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An Econometric Analysis of the Flat Tax Revolution

Authors : Wayne Tarrant, Ethan Petersen

Abstract : The concept of a flat tax goes back to at least the Biblical tithe. A progressive income tax was first vociferously espoused in a small, but famous, pamphlet in 1848 (although England had an emergency progressive tax for war costs prior to this). Within a few years many countries had adopted the progressive structure. The flat tax was only reinstated in some small countries and British protectorates until Mart Laar was elected Prime Minister of Estonia in 1992. Since Estonia's adoption of the flat tax in 1993, many other formerly Communist countries have likewise abandoned progressive income taxes. Economists had expectations of what would happen when a flat tax was enacted, but very little work has been done on actually measuring the effect. With a testbed of 21 countries in this region that currently have a flat tax, much comparison is possible. Several countries have retained progressive taxes, giving an opportunity for contrast. There are also the cases of Czech Republic and Slovakia, which have adopted and later abandoned the flat tax. Further, with over 20 years' worth of economic history in some flat tax countries, we can begin to do some serious longitudinal study. In this paper we consider many economic variables to determine if there are statistically significant differences from before to after the adoption of a flat tax. We consider unemployment rates, tax receipts, GDP growth, Gini coefficients, and market data where the data are available. Comparisons are made through the use of event studies and time series methods. The results are mixed, but we draw statistically significant conclusions about some effects. We also look at the different implementations of the flat tax. In some countries there are equal income and corporate tax rates. In others the income tax has a lower rate, while in others the reverse is true. Each of these sends a clear message to individuals and corporations. The policy makers surely have a desired effect in mind. We group countries with similar policies, try to determine if the intended effect actually occurred, and then report the results. This is a work in progress, and we welcome the suggestion of variables to consider. Further, some of the data from before the fall of the Iron Curtain are suspect. Since there are new ruling regimes in these countries, the methods of computing different statistical measures has changed. Although we first look at the raw data as reported, we also attempt to account for these changes. We show which data seem to be fictional and suggest ways to infer the needed statistics from other data. These results are reported beside those on the reported data. Since there is debate about taxation structure, this paper can help inform policymakers of change the flat tax has caused in other countries. The work shows some strengths and weaknesses of a flat tax structure. Moreover, it provides beginnings of a scientific analysis of the flat tax in practice rather than having discussion based solely upon theory and conjecture.

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