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INDEXING, UNCHAINED

DANIEL HEMEL*

I INTRODUCTION

Inflation indexing is an important and controversial issue in the design of tax systems and transfer programs. The choice of whether—and how—to adjust policy parameters for inflation carries significant political, distributional, and macroeconomic implications. In recent years, indexing has gained particular attention in three policy contexts: (1) whether to switch from an “unchained” to “chained” inflation index when calculating Social Security benefits; (2) whether to make a similar unchained-to-chained shift when setting federal income tax parameters such as bracket thresholds and deduction amounts; and (3) whether to index basis for inflation when calculating capital gains. Hundreds of billions of dollars ride on the resolution to these three questions.

Across all of these contexts, the debate over inflation indexing is generally framed in terms of “accuracy.” When the National Commission on Fiscal Responsibility and Reform chaired by Alan Simpson and Erskine Bowles recommended in 2010 that Social Security cost-of-living adjustments be calculated using the “chained” Consumer Price Index (CPI), the commission emphasized that chained Consumer Price Index (CPI) is “a more accurate measure of inflation.”¹ The Center for a Responsible Federal Budget, a Washington, D.C.-based think tank that picked up the chained CPI mantle after the Simpson-Bowles commission dissolved, likewise listed accuracy

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¹ NAT’L COMM. ON FISCAL RESP. & REFORM, THE MOMENT OF TRUTH 51 (Dec. 2010), https://www.senate.gov/reference/resources/pdf/NationalCommissiononFiscalResponsibilityandReform_Dec012010.pdf.

as its primary justification for chaining: “[P]olicymakers should ensure that the most accurate measure of inflation is being used,” the group declared in a white paper, and “[a]n overwhelming majority of economists from both parties agree that the chained CPI is a far more accurate measure of inflation than the CPI measurements currently in use.”² When the Obama administration proposed a switch to chained CPI across federal tax and transfer programs in 2013, it foregrounded the “accuracy” argument as well.³

The case for capital gains indexing has proceeded on similar premises. For example, Reed Shuldiner—in a comprehensive and insight-packed 1993 article on indexation—argued that computing capital gains without adjusting for inflation produces an “inaccurate” result.⁴ The congressional Joint Economic Committee, in a 1999 report, similarly said that indexing is necessary in order to “measure capital gains correctly.”⁵ Lawyers Charles Cooper and Vincent Colatriano—in a 2012 article urging the Treasury Department to index capital gains for inflation via executive action—wrote that capital gains indexation would “more accurately assess[] the actual increase in a person’s wealth or purchasing power.”⁶ Accuracy-based arguments for capital gains indexation sprung to life again in 2019 when President Trump asserted that he had the power to index capital gains for inflation of his own accord.⁷

² MARK GOLDWEIN, JASON PEUQUET & ADAM ROSENBERG, MOMENT OF TRUTH PROJECT, MEASURING UP: THE CASE FOR THE CHAINED CPI 2 (updated Mar. 19, 2013) <http://www.crfb.org/sites/default/files/measuringupcaseforthechainedcpi.pdf>.

³ See OFFICE OF MGMT. & BUDGET, FISCAL YEAR 2014 BUDGET OF THE U.S. GOVERNMENT, 46 (2013) <https://www.govinfo.gov/content/pkg/BUDGET-2014-BUD/pdf/BUDGET-2014-BUD.pdf> (“Most economists agree that the chained CPI provides a more accurate measure of the average change in the cost of living than the standard CPI.”).

⁴ Reed Shuldiner, *Indexing the Tax Code*, 48 TAX L. REV. 537, 550 (1993).

⁵ JOINT ECON. COMM. STAFF REPORT, CUTTING CAPITAL GAINS TAX RATES: THE RIGHT POLICY FOR THE 21st CENTURY 9 (1999), https://www.jec.senate.gov/public/_cache/files/1c3a5162-63fa-411e-8e4b-f85e910869a0/cutting-capital-gains-tax-rates-whitman-august-1999.pdf.

⁶ Charles J. Cooper & Vincent Colatriano, *The Regulatory Authority of the Treasury Department to Index Capital Gains for Inflation: A Sequel*, 35 HARV. J. L. & PUB. POL’Y 487, 497 (2012).

⁷ See Alan Rappeport, *Trump Says He Can Cut Tax on Gains on His Own*, N.Y. TIMES, Aug. 21, 2019, at A21. President Trump later said through a spokesperson that he would not pursue capital gains indexation via executive action “at this time.” Andrew Restuccia & Kate Davidson, *Trump Rules Out Indexing Capital-Gains Taxes to Inflation*

Critics of chained CPI and capital gains indexation have joined issue on the accuracy point. The AARP, which opposes the use of chained CPI for Social Security cost-of-living adjustments (COLAs), has argued that chained CPI is “even less accurate than the current formula.”⁸ Hundreds of economists who signed a letter opposing the use of chained CPI for Social Security in 2012 agreed that the annual Social Security COLA “should be based on the most accurate measure possible of the impact of inflation on beneficiaries,” but disputed that chained CPI was the best way to achieve that goal.⁹ More recently, in the debate over whether the Trump administration should index capital gains for inflation via executive action, critics of the move have argued that indexing capital gains, but not other elements of the tax code, would lead to the “mismeasurement” of income—a direct counterpoint to the “accuracy” claim pushed by proponents.¹⁰

This Article argues that—across all three of these indexing debates (and several more)—the emphasis on “accuracy” misses the mark in two respects. First, inflation is not a quantity that exists in the world apart from how it is measured. It is not like the distance from London to New York, which can be measured accurately or inaccurately. To say that chained CPI is more “accurate” than unchained CPI is something like saying that a U.S. liquid pint measure is more “accurate” than an imperial pint measure. We may have good reasons for using a U.S. liquid pint rather than an imperial pint—or vice versa—but “accuracy” is not one of them. Likewise, we may have good reasons for caring more about the month-to-month change in the price of a fixed basket

‘at This Time,’ WALL ST. J. (Sept. 21, 2019), <https://www.wsj.com/articles/trump-again-mulls-capital-gains-tax-cuts-11568210829>. On the new push for indexing capital gains via executive action, see generally Daniel Hemel & David Kamin, *The False Promise of Presidential Indexation*, 36 YALE J. ON REG. 693 (2019).

⁸ David Certner, *Chained CPI for Social Security Not More Accurate for Seniors*, AARP: WHERE WE STAND (Feb. 21, 2013, 1:24 PM), <https://blog.aarp.org/where-we-stand/chained-cpi-for-social-security-not-more-accurate-for-seniors>.

⁹ ECON. POLICY INST., ECONOMIST AND SOCIAL INSURANCE EXPERT STATEMENT ON SOCIAL SECURITY COLA: NO EMPIRICAL BASIS FOR REDUCING THE SOCIAL SECURITY COLA (Nov. 20, 2012), https://www.epi.org/files/2012/EPI_COLA_Letter.pdf.

¹⁰ See Bernie Becker, *Avoid Taking Shelter*, POLITICO: MORNING TAX (Aug. 7, 2019, 10:00 AM), <https://www.politico.com/newsletters/morning-tax/2019/08/07/avoid-taking-shelter-466008>; (quoting Kyle Pomerleau of the Tax Foundation).

of goods and services (standard CPI) or about the month-to-month change in the price of a fixed level of consumption utility (chained CPI), but neither is more “accurate” than the other.

Second, and more importantly, the adjustment of policy parameters over time is not, at its core, a question of technical accuracy. How Social Security benefits ought to change year to year, how the schedule of tax rates ought to change over time, and whether inflationary gains ought to be included in the tax base are not questions of measurement. They are, instead, value judgments. “Accuracy” in this context turns out to be both an illusion and a distraction.

Seeing through the mirage of “accuracy” is important not only because it offers a clearer-eyed view of the values at stake in indexing debates, but also because it opens up broader vistas for tax and transfer policymaking. For example, rather than focusing on whether “unchained” or “chained” versions of the Consumer Price Index provide more “accurate” measures of inflation, we might ask whether pensioners and disabled adults ought to share in the gains from economic growth. An affirmative answer to the latter question would suggest that Social Security benefits ought to be tied to an index that tracks overall economic changes (e.g., nominal gross domestic product) rather than an index that tracks only price-level changes (e.g., unchained or chained CPI). Likewise, instead of a cramped choice between unchained and chained CPI for tax bracket thresholds and deduction amounts, we might imagine tying tax system parameters to deficit levels or business cycle measures. And instead of an argument about capital gains indexation framed in “accuracy” terms, we might imagine a more direct discussion about whether (and how much) the income tax should operate as a tax on wealth.

Each of these questions will require more than this short Article to answer. The modest goal here is to show why indexing decisions ought to be “unchained,” so to speak, from a narrow focus on “accurate” measures of inflation. Part II introduces the indices according to which tax

and transfer parameters are adjusted and the contexts in which indexation questions arise. Part III—the heart of the Article—presents the case against “accuracy” as an objective for parameter adjustment. Part IV considers implications of this argument for participants in policy debates and for scholars engaged in the law and macroeconomics enterprise.

II INDICES AND CONTROVERSIES

A. The Index Menu

The Bureau of Labor Statistics (BLS), an agency within the Department of Labor, is the primary producer of inflation statistics in the United States. BLS began to publish the CPI in 1919 after rapid price-level rises during World War I intensified interest in inflation measurement.¹¹ For most of its history, the CPI tracked price changes affecting urban workers.¹² In 1978, the agency introduced a new measure, the Consumer Price Index for All Urban Consumers (CPI-U), and changed the name of the old CPI to the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).¹³ CPI-U and CPI-W differ in the relative importance of their components: CPI-U, for example, places a larger weight on housing, while CPI-W places a larger weight on transportation.

In 1987, Congress directed the BLS to develop an experimental price index for elderly consumers in addition to CPI-U and CPI-W.¹⁴ This measure—formerly known as “CPI-E,” and recently retitled “CPI-XE”¹⁵—places a larger weight than CPI-U and CPI-W on certain index

¹¹ *The First Hundred Years of the Consumer Price Index: A Methodological and Political History*, BUREAU OF LAB. STAT., MONTHLY LAB. REV. (Apr. 2014), <https://www.bls.gov/opub/mlr/2014/article/the-first-hundred-years-of-the-consumer-price-index.htm>.

¹² *See generally id.*

¹³ *Id.*

¹⁴ Kenneth J. Stewart & Joseph Pavalone, *Attachment F: Experimental CPI for Americans 62 Years of Age and Older*, BUREAU OF LAB. STAT.: ECON. NEWS RELEASE (1996), <https://www.bls.gov/news.release/cpi.br12396.a06.htm>.

¹⁵ *Renaming of Select Data Series*, BUREAU OF LABOR STAT.: CONSUMER PRICE INDEX (2019), <https://www.bls.gov/cpi/notices/2019/renaming-data-series.htm> (announcing renaming).

components (most notably, medical care) and a smaller weight on others (including food and beverages and education). The Bureau of Labor Statistics describes CPI-XE as “experimental” and emphasizes that “it should be interpreted with caution.”¹⁶ Because CPI-XE is based on a smaller set of households than CPI-U and CPI-W, it is more vulnerable to the influence of outliers within its sample. Even so, the differences between CPI-U, CPI-W, and CPI-XE are modest.¹⁷ Although over time CPI-XE has outpaced CPI-U and CPI-W, there are some years in which CPI-U and CPI-W rise more rapidly than CPI-XE.¹⁸

All three of these measures are Laspeyres price indices.¹⁹ (The name “Laspeyres” honors the German economist Étienne Laspeyres, who pioneered the use of this type of measure in the late nineteenth century.) A Laspeyres price index reflects changes over time in a base-period reference basket of goods and services. To understand how a Laspeyres price index is calculated, consider the following example, which uses the hypothetical numbers in Table 1:

¹⁶ *Consumer Price Index Frequently Asked Questions*, BUREAU OF LABOR STAT.: CONSUMER PRICE INDEX (Apr. 25, 2019), <https://www.bls.gov/cpi/questions-and-answers.htm>.

¹⁷ From 1982 through 2011, CPI-U and CPI-W both grew at an average annual rate of 2.9 percent while CPI-XE increased at an average annual rate of 3.1 percent. *Consumer Price Index for the Elderly*, BUREAU OF LAB. STAT.: THE ECON. DAILY (Mar. 2, 2012), https://www.bls.gov/opub/ted/2012/ted_20120302.htm.

¹⁸ *Id.*

¹⁹ Technically, CPI-W, CPI-U, and CPI-XE are “modified Laspeyres price” indices, or “Lowe price” indices, rather than true Laspeyres price indices. A true Laspeyres price index would update the basket every period, while the CPI-U and CPI-W baskets are updated every two years, and the CPI-XE basket is updated less consistently than that. CPI-W and CPI-U—and, to a lesser extent, CPI-E—thus do reflect changes in consumption patterns, but with a time lag.

Table 1. Price and Quantity of Apples and Bananas Purchased by a Single Consumer Over Two Periods

Period	Apples			Bananas			Total Expenditure
	Price	Quantity	Expenditure	Price	Quantity	Expenditure	
1	\$0.50	12	\$6	\$1	4	\$4	\$10
2	\$1	5	\$5	\$0.50	10	\$5	\$10

The Laspeyres price index identifies the change in the price of the base-period (Period 1) basket of twelve apples and four bananas. The Laspeyres price index “overlooks” the fact that the consumer chooses to buy a different number of apples and bananas in the second period after the prices of those items change. I place “overlooks” in quotation marks because Laspeyres was not unaware of the fact that consumers might change the composition of their consumption baskets in response to price fluctuations and other factors.²⁰ The Laspeyres price index, though, is not a measure of how consumption baskets change; it is a measure of how the price of a particular consumption basket changes over time.

Here, the cost of the consumer’s basket of twelve apples and four bananas has risen from \$10 in the first period to $\$1 \times 12 + \$0.50 \times 4 = \$14$ in the second period. Thus the Laspeyres price index is $\$14/\$10 = 1.4$. The inflation rate calculated according to the Laspeyres price index is 40%. In other words, it costs 40% more to buy twelve apples and four bananas in the current period than in the base period.

An alternative to the Laspeyres price index is the Paasche price index, so named for the turn-of-the-twentieth-century German economist-turned-politician Hermann Paasche. Instead of

²⁰ See Joseph Persky, *Retrospectives: Price Indexes and General Exchange Values*, 12 J. ECON. PERSPECTIVES 197, 199-200 (1998).

using the first-period bundle (twelve bananas and four apples) as the reference basket, as in the Laspeyres index, the Paasche index takes the second-period bundle (five apples and ten bananas) as the reference basket. Here, the cost of buying five apples and ten bananas has fallen from $\$0.50 \times 5 + \$1 \times 10 = \$12.50$ in the first period to $\$10$ in the second period. Thus the Paasche price index is $\$10/\$12.50 = 0.8$, and the inflation rate calculated according to the Paasche price index is -20% . In other words, it costs 20% less to buy five apples and ten bananas in the second period than in the first period.

The Laspeyres and Paasche price indices are both categorized as “fixed weight” price indices: they take a fixed basket of goods and measure how the price of that basket changes over time. The difference is in which basket they choose: the Laspeyres price index takes the base period basket as the reference basket, while a Paasche price index takes the current period basket as the reference basket. In general, the Laspeyres price index will yield a higher estimate of inflation than the Paasche price index because consumers substitute away from goods whose prices have increased more rapidly and toward goods whose prices have increased less rapidly or declined.

A “flaw” in any fixed weight price index is that it fails to account for consumer substitution in real time. Chained price indices (of which the Törnqvist index is a particularly prominent example²¹) seek to correct this “flaw.” I put quotation marks around “flaw” here because the Laspeyres and Paasche price indices are perfectly accurate measures of what they purport to measure: the change in the price of a basket of goods and services whose component weights remain constant over time. Assuming again that the first period is the reference period, the Törnqvist index for the basket of apples and bananas in the second period would be:

²¹ The Törnqvist price index is named for twentieth century Finnish statistician Leo Törnqvist.

$$\left(\frac{\$1}{\$0.50}\right)^{\left(\frac{0.6+0.5}{2}\right)} * \left(\frac{\$0.50}{\$1}\right)^{\left(\frac{0.4+0.5}{2}\right)} \approx 1.07$$

This is the product of the ratios of the second-period price to the first-period price for each basket component raised to the two-period average of its expenditure share. The inflation rate calculated according to this formula would be 7% (that is, $(1.07 - 1)/1$).

When proponents of the use of chained CPI for policy purposes say that chained CPI provides a more “accurate” measure of inflation than fixed-weight CPI, what exactly do they mean? Chained CPI reflects an attempt to implement the “cost of living” concept. The change in the “cost of living” is the change in the minimum expenditure required to attain the same level of consumption utility as would be generated by a reference basket of goods and services in the base period. The Törnqvist index provides an approximation of the change in the cost of living given certain assumptions about consumers’ utility functions. The Laspeyres index, by contrast, provides an upper-bound estimate of the change in the cost of living. A Paasche index would give a lower bound. None of these formulas, however, can give us an exact measure of the change in the cost of living or its upper or lower bound because we cannot directly observe the consumption utility that consumers derived from apples and bananas and other goods and services across periods, which may vary with a whole host of nonprice factors. For example, apples may taste better when crime is low and the Mets are in first place.

The BLS introduced the Chained Consumer Price Index for All Urban Consumers (C-CPI-U) in August 2002, with estimates extending back to December 1999 (the reference period).²² In most months, the change in the C-CPI-U is the same as or 0.1 percentage points lower than the

²² ROBERT CAGE ET AL., INTRODUCING THE CHAINED CONSUMER PRICE INDEX, 1 (2003), <https://www.bls.gov/cpi/additional-resources/chained-cpi-introduction.pdf>.

change in the CPI-U.²³ Over time, however, small differences compound. Thus, from December 1999 through December 2016, the C-CPI-U increased by 37.3 percent,²⁴ while the CPI-U increased by 43.5 percent.²⁵

The four indices discussed here—CPI-W, CPI-U, CPI-XE, and C-CPI-U—come nowhere close to exhausting the full range of inflation measures produced by BLS and other statistical agencies. They are, however, the primary options that policymakers consider when designing inflation-indexed taxes and benefits. The next subpart considers the particular policy contexts in which inflation indexing debates have arisen.

B. Indexing Controversies

1. Social Security Benefits

Social Security is often described as the “third rail” of American politics.²⁶ It is also the third rail of inflation indexing—the policy context in which inflation indexing battles are most heated and the lens through which other inflation indexing controversies are often viewed.²⁷ And it is probably the most complicated example of indexing in practice. A brief bit of background, therefore, may help to set the stage for the Social Security indexing debate.

²³ *Id.* at 5.

²⁴ *Table 24C. Historical Chained Consumer Price Index for All Urban Consumers (C-CPI-U): U.S. City Average, All Items*, BUREAU OF LABOR STATISTICS (Aug. 2017), <https://www.bls.gov/cpi/additional-resources/chained-cpi-table24C.pdf>.

²⁵ *CPI Inflation Calculator*, BUREAU OF LABOR STATISTICS, <https://data.bls.gov/cgi-bin/cpicalc.pl> (last visited Jan. 6, 2020).

²⁶ *See, e.g.*, Terry Weiner, *Touching the Third Rail: Explaining the Failure of Bush’s Social Security Initiative*, 35 *POL. & POL’Y* 872, 872 (2007).

²⁷ *See, e.g.*, David Dayen, *The Biggest Trojan Horse in the Republican Tax Plan*, *NEW REPUBLIC* (Nov. 7, 2017), <https://newrepublic.com/article/145688/biggest-trojan-horse-republican-tax-plan> (“Even if this specific legislation [adopting chained CPI for income tax parameters] doesn’t touch Social Security, make no mistake: It puts Social Security under threat.”); *Using the Chained CPI in the Tax Code: Will Social Security Be Next?*, *NAT’L COMM. TO PRESERVE SOC. SECURITY & MEDICARE* (Nov. 14, 2017), <https://www.ncpssm.org/documents/general-archives-2017/using-chained-cpi-tax-code-will-social-security-next> (“The proposal in the House and Senate Republicans’ tax reform plan to move to a ‘chained’ Consumer Price Index (CPI) to calculate increases in the tax code brackets and the standard deduction can only be seen as part of a broader plan to extend the use of this index when adjusting Social Security benefits for inflation. It is the elephant’s nose under the tent.”).

Retired workers receive monthly Social Security benefits based on their “primary insurance amount,” which is calculated by multiplying “average indexed monthly earnings” by a series of percentage replacement factors. Average indexed monthly earnings are based on the worker’s highest thirty-five years of earnings in covered employment. Once a worker becomes eligible for Social Security retirement benefits, her benefit amount grows based on the Social Security cost of living adjustment (COLA).²⁸ This scheme raises two indexing-related questions: (1) what index should be used to calculate average indexed monthly earnings?; and (2) what index should be used to calculate the COLA?

For example, imagine an individual born in 1960 who begins collecting the Social Security retired-worker benefit in 2022. Let’s say that she earned \$50,000 in the year 2000 and that the year 2000 will be one of the thirty-five years factored into her average indexed monthly earnings amount. One question is how much her \$50,000 in year 2000 dollars should count for when calculating her average indexed monthly earnings, and thus her primary insurance amount, in 2022. A second question is how much her Social Security benefits should increase each year after she begins collecting in 2022.

Congress has answered the first question by choosing the “national average wage index,”²⁹ which tracks the nominal change in the mean taxable compensation reported by employers year after year.³⁰ The national average wage index is (by design) *not* an inflation index; it is a measure of something else entirely (wage growth). For the second question (the cost-of-living adjustment), Congress has chosen CPI-W.³¹ This latter choice is, on first glance, somewhat surprising: after all,

²⁸ CONG. RESEARCH SERV., SOCIAL SECURITY PLANNER 8-9 (May 7, 2019), <https://fas.org/sgp/crs/misc/R42035.pdf>.

²⁹ 42 U.S.C. § 415(a)(1)(B)(ii).

³⁰ *Net Compensation Defined*, SOC. SECURITY ADMIN., <https://www.ssa.gov/OACT/COLA/netcomp.html> (last visited Jan. 6, 2020).

³¹ CONG. RESEARCH SERV., SOCIAL SECURITY: COST-OF-LIVING ADJUSTMENTS (Nov. 19, 2018), <https://fas.org/sgp/crs/misc/94-803.pdf>.

CPI-W tracks changes in the consumption patterns of urban workers, while Social Security beneficiaries are typically out of the workforce. The reliance on CPI-W can be explained historically by the fact that Congress adopted the cost of living adjustment provision in 1972,³² which was before the advent of CPI-U or CPI-XE. And the choice of index has stuck.

Proposals to shift from the national average wage index to an inflation-focused measure for calculating the primary insurance amount have emerged at various points.³³ The question of wage indexing is interesting and important; it has not, however, been a primary focus of policymakers' attention over the past decade. More recently, debates about Social Security reform have centered on two major proposals to change the cost-of-living adjustment formula. The first—which has received the most attention—would tie cost-of-living adjustments to the C-CPI-U.³⁴ Because C-CPI-U tends to grow at a slightly slower rate than CPI-W, this proposal would have the effect of reducing benefits over time. In December 2018, the Congressional Budget Office estimated that tying cost-of-living adjustments to C-CPI-U instead of CPI-W for Social Security benefits would reduce benefits—and thereby reduce the federal deficit—by \$134 billion over the next decade.³⁵ Applying a similar change to other benefit programs with cost-of-living adjustments—including civil service and veterans' pensions and Supplemental Security Income—would reduce benefits (and the deficit) by an additional \$33 billion over a decade.³⁶ Then-President

³² Robert M. Ball, *Social Security Amendments of 1972: Summary and Legislative History*, SOC. SECURITY BULL., (Mar. 1973) <https://www.ssa.gov/history/1972amend.html>.

³³ For an overview, see John F. Cogan & Olivia S. Mitchell, *Perspectives from the President's Commission on Social Security Reform*, 17 J. ECON. PERSPECTIVES 149, 158-59 (2003).

³⁴ See, e.g., Editorial, *A Better Stat for Inflation*, WASH. POST (Nov. 25, 2012), https://www.washingtonpost.com/opinions/a-better-stat-for-inflation/2012/11/25/592e4ad4-3405-11e2-bb9b-288a310849ee_story.html (endorsing shift to chained CPI for Social Security cost of living adjustments).

³⁵ CONG. BUDGET OFF., USE AN ALTERNATIVE MEASURE OF INFLATION TO INDEX SOCIAL SECURITY AND OTHER MANDATORY PROGRAMS (2018), <https://www.cbo.gov/budget-options/2018/54752>.

³⁶ *Id.*

Obama included a proposal for chained CPI in his fiscal year 2014 budget, though he omitted the proposal from subsequent budgets after strong political backlash.³⁷

A second proposal—championed by Senator Bernie Sanders of Vermont, among others—would link Social Security cost-of-living adjustments to CPI-XE.³⁸ The effect of this proposal on benefit levels and deficits would depend on which index increases at a faster rate. Due largely to rising health care costs, CPI-XE has generally grown more rapidly than CPI-W and CPI-U in recent years, though there is no guarantee that the trend will continue.

2. Tax Thresholds

While the use of chained CPI for Social Security has been debated for several years, chained CPI for tax thresholds had garnered less attention until 2017, when congressional Republicans included a chained CPI provision in their \$1.4 trillion tax cut bill.³⁹ That law, as passed, provides that inflation-indexed thresholds in the Internal Revenue Code—including the bracket cutoffs, the maximum earned income tax credit, the standard deduction amounts, and the caps on contributions to tax-preferred retirement plans—will increase with chained CPI (C-CPI-U) rather than CPI-U.⁴⁰

The use of C-CPI-U rather than CPI-U for bracket changes and the standard deduction will mean that more income is subject to higher tax rates. The use of C-CPI-U for the earned income tax credit (EITC) will lead to smaller EITC payouts. The net effect of these and other changes to tax liability resulting from the switch to C-CPI-U will be to raise revenue by \$133.5 billion over the 2018–2027 period (and more afterwards), partly offsetting the negative revenue effects of the

³⁷ For a catalog of congressional Democrats' negative responses to President Obama's chained CPI proposal, see Andrew Johnson, *Democrats Slam Obama's Chained CPI Proposal*, NAT'L REV. (Apr. 5, 2013), <https://www.nationalreview.com/corner/democrats-slam-obamas-chained-cpi-proposal-andrew-johnson>.

³⁸ Social Security Expansion Act, S. 478, 116th Cong. §3(b) (2019).

³⁹ Pub. L. No. 115-97, 131 Stat. 2054 (2017).

⁴⁰ *Id.*

tax cuts elsewhere in the same bill.⁴¹ Somewhere around half of those costs will be borne by the top 20 percent of taxpayers by income.⁴²

3. Indexing Capital Gains for Inflation

Proposals to index capital gains—which are currently not indexed at all—have percolated for several decades. Without indexing, a taxpayer calculates gain and loss on the sale or exchange of an asset by subtracting “basis”—which, in the simplest case, is the price in nominal dollars that the taxpayer paid when purchasing the asset—from the amount realized. The result is that taxable gains accrue purely by virtue of inflation. Proponents of indexing basis for inflation argue that the non-indexation status quo therefore leads to the inaccurate measurement of income.⁴³

In 1982 and several times thereafter, legislation to index basis for inflation passed one house of Congress, but it has never become law.⁴⁴ On two occasions, proponents of indexation have pressed the White House to index basis for inflation via executive action—specifically, by ordering the Treasury Department and the IRS to issue a regulation that construes the term “cost” in the statutory definition of “basis” to be an asset’s real, rather than nominal, cost. The first such push came in the early 1990s, when President George H.W. Bush was in office.⁴⁵ At the time, the leading presidential indexation advocates were explicitly agnostic as to the particular index used.⁴⁶ More recently, several advisers to President Trump as well as allies of the administration outside

⁴¹ STAFF OF THE JOINT COMM. ON TAXATION, 115th CONG., GENERAL EXPLANATION OF PUBLIC LAW 115-97 443 (Comm. Print 2017).

⁴² See *T13-0105 - Tax Parameters Indexed with Chained CPI, Current Law; Distribution of Federal Tax Change by Cash Income Percentile, 2020*, TAX POL’Y CENTER (Mar. 8, 2013), <https://www.taxpolicycenter.org/model-estimates/distributional-effects-indexing-tax-parameters-using-chained-cpi/tax-parameters-0>; (noting that those with a cash income in the top quintile will be responsible for 48.6 percent of the share of total federal tax change).

⁴³ See *supra* notes 4-6 and accompanying text.

⁴⁴ On the history of proposals to index capital gains for inflation, see generally Jane G. Gravelle, CONG. RESEARCH SERV., CRS 7-5700, INDEXING CAPITAL GAINS FOR INFLATION 6–9 (2018).

⁴⁵ *Id.* at 8.

⁴⁶ See Charles J. Cooper, Michael A. Carvin, & Vincent J. Colatrigano, *The Legal Authority of the Department of the Treasury to Promulgate a Regulation Providing for Indexation of Capital Gains*, 12 VA. TAX REV. 631, 639 n.19 (1993) (noting that “we have not examined the merits of various indexing schemes”).

government have urged him to do the same.⁴⁷ President Trump reportedly told advisers in September 2019 that he would not move ahead with indexing capital gains for inflation, but might reconsider it later.⁴⁸ Now that chained CPI (and specifically, C-CPI-U) is the index used for other tax parameters, it seems likely that a future capital gains indexation proposal would likewise tie the calculation of basis to C-CPI-U rather than another index.⁴⁹

III

ACCURACY AS A DISGUISE FOR VALUE JUDGMENTS

The central argument of this Article is that there is no one “accurate” measure for how policy parameters should be adjusted over time to account for inflation. The adjustment of tax and transfer parameters is, instead, primarily a value judgment for which no macroeconomic measure can substitute. Once one considers the arguments for adjustment and the features of different price indices, moreover, the normative case for C-CPI-U turns out to be uneasy at best.

A. “Accuracy” and Social Security Indexation

Recall that C-CPI-U is an approximation—and only that—of the cost of attaining the same level of consumption utility as would be generated by the reference basket of goods and services in the base period. For proponents of using C-CPI-U to calculate Social Security COLAs, the justificatory burden is to explain why the guidepost for adjustment should be the change in the C-CPI-U.

⁴⁷ On the dubious legality of indexing basis for inflation via executive action, see Hemel & Kamin, *supra* note 7.

⁴⁸ Andrew Restuccia & Kate Davidson, *Trump Rules Out Indexing Capital-Gains Taxes to Inflation ‘at This Time,’* WALL ST. J. (Sept. 11, 2019), <https://www.wsj.com/articles/trump-again-mulls-capital-gains-tax-cuts-11568210829>.

⁴⁹ See, e.g., John Ricco, *Indexing Capital Gains to Inflation*, PENN WHARTON BUDGET MODEL (Mar. 23, 2018), <https://budgetmodel.wharton.upenn.edu/issues/2018/3/23/indexing-capital-gains-to-inflation> (calculating revenue and distributional consequences of capital gains indexation on the assumption that chained CPI would be the index used).

C-CPI-U is consistent with at least one function of the Social Security system. Social Security's Old-Age, Survivors, and Disability Insurance (OASDI) program can be understood as a form of forced consumption smoothing. Because of the diminishing marginal utility of consumption, individuals maximizing their own expected utility will want to smooth consumption over time and across states of the world. With OASDI, we transfer some amount of consumption from our working years to years in which we are unable or less able to work due to seniority or disability. Accomplishing this through a mandatory program addresses adverse selection problems that plague private-sector wage insurance schemes. Inflation indexing seeks to ensure that consumption utility remains steady throughout our lifetimes. The use of C-CPI-U is broadly consistent with this objective: it ensures—or tries to—that retirees, survivors, and disabled workers can derive the same amount of consumption utility from spending their OASDI benefits each year.⁵⁰

Social Security is not, however, exclusively a mechanism for consumption-smoothing. The OASDI program is also a mechanism for redistribution, and this is even more the case for Social Security's Supplemental Security Income (SSI) program. How much we ought to redistribute depends on some weighing of distributive benefits against efficiency costs. Distributional goals are likely to vary across time periods, but not necessarily according to C-CPI-U. Overall economic growth and changes in income and wealth inequality—as well as changes in price levels—shape our distributional objectives.⁵¹ All this would counsel in favor of a formula for cost-of-living

⁵⁰ Wage indexing during a worker's lifetime is more difficult to explain from a consumption smoothing perspective. For a discussion of wage indexing and a proposal for reform, see Cogan & Mitchell, *supra* note 33, at 157–59.

⁵¹ There are, concededly, strands of libertarian thought that posit that the government's obligation is to provide a subsistence-level existence to all individuals. *See, e.g.,* Miranda Perry Fleischer & Daniel Hemel, *Atlas Nods: The Libertarian Case for a Basic Income*, 2017 WIS. L. REV. 1189 (evaluating libertarian arguments for a “sufficientarian” safety net). If we adopt that view, then the change in price of the basket of goods and services necessary to achieve a subsistence-level existence is, indeed, an appropriate basis for Social Security COLAs. Note, though, that C-CPI-U is not such a measure, because it is based on the consumption pattern of all urban American consumers and not specifically those living near the subsistence level.

adjustments that would incorporate growth measures (e.g., nominal GDP) and inequality measures (e.g., the Gini coefficient). For instance, if real GDP increased significantly and the wealth gap widened but price levels remained constant, we presumably would want to redistribute more than we already do, regardless of whether C-CPI-U or any other inflation index showed an increase.

Seen in this light, C-CPI-U no longer looks like an especially attractive peg for Social Security cost of living adjustments. CPI-W—which typically outpaces C-CPI-U—will likely come closer than C-CPI-U to capturing the range of considerations that ought to enter the cost-of-living-adjustment calculus. But framing the choice as between CPI-W and C-CPI-U (or CPI-XE) restricts the menu of options unduly. If inflation is not the only reason why Social Security benefits should change over time, then inflation measures should not be the only inputs to the cost-of-living adjustment calculation.⁵²

Another possibility—quite apart from the proposal for a blended index that accounts for inflation, growth, and inequality—is not to adjust benefits and tax thresholds automatically but instead to rely on Congress to periodically recalibrate those parameters via legislation. That was, again, how Social Security until the 1970s. Of course, Congress can recalibrate policy parameters via legislation through whatever formula it adopts for automatic adjustment. The decision to index and the choice of index simply establish a default rule that applies in the event of congressional inaction.

Seen in that latter light, it is not obvious that the optimal default rule should reflect an estimate of the optimal change in redistribution across time. For example, Congress—knowing that future legislatures will face pressure from voters and interest groups to raise benefit levels—may choose an index that appreciates at a slower rate in order to counteract expected political

⁵² *Accord* Robert J. Shiller, *Want to Fix Social Security? Use the Right Wrench*, N.Y. TIMES, June 9, 2013, at BU4.

forces. A switch from CPI-W to C-CPI-U may be justified on these grounds, though if C-CPI-U is the appropriate measure for that purpose, it is by pure happenstance. Conversely, Congress—knowing that future legislatures will face pressure to favor the rich—may choose an index that appreciates at a faster rate, such as an unchained CPI-W or unchained CPI-U. The key point for our purposes is that the optimal default rule does not necessarily reflect a measure of anything other than a crude balancing of egalitarian and efficiency-enhancing objectives, perhaps with a dose of political economy prognostication as well.

B. “Accuracy” and the Indexation of Tax Code Parameters

The argument in favor of C-CPI-U for indexing tax code parameters such as the bracket thresholds runs into similar obstacles. Whether to index bracket thresholds for inflation and, if so, what index to use, are not questions of accuracy. Rather, they are at their core choices about how much revenue we want to raise and from whom. There is no obvious reason why, for example, the taxable income threshold at which the 37 percent marginal rate kicks in should move in synchrony with the cost of attaining a particular amount of consumption utility. An inflation index that increases at a faster pace will raise less revenue from high-income households; an index that increases at a slower rate will raise more. One choice of index might be normatively more attractive than another, but not because it better measures anything other than our shared values.

Many commentators do not see the issue this way. Reed Shuldiner, for example, writes that “inflation can distort a tax structure” and that “indexation can prevent such distortion.”⁵³ It is not clear whose behavior is being distorted though. Inflation without indexation certainly can *change* the tax structure. To illustrate with an absurdly long timeframe: If we keep the current rate schedule in place for the next 440 years and inflation proceeds at a 2 percent rate, the threshold at which the

⁵³ Shuldiner, *supra* note 4, at 539.

37 percent rate kicks in for joint filers—\$600,000 in tax year 2018—will be the equivalent of \$100. We would, for all practical purposes, have a 37 percent flat rate. Everyone—but especially low-income households—would see their average rates rise. But is this a distortion?

In one sense, yes. Income taxes distort behavior, and an inflation index that increases at a slower rate results in higher income taxes. The “distortion” from non-indexation, though, is no different from the distortion from explicit rate hikes. Higher income taxes, moreover, also lead to more government revenue, which could be used to pay down the national debt, produce more public goods, or distribute larger amounts to low-income households. These may be good or bad results (and readers will likely disagree on whether they are good or bad). But the goodness or badness of higher taxes, smaller deficits, more public goods, and more redistribution does not depend on whether CPI-U or C-CPI-U is a more “accurate” measure of anything. If one wants the government to raise more revenue, then one should favor C-CPI-U over CPI-U and no indexation over C-CPI-U. “Accuracy” is, again, of little relevance.

While the choice of index (or the choice not to index) clearly has distributional implications, those implications are themselves nonobvious. An inflation index that increases at a slower pace makes taxes higher and causes the rate schedule to reach its peak more quickly in real-dollar terms. It in that sense makes the tax schedule less graduated, though that does not necessarily mean less redistributive.⁵⁴ Lower- and middle-income households will pay more than they otherwise would, but they may also get more back in public goods and cash grants. Put somewhat differently, inflation without indexing (or, less dramatically, using C-CPI-U instead of CPI-U for inflation indexing) makes our tax system look more Nordic: higher average tax rates across the

⁵⁴ See Jason S. Oh, *Are Progressive Tax Rates Progressive Policy?*, 92 N.Y.U. L. REV. 1909, 1215 (2017) (explaining how “marginal rate cuts at low levels of income often make fiscal policy more *regressive*”).

income distribution, but more government revenue-raising and more room for government spending as a result.⁵⁵

Finally, as with Social Security benefits, we might think of indexing tax parameters as an exercise in legislative default rule-setting. If we did not index bracket thresholds for inflation, Congress presumably would intervene at some point in the next 440 years and adjust those parameters itself. The question that indexing addresses is what default rule should prevail absent legislative action. If we are worried about undertaxation by future Congresses, then we might favor no indexation or (a distant next-best) C-CPI-U. If we are worried about the growth of the federal government and adopt a “starve-the-beast” mindset, we might opt for CPI-U or any of a number of other measures, for example, bracket thresholds rise with nominal GDP, bracket thresholds rise 5 percent each year regardless of inflation, and so on. Again, since there is no apparent reason why tax parameters ought to rise with the particular definition of the cost of living that the Törnqvist index seeks to implement, there is no obvious reason why chained CPI ought to take priority over any other index or no index at all. Any such argument will have to be made on terrain other than technical accuracy.

C. “Accuracy” and Indexing Capital Gains

The debate over indexing capital gains is the last refuge of “accuracy” arguments. Supporters say that indexing would “more accurately assess[] the actual increase in a person’s wealth or purchasing power.”⁵⁶ And if the goal is to tax only real—rather than nominal—changes in wealth, then indexing serves a purpose. But it is not at all obvious that our goal should be to tax

⁵⁵ See Kyle Pomerleau, *How Scandinavian Countries Pay for Their Government Spending*, TAX FOUND. (June 10, 2015), <https://taxfoundation.org/how-scandinavian-countries-pay-their-government-spending>.

⁵⁶ PETER J. FERRARA, AM. FOR TAX REFORM, THE LEGAL AUTHORITY OF THE TREASURY DEPARTMENT TO INDEX CAPITAL GAINS FOR INFLATION 8 (2019), <https://www.atr.org/sites/default/files/assets/ATR%20Memo%20-%20The%20Legal%20Authority%20of%20the%20Treasury%20Department%20to%20Index%20-%20Capital%20Gains%20for%20Inflation.pdf>.

only real changes in wealth. Here again, the appeal to “accuracy” substitutes a technical argument for a normative one.

To better understand this point, consider the well-known result in public finance that a mark-to-market income tax approximates a tax on the nominal risk-free return or—alternatively—an annual wealth tax.⁵⁷ That is, a proportionate mark-to-market income tax theoretically exempts risky returns, and so we are left with a tax on the risk-free component (this is a version of the classic Domar-Musgrave result).⁵⁸ A 40 percent mark-to-market income tax when the nominal risk-free return is 5 percent approximates a 2 percent wealth tax.⁵⁹ When the nominal risk-free return rises or falls, the effective annual wealth tax rate rises or falls too.

Seen in this light, indexation simply reduces the effective annual wealth tax. If the rate of inflation is 3 percent, then indexing transforms what was an annual wealth tax of 2 percent (that is, 0.4×0.05) into an annual wealth tax of 0.8 percent (that is, 0.4×0.02).⁶⁰ That, again, may be a good thing if we want a lower wealth tax and a bad thing if we want a higher wealth tax. It is not, however, a question about “accuracy.”

The discussion in the previous two paragraphs elides important qualifications that complicate the capital gains indexing decision. One is that our actual capital income tax is not mark-to-market. Indexing decisions therefore potentially affect “lock-in”⁶¹ whereas a mark-to-

⁵⁷ For an exposition, see generally David A. Weisbach, *The (Non)Taxation of Risk*, 58 TAX L. REV. 1 (2004). A mark-to-market income tax treats all assets as if they were sold at the end of one tax year and repurchased at the beginning of the next.

⁵⁸ See Evsey D. Domar & Richard A. Musgrave, *Proportional Income Taxation and Risk-Taking*, 58 Q.J. ECON. 388 (1944).

⁵⁹ To be more precise, a 40 percent mark-to-market income tax when the risk-free return is 5 percent approximates a 1.9 percent wealth tax. $(1 - 0.019) \times (1.05) \approx 1.03$; $1.05 - 0.4 \times 0.05 = 1.03$.

⁶⁰ Again, we can be slightly more precise. With a 40 percent mark-to-market income tax and a 2 percent real risk-free rate of return, the mark-to-market income tax ($40\% \times 2\% = 0.8\%$) is equivalent to a wealth tax of $0.08/1.05 \approx 7.6\%$.

⁶¹ “Lock-in” refers to circumstances in which an individual holds onto an appreciated asset, even though an alternative investment would be optimal from a non-tax perspective, because she seeks to avoid paying capital gains tax upon sale. See, e.g., Charles C. Holt & John P. Shelton, *The Lock-In Effect of the Capital Gains Tax*, 15 NAT’L TAX J. 337 (1962).

market income tax or annual wealth tax would not. A second is that rates are not flat and losses are not fully deductible, so the classic Domar-Musgrave result does not apply perfectly to the world. The joint determination of the capital income tax rate and the inflation index therefore affects the tax burden on risk—a higher tax rate with indexing burdens risk more than a lower tax rate without indexing. A third qualification concerns the treatment of supernormal returns. If we want to raise the tax burden on supernormal returns relative to the risk-free return—for example, because we think that supernormal returns represent rents—then that would be a reason to raise the capital income tax rate and to index. If we want to reduce the tax burden on supernormal returns relative to the risk-free return—for example, because we think that supernormal returns reflect rewards for innovation that the government ought to amplify—then that would be a reason to reduce the capital income tax rate and not index.⁶² Finally, indexing capital gains but not other elements of the tax code would open the door to arbitrage opportunities, which is one reason why proponents of capital gains indexing generally agree that it ought to apply to interest and related elements of the tax code as well.⁶³ The administrative and compliance costs of complete indexing, though, may be substantial—and sufficient to cause us to call off the whole endeavor. In sum, the choice of whether to index capital gains for inflation is difficult. But it is ultimately a question of policy rather than a matter of measurement.

IV IMPLICATIONS

This Article has focused on the relatively narrow issue of whether and how to index policy parameters for inflation. The central argument is a negative claim: Indexation is *not*—or ought *not*

⁶² See Charles I. Jones, *Taxing Top Incomes in a World of Ideas* (Stan. Graduate Sch. of Bus., Working Paper, 2019), <https://web.stanford.edu/~chadj/toptax.pdf> (arguing that “top income taxation reduces everyone’s income, not just the income at the top”).

⁶³ See Hemel & Kamin, *supra* note 47, at 704-05.

to be—primarily a question of “accuracy.” A fixed weight (Laspeyres or Paasche) price index can be an accurate measure of the change in the price of a fixed basket of goods and services, while a chained (Törnqvist) index can be a best-guess estimate of the change in the price of a given level of consumption utility, though we can never know for sure because we cannot directly observe utilities. These observations don’t help us much, though, in deciding how to adjust policy parameters over time. Those decisions depend on changes in nominal wages, nominal GDP, income inequality, political economy, and redistributive preferences, in addition to inflation.

This discussion (hopefully) helps us better understand the role of macroeconomic measures in the law. By basing year-to-year changes in policy parameters on measures of inflation, lawmakers outsource difficult distributional decisions to the realm of macroeconomics. This is not, though, a situation in which outsourcing leads to satisfactory results. In deciding how much to tax and transfer, we consider—and ought to consider—a range of factors in addition to price levels. Why, then, should price-level changes alone determine changes in how much we tax and transfer?

The decision to outsource distributional decisions is not necessarily borne out of ignorance. The appeal to macroeconomic measures may instead be instrumentally rational for a number of reasons. In some cases, choosing one index over another—or indexation over non-indexation, or vice versa—allows lawmakers to better achieve their distributional goals without necessarily stating their motivations. Relatedly, indexation may serve to reduce lawmakers’ decisional costs or may structure future decisional environments in politically useful ways. Indexation, in other words, may be a strategically valuable tool even if it is a dubious normative basis for policy parameter adjustment.

The analysis here also might suggest that decoupling year-to-year policy parameter changes from inflation can—perhaps surprisingly—create new space for law and macroeconomics

to operate. One reason why we might want to adjust policy parameters year to year is macroeconomic stabilization. We might, for example, want tax rates and transfers to move countercyclically—responding to real growth (or lack thereof) rather than or in addition to price level changes. Loosening the link between policy-parameter changes and inflation may open a discussion about how we think taxes and transfers ought to adjust to new macroeconomic conditions, with price levels being one of many conditions that we could consider.

Finally, a focus on inflation indexing serves as a reminder of the law and macroeconomics movement’s distributive stakes. Indexing policy parameters for inflation—which might at first glance appear to be a technical question of macroeconomic measurement—turns out to be very much a question of who owes what to whom. The law and (micro)economics movement has faced criticism—some of it warranted—for overlooking or sidelining distributional impacts in its analysis.⁶⁴ Law and macroeconomics can learn a lesson from that failure and follow a different course.

⁶⁴ See, e.g., Lee Anne Fennell & Richard H. McAdams, *The Distributive Deficit in Law and Economics*, 100 MINN. L. REV. 1051 (2016); Zachary Liscow, *Is Efficiency Biased?*, 85 U. CHI. L. REV. 1649 (2018).