

## Abstract

This dissertation analyzes two presently widely discussed topics in Public Finance: relationship between the shadow economy and tax policy, and the effect of financial transaction taxes on the functioning of financial markets.

The first chapter describes presently used estimators of the size of the shadow economy, with a focus on microeconomic estimators. It illustrates problems with assumptions that a vast majority of recent studies use to identify underreporting (mainly the comparison of employed and self-employed) using data from four transition economies as an example. It shows that the most common assumption, that self-employed evade whereas employees do not is probably too strict in less compliant economies, where even employees have opportunities to evade through e.g. under-the-table wages or by moonlighting at unreported jobs.

The second chapter develops an estimator of unreported income that relaxes some of these strict assumptions. Assuming only that tax-evading households have a higher consumption-income gap than non-evaders in surveys, an endogenous switching model with unknown sample separation enables the estimation of both the probability of hiding income and the expected amount of unreported income for each household. Using data from Czech and Slovak household budget surveys, we find the size of the shadow economy to be substantially larger than estimated using other techniques. These results are robust under a number of alternative specifications. Furthermore, we show that since the share of underreported income decreases with income level, true income inequality in these countries is lower than suggested by the reported income.

In the third chapter we analyze the tax evasion response to the introduction of the flat tax in several transition economies. Using the estimator from the previous chapter, we show that in majority of studied countries there was no discernible effect of the flat tax reform on the size of the shadow economy. We argue that this finding is consistent with the tax morale story, as satisfaction with public services and with countries' development in general declined in these countries.

The fourth chapter focuses on financial transaction taxes (FTTs), which have returned to spotlight since the recent economic crisis as a possible means to offset negative risk externalities. However, up-to-date academic research does not provide sufficient insights into the effects of transaction taxes on financial markets, as the literature has heretofore been focused too narrowly on Gaussian variance as a measure of volatility. In this paper, we argue that it is imperative to understand the relationship between price jumps, Gaussian variance, and FTTs. While Gaussian variance is not necessarily a problem in itself, the non-normality of return distribution caused by price jumps affects not only the performance of many risk-hedging algorithms but directly influences the frequency of catastrophic market events. To study the relationship between FTTs and price jumps, we use an agent-based model of financial markets. Its results show that the relationship is intricate, as the volatility as measured by the standard deviation of prices may rise with increasing tax rate, while, at the same time, the measure of price jumps goes down. This result implies that regulators may face a trade-off between overall variance and price jumps when designing optimal tax.