

THE END OF CASH, THE INCOME TAX, AND THE NEXT 100 YEARS

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I. INTRODUCTION

One theme of this symposium, which celebrates the 100th anniversary of the federal income tax, is “The Next 100 Years.” What will the next hundred years have in store for the federal income tax? We suspect that technological innovations will play a very significant role. Technology has dramatically affected life in the United States over the past century in many areas, perhaps most notably in communications.¹ On the other hand, the income tax is technologically very similar to the way it was in its early years, and technological developments have been at the margins of the income tax and have not affected its core elements.

This is not to imply that technology has had no effect on the income tax. Technological improvements have made third-party reporting and withholding more efficient, which has allowed these mechanisms to become more pervasively used.² Tax compliance software has made it easier for professional tax preparers and taxpayers alike to prepare and file tax returns and information statements.³ Technology has also made it easier for taxpayers to substantiate their activities; the proverbial shoebox full of receipts is disappearing. All of these changes have undoubtedly facilitated the evolution of the in-

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1. Wesley MacNeil Oliver, *Western Union, the American Federation of Labor, Google, and the Changing Face of Privacy Advocates*, 81 MISS. L.J. 971, 972 (2012).

2. Ruth Mason, *Delegating Up: State Conformity with the Federal Tax Base*, 62 DUKE L.J. 1267, 1280-81 (2013).

3. See *id.*; see also Jay A. Soled, *Homage to Information Returns*, 27 VA. TAX REV. 371, 372-73 (2007).

come tax from its original class tax to the mass tax it is today. These changes have also facilitated the exponential growth of the tax expenditure budget, which is now the primary way in which the federal government engages in non-military discretionary spending.⁴ And both of these developments—the transition to a mass tax and the growth of tax expenditures—have resulted in the federal income tax becoming the most salient and controversial tax in the United States.⁵

But while technology has certainly affected the income tax, it has not affected its core elements. The income tax remains a self-reported, annually calculated tax. And the tax problems resulting from the cash economy—namely, that cash income is rarely reported accurately—continue to plague the income tax.⁶ The income tax is thus analogous to the transportation industry; while technology has made car and plane travel more efficient and accessible to the masses, the traveling experience has not changed fundamentally over the past century. However, recent news reports suggest that driverless cars may be available on a widespread basis within the next ten years.⁷ Driverless cars would fundamentally alter traffic control systems, parking, and even the way that cities are structured.⁸ Perhaps the same fundamental technology-driven changes are in store for the income tax.

While technology might improve the federal income tax, it could have the opposite effect by paving the way towards the elimination of the income tax. One particular type of technology—payment systems—has the potential either to fortify the income tax or to destroy it. Payment systems technology (e.g., electronic payment systems) could eventually shrink the cash economy down to an immaterial size and perhaps even make cash as obsolete as payphones. These developments would fortify the income tax by reducing the large part of the “tax gap”⁹ attributable to unreported cash income, which would result in increased fairness and efficiency, greater confidence in the tax system, and improved taxpayer morale. But payment systems technology, instead, could destroy the income tax by easing the transition from the income tax to a consumption tax.

4. See LAWRENCE ZELENAK, *LEARNING TO LOVE FORM 1040: TWO CHEERS FOR THE RETURN-BASED MASS INCOME TAX* 56-60 (2013) (describing the tax expenditure explosion and its relationship to the income tax becoming a mass tax).

5. See *id.*

6. Susan Cleary Morse, Stewart Karlinsky & Joseph Bankman, *Cash Businesses and Tax Evasion*, 20 STAN. L. & POL'Y REV. 37, 39-40 (2009).

7. Nick Bilton, *How Driverless Cars Could Reshape Cities*, N.Y. TIMES, July 8, 2013, at B5.

8. See *id.*

9. See *infra* Part II (defining “cash tax gap”).

In Part II, we explain how the end of the use of cash would strengthen the income tax system by eliminating the very large portion of the tax gap that results from the inability of the Internal Revenue Service to ensure that cash transactions are properly reported. In Part III, we describe some of the advantages of a consumption tax over the income tax that have been asserted by many economists and policymakers.¹⁰ We then explain how the end of cash makes the transition to that type of system more realistic. We also briefly address some of the possible transitional and permanent concerns that such a move would entail. In Part IV, we conclude.

II. CASH AND THE INCOME TAX GAP

A large portion of the income tax gap—the difference between the amount of income tax revenue that is by law supposed to be paid and the amount of income tax revenue actually collected—is attributable to cash income that is not reported. This “cash tax gap,” which has recently been estimated at over \$100 billion per year,¹¹ has many troubling policy implications. First, the lost tax revenue means that tax rates are higher than they otherwise would need to be to raise the same amount of revenue. The higher tax rates result in greater tax-induced distortions, including the adoption of tax planning strategies to reduce the tax burden.¹² Second, the unintentional tax preference for cash transactions results in the cash economy being larger than it otherwise would be. Businesses that routinely accept cash (such as those that provide household and other personal services¹³) are tax-preferred relative to other businesses, which results in overinvestment in those types of businesses. In other words, the after-tax return from cash businesses is greater because of underreporting.¹⁴

10. DANIEL S. GOLDBERG, *THE DEATH OF THE INCOME TAX: A PROGRESSIVE CONSUMPTION TAX AND THE PATH TO FISCAL REFORM* 5 (2013) (“[A] consumption tax, that is, a tax based on what individuals consume rather than on what they earn as under an income tax, is viewed by most economists as superior to an income tax.”).

11. See Kathleen DeLaney Thomas, *Presumptive Collection: A Prospect Theory Approach to Increasing Small Business Tax Compliance*, 67 *TAX L. REV.* (forthcoming 2013) (manuscript at 5) (on file with authors).

12. JOEL SLEMROD & JON BAKIJA, *TAXING OURSELVES* 144 (4th ed. 2008) (“On all the margins of choice, taxpayers will undertake behavior that reduces tax liability up to the point that the marginal cost equals the marginal tax saving.”).

13. For tax avoidance reasons (both income and employment taxes), homeowners often pay domestic help in cash. Catherine B. Haskins, *Household Employer Payroll Tax Evasion: An Exploration Based on IRS Data and on Interviews with Employers and Domestic Workers* 5 (Feb. 1, 2010) (unpublished Ph.D. dissertation, Univ. of Massachusetts – Amherst), available at http://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1171&context=open_access_dissertations.

14. See Thomas, *supra* note 11, at 5 n.21; see also U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-07-1014, *TAX GAP: A STRATEGY FOR REDUCING THE TAX GAP SHOULD INCLUDE OPTIONS FOR ADDRESSING SOLE PROPRIETOR NONCOMPLIANCE* (2007), available at <http://www.gao.gov/new.items/d071014.pdf>.

Third, to avoid detection by the IRS, taxpayers who do not report cash income typically do not deposit the cash they receive in bank accounts or make other investments (e.g., in stocks, bonds, or CDs) with that cash. As a result, the cash is suboptimally invested, and cash recipients are unable to borrow funds to grow their businesses.¹⁵ Fourth, the cash tax gap hurts taxpayer morale and encourages other types of tax cheating. Open and obvious cheating by failing to declare cash income and offering “cash discounts” can make even taxpayers who are inclined towards honest reporting doubt the integrity of the system.¹⁶

Fifth, the tax preference for cash encourages the use of cash over other mediums of money payment. In fact, the tax preference for cash probably plays a key role in the persistence of cash in the economy. Considering the readily available alternatives to cash (debit card, credit card, or e-payment transactions) and the problems inherent in dealing with cash, it is a wonder that cash transactions remain as common as they are. The problems with cash are legion.¹⁷ Cash is subject to counterfeit, and counterfeiters are becoming increasingly sophisticated. Cash is more easily stolen than electronic money.¹⁸ Cash must be secured during transit and where stored. Cash must be physically delivered to where it will be stored, resulting in transportation costs.¹⁹ Once a transaction in cash is consummated, it may be impossible to find and collect against the seller if the product or service is not delivered or is defective.²⁰ Cash transactions do not spontaneously and immediately leave a record of what has transpired, which allows for disputes as to whether payments have been made and makes it more difficult for parties to keep track of what they have purchased or sold.²¹ Cash is easier for sellers’ or buyers’ agents to misappropriate. Cash transactions require change to be physically provided if exact cash is not paid, which requires sellers to keep change on hand and slows down transactions. Cash generally must be accounted for manually. Electronic cashiers cannot process cash

15. Morse et al., *supra* note 6, at 49-54; see also Ilan Benshalom, *Taxing Cash*, 4 COLUM. J. TAX L. 65, 74 (2012).

16. See Leandra Lederman, *Reducing Information Gaps to Reduce the Tax Gap: When Is Information Reporting Warranted?*, 78 FORDHAM L. REV. 1733, 1755 (2010).

17. See generally DAVID WOLMAN, *THE END OF MONEY* (2012) (describing the problems of cash and predicting an eventual cashless society).

18. *Id.* at 45.

19. JACK WEATHERFORD, *THE HISTORY OF MONEY* 238 (1997).

20. Other payment systems make recourse against the seller much easier. Credit and debit card companies allow buyers to challenge charges, and e-payment sellers generally leave a footprint that would allow a claim to be made against them. Arnold S. Rosenberg, *Better than Cash? Global Proliferation of Payment Cards and Consumer Protection Policy*, 44 COLUM. J. TRANSNAT’L L. 520, 524 (2006).

21. *Id.* at 534.

transactions efficiently, which means that sellers that accept cash usually will hire human cashiers. The list goes on and on.

This is not to say that cash does not sometimes have its virtues. Cash is currently very useful for small, ad hoc transactions, such as tipping service providers.²² But this advantage too will soon wither away, as e-payment technologies through, for example, mobile phone applications, become commonplace.²³ Nevertheless, there are certain advantages of cash that will likely persist. Most significantly, cash easily allows for anonymous purchases.²⁴ In addition, cognitive biases may have a salutary effect on spending behavior when cash is used as the medium of payment.²⁵ People tend to be more frugal paying in cash rather than in other media; casinos seem to bank (no pun intended) on this principle by requiring gamblers to bet with tokens. Personal finance experts likewise encourage the use of cash to tamp down excessive spending.²⁶ But even this advantage may be ephemeral as electronic commitment devices (perhaps electric shocks from your cell phone if you spend too much²⁷) eventually develop.

Overall, the benefits of non-cash payment media substantially outweigh the benefit of cash, leaving aside tax consequences. This explains the exponential growth of non-cash payment media and its emerging dominance in the economy.²⁸ Eventually, it is likely that nearly all remaining cash-transaction outliers will involve tax evaders and crime participants.

Given the critical role of cash in tax evasion and criminal activity more generally, it is not surprising that governments have begun to discourage the use of cash, sometimes subtly and other times in heavy-handed ways. Italy and Greece recently banned the use of cash

22. See Benshalom, *supra* note 15, at 71 (explaining that cash is “especially efficient for small retail purchases”).

23. Cf. DAVID W. SCHROFFER, *THE SMARTPHONE WALLET: UNDERSTANDING THE DISRUPTION AHEAD* (2010) (predicting the eventual dominance of the smartphone wallet).

24. See Benshalom, *supra* note 15, at 92 (describing the privacy benefits of using cash). Even the end of cash may not completely eliminate anonymous purchases. See Omri Marian, *Are Cryptocurrencies Super Tax Havens?*, 112 MICH. L. REV. FIRST IMPRESSION 38, 39 (2013).

25. See Benshalom, *supra* note 15, at 71 (noting that cash “allows some people to better manage their personal budgets”).

26. See WOLMAN, *supra* note 17, at 88.

27. In all seriousness, electronic devices allow users to check their balances anywhere at any time and should also make it easier to create (and perhaps stick to) a budget.

28. Some might point to the earning of points and miles through credit/debit card use as a reason for the emerging dominance of non-cash media. Certainly this may have been a factor in discouraging the use of cash (because points and miles operate as an effective tax on cash users), but the convenience and other benefits of non-cash media would outweigh the benefits of cash, leaving aside points and miles, except in a very small subset of purchasing activity.

in transactions exceeding a threshold amount.²⁹ Other countries have taken large currencies out of production, making large cash transfers more onerous.³⁰ Still others have subsidized the cost of electronic payment terminals for small retailers or provided tax rebates when a taxpayer's electronic payments reach threshold amounts.³¹

In addition to these legal changes, some governments have engaged in campaigns criticizing the use of cash in an attempt to change social norms. For example, Britain's Treasury Minister recently remarked that paying tradesmen such as plumbers in cash is "morally wrong" because it facilitates tax evasion.³² Other governments have run advertising campaigns that, while not specifically targeting cash transactions, emphasize the social cost of tax evasion.³³

Academic commentators have argued that governments should discourage cash transactions.³⁴ For example, Ilan Benshalom would impose a Pigovian tax on cash withdrawals from financial institutions to cause cash users to internalize the societal costs of tax evasion and criminal activity facilitated by cash transactions.³⁵

As these legal and social attacks on cash proceed, technology continues to make e-payments easier, more secure, and more ubiquitous. For example, Starbucks recently started selling the Square card reader, which easily converts any cell phone into a credit or debit card reader.³⁶ Square and other companies have also created technology allowing for "mobile payment" through cell phones without the

29. Joe Weisenthal, *Italy is Taking a Draconian New Measure to Avoid Tax Evasion*, BUSINESS INSIDER (Dec. 4, 2011, 4:48 PM), <http://www.businessinsider.com/italy-banning-cash-transactions-above-1000-euros-2011-12>; *Greek FinMin Unveils Tax Reform, Wage Policy*, REUTERS (Feb. 9, 2010, 11:37 AM), <http://www.reuters.com/article/2010/02/09/greece-finmin-highlights-idUSLDE61824V20100209>.

30. REBECCA HELLERSTEIN & WILLIAM RYAN, FEDERAL RESERVE BANK OF NEW YORK, STAFF REPORT NO. 400, CASH DOLLARS ABROAD 2 (rev. ed. 2011), available at http://www.newyorkfed.org/research/staff_reports/sr400.pdf.

31. See FRIEDRICH SCHNEIDER, A.T. KEARNEY, THE SHADOW ECONOMY IN EUROPE, 2011: USING ELECTRONIC PAYMENT SYSTEMS TO COMBAT THE SHADOW ECONOMY 7-8 (describing subsidies paid by Mexico, Columbia, Argentina, and South Korea for retailers who accept electronic payments).

32. Nicholas Watt, *Paying a Plumber Cash in Hand is Morally Wrong, Says Tory Minister*, THE GUARDIAN (July 23, 2012), <http://www.theguardian.com/politics/2012/jul/23/taxandspending-hmrc>.

33. Elisabetta Povoledo, *Italy Tries to Get Tax Cheats to Pay Up*, N.Y. TIMES (Aug. 8, 2011), <http://www.nytimes.com/2011/08/09/business/global/italy-tries-to-get-tax-cheats-to-pay-up.html>.

34. See, e.g., Jay A. Soled, *To Close the Tax Gap, Eliminate Cash*, 115 TAX NOTES 379 (2007).

35. See generally Benshalom, *supra* note 15.

36. Brian X. Chen, *Now on Sale at Starbucks: Square's Credit Card Reader*, N.Y. TIMES BITS BLOG (Jan. 3, 2013, 2:20 PM), <http://bits.blogs.nytimes.com/2013/01/03/starbucks-square-mobile-credit-card-reader/>.

use of a credit or debit card.³⁷ Biometric payment, through, for example, a touch of the finger, is also reportedly on the horizon.³⁸

The demise of cash should have positive ramifications for the income tax. E-payments automatically leave an electronic trail for every transaction, which decreases the risk of non-reporting of income. More importantly, e-payments must be made through a third-party intermediary who could become subject to third-party reporting obligations. The recently enacted section 6050W of the Internal Revenue Code expanded third-party reporting obligations to credit/debit card issuers and to “third party settlement organizations,” such as PayPal, who must now generally issue Forms 1099-K to their payees who both receive more than \$20,000 in payments in a calendar year and engage in more than 200 transactions during the year.³⁹ Section 6050W could easily be expanded to cover the information-reporting regime; the \$20,000/200 transaction floor could be lowered to cover nearly all e-payment transactions.

Closing the cash tax gap would raise revenues, which could allow for reduced rates, which would in turn reduce tax-induced behavioral distortions. Closing the gap would also improve taxpayer morale and confidence in the tax system by buttressing the view that everyone is paying their fair share. Traditional cash businesses, which tend to be smaller, more informal, and have a business-to-consumer orientation, would no longer be tax-advantaged relative to other businesses, resulting in more efficient investment decisions overall.⁴⁰ Second-order problems associated with the storing of cash proceeds, such as the suboptimal investment and borrowing activities by tax evaders, would be alleviated.⁴¹

A major drawback of this electronic utopia is that financial companies will have information concerning our private as well as our commercial activities, but society may have no choice other than to accept that consequence. However, especially in light of recent NSA scandals, the public may object to the government obtaining that information.⁴² Of course, the government already obtains a great deal of information (through third-party reporting), but individuals might

37. Jenna Wortham, *I'm Still Waiting for My Phone to Become My Wallet*, N.Y. TIMES (July 27, 2013), www.nytimes.com/2013/07/28/technology/im-still-waiting-for-my-phone-to-become-my-wallet.html.

38. Ellen McCarthy, *Cash, Charge or Fingerprint?*, WASH. POST (June 9, 2005), <http://www.washingtonpost.com/wp-dyn/content/article/2005/06/08/AR2005060802335.html>.

39. See I.R.C. § 6050W.

40. Joel Slemrod, *Small Business and the Tax System*, in THE CRISIS IN TAX ADMINISTRATION 69, 96 (Henry J. Aaron & Joel Slemrod, eds., 2004).

41. See Benshalom, *supra* note 15, at 73-74.

42. See Goldberg, *supra* note 10, at 118.

be unwilling to have the government know every single transaction in which they engage.

III. WILL PAYMENT SYSTEMS TECHNOLOGY EASE TRANSITION TO A CONSUMPTION TAX?

The previous part explained that technological innovations in payment systems should fortify the income tax by dramatically reducing the income tax gap as well as cash-induced distortions. This part considers whether those same technological innovations might eventually doom the income tax as we know it by paving the way towards a retail-sales-based consumption tax. It should be noted that it is possible to adopt a consumption tax system and still retain an income tax for high income taxpayers. A number of countries have done that.⁴³ However, retention of an income tax system forgoes some of the benefits that are obtained from adopting a consumption tax as a complete substitution for the income tax.

For a variety of reasons, many tax experts and policymakers advocate for the federal tax system to transition from a (mostly) income base to a pure consumption base.⁴⁴ In addition, moving from the current return-based system (in which taxpayers must file annual income tax returns) to a retail-transaction-based system (in which retailers charge and collect taxes on transactions) would probably have political traction because of the public distaste for filing tax returns.⁴⁵

One argument in favor of a consumption tax is the philosophical one that the private withdrawal of goods and services from the economy ought to be taxed, rather than the production of goods and services.⁴⁶ Another is that an income tax discourages saving (i.e., future consumption) in favor of immediate consumption, while a consumption tax is neutral as to the timing of consumption.⁴⁷ Yet another ar-

43. For example, the United Kingdom, France, and Germany each have both an income tax and a value added tax (VAT).

44. See, e.g., EDWARD J. MCCAFFERY, *FAIR NOT FLAT: HOW TO MAKE THE TAX SYSTEM BETTER AND SIMPLER* (2002); LAURENCE S. SEIDMAN, *THE USA TAX: A PROGRESSIVE CONSUMPTION TAX* (1997) (each proposing transition to a consumption tax).

45. See NEAL BOORTZ & JOHN LINDER, *THE FAIRTAX BOOK: SAYING GOODBYE TO THE INCOME TAX AND THE IRS 40-41* (2005) (describing public dissatisfaction with the filing of income tax returns).

46. See, e.g., N. Gregory Mankiw, *A Better Tax System (Assembly Instructions Included)*, N.Y. TIMES (Jan. 21, 2012), http://www.nytimes.com/2012/01/22/business/four-keys-to-a-better-tax-system-economic-view.html?_r=0.

47. To illustrate this point, Chirelstein and Zelenak use the following example. Consumer (C) and Saver (S) each earn \$1,000 in wages in Year 1. In a tax-free, 10% interest world, C will consume \$1,000 in Year 1, while S could consume \$1,100 (\$1,000 x 1.1) in Year 2. Under a 40% consumption tax, C would consume \$600 (\$1,000 - 40%) in Year 1, while S consumes \$660 (\$1,000 x 1.1 - 40%) in Year 2. Under a 40% income tax, C would again consume \$600 in Year 1, while S could only consume \$636 [(\$1,000 - 40%) + [10% x (\$1,000 - 40%)]]. The 1:1.1 ratio between immediate and delayed consumption holds for

gument is that taxing income is much more difficult and complicated than taxing consumption. The realization rule—that gains and losses from property are generally taken into account only upon a sale or exchange of the property—is a necessary fixture of the income tax; yet it can be circumvented through hedging.⁴⁸ More importantly, the realization rule creates incentives to hold onto appreciated property (to avoid income recognition) and to dispose of depreciated property (to trigger losses); the capital gains preference and limitations on capital losses are responses to these incentives.⁴⁹ In addition, capitalization and cost recovery issues (e.g., repairs versus improvements, capitalization and amortization of intangibles) can be immensely difficult to administer. The taxation of undistributed income of flow-through business entities is also difficult. All of these problems would disappear under a consumption tax.⁵⁰ Under a consumption tax, realization of gains or losses would be a non-event because mere realizations do not represent consumption. Likewise, the amount that a taxpayer consumes is unaffected by whether a business expenditure results in long-term or short-term benefit, which means that the capitalization doctrine would be rendered irrelevant.⁵¹ And reinvested profits of a business likewise do not result in consumption, which means that business entity taxation would no longer be necessary.⁵²

Despite the purported benefits of moving to a consumption tax imposed on transactions, two principal obstacles are thought to be the most significant deterrents. First, and most important, it is impossible, with current technology and prevailing political attitudes, to impart much progressivity into a retail sales tax (or into its close cousin, the VAT). Everyone must pay the same tax rate because the

the tax-free world and the consumption tax but it is reduced to 1:1.06 for the income tax. See MARVIN A. CHIRELSTEIN & LAWRENCE ZELENAK, *FEDERAL INCOME TAXATION* 486 (12th ed. 2012). Note that in this example it is assumed that the tax base for both the income tax and the consumption tax is tax-inclusive.

48. David M. Schizer, *Frictions as a Constraint on Tax Planning*, 101 COLUM. L. REV. 1312, 1340-44 (2001).

49. David A. Weisbach, *The (Non)Taxation of Risk*, 58 TAX L. REV. 1 (2004).

50. This is not to say that tax complexity would altogether disappear. There still would remain disputes about whether something represents consumption (e.g., gifts or fringe benefits versus non-taxable perks) and valuation of in-kind consumption. See John K. McNulty, *Flat Tax, Consumption Tax, Consumption-Type Income Tax Proposals in the United States: A Tax Policy Discussion of Fundamental Tax Reform*, 88 CALIF. L. REV. 2095, 2178 (2000). But disputes falling under the “increase in net worth” side of the Haig-Simons equation would disappear since the focus is on consumption, not on the value of one’s net worth.

51. Under a pure consumption tax, all expenditures would be immediately deductible, thereby eliminating the need for capitalization. See SLEMROD & BAKIJA, *supra* note 12, at 238.

52. However, it is politically unlikely in the extreme that there would be no taxes imposed on corporate entities. It is a virtual certainty that the corporate income tax would be retained or would be replaced by some other tax.

cash register cannot distinguish between Bill Gates and Joe the Plumber.⁵³ To alleviate those concerns, retail sales tax advocates often propose that the government pay a “prebate,” which is a fixed cash transfer to every taxpayer to offset the sales tax paid on a specified amount of consumption.⁵⁴

A prebate would effectively create a single zero-bracket but would not result in different marginal tax rates above the zero-bracket amount. Thus, once a taxpayer consumes above the zero-bracket amount, the taxpayer would be taxed at the same marginal rate regardless of whether he was Joe the Plumber or Bill Gates.⁵⁵ Widespread government cash disbursements also seem to be, at this point, a political non-starter. Prebates involve the transfer of cash to every citizen, which (it is claimed) makes voters uncomfortable⁵⁶ and has the potential for fraud.⁵⁷ “Tax coupons,” which would exempt from tax a specified amount of spending each year, would avoid the politically unattractive cash transfers, but would also impart only very limited progressivity.⁵⁸ Tax coupons would also likely face similar fraud issues.

Another version of a consumption tax—the so-called cash-flow tax—could easily impart a good deal of progressivity in a politically acceptable way. The income tax could be turned into a cash-flow tax quite easily. By allowing for unlimited individual retirement account (IRA) contributions and also getting rid of any penalty taxes on premature IRA distributions, only income that is consumed during the year is taxed.⁵⁹ The “consumed income” could then be subject to a

53. Another way to attempt to add progressivity is to have different rates for different types of items (food could be taxed at a low rate while yachts could be taxed at a high rate). This, however, is an imperfect tool and leads to administrative difficulties of how to label certain items for tax purposes. See Catherine Rampell, *Value-Added Taxes: A Primer*, N.Y. TIMES ECONOMIX BLOG (Apr. 19, 2010, 1:38 PM), <http://economix.nytimes.com/2010/04/19/value-added-taxes-a-primer/>.

54. See, e.g., BOORTZ & LINDER, *supra* note 45, at 84-85.

55. Note, however, that the use of a zero-bracket amount does provide some progressivity to the effective tax rate applied to consumers. For example, take a consumption tax system with a prebate amount of \$1000, and a consumption tax rate of 20%. X spends \$10,000 in year one, X pays a tax of \$2000 (20% times \$10,000). Taking into account the \$1000 prebate, X's effective tax rate is 10%: \$2000 minus the \$1000 prebate, or \$1000, divided by \$10,000. Y spends \$20,000, and pays a tax of \$4000 (20% times \$20,000). Y's effective tax rate is 15%: \$4000 minus the \$1000 prebate, or \$3000, divided by \$20,000. So, the effective rate paid by Y is greater than the effective rate paid by X, even though the marginal tax rates are the same.

56. Daniel N. Shaviro, *Welfare, Cash Grants, and Marginal Rates*, 59 SMU L. REV. 835, 839 (2006).

57. See, e.g., HANK ADLER & HUGH HEWITT, *THE FAIRTAX FANTASY* 46 (2009).

58. Cf. ZELENAK, *supra* note 4, at 76-77 (describing a 1943 proposal by Treasury Secretary Henry Morgenthau, Jr. for a national sales tax combined with tax coupons to impart progressivity).

59. See MCCAFFREY, *supra* note 44, at 57-58; SEIDMAN, *supra* note 44, at 6-7.

progressive tax rate schedule, so that as the taxpayer's consumption increases during the year, the consumption is taxed at higher rates.⁶⁰ This method of taxing consumption would probably be palatable to the public, as it would superficially look very much like the current income tax. On the other hand, a cash-flow tax would still require taxpayers to file annual returns,⁶¹ which would take away the attractiveness of the proposal for those who wish to do away with individual returns.

Futuristic "smart" e-payment systems could be able to track how much every taxpayer spends each year and to adjust the rate of tax (as calculated and collected by the retailer or by an e-payment middleman) as the taxpayer's spending increases. Thus, for example, the first \$10,000 of consumption spending could be tax free, with the next \$10,000 taxable at a 5% rate, the next \$10,000 at a 10% rate, and so on. To avoid liquidity issues for both taxpayers and the government, the amount of tax paid on a particular transaction would be a blended rate based on estimated annual consumption, and true-up adjustments would be made towards the end of the year if actual consumption during the year differed from projected consumption.⁶² However, one problem with that approach is that it is vulnerable to tax evasion by the simple scheme of having purchases made for someone by a person with low consumption.⁶³

A second obstacle to moving to a consumption tax is the transition problem. Money already taxed under the outgoing income tax, as represented by the taxpayer's aggregate basis in her assets or cash on hand, should not be taxed again under the new consumption tax.⁶⁴ Absent any transition relief, under any of the consumption tax systems—retail sales tax, VAT, and cash-flow tax—double taxation of pre-enactment basis would result.⁶⁵ While there are ways to mitigate

60. See MCCAFFREY, *supra* note 44, at 57-58; SEIDMAN, *supra* note 44, at 6-7.

61. See MCCAFFREY, *supra* note 44, at 57.

62. For example, assume that a taxpayer, based on her prior year's consumption (or income, if this is the first year of the consumption tax), is expected to spend \$100,000 on consumption, which would (after taking account of any exemption amount) be taxed at an effective rate of 20%. At the beginning of the year, the tax would be imposed at that 20%. If the taxpayer's spending during the year is less than expected, such that the expected effective tax rate is now 15%, the tax rate on future purchases would be adjusted. After the end of the year, when the proper tax rate is known with precision, a refund would be issued to the taxpayer for any excess tax paid. This system is much like the wage withholding system we have today.

63. Of course, if cash is completely eliminated, then the government should be able to track transactions between the evaders.

64. See MCCAFFREY, *supra* note 44, at 108-10 (discussing transition problem of pre-enactment basis).

65. While it is easy to see how double taxation would result under retail sales tax and VAT, double taxation may be harder to see under the cash-flow model, but it nevertheless exists there too. Under the cash-flow model, taxpayers would be required to put all of their investment assets into their IRA, and distributions therefrom would subsequently be taxed

the transition burden on existing wealth even under current technology, smart e-payment systems would make it easier to provide transition relief. Smart e-payment systems could take account of the taxpayer's basis and cash at the time of transition and allow for that amount to purchase tax-free consumption to the extent legislators determine transition relief is warranted. The amount of such exclusion from the consumption tax could be amortized over the anticipated consumption of the taxpayer during the taxpayer's life expectancy.

Payment systems technology could make a progressive retail sales tax that includes such transition relief for pre-enactment basis a realistic possibility. E-payment technology would allow third-party intermediaries (or, more rarely, retailers) to adjust the tax rate imposed on purchases to take account of both the taxpayer's consumption level and the taxpayer's previously taxed assets. The technology could also allow a taxpayer's pre-enactment basis to be amortized against future consumption, preventing or at least ameliorating the double taxation problem.

As a political matter, a progressive retail sales tax would have a number of benefits to make it attractive. It would remove the inconvenience of taxpayers having to file annual tax returns, which is something that voters claim to hate.⁶⁶ Because the tax would be paid in small increments, like traditional retail sales taxes imposed by states, it would be less salient than the current income tax.⁶⁷ And the tax would be progressive without requiring the government to make direct wealth transfers to its citizens.

Once the requisite technology is eventually developed, the major impediment to implementing a progressive retail sales tax would probably be privacy concerns. To impose the correct tax rate at the point of retail sale, the third-party intermediary (or, perhaps, the retail seller) would need to know the amount of the buyer's previous consumption. This could be troubling to some people, though they might be comforted by the fact that machines, not people, will be aggregating and processing the consumption data. Unfortunately, we have seen that people can farm information out of the machines that collect it.⁶⁸ We also must keep in mind that attitudes towards privacy

regardless of whether the distributions represent amounts previously taxed under the former income tax, thereby resulting in double taxation.

66. *A Third of Americans Say They Like Doing Their Income Taxes*, PEW RESEARCH CTR. (Apr. 11, 2013), <http://www.people-press.org/2013/04/11/a-third-of-americans-say-they-like-doing-their-income-taxes/>.

67. The salience of the income tax is reduced by the withholding mechanism. However, since taxpayers must file an income tax return each year, they will see their ultimate tax bill even if they do not have to pay it all at once.

68. Amir M. Hormozi & Stacy Giles, *Data Mining: A Competitive Weapon for Banking and Retail Industries*, INFO. SYS. MGMT., Spring 2004, at 62, 69.

and technology will certainly evolve as we inevitably move towards a paperless society. For example, the idea of electronic stock registration (in lieu of physical shares) would surely have been a non-starter over much of the stock market's history, yet physical shares are now nearly obsolete. And the information now voluntarily shared by Facebook users would have been considered extremely private in years past.⁶⁹ So while current prevailing attitudes towards privacy might preclude the enactment of a progressive retail sales tax now, it is quite possible that privacy concerns will eventually diminish to the point where such a tax is politically feasible.

Privacy concerns might also ensure that at least some cash transactions will continue to occur. People who place a high value on anonymous purchasing may continue to use cash.⁷⁰ Other people might choose to use cash only when they are making purchases that they consider particularly private or sensitive. The persistence of cash transactions would pose a problem for a progressive retail sales tax. Ideally, the same amount of tax ought to be imposed whether payments are made in cash or electronically. But only electronic payments can be tracked, and such tracking is necessary in order to determine the correct tax rate. It seems to us that the best solution would be to impose the highest statutory tax rate on cash purchases and require the retail seller to collect the tax. This would treat all cash purchases as if persons with large amounts of consumption made them. In many cases, this would overtax cash purchases and, in effect, act as a penalty on anonymous purchasing. This would be an unintended by-product of a progressive retail sales tax, but given the expected evolution in attitudes regarding privacy, it is possible that this penalty might not impede the eventual enactment of such a tax.

IV. CONCLUSION

In this Symposium Essay, we have argued that technological innovation will be critical during the next 100 years of the income tax. On the one hand, the increasing prevalence of electronic payment systems should bolster the income tax by substantially reducing the tax gap and mitigating the distortions caused by the cash economy. On the other hand, technological innovation and the corresponding evolution of attitudes towards privacy could make a progressive retail sales tax quite feasible, which might spell the end of the income tax.

69. Natasha Singer, *Your Online Attention, Bought in an Instant*, N.Y. TIMES (Nov. 17, 2012), <http://www.nytimes.com/2012/11/18/technology/your-online-attention-bought-in-an-instant-by-advertisers.html?pagewanted=1&r=0>.

70. Even without cash, anonymous electronic currencies, such as bit coins, may be available. See Marian, *supra* note 24, at 39.

