

AUTOMATION AND THE INCOME TAX

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Technological advancements are playing a transformative role in curtailing and, in some instances, eliminating the need for labor. These very same forces are catapulting capital in the form of robotics, machinery, and intellectual property to the economic forefront. In virtually every sphere of human existence, labor's decline and capital's rise have been widely felt. Notwithstanding the magnitude of these changes, to date, Congress appears committed to retaining its historic pattern of taxing labor income more heavily than it taxes income derived from capital. However, as the technological era evolves and capital gradually eclipses labor's role in the economy, fundamental tax reform is in order. Among other things, the technological era requires that all income – regardless of source – bear a similar tax burden.

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I. INTRODUCTION

There is a trend afoot that shows no signs of abating: technological advancements are progressing at an extraordinarily rapid pace, eliminating jobs and whole industries.¹ Notwithstanding the pace of these transformative changes, the income tax system has been slow to adjust, largely still rooted in taxing labor-produced income more heavily than that produced from capital.² Nevertheless, as labor in the form of human capital— the erstwhile driving force behind the nation’s economic growth³ – wanes in importance and capital in the form of robotics, machinery, and intellectual property emerges in its place, the tectonics of the income tax system will have to shift.

While this shift will have significant economic implications that warrant careful

¹ See, e.g., Martin Ford, *RISE OF THE ROBOTS: TECHNOLOGY AND THE THREAT OF A JOBLESS FUTURE* (2015) (presenting a compelling and comprehensive case that technology is eradicating many jobs and, in some cases, has caused whole industries to vanish). See also Samantha Masunaga, *Robots Could Take Over 38% of U.S. Jobs Within about 15 Years, Report Says*, LA TIMES (March 24, 2017), available at <http://www.latimes.com/business/> (“More than a third of U.S. jobs could be at “high risk” of automation by the early 2030s....”); John Markoff, *Skilled Work, Without the Worker*, NY TIMES (Aug. 12, 2012), available at <http://www.nytimes.com/2012/08/19/business/new-wave-of-adept-robots-is-changing-global-industry.htm> (“A new wave of robots, far more adept than those now commonly used by automakers and other heavy manufacturers, are replacing workers around the world in both manufacturing and distribution.”); Stephanie Clifford, *U.S. Textile Plants Return, with Floors Largely Empty of People*, NY TIMES (Sept. 12, 2013), available at http://www.nytimes.com/2013/09/20/business/us-textile-factories-return.html?pagewanted=all&_r=0 (“And politicians’ promises that American manufacturing means an abundance of new jobs is complicated — yes, it means jobs, but on nowhere near the scale there was before, because machines have replaced humans at almost every point in the production process.”); Carl Benedikt Frey & Michael A. Osborne, *The Future of Employment: How Susceptible Are Jobs to Computerisation?*, available at http://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf (“According to our estimates, about 47 percent of total U.S. employment is at risk [of being lost].”); James Manyika, Michael Chui, Jacques Bughin, Richard Dobbs, Peter Bisson & Alex Marrs, *Disruptive Technologies: Advances that Will Transform Life, Business, and the Global Economy* (2013), available at <http://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/disruptive-technologies> (“Twelve emerging technologies—including the mobile Internet, autonomous vehicles, and advanced genomics—have the potential to truly reshape the world in which we live and work. Leaders in both government and business must not only know what’s on the horizon but also start preparing for its impact.”). Bear in mind that over a half a century ago, even then technology was a perceived threat to the job market. *The Automation Jobless: Not Fired, Just Not Hired*, TIME MAGAZINE (1961) available at <http://content.time.com/time/magazine/article/0,9171,828815,00.html>.

² See *infra* Section II.

³ See generally, George Langelett, *Human Capital: A Summary of the 20th Century Research*, 28 J. OF EDUCATION FINANCE 1 (2002).

circumspection and exploration, perhaps its greatest impact may be on how the country raises tax revenue. More specifically, because wealth generation and concentration is increasingly anchored to capital, not labor, Congress must consider reforming the Internal Revenue Code (“Code”) in a manner that takes this dynamic into account. In broad brushstroke, as tax revenues from wages fall, taxes on business profits, investment income, and capital gains must correspondingly increase.⁴ This constitutes a complete reversal of past practices in which income derived from labor has historically borne the brunt of taxation and, by contrast, income derived from capital was either exempt from tax or, alternatively, experienced much lower tax rates.⁵

There is already some evidence that technological advancements have begun to make their mark on the Code. Over the last two decades, as the pace of technological changes have accelerated, Congress has chosen to retain relatively constant tax rates on wage income.⁶ In contrast, it has chosen to raise tax rates on unearned income from investments, such as interest, dividends, and capital gains.⁷ While it is hard to be prescient, particularly with respect to the income tax, there is every reason to believe that this general trend will continue and that Congress will no longer rely upon labor income as heavily as it once did as a revenue source.

This Article explores how Congress should reform the Code to account for labor’s decline and capital’s rise and, in addition, the concomitant implications associated with the reforms measures proposed. Section II sets forth several salient background items, including a short history of the labor/capital income dynamic, an explanation of how the Code currently taxes wages, business and investment profits, and capital gains, and a discussion of the relative revenue each mode of taxation generates. Section III next explores how automation has transformed the economy in ways that only a generation ago were unimaginable and the bearing these changes have had on the tax system and, in particular, revenue receipts. Section IV predicts how Congress will have to reform the income tax system to better align it with technological advancements and discusses the larger economic and social implications of doing so. Section V concludes.

II. BACKGROUND

Examining the impact technological advances have had on the economy and the larger implications such changes presage for the Code requires an investigation of the past and an explication of the present. While various modes of taxation are endemic to civilized societies and extant for many millennia, income tax systems are of relatively recent vintage.⁸ Their emergence raises the following important questions: why the Code came into existence and supplanted prior

⁴ See *infra* Section IVA.

⁵ See *infra* Section IIA.

⁶ See American Taxpayer Relief Act of 2012, Pub. L. 112-240, § ??? (made “permanent” the lower rates of the so-called Bush tax cuts (while retaining the higher tax rate at upper income levels)).

⁷ See Health Care and Education Reconciliation Act of 2010, Pub. L. 111-152, § 1411, 124 Stat. 1029 (instituting I.R.C. § 1411 that imposes a 3.8% Medicare contribution tax on passive investment income).

⁸ See *infra* Section IIA.

means of tax revenue collection, how the Code evolved into what it is today, and, finally, whether the Code can successfully continue to raise revenue.

The next three Sections attempt to answer these questions, exploring (A) the history of the income tax, with particular emphasis paid to its treatment of income derived from labor versus that derived from capital; (B) the current tax treatment of labor-generated income versus capital-generated income; and (C) the relative revenue that labor and capital income each generate.

A. Heritage of the Income Tax and Its Bias towards Capital

For millennia, dating back as far as when Mesopotamia was in its vibrancy, civilized societies have required tax collection to fund essential governmental services such as the military, judicial systems, and the provision of other public goods like garbage collection.⁹ There have been a host of ways that governments have levied tax burdens. For example, in ancient Egypt, taxes were largely agrarian-based, calibrated to the Nile's tides,¹⁰ whereas during the Greek and Roman Empires, taxes were frequently assessed on property ownership.¹¹

Shortly after the Norman Conquest in 1066, when feudalism came into full vogue, the predecessor of the modern day income tax—so called “product taxes”—came into existence.¹² At the time, such taxes were assessed primarily based on the capitalized value of rental income derived from real estate ownership.¹³ At the time, this mode of tax collection made eminent sense because, under feudalism, land was essentially not saleable; that being the case, for tax collection purposes, rents derived from such property were an accurate proxy of the property's underlying value. This practice of taxing the capitalized rental income of real estate was periodically extended to the capitalized income of other “products” such as business

⁹ See, e.g., Tonia Sharlach, *Taxes in Ancient Mesopotamia*, UNIV. OF PENN. ALMANAC, available at <http://www.upenn.edu/almanac/v48/n28/AncientTaxes.html> (“Since they didn't have coined money, ancient households had to pay taxes in kind, and they paid different taxes throughout the year. Poll taxes required each man to deliver a cow or sheep to the authorities. Merchants transporting goods from one region to another were subject to tolls, duty fees, and other taxes.”).

¹⁰ See, e.g., Aristide Theodorides, *The Concept of Law in Ancient Egypt*, in *THE LEGACY OF EGYPT* 291, 292 (J. R. Harris ed., 2d ed. 1971).

¹¹ See, e.g., *Taxation*, ANCIENT HISTORY & CIVILIZATION ENCYCLOPEDIA, p. 437, available at <http://erenow.com/ancient/ancient-greece-and-rome-an-encyclopedia-for-students-4-volume-set/437.html> (“The major tax throughout Roman history was the tributun, which was a tax on material wealth, including land, slaves, and goods.”).

¹² Stephen Dowell, *A History of Taxation and Taxes in England from the Earliest Times to the Year 1885* (1888), p. 67.

¹³ Seligman, Edwin Robert Anderson. *The Income Tax: A Study Of The History, Theory And Practice Of Income Taxation At Home And Abroad*. Macmillan New York 1914. pp 41. The “capitalized value” refers to the present value of the projected future income stream from the property.

enterprises.¹⁴ As described by economist, Edwin Seligman, “[a] product tax is a tax upon a thing itself, irrespective of who the owner may be, or who benefits from the income.”¹⁵

Even after the Tenures Abolition Act eliminated the feudal system in 1660, product taxes left an indelible mark on the future of income tax systems worldwide. In feudalism’s absence, land owners were finally free to bequeath estates to heirs of their choosing without interference from the Crown. Nevertheless, Great Britain established a comprehensive so-called “entailment system,” which allowed a line of heirs to use an estate, but essentially denied them discretionary rights to sell or gift it.¹⁶ The tradition of entailing property created a situation in which the realization of capital appreciation of real property was virtually nonexistent. In the vast majority of cases, since most, if not all, of a person’s estate consisted of entailed real property, a perception quickly emerged that capital constituted a physical object outside the scope of income.¹⁷ Put somewhat differently, over a tenant’s lifetime, capital value might experience increases or decreases, but such fluctuations were viewed as changes in the corpus, not as unrealized income or loss.¹⁸ A British tradition thus arose of referring to a person’s worth in terms of annual income, rather than making reference to the underlying property ownership itself.¹⁹

In 1799, when Great Britain enacted the first full-fledged income tax system, what was singularly unsurprising was that capital gains were not taxed.²⁰ After all, for centuries, engrained in the mindset of the general populace was the notion that income was comprised of reoccurring

¹⁴ *Id.* at 42.

¹⁵ *Id.* Page 13. Other historians believe that the products tax was essentially the equivalent of an income tax. William Kennedy, *English Taxation, 1640-1799: An Essay on Policy and Opinion*. London: Bell, 1913. pp 47-48.

¹⁶ Maitland, Frederic William. *A Sketch of English Legal History*. New York and London: G.P. Putnam's sons, 1915. Pp 139-140. See also, Perry, Harvey. *Capital Gains: The British Point of View*. Proceedings of the Annual Conference on Taxation under the Auspices of the National Tax Association, vol. 46, 1953, pp. 151-152. See also, Seltzer, Lawrence H. *The Nature and Tax Treatment of Capital Gains and Losses*. New York: National Bureau of Economic Research, 1951, pp 26.

¹⁷ Perry, Harvey. *Capital Gains: The British Point of View*. Proceedings of the Annual Conference on Taxation under the Auspices of the National Tax Association, vol. 46, 1953, pp. 152-153. See also, Seltzer, Lawrence H. *The Nature and Tax Treatment of Capital Gains and Losses*. New York: National Bureau of Economic Research, 1951, pp 26, 257.

¹⁸ Perry, Harvey. *Capital Gains: The British Point of View*. Proceedings of the Annual Conference on Taxation under the Auspices of the National Tax Association, vol. 46, 1953, pp. 152. See also, Seltzer, Lawrence H. *The Nature and Tax Treatment of Capital Gains and Losses*. New York: National Bureau of Economic Research, 1951, pp 26.

¹⁹ Perry, Harvey. *Capital Gains: The British Point of View*. Proceedings of the Annual Conference on Taxation under the Auspices of the National Tax Association, vol. 46, 1953, pp. 152. A bibliophile may recall that Mr. Darcy was worth “A clear ten thousand per annum.” Jane Austen, *PRIDE AND PREJUDICE* (1813).

²⁰ Seltzer, Lawrence H. *The Nature and Tax Treatment of Capital Gains and Losses*. New York: National Bureau of Economic Research, 1951, pp 28.

revenue on an annual basis; capital gains simply did not fit meet this definition. All other income sources, however, were taxed.²¹ For nearly two centuries, this tradition of taxing income but not capital gains remained a regular feature of the English income tax system, only recently revisited, when, in 1965, capital gains were finally made subject to income tax.²²

With the passage of the Sixteenth Amendment, Congress considered formulating an income tax system of its own. Unlike England, however, there was no system of entails in the United States and thus land was regularly bought and sold, with no intrinsic reason to differentiate it from other wealth accretions. When instituting the nation’s first income tax, gains and losses associated with capital ownership were accordingly subject to taxation and treated akin to other income sources.

But this tax parity did not last long. Remnants of Great Britain’s and other European income tax systems – in which capital gains were either not tax or lightly taxed – likely became catalysts for change in the United States. Soon after nation’s income tax was instituted, the then Secretary of the Treasury, Andrew Mellon, exclaimed that high capital gain tax rates were a drag on economic growth.²³ In addition, a leading corporate attorney, Fredrick R. Kellogg, testified several times before the Senate Finance Committee about the need to reduce capital gains tax rates to “unlock” capital realizations.²⁴ No doubt aware that their European counterparts already granted preferential treatment to capital gains, Congressional members were receptive to Mellon’s and Kellogg’s entreaties and voted in 1921 to reduce capital gains rates to a flat 12.5

²¹ Myers, J. S. *Tax on Income. A Correct Abridgment of the Act for Imposing a Tax on all Income, containing those Clauses which principally affect Landlords, Tenants, etc., exhibited in a clear and methodical Manner, etc., with a Schedule for estimating the Income of Persons liable to be Assessed.* 5th Edition. London, 1799. https://books.google.com/books?id=mRBXAAAACAAJ&lpg=PA10&ots=QtN0_bLWLI&dq=taxes%20on%20income%20A.%20A%20correct%20abridgement%20of%20the%20act%20imposing%20a%20tax%20on%20all%20income%201799&pg=PA3#v=onepage&q=taxes%20on%20income.%20A%20correct%20abridgement%20of%20the%20act%20imposing%20a%20tax%20on%20all%20income%201799&f=false. See also, Dowell, Stephen. *A History of Taxation and Taxes in England from the Earliest Times to the Year 1885.* London: Longmans, Green, 1888. pp 93-94.

²² The Finance Act 1965. pp 19-64. <http://www.legislation.gov.uk/ukpga/1965/25/contents/enacted>

²³ Mellon, Andrew W. *Taxation: The People's Business.* Macmillan London 1924. pp 18-19, 127-138.

²⁴ Ajay K. Mehrotra and Julia C. Ott. *The Curious Beginnings of the Capital Gains Tax Preference*, 84 FORDHAM L. REV. 2517 (2016). pp 2525-26. citing Internal-Revenue Hearings Before the S. Comm. on Finance on the Proposed Revenue Act of 1921, 67th Cong. 534–54 (1921) (statement of Frederick R. Kellogg). https://books.google.com/books?id=gd_QEcY2isC&lpg=PA534&ots=xVbeyBCN4t&dq=statement%20of%20Frederick%20R.%20Kellogg%201921&pg=PA534#v=onepage&q=statement%20of%20Frederick%20R.%20Kellogg%201921&f=false

percent (compared to a maximum tax rate of 58 percent applicable to ordinary income).²⁵

Ever since the 1921 Act²⁶ passed, but for a short four-year period following the passage of the Tax Reform Act of 1986,²⁷ capital gains have enjoyed a significant tax rate preference relative to ordinary income. This tax rate preference constitutes a tax expenditure, which has come at a significant dollar cost to the government's coffers.²⁸ The unanswered question is whether, in the age of automation, the nation can continue to endure this hefty financial burden.

B. Current Taxation of Labor and Capital Income under the Code

In theory, under the Code, all income should be taxed absent a compelling public policy justification for exemption. The authority for the foregoing proposition is found in Code section 61. It declares that all wealth accretions “regardless of source” should be included in the tax base.²⁹ But, for a variety of reasons, the Code taxes labor income much more severely than capital income. This Section first examines the tax burdens that befall income derived from labor and capital; next, it explores the putative reasons underpinning their incongruent tax treatments.

1. Tax Burdens

The tax burdens that befall income from (a) labor, (b) business and investment profits, and (c) capital gains are each different. Consider, in general, how the Code taxes each.

(a) **Income Derived From Labor.** Labor income bears the nation's highest tax burden, which is largely attributable to the fact that it is taxed twice. First, the Code imposes an income tax on labor earnings.³⁰ More specifically, depending upon the taxpayer's filing tax status (i.e., single, married, or head of household) and income level, labor earnings are subject to income tax rates ranging from 10 percent to 39.6 percent.³¹ Second, upon the very same earned income, the Code imposes employee and employer payroll taxes.³²

²⁵ See *id.* at 2526-27; Citizens for Tax Justice, *Top Federal Income Tax Rates Since 1913*, <http://www.ctj.org/pdf/regcg.pdf>.

²⁶ The Revenue Act of 1921, § 206(b), 42 Stat. 227, 233.

²⁷ McClelland, Rob. *Capital Gains: Tax Debate 2017*. Tax Policy Center. February 6, 2017. <http://www.taxpolicycenter.org/publications/capital-gains/full>

²⁸ See U.S. Department of the Treasury, Office of Tax Analysis (2016), Line 70, available at <https://www.treasury.gov/resource-center/tax-policy/Documents/Tax-Expenditures-FY2018.pdf> (estimating that the capital gains tax rate preference reduces revenue yields by over a \$100 billion annually).

²⁹ I.R.C. § 61(a).

³⁰ I.R.C. § 61(a).

³¹ I.R.C. § 1(a) – (d); see also Tax Foundation, *2017 Tax Brackets* (Nov. 10, 2016), <https://taxfoundation.org/2017-tax-brackets/> (inflation-adjusted thresholds issued annually by IRS).

³² I.R.C. § 3101 (payroll tax imposed on employees); I.R.C. § 3111 (payroll tax imposed on employers).

The employee payroll tax is levied on earnings from employment,³³ and consists of two components: (i) an old-age, survivors, and disability insurance tax equal to 6.2 percent of wages³⁴ and (ii) a hospital insurance tax equal to 1.45 percent of wages.³⁵ The employer payroll tax contains the same two components at the same rates.³⁶ In other words, an employee owes a combined 7.65 percent of her wages in payroll taxes, and her employer owes an additional 7.65 percent in payroll taxes on those same wages.³⁷ In those cases when the taxpayer is instead self-employed, payroll taxes take the form of a self-employment tax with the same components,³⁸ but at rates that are double the rate paid by employees. In other words, the self-employed taxpayer is responsible for: (i) an old-age, survivors, and disability insurance tax equal to 12.4 percent of net self-employment income;³⁹ and (ii) a hospital insurance tax equal to 2.9 percent of net self-employment income.⁴⁰

To illustrate the tax burden Congress places on labor income,⁴¹ consider the plight of a single, self-employed taxpayer. Net of expenses, suppose that in 2017 this taxpayer earns \$100,000 from plumbing services and that his effective tax rate is 25 percent. Under this set of assumptions, the taxpayer would incur approximately \$14,130 of payroll tax (\$100,000 x 15.3 percent x 92.35 percent⁴²) and \$23,234 (((\$100,000 - \$7,065)) x .25) of income tax.⁴³ The total

³³ I.R.C. § 3121(a).

³⁴ I.R.C. § 3101(a).

³⁵ I.R.C. § 3101(b).

³⁶ I.R.C. § 3101(a), (b).

³⁷ Additional hospital insurance taxes apply for employees paid more than \$200,000/year at a rate of 0.9 percent, and old age, survivors, and disability insurance taxes are not required after the first \$127,200 of wages for 2017. *See* IRS Publication 15 (Circular E), *Employer's Tax Guide*, 23-24 (2017) available at <https://www.irs.gov/pub/irs-pdf/p15.pdf>. The employer may also have to pay federal unemployment taxes on the first \$7000 of wages at a rate that varies based on the amount of state unemployment contributions made. *See id.* at 34-35.

³⁸ I.R.C. § 1401.

³⁹ I.R.C. § 1401(a).

⁴⁰ I.R.C. § 1401(b). Self-employment taxes only apply if an individual earns at least \$400 during the year from self-employment. The same \$127,200 ceiling applies for old age, survivors, and disability insurance taxes and the same additional hospital insurance tax applies for net earnings over \$200,000, *see supra* note 37. *See* IRS, Topic 554, *Self-Employment Tax*, <https://www.irs.gov/taxtopics/tc554.html>.

⁴¹ “Labor income” as used in this Article refers to both wages paid by employers and labor earnings from self-employment. A self-employed taxpayer might earn both labor income and “business profits” (discussed in the next section). For self-employed taxpayers operating as sole proprietors, all of their earnings are subject to self-employment tax, although the tax applies net of expenses. But a taxpayer operating a business through an S-corporation can pay herself a salary (subject to self-employment tax) and separately pay herself a distribution of profits (not subject to self-employment tax). *See* [ADD CITE]

⁴² Taxpayers may deduct half of their potential self-employment tax liability from their net business income before applying the 15.3 percent self-employment tax rate. Thus, if an individual earned \$1000 of net business income, he could first deduct \$76.50. The result is that

taxes levied on the taxpayer's labor income would thus be \$37,364 (\$14,130 + \$23,234) or approximately 37.4 percent of the income earned.⁴⁴ Had the taxpayer instead been an employee of a plumbing business, rather than self-employed, and had earned a \$100,000 salary, a similar tax fate would have befallen him.⁴⁵

(b) **Income Derived From Business Profits and Investments.** Next, business and investment profits endure a moderate amount of tax. This lower tax burden results in part because business and investment profits are taxed only once (not twice), applying the same progressive tax rates as those imposed on labor income.⁴⁶ In the case of so-called “qualified dividends,”⁴⁷ investment profits enjoy an even lower tax rate.⁴⁸ Moreover, because the Code permits related expenses to be deducted,⁴⁹ business profits and investments are generally taxed on a *net* basis, rather than on a gross dollar amount (as is generally the case with wages⁵⁰). Congress has been particularly magnanimous with respect to business expenses, generously permitting robust deductions in the form of accelerated depreciation,⁵¹ domestic production initiatives,⁵² and research and development credits.⁵³ These deductions, initiatives, and credits can significantly diminish the tax burden associated with the production of business and investment profits.

To illustrate the modest tax burden Congress places on business and investment profits,

only 92.35 percent of net earnings are subject to self-employment tax. *See* IRS, Topic 554, *Self-Employment Tax*, <https://www.irs.gov/taxtopics/tc554.html>.

⁴³ Because one-half of self-employment tax is also deductible for income tax purposes (I.R.C. § 1402(a)(12)), the actual income tax burden is levied on \$92,935 (\$100,000 – (\$14,130/2)).

⁴⁴ Bear in mind that many states also levy special payroll taxes on labor income. Some of these taxes are for state unemployment insurance (see e.g., N.J.S.A. 43:21-7); other of these taxes are for state disability insurance (see e.g., *Id.*).

⁴⁵ The taxpayer would be subject to a payroll tax of \$7,650 and the taxpayer's employer's would be subject to the identical tax burden of \$7,650. Depending upon the labor market's economic elasticity, this latter tax would probably result in the employee receiving somewhat lower wages. On whatever wages the employee ultimately did receive, the income tax rates provided by section 1 of the Code would apply.

⁴⁶ I.R.C. § 1.

⁴⁷ I.R.C. § 1(h)(11)(B)(i).

⁴⁸ I.R.C. § 1(h)(11)(A).

⁴⁹ I.R.C. §§ 162, 212.

⁵⁰ Although the Code does allow for the deductibility of certain employee business expenses, such deductions constitute “miscellaneous itemized deductions,” which means: (1) they are only available to taxpayers who don't claim the standard deduction and (2) the business expenses (combined with any other miscellaneous itemized deductions) must exceed a floor equal to 2 percent of the taxpayer's adjusted gross income. *See* I.R.C. § 67. In practice, as a result of these limitations, most employee business expenses are not deductible.

⁵¹ I.R.C. § 168(a).

⁵² I.R.C. § 199(a).

⁵³ I.R.C. § 41(a).

consider a taxpayer who owns two assets: (a) a \$1 million widget-making machine that annually generates \$100,000 of gross revenue and (b) \$1 million of stock in a publicly-held company.

Depending upon when the widget-making machine was placed into service, the Code could entitle the taxpayer to take several hundreds of thousands of dollars of depreciation deductions, a large portion of which may be available in the first year.⁵⁴ Assuming the machine were operated in the United States and other criteria were met, the taxpayer might also be entitled to a domestic production deduction.⁵⁵ Moreover, some of the dollars spent developing the widget-making machine might also generate a research and development credit,⁵⁶ further offsetting whatever tax dollars would be due on the taxpayer's net business profits. As a result of these deductions, the taxpayer may report no or very little net business income from the machine notwithstanding the \$100,000 of annual gross earnings, resulting in an effective tax rate as low as zero in some years.

Additionally, dividends received by the taxpayer from the public company stock would be accorded favorable tax rates, equal to essentially one-half of the tax rates applicable to ordinary income.⁵⁷ For example, if the taxpayer was in the highest marginal bracket for ordinary income (39.6 percent) and received \$100,000 in dividends from the public company, the taxpayer would face a 20 percent rate, or \$20,000 of tax, as long as those dividends constituted "qualified dividends."⁵⁸ Drilled down to the essentials, what becomes apparent is that, notwithstanding the Code's published tax rate schedule, business and investment profits enjoy a relatively moderate tax burden compared to wages.

(c) **Income Derived from Capital Gains.** Finally, compared to labor income and business and investment profits, capital gains often sustain the least tax burden. For starters, capital gains endure only one tax and, in addition, command preferential tax rates that are essentially half of those that labor income and business and investment profits endure.⁵⁹ Tax relief does not end there, however; under the Code, there are a series of provisions that serve to alleviate,⁶⁰ defer,⁶¹ and, in some cases, entirely eliminate⁶² capital gains. Indeed, the whole concept of realization, a central bedrock of Code section 1001, constitutes a significant departure from the conceptual purity denoted in Code section 61 in which all annual wealth accretions ostensibly constitute income.⁶³

⁵⁴ I.R.C. §§ 168(a),(k); 179.

⁵⁵ I.R.C. § 199(a).

⁵⁶ I.R.C. § 41(a).

⁵⁷ I.R.C. § 1(h)(11)(A).

⁵⁸ A "qualified dividend" is one paid on stock in a domestic or qualified foreign company and that meets a certain minimum holding period requirement. I.R.C. § 1(h)(11)(B).

⁵⁹ I.R.C. § 1(h)(11)(A).

⁶⁰ *See, e.g.*, I.R.C. § 121.

⁶¹ *See, e.g.*, I.R.C. § 1031.

⁶² I.R.C. § 1014.

⁶³ Admittedly, there are some factors that favor preferential capital gains rates, which are discussed in the next subpart.

To illustrate the favoritism Congress has historically bestowed upon capital gains, consider a taxpayer who purchased a marketable security for \$10,000 that has gradually appreciated over a 9-year period to \$100,000. Notwithstanding the security's annual increases in fair market value, the taxpayer does not have to bear any income tax on that appreciation. Furthermore, if the taxpayer sells the security, the \$90,000 of gain will be taxed, but at tax rates far lower than those that apply to labor income or business income.⁶⁴ For example, a taxpayer in the highest marginal tax bracket for ordinary income (39.6 percent) will face a 20 percent capital gains rate under section 1 of the Code.⁶⁵ Furthermore, if the taxpayer dies owning the security, the \$90,000 of capital gain will never be subject to income tax.⁶⁶

Clearly, how the Code categorizes income has important tax consequences. Whether there are compelling justifications for such dissimilar treatments is the next topic of discussion.

2. Rationales Underpinning Distinct Tax Treatments

Dating back to when Congress instituted the income tax in the early and mid-part of the twentieth century, many rationales – primarily based upon administrative necessity and historical precedent from other countries – underpinned how income derived from different sources was to be taxed.⁶⁷ Over time, however, technological advances have gradually eroded and, in some cases, obliterated these rationales, requiring that they now be revisited.

Below is a compendium of the historic justifications for different tax treatments under the Code.

(a) **Rationale for High Taxes on Labor Income.** When Congress first instituted the income tax in 1913,⁶⁸ it made no ostensible distinctions between and among the various sources of the income taxpayers earned – plain and simple, it was all to be equivalently taxed.⁶⁹

But three major historical events made labor income a particularly attractive target for taxation. The first was the economic depression that struck the nation in 1929. Congress sought to provide an economic safety net for those retiring from the labor force.⁷⁰ That being the case, it used labor income as an easily identifiable demarcation point to determine annual contributions

⁶⁴ Id.

⁶⁵ An additional tax of 3.8 percent applies to the “net investment income” of certain high-income taxpayers; when applicable, a taxpayer’s maximum capital gains rate would be 23.8 percent. I.R.C. § 1411.

⁶⁶ I.R.C. § 1041(a).

⁶⁷ See *supra* Section IIA.

⁶⁸ Income Tax Law of 1913, Pub. L. No. 16, ch. 16, 38 Stat. 114, 166-181 (1913).

⁶⁹ However, even at the inception of the income tax, by instituting a realization requirement, Congress and the Treasury Department laid the groundwork for the preferential tax treatment accorded capital income.

⁷⁰ See, e.g., H.R. 4120, 74th Cong. (1935) (“To alleviate the hazards of old age, unemployment, illness, and dependency....”).

to what became known as Social Security.⁷¹ Second, in 1943, when World War II was raging, the country needed a steady and more robust revenue stream. Using a new wage-withholding system, Congress saw labor income as a vast reservoir of wealth that could readily be tapped to underwrite its war-time expenditure obligations.⁷² Third, in the 1960s President Lyndon Johnson launched a so-called war on poverty.⁷³ Capitalizing upon the success from taxing labor income under Social Security, Congress introduced Medicare and Medicaid to provide hospital and medical insurance to the elderly and indigent.⁷⁴

These historic events led to the institution of massive entitlement programs and strengthened our nation's military might. But why did Congress opt to tax labor more heavily than other income sources? A number of factors led to this outcome.

One was administrative expediency. Labor income is difficult to camouflage. When taxpayers perform labor in their capacity as employees, they usually incur few related expenses; as such, whatever remuneration they receive gives rise to taxable income. Labor income also tends to involve the presence of third-parties, in the form of employers, which is beneficial from the government's standpoint. This is because third-party employers facilitate tax withholding and information reporting, both of which result in better taxpayer compliance.⁷⁵ By way of contrast, the same is not always true of business profits, investment income, and capital gains. Production of these latter forms of income often involves deductible expenses and basis recoveries. In addition, third-party payors have historically been absent from many of these transactions, resulting in relatively lackluster compliance.⁷⁶

Another factor pertains to economic theory. More specifically, a tax on labor income may cause some taxpayers to work more (this is known as the *income effect*).⁷⁷ For low- and middle-income taxpayers, their participation in the labor market is likely inelastic; they need to put the

⁷¹ The Social Security Act (Act of August 14, 1935), c. 531, 49 Stat. 620.

⁷² Current Tax Payment Act of 1943, Pub. L. 68, Ch. 120, 57 Stat. 126; Carolyn C. Jones, *Class Tax to Mass Tax: the Role of Propaganda in the Expansion of the Income Tax During World War II*, 37 BUFFALO L. REV. 685 (1989). For an excellent historical overview of income tax withholding, see Richard L. Doernberg, *The Case Against Withholding*, 61 TEX. L. REV. 595, 599-604 (1982).

⁷³ President Lyndon Baines Johnson, First State of the Union Address (Jan. 8, 1964), available at <http://www.americanrhetoric.com/speeches/lbj1964stateoftheunion.htm>.

⁷⁴ The Social Security Amendments of 1965, Pub. L. 89-97, 79 Stat. 286.

⁷⁵ See generally, Leandra Lederman, *Statutory Speed Bumps: The Roles Third Parties Play in Tax Compliance*, 60 STAN. L. REV. 695 (2007).

⁷⁶ Internal Revenue Serv., *Tax Gap Estimates for the Years 2008-2010* Attachment 3, available at <https://www.irs.gov/PUP/newsroom/tax%20gap%20estimates%20for%202008%20through%202010.pdf> (estimating 63 percent noncompliance rate when income is not subject to information reporting or withholding).

⁷⁷ See generally A.B. Atkinson & J.E. Stiglitz, LECTURES ON PUBLIC ECONOMICS at 27, 33-34(1980); J.A. Mirrlees, *An Exploration in the Theory of Optimum Income Taxation*, 38 REV. ECON. STUD. 175 (1971).

proverbial “bread on the table” and the imposition of taxes may thus cause them to increase their work hours.⁷⁸ Therefore, other than with respect to financially well-to-do taxpayers (who may engage in more leisure activities and less work, which is known as the *substitution effect*),⁷⁹ a tax on labor income could be imposed with little or no negative effect on the labor market.⁸⁰

A third factor is grounded in the notion of sufficiency. For a tax to have utility/functionality there must be an adequate base upon which to impose a tax.⁸¹ For example, in terms of revenue generation, the institution of a universal estate tax would probably be nonsensical for one simple reason: without imposing tax rates that the general public would likely consider confiscatory, not enough taxpayers perish annually to provide a sufficient base to tax.⁸² The same is not true of labor income. Relative to other income forms, it is plentiful.⁸³ Furthermore, labor income tends to be generated in a fairly steady stream, with few opportunities to defer receipt to later tax years.

A fourth factor pertains to political expediency. As the income tax system evolved in the United States, consider in whose hands power vested, namely those who controlled the capital apparatus.⁸⁴ It comes as no surprise that the power elite devised the nation’s income tax system in a manner that imposed a greater tax burden on others rather than themselves.⁸⁵ Furthermore, in an endeavor to make payroll taxes more politically palatable to the masses, Congress introduced tax withholding on wages, helping to ensure compliance while simultaneously alleviating taxpayers of the difficult administrative burden of having to put aside adequate savings to meet

⁷⁸ See, Martin J. McMahon, Jr. & Alice G. Abreu, *Winner-Take-All Markets: Easing the Case for Progressive Taxation*, 4 FLA. TAX REV. 1, 43-45 (1998) (analyzing the different substitution effects between lower- and high-income taxpayers).

⁷⁹ See Atkinson & Stiglitz, *supra* note 53 at 27-28.

⁸⁰ See, Joseph Bankman & Thomas Griffith, *Social Welfare and the Rate Structure: A New Look at Progressive Taxation*, 75 CALIF. L. REV. 1905, 1964-65 (1987) (“Looking at the whole range of econometric studies of the labor supply, the most plausible conclusion is that the elasticity of substitution between consumption and leisure lies between 0.3 and 0.8 and almost certainty is less than the elasticity of 1.0 used in the Mirrlees model.”).

⁸¹ See Joseph T. Sneed, *The Criteria of Federal Income Tax Policy*, 17 STAN. L. REV. 567 (1965) (“Thus, when it is determined that a given amount of additional revenue is required, existing and possible additional taxes must be evaluated to determine their capacity to fulfill the need.”).

⁸² See James M. Poterba, Steven F. Venti, & David A. Wise, *Were They Prepared for Retirement? Financial Status at Advanced Ages in HRS and AHEAD COHORTS*, NBER Working Paper No. 17824 (2012), available at <http://www.nber.org/papers/w17824> (“We find that a substantial fraction of persons die with virtually no financial assets - 46.1 percent with less than \$10,000 - and many of these households also have no housing wealth and rely almost entirely on Social Security benefits for support.”).

⁸³ See *supra* notes ? - ? and accompanying text.

⁸⁴ See *supra* notes ? - ? and accompanying text.

⁸⁵ See Margaret Levi, *A Theory of Predatory Rule*, 10 POL. & SOC’Y 431 (1981) (arguing that “rulers are predatory in that they try to extract as much revenue as they can from the population.”).

their annual tax obligations.⁸⁶

A fifth and final factor relates to the connection Congress conveniently drew between the payment of payroll taxes and the subsequent receipt of retirement income in the form of Social Security. The structure of defined benefit retirement plans provides a model for this justification. Under a defined benefit retirement plan, workers contribute a set percentage of their income to a plan and, depending upon their “overall years/months of service,” they later become entitled to fixed dollar amounts of annual retirement benefits.⁸⁷ In devising Social Security, to provide financial security for the nation’s workforce, the federal government sought to replicate the defined benefit plan structure via a mandated tax on labor income.⁸⁸

In sum, administration and enforcement concerns, as well as economic efficiency, were principled rationales for taxing labor more than other sources of income in the formative years of our income tax system. Additionally, the political environment at the time and Congress’s desire to fund a retirement system provide further historical context for higher labor taxes.

(b) Rationale for Business Profits and Investment Taxation. The United States has deep capitalistic roots, echoed, in part, even in its Constitution.⁸⁹ More than a century after the nation declared its independence, when it came to devising a viable framework to raise needed revenue, capitalist tenets played a pivotal role in shaping the Code.⁹⁰ Congress accordingly devised an income tax system designed to promote capital growth and production and prioritized private property ownership. These objectives and their accomplishment manifested themselves in several salient ways.

To encourage taxpayers to acquire tools of production, the Code provides many robust incentives. For example, two of the most formidable are bonus and accelerated depreciation deductions encapsulated in Code section 179 and 168, respectively. Together, these provisions enable taxpayers to deduct large proportions or entire acquisition costs of trade and business assets.⁹¹ Consider the tax consequences that befall a dentist who acquires a \$100,000 x-ray

⁸⁶ See Doernberg, *supra* note 48 at 595 (“The IRS claims that the use of withholding as a verification and collection technique is the most efficient method of obtaining the revenues necessary to provide government services.”).

⁸⁷ *Pension Benefit Guar. Corp. v. LTV Corp.*, 496 U.S. 633, 637 n.1 (1990) (stating that a “defined benefit plan is one that promises to pay employees, upon retirement, a fixed benefit under a formula that takes into account factors such as final salary and years of service with the employer”).

⁸⁸ See, e.g., Regina T. Jefferson, *Privatization: Not the Answer for Social Security Reform*, 58 WASH. & LEE L. REV. 1287, 1303-1304 (2001) (“The defined benefit plan structure is currently used by the Social Security program, with the government effectively guaranteeing the delivery of the promised benefits.”).

⁸⁹ HOW CAPITALISTIC IS THE CONSTITUTION? (Robert A. Goldwin and William A. Schambra, eds., 1982); Arthur Selwyn Miller, *THE SUPREME COURT AND AMERICAN CAPITALISM* (1968).

⁹⁰ See *supra* notes ? - ? and accompanying text.

⁹¹ See I.R.C. § 179(b)(1) (an allowable immediate deduction is allowable up to \$500,000

machine to be used in her dental practice. Assume that the dentist’s effective tax rate is 35 percent, and this will be her dental practice’s only property acquisition for the year. Under this set of facts, even if the x-ray machine has a useful life of ten years (suggesting that its true economic depreciation is \$10,000 annually), the dentist would be able expense the entire purchase price in the year she places the x-ray machine into service, sheltering \$100,000 of income and yielding an immediate \$35,000 of tax savings. By offering these robust depreciation deductions, Congress effectively partners with trades and businesses, helping to underwrite their expenditures.

Adhering to its capitalist roots, the Code also provides a series of incentives designed to promote private party ownership and investment. A small smattering of Code section examples helps illustrate this point: to encourage real estate ownership, the Code permits taxpayers to deduct their mortgage interest payments;⁹² to make capital investments more attractive, dividend income is accorded preferential tax treatment;⁹³ and, finally, retirement accounts are allowed to grow tax-free, sheltering vast amounts of income from taxation for years and decades to come.⁹⁴

A lack of political will has also led business profits to be taxed rather moderately, particularly given that profits earned by small businesses and independent contractors were historically difficult to monitor. Traditionally, there have been no third parties to issue tax information returns, taxpayers easily concealed profits by dealing in cash, and the IRS lacked the resources to adequately police compliance.⁹⁵ As a result, when it comes to these sort of trade and business enterprises, tax compliance has been abysmal.⁹⁶ Theoretically, Congress could have

of property placed into service; however, this immediate deduction is phased-out dollar-for-dollar when taxpayers place more than \$2 million of property into service (I.R.C. § 179(b)(2), (3)).

⁹² I.R.C. § 163(h)(3).

⁹³ I.R.C. § 1(h).

⁹⁴ I.R.C. §§ 401 – 424.

⁹⁵ See, e.g., Associated Press, *Income Tax Audits Plummet as IRS Loses Agents to Budget Cuts*, FORTUNE (Mar. 2017), available at <http://fortune.com/2017/03/05/income-tax-audits-irs-agents/> (“The number of people audited by the IRS in 2016 year dropped for the sixth straight year, to just over 1 million. The last time so few people were audited was 2004. Since then, the U.S. has added about 30 million people.”); GAO, *Enforcement of Tax Laws Remains High-Risk Area*, 2017 TAX NOTES TODAY 31-26 (2017) (“Between fiscal years 2011 and 2016, IRS’s annual appropriations declined about \$ 900 million. Likewise, staffing has declined: full-time equivalent staff members funded by annual appropriations declined by 12,000 between fiscal year 2011 and fiscal year 2016, a 13 percent reduction. At the same time, IRS’s enforcement performance has declined.... Reductions in examinations can reduce revenue collected and may indirectly reduce voluntary compliance.”); Bruce Bartlett, *Slashing the IRS Budget--Penny-Wise and Pound-Foolish*, FISCAL TIMES (Jan. 17, 2014), <http://www.thefiscaltimes.com/Columns/2014/01/17/Slashing-IRS-Budget-Penny-Wise-and-Pound-Foolish> (how budgetary constraints restrict the IRS’s ability to fulfill its mission).

⁹⁶ See, e.g., Stacy Cowley, *Why the I.R.S. Fails to Crack the Small-Business Tax Nut*, N.Y. TIMES (2016), available at <https://www.nytimes.com/2016/06/16/business/smallbusiness/why-the-irs-fails-to-crack-the->

invigorated enforcement efforts by augmenting IRS funding and instituting other tax compliance measures,⁹⁷ but many politicians and commentators have argued that this course of action would be too intrusive.⁹⁸

Finally, capitalism (with its Puritan origins) places an immense premium on savings in lieu of consumption.⁹⁹ In light of this bias, investment income in the form of interest, dividends, and rents enjoys a relatively light tax burden insofar as they constitute the embodiment of savings (i.e., bank deposits, capital investment, and real estate ownership). As such, to the extent possible, the Code seeks to minimize and, on occasion, even exempt such earnings from taxation.¹⁰⁰

(c) **Rationale Capital Gains Preference.** Over the past century, the Code has afforded preferential tax treatment to long-term capital gains relative to ordinary income.¹⁰¹ The historic tax rate chart found in the Appendix illustrates this point.

A central justification¹⁰² for the capital gains tax rate preference, that has likely played a major role in historically low capital gains rates, is the so-called “lock-in effect.” The lock-in

small-business-tax-nut.html?_r=0 (“Most of that “tax gap” is income that goes unreported, and the biggest chunk of it, by far — \$125 billion — is individual business income.”).

⁹⁷ For example, Congress has made some feeble attempts to increase small business tax compliance. See, e.g., Joel Slemrod, Brett Collins, Jeffrey L. Hoopes, Daniel Reck, & Michael Sebastiani, *Does Credit-Card Information Reporting Improve Small-Business Tax Compliance?*, 149 J. OF PUBLIC ECONOMICS 1 (2017) (how the Form 1099-K, which provides the IRS information about electronic sales, has increased income reporting).

⁹⁸ See Robert E. Brown & Mark J. Mazur, *The National Research Program: Measuring Taxpayer Compliance Comprehensively*, 51 U. KAN. L. REV. 1255 (2003) (the IRS instituted the so-called National Research Program as a successor to the Taxpayer Compliance Measurement Program in large part because the latter was deemed too intrusive and time-consuming).

⁹⁹ Marjorie E. Kornhauser, *The Morality of Money: American Attitudes Toward Wealth and the Income Tax*, 70 IND. L.J. 119, 132 (1994) (“In America, Social Darwinism, with William Graham Sumner of Yale its preeminent spokesman, was immensely popular, reaching its peak in 1882 and being endorsed by entrepreneurs such as Andrew Carnegie. Progress resulted from the economic virtues of frugal living and industriousness--lots of saving and little leisure and consumption.”). Notwithstanding the proposition that levying an income tax supposedly constitutes a disincentive to save, empirical studies have yet to substantiate this position. Compare Michael J. Boskin, *Taxation, Saving, and the Rate of Interest*, 86 J. POLIT. ECON. 15 (1978), and Laurence S. Seidman and Kenneth A. Lewis, *The Consumption Tax and the Saving Elasticity*, 52 NAT’L TAX J. 67 (1999), with Robert E. Hall, *Intertemporal Substitution in Consumption*, 96 J. POLIT. ECON. 339 (1988), and A. Lans Bovenberg, *Tax Policy and National Saving in the United States: A Survey*, 42 NAT’L TAX J. 123 (1989).

¹⁰⁰ See, e.g., I.R.C. § 103 (exempting from tax, interest on state bonds).

¹⁰¹ See *supra* note ??? and accompanying text.

¹⁰² Commentators have offered additional justifications for the capital gains preference, although it’s unclear how much those justifications have played a role in the history of capital gains rates. For example, preferential rates may compensate taxpayers for taxes on gains that are

effect refers to the powerful disincentive to engage in a sale or other taxable disposition of property (in other words, a realization event) because doing so triggers taxation.¹⁰³ While the precise magnitude of the lock-in effect depends on many factors,¹⁰⁴ the most prominent among them is the tax rate imposed. When that rate is low, the disincentives are still present but matter less; when that tax rate is high, the disincentive to sell is much more potent.¹⁰⁵

An additional factor in taxing capital gains lightly or not at all pertained to administrative practicalities. In particular, the tax bases of many assets were deemed hard or impossible to know. For example, investors who held stock or securities for many years struggled to identify the tax basis they had in their investments; poor-record keeping along with dividend reinvestment plans and redemptions plagued tax basis identifications and computations.¹⁰⁶ A taxpayer's death also clouded accurate tax basis identifications.¹⁰⁷ The lack of third-party

inflationary rather than true economic gains, and may serve to alleviate the “double tax” on corporate profits insofar as a sale of corporate stock is concerned. But for a refutation of many of these additional justifications, see Noel B. Cunningham & Deborah H. Schenk, *The Case for a Capital Gains Preference*, 48 TAX L. REV. 319 (1993).

¹⁰³ See generally Charles C. Holt & John P. Shelton, *The Lock-In Effect of the Capital Gains Tax*, 15 NAT'L TAX J. 337 (1962).

¹⁰⁴ For example, a taxpayer will likely be influenced by how much taxable appreciation is built into the asset. If an asset has only a negligible basis—such as a founder's stock of a corporation—and will be taxed at a relatively high tax rate, the combined effect is daunting. A share of stock with a basis of \$1 that is sold for \$1,000 will produce a tax liability of \$299.70 if taxed at a 30 percent rate (i.e., $.3 \times (\$1,000 - \$1)$). In contrast, if the same stock was sold for \$1000 but had only appreciated by \$100 (i.e., with a basis of \$900), the sale would produce only \$30 of tax assuming the same 30 percent rate ($(\$1000 - \$900) \times .3$).

¹⁰⁵ There is a considerable literature on the effect of rate changes on realization rates. Cong. Budget Office, *How Capital Gains Tax Rates Affect Revenues: The Historical Evidence*, (1988), available at <https://www.cbo.gov/sites/default/files/cbofiles/ftpdocs/84xx/doc8449/88-cbo-007.pdf>; Cong. Budget Office, *Perspectives on the Ownership of Capital Assets and the Realization of Capital Gains* (1997), available at <https://www.cbo.gov/sites/default/files/105th-congress-1997-1998/reports/capgains.pdf>; George Zodrow, *Economic Analyses of Capital Gain Taxation: Realizations, Revenues, Efficiency and Equity*, 48 TAX LAW REV. 419 (1993); Jane G. Gravelle, *Can a Capital Gains Tax Cut Pay for Itself?*, 48 TAX NOTES 209 (1990); J. Andrew Hoerner, *Treasury's Capital Gains Estimates: Mr. Economist Goes to Washington*, 44 TAX NOTES 141 (1989).

¹⁰⁶ See, e.g., Joseph M. Dodge & Jay A. Soled, *Debunking the Basis Myth Under the Income Tax*, 81 IND. L.J. 539, 542 (2006) (“That is, under the current income tax regime, (a) taxpayers often lack the acumen and requisite records and information to fulfill their tax basis reporting obligations, (b) the rules themselves are unwieldy and complicated, and (c) the IRS is unable to fulfill its compliance mission insofar as basis and gain monitoring is concerned.”).

¹⁰⁷ See, e.g., *Carryover Basis Provisions: Hearing Before the House Comm. on Ways and Means*, 96th Cong., 1st Sess. 13 (1979) (statement of American Bankers Association) (Manufacturer's Hanover Trust Company reported that cost basis information for marketable securities was impossible to locate in 22% of estates, required time and research in 44%, and was readily available in 34%); *id.* at 126-29 (statement of the American Institute of Certified Public

reporting further obfuscated accurate tax basis identifications; when it came to taxpayers reporting their gains and losses, they were essentially on the honor system, which has historically not boded well for tax compliance.¹⁰⁸

Another rationale for the preferential treatment of capital gains is historical in nature. As previously pointed out, facets of our nation's income tax system undoubtedly originated from old English law.¹⁰⁹ Under these laws capital gains were deemed principal, not income; this same psychology likely pervaded the mindset of those who initially crafted the income tax and who, by providing a lower tax rate, sought to strike a compromise between those who thought capital gains should be exempt from tax and those who thought that capital gains should be treated akin to ordinary income.¹¹⁰

The Haig-Simons definition of income¹¹¹ – “income equals (1) his or her change in net

Accountants (AICPA)) (offering letters from practitioners indicating the difficulty in reconstructing basis of old stock certificates, closely held stock, and stock that underwent recapitalizations or stock splits). For a detailed look at the tax bar's critique of the carryover basis rule, see Howard J. Hoffman, *The Role of the Bar in the Tax Legislative Process*, 37 TAX L. REV. 411, 448-66 (1982). Some of the problems in ascertaining historical basis are discussed in Thomas J. McGrath & Jonathan G. Blattmachr, CARRYOVER BASIS UNDER THE 1976 TAX ACT (1977), at 191-94, 222-28.

¹⁰⁸ See U.S. Gov't Accountability Office, GAO-06-603, Capital Gains Tax Gap (2006), available at <http://www.gao.gov/new.items/d06603.pdf> (in the absence of tax information returns, indicating that roughly two-thirds of taxpayers underreported their capital gains and one-third overreported).

¹⁰⁹ See *supra* note ???.

¹¹⁰ Across the globe, countries tax capital gains in a whole host of ways. See Rainer Niemann & Caren Sureth, *Sooner or Later? – Paradoxical Investment Effects of Capital Gains Taxation under Simultaneous Investment and Abandonment Flexibility*, 22 J. OF EUROPEAN ACCOUNTING REV. 367, 367 (2013):

Other countries do not tax capital gains at all if some preconditions are met. For example, Greece, Latvia, Poland, Romania, and Switzerland usually refrain from taxing capital gains on selling non-business property. According to Austrian, Danish, Dutch, Estonian, Bulgarian, Finnish, French, German, Hungarian, Spanish, and Swedish tax law, gains and losses on the disposal of business property are taxable as ordinary income, whereas gains on selling non-business securities are subject to a flat capital gains tax rate. In the Czech Republic, Great Britain, Lithuania, Luxembourg, Portugal, and Slovenia, private capital gains are tax-exempt if a certain period of time is allowed to elapse between acquisition and disposal. Even countries with tax systems close to theoretically ideal tax systems, such as the Nordic Dual Income Tax, have developed a variety of capital gains tax regimes.

¹¹¹ See Henry C. Simons, PERSONAL INCOME TAXATION 50 (1938); Robert M. Haig, *The Concept of Income--Economic and Legal Aspects*, in THE FEDERAL INCOME TAX 1, 7 (Robert M. Haig ed., 1921).

worth plus (2) his or her consumption”¹¹² – does not differentiate between and among income sources. Code section 61 follows this same pattern and defines income in a like-minded manner. Notwithstanding the academic tidiness of Code’s definition, income derived from labor is heavily taxed, business profits and investments moderately taxed, and capital gains lightly taxed. The next Section explores the revenue implications associated with these disparate tax treatments.

C. Tax Revenue Generation from Labor and Capital Income under the Code

To understand the respective roles that labor and capital income play in revenue generation, it is useful first to examine the overall makeup of federal tax revenues. In recent years, the federal government collects around \$3 trillion in revenue annually from taxes, duties, and other government fees (\$3.3 trillion in 2016).¹¹³ Individual income taxes generally make up about half of the total revenue collected (47 percent for 2016) while payroll taxes make up about one third of total revenue (34 percent for 2016).¹¹⁴ The corporate income tax contributed to 9 percent of total revenues for 2016, while the remaining 9 percent was made up of estate and gift taxes, excise taxes, and other miscellaneous taxes, duties, and fees.¹¹⁵

Individual income taxes, the largest source of federal revenue, include taxes on wages as well as taxes on investments, business income, and capital gains. While the above-cited data does not break down federal income tax revenues by source of income, statistics from the Internal Revenue Service (IRS) indicate that the majority of individual income is earned from salary and wages, as opposed to business, investment, or capital gains income. For example, in 2013, income from salaries and wages made up about 70 percent of individual income, while business and investment income made up about 16 percent, and capital gains made up approximately 5 percent of individual income.¹¹⁶ Given that a substantial majority of taxable income comes from labor, it is safe to conclude that the majority of tax revenues flowing from the individual income tax are also from labor. When combined with payroll taxes (which are only attributable to labor income and not to business or investment income), taxes on labor clearly represent a majority of federal tax revenue.

¹¹² Theodore P. Seto, *Inside Zarin*, 59 SMU L. REV. 1761, 1795 (2006).

¹¹³ Congressional Budget Office, *Options for Reducing the Deficit: 2017-2026* (Dec. 2016) at 119 (hereinafter “CBO Report”), <https://www.cbo.gov/publication/52142>.

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ Percentage calculations are on file with the authors and are based on data from IRS, Statistics of Income Tax Stats, *Individual Income Tax Returns Publication 1304* (2014), Table A, available at https://www.irs.gov/uac/soi-tax-stats-individual-income-tax-returns-publication-1304-complete-report#_tbla. Total income from salaries and wages for 2013 was reported to be approximately \$6.5 trillion, while total income from all sources was reported to be approximately \$9.2 trillion. Business and investment income for this purpose includes income from interest (taxable and tax-exempt); dividends (qualified and ordinary); business and professional activities; and income from rents, royalties, partnerships, and trusts and estates. Capital gains income is comprised of net capital gains and capital gains distributions.

The reverse is true when it comes to taxes on capital gains. Specifically, data from the Treasury Department indicates that tax revenues from long-term capital gains represent only a small portion of overall federal tax revenue. For example, in 2013, tax revenue from long-term capital gains was approximately \$86 billion, which represented just 6.5 percent of total federal income taxes collected (\$1.3 trillion) and just 3.1 percent of all federal revenue collected (\$2.8 trillion). Similarly, in 2014, taxes on long-term capital gains were approximately \$126 billion, representing 9 percent of federal income taxes (\$1.4 trillion) and just 4.2 percent of all federal revenue (\$3 trillion).¹¹⁷

While these figures are partially driven by the fact that most income does not come from capital gains, the preferential rates applied to capital gains also play a large role in the low revenue associated with such income. The Joint Committee on Taxation estimates that the preferential rate on long-term capital gains and qualified dividends cost the government \$130.9 billion in lost tax revenue in 2016 alone. Further, the exclusion of capital gains at death is estimated to have cost \$32.9 billion, the exclusion of capital gains from sales of personal residences is estimated to have cost \$29.2 billion, and the deferral of gain on like-kind exchanges by individuals cost an estimated \$5.9 billion in 2016.¹¹⁸

In sum, of the roughly 3 trillion of tax revenue collected each year, well over half comes from income and payroll taxes on labor. Business and investment income make up a smaller portion of that revenue and preferential capital gains taxes contribute to only a very small percentage of overall revenue. In an era when labor was the dominant driver of the economy, this tax system made sense. If the government's goal is to maximize tax revenue in the most efficient manner possible, then relying on labor as the primary driver of tax revenue historically achieved that goal. However, as discussed in the next part, the technological revolution may alter the prominence of labor in the economy. If that is the case, the revenue implications of such a change may be significant.

III. THE TECHNOLOGICAL REVOLUTION AND THE LABOR/CAPITAL DYNAMIC

During the course of human civilization, there have been only a hand-full of designated epochs or eras (e.g., Ancient Egypt, Greece, and Rome, the Middle Ages, the Renaissance, and the Industrial Revolution).¹¹⁹ These sorts of salient designations are typically saved or reserved for major or transformative events. In recognition that we are now in the midst of this sort of happening, the current time period has earned the moniker “The Technological Era,”¹²⁰ emblematic that monumental changes are occurring that are challenging the existing status quo at its core. While physical and intellectual labor were once commonplace features of everyday

¹¹⁷ Office of Management and Budget, Historical Tables, *Receipts by Source: 1934-2022*, Table 2.1, available at <https://www.whitehouse.gov/omb/budget/Historicals>.

¹¹⁸ The Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2016-2020*, JCX-3-17, at 32-33, available at <https://www.jct.gov/publications.html?func=startdown&id=4971>.

¹¹⁹ Matt Clayton, *WORLD HISTORY: CAPTIVATING STORIES OF EVENTS THAT SHAPED OUR PLANET* (2015).

¹²⁰ Klaus Schwab, *THE FOURTH INDUSTRIAL REVOLUTION* (2017).

society, now technological advancements are helping fulfill both of these roles in lieu of human capital.

The Sections below elaborate on how capital in the form of technological advancement is uprooting labor. Section A details this dynamic; Section B then examines the implications to the income tax system associated with these changes; Section C next sets forth the potential long-term revenue consequences that these changes may produce.

A. Technological Changes that Curtail or Eliminate the Need for Labor

There is no facet of the economy that technological advances do not effect. From the mundane removal of street trash to the ultra-sophistication of laparoscopic surgery, technology touches the daily existences of virtually every taxpayer at a pace that is unprecedented. As evidence of the speed at which technological changes are progressing, consider Moore's Law, which predicts that computer processing power will double approximately every two years.¹²¹ Over a half a century ago this prediction was made and, to the surprise of many scientists, engineers, and commentators, it remains intact even today.¹²²

But these technological advances do not remain untapped in researchers' labs. Instead, these advances have been brought to market and, in endeavors to secure workplace efficiency, their adoptions have been widespread. Put somewhat differently, with the assistance of technological advances, work that in yesteryear might take months or even years to complete can now be accomplished in the matter of a few hours, minutes, or even seconds.¹²³ Along the same lines, work that once required hundreds or thousands of workers to complete may now be accomplished by a few or even a single worker.¹²⁴

¹²¹ Gordon E. Moore, *Cramming More Components onto Integrated Circuits*, Electronics, Apr. 19, 1965, at 114, http://www.monolithic3d.com/uploads/6/0/5/5/6055488/gordon_moore_1965_article.pdf; see also Moore's Law, <http://www.moorelaw.org/> (last visited Sept. 26, 2017).

¹²² Dan Hutcheson, *Transistor Production Has Reached Astronomical Scales*, IEEE Spectrum, (Apr. 2, 2015, 19:00), <http://spectrum.ieee.org/computing/hardware/transistor-production-has-reached-astronomical-scales>; Thomas L. Friedman, Opinion, *Moore's Law Turns 50*, N.Y. TIMES (May 13, 2015), <http://nyti.ms/1JGIp5t>.

¹²³ See, e.g., Nick Heath, *Let's Try and Not Have a Human Do It: How One Facebook Techie Can Run 20,000 Servers*, ZDNet (2013), available at <http://www.zdnet.com/article/lets-try-and-not-have-a-human-do-it-how-one-facebook-techie-can-run-20000-servers/> (“How many people does it take to run 20,000 servers? In the case of Facebook just the one.”).

¹²⁴ See, e.g., Stephanie Clifford, *U.S. Textile Plants Return, with Floors Largely Empty of People*, NY TIMES (2013), available at http://www.nytimes.com/2013/09/20/business/us-textile-factories-return.html?pagewanted=all&_r=0 (how a factory that once employed 2,000 employees can easily manage now with just 140 employees); Wade Rush, *Hamburgers, Coffee, Guitars, and Cars: A Report from Lemnos Labs*, XCONOMY (2012), available at <http://www.xconomy.com/san-francisco/2012/06/12/hamburgers-coffee-guitars-and-cars-a-report-from-lemnos-labs/#> (“Our device isn't meant to make employees more efficient,” said co-founder Alexandros Vardakostas. “It's meant to completely obviate them.”).

The ubiquity of technological advances and their effects on the labor market can be categorized into two general baskets: (1) physical labor and (2) intellectual labor. Below is a short exposition of each.

1. Physical Labor

For most of human civilization, production of food, shelter, and clothing required an intense amount of physical labor: fields and domesticated animals had to be planted and tended to; wood, stones, and bricks, had to be gathered and then nailed, collected, and laid; and cotton, silk, and skins had to be harvested, gathered, and sowed. This physical labor was all consuming and, in the never-ending search for more able hands, was a major factor in universal high birthrates.¹²⁵

For many millennia, physical labor remained a staple in people's lives. Only after the Industrial Revolution began to hit its full stride did technology alleviate some of the physical drudgeries associated with daily existence. While there are many examples of technological innovations that played transformative roles during the Industrial Revolution, two stand out: the assembly line and the combustible engine. Introduced by Henry Ford, the assembly line significantly increased productivity and alleviated much of the physical labor associated with consumer good production.¹²⁶ The combustible engine led to the genesis of the field tractor, which made agricultural production dramatically less physically demanding.¹²⁷

In terms of eradicating physical labor in the workplace, recent technology advances have gone far beyond those that the Industrial Revolution produced. With respect to the production of life's essentials – food, shelter, and clothing – physical labor is either not a factor or has been relegated to secondary importance.¹²⁸ For example, machinery now exists that can prune an orchard,¹²⁹ milk cows,¹³⁰ and harvest entire fields of crops.¹³¹ Other machinery can build

¹²⁵ John C. Caldwell & Thomas Schindlmayr, *Explanations of the Fertility Crisis in Modern Societies: A Search for Commonalities*, 57 *POPULATION STUDIES* 241, 256 (2003) (“As industrialization spreads and incomes rise, the evidence grows that rich, highly urbanized and educated countries with few families working in agriculture may not reproduce themselves. Simply, the family is no longer the production unit.”)

¹²⁶ See generally, Ray Batchelor, *Henry Ford: Mass Production, Modernism and Design* (1994).

¹²⁷ See generally, William J. White, *Economic History of Tractors in the United States*, EH.NET, available at <https://eh.net/encyclopedia/economic-history-of-tractors-in-the-united-states/>; Erik Brynjolfsson and Andrew McAfee, *THE SECOND MACHINE AGE: WORK, PROGRESS, AND PROSPERITY IN A TIME OF BRILLIANT TECHNOLOGIES* (2014) at 176.

¹²⁸ Evidence for this proposition abounds. See, e.g., International Federation of Robotics website, *Executive Summary World Robotics 2016 Industrial Robots*, available at https://ifr.org/img/uploads/Executive_Summary_WR_Industrial_Robots_20161.pdf (“Between 2010 and 2015, the average robot sales increase was at 16% per year.”).

¹²⁹ Peter Murray, *Automation Reaches French Vineyards with a Vine-Pruning Robot*,

skyscrapers that marvel small mountains¹³² or construct prefabricated homes that can be situated virtually anywhere.¹³³ Finally, still other machinery is starting to be developed with the expectations that it can stitch together the finest gossamer gowns and do so continuously, from dawn to dusk, every morning, afternoon, and evening.¹³⁴

Opportunities to engage in physical labor remain, but usually by choice, not necessity. Consider the fact that before the middle of the twentieth century, commercial gyms did not exist and for good reason: members of the general populace apparently already endured enough on-the-job physical labor that they did not need to rely upon a third-party source to secure a physical workout. Over the last several decades, the advent and success that commercial gyms have enjoyed speaks volumes regarding the diminishing role physical labor plays in the twenty-first century economy.¹³⁵

SingularityHub (2012), available at <https://singularityhub.com/2012/11/26/automation-reaches-french-vineyards-with-a-vine-pruning-robot/> (“Now that Wall-Ye V.I.N. has been built we can rest assured that there are no jobs too sacred to be handed over to the automated expertise of robots. Wall-Ye is a robot that takes the human touch out of caring for those grape vines that make French wines among the best in the world.”).

¹³⁰ See Kaleigh Rogers, *Robots Are Milking Cows for Dairy, Data*, Motherboard (2015), available at https://motherboard.vice.com/en_us/article/robots-are-milking-cows-for-dairy-data (“Milking has been semi-automated for decades now, but it still requires a human to corral the animals, clean the cows' udders, and hook up and detach the milking machine. Robotic milkers eliminate the need for human intervention: it's just animal and machine.”).

¹³¹ See *Latest Robot Can Pick Strawberry Fields Forever*, JAPAN TIMES (2013), available at <http://www.japantimes.co.jp/news/2013/09/26/business/latest-robot-can-pick-strawberry-fields-forever/#.WQjG5002y70> (“A robot that picks ripe strawberries while farmers sleep has been unveiled with claims it could cut workloads by two-thirds.”).

¹³² See generally, Adam Hadhazy, *These Are the World's 21 Tallest Buildings*, POPULAR MECHANICS (2015), available at <http://www.popularmechanics.com/technology/design/g1705/21-tallest-buildings-in-the-world/>.

¹³³ See generally, Peter Gossel, Arnt Cobbers, & Oliver John, *A Brief History of Prefab*, ARCHITECTURE WEEK (2012), available at http://www.architectureweek.com/2012/1003/design_1-1.html.

¹³⁴ See, e.g., Rina Raphael, *Is This Sewing Robot the Future of Fashion*, FAST COMPANY (2017), available at <https://www.fastcompany.com/3067149/is-this-sewing-robot-the-future-of-fashion> (“Startup Sewbo has figured out how to get a machine to sew an entire garment, and it may finally push clothing factories to fully automate.”).

¹³⁵ See, e.g., Eric Chaline, *School for Naked Exercise: A History of the Gym*, BOSTON GLOBE (Jan. 3, 2016), available at <https://www.bostonglobe.com/ideas/2016/01/03/school-for-naked-exercise-history-gym/laHtSCiDhCueckb7LDrCPO/story.html> (“[T]he first commercial gyms that began to appear in Europe in the mid-19th century.... What had happened between 1820 and 1850 to account for this exercise revolution? Primarily, the rapid industrialization, democratization, and urbanization of Western Europe, with France and Great Britain at the industrial and political forefront.”).

2. Intellectual Labor

Over time, there is no discernable difference in the intellect between ourselves and our predecessors.¹³⁶ The acclaimed intellectual works of the twentieth century, for example, do not demonstrate any greater intellectual prowess than those dating back to Ancient Greece. From a strict cerebral vantage point, there has not been any noticeable progression.

Nevertheless, our ability to store, retrieve, and process data has never been greater. Computer hard drives and the “cloud” permit almost unlimited storage capacity.¹³⁷ Access to this information is unparalleled: in milliseconds we can retrieve virtually any electronic information we need.¹³⁸ And, in terms of data manipulation, computers open the door to processing at lightning speeds.¹³⁹ Therefore, while we are no smarter intellectually than our predecessors, as a society, technology permits us to do far more with our existing ingenuity.

¹³⁶ See, e.g., Steve Connor, *Human Intelligence ‘Peaked Thousands of Years Ago and We’ve Been on an Intellectual and Emotional Decline Ever Since*, INDEPENDENT (Nov. 2012), available at <http://www.independent.co.uk/news/science/human-intelligence-peaked-thousands-of-years-ago-and-weve-been-on-an-intellectual-and-emotional-8307101.html> (“Professor Gerald Crabtree, who heads a genetics laboratory at Stanford University in California, has put forward the iconoclastic idea that rather than getting cleverer, human intelligence peaked several thousand years ago and from then on there has been a slow decline in our intellectual and emotional abilities.”).

¹³⁷ Martin Ford, *RISE OF THE ROBOTS: TECHNOLOGY AND THE THREAT OF A JOBLESS FUTURE* (2015), pp. 63-64 (“For example, computer memory capacity and the amount of digital information that can be carried on fiber-optic lines have been both experienced consistent exponential increases. Nor is the acceleration confined to computer hardware; the efficiency of some software algorithms has soared at a rate far in excess of what Moore’s Law alone would predict.”); Thomas L. Friedman, *Owning Your Own Future*, NY TIMES (2017), available at <https://www.nytimes.com/2017/05/10/opinion/owning-your-own-future.html>:

Mark Bohr, Intel’s senior fellow for technology, explained to me that Intel’s main workhorse microprocessor today is the 14-nanometer chip it introduced in 2014. It packs 37.5 million transistors *per square millimeter*. By the end of 2017, thanks to Moore’s Law, Intel will begin producing a 10-nm chip that will pack “100 million transistors per square millimeter — more than double the previous density with less heat and power usage,” said Bohr.

¹³⁸ See, e.g., Michael P. Lynch, *THE INTERNET OF US: KNOWING MORE AND UNDERSTANDING LESS IN THE AGE OF BIG DATA* (2017) (“We used to say “seeing is believing”; now, googling is believing. With 24/7 access to nearly all of the world’s information at our fingertips, we no longer trek to the library or the encyclopedia shelf in search of answers. We just open our browsers, type in a few keywords and wait for the information to come to us.”).

¹³⁹ See, e.g., President’s Council of Advisors on Science and Technology, *Report to the President and Congress: Designing a Digital Future: Federally Funded Research and Development in Networking and Information Technology* (2010), p. 71, available at <https://www.hsd.org/?view&did=10223> (“Grötschel, an expert in optimization, observes that a benchmark production planning model solved using linear programming would have taken 82 years to solve in 1988, using the computers and the linear programming algorithms of the day.

In the workplace, the capacity to “do far more” with the same intellect has a by-product in the form of job elimination. Evidence for this proposition abounds. In many instances, jobs that were once intellectually intense are no longer. Consider legal research. It once required attorneys to scour the library for sources, photocopy material, and, if need be, transcribe findings into legal memoranda and briefs.¹⁴⁰ Now, often with just a few keystrokes, attorneys can find governing authority (assuming it exists), send it to their printers, and, if need be, copy and paste their findings.¹⁴¹

The role technology has played in terms of facilitating legal research is just the tip of the iceberg. The use of technology in performing intellectual labor is pervasive. Machinery can perform the same intellectual tasks as humans, often more efficiently, and not need personal, sick, or vacation days. Along with these technological advancements has come the elimination of jobs of toll collectors, telephone operators, bank tellers, and untold others. And with the advent of self-driving automobiles and trucks around the corner,¹⁴² whole other industries (e.g., taxi driving and trucking) are likely soon to come to a screeching halt or disappear into complete oblivion.

In sum, technological advances are wreaking havoc in the labor market. Although statistics vary across the board, every time technology creates a new job, it is estimated to simultaneously eliminate three others.¹⁴³ And, at least for the foreseeable future, this trend is

Fifteen years later – in 2003 – this same model could be solved in roughly 1 minute, an improvement by a factor of roughly 43 million.”).

¹⁴⁰ See generally, Steven M. Barkan, *On Describing Legal Research*, 80 MICH. L. REV. 925 (1982) (reviewing J. Myrn Jacobstein & Roy M. Mersky, *Fundamentals of Legal Research* (2d ed. 1981)).

¹⁴¹ See, e.g., John Markoff, *Armies of Expensive Lawyers, Replaced by Cheaper Software*, NY TIMES (2011), available at <http://www.nytimes.com/2011/03/05/science/05legal.html> (“Last year, Clearwell software was used by the law firm DLA Piper to search through a half-million documents under a court-imposed deadline of one week. Clearwell’s software analyzed and sorted 570,000 documents (each document can be many pages) in two days. The law firm used just one more day to identify 3,070 documents that were relevant to the court-ordered discovery motion.”); Jane Croft, *Legal Firms Unleash Office Automatons*, FINANCIAL TIMES, May 16, 2016, <<https://www.ft.com/content/19807d3e-1765-11e6-9d98-00386a18e39d>> (demonstrating the existence of software programs that can outperform attorneys and paralegals in document review).

¹⁴² See, e.g., Guilbert Gates, Kevin Granville, John Markoff, Karl Russell, & Anjali Singhvi, *The Race for Self-Driving Cars*, NY TIMES (2016), available at <https://www.nytimes.com/interactive/2016/12/14/technology/how-self-driving-cars-work.html> (explaining how self-driving cars are being perfected and will soon be massed produced).

¹⁴³ David Rotman, *How Technology Is Destroying Jobs*, MIT TECHNOLOGY REVIEW (2013), available at <https://www.technologyreview.com/s/515926/how-technology-is-destroying->

anticipated to continue. One response to this concern may be that we have weathered technological change in the past and the labor force has emerged relatively unscathed. But there is reason to believe the present transformation is fundamentally different. The pace and scale of technological advancement surpasses what we have experienced in the past. Computers can accomplish exponentially more than they could historically and at a cheaper cost than ever before.¹⁴⁴ Even under a more optimistic view, that new jobs will eventually emerge to replace the ones that are lost, the labor market is still likely to experience significant disruptions in the short-term.¹⁴⁵

The labor market's transformation has important consequences, including the way the government raises revenue to meet its expenditures, particularly when the first decade of the twenty-first century has resulted in the creation of no new jobs.¹⁴⁶ Given the reliance the income tax has historically placed on labor income as a key component of its revenue base, a major upheaval is on the horizon. The next Section explores the anticipated consequences of such an upheaval.

B. Consequences Associated with Labor Income's Diminishment

Throughout the economy, twenty-first century technological advancements enumerated in the prior Section have had profound effects. In terms of economic importance, the role of labor is ebbing and that of capital is rising; furthermore, information availability via the Internet is unprecedented.¹⁴⁷ These profound effects have upended the traditional justifications proffered for the varied tax treatments of income derived from labor, business and investment profits, and capital gains.

jobs/ (“Brynjolfsson, a professor at the MIT Sloan School of Management, and his collaborator and coauthor Andrew McAfee have been arguing for the last year and half that impressive advances in computer technology – from improved industrial robotics to automated translation services – are largely behind the sluggish employment growth of the last 10 to 15 years.”). Contrast, *Technology Has Created More Jobs than It Has Destroyed, Says 140 Years of Data*, THE GUARDIAN, available at <https://www.theguardian.com/business/2015/aug/17/technology-created-more-jobs-than-destroyed-140-years-data-census> (“Study of census results in England and Wales since 1871 finds rise of machines has been a job creator rather than making working humans obsolete.”).

¹⁴⁴ Ryan Abbott & Bret Bogenschneider, *Should Robots Pay Taxes? Tax Policy in the Age of Automation* at 15-16, draft https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2932483.

¹⁴⁵ *Id.* at 16 (“During previous times of rapid technological change, it took decades to develop new worker skill sets on a significant scale and to build new job markets.”).

¹⁴⁶ Neil Irwin, *Aughts Were a Lost Decade for U.S. Economy, Workers*, WASH. POST (2010), available at <http://www.washingtonpost.com/wp-dyn/content/article/2010/01/01/AR2010010101196.html>.

¹⁴⁷ See Stephanie Pappas, *How Big Is the Internet, Really?*, LIVESCIENCE (2016), available at <http://www.livescience.com/54094-how-big-is-the-internet.html> (“As of September 2014, there were 1 billion websites on the Internet, a number that fluctuates by the minute as sites go defunct and others are born.... By the end of 2016, global Internet traffic will reach 1.1 zetta bytes per year ... and by 2019, global traffic is expected to hit 2 zettabytes per year. One zettabyte is the equivalent of 36,000 years of high-definition video....”).

Consider each income category and the transformative effects technological advancements have had.

1. Taxing Labor in the Technological Age.

It first should be noted that taxing income derived from labor remains a viable avenue for raising tax revenue, notwithstanding the transformative effects of technology. Readily subject to third-party withholding and the issuance of tax information returns,¹⁴⁸ labor income continues to be highly visible. Furthermore, due to technological innovations, the labor market has become even more inelastic (i.e., with a soft market for good, high-paying jobs, there is less taxpayer proclivity to substitute leisure activities for labor).¹⁴⁹ That being the case, taxing labor income theoretically should have minimal effect on economic behavior.¹⁵⁰ In other words, the efficiency case for taxing labor income remains strong. But in the twenty-first century, justifications for taxing labor income *more heavily* than business and investment profits and capital gains have become increasingly suspect.

As discussed above, throughout much of the twentieth century, the labor income base was robust compared to the capital income base. In the twenty first century, a reversal is happening as technology propels capital income upward compared to that derived from labor. If this overall economic trend continues, Congress can no longer primarily rely upon labor income to keep Treasury’s coffers full. For every job that is lost to technology (without replacement in another sector), the share of income attributable to labor declines and, along with it, the corresponding tax revenue. To generate sufficient revenue to meet its expenditures, Congress must therefore reconsider the tax rate applicable to each of labor, business and investment profits, and capital gains.

¹⁴⁸ Jay A. Soled, *Homage to Information Returns*, 27 VA. TAX REV. 371 (2007).

¹⁴⁹ See Patrick Gillespie, *Millions in Gig Economy Can’t Find Better Jobs or Pay*, CNN MONEY (2016), available at <http://money.cnn.com/2016/10/27/news/economy/gig-economy-workers/> (“Most of the estimated 68 million gig workers choose the freelance lifestyle for better work-life balance. But nearly 20 million of them do it out of necessity because they can’t find better work or pay, according to a report by McKinsey Global Institute, a consulting firm.”); Ian Salisbury, *Why It’s Still Hard to Find the Job You Really Want*, MONEY (2014), available at <http://time.com/money/3619921/jobs-report-unemployment/> (“The problem is that the post-recession economy is still better at producing marginal jobs—think retail and food service gigs—than the comparatively well-paying construction, manufacturing, and government jobs that let middle-class people buy homes and support their families.”); Joel Slemrod, *A General Model of Behavioral Response to Taxation*, 8 INTERNATIONAL TAX AND PUBLIC FINANCE 119 (2001) (“In the model of labor supply, as long as the marginal cost of avoidance depends on true labor income the real behavioral response to wage rates or tax rates depends on a mixture of the elasticity of substitution and the avoidance technology.”).

¹⁵⁰ See generally, Thomas Piketty & Emmanuel Saez, *Optimal Labor Income Taxation*, NBER WORKING PAPER 18521, available at <https://eml.berkeley.edu/~saez/piketty-saezNBER12handbook.pdf> (2012).

Consider, too, that historical factors that once justified taxing labor more heavily than other types of income have waned in importance in recent years. Since World War II, the combination of tax withholding and information return reporting on labor income readily ensured a robust and steady revenue supply,¹⁵¹ whereas business and investment income was historically harder to monitor. However, over this same time period, the use of cash currency has declined and electronic transfers in the form of credit and debit card payments have become much more commonplace.¹⁵² As result of this marketplace transformation, business and investment profits have become much more visible and easier to trace, making them more akin to wage income in this respect.¹⁵³ This increased visibility makes non-labor income a much more accessible and attractive target of taxation.

2. Taxing Business Profits and Investments in the Technological Age

There is no reason to assume that the United States will seek to shed its capitalist roots anytime soon. Over the past two-and-half centuries, the country has proven to be an economic powerhouse, achieving unprecedented levels of productivity.¹⁵⁴ To date, consistent with this capitalist heritage, Congress has sought to tailor the Code in a manner that aggressively cultivates a business and investment environment that is friendly to economic growth.¹⁵⁵ Yet, it is unclear if these favorable tax rules are necessary and worth their cost, particularly in the modern technological era.

The Code has been intentionally designed to minimize the tax burden associated with business profits and investments. While there are a whole series of Code sections that reflect this pro-business/investment approach, bonus and accelerated depreciation deductions stand out. These deductions sanction income deferral: they enable production costs that yield many years of

¹⁵¹ See *supra* note 48.

¹⁵² Jeffrey H. Kahn & Gregg D. Polsky, *The End of Cash, the Income Tax, and the Next 100 Years*, 41 FLA. ST. U. L. REV. 159 (2013). See Susan Cleary Morse, Stewart Karlinsky & Joseph Bankman, *Cash Businesses and Tax Evasion*, 20 STAN. L. & POL'Y REV. 37 (2009) (explaining why the use of cash facilitates tax noncompliance and the underground economy).

¹⁵³ James Alm & Jay A. Soled, *W(h)ither the Tax Gap*, 41 UNIV. OF WASH. L. REV. 159 (2017).

¹⁵⁴ Mack McLarty & Nelson Cunningham, *North America Is the Strongest Economy in the World. Let's Keep It that Way*, WASH. POST (2016), available at https://www.washingtonpost.com/opinions/global-opinions/north-america-is-the-strongest-economy-in-the-world-lets-keep-it-that-way/2016/06/29/ca06952c-3e0b-11e6-84e8-1580c7db5275_story.html?utm_term=.da14efaf8f6f (“But North America the economic powerhouse has reigned supreme for nearly a century, becoming the largest and strongest in the world, an industrial dynamo, a commodities cornucopia and a magnet for millions upon millions of immigrants seeking a better life.”).

¹⁵⁵ See, e.g., N. Gregory Mankiw, *How Best to Tax Business*, NY TIMES (2017), available at https://www.nytimes.com/2017/04/21/upshot/tax-code-business.html?_r=0 (discussing ways Congress may reform business taxes to make the United States more competitive in the global economy).

annual income to be fully deducted in the year of acquisition.¹⁵⁶ Congress thus underwrites these acquisitions while, at the same time, forgoing making other expenditures (e.g., strengthening the military, providing cleaner public parks, and making infrastructure investments). Yet, in light of the vast and unparalleled productivity of twenty-first century machinery, taxpayers are already incentivized to make such purchases. They do not need Congressional assistance in the form of income deferral to motivate them.¹⁵⁷

Query, too, whether to foster private property ownership and investment, Congress needs to dangle tax incentives in front of taxpayers, such as the deductibility of home mortgage interest and the reduced tax rate on dividends. Empirical evidence that these incentives have a significant impact on taxpayer behavior is mixed at best.¹⁵⁸ Further, the Internet has made investing easier than ever before, even by relatively unsophisticated individuals. The justification for spending billions of dollars in the form of tax expenditures that shelter business profits and investment income from taxation thus appears quite weak.

Next, administrative obstacles that once beset monitoring business profit and investment income are no longer as daunting. Three major changes in the nation's economy have catapulted business profits and investments out of the shadows and into the light. First, there is a global trend underway in which cash – which in yesteryear could be easily hidden and made to disappear – is being dethroned as the preferred mode of transacting business; it is instead being replaced by credit cards, debit cards, wire transfers, and smart phone applications, all of which leave electronic traces that make business profits and investment income much harder to hide.¹⁵⁹

¹⁵⁶ I.R.C. §§ 168(a), 179(a). For an excellent overview of accelerated depreciation, see Rebecca N. Morrow, *Accelerating Depreciation in Recession*, 19 FLA. TAX REV. 465, 472-489 (2016).

¹⁵⁷ Indeed, a recent paper by Lily Batchelder suggests that many firms *don't* take favorable tax expensing rules into account in making investment decisions because, in part, financial accounting rules do not recognize the benefit of immediate expensing. Lily Batchelder, *Accounting for Behavioral Considerations in Business Tax Reform: The Case of Expensing* (forthcoming), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2904885.

¹⁵⁸ See, e.g., Joel Slemrod & Jon Bakija, *TAXING OURSELVES: A CITIZEN'S GUIDE TO THE DEBATE OVER TAXES* 320-21 (5th ed. 2017) (“The historical experience in the United States and other countries casts doubt on predictions of large impacts on either housing prices or the extent of homeownership [from repealing the mortgage interest deduction.]”).

¹⁵⁹ See Catherine New, *Cash Dying as Credit Card Payments Predicted to Grow in Volume*, HUFFINGTON POST (June 7, 2012), http://www.huffingtonpost.com/2012/06/07/credit-card-payments-growth_n_1575417.html [<https://perma.cc/Z7BD-JTQH>]:

What was once the most secure way to pay for things—hard cash—is increasingly becoming currency non grata in wallets and checkouts across the country. Airlines won't take it for in-flight snacks and a growing number of stores and restaurants like Standard Market, a new neighborhood market in Chicago, won't accept it. It's plastic or bust for consumers who want to do a transaction in these card-only places.

Meanwhile, plastic cards purchases comprised 66 percent of all in-person sales, with nearly half of them, or 31 percent, made with debit cards, according to

Second, automation has allowed Congress to pass into law measures that augment third-party oversight. Consider, for example, the passage of the Foreign Account Tax Compliance Act.¹⁶⁰ This law requires overseas investment institutions to collect and submit information to the IRS, effectively limiting taxpayers' ability to invest offshore in ways that camouflage their identities.¹⁶¹ Third, technological changes and globalization have led to large-scaled businesses replacing many small-scaled business enterprises.¹⁶² This is relevant because larger business enterprises (and those employees who work for such enterprises) tend to be far more tax compliant than those business enterprises that are smaller,¹⁶³ for a whole host of reasons (such as

[Javelin Strategy & Research, a marketing research firm]. Last year shoppers used credit cards for 29 percent of point-of-sale purchases; Javelin expects that number to rise to 33 percent by 2017. Shoppers deployed gift cards and prepaid cards for 6 percent of purchases made with plastic last year. A mere 7 percent of transactions involved use of a paper check, with such transactions projected to drop further in the next few years.

See generally John Heggstuen, *Cash Is Fading, and Checks Are Dying as Smartphones and Tablets Change the Way We Pay*, BUS. INSIDER (Aug. 4, 2014), <http://www.businessinsider.com/cash-is-fading-and-checks-are-dying-as-smartphones-and-tablets-change-the-way-we-pay-2014-8> [<https://perma.cc/3B3U-P2FW>]. Tamás Briglevics & Scott Schuh, *U.S. Consumer Demand for Cash in the Era of Low Interest Rates and Electronic Payments* 1 (Fed. Reserve Bank of Boston, Working Paper No. 13-23, 2013), <http://www.bostonfed.org/economic/wp/wp2013/wp1323.pdf> [<https://perma.cc/C98W-CNBC>].

¹⁶⁰ Hiring Incentives to Restore Employment Act, Pub. L. No. 111-147, §§ 501–62, 124 Stat. 71, 97–118 (2010).

¹⁶¹ See Dean Marsan, *FATCA: The Global Financial System Must Now Implement a New U.S. Reporting and Withholding System for Foreign Account Tax Compliance, Which Will Create Significant New Exposures—Managing This Risk (Part III)*, 88 TAXES 21 (2010) (explaining that U.S. taxpayers will find it increasingly hard to park investments offshore and fail to disclose them).

¹⁶² See ANTHONY CARUSO, U.S. CENSUS BUREAU, G12-SUSB, STATISTICS OF U.S. BUSINESSES EMPLOYMENT AND PAYROLL SUMMARY: 2012 (2015), at p. 1, available at <http://www.census.gov/content/dam/Census/library/publications/2015/econ/g12-susb.pdf> [<https://perma.cc/HVC4-ASSC>] (“The most recent report indicates that only 17.6% of the labor force now works for “very small enterprises” (defined as having fewer than twenty employees); the rest of the labor force works for small, medium, and large enterprises.”).

¹⁶³ See James Alm & Jay A. Soled, *W(h)ither the Tax Gap?*, -- WASH. LAW REVIEW (2017) – at ? (explaining the reasons large business enterprises are apt to be more compliant than small business enterprises); U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-07-1014, TAX GAP: A STRATEGY FOR REDUCING THE GAP SHOULD INCLUDE OPTIONS FOR ADDRESSING SOLE PROPRIETOR NONCOMPLIANCE 10 (2007), <http://www.gao.gov/assets/270/265399.pdf> [<https://perma.cc/854P-Z6RR>] (“[A]n estimated 70 percent of Schedule C filers in 2001 (about 12.9 million) made an error when reporting net business income (that is, net profit or loss on line 31 of Schedule C). Most of the misreporting was underreporting. . . . [A]n estimated 61 percent of Schedule C filers underreported their net income and 9 percent overreported.”); Kathleen Delaney Thomas, *Presumptive Collection: A Prospect Theory Approach to Increasing Small Business Compliance*, 67 TAX L. REV. 111, 113 (2013) (“When combined with under-reported

management oversight and lack of opportunities for collusion).

3. Taxing Capital Gains in the Technological Age

Under the Code, capital gains are accorded unparalleled preferential tax treatment, emblematic of their semi-sacred status in the United States.¹⁶⁴ The proffered justifications for such preferential treatment have withstood scrutiny for close to a century¹⁶⁵ – until now, when technological advancements and information availability have cast a shadow on the legitimacy of these justifications.

Perhaps the longest standing justification for not taxing capital gains (or, at the very least, taxing them lightly) is that they do not constitute income.¹⁶⁶ As previously mentioned,¹⁶⁷ this claim's origin dates back to old English trust law in which capital gains were defined to be principal, rather than income. This was an important distinction for trustees to make; after all, they had to balance their fiduciary allegiances and duties between income and remainder beneficiaries.¹⁶⁸ But stripped of the trust context, this justification for a tax rate preference makes no sense. Plain and simple, capital gains constitute an accretion to wealth, deferred until there has been a recognition event (the latter an administrative concession designed to help enhance compliance and moot issues of liquidity). As such, capital gains fit snugly in the traditional scope of income and should be so treated under the Code.

The evolving business landscape in the 21st century also casts a new light on the capital gains preference. As several commentators have recently argued, the line between capital gains and ordinary income is becoming increasingly difficult to draw.¹⁶⁹ Many taxpayers earning capital gains conduct business through passthrough entities the likes of which were nonexistent when the capital gains preference originated. Whereas a century ago, policymakers could easily distinguish between gains from a sale of stock held in an investment portfolio and income derived from a plumbing business, nowadays, there are many gray areas. A taxpayer conducting

self-employment tax (\$57 billion), individual small business noncompliance accounts for approximately \$179 billion, or 40% of the total tax gap.”).

¹⁶⁴ I.R.C. § 1(h).

¹⁶⁵ See, e.g., Cunningham & Schenk, *supra* note 102; Constantine N. Katsoris, *In Defense of Capital Gains*, 42 FORDHAM L. REV. 1 (1973). Daniel Halperin, *Commentary: A Capital Gains Preference Is Not EVEN a Second-Best Solution*, 48 TAX L. REV. 381 (1993); Daniel N. Shaviro, *Commentary: Uneasiness and Capital Gains*, 48 TAX L. REV. 393 (1993).

¹⁶⁶ David Bradford, UNTANGLING THE INCOME TAX 46-51.

¹⁶⁷ See *supra* notes ??? - ??? and accompanying text.

¹⁶⁸ See *supra* notes ??? - ??? and accompanying text.

¹⁶⁹ Victor Fleischer, *Taxing Alpha: Labor is the New Capital*, TAX LAW REV. (2016); Thomas Piketty, Emmanuel Saez & Gabriel Zucman, *Rethinking Capital and Wealth Taxation*, Draft (Sept. 17, 2013), <http://piketty.pse.ens.fr/files/PikettySaez2014RKT.pdf> (“In our view, the fuzziness of the capital vs. labor frontier is the simplest –and the most compelling–rationale for a comprehensive income tax (i.e. an income tax treating labor and capital income flows alike)....”).

business through an entity may derive some income from his labor and other income that represents true “profit” of the business. Because of the favorable tax rules afforded to non-labor income, there is a powerful incentive for taxpayers to characterize as much income as possible as deriving from profits,¹⁷⁰ for example, by characterizing earnings as dividends instead of wages.¹⁷¹ This incentive to essentially convert labor income into capital income likely causes noncompliance with the tax laws,¹⁷² encourages socially wasteful tax planning, and imposes increased enforcement costs on the IRS. Taxing capital and labor alike would eliminate the inefficiencies associated with separating income streams into multiple baskets.

Further, as Victor Fleischer notes, much of today’s capital gains income is derived not from earnings on investment portfolios, but from so-called “carried interest” earned by fund managers¹⁷³ or sales of founder’s stock held by successful entrepreneurs.¹⁷⁴ But gains from carried interest and founder’s stock are largely attributable to the *labor* of the fund managers and entrepreneurs and, thus, the case for taxing them at preferential rates appears weak.¹⁷⁵ What’s

¹⁷⁰ Some commentators have advocated for a rule that would impose a fixed rate of return on capital to eliminate the need to distinguish between labor and capital. *See, e.g.*, Edward D. Kleinbard, *Capital Taxation in an Age of Inequality*, 90 S. CA. L. REV. 593, 603 (2017) (“[A dual income tax structure] requires the development of a new tax tool, namely a ‘labor-capital income tax centrifuge,’ to tease apart labor and capital income when the two are hopelessly intermingled, as in the case of the owner-entrepreneur of a closely held business.”).

¹⁷¹ *See, e.g.*, Saez & Zucman at 2 (“Typically, self-employed individuals and business owners can to a large extent decide how much they get paid in wages and how much they receive in dividends. This also applies to a large number of corporate executives....”).

¹⁷² For example, section 162 technically prohibits taxpayers from paying salaries that aren’t “reasonable.”

¹⁷³ A common practice of fund managers is a so-called two and twenty fee structure: the manager earns a 2 percent management fee on the capital deployed; in addition, a 20 percent premium (i.e., “carried interest”) is paid once a specified return threshold is reached. The 2 percent fee is generally taxed as ordinary income while the 20 percent “carry” is generally taxed as capital gain. *See* Victor Fleischer, *How A Carried Interest Tax Could Raise \$180 Billion*, NY TIMES (2016), available at <https://www.nytimes.com/2015/06/06/business/dealbook/how-a-carried-interest-tax-could-raise-180-billion.html> (suggesting that earning fees in this fashion is a ubiquitous practice). *See also* Alan D. Viard, *The Taxation of Carried Interest: Understanding the Issues*, 61 NAT’L TAX J. 445, 445 (2008), available at <https://www.nytimes.com/2015/06/06/business/dealbook/how-a-carried-interest-tax-could-raise-180-billion.html> (“Carried interest is a share, allocated to fund managers, of the income generated by the fund’s holding in its portfolio companies. When that income consists of qualified dividends or long-term capital gains, the managers are taxed at the [...] rate applicable to those forms of income.”)

¹⁷⁴ Fleischer, *supra* note 169 at 18 (“Carried interest alone generates about \$100 billion a year of capital gains income, or about 1/8 of all reported capital gains.”).

¹⁷⁵ *See id.* at 3 (“When Mark Zuckerberg sells shares of Facebook, the capital gain he reports on his tax return represents the realized value of the hard work, ideas, and leadership that he provided to Facebook. IT does not represent a return on whatever small financial investment he made with after-tax savings while sitting in a Harvard dorm room.”)

more, this type of income inures almost exclusively to the very wealthiest taxpayers, who are able to see most of their income taxed at preferential rates.¹⁷⁶ In light of both growing income inequality and the increasing ease with which taxpayers can now characterize labor income as capital gains, the upsides of the capital gains preference no longer justify its costs.

Perhaps the strongest justification for granting preferential tax rates to capital gains has been that lower rates reduce the lock-in effect, i.e., the inefficient incentive to hold on to capital assets to avoid taxation.¹⁷⁷ Even in recent years, some commentators continue to contend that a capital gains tax rate preference is a *sine qua non* to a vibrant economy.¹⁷⁸ Yet, in a technological age, the lock-in effect potentially has less currency than perhaps it once did. It has become increasingly clear that many factors color taxpayers' investment decisions,¹⁷⁹ the foremost being anticipated investment returns, which are far more accessible via the Internet than ever before.¹⁸⁰ In the case of entrepreneurs and fund managers, who earn most taxable capital gains in the modern economy, there is virtually no evidence that tax rates influence the timing of income realizations.¹⁸¹ Even conceding that capital gains taxes exacerbate the lock-in effect to some degree, the impediment to the flow of capital investment has proven to be minimal,¹⁸² as evidenced by the burgeoning capital economy.¹⁸³ And since the lock-in effect is, in part, a product of the generous tax deferral afforded capital appreciation, raising tax rates on capital gains would help foster equity.¹⁸⁴

Finally, certain administrative practicalities that once favored a capital gains preference are now moot. Historically, Congress probably shied away from taxing capital gains too heavily

¹⁷⁶ See *id.* at 28.

¹⁷⁷ See *supra* note 103 and accompanying text.

¹⁷⁸ Daniel J. Mitchell, *The Overwhelming Case Against Capital Gains Taxation*, FORBES (2014), available at <https://www.forbes.com/sites/danielmitchell/2014/11/07/the-overwhelming-case-against-capital-gains-taxation/#1e03b1a83b0a>; William D. Popkin, *The Deep Structure of Capital Gains*, 33 CASE W. RES. L. REV. 153 (1983).

¹⁷⁹ See, e.g., Alex Davidson, *A Guide to Sustainable Investing*, WALL ST. J. (2015), available at <https://www.wsj.com/articles/a-guide-to-sustainable-investing-1447038115> (listing factors that taxpayers should consider when investing).

¹⁸⁰ See, e.g., Robert Powell, *What Investors Need to Understand about 'Investment Return'*, WALL ST. J. (2017), available at <https://www.wsj.com/articles/what-investors-need-to-understand-about-investment-return-1491790501> (explaining the difficult ways to calculate investment return).

¹⁸¹ Fleischer, *supra* note 169, at 6, 38-39 (“Entrepreneurs and fund managers often do not control the timing of income in the same way that a portfolio investor controls the timing of asset sales.”).

¹⁸² Cf. Marcus Ryu, *Why Corporate Tax Cuts Won't Create Jobs*, NEW YORK TIMES, Oct. 9, 2017 (“I have never heard someone say, ‘I would have started a company, but tax rates were too high.’”)

¹⁸³ Thomas Piketty, *CAPITAL IN THE TWENTY-FIRST CENTURY* (2014) (“By 2010, and despite the crisis that began in 2007–2008, capital was prospering as it had not done since 1913.”).

¹⁸⁴ See *supra* notes ??? - ??? and accompanying text.

as a concession to the administrative reality that taxpayers had a hard time computing their gains and, by the same token, the IRS had a difficult time monitoring taxpayer compliance.¹⁸⁵ For example, consider the plight of taxpayers who purchased AT&T stock, say in 1980.¹⁸⁶ After a series of spin-offs and other capital events (e.g., stock dividends and redemptions), if and when taxpayers sold their investment, they would have to compute their tax bases in the original AT&T stock they owned as well as the tax bases of the spun-off companies. Most taxpayers lacked the ability, time, and resources to make these computations; furthermore, the IRS lacked the resources to ensure compliance.¹⁸⁷ Fast forward to the twenty-first century in which data storage, data mining, and data manipulation is routine.¹⁸⁸ Congress capitalized upon these technological advances and mandated that third-party brokers maintain, adjust, and report the tax basis investors have in their marketable securities on the face of tax information returns.¹⁸⁹ From a taxpayer oversight perspective, this third-party tax information reporting requirement leveled the playing field between the income derived from labor and that derived from capital: each now can be readily monitored for complete accuracy.

C. Tax Revenue Implications Associated with Technological Transformation

Without meaningful reform, a decline in labor income will inevitably bring with it a decline in tax revenue, since taxes on labor make up a majority of federal tax revenue.¹⁹⁰ Indeed, a recent report by the International Monetary Fund indicates that “the U.S. labor share [of income] has fallen by 3.5 percent” since 2000.¹⁹¹ The report attributes the fall, in part, to “higher substitutability between labor and capital arising from technological change and routinization.”¹⁹² Similarly, recent empirical studies have documented a decline in the share of gross domestic product (GDP) allocated to wages in recent years, both abroad and in the United States.¹⁹³

¹⁸⁵ Government Accountability Office, Ref. No. GAO-06-603, *Capital Gains Tax Gap: Requiring Brokers to Report Securities Cost Basis Would Improve Compliance if Related Challenges Are Addressed* at 12 (June 2006).

¹⁸⁶ The National Taxpayer Advocate, in her 2005 report to Congress, utilizes AT&T stock to illustrate the nature of the problem. National Taxpayer Advocate’s 2005 Report to Congress, available at https://www.irs.gov/pub/tas/section_2.pdf at p. 435.

¹⁸⁷ See *supra* note ???.

¹⁸⁸ See *supra* note ???.

¹⁸⁹ See *supra* note ???.

¹⁹⁰ See *supra* Part II.C.

¹⁹¹ International Monetary Fund, *United States: 2017 Article IV Consultation*, IMF Country Report No. 17/239 (July 2017), at 17, available at <http://www.imf.org/en/Publications/CR/Issues/2017/07/27/United-States-2017-Article-IV-Consultation-Press-Release-Staff-Report-45142>.

¹⁹² *Id.*

¹⁹³ See, e.g., David Autor, David Dorn, Lawrence F. Katz, Christina Patterson & John Van Reenen, *The Fall of the Labor Share and the Rise of Superstar Firms*, NBR Working Paper 23396 (May 2017), <http://www.nber.org/papers/w23396> (attributing the fall in the labor share of GDP in the United States to the rise of “superstar firms”, which take advantage of technology and globalization to produce high profits with relatively low labor costs); Loukas Karabarbounis & Brent Neiman, *The Global Decline of the Labor Share*, NBR Working Paper 19136, at 1

Similarly, consider the make-up of individual income over a recent five-year period, as depicted in Table 1 below. From 2010 until 2014 (the most recent year for which data is publicly available), salaries and wages have declined as a percentage of total income, while business and investment income have slightly increased. Capital gains income as a percentage of income have increased even more significantly in this time period.¹⁹⁴

TABLE 1¹⁹⁵

Year	Salaries/Wages as Percentage of Total Income	Business/Investment as Percentage of Total Income ¹⁹⁶	Capital gains as Percentage of Total Income
2010	71.1	15.2	4.4
2011	71.3	15.3	4.4
2012	68.2	16.9	6.7
2013	70.1	15.8	5.3
2014	68.4	16.1	7.0

Further, consider the respective shares of payroll taxes and income taxes of total tax revenue from 2010 to 2018, as depicted below in Table 2. In 2010, payroll taxes (for both Social Security and Hospital Insurance) represented 40 percent of total tax revenues. In 2011 and 2012, Social Security tax rates were temporarily reduced (from 12.4 percent to 10.4 percent),¹⁹⁷ so the overall share of payroll taxes as a percentage of tax revenues fell predictably from 2010 to 2011. However, even assuming the 2011 and 2012 shares would have been somewhat higher without the temporary rate decrease, there is an overall decline in the percentage of total tax revenues from payroll taxes over this period, from 40 percent in 2010 to an estimated 33.5 percent for 2018. At the same time, income taxes (including taxes on investments, profits, and capital gains)

<http://www.nber.org/papers/w19136.pdf> (attributing the global decline in the labor share to “[e]fficiency gains in capital producing sectors, often attributed to advances in information technology and the computer age...”); *see also* Simcha Barkai, *Declining Labor and Capital Shares*, <http://home.uchicago.edu/~barkai/doc/BarkaiDecliningLaborCapital.pdf> (presenting evidence that firms have reduced spending on both labor and capital in recent years, while profits have increased).

¹⁹⁴ However, in the case of capital gains income, fluctuations may be due, in part, to changes in capital gains rates, which may cause people to realize more or less capital gains income in a given year.

¹⁹⁵ Created using data from: IRS, Statistics of Income Tax Stats, *Individual Income Tax Returns Publication 1304* (2014), Table A, available at https://www.irs.gov/uac/soi-tax-stats-individual-income-tax-returns-publication-1304-complete-report#_tbla.

¹⁹⁶ *See supra* note 116 for a description of the components of business and investment income.

¹⁹⁷ Tax Policy Center, *Payroll Tax Rates 1937-2017*, <http://www.taxpolicycenter.org/statistics/payroll-tax-rates> (last visited Aug. 3, 2017).

as a percentage of total tax revenue have steadily increased, from 41.5 percent in 2010 to an estimated 50.2 percent for 2018.

TABLE 2¹⁹⁸

Year	Payroll Taxes as Percentage of Total Tax Revenue	Income Taxes as Percentage of Total Tax Revenue
2010	40.0	41.5
2011	35.5*	47.4
2012	34.5*	46.2
2013	34.2	47.4
2014	33.9	46.2
2015	32.8	47.4
2016	34.1	47.3
2017 estimate	34.0	48.0
2018 estimate	33.5	50.2

*Temporarily lower payroll tax rate.

Together, these trends suggest an overall decline in tax revenue generation from labor income in recent years. Payroll taxes are derived *only* from labor, and without changes in payroll tax rates (except for the temporary decrease in 2011-2012), a decline in the share of payroll taxes as a percentage of overall tax revenue suggests an overall decline in labor income.¹⁹⁹ The fact that tax revenue from income taxes has simultaneously increased suggests taxes on *non-labor* income—business income, investment income, or capital gains—now constitute a greater share of overall tax revenue than they used to.

With over \$3 trillion in annual tax revenue collected in recent years, a decline of even a few percentage points in the tax revenue associated with labor income would result substantial revenue loss to the government. Thus, to sustain a viable tax base, policymakers must impose offsetting adjustments in the tax code. The next Part lays out suggestions for meaningful tax reform that would preserve the tax base in an era of declining labor income.

IV. TAX REFORM IN AN ERA OF RAPID TECHNOLOGICAL ADVANCEMENTS

In the past, technological changes have colored the direction that tax reform has taken. As the country has modernized, for example, Congress introduced third-party reporting, mandated

¹⁹⁸ Office of Management and Budget, Historical Tables, *Percentage Composition of Receipts by Source*, Table 2.2, available at <https://www.whitehouse.gov/omb/budget/Historicals>.

¹⁹⁹ While payroll tax rates generally have not changed, the threshold for Social Security taxes is indexed for inflation and changes from year-to-year. Thus payroll tax revenues could also decline if the threshold adjustments for Social Security did not keep up rising incomes.

the use of magnetic tape submissions, and required electronic form filing.²⁰⁰ Likewise, as Internet use has become ubiquitous, Congress has instituted changes to facilitate e-filing and encouraged the IRS to use cost-effective measures to dispense important tax-related information.²⁰¹ These changes and others like them signify that when it comes to tax reform Congress has not been oblivious to technological advances and their pivotal role in shaping the nation's economic landscape.

But capital's rise and labor's ebb have yet to make their mark on tax reform. In many respects, the same system of taxation that was instituted close to a century ago – income derived from labor taxed heavily, business and investment profits taxed moderately, and capital gains taxed lightly – remains entrenched. Retention of a twentieth century tax system, however, makes little or no sense in the twenty-first century.

In the Sections below, we explore (A) twentieth-first century tax reform in a changing labor market and (B) the anticipated effects associated with the institution of these tax reform measures.

A. Twentieth-First Century Tax Reform in a Changing Labor Market

In devising tax reform, Congress should not institute measures that seek to hinder technological advancement – and for good reason: technological advancements have significantly raised most taxpayers' standard of living, augmented leisure time, and considerably reduced mortality rates.²⁰² At the same time, labor remains an essential component of a vibrant economy. Without a knowledgeable, energetic, and committed workforce, capital production would stall and the nation's economic fabric would tatter.

Bearing in mind tax reform's dual objectives of simultaneously promoting both

²⁰⁰ See IRS Data Book, 2009, Publ'n 55B, tbl. 14, n.2 (2010), available at <https://www.irs.gov/pub/irs-soi/09databk.pdf>. (“The use of magnetic tapes for delivery of information returns was discontinued on December 31, 2008. Information returns previously provided on magnetic tape were provided electronically through the Filing Information Returns Electronically system beginning on January 1, 2009.”).

²⁰¹ For example, the IRS has essentially stopped printing information booklets and has instead posted virtually every on the Internet. IRS, More People Using IRS.GOV in 2015 Filing Season, IRS Says, 2015 Tax Notes Today 49-12. Taxpayers can easily and quickly view or download any IRS form, publication or instruction booklet by visiting IRS.gov. If taxpayers still need printed forms or instructions, they can place their order online at IRS.gov/orderforms.

²⁰² See Lindsey Burke & James Sherk, *Automation and Technology Increase Living Standards* (2015), available at http://www.heritage.org/jobs-and-labor/report/automation-and-technology-increase-living-standards#_ftnref9 (“Technological progress enables employees to produce vastly more goods and services with their labor. This increases their compensation because competitive labor markets compel employers to pay employees proportionately to their productivity.”); Joel Mokyr, Chris Vickers, & Nicolas L. Ziebarth, *The History of Technological Anxiety and the Future of Economic Growth: Is This Time Different?* 29(3) J. OF ECON. PERSPECTIVES 31–50 (2015) (detailing the value and wealth that technology generates).

technology and labor, Congress should institute the following three-prong strategy: (1) institute a universal progressive tax rate structure; (2) curtail subsidizing capital relative to labor; and (3) adopt alternative Social Security funding and disbursement mechanisms.

1. Universal Progressive Tax Rate Structure

As discussed above, capital gains have been taxed at much more favorable tax rates than ordinary income over the course of the last century.²⁰³ Although commentators have proffered numerous justifications for the capital gains tax preference, those justifications have not gone unchallenged. Tomes have been written,²⁰⁴ colloquia convened,²⁰⁵ and election platforms orchestrated²⁰⁶ that directly speak to the advantages and disadvantages associated with the capital gain tax preference. These debates have touched upon a wide array of topics, including capital gain tax preferences' micro- and macro-economic effects,²⁰⁷ behavioral impact upon taxpayers' investment decisions,²⁰⁸ and ability to spur economic growth.²⁰⁹

While these debates have provided a more thorough understanding of how the capital gain tax preference came into being and the reasons it remains intact even today, rehashing them would be of little practical utility. Instead, there is a new prism – where capital now dominates the economic landscape and labor's importance has ebbed – through which the capital gain tax rate preference should be viewed and evaluated. This is an important exercise, informing whether the capital gains tax rate preference has outlasted its usefulness.

When the capital gains tax rate preference was first instituted, capital in the form of machinery and intellectual property (e.g., patents and know-how), were in their infancy. For example, car engines existed, but they were rudimentary in nature. The nation remained largely agriculturally based and labor-oriented. To propel economic growth, Congress sought to spur capital investments; what better way to do this than to lessen the financial burden associated

²⁰³ See *supra* notes ??? - ??? and accompanying text.

²⁰⁴ See, e.g., Cunningham & Schenk, *supra* note 102; Daniel Shaviro, *Commentary, Uneasiness and Capital Gains*, 48 TAX L. REV. 393 (1993); George Zodrow, *Economic Analyses of Capital Gains Taxation, Realizations, Revenues, Efficiency and Equity*, 48 TAX L. REV. 419 (1993).

²⁰⁵ See, e.g., Deborah H. Schenk, *Colloquium on Capital Gains*, 48 TAX L. REV. 315 (1993).

²⁰⁶ See, e.g., Ryan Ellis, *Clinton and Sanders Propose Highest Capital Gains Tax Rate in History*, FORBES (2016), available at <https://www.forbes.com/sites/ryanellis/2016/01/26/clinton-and-sanders-propose-highest-capital-gains-tax-rate-in-history/#43a5e98a1127>.

²⁰⁷ See, e.g., Joint Economic Study, *The Economic Effects of Capital Gains Taxation* (1997), available at https://www.jec.senate.gov/public/_cache/files/b3116098-c577-4e64-8b3f-b95263d38c0e/the-economic-effects-of-capital-gains-taxation-june-1997.pdf.

²⁰⁸ See, e.g., Edward A. Dyl, *Capital Gains Taxation and Year-End Stock Market Behavior*, 32 J. OF FIN. 165 (1977).

²⁰⁹ See, e.g., Len Burman, *Capital Gains Tax Rates and Economic Growth (or not)*, FORBES (2012), available at <https://www.forbes.com/sites/leonardburman/2012/03/15/capital-gains-tax-rates-and-economic-growth-or-not/#6998ca7a1e2e>.

with the use of capital.²¹⁰

But as previously pointed out, technological advances have eclipsed the traditional economic forces of yesteryear embodied in labor. While the equivalent of trillions of dollars has been spent promoting the use of capital (in the form of various tax expenditures), the same cannot be said of the nation's commitment to spurring the use of labor. This annual spending cycle dedicated towards capital must end; instead, to propel a nimble and capable workforce that harmoniously and symbiotically functions with capital, Congress needs to make significant investments in labor.

A starting point to treating capital and labor equally is via tax rates. In the twenty-first century, there is no compelling reason for income generated by capital to be treated any more favorably than income from labor. Both should be subject to the same tax rates. By leveling the playing field in this fashion and eliminating its pro-capital bias, Congress would send a loud and clear message to the economic community: both capital and labor need to be vibrant. As technology advances, capital needs to evolve in a manner that can maximize labor's potential; simultaneously, the workforce, too, need to evolve in a manner that can likewise maximize capital's potential.

Until capital production can exist on its own and is wholly automated, labor remains an essential component of the economy. Congress should therefore seek to cultivate it. Having universal tax rates applicable to income (whether derived from labor or capital) is an important step forward in realizing this goal.

2. Curtail Subsidizing Capital Relative to Labor

Next, Congress should curtail its spending on subsidies to promote capital and invest more in the promotion of labor. The tax law provides subsidies through “tax expenditures”—those deductions, credits and exemptions in the Code that are designed to achieve various social and economic goals.²¹¹ The current list of tax expenditures in the Code is long, extensive, and broad.²¹² Consider the largest of such expenditures: the Code presently excludes the provision

²¹⁰ An example of this approach is Code section 1231. This Code section permits taxpayers the best of two worlds: on the dispositions of their trade and business assets, if taxpayers experience overall gains, they secure a capital gain tax rate preference; conversely, on the dispositions of their trade and business assets, if they experience overall losses, they are allowed ordinary loss treatment (and the avoidance of the capital loss limitation rules). Under the Code, no other types of assets are afforded such favorable tax treatment.

²¹¹ Stanley S. Surrey, *Federal Income Tax Reform: The Varied Approaches Necessary to Replace Tax Expenditures with Direct Governmental Assistance*, 84 HARV. L. REV. 352, 354 (1970). As defined under the Congressional Budget and Impoundment Control Act of 1974 (the “Budget Act”), *tax expenditures* are “revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability.” Congressional Budget and Impoundment Control Act of 1974 (Pub. L. No. 93-344), sec. 3(3).

²¹² Every year the Joint Committee on Taxation publishes a list of tax expenditures. The

of employer-provided health care insurance from the tax base.²¹³ While there are presumably legitimate public policy objectives associated with this tax expenditure's institution and retention, it significantly distorts the tax base and costs the Treasury an estimated quarter of a trillion dollars annually in forgone revenue.²¹⁴

While there are a number of tax expenditures in the Code that subsidize each of capital and labor, the subsidies to capital far outweigh those to labor. The five largest capital-related tax expenditures are as follows: (i) the deduction for mortgage interest; (ii) the exclusion of capital gains on the sale of a residence; (iii) expensing under section 179;²¹⁵ (iv) the reduced tax rate on dividends and capital gains; and (v) the exclusion of capital gains at death.²¹⁶ In contrast, the five largest labor-related tax expenditures are as follows: (i) the exclusion of benefits provided under cafeteria plans; (ii) the exclusion of miscellaneous fringe benefits; (iii) the exclusion of employee meals and lodging; (iv) the exclusion of scholarship and fellowship income; and (v) credits for college tuition.²¹⁷

In the tables below, consider the revenue loss associated with these expenditures projected for 2018.

most recent, spanning 47 pages, is the following: Joint Committee on Taxation, JCX-3-17, Estimates of Federal Expenditures for Fiscal Years 2016-2020 (2017), available at <https://www.jct.gov/publications.html?func=startdown&id=4971>.

²¹³ I.R.C. § 106.

²¹⁴ See Sean Lowry, *Health-Related Tax Expenditures: Overview and Analysis*, Congressional Research Service (2016), at p. 5, available at <https://fas.org/sgp/crs/misc/R44333.pdf> (“In FY2016, health tax expenditures are estimated to amount to \$234.0 billion.”).

²¹⁵ While it didn't make the top five, accelerated and bonus depreciation is also estimated to cost \$24.8 billion for 2018. Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2016-2020*, JCX-3-17 (Jan. 30, 2017), at 34 <https://www.jct.gov/publications.html?func=startdown&id=4971>.

²¹⁶ *Id.* at 32-33.

²¹⁷ In selecting the largest expenditures related to “labor”, we relied on the Joint Committee Report's classifications of expenses as relating either to “Education and Training” or “Employment.” Other expenditures that bear some relationship to labor were omitted because of their classification. For example, the Earned Income Tax Credit and various retirement benefits are classified as “Income Security” expenditures, and the exclusion of employer contributions for health care is classified as a “Health” expenditure. *See id.* at 35-39.

CAPITAL-RELATED TAX EXPENDITURES²¹⁸

Expenditure	Dollar Amount (In Billions)
Deduction for mortgage interest	\$72.4
Exclusion of capital gains on sale of residence	\$33.4
Expensing under section 179	\$45.7
Reduced tax rate on dividends and capital gains	\$135.9
Exclusion of capital gains at death	\$35.6
TOTAL	\$323.0

LABOR-RELATED TAX EXPENDITURES

Expenditure	Dollar Amount (In Billions)
Exclusion of benefits provided under cafeteria plans	\$33.9
Exclusion of miscellaneous fringe benefits	\$8.0
Exclusion of employee meals and lodging	\$3.2
Exclusion of scholarship and fellowship income	\$3.9
Credits for tuition for post-secondary education	\$20.0
TOTAL	\$69.0

Sometimes numbers speak for themselves and that is certainly the case here. In terms of the largest tax expenditures, Congress currently spends approximately four and half times *more* annually promoting the use of capital in lieu of labor. This disproportionate spending is anachronistic in nature, however, harkening back to a time period during which the economy was labor-centric as opposed to being capital-centric; in all likelihood, Congress instituted these tax expenditures to invigorate capital use. For a whole host of reasons, including favorable tax policies, this Congressional policy has proven wildly successful: capital, rather than labor, is now the dominant productive force in the nation’s economy.²¹⁹

A top priority of the nation’s tax reform agenda should be to rethink and reform the current capital/labor dynamic. In today’s economic environment, there is no reason that Congress should generously spend far more revenue promoting capital than labor. Instead, Congress should reverse the dollars amounts dedicated to these tax expenditures or, at the very least, handle them with parity. By eliminating (i) expensing and accelerated depreciation deductions; (ii) the tax rate preference for qualified dividends and capital gains; and (iii) section 1014 (which allows capital gains to escape tax at death), Congress could curtail subsidizing capital purchases to the tune of billions of dollars.²²⁰ On the other side of the ledger sheet, Congress should offer

²¹⁸*Id.* (Dollar amounts combine expenditures for corporations and individuals.)

²¹⁹ Piketty, *supra* note ???.

²²⁰ See, e.g., Yoram Margalioth, *Not a Panacea for Economic Growth: the Case of Accelerated Depreciation*, 26 VA. TAX REV. 493 (2007) (advocating depreciation methods that match economic depreciation).

more robust credits, deductions, and exclusions related to educational expenditures;²²¹ these sorts of measures would strengthen labor’s intellectual agility, making it a much more attractive commodity.

3. Alternative Means to Fund Social Security and Dispense Its Benefits

As discussed above in Part III.C., the share of payroll taxes as a percentage of overall tax revenues has been on the decline in recent years, which may reflect an overall decline in labor income. If this downward trend in payroll tax revenue continues, it will place added pressure on the nation’s primary source of funding for retirement – Social Security -- which studies indicate is already in jeopardy.²²² As the role of labor becomes less important in the current economy, it makes less sense to rely solely on payroll taxes to fund retirement going forward.

Further, it is unclear why labor income and the subsequent receipt of Social Security benefits should continue to correspond in the modern era. While Congressional members commonly equate payroll tax payments to funding a defined benefit retirement plan in the form of Social Security,²²³ this is not what happens in practice. Congress does not set aside taxpayers’ payroll tax payments in a reserve and utilize this investment pool to satisfy the nation’s Social Security obligations. Instead, payroll tax receipts are commingled with general tax receipts and together, this amalgamated whole is used to meet the government’s expenditure obligations.²²⁴ And unlike traditional retirement plans, payroll tax payments lack neutrality: those taxpayers whose lifespans are generally shorter bear a larger tax burden than those taxpayers whose lifespans are generally longer. History has taught us that those with the shorter-life spans tend to

²²¹ Richard Goode, Educational Expenditures and the Income Tax, in *ECONOMICS OF HIGHER EDUCATION* 281 (Selma J. Mushkin ed., 1962); David S. Davenport, *Education and Human Capital: Pursuing an Ideal Income Tax and A Sensible Tax Policy*, 42 *CASE W. RES. L. REV.* 793 (1992); Brian E. Lebowitz, *On the Mistaxation of Human Capital*, 52 *TAX NOTES* 825 (Aug. 12, 1991).

²²² See *supra* note 226 and accompanying text.

²²³ Floyd Norris, *Is It Really a Pension? It’s a Problem*, *NY TIMES* (2010), available at <http://www.nytimes.com/2010/11/05/business/05norris.html> (“If you look at Social Security as a pension plan, that result seems not only fair, but required. If you contribute more to a normal pension plan, you expect to get higher benefits. Why else would you contribute? And Social Security taxes are often called contributions.”). Alan L. Gustman, Thomas Steinmeier, & Nahid Tabatabai, *The Growth in Social Security Benefits Among the Retirement Age Population from Increases in the Cap on Covered Earnings*, NBER Working Paper 16501, p. 1, available at <http://www.nber.org/papers/w16501.pdf> (“In addition, as opposed to an increase in the payroll tax rate, raising the tax ceiling creates a leak in the (future) finances of the system in the form of an increase in future benefit obligations to be paid to those at the top of the earnings distribution.”).

²²⁴ David John, *Misleading the Public: How the Social Security Trust Fund Really Works*, *THE HERITAGE FOUNDATION SPECIAL REPORT*, available at <http://www.heritage.org/social-security/report/misleading-the-public-how-the-social-security-trust-fund-really-works> (“There is no cash in the Social Security trust fund, and there never has been any. The Social Security trust fund is merely an accounting device....”).

be poorer and people of color, while those with longer lifespans are likely to be well-off and white.²²⁵ Studies also continually indicate that, due to taxpayers’ overall increasing longevity, there is a mismatch between payroll payments in and anticipated Social Security payments out.²²⁶ Stripped down to its essentials, payroll taxes constitute an extra tax on labor, masquerading as a retirement funding mechanism.

One alternative to Social Security is to replace it with a guaranteed or “universal basic income” (UBI) payment.²²⁷ The central premise of the UBI proposal is to replace all government transfer payments -- Social Security, Medicaid, the Earned Income Tax Credits, food stamps, etc. – with one lump sum payment for each individual.²²⁸ Charles Murray, for example, proposes an annual payment of \$10,000 (paid in monthly installments), with an additional \$3000 that must be used to purchase health insurance.²²⁹ Regardless of the amount, a key aspect of a UBI or other guaranteed income payment is that it would not be tied to work: every taxpayer would automatically be entitled to some minimum transfer payment regardless of employments status or earnings. That payment, however, would be solely responsible for the government’s funding of retirement and other social needs. While the idea is not new, the UBI has been gaining more traction in recent years, with several cities implementing pilot programs both in the United States and abroad.²³⁰

There is much to recommend the UBI proposal. It would (ideally) ensure that every

²²⁵ See, e.g., C. Eugene Steuerle, Karen E. Smith, & Caleb Quakenbush, *Has Social Security Redistributed to Whites from People of Color*, URBAN INSTITUTE (2012), available at <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/412943-Has-Social-Security-Redistributed-to-Whites-from-People-of-Color.PDF> (“When considered across many decades – historically, currently, and in the near future – Social Security redistributes from people of color to whites.”).

²²⁶ See, e.g., Robert Pear, *Social Security’s Financial Health Worsens*, NY TIMES (2012), available at <http://www.nytimes.com/2012/04/24/us/politics/financial-outlook-dims-for-social-security.html> (“The Social Security trust fund will be exhausted in 2033, three years sooner than projected last year, the administration said. And Medicare’s hospital insurance trust fund will be depleted in 2024, the same as last year’s estimate, it said.”).

²²⁷ See, e.g., Charles Murray, *IN OUR HANDS: A PLAN TO REPLACE THE WELFARE STATE* (2016).

²²⁸ As Miranda Perry Fleischer and Daniel Hemel point out, the idea of a guaranteed income payment can be traced back at least as far as the late eighteenth century, and more recently to Milton Friedman in his proposal for a “negative income tax.” See Fleischer & Hemel, *Atlas Nods: The Libertarian Case for a Basic Income*, draft available at http://www.law.nyu.edu/sites/default/files/upload_documents/The%20Libertarian%20Case%20for%20a%20universal%20Basic%20Income.pdf.

²²⁹ Charles Murray, *A Guaranteed Income For Every American*, WALL ST JOURNAL (June 3, 2016). Murray’s proposal would guarantee \$10,000 for adults earning up to \$30,000, but the amount would gradually phase down (through a surtax) to \$6500 for those earning at least \$60,000.

²³⁰ See Fleischer & Hemel, *supra* note 228, describing trial programs involving cash transfers in Finland, Kenya, the Netherlands, and Oakland, California.

American could afford basic living expenses, and it would vastly reduce the enforcement costs associated with the current welfare regime because eligibility requirements would not need to be policed. However, critics have noted a number of potential drawbacks, the biggest of which is that a UBI would likely require an increase in tax rates (even accounting for the elimination of other entitlement programs).²³¹

It is beyond the scope of this Article to fully explore the intricacies of current proposals for a UBI. However, it suffices to say that policymakers would be well-advised to consider a radical restructuring of our current mechanism for funding retirement, health care, and basic needs for the poor. Projections of the future funding status of Social Security and Medicare are already grim,²³² and declining payroll tax revenues associated with diminishing labor income would only exacerbate this problem. A UBI, paired with enhanced tax revenue from higher taxes on capital, could provide a steady welfare safety net that could withstand radical shifts in employment brought about by automation.

The Technological Era requires that Congress reconsider the nature of the tax reform it institutes. While Congress has sought to foster the use of capital, it has done little to nurture the use of labor, even unintentionally (via the current tax rate structure), yet perversely, dissuading its use. The institution of the tax reform measures enumerated above would establish an environment in which Congress places capital and labor on equal footing, recognizing that, together, they must function synergistically.

B. Implications Associated with Proposed Tax Reform

Tax reform measures touch upon many aspects of the economy. And while their macro- and micro-effects are often difficult to predict, there are some repercussions that can be readily anticipated. By way of example, consider the exclusion from income of interest on state and local bonds.²³³ As a result of this exemption, states and local governments can much more readily borrow funds secured by lower carrying costs.²³⁴

²³¹ See *id.* at 51 (estimating that a \$10,000 UBI would require a tax rate increase of 10-11 percent, after accounting for the elimination of existing entitlement programs).

²³² See *supra* note 226.

²³³ I.R.C. § 103.

²³⁴ Grant A. Driessen, *Tax-Exempt Bonds: A Description of State and Local Government Debt*, Cong. Research Service (2016), available at <https://fas.org/sgp/crs/misc/RL30638.pdf> (“This tax exemption of interest income is granted because it is believed that state and local capital facilities will be underprovided if state and local taxpayers have to pay the full cost.”). Not all effects of tax reform are easy to predict. Consider the deduction for home interest. I.R.C. § 163(h)(3). While the real estate lobby claims this deduction entices home ownership, there is scant empirical evidence that this is actually the case (i.e., the mortgage interest deduction actually facilitates home ownership). For excellent pieces that present this point of view, see Dennis J. Ventry, Jr., *The Accidental Deduction: A History and Critique of the Tax Subsidy for Mortgage Interest*, 73 LAW AND CONTEMPORARY PROBLEMS 233 (2009); Bruce Barlett, *The*

While promoting capital use and technological innovations, Congress does not want to weaken or undermine the vibrancy of the nation's labor force. That being the case, it should institute one or more of the tax reform measures enumerated above. Were the enumerated tax reform measures instituted, the likely effects would be threefold: (1) labor's use would be buoyed or, at the very least, stabilized, (2) administrative efficiencies would be gained; and (3) wealth equity would be enhanced.

1. Labor's Use Would Be Buoyed or Stabilized

Elementary economics teaches that if something costs less, demand is greater.²³⁵ Assuming this axiom's validity, if Congress were to repeal the payroll tax, its elimination would reduce labor's cost, making its use more economically attractive. Consider the implications to both employers and employees.

For starters, payroll tax elimination would enable employers to have greater financial latitude to hire more employees. For every \$100 of wages, in the absence of a payroll tax, an employer could secure \$7.65 of savings. These tax savings could be used for a variety of purposes, including the retention of a larger labor force. The math is simple: For every thirteen employees a business currently hires (assuming the same wage), the elimination of the 7.65 percent payroll tax would essentially enable it to hire a fourteenth employee for no additional out-of-pocket cost (i.e., $13 \times 7.65 \text{ percent} = 99.45 \text{ percent}$).

The anticipated effect of eliminating the payroll tax to employees is somewhat more indeterminate. On the one hand, payroll tax elimination should reduce the cost of labor, increasing its demand; this increased demand should result in higher wages being paid. On the other hand, assuming revenue neutrality, payroll tax revenue would have to come from an alternative source, such as higher marginal income tax rates and/or the introduction of a new revenue source (e.g., carbon tax). Until Congress identifies this alternative source, the overall net economic effect to employees remains uncertain.²³⁶

Sacrosanct Mortgage Interest Deduction, N.Y. TIMES (2013), available at <https://economix.blogs.nytimes.com/2013/08/06/the-sacrosanct-mortgage-interest-deduction/>.

²³⁵ See, e.g., Catherine Rampell, *Why Is Turkey Cheaper When Demand Is Higher?*, N.Y. TIMES (2013), available at <http://www.nytimes.com/2013/11/24/magazine/why-is-turkey-cheaper-when-demand-is-higher.html> (“Consumers might get more price-sensitive during periods of peak demand and do more comparison-shopping, so stores have to drop their prices if they want to capture sales.”).

²³⁶ The effects of higher marginal tax rates remains unsettled: on the one hand, there are many economists who contend that higher marginal tax rates drive taxpayers to pursue more leisure-oriented activities (i.e., the substitution effect); on the other hand, there are other economists who argue that higher marginal tax rates lead taxpayers to work more to secure the same net take-home pay (i.e., the income effect). Orley Ashenfelter & James Heckman, *The Estimation of Income and Substitution Effects in A Model of Family Labor Supply*, 42 ECONOMETRICA 73 (1974).

On balance, a reduction or elimination of the payroll tax should have a positive bearing on the economy and, in particular, provide vibrancy to the labor market. As employers turned to hire, it would buoy the nation's workforce; meanwhile, higher wages combined with a larger tax burden (be it in the form of income tax, carbon tax, or other tax) would essentially leave employees in the same ex-ante position they were in prior to the institution of this proposed tax reform measure. Ultimately, an economic equilibrium point would be reached in which labor's use would either be buoyed or, at the very least, stabilized.

Further, Congress could use the projected revenue savings from no longer subsidizing business and investment profits to augment educational opportunities. Study after study reports that the United States is lagging in training the next generation of engineers and scientists.²³⁷ Congress therefore needs to send a signal that this is where the future lies and, to this end, it is willing to invest in the human capital of its youth. How exactly this objective is achieved is the fodder of a vast array of analysis in the educational arena. Suffice it to say, that Congress should be creative in its approaches and utilize the Code as a tool to promote investments in human capital. A myriad of opportunities exists; no one of which is the unequivocal answer.

2. Administrative Efficiencies Would Be Gained

A major contributing factor to the Code's girth and complexity is attributable to fact that capital gains secure preferential tax rate treatment. The Code is replete with sections, subsections, clauses, and subclauses that elaborate when and if something is a capital asset and the appropriate tax treatment associated with this label.²³⁸ These are not easy-to-understand provisions; to the contrary, some of the Code's most challenging attributes relate to capital gain treatment and the concomitant computations that these determinations engender.²³⁹ If Congress were to eliminate the capital gain tax rate preference, consider the administrative efficiencies that could be gained by taxpayers, tax practitioners, and the IRS.

Were all income subject to the same tax rates, taxpayers would have an easier time comprehending their tax burden. With a few keystrokes on their computer or numeric entries on

²³⁷ See Drew Desilver, U.S. Students Academic Still Lags that of Their Peers in Many Other Countries, Factank (2017), available at <http://www.pewresearch.org/fact-tank/2017/02/15/u-s-students-internationally-math-science/> (“Recently released data from international math and science assessments indicate that U.S. students continue to rank around the middle of the pack, and behind many other advanced industrial nations.”); Katherine Beard, *Behind America's Decline in Math, Science and Technology*, U.S. NEWS (2013), available at <https://www.usnews.com/news/articles/2013/11/13/behind-americas-decline-in-math-science-and-technology> (“America has fallen far from its place as a leader in math and science, experts said during a Science, Technology, Engineering and Math (STEM) Diversity Symposium on Capitol Hill....”).

²³⁸ A short list of some, but certainly not all, of the various Code sections at play, include I.R.C. §§ 1211, 1212, 1221, 1222, 1231, 1234, 1239, 1245, 1248, 1250.

²³⁹ See generally, Samuel A. Donaldson, *The Easy Case Against Tax Simplification*, 22 VA. TAX REV. 645, 713-722 (2003); John W. Lee, *Critique of Current Congressional Capital Gains Contentions*, 15 VA. TAX REV. 1 (1995).

their smart phone, taxpayers could quickly secure a good idea of what their anticipated annual tax burden would be. Furthermore, they would no longer have to dwell on whether they should hold on their capital investments for a particular period of time (e.g., more than one year)²⁴⁰ or how deductions for certain charitable contributions might be limited.²⁴¹ To be sure, even were Congress to eliminate the capital tax rate preference to some taxpayers the Code would remain shrouded in mystery, but for far more taxpayers its enigmatic veil would be lifted.

Repealing the capital gains tax preference would also eliminate socially wasteful tax planning resulting from taxpayers and their advisors seeking out strategies to recharacterize labor income as capital gains.²⁴² The IRS would also be a benefactor of a unified tax rate structure. A by-product of eliminating the distinction between capital gain and ordinary income tax treatment is that there would be less resource dedication to training IRS personnel to identify capital assets and to uncovering taxpayer exploitation strategies. In addition, the IRS could redirect resources away from monitoring whether taxpayers were being compliant in this sphere of tax practice to other pressing needs (e.g., identity theft and privacy concerns) that are currently besieging the agency and the general public.²⁴³

3. Wealth Equity Would be Enhanced

Over the last several decades, there is compelling evidence that the vast majority of the nation's income has inured disproportionately to the wealthy.²⁴⁴ And what is likewise clear is

²⁴⁰ I.R.C. § 1222(3).

²⁴¹ I.R.C. § 170(e).

²⁴² See, e.g., *supra* notes 173-175 and accompanying text.

²⁴³ See Dennis J. Ventry, Jr., *Why Steven Mnuchin Wants a Stronger I.R.S.*, NY TIMES (2017), available at <https://www.nytimes.com/2017/03/27/opinion/why-steven-mnuchin-wants-a-stronger-irs.html>:

Unfortunately, the seemingly endless cuts have compromised the agency's ability to collect taxes, combat identity theft, prosecute tax criminals and deliver taxpayer services. The size of the audit staff has fallen by 30 percent, resulting in a decades-low audit rate of 0.7 percent for individual taxpayers. For large corporations, the number of returns audited in 2016 fell by nearly half compared to 2006, to 9.5 percent from 17 percent. Meanwhile, the enforcement unit lost 7,000 employees. The criminal investigations unit has also suffered staff reductions, resulting in fewer cases, prosecutions and convictions.

²⁴⁴ See Emmanuel Saez & Gabriel Zucman, *Wealth Inequality in the United States Since 1913: Evidence from Capitalized Income Tax Data*, NBER Working Paper 20625 (2014), available at <https://gabriel-zucman.eu/files/SaezZucman2014.pdf> (“The rise of wealth inequality is almost entirely due to the rise of the top 0.1% wealth share, from 7% in 1979 to 22% in 2012 – a level almost as high as in 1929. The bottom 90% wealth share first increased up to the mid-1980s and then steadily declined. The increase in wealth concentration is due to the surge of top incomes combined with an increase in saving rate inequality.”); Emmanuel Saez, *Striking It Rich: The Evolution of Top Incomes in the United States* (2013), available at <http://eml.berkeley.edu/~saez/saez-UStopincomes-2012.pdf> (“Top 1% incomes grew by 31.4% while bottom 99% incomes grew only by 0.4% from 2009 to 2012.”).

that the Code has played a contributory role in perpetuating wealth inequity.²⁴⁵ Indeed, for the wealthiest Americans, the majority of their income is passive, taxed at preferential rates, with a only a small portion comprising salaries.²⁴⁶

Allowing the Code to perpetuate (or worsen) the nation’s wealth inequities requires revisiting. While there is no single panacea to reduce wealth inequality, reforming the Code constitutes a viable starting point. Consider that tax expenditures inure disproportionately to the upper income taxpayers²⁴⁷ and, furthermore, that the vast majority of business and investment income plus capital gains are earned by higher-income earners.²⁴⁸ Axiomatically, the converse must be true as well: the less-well-to-do enjoy fewer tax expenditures and, furthermore, they primarily derive their income through labor. Left untouched, the Code thus appears poised to worsen the existing wealth gap.

To close or, at the very least, reduce the wealth gap, Congress must recognize technological advances are fundamentally changing the economic landscape. Relative to labor, capital has become the dominant force. In this environment, the use of capital no longer needs to be subsidized; instead, labor in the form of human capital needs to be cultivated. Two ways this can be achieved are as follows: first, Congress must overhaul the tax expenditures the nation

²⁴⁵ Wojciech Kopczuk, *Recent Evolution of Income and Wealth Inequity*, *Comments on Piketty’s Capital in the Twenty-First Century*, 68 TAX L. REV. 545 (2015); Beverly Moran, *Wealth Redistribution and the Income Tax*, 53 HOW. L.J. 319 (2010).

²⁴⁶ See, e.g., Sanjay Sanghoo, *Fantasy Cliff: Debunking the Biggest Myths about the Bush Tax Cuts and the Rich*, HUFFPOST (2013), available at http://www.huffingtonpost.com/sanjay-sanghoo/bush-tax-cuts_b_2207472.html (“Unlike most low or middle income Americans, the rich make a substantial portion of their money from passive income (on average, the top 400 earners in the US make 59 percent of their income from capital gains or dividends versus only 9 percent from salaries), which is taxed at a preferential rate of 15 percent.”).

²⁴⁷ See Cong. Budget Office, *The Distribution of Major Tax Expenditures in the Individual Income Tax System* (2013), available at http://cbo.gov/sites/default/files/cbofiles/attachments/43768_DistributionTaxExpenditures.pdf (“In calendar year 2013, more than half of the combined benefits of those tax expenditures will accrue to households with income in the highest quintile (or one-fifth) of the population (with 17 percent going to households in the top 1 percent of the population), CBO estimates. In contrast, 13 percent of those tax expenditures will accrue to households in the middle quintile, and only 8 percent will accrue to households in the lowest quintile....”).

²⁴⁸ See IRS, *Cumulative 2015 Filing Season Information for Tax Returns Processed by the IS through May 28, 2015*, available at <https://www.google.com/#q=cumulative+2015+filing+season+information+for+tax+returns+processed+by+the+irs+through+may+28,+2015+size+of+adjusted+gross+income+agi&spf=1496065182006> (of those taxpayers have adjusted gross incomes in excess of \$10 million, showing that 39.6 percent of their income was comprised of capital gains). See also Tony Nitti, *Why Republicans Should Embrace A 28% Tax on Capital Gains*, FORBES (2015) (“These preferential rates are expected to save taxpayers \$540 billion over the next four years. And of that \$540 billion in savings, approximately 85% of it will inure to the wealthiest 2%.”).

makes and dedicate a larger proportion to strengthening human capital (primarily in the form of educational training); second, taxing income at similar rates – no matter how derived – would help narrow existing wealth disparities.

V. CONCLUSION

When it comes to fundamental tax reform, Congress can no longer afford to ignore the transformation of the nation’s economic landscape. Relative to labor, capital has catapulted economic productivity to new heights – a trend that will undoubtedly continue and likely accelerate. And while the interplay between capital and labor has important public policy implications, none is perhaps as important as the direction tax reform should take.

For close to a century, Congress has harbored what amounts to be a fixation on taxing the income labor produces. It has proven to be a plentiful “crop” that historically was easy to harvest. But as labor’s yields dwindle and, in some cases, entirely dry up, bountiful new crops are emerging in the form of business profits, investment income, and capital gains. Congress must therefore revisit how it tends to these crops and shares in taxpayers’ harvest of them. To state the obvious: on the nation’s economic mantelpiece, capital has usurped labor’s place. The only unanswered question is whether Congress will strategically account for the vast magnitude of these changes to the nation’s advantage.

To preserve the Code’s sanctity, the conclusion this analysis draws is elementary in nature. Instead of taxing income from labor heavily, business profits and investment income moderately, and capital gains lightly (or not at all), all income – regardless of source – must bear similar tax burdens.²⁴⁹ Adhering to this straightforward approach would, for purposes of the Code, be in line with restoring the concept of income to its theoretical roots. This would have several virtues, including resurrecting labor’s economic role in the economy, simplifying tax administration, making the Code a more efficient tool to raise revenue, and fostering equity. Failure to have income (regardless of source) shoulder similar financial burdens destines the Code to gradual obscurity, guaranteed to be eventually supplanted or replaced by another mode of taxation.

²⁴⁹ See Richard Goode, *THE INDIVIDUAL INCOME TAX* 11 (1964) (calling for uniform a system of uniform taxation); Walter J. Blum, *Federal Income Tax Reform—Twenty Questions*, 41 *TAXES* 672, 680-82 (1963) (same). There are commentators who instead advocate for “optimal tax.” See, e.g., Eric M. Zolt, *The Uneasy Case for Uniform Taxation*, 16 *VA. TAX REV.* 39, 41 (1996):

There are at least three reasons [optimal taxation is better than uniform taxation]. First, advances in economic and political theory throw new light on the design of tax systems and the usefulness of nonuniform taxation. Second, low compliance rates for certain types of income undermine the fairness and efficiency of tax systems where nonuniform tax treatment could significantly improve the ability of the taxing authorities to collect and enforce taxes. Third, the increasing international flows of capital severely undermine the validity of a uniform tax system, particularly in small countries with open economies.

APPENDIX A²⁵⁰

²⁵⁰ This chart was prepared by the Tax Policy Center and Citizens for Tax Justice, available at <http://federal-tax-rates.insidegov.com/>.