



Financial Economics Meets Tax Policy

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Following this Introduction, there are five distinct studies that constitute this Special Section of the *Atlantic Economic Journal*, where the emphasis is on financial economics and public policy. For purposes of the studies provided here, financial economics is broadly defined to include not only purely mainstream financial economics issues, such as banking, lending, and interest rate yields, but also market responses to tax policies and certain financial market and other public policies. Each of the studies provided here endeavors to provide new empirical insights that can be of use both to researchers and within the classroom as well.

The study by Alm et al. (2020) is intended to help disentangle individual taxpayers' responses to audit rate changes undertaken by Internal Revenue Service (IRS) personnel. In pursuit of this goal, the authors collected individual-level data from a series of identical laboratory experiments in which only audit rates were changed, a *de facto ceteris paribus*-embracing procedure. The authors stress that the measures of income tax compliance are accurate and unambiguous measures that reflect individual choices. These measures were also derived in a setting that controlled explicitly for extraneous influences on individual behavior, which thereby can clearly permit identification of the impact of a change in a single policy variable (i.e., the audit rate) on the behavioral outcome of interest (e.g., individual income compliance). Although there are obvious reasons for caution in using and interpreting data collected from laboratory experiments, the laboratory offers an opportunity to investigate, in a controlled environment, individual responses to audit rate changes, and, importantly, to distinguish individual responses from average responses.

Consistent with most of the previous related empirical research, the results obtained in this study imply that the average response across all taxpayers is to increase income-

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tax-system compliance when audit rates are increased (or decreased). Furthermore, it is noteworthy that the estimated overall reported income-audit rate elasticity is also comparable to previous empirical estimates. However, the data in this study also indicate the presence of extensive heterogeneity in individual responses. Many individuals do in fact respond to an increase (decrease) in the audit rate by increasing (decreasing) their compliance rate. However, these individuals represent only about two-thirds of all the subjects. In fact, the data also show that many, roughly 1/6th of the subjects, do not respond at all to audit rate changes. Moreover, somewhat surprisingly, the data in this study further show that about 1/6th of all subjects actually decrease their compliance when audit rates increase, and vice versa. Indeed, the average estimated response across all taxpayers is driven largely by those individuals who respond to a higher (lower) audit rate by reporting more (less) taxable income. When the authors focused solely on the individuals who responded predictably to audits, their estimates revealed substantially larger responses to audits. The individual-level data also provide evidence consistent with the so-called “bomb crater effect” of tax audits. These different individual responses are consistent with some theories of individual behavior that go beyond the standard economics-of-crime behavioral framework to incorporate other motivations for individuals. Overall, these results seem to suggest that government policy interventions, at least in matters of compliance, must consider the full spectrum of individual behaviors when devising appropriate policies.

The study by Nguyen and Barth (2020) contributes to the literature by providing empirical evidence that, over the study period 2003 to 2016, community banks in the U.S. provided more small business funding than non-community banks. This result is mainly due to the period after the financial crisis/Great Recession. Moreover, when controlling for a variety of banking and demographic factors, the findings indicate that there is strong evidence that community banks provide more small business loans, in terms of both number and magnitude, particularly in non-metropolitan areas. The results clearly indicate the importance of community banks in providing small business funding in areas where small businesses typically experience difficulty in obtaining funding from non-community banks.

Importantly, this study indicates that the conventional paradigm may not hold due to deregulation and lending technology innovations during the period from 2003 to 2007. However, in recent years, the change in focus of non-community banks enables community banks, with their clear comparative advantage in relationship banking, to return to their important role of providing funding for small businesses. In addition, there is evidence that community banks still take advantage of relationship banking in funding small businesses in counties where they have offices although they effectively do not do so in those counties where there are no bank offices.

The exploratory study by Cebula et al. (2020) seeks to ascertain the impacts of the average federal personal income tax rate (*ATR*) and personal income tax evasion (as measured by the AGI Gap, *AGI-Gap*) on the spread between the *ex post* real interest rate yields on Moody’s Aaa-rated corporate bonds, *EPRAAA*, and high-grade municipal bonds, *EPRTF*, in the U.S. The AGI Gap reflects income tax evasion in terms of underreporting of taxable income to the IRS. Using annual data, for practical reasons of data availability, it was found (as hypothesized) on the basis of co-integration (full modified ordinary least squares) estimations that the spread between *EPRAAA* and *EPRTF* do in fact appear to be an increasing function of both the *ATR* and the *AGI-Gap*

variables. These results are characterized as preliminary. Nevertheless, among the implications for policymakers is that there exists evidence suggesting that raising federal taxes correlates with decreased private investment in high-quality bonds such as Aaa-rated corporate bonds and, potentially, treasuries (the interest paid upon which is, of course, also subject to federal income taxation), while boosting flows of funds into the market for tax-free municipals, thereby creating downward pressure on the interest rate paid on the latter issues.

This is an exploratory study using heretofore largely neglected, but interesting, fiscal/tax variables. More elaborate modeling, as well as more sophisticated econometric techniques, would be needed to establish conviction about these results before a definitive set of conclusions and policy suggestions can be obtained. It would also be helpful if more granular data, such as quarterly data were available, but this is obviously difficult to achieve due to the collection parameters for the *ATR* and *AGI-Gap* data, neither of which can readily be translated into anything but the annual data form in which they are already expressed.

The objective of the study by Hall et al. (2020) is to examine the spatial spillovers of income tax adoption in the U.S. at the state level over the 111 year period from 1900 to 2010. The literature on income tax adoption suggests there might be spatial correlation at play affecting the timing of the adoption of income taxes. To answer this question, the authors employed a spatial Durbin probit model, while simultaneously controlling for demographic factors thought to be potentially associated with the income tax adoption decision. The authors found a negative spatial autocorrelation in the adoption of an income tax among neighboring states, which is a finding consistent with a model of Tiebout competition.

In addition to contributing to the literature on income tax adoption, this study contributes to the understanding of the determinants of government growth and government growth per se during the twentieth century. Whereas most of the existing related literature accounts for spatial diffusion, it does not, in contrast to the undertaking by Hall et al., formally employ spatial econometric analysis and might be drawing incorrect conclusions due to biased estimates. This study may very well also be of interest to the literature studying the effects of spatial spillovers on policies and institutions in general.

With the literature on corruption and tax evasion well established, researchers have often embarked on analyzing the relationship between corruption and tax evasion at the firm level. This issue is important in part because the presence of corruption and tax evasion in general hampers economic growth and limits the ability of the government to provide public goods and services necessary to provide support for market-based institutions and societal well-being. The study by Payne and Saunoris contributes to the existing literature on the relationship between corruption and tax evasion at the firm level by investigating the heterogeneous impact of corruption on firm-level tax evasion, which has not been heretofore explored in the scholarly literature.

The authors hypothesize that bribes on firm-level tax evasion are conditional on the prevalence of tax evasion in a country. Using firm-level data for 25 transition economies obtained from the Business Environment and Enterprise Performance Survey (BEEPS), Payne and Saunoris specified a model in which firm tax evasion is a function of bribes, the perceived tax burden, the degree of trust in government, and various firm characteristics. The latter includes firm size, type of firm ownership, and the firm's

industry sector. The censored quantile instrumental variables estimation procedure is used to analyze the impact of bribery across the conditional distribution of firm-level tax evasion. The estimation results reveal that the impact of corruption on tax evasion increases as tax evasion is consistent with an inverted “U” shape relationship. The estimation results also indicate that the impact of firm-level characteristics varies across the conditional distribution of tax evasion. Consequently, the policy recommendations that apply vary in response to the extent of the income tax evasion. Interestingly, it turns out that policies that focus on reducing tax burden and controlling corruption would be more effective under circumstances in which the extent of tax evasion is more widespread.

Clearly, financial economics, due to its many complex underpinnings and linkages, can be interpreted very broadly to encompass myriad fields of study. Thus, not only do these special section papers focus expressly upon financial markets per se, as in Nguyen and Barth (2020) and in Cebula et al. (2020), but also on tax-related issues and various public economic policies. Hopefully, the contents of the studies provided here will prove of value, whether in the research arena or the classroom.

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