – 2009. ** ←=update 5. *Is Assessment 2005 Going to be Reform or Allegheny County's Version of "Ground Hog Day?"* by Robert P. Strauss 6. *Restoring the Public Trust in Allegheny County's Real Estate Assessments* by Robert P. Strauss 7. Robert P. Strauss & David A. Strauss, *Residential Real Estate Fairness in Four Urban Areas.* ** 8. Robert P. Strauss, A Sales Ratio Study of the City of Philadelphia, May, 2013 **
16	1. *Status of the Social Security and Medicare Programs, A Summary of the 2018 Annual Reports. Esp. Charts B, C https://www.ssa.gov/oact/trsum/* *
17	1. Special Report/Viewpoint: *Revising the Medicaid Reimbursement Formula in an Era of Fiscal Austerity* by Robert P. Strauss. * 2. CBO Testimony: *Means-Tested Programs and Tax Credits for Low-Income Households* by Jeffrey Kling. **
18	N/A
19	1. *General Revenue Sharing: How Well Is It Working?* by Robert P. Strauss. * 2. *State and Local Fiscal Assistance Amendments of 1976: Conference Report.* * (NOTE: Closely read the Nondiscrimination Section, pages 31 – 40.)
20	1. *III. Effects of Complexity on the Present-Law Federal Tax System.* * 2. *IV. Efforts of Foreign Countries to Simplify Their Tax Laws* *
21	N/A
22 & 23	1. Fairmodel most recent *U.S. Forecast* *https://fairmodel.econ.yale.edu/* 2. Fairmodel most recent appendix

Problem Sets

Problem	Out/Due	Nature of Problem Set	EST. TIME
Prob 1	Out: 9/2 Due: 9/9	SimCity 2000: Understanding the Budget Constraint **NOTE**: SimCity 2000 is no longer available in Virtual Heinz You must purchase and install it for under $5.00 Instructions will be on Canvas **(Group Problem Set)**	**3-6 hours**
Prob 2	Out: 9/9 Due: 9/21	Reading and Interpreting the Internal Revenue Code	**5-10 hours**
Prob 3	Out: 9/21 Due: 9/30	**Sacrifice Theory, Excess Burden and Efficient Taxes**	**5-10 hours**
Prob 4	Out: 9/30 Due: 10/21	Individual Taxation with SAS using Canadian 2009 CEX **(Group Problem Set)**	**10-15 hours**
Prob 5	Out: 10/28 Due: 11/11	Business Depreciation Policy, Warp Depreciation	**5-10 hours**
Prob 6	Out: 11/11 Due: 11/18	Property Taxation: Equity and Appraisal Analysis of Residential Properties in Allegheny County	**7-15 hours**
Prob 7	Out: 11/18 Due: 12/13	**Macro-Public Finance: Stabilizing the US Economy with Fair Model** **(Group Problem Set)**	**5-10 hours**

Course Calendar

Musgrave and Musgrave chapter readings [ ] and articles in bound notes completed by date
    Out – Homework # handed *Out* to Class
    Due – Homework # *Due* to Professor Strauss by End of Class (5 PM EST)

	Monday	**Wednesday**	**Friday**
Aug/Sept	31: Intro to Course	2: [1-3, 8], *#1 Out*	4:
	7: **LABOR DAY**	9: [4-5], *#1 Due, # 2 Out*	11: Virtual Hunt Library Tour
	14: [7]	16: [6, 12-14]	18: SAS Tutorial
	21: [15 – 16] *#2 Due, #3 Out*	23: [16 – 17]	25:
	28: [19 – 20, article in notes]	30: [19 – 20, table in notes] *#3 Due, #4 Out*	
October	5: [23]	7: **REVIEW**	9: **Chuck E Cheese**
	12: **EXAM #1**	14: [21 – 22]	16:
	19: [21 – 22, article in notes]	21: [33], *#4 Due*	23:
	26: [25]	28: [24, article in notes] *#5 Out*	30:
November	2: [24]	4: [26]	6:
	9: [11, see table in notes]	11: [28-29, article in notes] *#5 Due, #6 Out*	13:
	16: [article in notes]	18: **REVIEW** *#6 Due, #7 Out*	20:
	23: **EXAM #2**	25: Thanksgiving Break	27:
	30: Fair Model Tutorial		
December		2: [article in notes]	4:
	7: [30-32]	9: [30-32]	11: **COURSE REVIEW**
	13: **FINAL EXAM (3 hours, 30%), #7 Due** Date subject to change		