New Research on Tax Administration: An IRS-TPC Conference

Urban Institute, 2100 M Street, N.W., Washington, DC • June 21, 2012

Abstracts of Papers

9:20 – 10:50 **Session 1: Understanding the Taxpayer Experience**

- **Tax Compliance Costs for Corporations and Partnerships: A New Look**
  George Contos and John Guyton (IRS: RAS), Allen Lerman and ***Susan Nelson*** *(Department of the Treasury, Office of Tax Analysis)*

  [Forthcoming]

- **2011 IRS Survey of Individuals Living Abroad**
  Tiffanie N. Bruch and ***David C. Cico****, and Saima S. Mehmood (IRS: W&I Research & Analysis)*

  Both in support of the Internal Revenue Service (IRS) Multiyear Servicewide Approach to International Tax Administration as well as in response to a *2008 Taxpayer Advocate Most Serious Problem* on access to the IRS by individual taxpayers located outside the United States, Wage and Investment Research and Analysis (WIRA) initiated a portfolio of international taxpayer research to increase IRS knowledge of the service needs and filing issues of taxpayers living outside of the United States (international taxpayers). Specifically, in an effort to develop a current and accurate baseline of international taxpayer needs, preferences, and behaviors, WIRA implemented a multi-tiered international research program with each project grounding as well as informing the next project.[1] This systematic and multi-source program of international taxpayer research included:

  - Focus groups with tax practitioners who service international taxpayers
  - Demographic and tax filing profile of international taxpayers over various tax years
  - Interviews with tax attaches working with taxpayers overseas
  - Interviews with multinational companies based in the U.S. employing u.s. citizens overseas
  - *2009 IRS Survey of International Taxpayers*
  - *2011 IRS Survey of International Taxpayers*

  The *2011 Survey* represents both research designed to inform and build the business case for improving and/or expanding the service channels available to taxpayers living abroad as well as a step forward in the IRS's commitment to improve the services it provides to individuals who live outside the United States.

- **Taxpayer Compliance Behavior in Alternative Reporting Regimes: Transparency vs. Burden**
  Laura Kalambokidis *(University of Minnesota), Marsha Blumenthal (University of St. Thomas), and Alex Turk (IRS:SB/SE)*

  Opportunities to cheat on taxes are reduced when a taxpayer's income or deductions are transparent to the tax administrator, for example because they are required to be reported to the administrator by the source. In some cases, tax administrators allow taxpayers to trade transparency—and with it the chance to under-report income or over-state deductions—for reduced compliance burden. If taxpayers who would have

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[1] For the *2009 IRS Survey of International Taxpayers*, the focus groups and interviews were used in the development and refinement of the survey instrument while the demographic/tax filing profile was used to define the sample. For the *2011 IRS Survey of Individuals Living Abroad*, lessons learned and responses from the 2009 Survey were used to develop the survey instrument with the sampling plan being informed by research into alternative data sources such as the IRS non-filer database, U.S. Department of State Passport data, and Certificate of Loss of Nationality data.

cheated in a non-transparent regime can be induced to make the trade, compliance may improve. If the regime choice separates taxpayers who base their compliance decisions on the size of enforcement parameters—such as audit and penalty rates—from those whose compliance behavior is influenced by other factors, the tax authority may benefit from the opportunity to target their enforcement efforts. This paper presents the results of a laboratory experiment designed to explore regime choice as a sorting mechanism. We observe subjects' compliance behavior, allowing us to estimate their propensity to cheat. We also observe their willingness to pay for burden reduction. Finally, we offer subjects a choice between an automatic-reporting regime, in which their earnings are known to the authority and burden is variable, and a high-burden, self-reporting regime. We determine how subjects' propensity to cheat and willingness to pay for burden reduction influence their choice of regime and, conditional on having chosen self-reporting, on their compliance behavior. We find that a higher propensity to cheat is associated with a greater likelihood of choosing self-reporting and, having made that choice, higher amounts of under-reporting. A higher willingness to pay for burden reduction is associated with a lower likelihood of choosing self-reporting, but having made that choice, a *higher* level of under-reporting.

11:00 – 12:30 **Session 2: Measuring the Tax Gap**

- **Estimates of the TY2006 Individual Income Tax Underreporting Gap**
  Kim Bloomquist, Ed Emblom, ***Drew Johns,*** *and Pat Langetieg (IRS:RAS)*

In January 2012, IRS estimated the Tax Year (TY) 2006 gross tax gap to be $450 billion. Underreporting of individual income taxes and self-employment taxes on timely filed returns combined to account for $292 billion of that gross tax gap. The TY 2006 individual income tax underreporting gap estimate is a product of new random audit data and significant methodological advancements. Specifically, the estimation of amounts that go undetected during NRP audits was greatly improved over the previous methodology and average marginal tax rates were replaced with a tax calculator. The individual income tax underreporting gap is based on TY2001 and TY2006 data collected through the National Research Program reporting compliance studies.

- **Advances in Nonfiling Measures**
  Mark Payne *and Alan Plumley (IRS:RAS), and Brian Erard (B. Erard & Associates)*

This paper focuses on two measures of individual nonfiling: the nonfiling gap (the amount of tax not paid on time by those who do not file on time) and the Voluntary Filing Rate (the number of required returns that are filed on time, expressed as a percentage of the total number of required returns). In particular, we describe in this paper a number of methodological improvements we have made for estimating these two measures.

Our efforts have produced several important benefits. Perhaps one of the most significant of these has been to document the extent to which the CPS ASEC data understate certain types of income, and to develop a reasonable approach to imputing these income sources to the CPS each year. Our efforts have also resulted in a more accurate definition of the criteria underlying the filing requirement, which we now apply as closely as possible to the data. And under our revised methodology, we now apply a consistent definition of what it means for a required return to be timely filed for purposes of our measures. Ultimately, these improvements enhance the quality of our nonfiling measures, and allow us to develop a deeper understanding of the drivers of fluctuations in the measures over time.

- **Tax Gap Analysis in the United Kingdom**
  Mick Thackray *(HMRC, UK)*

The published **Vision** of Her Majesty's Revenue and Customs (HMRC), The United Kingdom tax authority, is this:

> ***We will close the tax gap****, our customers will feel that the tax system is simple for them and even-handed, and we will be seen as a highly professional and efficient organisation*

And HMRC's first **Strategic Objective** is this:

> ***Maximise revenue to close the tax gap***
>
> *Our objective is to provide the money for public services by maximising revenue to close the tax gap and improving the extent to which individuals and businesses receive the credits and payments to which they are entitled*

These two statements show how the concept of the tax gap – the total amount of tax lost through non-compliance – is at the core of HMRC's strategic planning. Consequently, tax gap analysis, its application and its continuing development, is a priority for HMRC's Knowledge, Analysis and Intelligence (KAI) directorate

HMRC and its indirect tax predecessor, Her Majesty's Customs and Excise (HMCE) have been estimating their tax gaps for about fifteen years. These estimates are published annually, as a total tax gap since 2009. The publications are now Official Statistics, published under a Code of Practice introduced by the UK's Statistics and Registration Service Act. They help UK taxpayers and other external stakeholders to understand and challenge HMRC's operational performance at a strategic level, and are an important part of HMRC's contribution to the UK's transparency agenda.

The fact that HMRC's tax gap estimates are Official Statistics, produced by members of the UK Government Statistical Service, provides assurance of their independence from political and management inference. They are used extensively in the current public debate on fiscal deficits and austerity measures.

KAI's tax gap estimates have uses within HMRC that go beyond just that of being information. They are also used as strategic planning and risk management tools. Similarly, they are used in the UK Treasury's Fiscal Risk Register as well as in the Chancellor of the Exchequer's annual fiscal forecast.

KAI's Enforcement and Compliance team is currently planning a step increase in the range and depth of HMRC's tax gap analysis. This will improve our understanding in the following dimensions:

- Components of the tax gap, the more detailed contribution of specific risks and behaviours to the overall gap; and
- Using this, tax gap analysis in real time to support active risk management

HMRC also intend to ask academic researchers in the field of tax administration to review their tax gap analysis, to ensure it is robust, and fit for purpose

1:30 – 3:00 **Session 3: Understanding Individual Tax Compliance Behavior**

- **Incorporating Indirect Effects in Audit Case Selection: An Agent-Based Approach**
  Kim M. Bloomquist *(IRS:RAS)*

In selecting tax returns for operational audits the Internal Revenue Service (IRS) historically has focused primarily on direct revenue maximization. While this strategy aims at making efficient use of increasingly scarce labor resources, it ignores indirect effects and may result in a lower level of voluntary compliance—and therefore total revenue—than could be realized if audit cases were selected to maximize both direct and indirect effects. This paper describes the development of an agent-based model (ABM) that simulates the tax reporting behavior of a community of 85,000 individual taxpayers. Design features of the Individual Reporting Compliance Model (IRCM) include detailed tax return information, taxpayer learning behavior, formal and informal social networks and tax agency enforcement measures (e.g., audits and information reporting). A case study shows how IRCM can be used to assess the compliance impacts of alternative audit selection strategies taking indirect effects into account.

- **Estimating the Impact of Liens on Taxpayer Compliance Behavior and Income**
  ***Terry Ashley**, **Jeff Wilson**, and Tom Beers (IRS: Taxpayer Advocate Service)*

This paper addresses a concern raised by the National Taxpayer Advocate that lien filings have increased, without corresponding increases in Internal Revenue Service (IRS) collection revenue. Lien filings are often harmful to taxpayers. Therefore, the National Taxpayer Advocate wanted to determine the impact of a Notice of Federal Tax Lien (NFTL) on taxpayer income and overall taxpayer compliance. We conducted our analysis by estimating the impact of NFTLs on the tax compliance of delinquent taxpayers, who had initial tax liabilities in 2002. We used a propensity score matching procedure to establish a set of comparable lien and non-lien taxpayers (lien taxpayers included in the study had liens filed against them between 2002 to 2004). This procedure mitigated problems arising from selection bias due to a nonrandom filing of the NFTL. The propensity score model used independent variables derived from IRS lien filing criteria. Using the matched sample of comparable lien and nonlien taxpayers, we estimated the lien impact through logistic regression equations for payment compliance on their liabilities incurred in 2002, future payment compliance, future filing compliance, and on increases in future income. We looked at the effect of the NFTL from 2002 through consecutive yearly periods ending in 2010. Results from the models suggest that lien filings were associated with a negative outcome for payments on taxpayers' 2002 tax liabilities, future filing compliance, and on income earned by taxpayers in years following the filing of the NFTL. Results also suggest that lien filings had a positive impact on taxpayers' payment compliance for future tax liabilities.

- **The Administration's Worst Customers – Habitual Noncompliers**
  ***Michael Duggan**, Martyn Knottenbelt, and Jason Byrnes (Inland Revenue, New Zealand)*

A Habitual Non-Complier (HNC, also known as Egregious Repeaters) is an individual with a history or pattern of non-compliance – a person who serially and deliberately does not comply – even after compliance intervention. HNCs are a risk to tax administrations in terms of lost revenue, integrity of the tax system, and reputational damage. They can also be costly to deal with through compliance interventions. The purpose of this paper is to outline research that was conducted to understand, quantify, and assess the risk posed by habitual non-compliers and discuss the management of this customer group going forward. The research project was initiated by tax administration investigators, and was a collaboration between researchers, managers, analysts and investigators within the organisation.

The paper reports on four inter-related initiatives: the creation of a research database of HNCs; qualitative in-depth interviews with HNCs; a profile of habitually late filers and payers; and, statistical modelling to identify key indicators of the "worst" non-compliers and using these indicators to detect other HNCs. Key research findings include: the main financial risk relates to a relatively small proportion of HNCs; there were common techniques used by the "worst" offenders (such as the pervasiveness of delaying tactics); a connection to non-compliance with other government agencies; four HNC archetypes; and, the ability to identify certain HNC through factors such as shortfall penalties, bankruptcies, write-offs, and links to tax agents.

3:15 – 4:45 **Session 4: The Tax Implications of Business Complexity**

- **Development of Financial Products Business Rules using Business Intelligence Technology**
  Dave Macias *and Jennifer Li (IRS, LB&I)*

  In recent years there has been growing concern with the financial and tax compliance risks associated with use of complex financial instruments by large companies. The increasing complexity, sophistication and aggressiveness of these arrangements make them more difficult to detect using traditional return scoring and screening techniques, and also make it more important that IRS find improved methods for risk detection in this area. This paper discusses the Large Business and International division of IRS ("LB&I") use of advanced technology and availability of electronic data to improve risk identification and return selection for corporate taxpayers who are involved in these transactions.

- **Corporate Tax Compliance: The Role of Internal and External Preparers**
  Kenneth Klassen (University of Waterloo), ***Petro Lisowsky*** *(University of Illinois, Urbana-Champaign), and Devan Mescall (University of Saskatchewan)*

  Using a survey of tax executives and proprietary data on who signs the corporate tax return, we investigate tax reporting strategies to understand how firms are managing this challenging task, and what effect tax preparers have on corporate tax positions. Specifically, we investigate whether tax preparer type—internal, external auditor, or external non-auditor—is related to tax aggressiveness. Using IRS data on who signs a firm's tax return, we find that (1) firms using internal and external non-auditor preparers exhibit greater tax aggressiveness than external auditor preparers; and (2) publicly disclosed tax fees paid to a firm's auditor do not provide information sufficient to replicate this result. In our survey, tax executives report that their firms outsource only 30% of their compliance and planning work, and seldom utilize their auditor exclusively for such work. Applying conventions in tax fee research to infer preparer type, we estimate that tax fees incorrectly classify between 20 and 62 percent of firms into tax preparer types that do not match those reported on a firm's tax return. Our findings are important given that the paucity of archival research on tax preparers and the importance of tax advisors to the tax-related decisions made by companies in the U.S. economy.

- **Using link analysis to identify indirect and multi-tiered ownership structures**
  Larry May *(IRS:RAS)*

  Partnerships, along with the other entities that allocate tax items to their investors (mostly Subchapter S Corporations and trusts) are collectively referred to as pass through entities. A partnership or other pass through entity can also combine its collective resources with the resources of others to form a second level pass through entity or tier. This tiering strategy can repeat for many levels. As capitalization efforts grow for large endeavors such as oil & gas exploration, medical research & development, or large commercial real estate development, the depth and complexity of these pass through structures also grows. Many other valid business reasons, such as liability constraints, contribute to the ever increasing complexity of pass through structures. Tax law must accommodate these business arrangements; however, in doing so, it has afforded the opportunity for unscrupulous taxpayers to defuse and obfuscate bogus transactions to obtain unjustified tax benefits.

  This paper will detail efforts to use link analysis to bring together these multiple tax entities, summarize their activity, and enhance transparency. Specifically, this paper will discuss the analysis of enterprise structures. Enterprise structure analysis is an attempt to identify, summarize, and analyze the collection of pass through entities controlled by a common taxpayer. It is focused on an investor and the pass throughs that investor is able to control. Only linkages collectively representing 50% or more ownership are retained as part of the structure.