Building up tax systems: Lessons from the Nordic countries

Jukka Pirttilä (UNU-WIDER)

29 June 2014

UNITED NATIONS UNIVERSITY
UNU-WIDER

Outline

Outline

The purpose of this talk

- Review briefly some key features of the tax structure and tax systems in Nordic countries
- To gain some understanding on how tax institutions could be arranged in developing and emerging economies
- Especially if and when these countries aim to increase their tax revenues
- Much of the material draws on recent survey by Kleven (2014)

4 central messages

4 central messages

- Building up a broad tax base is needed to keep tax distortions and avoidance at bay with increasing tax rates

4 central messages

- Building up a broad tax base is needed to keep tax distortions and avoidance at bay with increasing tax rates
- Extensive 3rd-party reporting is essential for reducing tax evasion

4 central messages

- Building up a broad tax base is needed to keep tax distortions and avoidance at bay with increasing tax rates
- Extensive 3rd-party reporting is essential for reducing tax evasion
- The effects of taxation are *not* independent of how the money is spent: social programs that boost labor force participation help reduce tax distortions

4 central messages

- Building up a broad tax base is needed to keep tax distortions and avoidance at bay with increasing tax rates
- Extensive 3rd-party reporting is essential for reducing tax evasion
- The effects of taxation are *not* independent of how the money is spent: social programs that boost labor force participation help reduce tax distortions
- The dual income tax has potential, but beware of income shifting

Outline

The Nordic countries: Why so successful?

- Record-high tax rates, a lot of redistribution and low inequality
- According to basic economic theory, these should be troubled economies

The Nordic countries: Why so successful?

- Record-high tax rates, a lot of redistribution and low inequality
- According to basic economic theory, these should be troubled economies
- Yet, the countries appear to perform very well. High levels of GDP and quality of life

The Nordic countries: Why so successful?

- Record-high tax rates, a lot of redistribution and low inequality
- According to basic economic theory, these should be troubled economies
- Yet, the countries appear to perform very well. High levels of GDP and quality of life
- Which features in their tax system and public sector more generally make this possible?

Outline

Conceptual framework to measure tax distortions

- In the modern public finance literature, a broad consensus that a good measure of the extent of tax distortions is the elasticity of taxable income (ETI)
- It is defined as the percentage change in taxable income when the take-home part (1-marginal tax rate) of income is increased by 1 percent
- Chetty (2009): ETI is a sufficient statistic of the deadweight loss, takes into account not only labor supply, but also other margins of response, such as effort and avoidance.
- But notice that ETI can be lowered by making avoidance harder via broader tax base

Evidence on ETI

- Based on research that utilizes tax reforms to provide exogenous variation to $(1 - T')$
- US estimates between 0.2-0.5. The response of broad income less than that of taxable income
- Some evidence that ETI is lower in Nordic countries (Kleven and Schultz (2013))
- In addition, the difference in the elasticity of broad income and taxable income is smaller, reflecting wider tax base

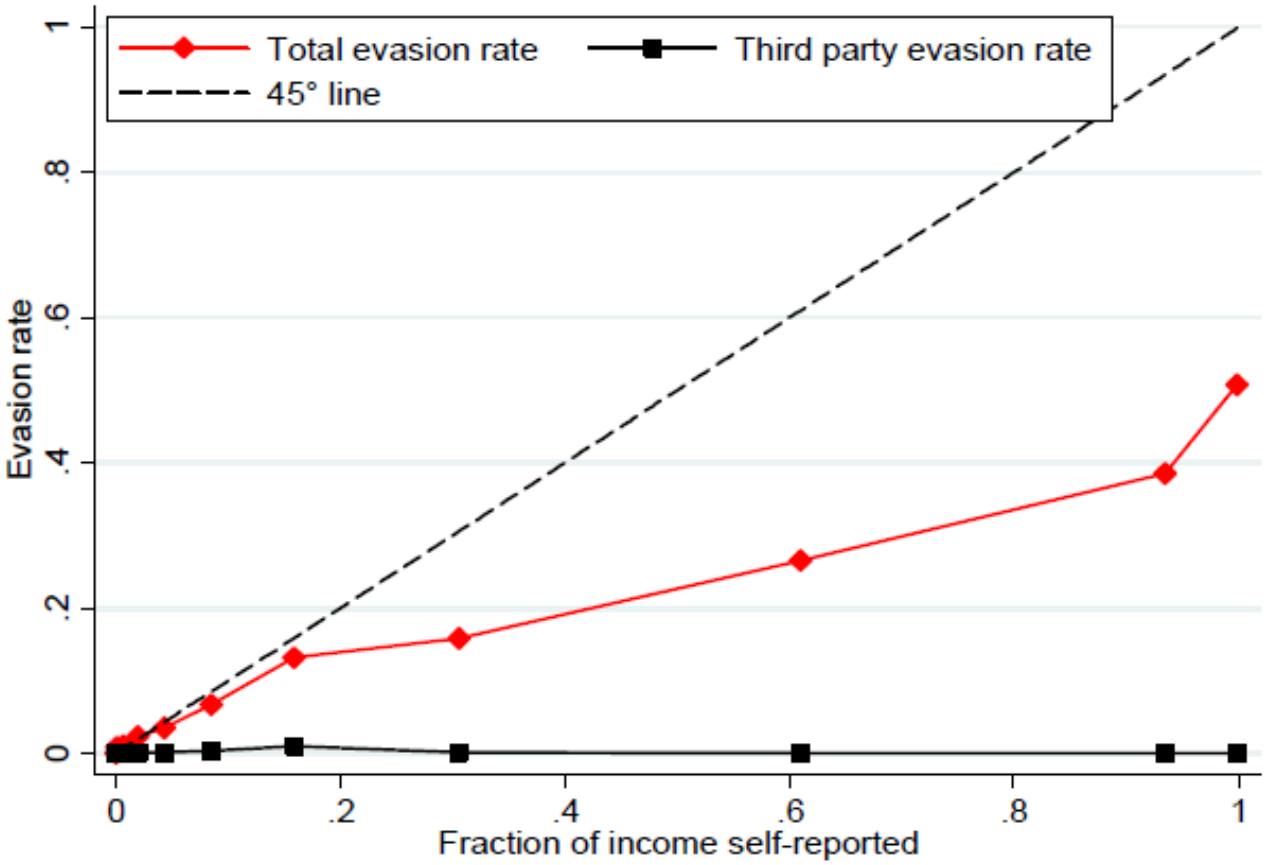
Table 8. Elasticities of Broad Income vs. Taxable Income

	Panel A: Broad income			Panel B: Taxable income		
	All individuals	Wage earners	Self-employed	All individuals	Wage earners	Self-employed
	(1)	(2)	(3)	(4)	(5)	(6)
			All reforms (1984-2005)			
1-τ on labor income	0.054***	0.052***	0.084***	0.066***	0.064***	0.104***
	(0.003)	(0.003)	(0.039)	(0.003)	(0.003)	(0.040)
1-τ on capital income	0.014***	0.014***	0.003	0.015***	0.016***	-0.006
	(0.002)	(0.002)	(0.029)	(0.002)	(0.002)	(0.031)
Joint increase in 1-τ on labor and capital income	0.068***	0.067***	0.084*	0.082***	0.080***	0.099*
	(0.005)	(0.005)	(0.048)	(0.006)	(0.005)	(0.050)
Number of observations	31,103,309	29,540,762	1,562,547	30,893,781	29,398,652	1,495,129

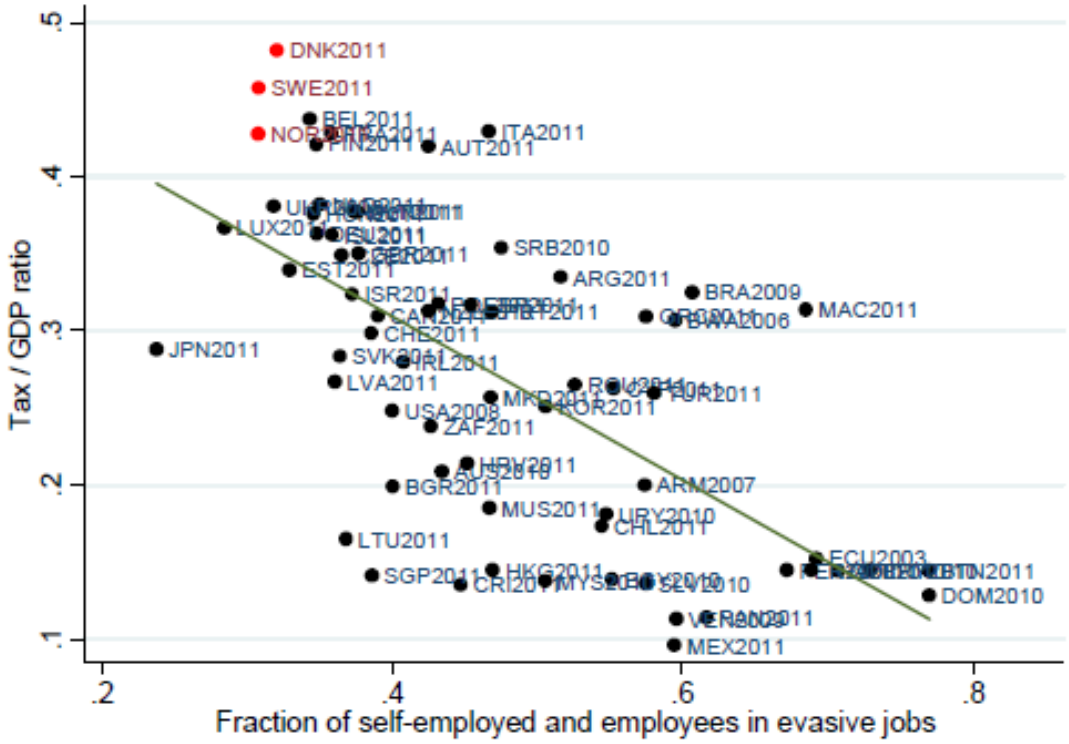
The role of 3rd-party reporting in inhibiting evasion

- In the Nordic countries, extensive third party reporting regarding not only labor income, but also on many deductions and items of capital income
- Kleven et al. (2011) show that there is virtually no tax evasion for items that are third party reported
- Whereas there is significant tax evasion on self-reported parts of the tax bill
- Third-party reporting key for minimizing tax evasion. The key question is how to achieve it in developing countries.

Figure 1: Evasion by Fraction of Income Self-Reported



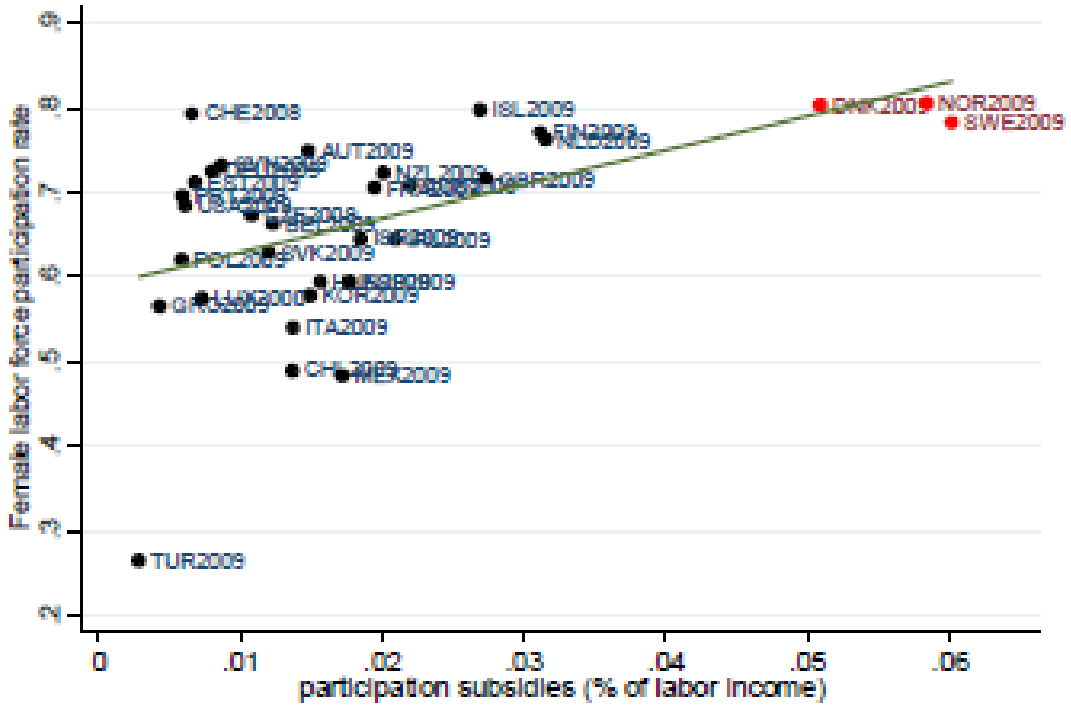
Panel B: Tax Take vs Fraction of Self-Employed and Employees in Evasive Jobs



How to achieve high employment rates with a heavy tax burden

- The conventional economic theory stresses the harmful consequences of labor income tax burden on employment and working hours
- That view abstracts completely from the expenditure side
- The Nordic counties spend a sizable share of their expenditure on uses that support employment
  - Directly via services such as daycare (enables participation of both parents)
  - Indirectly via universal health care and education which foster increases in skills
- Both theoretically (Blomquist, Christiansen, and Micheletto (2010)) and empirically verified that this policy reduces the distortions of taxation on employment

Panel D: Female Labor Force Participation Rate vs Participation Subsidies



The promise of the dual income tax?

- In early 1990s, Sweden, Norway and Finland moved to a dual income tax system. This system gained some popularity elsewhere as well.
- Key principles
  - Some rate cutting and base broadening
  - Division of the tax base to labor income (continued to be taxed at a progressive scale) and capital income (which begun to be taxed at a low, flat, rate)
- Probably led to increased efficiency of both individual tax bases
- But also to significant income shifting from labor income to capital income (Pirttilä and Selin, 2011)

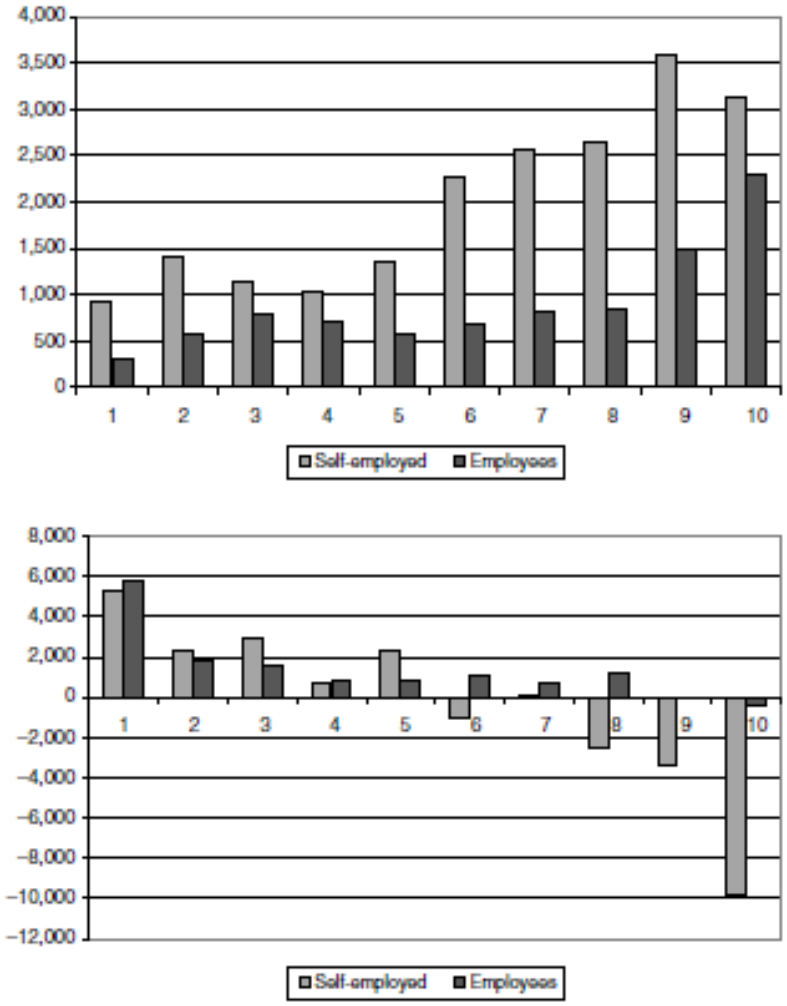


Fig. 1. Mean change in capital income (upper panel) and mean change in labour income (lower panel), in EUR, from 1992 to 1995 by decile. Deciles are based on total income in 1992

Outline

Guidance for developing countries' institutions?

- Broad tax base: relatively easy to implement by cutting deductions
- 3rd-party reporting: The role of new information technology, paper trails (credit cards) and VAT chains (reverse charging)
- Labor supply may not be a key problem, but still the *combined* effect of the revenue and expenditure side matters for the overall distortions
- The DIT might be more suitable for a developing county if the alternative is to have no tax on capital income due to implementation problems

Blomquist, Sören, Vidar Christiansen, and Luca Micheletto (2010). “Public provision of private goods and nondistortionary marginal tax rates”. In: *American Economic Journal: Economic Policy* 2, pp. 1–27.

Chetty, Raj (2009). “Sufficient Statistics for Welfare Analysis: A Bridge Between Structural and Reduced Form Methods”. In: *Annual Review of Economics*, pp. 451–488.

Kleven, Henrik Jacobsen et al. (2011). “Unwilling or Unable to Cheat? Evidence from a Tax Audit Experiment in Denmark”. In: *Econometrica* 79, pp. 651–692.

Kleven, Henrik (2014). “How can Scandinavians tax so much?” In: *Journal of Economic Perspectives*. Forthcoming.

Kleven, Henrik and Esben Anton Schultz (2013). ““Estimating Taxable Income Responses Using Danish Tax Reforms”. In: *American Economic Journal: Economic Policy*. Forthcoming.

Pirttilä, Jukka and Håkan Selin (2011). “Income shifting within a dual income tax system: Evidence from the Finnish tax reform of 1993”. In: *Scandinavian Journal of Economics* 113, pp. 120–144.