

Topics in Tax Policy and Public Economics
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Overview

The role for government intervention in the economy has always been recognized in market-based economies, advanced or developing. What bring much less consensus among economists and policy-makers are the conditions (e.g., circumstances), the nature (e.g., the instruments for intervention), the timing, or the size of government interventions. To be sure, what makes the problem even bigger is that there seems to be no static answer to these questions. For instance, the role of governments in encouraging environmental protection (such as tax incentives to individuals and businesses' investment in energy-saving technologies) was much less urgent at the turn of the 1900s--when carriages and steamed boats were still the main means of human and industrial transportation--than it is today. Likewise, the role of governments in stimulating the creation and use by businesses of intellectual assets and new ideas was much less obvious 50 years ago when the size of the intangible economy and its role for long-term economic growth was smaller.

In this general project, students will evaluate, theoretically, empirically, or both, the role of government interventions under various specific market conditions that are of increasing importance in modern economies. Most of the following projects are examples, essentially aimed at providing students with ideas of important research questions in the public finance / public economics field. They are not binding, so students could modify them based on their own research interests / findings.

Finally, depending on the orientation of the projects, students participating in this seminar could benefit from the resources of NES's new Center for the Study of Diversity and Social Interactions, directed by Shlomo Weber.

Notice to students: The project will have joint meetings with the project "Topics in Microeconomics" lead by Professors Efthymios Athanasiou, Ozgur Evren, and Sergei Izmalkov.

Suggested specific projects

Theoretical and empirical projects could include, but are not restricted to the 6 broad categories listed below. One or more papers could be written on either of the following suggested projects:

Project 1: The optimal design and the effectiveness of government support to innovation

Most economists recognize the increasing potential of technology as a way to improve long-term economic growth. The two-digit growth of the Asian Tigers in the 1980s and 1990s was largely due to their focus on high-tech. Aware of the need to remain in the high-tech race, most countries have turned to increased fiscal incentives for R&D. The rationale for R&D tax incentives depends on the extent to which they reduce its cost (e.g., large fixed cost for small firms, liquidity and credit constraints, higher uncertainty / smaller success rates, free riding from competitors, etc.). The advantage of R&D expenditures, as opposed to physical assets, is their spillover effect.

Students will have to identify the rationale for providing tax incentives for R&D (the market failure) and investigate theoretically the conditions under which different fiscal instruments reach a second-best (tax instruments vs. direct spending--refundable or not--or improved regulation). They should then be able to investigate the effectiveness of several tax incentives across countries. This empirical approach could take advantage of the variation in tax codes in the post-Soviet blocs, or across Russian regions. For example, since 2009 the Russian Federation allows full deduction of current R&D expenditures for tax purposes. Previously only 50% of such expenditures were taken into account.¹ The advantage from an applied micro perspective is that although the literature on the effectiveness of tax incentives for businesses is very large (mostly for US and other OECD countries), there is almost no research for emerging countries, including Russia and other post-Soviet bloc countries (see e.g., Bloom et al., 2002). Investigating the effectiveness of tax incentives for innovation (e.g., by making use of the variation across Russian regions or Post-soviet countries) would greatly contribute to the literature on corporate taxation.

Project 2: Optimal taxation of private equity

Many countries (including the US, UK, The Netherlands, Germany, and others) tax income from private equity managers as capital income--which is taxed at a much lower tax rate than labor income. However, this treatment has been highly criticized in recent years by various groups. In the US, although many recent proposals have been submitted to reform this tax treatment, no agreement has been reached.² By contrast, other countries have seriously considered tax reform. There is very little theoretical and empirical research on the grounds that justify such treatment. On the one hand, managers of private equity companies (PE managers) do not directly own or invest in the businesses they restructure (these restructured businesses are owned by PE investors, not PE managers). As such, their revenues should be taxed as labor income. On the other hand, proponents of capital gains treatment claim that PE managers should be compensated for taking greater risks, and for the positive spillover of restructuring struggling firms.

This question could be analyzed theoretically. On the one hand, equal tax treatment would be theoretically granted on the basis of horizontal equity. For instance, if all managers have the same skills, and if a manufacturing company (e.g., Microsoft) manager's income is characterized, for tax purposes, as labor income, a PE (e.g., KKR & Co) manager's income should also be characterized as labor income. On the other hand, to the extent that PE managers'

¹ For example, since 2009 the Russian Federation now allows full deduction of current R&D expenditures for tax purposes. Previously only 50% of such expenditures were taken into account. More generally, existing R&D tax incentive schemes differ significantly across countries in terms of their generosity, their design and the categories of firms or R&D areas they target. See OECD "Science, Innovation, and Technology Outlook", 2010: <http://www.oecd.org/sti/oecdsciencetechnologyandindustryoutlook.htm>.

² <http://www.dailyfinance.com/2013/02/05/carried-interest-obama-wall-street-tax-loophole/>. See also: <http://www.taxpolicycenter.org/briefing-book/key-elements/business/carried-interest.cfm>

activities generate positive externalities, they should be encouraged to engage in them, in which case the lower tax rate acts as a compensation for this uninsured risk. In other words, such differential taxation acts as an insurance mechanism where the government shares the risk taken by PE owners.

The question should also be analyzed empirically to the extent that students can find good survey data on individual income sources and type of occupational activity.

- There are various providers of detailed private equity companies' data (many not publicly available but students should check what NES can access). They may also directly contact the providers to evaluate their options.³
- Student could also take advantage of PSID-like panel surveys of individuals (including income sources, and a host of socio-economic variables) that are compatible across countries, including Russia. They may actually obtain access after submitting a brief research proposal.⁴

Project 3: Innovations, investor protection, and the strength of judicial systems in Russia (and / or other emerging countries)

In Russia, as in many emerging countries, corporate governance rules are very imperfectly defined, and judicial courts not always efficient at protecting investors (Lambert-Mogiliansky et al., 2007). In order to invest more resources into the creation of new ideas (innovations), strong patenting rights are critical for both securing financing (La Porta et al., 1997; Djankov et al., 2007; Demirgüç-Kunt and Maksimovic, 1998; Ponticelli, 2012) and incentives to innovate. In such a context, the effectiveness of tax incentives for R&D strongly relies on the confidence that companies and lenders can put on the judicial system.

Students could investigate this question from both theoretical and empirical perspectives. From a theoretical perspective, they should build from a standard principal-agent model. Empirical investigation could be made with available data both at the industry and firm levels.⁵

Project 4: Information and access to government programs

In theory, state or federal government programs for lower income group (e.g., State Children Health Insurance Program, Temporary Assistance for Needy Families, Earned Income Tax Credits, food stamps, low income housing, etc.) have a potential to not only reduce poverty and/or inequality, but also increase total welfare. Programs that work outside of the tax system are the only way for governments to reach the most needy (as many of them have never received labor income). However, in either case, a significant drawback of these programs in practice is that due to the lack of access to information for these groups, the take-up rate of many government programs can be small, which in turn increases the cost of governments (Currie, 2006). With improvements in technology such as increased access to information for these groups

³ For an overview of the extent of available data, see HBS library website (http://www.library.hbs.edu/databases/by_subject/private_equity.html). Students may also have access to industry-level data, or occupational data, which are publicly provided and can easily be accessed in the US and other OECD countries.

⁴ For more details on panel survey data of individuals that are compatible in a few countries, including the US and Russia, see the CNEF at Cornell University which provides correspondence files for 8 countries including the US, the UK, Switzerland, Canada, Germany, South Korea, Australia, and Russia. <http://www.human.cornell.edu/pam/research/centers-programs/german-panel/cnef.cfm>
The Russian panel is “The Russia Longitudinal Monitoring Survey (RLMS)”, which can be obtained from NES or the HSE, and include 19 years of panel data since 1992. <http://www.cpc.unc.edu/projects/rlms-hse>

⁵ Firm level data on R&D could be obtained from CEFIR (“RUSLANA” database). Patent filing data can be obtained at the regional and country levels. They can also be obtained at the firm / industry levels, although this would require access from other institutions than NES (e.g., ORBIS database).

and increased computerization, one would expect that the effectiveness of these programs would improve (Kopczuk and Pop-Eleches, 2007). Students could investigate this question (theoretically and/or empirically) in Russia. For this they can use panel surveys of consumers (see footnote 4) and collect data on access to information at the local level (e.g., Yandex, Google).

Project 5: Flat tax reforms, efficiency, equity, and inequality

Since the collapse of the Soviet Bloc, many post-Soviet nations have adopted a “flat tax.” When it was conceived by Robert Hall and Alvin Rabushka in the 1980’s, the main message of the flat tax model was that it is the optimal way to tax income from all sources (labor or capital): contrary to a progressive taxation, a flat tax reduces tax evasion and therefore the deadweight loss of taxation (Gale, 1998). One significant drawback of a flat tax system is that it reduces equity: it benefits higher income groups progressively because of diminishing marginal utility. (In fact, a flat tax is equivalent to a consumption tax.)

Although most Western countries operate under dual systems of progressive income taxation, many former Communist countries introduced a flat tax including Estonia (1994), Russia (2001), Slovakia (2004), Georgia and Romania (2005), Macedonia and Albania (2007), the Czech Republic and Bulgaria (2008), Bosnia (2009), and Hungary (2011).⁶ If the theory is correct, this variation provides an opportunity to evaluate the conditions under which the Hall & Rabushka theory works (Gorodnichenko et al, 2009; Hall & Rabuska, 1996).

Project 6: International taxation of royalty and R&D intensity

Most countries use tax the distribution of royalties by local companies to owners of R&D (“withholding tax rates”). Because of its intangible nature, multinational companies have more leeway in their choice of location of R&D ownership (e.g., high skilled employees or patents, as compared to the location of fixed assets, like machinery, equipment, and buildings). In such a context, the theory should imply that companies compensate for differences in royalty withholding tax rates by locating R&D in high-tax locations, therefore circumventing the cost of these taxes (see e.g., Hines, 1993, 1995). Students could investigate empirically the impact of the international taxation of royalty distributions on the location of innovation (e.g., local corporate R&D intensity). They could focus on multinational companies operating in Russia and/or neighboring countries.

References

The references provided below include important research papers related to the above-mentioned topics. More references will be needed depending on students’ areas of interest.

Bloom, Nick , Rachel Griffith, John Van Reenen. 2002. “Do R&D tax credits work? Evidence from a panel of countries 1979–1997.” *Journal of Public Economics*, 85, 1, July, 1-31.

Currie, J. 2006. The take-up of social benefits. In A. Auerbach, D. Card, & J. Quigley (Eds.), *Poverty, the distribution of income, and public policy* (pp. 80–148). New York: Russell Sage.

DemirDemirgüç -Kunt, A. and V. Maksimovic. 1998. “Law, Finance, and Firm Growth”. *The Journal of Finance* 53(6), 2107–2137.

Djankov, S., C. McLiesh, and A. Shleifer. 2007. “Private Credit in 129 Countries”. *Journal of Financial Economics* 84(2), 299–329.

⁶ Slovakia’s newly re-elected left-wing government (which had previously left the flat tax regime unchanged) re-introduced a directly progressive income tax (PIT) as part of an austerity package. See <http://blogs.lse.ac.uk/europpblog/2013/03/18/slovakia-abandon-flat-tax/>

Gale, William. 1998. "Simple, Efficient, Fair. Or Is It? The Flat Tax in Theory and Practice." *The Brookings Review*, 16, No. 3 (Summer), pp. 40-44.

Gorodnichenko, Yuriy , Jorge Martinez-Vazquez, and Klara Sabirianova, Peter. 2009. "Myth and Reality of Flat Tax Reform: Micro Estimates of Tax Evasion Response and Welfare Effects in Russia." *Journal of Political Economy*, Vol. 117, No. 3 (June): 504-554.

Hall, Robert E. and Alvin Rabushka. 1996. "The Flat Tax." Hoover Institution Press (Review of the 2nd Edition). Also in *The Money Review*, November, 22-24.

Hines, James R. Jr. 1993. "On the sensitivity of R&D to delicate tax changes: the behavior of U.S. multinationals in the 1980s." In: Giovannini, A., Hubbard, R.G., Slemrod, J. (Eds.), *Studies in International Taxation*. University of Chicago Press, Chicago, pp. 149-94.

Hines, James R. Jr. 1995. "Taxes, Technology Transfer, and the R&D Activities of Multinational Firms." NBER Working Papers 4932, National Bureau of Economic Research, Inc.

Kopczuk, W., & Pop-Eleches, C. 2007. Electronic filing, tax preparers and participation in the Earned Income Tax Credit. *Journal of Public Economics*, 91, 1351-1367.

Lambert-Mogiliansky, Ariane, Konstantin Sonin, and Ekaterina Zhuravskaya. 2007. "Are Russian commercial courts biased? Evidence from a bankruptcy law transplant." *Journal of Comparative Economics*, Elsevier, vol. 35(2), pages 254-277, June.

La Porta, R., F. Lopez-de Silanes, A. Shleifer, and R. Vishny. 1997. "Legal Determinants of External Finance". *Journal of Finance* 52 (3), 1131-1150.

Ponticelli, Jacoppo. 2012. "Court Enforcement and Firm Productivity: Evidence from a Bankruptcy Reform in Brazil." (Job-Market-Paper). Universitat Pompeu Fabra, Department of Economics and Business. December.