

Working Paper

Taxation and Big Brother: Information, Personalization, and Privacy in 21st Century Tax Policy

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**This lecture was given at the Annual Lecture to the Institute of Fiscal Studies,
London, on September 26. I am grateful to Katherine Blauvelt for research
assistance and extended conversations that clarified my thinking on a number of
issues.**

Thank you for the invitation. It is a pleasure and honor to be here. I view part of my responsibility is to report on fiscal developments in the United States. Any report from the States would have to note that the past several weeks have been tumultuous, what with the nomination and hearings regarding a new Chief Justice of the Supreme Court and the devastating Hurricane Katrina. On the fiscal front, we are awaiting the report of the President's Advisory Panel on Federal Tax Reform, which is expected to outline one or more income tax reform options and at least one consumption tax alternative as a replacement for the income tax.

I will try tonight to touch on all of these developments. I'll begin with the nomination of John Roberts to be the Chief Justice of the Supreme Court. You may be interested to know that Roberts wrote his undergraduate thesis at Harvard about British politics, about the fate, a century ago, of the British Liberal Party which, after winning a landslide victory in 1906, never won another general election. His thesis was that politicians, and judges for that matter, should be *wary* of the assumption that the future will be little more than an extension of things as they are today.

A wonderful article that appeared in the *New York Times* before the Congressional hearings on Roberts began argued that, instead of questioning Roberts with the goal of finding hints of his views about the most controversial issues of the past generation – affirmative action, abortion – the Senators who must approve the nomination should try to get a sense of the kinds of issues that will arise in the future as a result of scientific

advances.¹ One issue was brain fingerprinting and the future of privacy rights. You are probably aware that the London Underground has announced plans to introduce high-tech body scanners that peer through clothing. In the future, biometric cameras will be able to calculate “threat indexes” based on how suspicious high-tech profiling suggests a person is, using the link between the person’s face and his travel records and magazine subscriptions, maintained by a big commercial database. Would this be constitutional in the U.S? What about analyzing brain waves that suggest a propensity to violence, a sort of cognitive profiling? Genetic screening, which enables the selection of embryos with traits desired by parents, including sex selection, raises another set of issues. When does screening for genetic disabilities, now widely accepted, become screening for genetic enhancement? The point is that resolving the complex technology-related disputes of the future ends up involving political and often moral issues.

I want to convince you tonight that the same statement applies to taxation. The transmission and processing of information is at the core of taxation, and one of the great ongoing technological resolutions has been in information technology. Looking forward ten, twenty, or thirty years, what are the implications of technological advancements for tax policy? How will, and how should, tax policy be different twenty years from now than it is today?

I will argue that, although the new technology greatly facilitates the use of taxpayer information to create a personalized consumption tax system, there are forces pushing the tax system in the opposite direction, toward a radically depersonalized tax system, partly

¹ Rosen (2005).

out of concern over the infringement on privacy of the information. A depersonalized tax system could serve as a Ulyssean² constraint against personalization by restricting the scope of state regulation that is practically possible.

Before I look forward to make this argument, allow me one look back, if only to justify and explain the “big brother” reference in the title of tonight’s lecture.

George Orwell’s classic novel of totalitarianism mentions fiscal policy only twice, in passing. At one point it mentions that party members must make “voluntary” contributions that total 25 percent of income. At another point it mentions the Lottery as a method of collecting revenue from the plebes, with the winners of the promised big prizes being mostly non-existent persons.

De-emphasizing the details of the fiscal policy of Oceania probably made sense for holding most readers’ attention. But it also allowed Orwell to sidestep the fact that, for all of their manifest failings on economics and human rights that he meant to highlight, totalitarian, centrally-planned states were good at one thing—tax collection. Communist economies operated an administratively efficient tax system that featured near-universal withholding at source and information reporting, all in one.³ Moreover, the withholding system was almost completely invisible. In a pure command economy, taxes are implicit, unobservable and equal to the difference between what someone contributes to

² I have in mind the episode in the *Odyssey*, when nearing the rocky island where the Sirens sweetly sang, Odysseus stopped the ears of his crew with wax and had himself tied to the mast so he could not steer the ship off course toward the Sirens.

³ This is especially interesting in light of the fact that one of the well-known flaws of the planned economy is its inability to make use of the information about technology and tastes. The details about the Soviet tax administration are drawn from Ickes and Slemrod (1992).

production and their real purchasing power. The state enterprises just pay everyone “net.” Because of this system, there is also little need for tax administration. Indeed, by the 1960s, the Soviet tax administration system was dismantled and its functions carried out by the Ministry of Finance. A separate tax inspectorate was set up in the Ministry of Finance only after the collapse of the communist system, in July of 1990. The unfamiliarity of the citizenry with explicit tax collection is an important reason for the difficulty of tax collection in the post-Soviet states.

Of course, the political world Orwell envisioned in the late 1940s has not come to pass. Needless to say, though, the technology Orwell envisioned seems quaint today. Recall that the principal method of surveillance of party members was the Telescreen, the two-way screen in every room of every party member’s home.⁴ In 2005 we have surveillance cameras, at least in public places. We have computers that can track, match, and analyze billions of financial transactions. We have the Internet. In sum, we have rapidly increasing availability of, and capacity to analyze, information. This revolution in information technology—in storing, processing, and moving information-- has reduced the cost of control and the cost of invading privacy, as evidenced by the high-tech body scanners of today and the possible brain fingerprinting of the future. The fact that Oceania had a technologically primitive means of surveillance but a potentially sophisticated means of taxation – exact, hidden withholding – is a theme that I will come back to.

1. Information

⁴ See the estimate of the compliance cost of Telescreens in Posner (2005, p. 198).

1.1. The Benign Use of Information

To develop my argument, I'll need to change gears and say a few words about the economics of taxation. Information occupies a central role in the modern theory of taxation.⁵ The 1996 Nobel Memorial Prize in Economics was awarded to James Mirrlees for, among other contributions, his formulation of the question of how progressive the tax burden should be as a problem of asymmetric information: informational constraints are the ultimate limit to government policy.⁶ In his formulation, society would like to impose a higher tax burden on the more able compared to the less able, but the taxing authority cannot observe ability. (Or at least it could not when he wrote the seminal article in 1971. I'll come back to that.) Instead it can observe income, which is correlated with ability. However, because income is the result of decisions taken by people, taxing income distorts the incentive to work, save, and do whatever else people do to produce income. Jan de Van Graaff put it nicely, when he said:

If we tax able men more than dunderheads, we open the door to all forms of falsification: we make stupidity seem profitable—and any able man can make himself seem stupid. Unless we really do have an omniscient observing economist to judge men's capabilities, or a slave-market where prices they fetch reflect expert appraisals of their capacities, any taxing authority is bound to be guided by elementary visible criteria like age, marital status and—above all—ability to pay.⁷

In modern tax theory, information is crucial, and the more information the better. The 2001 Nobel Laureate George Akerlof has argued that whenever the taxpayer population can be divided into identifiable groups with different average innate ability, it is optimal to have both separate income tax schedules for each group and lump-sum transfers from

⁵ Information is not essential for an arbitrary, capricious tax system.

⁶ The seminal paper is Mirrlees (1971).

⁷ Van Graaff (1957, p. 78), brought to my attention by Boadway (1998).

the higher-ability group to the lower-ability groups.⁸ In other words, the tax system should take account of *any* factor that is correlated with ability—what Akerlof called “tags.” The use of tagging improves the government’s ability to discriminate among persons of different types and thereby reduces the efficiency cost of redistributive tax systems. For example, even if there is no other reason for favoring an income tax (which taxes the normal return to saving) over a consumption tax (which does not), if the taste for saving is correlated with ability so that high-ability folks are, other things equal, bigger savers, one might want to tax the return to saving, i.e., capital income.⁹

At first sight, one might think that in the last 10 or 15 years the U.S. income tax has deftly expanded its use of tagging, as more and more personal choices have tax implications, such as having child care expenses or kids going to college. It has become more personalized. Indeed, it seems technologically feasible that the U.S. income tax system could operate like the kind of frequent-flyer program that most airlines *have*, where at any moment the customer can log on to the Internet and get a statement of the status of one’s account, not only the net credits earned but also the transactions that affected the net amount. With the U.S. income tax, as with a frequent-flyer program, you get debits for earning income, but you get credits for a whole host of things, like giving money to a charity, sending a child to university, depositing money into a special savings account, and so on.

Lest you think I am incredibly naïve, I hasten to add that the increased personalization and accompanying increased complexity of the U.S. income tax is probably more due to the fact that complex tax structures emerge as a by-product of the struggle for political

⁸ Akerlof (1978).

⁹ Saez (2002) develops this idea formally.

office, in the course of which political parties are forced to propose and implement policies that discriminate or distinguish as carefully as possible among heterogeneous voters. Administrative costs, as well as the self-selection behavior discussed above, limit the desire of governments to discriminate fully among taxpayers. In a book about the politics of taxation Walter Hettich and Stanley Winer argue that “declines in the cost of administering a tax system, such as may occur with advances in computer technology, can be expected to lead to further complexity.”¹⁰ They go on to say, provocatively, that “it is possible to have a flat tax, or to have democracy, but not both.”¹¹

The prediction of both the economic and political models is for greater and greater use of information about taxpayers, of more and more personalization of the tax system. But wait. There are signs that the reverse will happen. This brings me to the President’s tax reform panel.

2. Tax Policy Issues

During the 2004 presidential campaign President Bush announced his support for a non-partisan panel to consider major tax reform, and created the President’s Advisory Panel on Federal Tax Reform by executive order on January 7, 2005. It was originally scheduled to release its report at the end of July, and I had hoped to discuss the report here today. In the summer the report release date was postponed to September 30 and now, in the wake of Hurricane Katrina, has been postponed again, probably to the end of October.

¹⁰ Hettich and Winer (1999, p. 92).

¹¹ Hettich and Winer (1999, p. 92).

According to its charge, any reform proposal should preserve an “appropriate” progressivity of the distribution of the tax burden, while “recognizing the importance of homeownership and charity.” It should promote long-run economic growth and job creation, and be simpler than the current system. It should be revenue-neutral.

The Panel is charged with providing the Secretary of the Treasury with options, not a single plan; most observers expect to see three options. One of those options must be a reformed income tax, implying that at least one and probably both of the other options will be some variant of a consumption tax.

Thus, there is a chance that the United States will begin a serious discussion of a truly radical tax reform, its most serious tax reform discussion in two decades, which will consider two major changes: abandoning what is nominally an income tax for a consumption tax, and depersonalizing the tax system by adopting either a flat tax, a value-added tax (VAT), or retail sales tax (RST), each of which features essentially no individual-specific deductions or credits. The latter change is perhaps the more surprising because, just as technological advances have lowered the cost of utilizing personal information to determine tax liability, we in the U.S. will consider renouncing the use of all such information in our tax system.

Why shouldn't the tax system make use of lots of personal information, to attain a highly personalized distribution of the tax burden and to efficiently raise revenue? Let me address three possible reasons. First, there is a cost in the government obtaining and verifying this information about tags. But this is falling. Second, personalization is not

better for everyone. Note that a tax system in which people's tax liability is differentiated by tags violates horizontal equity, such that families with the same income will pay different amounts of tax, depending on their characteristics, or tags. Why should family size, or how charitable it is, affect tax liability for a given level of ability to pay?

Third, can the government be trusted with this information? Can it be trusted to make appropriate use of it in policy? Can it forego using it inappropriately to punish particular individuals? Limiting the amount of information collected limits the use of the tax system as an instrument of control. Tax data is fiercely protected in the United States where there are very tight restrictions on the conditions under which the Internal Revenue Service can share tax return information with other government agencies,

Is personalizing the tax system, like the Telescreens of 1984, a *privacy* issue? Stanford Law School professor Lawrence Lessig, writing about information generally and not about tax policy, distinguishes three separate conceptions of privacy. In the first, the concern is the *burden* of intrusion—what he calls the utility conception: a police search of one's home or one's car is, to be sure, a hassle. In the second conception, he conceives privacy as dignity -- even if a "search" is not bothersome or costly, it is an offense to one's dignity. Finally, he considers the invocation of privacy concerns as a way to constrain the power of the state to regulate, to restrict the scope of regulation that is practically possible—what he calls the "substantive" conception of privacy.¹² Harvard Law School professor William Stuntz (1995) illustrates the latter nicely with an example far from taxation -- the use of contraception: "Just as a law banning the use of contraceptives would tend to encourage bedroom searches, so also would a ban on

¹² Lessig (1999, pp. 146-8).

bedroom searches tend to discourage laws prohibiting contraceptives.” If the means of enforcement are limited, so too is the effectiveness of laws that require the enforcement.

For the most part these issues related to privacy have attracted attention in areas other than taxation. Let me raise just two examples. A debate simmers about what is the common practice of being offered a “discount” card at your grocery store or bookstore. Along with the discounts the store awards you, the store collects data about what you buy. With that data, it may provide personalized marketing or even personalized pricing. Is this acceptable? Should companies ask permission before proceeding, or require consumers to opt out? A second example is DNA testing. In 2003 the U.S. Senate voted unanimously in favor of the Genetic Information Nondiscrimination Act, which would bar employers from using people’s genetic information or family histories in hiring, firing, or assigning workers, and would bar insurance companies from using genetic records to deny medical coverage or set premiums. The worry, of course, is that the availability of information will disadvantage certain groups, arguably unfairly.¹³

Of course, providing information could be made voluntary. After all, in the U.S. income tax the extra information one provides, such as the amount of charitable contributions, generally serves to reduce tax liability. But this does not dispose of the issue at all, because with a balanced-budget constraint, those who do not provide the information are

¹³ Oscar Gandy, professor of communication at the University of Pennsylvania, in his book *The Panoptic Sort*, argues that the vast structure for collecting data and discriminating on the basis of that data is a source of concern. The name of the book of course comes from The Panopticon, meaning “all-seeing”, the model prison proposed by Jeremy Bentham as a round-the-clock surveillance machine whose design ensured that no prisoner could ever see the “inspector” who conducted surveillance from the privileged central location within the radial configuration.

penalized. We are, after all, taxing ourselves. The same is true for private companies' use of this information—efficiencies from price discrimination aside, those consumers who do not provide the reward-producing information are penalized by paying higher prices than those who do provide it.

2.1. Business-based Systems

What if we were convinced by these privacy arguments that no personal information should affect tax liability –that we should abandon personalized tax systems? What about relying on business-based tax systems such as the VAT or RST under which individuals do not have to file returns, and businesses are responsible for remitting all taxes to the government?

Not having to deal with individuals promotes administrative efficiency. Richard Bird of the University of Toronto has stated this argument best: “The key to effective taxation is information, and the key to information in the modern economy is the corporation. The corporation is thus the modern fiscal state’s equivalent of the customs barrier at the border.”¹⁴

Second, business-based taxes might serve as a Ulyssean constraint against personalization in the sense of Lessig’s third conception of privacy: as a way to constrain the power of the state to regulate by restricting the scope of regulation that is practically possible.¹⁵ Adapting the language of Professor Stuntz’s contraception analogy: “Just as a law requiring personalization would tend to encourage personal tax systems, so also would a ban on personal tax systems tend to discourage personalized taxation.” It is, the

¹⁴ Bird (1996).

¹⁵ Lessig (1999, pp. 146-8).

argument goes, difficult if not impossible to favor charitable contributions, or big families, with a VAT or RST. With individuals not filing returns, the natural process for providing information about a family's charitable contribution amount or the number of dependent children is absent.

2.2. Withholding

However, the distinction between business-based taxes like the VAT and personalized taxes like the income tax is not hard and fast, and technology will erode the distinction as time passes. Income tax systems in the United States and United Kingdom increasingly are largely business-based, due to employer withholding and employer information reporting. Even though the tax on labor income is nominally on the individual, the tax is remitted by the employing business.

As many readers of *Fiscal Studies* no doubt know well, withholding at source for income taxes was introduced into the British income tax soon after its inception. The first modern British income tax, introduced in 1799 by Prime Minister and Chancellor of the Exchequer William Pitt, was judged to be a failure, mostly because it raised much less revenue than expected and was plagued with evasion. Its re-introduction a few years later by Pitt's successor Henry Addington was a success, the key design change being the remittance of revenues, or withholding at source, by the payer.¹⁶

The United States levied no income tax for more than a century after this, needing a constitutional amendment that was passed in 1913. Unlike the British experience, at its inception the U.S. income tax had withholding, but that lasted only for four years, until

¹⁶ The Pitt-Addington episode is wonderfully recounted in Farnsworth (1951).

1917, when it was abandoned.¹⁷ Advocates of mass-based income taxes in the United States had to face the reality that about one third of Americans were employed as farmers and another third owned or worked in small, usually unincorporated non-farm businesses and, for these people, the government had no way of discovering their identities. The mechanism to do so was not introduced until the 1930s with the Social Security system, including the Social Security number and withholding of taxes at source.¹⁸ It was not until the vast revenue needs caused by World War II that withholding for wages and salaries was again enacted into law. To this day the United States does not have withholding at source for anything other than wages and salaries, such as interest or dividends, as in the United Kingdom.

Because of withholding, the highly personalized U.S. income tax is, in terms of remittances, largely a business-based system--employers remit more than three-quarters of total personal income tax. For most individual taxpayers, the act of filing a tax return is associated with a refund of money, not a payment. The IRS correctly believes that it is much more efficient to collect and monitor taxes remitted by a smaller group of employers compared to taxes remitted by a hundred million or so employees.

The politics of withholding in the United States are fascinating. Although tax administrators swear by it, many American conservatives hate withholding because it reduces the visibility of tax collection and thus reduces the perceived cost of government. They want people to write checks every week or every month--none of this newfangled financial innovation called automatic deposit for them! Some conservative legislators

¹⁷ Withholding was used for Social Security taxes from its inception in 1936.

¹⁸ This history is taken from Brownlee (1996).

have introduced into Congress a bill entitled the “Cost of Government Awareness Act,”¹⁹ which would eliminate withholding and instead require individuals to pay income taxes in monthly installments. To many of these same conservatives the value-added tax is anathema, demonized as the hidden money machine that fuels European welfare states.

But it’s more than visibility that is at issue here and more than privacy, as well. There is, indeed, a profound dilemma for conservatives. Do they want the cost of government to be *visible*, or do they want it to be *high*? Having taxpayers regularly write checks to the government may increase the visibility of the tax burden, but it is also highly inefficient. One might argue for inefficiency, if the political process is dysfunctionally biased toward overspending.²⁰ Some American conservatives point to high spending in European countries with a VAT, and see the VAT as one *cause* of bigger European governments. The empirical evidence on this question is, however, mixed. Does income tax withholding lead to bigger government? Some fascinating recent research suggests otherwise.²¹ It exploits the fact that withholding for state income taxes was adopted at different times by different states. It finds that governments did respond to this administrative efficiency, but the major response was a shift in the composition of revenues toward the income tax rather than an increase in total revenues . Adopting withholding was, though, followed by an 8 percent increase in total tax revenues, but most of this increase was due to the higher demand for government that stimulated the adoption, not the fact that more efficient taxes lead to bigger government.

2.3. Return-free System

¹⁹ H.R. 1364, 107th Cong.

²⁰ See Becker and Mulligan (2003) for a formal statement of this view.

²¹ Dusek (2003).

The distinction between business-based taxes and personalized income taxes is almost entirely erased in exact withholding systems, such as the British Pay As You Earn system, or in a tax-agency-reconciliation system, under which the government prepares the return based on information it has received and the taxpayer needs only to check its accuracy. The U.S. has neither type of return-free system although, notably, starting last year the state of California piloted a pre-populated return system for 10,000 taxpayers.²²

Although both systems are essentially individual-return-free, there is one important difference between them. In an exact withholding system (but not in a tax-agency-reconciliation system), any information needed to personalize the tax burden—such as the number of dependents—is processed by the employer. Given the apparent willingness of many people to let companies collect information about their buying habits, perhaps giving such information to one's employer raises less of a privacy concern than giving it to the government.

So, business-based tax systems do not preclude personalization. Nor, is personalization precluded in statist economies such as the Soviet Union where return-free systems could co-exist with personalization, or in Orwell's Oceania where the implicit tax burden of any individual could be personalized to any extent. In principle there is no limit to the array of information that could affect final withholding, if people are willing to provide it to the government or to employers.

2.4. Computer Technology

²² See <http://www.govtech.net/magazine/story.php?id=93499&issue=4:2005>.

The revolution in information technology further blurs, and perhaps will ultimately destroy, the link between business-based tax systems and depersonalization systems and also has profound implications for the relationship between the taxpayer and the government. Computer technology has certainly allowed more efficient processing of returns. Computer filing is about efficient *transmittal* of information. Some companies resist, even though it is easier for them, because they do not *want* efficient processing of information – they do not want to make it easy for the IRS to analyze the information on tax returns and cross-check it with information on the public financial statements. Those tax payers who evade and aggressively avoid their tax liability are another constituency that pushes back against tax system efficiency.

The efficient processing of returns has been facilitated by the rapid computerization of the tax filing process. In 1993, 41 percent of American taxpayers prepared their own returns without software, while 51 percent used paid preparers and only 8 percent prepared their own returns on a computer. By 2003, the share of self-prepared returns *without* software had fallen from 41 percent to 13 percent. The tax software share tripled in a decade from 8 percent to 25 percent in 2003, while paid preparer use rose to 62 percent. Overall, counting both paid preparers and self-preparers, over 85 percent of tax returns were prepared on a computer in 2003, up from only 13 percent in 1987.²³

The proliferation of software-prepared returns is not without its downsides. Now a taxpayer can deal with all the complications without having any sense of why and how the inputted information affects tax liability, and therefore may make the system less transparent. Opaqueness is not good for democracy. Undoubtedly the growing

²³ The information on the growth of computer-prepared returns is from Guyton et al (2005).

complexity of the U.S. income tax has contributed to the growing use of tax software, and the ubiquity of software reduces the marginal cost of complicating the tax system further.

The new technology can be taken much farther, personalizing business-based tax systems. One example was proposed a decade ago as a way to introduce some progressivity into a retail sales tax system. The idea was to provide every family with an annual "smart card" that would have a sales tax credit based on family size. Each time the family made a purchase, the smart card would deduct that amount until the card's credit was used up; after that, the family would begin to pay the sales tax.²⁴ This kind of scheme is facilitated by the technology of biometric identifiers based on unique physiological or biological characteristics that can be stored electronically and retrieved for positive identification. For RST or VAT, the smart card can encode information about the purchaser – such as income or charitable inclinations – that can personalize the consumption tax rate in the same way that my grocery store offers me individual-specific discounts based on my purchasing history when I – as is in my interest – present my card. The Ulyssean argument for business-based taxes will be undermined by this technology, although how it will personalize the tax liability to the consumer rather than the purchaser will require a technology that has not yet been developed. The tax smart cards could contain information from brain fingerprinting or genetic information.

Looking ahead, this information could affect income tax liability, too. After all, according to the modern theory of taxation, the ideal redistributive tax is one based on innate ability, but ability is not measurable. But with genetic information, innate ability,

²⁴ This idea was discussed in Moore (1995).

or at least something correlated with innate ability, will be measurable, and income tax liability could be based on this. If government fails to prevent health insurance discrimination based on genetic information, it could offset it by basing income tax liability – or transfer eligibility – on that same information. Genetic information is, in a sense, the perfect tag – immutable, but correlated with well-being.²⁵

Before I conclude, I want to briefly touch on two other directions of flow of tax-related information. Up to now I have been discussing disclosure of information to the IRS or to the employer. What about public disclosure?

2.5. Public Disclosure

Public disclosure of two kinds is relevant--public disclosure of some aspects of tax returns generally, and public disclosure about tax evaders only.²⁶ Among OECD countries, Japan, Norway, Sweden, and Finland permit some public access to the information in corporate tax returns. In Norway, taxable income and income tax payments for both corporations and individuals are accessible from the Internet. Finland provides public access to a database that contains information about corporate income and reconciliations between tax and book numbers. In certain other countries, including Canada, Greece, Ireland, and New Zealand, there is public disclosure of information about tax evaders. These policies raise a host of privacy issues, but may facilitate compliance because of the stigma of public disclosure. On the other hand, some

²⁵ How the prospect of genetic-information-based income tax liability will interact with the possibility of genetic screening by parents I leave for another essay.

²⁶ The pros and cons of public disclosure of aspects of corporate tax returns are discussed in Lenter, Shackelford, and Slemrod (2003).

companies may be proud to reveal to shareholders their tax-cost-minimizing success, and the disclosure of this information may facilitate benchmarking the success of a company's tax department against its competitors.

2.6. Information about Government

Finally, potential applications of information technology advances are not uni-directional. Indeed, in his book entitled *The Transparent Society*, David Brin argues that the solution to others' spying on me is "let me spy on you."

In this vein, Mackinac Center for Public Policy – a conservative think tank in the United States -- has developed the "Right to Know Payroll Form." Under this plan, pay stubs would include all taxes incurred via federal, state, and local government that affect both the employer and employee, including the employer Social Security contribution and employer and employee compliance costs. The IRS now posts on its web site an enormous amount of aggregated information about the taxes it collects and the enforcement activities it undertakes. Other agencies do the same. This makes government more transparent, which I believe is good on its own terms. It may also be that more information about government affects individuals' economic behavior as well as their voting decisions. There is some evidence that having a negative attitude toward the tax system and perceiving other taxpayers as dishonest both significantly increase the likelihood that a person will evade taxes.²⁷ If transparency reduces these perceptions, and

²⁷ See Sheffrin and Triest (1992).

that is a pretty big “if,” more information would facilitate the equitable enforcement of the tax system.

3. Conclusions

As a look to the future almost has to be, my remarks have been more in the form of provocations rather than conclusions. At its core, taxation is a problem of information. But just at a time when the technology exists to manage a much richer exchange of information between taxpayers and government, there are signs that the American tax system might move, in the short run at least, to a sharply less information-intensive system. But technological improvements in what information is available, and how easily it can be utilized, will surely test this.

The information revolution has the potential to revolutionize the relationship between taxpaying citizens and the state. We have to decide whether we want it to happen.

Just as our probable next Chief Justice will have to decide cases about the use of brain fingerprinting in law enforcement and the use of genetic information by private insurers and employers, he may be called on to consider the future shape of taxation, and to balance the benefits of utilizing this new information against the concerns that many citizens harbor about privacy and government power.

There is, I think, an analogy to the “cost disease” first discussed forty-some years ago by the Princeton economist William Baumol. Baumol argued that, because some of the most important services that the government provides—education, law enforcement, and health care, for example—are labor-intensive and especially difficult to make more

productive, the government has to get more expensive relative to goods provided by the private sector in order to keep providing the same quality of services,. The result is that people pay more in taxes and don't get more in return, which makes it look as though the public sector, at least compared with the private sector, is inept and bloated. But it could be that the government is merely stuck in inherently low-productivity-growth businesses.

I suggest that the productivity growth in information technology may similarly disadvantage the government. But in this case the disadvantage – it may not be a disease at all -- arises not because the government is inherently less able to profit from technology-related productivity gains, but because we citizens do not *want* the government to take advantage of these gains.

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