Global Trends and the Tax System

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Ohio Northern University
Law Review

Woodworth Memorial Lecture

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Thank you very much for having me here today. It is an honor to be asked to give these remarks honoring Laurence Woodworth.

Today I want to speak with you about some global trends, particularly technological trends, that I believe will transform the way that tax administrations around the world will operate in the years to come. Before serving as IRS Commissioner, I was involved in capital markets and capital markets regulation as Vice Chairman of FINRA, the Financial Industry Regulatory Authority. Technology has transformed the way capital markets operate and the way that regulators need to think about their job. Similarly, technology continues to be a major force in the functioning of tax administrations. During my time as IRS Commissioner, I worked hard to transform the agency in some important ways that took advantage of trends in technology. I also served as the Chairman of the OECD Forum on Tax Administration during much of my term, and was exposed to major trends affecting tax authorities on a global basis.

Since leaving the IRS, I have had the opportunity to engage in conversations with both foreign governments and financial services institutions about how to take advantage of trends in technology and data. Today, I would like to talk about what trends I think will most affect global tax administrators over the coming years, largely based on my global travels before, during and after my term as Commissioner.

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Before getting into the trends, let me just say that the collection of taxes is one of the most fundamental responsibilities of any government. Government revenue—in the form of individual and corporate income taxes, payroll taxes and value-added taxes—provides funding for education, health care, national defense and other critical public services. Tax administrations, therefore, play a central role in in the health and well-being of nations.

Today, tax administration leaders globally face a dual challenge: in light of diminished government budgets, they are under pressure to simultaneously improve performance and keep costs down. A crucial part of the solution to this challenge will be found in technological innovation. Properly allocated and managed technology investments can produce great yields for tax administrations in the long run. When I think about where savvy leaders are hoping to invest in the tax world, they cluster around four key trends that I would like to discuss: the mobile Internet, the emergence of big data and advanced analytics, "cash-light" societies and digital enablement of business processes.[1]

Of course, there are other economic and social trends that will affect how tax administrations operate over the long-term. Demographic shifts and the globalization of capital, for instance, are two large-scale forces that have implications for tax administrations. Competition for talent, as tax administrations need specialized skills and have to compete against other private sector and public employers, is another. However, the trends that I will talk about today are having huge impact in the world around us and could transform tax administrations in the years to come.

MOBILE INTERNET

The first trend is the mobile internet. Today, more than a billion people have access to a mobile device, and this number is rapidly rising. Smartphone and tablet sales increased six-fold between 2007 and 2013.[2]

For tax administrations, mobile devices can serve as a low-cost channel to receive information and feedback from users, deliver automated services to taxpayers and provide payment and balance-due notifications. Mobile channels are particularly important for engaging younger taxpayers, who use their smartphones for almost all digital interactions. In emerging markets, the mobile Internet helps the government connect with citizens previously excluded from the formal tax system.

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1. These trends are based on my observations, as well as work and research that I have conducted with my colleagues at McKinsey & Company.

2. James Manyika et al., *Disruptive technologies: Advances that will transform life, business, and the global economy*, McKinsey Global Institute, May 2013.

Innovative tax administrations have been offering mobile services for a number of years. Sweden, for example, has been sending most taxpayers a prepopulated income-tax return that they can then confirm via phone or SMS. Estonia provides citizens with a wide range of mobile services including the ability to make tax payments.[3] In the United States, we launched the mobile app IRS2Go, which allows users to check the status of their tax filing and provides tax tips and access to the IRS's Twitter news feed. This year over half of all visitors to the Where's My Refund page on IRS.gov were mobile users.[4]

Government agencies, including tax administrations, will continue to make the shift from desktop and laptop Web-based to mobile interactions. A robust, visually appealing and user-friendly website designed for a computer screen will not automatically translate into a seamless, convenient mobile experience. Online services must be deliberately optimized for the mobile channel—and, as the use of mobile devices continues its seemingly unstoppable upward trajectory, it will be a trend that will demand management attention.

This will continue to evolve beyond simply offering information and sending reminders via mobile channels; consumers will increasingly expect to be able to conduct their financial transactions on smartphones. In the general economy, mobile payment volumes doubled between 2011 and 2012 and are expected to grow nine-fold between 2012 and 2015.[5] In developed countries, banks now offer full mobile banking services. Meanwhile, in several emerging markets, mobile payments are serving as a gateway to broader financial inclusion. In Kenya, mobile payment service M-Pesa is now used by nearly 90 percent of the population, not only to make peer-to-peer payments but also as a broader "branchless banking" platform.

In the United States, a handful of pioneering state governments—including Arkansas and Kansas—now accept mobile payments of property taxes. Over the next several years, the trend toward mobile will only accelerate.

BIG DATA AND ADVANCED ANALYTICS

The second trend I would like to discuss is big data and advanced analytics. The emergence of big data and advanced analytics has and will continue to affect every industry—and government is no exception. Data

3. Elana Berkowitz and Blaise Warren, "How Estonia became E-stonia," mckinsey.com, October 2012.

4. http://www.irs.gov/uac/Newsroom/IRS2Go-40-Smartphone-App-Downloads-Surpass-23-Million

5. "Pathways to growth in mobile payments," *McKinsey on Payments*, June 2012.

volumes from websites, social media and mobile devices are doubling every 20 months[6] while the costs of data storage are steadily decreasing. Organizations in both the private and public sectors are becoming more adept at using advanced analytics to create new opportunities, generate new insights, and inform important decisions.

For tax administrations, the implications are obvious. Tax administrators sit on very large amounts of data, and traditionally try to use that data to understand if there are individual or groups of taxpayers who are at risk of non-compliance. They then try to focus their resources on those taxpayers, and not bother compliant taxpayers.

While many tax administrations already analyze data extensively, the more sophisticated tax administrations are applying cutting-edge analytical tools to help improve their performance. Concepts such a "clustering," where computers can identify clusters of similar behavior and potentially ferret out fraud rings is an example of a newer technique that could be used extensively to combat refund fraud. In the collection area, technologically savvy tax administrations create a micro-level segmentation of taxpayers—taking into account taxpayer characteristics (including industry, geography and compliance history), debt characteristics (such as value, source and age of debt), and other criteria—and tailor their collection approaches to each segment.

Let me give you a specific example from Australia. As part of a big-data effort, the Australian Tax Office (ATO) analyzed the income-tax returns and business activity statements of more than 1 million small and medium-size enterprises (SMEs) to develop industry-specific benchmarks for key ratios, such as net profit margin. These benchmarks allowed the ATO to identify taxpayers that were outliers—for instance, restaurants or gas stations that may not be reporting all their income. A year after the ATO notified 30,000 businesses of their outlier status, 17 percent of those businesses adjusted their tax returns and reported a 68 percent average increase in taxable income.[7]

While there are clear revenue benefits to advanced analytics and big data, I am equally excited about the reduced burden on hardworking taxpayers that comes from more accurate, targeted compliance programs. As tax administrations get more sophisticated with their analytical approaches, they will more often select cases that are in fact problematic and require follow-up, and reduce the number of "false positives" where

6. Jacques Bughin, Michael Chui, and James Manyika, *Ten IT-enabled business trends for the decade head*, McKinsey Global Institute, May 2013.

7. *Annual Report 2012-2013*, Australian Tax Office, 2013.

taxpayers have to interact with tax administrations but ultimately have no issue.

LESS CASH AND MORE ELECTRONIC PAYMENTS

The next trend I would like to cover is the trend toward less cash and more electronic payments, sometimes referred to as the trend to "cash-light" societies. Financial institutions worldwide, including central banks and retail banks, are increasingly steering customers away from cash transactions—which are costly to process, risky for the end user and difficult to track—and toward electronic forms of payment, from wire transfers to credit cards to NFC chips in smartphones. In the U.S., the IRS has made great strides in driving up electronic filing. In fact, in 2013 approximately 83 percent of individual tax returns were filed electronically.

Other governments are embarking on efforts to significantly reduce cash in the payment system. According to research by McKinsey & Company's global payments practice, the number of financial transactions per capita worldwide is expected to increase 33 percent in just 5 years, from 671 in 2012 to 894 in 2017. The proportion of cash payments has been steadily falling, particularly in emerging markets.

Several countries have launched programs to increase the use of non-cash payments. For example, South Korea once offered tax deductions to consumers whose credit card spending amounts to at least 25 percent of their annual income.

The increasing prevalence of electronic payments should improve the ability of tax administrations to track the flow of taxable income and perform analytics on compliance. Since 2011, U.S. law has required banks and merchant services to report to the IRS all payments processed by credit or debit card providers or third-party networks (such as PayPal). The law should help increase compliance rates for taxpayers.

And of course, tax administrations should strive to become "cash-light" themselves, shifting taxpayers away from payment forms that are costly to process (such as checks or in-person cash payments at tax offices) and toward electronic forms of payment. Globally, there is room for improvement in this area: according to a 2013 OECD report, there are only 12 countries in which electronic payment methods account for the majority of tax payments.[8]

8. *Tax Administration 2013: Comparative Information on OECD and Other Advanced and Emerging economies*, OECD Publishing, 2013.

DIGITAL ENABLEMENT OF BUSINESS PROCESSES

The last trend I would like to discuss is the digital enablement of business processes. Computing costs are decreasing significantly: a $400 iPhone today has more computing power than a $5 million super-computer in 1975. The cost of data storage is steadily dropping as well, thereby creating a range of opportunities for tax administrations to operate with greater speed, flexibility and agility.

Large corporations have taken advantage of these trends, and digitized their supply chain interactions and developed new innovations, such as just-in-time inventory.

Tax administrations, once awash in paper forms, today have largely transitioned to electronic submissions-processing operations. In countries where tax administrations receive third-party data on critical income and deduction categories, several tax administrations are prepopulating tax returns, resulting in an "all digital" filing process. As of 2011, the tax administrations of seven countries fully prepopulated personal income-tax returns for the majority of their taxpayers.[9] Singapore receives salary information directly from employers and was able to prepopulate tax returns for over 1 million taxpayers (58 percent of Singapore's tax base) in 2012.[10] I think this is a very interesting global trend, but like most things related to taxes – everything is local. For example, when I was IRS Commissioner I never advocated a movement to pre-filled returns because I recognized that the policy framework in the U.S. does not lend itself to pre-filled returns. There was never any consensus on whether to change that, and in that environment it didn't make sense for us to devote scarce resources to it.

Digital enablement also has the potential to streamline existing processes. For instance, the potential of having all digital platforms for some examination and collection case adjudication is something to think about for the future. It has the potential to reduce transaction costs and taxpayers' waiting time.

When it comes to digital enablement, lessons learned from the private sector could benefit tax administrations as well. For instance, companies are integrating data and systems from their external partners, yielding significant gains in efficiency and customer satisfaction. Retailers, for example, are collaborating more closely with suppliers. Similarly, you could imagine tax administrations could pursue real-time digital interaction with third-party tax software providers. Tax administrations routinely validate and reject a portion of electronically filed tax returns for a variety of reasons, including ID number mismatches or missing information. These

9. Ibid.
10. *Annual Report 2012-2013*, Inland Revenue Authority of Singapore, 2013.

rejections can result in delays, inconvenience for the taxpayer and potentially costly customer-service interactions. Digital integration with third-party software providers would allow tax administrations to flag errors as tax returns are being prepared, resulting in fewer rejections and less rework. This is one aspect of the vision "real-time" tax administration that I discussed when I was IRS Commissioner. Digital enablement should allow for stepwise improvements in the compliance process, and move more activities of tax administrations further up in the filing process.

CONCLUSION

These trends are by no means exhaustive. There will certainly be other economic, social or technological trends with important ramifications for tax administrations. Tax administrations will also need to grapple with the major issues that come with technological innovation—issues such as cyber security, concerns about privacy and fierce competition for technology skills and talent.

I want to be clear that when I lay out these trends, I am not talking specifically about the IRS or any other tax agency. When it comes to the IRS, I think Commissioner Koskinen is an extremely capable leader and is doing a great job. I will leave it to him to decide the strategic priorities for the IRS, as he is in the best position to understand what the IRS needs to do today given the pressures, demands and opportunities facing the agency. Rather, these are important trends that everyone should pay attention to, as they will affect the way businesses and governments operate in the years to come.

Thank you for having me here, and I'd be happy to answer any questions.