

## **Intergenerational Equity in Fiscal Policy Reform**

Michael Doran  
University of Virginia  
School of Law

### **Introduction**

One of the most important but most difficult questions we can ask about government fiscal policy is whether it effects fair outcomes for current and future generations. Fiscal policy decisions made today confer benefits and impose burdens on generations not yet born, just as fiscal policy decisions made long ago conferred benefits and imposed burdens on the generations alive today. Previous generations have used government fiscal policy to transfer resources from themselves to their successors and from their successors to themselves; current generations engage in similar intergenerational transfers with future generations when reforming government fiscal policy.

Public debate about government fiscal policy, however, generally does not address intergenerational issues with the precision and rigor that typically characterize debate about intragenerational issues. Articulated concerns about intergenerational equity in this setting rarely advance beyond vague admonitions against “bankrupting our children’s future.” This follows in part from a general uncertainty, among policymakers and others, about how to engage the underlying questions. By contrast, public debate does incorporate formal evaluations of how fiscal policy promotes or undermines fairness among members of current generations. We regularly scrutinize tax, appropriations, and entitlement decisions to determine whether particular groups enjoy undue advantages or suffer undue disadvantages. Though we may hold markedly diverse views of what constitutes fairness, we share a broad consensus about the importance of pursuing fairness in the intragenerational distribution of wealth.

Academics have taken seriously the idea that proper evaluation of fiscal policy requires a rigorous assessment of intergenerational equity. In recent years, public-

finance economists have developed and refined formal models for measuring the intergenerational effects of fiscal policy; most prominent among these are “fiscal-gap accounting” and “generational accounting.”<sup>1</sup> Additionally, economists and lawyers have addressed the associated normative questions.<sup>2</sup> The stated objective of these inquiries is to provide the foundation for fiscal policy decisions that effect fair outcomes for current and future generations.

Contrary to the prevailing position of the economics and legal literatures, this paper argues for skepticism on the matter of intergenerational equity in government fiscal policy. More specifically, this paper argues that attempts to make either analytic or normative assessments of the intergenerational effects of fiscal policy are misguided. Government fiscal policy constitutes only one medium through which current generations benefit or burden future generations; other governmental and non-governmental activities complement or offset the intergenerational distribution of benefits and burdens determined by fiscal policy. Quantitative measurements and normative judgments about the intergenerational effects of government fiscal policy are incomplete and misleading; in their current state, they should not guide the making of government policy. Rather, the question of intergenerational equity must be understood as a difficult and unresolved problem of political and moral philosophy. This implies that, at present, even conscientious policymakers cannot incorporate notions of intergenerational equity into the resolution of specific fiscal policy questions in any rigorous or meaningful way.

Part I examines the federal social security program in order to ground the arguments developed in this paper. The social security program has long been understood as a paradigmatic case of government fiscal policy affecting the intergenerational redistribution of wealth. The program already has transferred trillions of dollars from later program participants to early program participants, and its

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<sup>1</sup> See Part II.A, *infra*.

<sup>2</sup> See Part III.A, *infra*.

impending financial insolvency inevitably will cause further transfers among current and future generations. Thus, the social security program ostensibly provides a compelling example of the place of intergenerational equity in government fiscal policy.

Part II and Part III, however, question the basic project of evaluating social security or any other aspect of government fiscal policy in this manner. Part II considers the best existing measures of the intergenerational effects of fiscal policy. As argued there, these measures simply do not provide a sufficient account of how fiscal policy distributes benefits and burdens across generations, and the partial account that they do provide yields unreliable results. More importantly, attempts to quantify the intergenerational effects of fiscal policy encounter basic framing problems. These measures require the construction of hard but arbitrary boundaries between different aspects of government fiscal policy, between fiscal policy and other segments of government policy, and between government activity and non-governmental activity. Outcomes that might appear inequitable when considered only as a matter of fiscal policy can appear entirely defensible when considered against the background of government policy as a whole; those same outcomes might appear again inequitable when considered against the entire intergenerational distribution of benefits and burdens resulting from all governmental and non-governmental activity. These framing problems indicate the absence of non-arbitrary parameters with which to evaluate the intergenerational equity or inequity of specific fiscal policy choices and outcomes.

Part III takes up the substantive content of intergenerational equity in fiscal policy. This part reviews several specific normative accounts from the economics and legal literatures, all of which necessarily encounter the same framing problems that undermine attempts to measure the intergenerational effects of fiscal policy. This part locates the question of intergenerational equity as a matter of political and moral philosophy and reviews several general accounts of intergenerational justice from the philosophical literature. Those accounts have yet to establish a consensus even on such basic questions as whether intergenerational justice requires that current generations save for the benefit of future generations. Formulating a persuasive normative account

of intergenerational equity in a manner that can inform government policy generally (to say nothing of government fiscal policy specifically) remains an open project. Finally, this part briefly considers arguments that the hard questions of intergenerational equity in fiscal policy could be resolved exclusively through the political process.

Thus, the position developed in this paper is fundamentally skeptical about the pursuit of intergenerational equity in government fiscal policy. We are not able to measure the intergenerational effects of fiscal policy without using arbitrary analytic frames, and we do not have a shared normative account of intergenerational equity. However appealing in the abstract may be the notion that taxation and spending should treat current and future generations fairly, intergenerational equity does not, at least for now, constitute a realistic goal of government fiscal policy.

## **I. Intergenerational Redistribution under Social Security**

Governmental decisions about how and when and whom to tax and how and when and for whom to spend have effects that span generations. Consider the decision in 1935 to establish social security<sup>3</sup> as a federal program of “social insurance,” the decision in 1939 to expand the program and to operate it on an unfunded basis, and the repeated decisions over the following four decades to expand the program still further.<sup>4</sup> The program benefits paid to early participants exceeded – in many cases, far exceeded – the economic value of their program contributions, and the program thus effected a redistribution of wealth from later participants to early participants. In present value, that intergenerational transfer amounts to approximately \$13 trillion.

Policymakers interested in assessing the intergenerational equity of the social security program would want to know what justified these decisions made in the 1930s

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<sup>3</sup> Throughout this paper, the term “social security” will refer specifically to the program of Old-Age, Survivors, and Disability Insurance set forth in Title II of the Social Security Act, 42 U.S.C. 301 et seq.

<sup>4</sup> See generally, W. Andrew Achenbaum, *Social Security: Visions and Revisions* (1986) and Martha Derthick, *Policymaking for Social Security* (1979).

and in subsequent decades to impose net program burdens on the young and unborn (who, at that time, were unable to participate in the political process) for the benefit of the middle-aged and elderly. Similarly, those policymakers, as they consider possible program reform, would want to understand the obligations of current program participants to the remaining early program participants and to future program participants. To set social security up as a focal point for these questions, Part I.A. provides a general overview of the program.<sup>5</sup> Parts I.B and I.C. then examine the past and future intergenerational effects of social security.

#### A. Overview of the Current Social Security Program

Social security – the federal government’s largest program for redistributing wealth<sup>6</sup> – provides retirement, survivor, and disability benefits to 49 million participants and their beneficiaries.<sup>7</sup> The taxes that finance social security comprise employment taxes levied on the earnings of most employed and self-employed individuals and income taxes levied on the benefits of certain program participants.<sup>8</sup> Employees and their employers pay a combined tax equal to 12.4 percent of the employees’ earnings.<sup>9</sup> Although the tax nominally is imposed separately on employees and employers,

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<sup>5</sup> Part I.A omits many details, qualifications, and complexities of the social security program.

<sup>6</sup> Congressional Budget Office, “The Long-Term Budget Outlook” 19 (2005); C. Eugene Steuerle and Jon M. Bakija, *Retooling Social Security for the 21st Century: Right and Wrong Approaches to Reform* 91 (1994).

<sup>7</sup> The Board of Trustees, Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds, *The 2007 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*, H.Doc. 110-30, 110th Cong., 1st Sess. 2 (2007).

<sup>8</sup> Congress has provided specific exemptions from social security coverage for certain individuals and specific exemptions from taxation for certain types of earnings. See 26 U.S.C. 3121, 26 U.S.C. 1402, and 42 U.S.C. 409 through 411.

<sup>9</sup> 26 U.S.C. 3101(a) (tax on wages paid to employee); 26 U.S.C. 3111(a) (tax on wages paid by employer).

employees likely bear the full cost of the tax through lower wages.<sup>10</sup> Self-employed individuals pay a tax equal to 12.4 percent of earnings.<sup>11</sup> In all cases, earnings are taxed only up to a maximum amount set by statute.<sup>12</sup> Additionally, participants with moderate income from sources other than social security must pay federal income tax on part of their program benefits.<sup>13</sup> Thus, social security is financed through a proportional – and notably regressive<sup>14</sup> – tax on earnings and a moderately progressive – although comparatively insignificant<sup>15</sup> – tax on benefits.

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<sup>10</sup> Peter A. Diamond and Peter R. Orszag, *Saving Social Security: A Balanced Approach* 24.

<sup>11</sup> 26 U.S.C. 1401(a). One-half of the 12.4 percent tax paid by the self-employed individual is deductible for purposes of the federal income tax. 26 U.S.C. 164(f). The deduction makes the effective tax rate on the self-employed individual just under 12 percent. The exclusion of the employer's share of the 12.4 percent tax from an employee's income makes the effective tax rate on the employee just under 12 percent. See Daniel Shaviro, *Making Sense of Social Security Reform* 11.

<sup>12</sup> 26 U.S.C. 3121(a)(1) (cross-referencing "contribution and benefit base" set out in section 230 of the Social Security Act); 26 U.S.C. 1402(b)(1) (same). The maximum taxable amount for 2007 is \$97,500. A separate tax equal to 2.9 percent is imposed on all earnings, without limitation, to finance the medicare program. As with the 12.4 percent tax that finances social security, one-half of the 2.9 percent tax nominally is imposed on the employee, 26 U.S.C. 3101(b), and one-half nominally is imposed on the employer, 26 U.S.C. 3111(b); a self-employed individual bears the full 2.9 percent tax, 26 U.S.C. 1401(b), subject to a federal income tax deduction for one-half of the tax, 26 U.S.C. 164(f).

<sup>13</sup> Up to 50 percent of social security benefit payments become includible in gross income if the sum of the individual's (or married couple's) modified adjusted gross income and one-half of the individual's (or married couple's) social security benefits exceeds \$25,000 (or \$32,000 in the case of a married couple). 26 U.S.C. 86. Although up to 85 percent of benefit payments are includible for individuals (or married couples) with higher incomes, *id.*, that additional inclusion is dedicated to the medicare program. Section 121(e) of the Social Security Amendments of 1983, Pub. L. 98-21. Separately, a portion of social security benefit payments received by a nonresident alien is includible in gross income (subject to contrary treatment under a bilateral tax treaty). 26 U.S.C. 871(a)(3). Because the income thresholds for taxation of benefits are not indexed for inflation, the number of participants who must pay income taxes on their benefits – and who therefore receive smaller net benefits – increases over time. See generally Congressional Research Service, "Social Security: Calculation and History of Taxing Benefits" (2007).

<sup>14</sup> Shaviro, *supra* n.\_\_\_\_, at 12; Steuerle and Bakija, *supra* n.\_\_\_\_, at 75.

<sup>15</sup> The 2006 revenues from the taxation of benefits constituted only two percent of total program. Trustees, *supra* n.\_\_\_\_, at 4.

The federal government accounts for these taxes through two trust funds – one for retirement and survivor benefits and one for disability benefits.<sup>16</sup> The trust funds, which consist of accounting entries on the general books of the United States Treasury,<sup>17</sup> serve as the only source of benefit payments under the social security program.<sup>18</sup> Amounts credited to the trust funds in excess of current obligations are used to acquire Treasury securities, of varying maturities and interest rates, that are backed by the full faith and credit of the United States.<sup>19</sup> Interest and redemption proceeds from the securities are used for program obligations or are reinvested in additional Treasury

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<sup>16</sup> 42 U.S.C. 401(a) (creating the Federal Old-Age and Survivors Insurance Trust Fund and appropriating employment tax revenues to that fund); 42 U.S.C. 401(b) (creating the Federal Disability Insurance Trust Fund and appropriating employment tax revenues to that fund); Section 121(e) of the Social Security Amendments of 1983, Pub. L. 98-21 (appropriating income tax revenues under 26 U.S.C. 86 and 26 U.S.C. 871(a)(3) to the trust funds). See generally Congressional Research Service, “Social Security: The Trust Fund” (2007).

<sup>17</sup> Although they do not hold assets separate and apart from the other assets of the United States Treasury, the trust funds do measure the capacity of the social security program to make benefit payments as they become due. See generally Shaviro, *supra* n.\_\_\_\_, at 88-90. As with benefit payments, the administrative costs of social security are charged against the trust funds. 42 U.S.C. 401(g).

<sup>18</sup> 42 U.S.C. 401(h) (providing that retirement and survivor benefit payments “shall be made only from the Federal Old-Age and Survivors Insurance Trust Fund” and that disability benefit payments “shall be made only from the Federal Disability Insurance Trust Fund”). In other words, there is no legal authority to make benefit payments from any amounts other than those credited to the trust funds. The Antideficiency Act, 31 U.S.C. 1341, prohibits any officer or employee of the federal government from making or authorizing any expenditure or obligation that exceeds the amount available through an appropriation or fund. Some have argued that, in the event of trust fund exhaustion, participants would have a cause of action against the government for unpaid benefits. See generally Congressional Research Service, “Social Security: What Would Happen if the Trust Funds Ran Out?” (2006). That point is interesting but irrelevant: because the courts lack constitutional authority to make federal appropriations, a court judgment that a participant is entitled to full benefits would be pointless absent an additional appropriation by Congress. See generally Thomas J. Nicola, “Whether Entitlement to Full Social Security Benefits Depends on Solvency of the Social Security Trust Funds If Congress Does Not Change the Law,” Congressional Research Service Memorandum (1998), in *Hearings Before the Task Force on Social Security of the Committee on the Budget, House of Representatives*, 106th Cong., 1st Sess. 223-8 (1999).

<sup>19</sup> 42 U.S.C. 401(d).

securities.<sup>20</sup> In this manner, the federal government each year uses excess social security revenues to finance other governmental operations; in exchange, the trust funds receive an interest-adjusted claim on general government revenues.

Through the payment of cash benefits to program participants and their beneficiaries, social security mitigates the risk that retirement, death, or disability will result in reduced income. Retirement benefits are determined as a function of the participant's earnings under a progressive benefit formula.<sup>21</sup> These benefits, which are payable both to the participant and to the participant's spouse,<sup>22</sup> are actuarially adjusted for early or late commencement<sup>23</sup> and are indexed for changes in the cost of living.<sup>24</sup>

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<sup>20</sup> 42 U.S.C. 401(f).

<sup>21</sup> Social security benefits are determined by reference to a participant's "primary insurance amount" ("PIA"). 42 U.S.C. 415(a). The PIA, in turn, is determined by reference to the participant's "averaged indexed monthly earnings" ("AIME"). 42 U.S.C. 415(b). AIME are the average of the participant's indexed monthly earnings (up to the maximum amount subject to employment taxes) for her 35 years of highest earnings. *Id.* See also Diamond and Orszag, *supra* n. \_\_\_\_, at 18; Steuerle and Bakija, *supra* n. \_\_\_\_, at 76. The participant's AIME are run through a rate schedule to determine her PIA. 42 U.S.C. 415(a). Under that schedule, the participant's PIA is the sum of the following: (1) 90 percent of AIME up to the first bend point (for 2007, \$680); (2) 32 percent of AIME between the first bend point and the second bend point (for 2007, \$680 and \$4,100); and (3) 15 percent of any additional AIME. Donna A. Clements and Robert J. Myers, *2007 Guide to Social Security and Medicare* 62 (2007). As with earnings, the bend points are indexed for wage growth. 42 U.S.C. 415(a). See also Steuerle and Bakija, *supra* n. \_\_\_\_, at 78. In December 2006, the average annual retirement benefit under the program was \$12,533. Congressional Research Service, *supra* n. \_\_\_\_, at 3 n.6.

<sup>22</sup> A participant's spouse is eligible to receive a monthly benefit, payable for the spouse's life, equal to the greater of 50 percent of the participant's PIA (subject to actuarial reduction for early commencement of payments) or the monthly retirement benefit earned by the spouse through the spouse's own earnings. 42 U.S.C. 402(b) (wife's benefits) and 42 U.S.C. 402(c) (husband's benefits). For many married couples, the 50-percent spousal benefit is the larger amount, and the spouse earns no additional benefit through the spouse's own work. Shaviro, *supra* n. \_\_\_\_, at 18-9. The minor or disabled child of a participant who has begun to receive retirement benefits is also eligible for benefit payments equal to 50 percent of the participant's PIA. 42 U.S.C. 402(d). Aggregate benefit payments to a family based on the earnings of a single participant are subject to an overall cap. 42 U.S.C. 403(a). See also Steuerle and Bakija, *supra* n. \_\_\_\_, at 81.

<sup>23</sup> A participant credited with at least 40 quarters of work qualifies for retirement benefits under the program. 42 U.S.C. 414. The participant will receive her PIA as a monthly benefit, payable for life, if she elects to begin receiving benefits at her full retirement age. 42 U.S.C. 402(a). The

Survivor and disability benefits generally are determined under modified versions of the benefit formula used for retirement benefits.<sup>25</sup> As a formal matter, the retirement, survivor, and disability benefits are all contingent on the will of the legislature. Congress specifically reserves the power to amend the terms of these benefits,<sup>26</sup> and the Supreme Court has held that that statutory commitment to pay program benefits does not create a right protected by the Due Process Clause of the Fifth Amendment.<sup>27</sup> Thus, Congress at any time may exercise its prerogative to reduce or eliminate the program benefits it has promised to pay.<sup>28</sup>

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full retirement age is currently a moving target – age 65 for participants born before 1938 but non-monotonically increasing to age 67 for participants born after 1959. 42 U.S.C. 416(l). See also Diamond and Orszag, *supra* n. \_\_\_\_, at 20. The participant may elect instead to begin receiving benefits as early as age 62 or as late as age 70. In either case, her PIA will be adjusted (downward if benefits begin early, 42 U.S.C. 402(q) and upward if benefits begin late, 42 U.S.C. 402(w)) such that the overall expected stream of benefits remains actuarially equivalent to the stream that would have been payable at her full retirement age. See also Diamond and Orszag, *supra* n. \_\_\_\_, at 20-1. A “retirement test” further reduces the benefits payable to a participant before full retirement age if the participant has even a modest level of earned income. 42 U.S.C. 403(b).

<sup>24</sup> 42 U.S.C. 415(i). See also Diamond and Orszag, *supra* n. \_\_\_\_, at 19.

<sup>25</sup> Survivor benefits consist of a single-sum payment of \$155, 42 U.S.C. 402(i), and monthly benefit payments determined on the basis of a deceased participant’s PIA; the benefits are payable to the deceased participant’s surviving spouse, 42 U.S.C. 402(e) through (g), minor or disabled child, 42 U.S.C. 402(d), and dependent parent, 42 U.S.C. 402(h). Disability benefits equal to a participant’s PIA are payable if she becomes disabled prior to reaching full retirement age. 42 U.S.C. 423. See also Diamond and Orszag, *supra* n. \_\_\_\_, at 21-2. A disabled participant’s spouse and minor or disabled child also receive monthly benefit payments. 42 U.S.C. 402(b) through (d). Both the survivor and disability benefits are indexed to changes in the cost of living, 42 U.S.C. 415(i), and are subject to per family limits, 42 U.S.C. 403(a).

<sup>26</sup> 42 U.S.C. 1304 (providing that “[t]he right to alter, amend, or repeal any provision of [the Social Security] Act is hereby reserved to the Congress”).

<sup>27</sup> *Fleming v. Nestor*, 363 U.S. 603 (1960) (rejecting challenge to forfeiture of social security benefits under 42 U.S.C. 402(n) brought by participant deported for membership in Communist Party).

<sup>28</sup> Although legislative changes to social security generally have increased benefit levels, revisions to the Social Security Act in 1977 and 1983 significantly reduced promised benefits.

A principal objective of social security is the progressive redistribution of wealth.<sup>29</sup> Although the employment taxes that provide most of the program's funding are regressive, benefits are calculated under a progressive formula. The benefit structure produces higher benefits, in absolute terms, for higher lifetime earnings, but it also produces higher benefits, in relative terms, for lower lifetime earnings. The formula thus results in higher replacement rates for lower earners than for medium or higher earners<sup>30</sup> and, similarly, a higher ratio of lifetime benefits to lifetime taxes for lower earners than for medium or higher earners.<sup>31</sup> However, much of the progressivity of the program derives from disability, survivor, and dependent benefits.<sup>32</sup> Higher mortality rates for lower earners effectively reverse part of the progressivity of the benefit formula; lower earners on the whole do not live as long as medium and higher earners and, therefore, receive retirement benefit payments for shorter periods.<sup>33</sup>

The social security program also redistributes wealth on other bases – including marital status, gender, and race. The spousal benefit, which transfers wealth from unmarried individuals to married couples, is one of the most significant contributors to this redistribution.<sup>34</sup> A non-working spouse becomes eligible for benefits solely by virtue of marriage to a working participant, but the working participant pays no

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<sup>29</sup> Diamond and Orszag, supra n. \_\_\_\_, at 16-7; Shaviro, supra n. \_\_\_\_, at 15. But see Steuerle and Bakija, supra n. \_\_\_\_, at 108-12.

<sup>30</sup> Alicia H. Munnell and Mauricio Soto, "What Replacement Rates Do Households Actually Experience in Retirement?" Center for Retirement Research Working Paper 2005-10 at 7-14 and 30-3 (2005); Steuerle and Bakija, supra n. \_\_\_\_, at 96. One in three elderly participants depends on social security for almost all her retirement income, and on in five has no other source of retirement income. Diamond and Orszag, supra n. \_\_\_\_, at 15.

<sup>31</sup> Congressional Budget Office, supra n. \_\_\_\_, at 3.

<sup>32</sup> Congressional Budget Office, "Is Social Security Progressive?" at 4 (2006).

<sup>33</sup> Congressional Budget Office, supra n. \_\_\_\_, at 5-7.

<sup>34</sup> Steuerle and Bakija, supra n. \_\_\_\_, at 102 and 112-3; Shaviro, supra n. \_\_\_\_, at 18-9; Leanne Abdnor, "Social Security Choices for the 21st-Century Woman," in Michael D. Tanner (ed.) *Social Security and Its Discontents* 117-21(2004).

additional taxes for these benefits. As critics have noted, the spousal benefit provides a substantial work disincentive to the non-working spouse because any earnings of the non-working spouse typically do not produce additional benefits.<sup>35</sup> Although social security nominally does not distinguish among participants on the basis of gender or race, differences in life expectancies that correlate with gender and race make lifetime benefits more valuable for certain participants than for others. Specifically, the longer life expectancies of women and of whites generally effect redistribution from men to women and – at least on certain accounts – from non-whites to whites.<sup>36</sup>

#### B. Intergenerational Effects of the Past and Current Social Security Program

The social security program initially did not provide for significant intergenerational redistribution, but legislative revisions from 1939 through 1977 conferred benefits on early program participants that substantially exceeded the economic value of their contributions. The result has been a net transfer of approximately \$13 trillion in windfall benefits from program participants born after 1937 to program participants born before 1938.<sup>37</sup> Many early participants who received those windfall benefits are now dead; many participants who will fund those windfall benefits have not yet been born.

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<sup>35</sup> Shaviro, *supra* n. \_\_\_\_, at 18-9; Jennifer Attrep, “Women and Social Security: Eliminating the Disincentive to Work” 8-15 (2006) (unpublished manuscript on file with author).

<sup>36</sup> Compare Steuerle and Bakija, *supra* n. \_\_\_\_, at 115-9 with Julia Lynn Coronado, Don Fullerton, and Thomas Glass, “Distributional Impacts of Proposed Changes to the Social Security System,” in James M. Poterba (ed.) *13 Tax Policy and the Economy* 168-71 (1999). The claim made by some analysts that social security redistributes from non-whites to whites is controversial. For arguments that such redistribution occurs, see, e.g., Michael D. Hurd and John B. Shoven, “The Distribution Impact of Social Security,” in David A. Wise (ed.), *Pensions, Labor, and Individual Choice* 198 and 212 (1985) and Peter J. Ferrara and Michael Tanner, *A New Deal for Social Security* 101-2 (1998). For contrary arguments, see, e.g., Dean R. Leimer, “Historical Redistribution Under the Social Security Old-Age and Survivors Insurance Program,” Social Security Administration, Office of Research, Evaluation, and Statistics Working Paper No. 101 at 21-3, 28-9, and 33 (2003).

<sup>37</sup> See *infra* at n. \_\_\_\_.

The original program, which Congress established in 1935 through the Social Security Act,<sup>38</sup> provided that participants would make substantial tax contributions before they first became eligible for benefits.<sup>39</sup> Tax collections were to begin in 1937, but benefit payments would not begin until 1942.<sup>40</sup> The Social Security Act required substantial pre-funding of benefits;<sup>41</sup> in this, Congress followed the lead of President Roosevelt who personally insisted that the program accumulate reserves in its early years to meet benefit obligations in the future.<sup>42</sup> However, the pre-funding requirement drew criticism from both the political left, which objected to the modest benefits,<sup>43</sup> and the political right, which objected to the accumulation of large sums under government control.<sup>44</sup> To check this bilateral attack, the Roosevelt Administration abandoned the principle of pre-funding and recommended legislation that put social security on an

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<sup>38</sup> Pub. L. 74-271.

<sup>39</sup> For excellent histories of the Social Security Act and of the social security program, see Achenbaum, *supra* n.\_\_\_\_, and Derthick, *supra* n.\_\_\_\_. Notably more partisan accounts are set out in Ferrara and Tanner, *supra* n.\_\_\_\_, and Nancy J. Altman, *The Battle for Social Security: From FDR's Vision to Bush's Gamble* (2005). For additional accounts of the original legislation and institutional development of the program, see generally Edward D. Berkowitz, *Robert Ball and the Politics of Social Security* (2003); Jerry R. Cates, *Insuring Inequality: Administrative Leadership in Social Security, 1935-54* (1983); Charles McKinley and Robert W. Frase, *Launching Social Security: A Capture-and-Record Account, 1935-1937* (1970); J. Douglas Brown, *The Genesis of Social Security in America* (1969); Arthur J. Altmeyer, *The Formative Years of Social Security* (1966); Edwin E. Witte, *The Development of the Social Security Act* (1962); and Wilbur J. Cohen, *Retirement Policies under Social Security* (1957).

<sup>40</sup> Derthick, *supra* n.\_\_\_\_, at 213-4 and 429.

<sup>41</sup> Derthick, *supra* n.\_\_\_\_, at 160-1.

<sup>42</sup> Derthick, *supra* n.\_\_\_\_, at 160 and 229-30; Witte, *supra* n.\_\_\_\_, at 74 and 149-51. Within the Roosevelt Administration, Treasury Secretary Henry Morgenthau had insisted upon the establishment of reserve funds under the program. Derthick, *supra* n.\_\_\_\_, at 143 and 160; Altmeyer, *supra* n.\_\_\_\_, at 28-9.

<sup>43</sup> Achenbaum, *supra* n.\_\_\_\_, at 30.

<sup>44</sup> Achenbaum, *supra* n.\_\_\_\_, at 30; Derthick, *supra* n.\_\_\_\_, at 90-1 and 143; Altmeyer, *supra* n.\_\_\_\_, at 88-9. The reserve fund was expected to accumulate to \$47 billion by 1980. Derthick, *supra* n.\_\_\_\_, at 232-3; Altmeyer, *supra* n.\_\_\_\_, at 89.

unfunded (or “pay-as-you-go”) basis.<sup>45</sup> Congress adopted the proposal, and the Social Security Act Amendments of 1939<sup>46</sup> spent down the substantial anticipated reserves, before they had accumulated, by making benefits considerably more generous for early program participants.<sup>47</sup> Specifically, Congress added benefits for the spouses and dependents of retired participants and for the survivors of deceased participants, amended the benefit formula to increase benefits for many early participants, deferred an increase in employment taxes, and accelerated the payment of the first program benefits from 1942 to 1940.<sup>48</sup>

Over the next four decades, legislation pushed the program further down the path of the 1939 amendments. Congress expanded program benefits throughout the 1950s, 1960s, and early 1970s;<sup>49</sup> in some cases, these benefit expansions were very substantial. Not until legislation enacted in 1977 and 1983 did Congress significantly reduce program benefits.<sup>50</sup> Although Congress also expanded program coverage and

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<sup>45</sup> Derthick, *supra* n.\_\_\_\_, at 160-1. Arguments for the *volte-face* are set out in a September 11, 1937 memorandum from Arthur Altmeyer (then Chairman of the Social Security Board) to President Roosevelt, reprinted in Altmeyer, *supra* n.\_\_\_\_, at 295-7.

<sup>46</sup> Pub. L. 76-379.

<sup>47</sup> Achenbaum, *supra* n.\_\_\_\_, at 3 and 32. As Martha Derthick notes, the effect of the legislation was not to lower the cost of the program but to redistribute benefits to earlier participants. Derthick, *supra* n.\_\_\_\_, at 236.

<sup>48</sup> Achenbaum, *supra* n.\_\_\_\_, at 32-3; Derthick, *supra* n.\_\_\_\_, at 47, 214, and 429.

<sup>49</sup> Achenbaum, *supra* n.\_\_\_\_, at 38-60. See the Social Security Act Amendments of 1950, Pub. L. 81-734; the Social Security Act Amendments of 1952, Pub. L. 82-590; the Social Security Amendments of 1952, Pub. L. 83-761; the Social Security Amendments of 1956, Pub. L. 84-880; the Social Security Amendments of 1958, Pub. L. 85-840; the Social Security Amendments of 1960, Pub. L. 86-778; the Social Security Amendments of 1961, Pub. L. 87-64; the Social Security Amendments of 1965, Pub. L. 89-97; the Tax Adjustment Act of 1966, Pub. L. 89-368; the Social Security Amendments of 1967, Pub. L. 90-248; the Tax Reform Act of 1969, Pub. L. 91-172; Pub. L. 92-336; the Social Security Amendments of 1972, Pub. L. 92-603; and Pub. L. 93-233. For a summary of these acts, see Derthick, *supra* n.\_\_\_\_, at 429-32.

<sup>50</sup> Achenbaum, *supra* n.\_\_\_\_ at 67-74 and 81-99. See the Social Security Amendments of 1977, Pub. L. 95-216, and the Social Security Amendments of 1983, Pub. L. 98-21. For a history of the 1977 legislation, see Derthick, *supra* n.\_\_\_\_, at 381-411; for a history of the 1983 legislation, see

financing throughout the program's first four decades, the thrust of its actions consistently was to confer greater program benefits on participants who were already retired or who were nearing retirement and, correspondingly, to impose greater program burdens on participants who were still young or not yet born. Surplus tax revenues collected since 1983 have resulted in modest pre-funding of benefit obligations, but the social security program still retains its essentially unfunded character.

The consequence of maintaining an unfunded program that provided net transfers to early participants was the accumulation of an implicit debt; and the consequence of accumulating this implicit debt was the redistribution of wealth across generations.<sup>51</sup> Because benefits paid out of the program are financed only by taxes paid into the program and interest on those taxes, social security functions as a set of zero-sum transactions.<sup>52</sup> If any group receives benefits that exceed the economic value of its contributions,<sup>53</sup> a second group must receive benefits that fall short of the economic value of its contributions by an amount equal to the excess benefits received by the first group. Thus, a net transfer of \$X to the first group of program participants must be paid for by a later group of program participants. If the second group does not bear the cost,

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Paul Light, *Artful Work: The Politics of Social Security Reform* (1985). The 1977 legislation was promoted as a "stabilization" of benefits, Derthick, *supra* n.\_\_\_\_, at 403, even though it reduced benefits for many program participants.

<sup>51</sup> Congressional Budget Office, "The Outlook for Social Security" 18 (2004). See generally Peter A. Diamond, *Social Security Reform* 65-6 (2002); Michael J. Boskin, Laurence J. Kotlikoff, Douglas J. Puffert, and John B. Shoven, "Social Security: A Financial Appraisal Across and Within Generations," 40 *Nat'l Tax J.* 19, 22-6 (1987). Although the program debt is an implicit debt rather than an explicit debt, there is not much reason to think that default on the program debt would be any more likely than would be default on an explicit debt. John Geanakoplos, Olivia S. Mitchell, and Stephen P. Zeldes, "Would a Privatized Social Security System Really Pay a Higher Rate of Return?" in R. Douglas Arnold, Michael J. Graetz, and Alicia H. Munnell (eds.), *Framing the Social Security Debate: Values, Politics, and Economics* 139 (1998).

<sup>52</sup> Sylvester J. Schieber and John B. Shoven, *The Real Deal: The History and Future of Social Security* 112-3 (1999).

<sup>53</sup> The "economic value" of a contribution is the contribution as adjusted for a market rate of interest.

it will be passed forward to the third group; if the third group does not bear the cost, it continues to pass forward to succeeding groups. As with any debt, the cost to whichever group pays for the \$X transfer to the first group will be the original \$X plus interest for the intervening period.<sup>54</sup> But because the net transfer to the first group has been made, the question is not whether but by whom it will be borne.<sup>55</sup>

The expansions of the social security program that began in 1939 and continued until 1977 effected precisely this result. Under the 1939 legislation, social security immediately began to pay windfall benefits to early participants. Subsequent legislation through the 1970s both increased the amount of these windfall benefits and broadened the size of the group that received them.<sup>56</sup> This provided early participants with high rates of return under the program.<sup>57</sup> The cohort born in 1880, which reached age 65 in 1945, experienced a 25-percent rate of return on the taxes it paid into social security; the cohort born in 1890, which reached age 65 in 1955, experienced an 18-percent rate of return on its taxes; and the cohort born in 1900, which reached age 65 in 1965, experienced a 12-percent rate of return on its taxes.<sup>58</sup> As Dean Leimer notes: “The large

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<sup>54</sup> As part of the implicit debt, the interest cost of servicing the principal amount of the debt could be borne by each group or, like the original principal itself, could be passed on to succeeding groups.

<sup>55</sup> Diamond and Orszag, *supra* n.\_\_\_\_, at 4 (“[O]nce that debt is determined, its cost cannot be avoided: the only issue is how we finance that cost across different generations.”) For a demonstration of how a pay-as-you-go system necessarily results in the accumulation of an implicit debt and how the accumulation of an implicit debt necessarily results in declining rates of return across generations, see John Geanakoplos, Olivia S. Mitchell, and Stephen P. Zeldes, “Social Security Money’s Worth,” National Bureau of Economic Research Working Paper 2267, at 83-100 (1999).

<sup>56</sup> Diamond and Orszag, *supra* n.\_\_\_\_, at 37; Steuerle and Bakija, *supra* n.\_\_\_\_, at 108.

<sup>57</sup> “The internal rate of return . . . is defined as the interest rate that equates the present value of taxes paid to the system and the present value of benefits received, by cohort.” Geanakoplos, Mitchell, and Zeldes, *supra* n.\_\_\_\_, at 142 n.24.

<sup>58</sup> Dean Leimer, “Cohort-Specific Measures of Lifetime Net Social Security Transfers,” Social Security Administration Office of Research and Statistics Working Paper Series Number 59, at 16 (1994). It should be noted that these rates of return are real rates of return, that they have been

rates of return received by these cohorts reflect the natural result of a pay-as-you-go social insurance program, where early cohorts pay taxes over little, if any, of their working lives, but receive benefits over a full retirement period.”<sup>59</sup> In some cases, program benefits were sufficiently large to effect a full refund not only of their lifetime employment taxes, with interest, but also their lifetime federal income taxes.<sup>60</sup>

The cash for the windfall benefits paid to early program participants was provided by participants who were then actively working and paying employment taxes but who were also accruing benefit claims in their own right. Once those later participants became eligible for benefits, their benefit payments in turn were covered by taxes imposed on their own successors. As the system has moved forward, each participant has received the benefits that she has been promised, but the cost of the windfall benefits to the early participants has never been paid off;<sup>61</sup> it has, in fact, only increased through continued expansion of the program and through accumulating interest.<sup>62</sup> As of 2007, the unpaid cost of the implicit debt attributable to early program participants stands at approximately \$13 trillion.<sup>63</sup>

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calculated only as to the old-age and survivors insurance component of the social security program, and that the values presented in the text have been rounded.

<sup>59</sup> Leimer, *supra* n.\_\_\_\_, at 17-8. See also Dean R. Leimer, “A Guide to Social Security Money’s Worth Issues,” 58 Soc. Sec. Bull. 3, 10-12 (1995).

<sup>60</sup> Steuerle and Bakija, *supra* n.\_\_\_\_, at 113.

<sup>61</sup> Schieber and Shoven argue that the low ratio of beneficiaries to active workers during this era facilitated benefit expansion precisely because the active workers would not experience the full burden of the increased benefit obligations. Schieber and Shoven, *supra* n.\_\_\_\_, at 96-7. Similarly, Derthick argues that the fact that “[n]early all of the early participants have later received far more than they had paid in taxes” reinforced political inclinations toward program expansion. Derthick, *supra* n.\_\_\_\_, at 6 and 8.

<sup>62</sup> Leimer, *supra* n.\_\_\_\_, at 43.

<sup>63</sup> See Diamond and Orszag, *supra* n.\_\_\_\_, at 72 (estimating implicit debt at \$11.6 trillion as of 2004); Geanakoplos, Mitchell, and Zeldes, *supra* n.\_\_\_\_, at 107-9 (estimating implicit debt at \$9.7 trillion as of 1997). Adjusting those estimates by the consumer price index for the intervening

Reasonable estimates put the turning point from net transfers out of the program to net transfers into the program with the cohort born in 1938.<sup>64</sup> Preceding cohorts received more than the economic value of their taxes, but the 1938 and succeeding cohorts have received and will receive less than the economic value of their taxes.<sup>65</sup> Thus, as compared to the 25-percent rate of return enjoyed by the 1880 cohort, the 1938 cohort will have a rate of return of less than 3 percent.<sup>66</sup> The cohort born in 1960 is projected to receive a 1.84-percent rate of return, and the cohort born in 1990 is projected to receive only a 1.80-percent rate of return – or about one-tenth the rate of return of the participants born 100 years earlier.<sup>67</sup> For cohorts born in the future, the program rates of return flatten out at just above 1.7 percent.<sup>68</sup> To put the point in different terms, for program participants born after the Second World War, 33 cents of every dollar in employment taxes finance their own social security benefits (assuming growth at a market rate of return); the remaining 67 cents represents a pure tax to fund the transfers made to earlier participants.<sup>69</sup> Through their below-market rates of return, program participants born after 1937 service the debt incurred in the initial transfers to the

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periods – admittedly, a very rough method for updating the values – puts the amount at just about \$13 trillion for 2007.

<sup>64</sup> Leimer, *supra* n.\_\_\_\_, at 30 and 71; Diamond and Orszag, *supra* n.\_\_\_\_, at 70-2.

<sup>65</sup> Diamond and Orszag, *supra* n.\_\_\_\_, at 37 and 208-9. See also Geanakoplos, Mitchell, and Zeldes, *supra* n.\_\_\_\_, at 85-7.

<sup>66</sup> Leimer, *supra* n.\_\_\_\_, at 71.

<sup>67</sup> Leimer, *supra* n.\_\_\_\_, at 16 and 72-3. The rates of return for the 1960 and 1990 cohorts are almost certainly too optimistic; in both cases, Leimer has assumed (deliberately but counterfactually) that no increase in program taxes or reduction in program benefits. Leimer, *supra* n.\_\_\_\_, at 9-13 and 16.

<sup>68</sup> Leimer, *supra* n.\_\_\_\_, at 75. Again, this assumes no increase in program taxes or reduction in program benefits.

<sup>69</sup> Steven Caldwell, Melissa Favreault, Alla Gantman, Jagadeesh Gokhale, Thomas Johnson, and Laurence J. Kotlikoff, “Social Security’s Treatment of Postwar Americans,” in James M. Poterba (ed.), *13 Tax Policy and the Economy* 110, 112, and 134 (1999).

program participants born before 1938. Because of the zero-sum nature of the program, the total burden imposed on the participants born after 1937 ultimately must equal the total windfall benefits paid to the participants born before 1938.<sup>70</sup>

### C. Intergenerational Effects of the Future Social Security Program

Social security faces serious funding problems. Although the program is funded adequately on a short-term basis, it is insolvent over the long term – so severely insolvent, in fact, that the unsustainability of the current program should not be doubted.<sup>71</sup> The social security program necessarily will change, whether or not Congress affirmatively enacts reform legislation. With trillions of dollars of program burdens to be distributed, conscientious policymakers will want to know how various reform options affect different generations.

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<sup>70</sup> That is, “[i]nvariably, cohorts born after 1937 must give up in the aggregate the whole” amount provided as windfall benefits to cohorts born before 1938. Geanakoplos, Mitchell, and Zeldes, *supra* n.\_\_\_\_, at 146. Although it might be appealing to argue that legislators were unaware of these intergenerational effects in the early years of the program, the effects in fact have long been recognized. M. Albert Linton, an insurance executive, urged the first Social Security Advisory Council during the late 1930s not to impose net burdens on future generations through the social security program. Derthick, *supra* n.\_\_\_\_, at 234-5. Representative John Byrne objected to the 1950 expansion of the program on the basis of the intergenerational redistribution that would result. Derthick, *supra* n.\_\_\_\_, at 45. He pointedly asked on the House floor how policymakers could justify imposing tax rates on future generations that they would not be willing to impose on current generations. Derthick, *supra* n.\_\_\_\_, at 241-2. In their 1950 study, two Brookings analysts detailed the substantial intergenerational redistribution under the expanding program. Meriam and Schlotterbeck, *supra* n.\_\_\_\_, at 173-6.

<sup>71</sup> There are critics who argue that program sustainability is not in question. See, e.g., Neil H. Buchanan, “Social Security and Government Deficits: When Should We Worry?” 92 *Cornell L. Rev.* 257 (2007); Dean Baker and Mark Weisbrot, *Social Security: The Phony Crisis* (1999). Others argue that the long-term solvency problems can be resolved without significant adjustments to the terms of the program. See, e.g., Henry J. Aaron and Robert D. Reischauer, *Countdown to Reform: The Great Social Security Debate* (1998).

## 1. Social Security Solvency

The trustees of the social security trust funds assess program solvency over both the short term and the long term.<sup>72</sup> Their short-term measure compares projected program assets to projected program obligations for each year of a ten-year period.<sup>73</sup> In effect, the short-term assessment determines whether the program will have enough cash to make benefit payments throughout the ten-year measuring period.<sup>74</sup> This measure, which does not consider whether the program accrues net liabilities or net assets during the ten-year measuring period,<sup>75</sup> currently indicates that the trust funds are solvent over the short term.<sup>76</sup>

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<sup>72</sup> Trustees, supra n.\_\_\_\_, at 30. The Chief Actuary of the Social Security Administration has noted that different views of the “role and design” of social security entail different views of what constitutes program solvency. Stephen C. Goss, “Measuring Solvency in the Social Security System,” in R. Douglas Arnold, Michael J. Graetz, and Alicia H. Munnell (eds.), *Framing the Social Security Debate: Values, Politics, and Economics* 16 (1998).

<sup>73</sup> Trustees, supra n.\_\_\_\_, at 30. The ratio of trust fund assets at the beginning of a year to program obligations for that year is known as the “trust fund ratio.” Trustees, supra n.\_\_\_\_, at 30 and 206. The trustees conduct their solvency analyses using three sets of economic assumptions – “intermediate” assumptions, “low-cost” assumptions, and “high-cost” assumptions. Goss, supra n.\_\_\_\_, at 29. The intermediate assumptions “represent the best guess of what future economic and demographic conditions will hold”; the low-cost and high-cost assumptions use variations of “the individual elements of the assumption set . . . that are thought to be quite unlikely to be achieved on the average in the long run, but are, nonetheless, plausible.” Goss, supra n.\_\_\_\_, at 29; see also Trustees, supra n.\_\_\_\_, at 6, 14-5, and 30. Most government and academic analysis follows the results produced by the intermediate assumptions. However, the Congressional Budget Office assesses social security solvency using different assumptions and, accordingly, reaching different conclusions in some cases. See, e.g., Congressional Budget Office, “The Outlook for Social Security,” 29-31 (2004). See also Congressional Budget Office, “Updated Long-Term Projections for Social Security” 7 (2006).

<sup>74</sup> Trustees, supra n.\_\_\_\_, at 30; Goss, supra n.\_\_\_\_, at 18. More specifically, the trustees define short-range financial adequacy under the following test: (1) the trust fund ratio must be at or above 100 percent throughout the ten-year testing period; or (2) the trust fund ratio must reach 100 percent within the first five years of the testing period and remain at or above 100 percent for the remainder of the ten-year testing period (and the projected trust fund assets at the beginning of each month of the ten-year testing period must be adequate to pay projected benefits during that month). Trustees, supra n.\_\_\_\_, at 31.

<sup>75</sup> See Howell E. Jackson, “Accounting for Social Security and Its Reform,” 41 Harv. J. Legis. 59 (2004).

The trustees use several different measures of long-term solvency, but they all unambiguously indicate that the program is not financially adequate over the next 75 years. The principal long-term measure – the calculation of “actuarial balance”<sup>77</sup> – generally follows the same cash-flow approach used to assess short-term financial adequacy. Under this measure, the trustees project that program costs will exceed program tax revenues in 2017; at that point, the trust funds will have to redeem Treasury securities. The balance of the trust funds is projected to be exhausted in 2041, and the program will no longer be able to make full benefit payments.<sup>78</sup> Instead, benefit payments will have to be reduced to 75-percent of benefits promised under the statute (and will fall again to 70-percent of promised benefits in 2081).<sup>79</sup> This 75-year actuarial deficit could be closed by an immediate and permanent increase in social security taxes of 1.95 percentage points, an immediate and permanent reduction in social security benefits of 13 percent, or immediate transfers from the government’s general fund of

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<sup>76</sup> Trustees, supra n.\_\_\_\_, at 2, 7, and 30-40. Over the ten-year period, the trust fund ratio is projected to rise from 345 percent in 2007 to a high of 409 percent in 2014 and 2015; after that, the ratio begins its steady decline. Trustees, supra n.\_\_\_\_, at 38 and 53.

<sup>77</sup> Goss, supra n.\_\_\_\_, at 19; Trustees, supra n.\_\_\_\_, at 41. The “actuarial balance” is the difference between tax revenue – the “summarized income rate” – and benefit payments (along with administrative expenses) – the “summarized cost rate” – over the 75-year measuring period. Goss, supra n.\_\_\_\_, at 19; Trustees, supra n.\_\_\_\_, at 191. Where the actuarial balance is at least zero for the 75-year measuring period, the program is considered to be financially adequate for the long term. Trustees, supra n.\_\_\_\_, at 41. If the program has positive trust fund ratios for the entire measuring period and if those ratios are stable or rising at the end of the measuring period, the trustees consider the program to have “sustainable solvency.” Trustees, supra n.\_\_\_\_, at 41.

<sup>78</sup> Trustees, supra n.\_\_\_\_, at 2-3, 51, and 53. Considered separately, the trust fund for disability insurance benefits is projected to become exhausted in 2026, and the trust fund for retirement and survivor benefits is projected to become exhausted in 2042. Trustees, supra n.\_\_\_\_, at 2, 51, and 53.

<sup>79</sup> Trustees, supra n.\_\_\_\_, at 8 and 16. As indicated above, the Antideficiency Act would prohibit the administrators of the social security program from paying full benefits once program costs exceed program revenues and trust fund assets. See supra n.\_\_\_\_.

\$4.7 trillion.<sup>80</sup> If the same assessment of actuarial balance were made over the infinite future, the actuarial deficit would require an immediate and permanent increase in social security taxes of 3.5 percentage points, an immediate and permanent reduction in social security benefits of 21.5 percent, or immediate transfers from the government's general fund of \$13.6 trillion.<sup>81</sup>

The trustees also analyze long-term solvency by calculating unfunded benefit obligations. The "closed-group unfunded obligation" measures how much more past and current generations have received and will receive from social security than they have paid and will pay into social security.<sup>82</sup> Currently, that amount is \$14.4 trillion.<sup>83</sup> The "open-group unfunded obligation" measures the excess of trust fund assets and projected program tax receipts over the projected cost of the program – in effect, how

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<sup>80</sup> Trustees, *supra* n.\_\_\_\_, at 3, 11, and 56.

<sup>81</sup> Trustees, *supra* n.\_\_\_\_, at 13 and 56. The long-term actuarial imbalance of the social security program is not a necessary consequence of the implicit debt discussed in Part I.B. Diamond and Orszag, *supra* n.\_\_\_\_, at 73-4 and 209.

<sup>82</sup> Trustees, *supra* n.\_\_\_\_, at 60-1. As Howell Jackson puts the point, the closed-group unfunded obligation "reflects the financial burden or liability being passed on to future generations." Howell Jackson, "Counting the Ways: The Structure of Federal Spending," 29 (2006).

<sup>83</sup> *Id.* at 60. Thus, if social security were immediately terminated for anyone outside the closed group – so that anyone who is either not yet born or is currently under the age of 15 would pay no taxes to social security and would receive no benefits from social security – the program would have an unfunded shortfall of \$14.4 trillion. By contrast, for all future generations (beginning with individuals who are presently under the age of 15), the present value of program revenues is expected to exceed the present value of program costs by \$0.8 trillion. Trustees, *supra* n.\_\_\_\_, at 60-1. The trustees and others question whether the closed-group unfunded obligation constitutes a meaningful solvency measure, insofar as the program was designed to operate on a pay-as-you-go basis covering past, current, and future generations. See, e.g., Trustees, *supra* n.\_\_\_\_, at 60; Goss, *supra* n.\_\_\_\_, at 31-2; Robert L. Clark, "Liabilities, Debts, Revenues, and Expenditures: Accounting for the Actuarial Balance of Social Security," 41 Harv. J. Legis. 161 (2004). Others have argued for even more rigorous assessments of the accrued but unfunded obligations. See Jackson, *supra* n.\_\_\_\_; Elizabeth Garrett, "Accounting for the Federal Budget and Its Reform," 41 Harv. J. Legis. 187 (2004); Robert C. Pozen, "The Virtues of Moving from Cash to Accrual Accounting for Social Security," 41 Harv. J. Legis. 199 (2004); Daniel N. Shaviro, "Accrual Accounting and the Fiscal Gap," 41 Harv. J. Legis. 209 (2004). See also Federal Accounting Standards Advisory Board, "Accounting for Social Insurance, Revised," Statement of Federal Financial Accounting Standards: Preliminary Views (2006).

much more all generations have received and will receive from social security than they have paid and will pay into it.<sup>84</sup> Arguably, this represents the best measure of program sustainability. It projects that, if the program were continued indefinitely in its current form, total benefit payments would exceed total revenues by \$13.6 trillion.<sup>85</sup>

## 2. Intergenerational Effects of Legislative Inaction

Congress could respond to the projected insolvency of social security by enacting or not enacting legislative reform of the program. The latter seems less likely: the salience and scope of social security – which presently collects taxes from 163 million people and pays out benefits to 49 million people<sup>86</sup> – suggests that Congress will at some point attempt to restore solvency. It is at least possible, however, the Congress will take no action. In the absence of reform, there will occur a time in the middle of this century when benefits due under the program exceed the sum of trust fund assets and program revenues. Program administrators will not have the legal authority to make full benefit payments;<sup>87</sup> instead, they will have to reduce benefits by at least 25 percent.<sup>88</sup> These reductions will lower the amounts received by retired participants; the reductions will not, however, reduce the amounts paid into the program by those participants. In other words, the primary effect of the reductions will be to impose larger program burdens on participants who will be receiving benefits at or after the middle of this century. By contrast, participants who have received benefits in the past or who are receiving benefit payments today will bear none of the cost of program insolvency.

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<sup>84</sup> Goss, supra n.\_\_\_\_, at 32.

<sup>85</sup> Trustees, supra n.\_\_\_\_, at 2 and 59. Restricting the calculation to the 75-year long-range measuring period reduces the unfunded obligation to \$4.7 trillion. Trustees, supra n.\_\_\_\_, at 2 and 57-8.

<sup>86</sup> Trustees, supra n.\_\_\_\_, at 2-3

<sup>87</sup> See supra n.\_\_\_\_.

<sup>88</sup> Trustees, supra n.\_\_\_\_, at 8 and 16.

### 3. Intergenerational Effects of Legislative Action

Any legislative reform intended to prevent insolvency would involve a reduction in benefit obligations, an increase in revenues, or a combination of the two. Assume, for example, that Congress decided to prevent insolvency by reform “within” the program. At one extreme, Congress could impose a one-time lump sum tax equal to \$13.6 trillion to be paid collectively by all participants who are subject to employment taxes; this would eliminate the entire funding shortfall for the program over the infinite horizon,<sup>89</sup> but it would impose the full burden on one or two generations then alive and working.<sup>90</sup> Under a related but less extreme approach, Congress could eliminate program insolvency through an increase of employment taxes equal to 3.5 percentage points;<sup>91</sup> as with the lump sum tax, this would impose no burden on participants who have already left the workforce, but it would spread the cost of solvency over all present and future working participants.<sup>92</sup> At the other extreme, Congress could cancel the program outright – collecting no additional taxes and paying no additional benefits. This would place the full burden on the participants (many of them elderly) who have paid taxes into the program but have not received their full scheduled benefits.<sup>93</sup> Alternatively, Congress could continue the program but immediately reduce all program benefits by 21.5 percent.<sup>94</sup> This would spread the cost of program solvency over all participants alive at or after the time the benefit reduction is put in place. Legislative reforms that combine a smaller increase in employment taxes and a smaller reduction in benefits

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<sup>89</sup> Trustees, supra n.\_\_\_\_, at 13 and 56.

<sup>90</sup> Geanakoplos, Mitchell, and Zeldes, supra n.\_\_\_\_, at 131-2.

<sup>91</sup> Trustees, supra n.\_\_\_\_, at 3, 11, and 56.

<sup>92</sup> See also Diamond, supra n.\_\_\_\_, at 5.

<sup>93</sup> Geanakoplos, Mitchell, and Zeldes, supra n.\_\_\_\_, at 131-2.

<sup>94</sup> Trustees, supra n.\_\_\_\_, at 56.

would have effects that fall between these two extremes.<sup>95</sup> Reform that would provide participants with individual accounts under social security (sometimes called, either pejoratively or admiringly, “privatization”) would not by itself improve or worsen program solvency, and the distributional effects of such reform would depend on considerations such as whether and how the accounts actually provide for advance funding of benefits and whether and how the solvency problem is addressed.<sup>96</sup>

If Congress chose to address solvency “outside” the social security program, it could increase program revenues without replicating the effects of either a lump sum tax or a general increase in employment taxes. For example, Congress could impose consumption taxes or wealth taxes, which would affect those who are retired, and dedicate the revenues to program solvency. Similarly, Congress could increase government borrowing or reduce other government spending and dedicate the proceeds to social security;<sup>97</sup> the incidence of those options would be determined by how Congress distributes the burden of the additional debt or forgone spending. It would be possible, for example, to restore solvency entirely through government borrowing of \$13.6 trillion that is not repaid until all program participants alive today have died. That

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<sup>95</sup> For this and other reasons, most reform plans that have been proposed since the 1983 legislation combine benefit reductions and tax increases. See, e.g., Diamond and Orszag, *supra* n.\_\_\_\_, at 79-98; Shaviro, *supra* n.\_\_\_\_, at 146-7; Aaron and Reischauer, *supra* n.\_\_\_\_, at 91-116; Steuerle and Bakija, *supra* n.\_\_\_\_, at 157-233; Kathryn L. Moore, “Social Security Reform: Fundamental Restructuring or Incremental Change?” 11 *Lewis & Clark L. Rev.* 341 (2007). For discussions of the intergenerational effects of specific program reforms, see generally Caldwell, Favreault, Gantman, Gokhale, Johnson, and Kotlikoff, *supra* n.\_\_\_\_; Jagadeesh Gokhale and Laurence J. Kotlikoff, “Social Security’s Treatment of Postwar Americans: How Bad Can It Get?” National Bureau of Economic Research Working Paper No. \_\_\_\_ (1999); Alan J. Auerbach, Jagadeesh Gokhale, and Laurence J. Kotlikoff, “Social Security and Medicare Policy from the Perspective of Generational Accounting,” National Bureau of Economic Research Working Paper No. 3915 (1991).

<sup>96</sup> Diamond, *supra* n.\_\_\_\_, at 6. See also Martin Feldstein and Andrew Samwick, “The Transition Path in Privatizing Social Security,” in Martin Feldstein (ed.), *Privatizing Social Security* 215 (1998); Laurence J. Kotlikoff, “Privatization of Social Security: How It Works and Why It Matters,” in James M. Poterba (ed.), *10 Tax Policy and the Economy* 1 (1996).

<sup>97</sup> Congressional Budget Office, *supra* n.\_\_\_\_, at 1.

would transfer wealth from future generations to current generations – not unlike the \$13 trillion transfer that funded windfall benefits for early program participants.

## II. Analytic Problems in Measuring Intergenerational Effects

The capacity of government fiscal policy to effect substantial redistribution of wealth among current and future generations should cause conscientious policymakers, as they contemplate changes to social security and other aspects of fiscal policy, to ask whether transfers that have been made in the past and transfers that might be made in the future have been and will be fair to the affected generations. But assessing the intergenerational equity of fiscal policy presents two difficult questions: how to measure intergenerational effects and how to determine what it means for those effects to be fair. Those questions are related but distinct. This Part II takes up the first question and argues that attempts to measure the intergenerational effects of fiscal policy are inherently problematic.

### A. Deficit, Fiscal-Gap, and Generational Accounting

In recent years, public-finance theory has developed quantitative models for determining the intergenerational effects of government fiscal policy; the most prominent are fiscal-gap and generational accounting. These models respond in part to the inadequacies of deficit accounting. Critics argue that the federal budget deficit does not provide reliable information about the actual costs of government.<sup>98</sup> As a measure of cash flow driven in large part by the labels attached to otherwise similar receipts and payments, the deficit is seen by these critics as inherently manipulable. For example, if government takes \$100 from individual A in year 1 and pays \$105 to individual A in year 2, the effects on the federal budget deficit for year 1 and year 2 differ significantly

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<sup>98</sup> Alan J. Auerbach, Jagadeesh Gokhale, and Laurence J. Kotlikoff, “Generational Accounts: A Meaningful Alternative to Deficit Accounting” in David F. Bradford (ed.), 5 *Distributional Analysis of Tax Policy* 56-7 (1991). See also Jackson, *supra* n.\_\_\_\_; Laurence J. Kotlikoff, *Generational Accounting: Knowing Who Pays, and When, for What We Spend* (1992).

depending on the labels that government attaches to the transactions.<sup>99</sup> The government could label the \$100 receipt in year 1 as a “tax” and the \$105 payment in year 2 as a “benefit,” or it could label the \$100 receipt as “borrowing” and the \$105 payment as a “repayment with interest.” Under the tax-and-benefit label, the year 1 budget deficit is reduced by \$100, and the year 2 deficit is increased by \$105; under the borrowing-and-repayment label, the year 1 deficit is unchanged; the year 2 deficit is increased by \$5. The deficit effects of the different labels are significant even though the underlying transaction is economically the same in both cases.<sup>100</sup>

The arbitrariness is more pronounced if the receipt from individual A and the payment to individual A are separated by a period longer than the government’s budget window.<sup>101</sup> If government takes \$100 as a tax from individual A in year 1 and, at the same time, undertakes to pay \$265 as a benefit to individual A in year 20, deficit accounting will for many years reflect only a \$100 decrease in the year 1 deficit because the reported deficit will not reflect the promise to pay a \$265 benefit to individual A in year 20 until well into the future. Of course, if the obligation to pay a \$265 benefit in year 20 were discounted to year 1 at an appropriate interest rate (here, five percent), the \$100 receipt in year 1 would be offset in full by the \$100 present value of a benefit obligation payable in year 20. In that case, the transaction would have no effect on the deficit.<sup>102</sup>

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<sup>99</sup> Auerbach, Gokhale, and Kotlikoff, *supra* n.\_\_\_\_, at 56; Kotlikoff, *supra* n.\_\_\_\_, at 18.

<sup>100</sup> Auerbach, Gokhale, and Kotlikoff, *supra* n.\_\_\_\_, at 57; Kotlikoff, *supra* n.\_\_\_\_, at 19.

<sup>101</sup> Alan J. Auerbach, William G. Gale, Peter R. Orszag, and Samara R. Potter, “Budget Blues: The Fiscal Outlook and Options for Reform” in Henry J. Aaron, James M. Lindsay, and Pietro S. Nivola (eds.), *Agenda for the Nation* 110 (2003).

<sup>102</sup> Kotlikoff, *supra* n.\_\_\_\_, at 143-9; David M. Cutler, Book Review of *Generational Accounting*, 46 *Nat’l Tax J.* 61, 62-3 (1993).

Additionally, deficit accounting fails to identify the intergenerational effects of fiscal policy.<sup>103</sup> To see this, assume that government pays a \$100 benefit to individual A, a retiree, in year 1 and that A's benefit is financed by a \$100 tax on individual B, a middle-aged worker, in year 1. Assume also that government promises to pay B a benefit of \$265 once B has retired in year 20 and that B's benefit will be financed by a \$265 tax on individual C in year 20, when C is middle-aged. Deficit accounting records no change in the federal budget deficit in year 1 or in year 20 attributable to the taxes on B and C and the benefits to A and B. In year 1, the government revenue from B's tax exactly matches the government expenditure on A's benefit, and so also with C's tax and B's benefit in year 20.<sup>104</sup> Deficit accounting thus not only misses the deferred benefit obligation incurred by the government; it also misses the basic point that this policy has made transfers from B to A and from C to B. Because A, B, and C are, by hypothesis, members of different generations, the fact and extent of the transfers presumably are important when considering whether the policy is intergenerationally fair. The point would be all the more significant if the benefits paid to the earlier generations (here, A and B) exceeded the value of the taxes they have paid – precisely the effect, for example, of social security. However, under deficit accounting, that redistribution fails even to register.

In response to these and other shortcomings of deficit accounting, public-finance economists have developed different measures of government fiscal policy – most notably, fiscal-gap accounting and generational accounting. Both fiscal-gap and generational accounting begin with the government's intertemporal budget constraint – the premise that, ultimately, aggregate government spending cannot exceed the sum of

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<sup>103</sup> Auerbach, Gokhale, and Kotlikoff, *supra* n.\_\_\_\_, at 56-7; Daniel N. Shaviro, "Reckless Disregard: The Bush Administration's Policy of Cutting Taxes in the Face of an Enormous Fiscal Gap," 45 B.C. L. Rev. 1285, 1290 (2004). See also Congressional Budget Office, "Who Pays and When? An Assessment of Generational Accounting" 2 (1995).

<sup>104</sup> Auerbach, Gokhale, and Kotlikoff, *supra* n.\_\_\_\_, at 57.

net government assets and aggregate government revenues;<sup>105</sup> and both fiscal-gap and generational accounting posit, counterfactually, the indefinite continuation of current fiscal policy.<sup>106</sup> Fiscal-gap accounting adds the present value of projected government receipts to the current value of government assets and subtracts that sum from the present value of projected government spending.<sup>107</sup> In contrast to deficit accounting, which measures the government's annual cash flow, fiscal-gap accounting measures the unfunded cost of future government spending. Thus, the "fiscal gap" is the amount, expressed as a present value, that government would have to add to its existing assets and its future revenues to pay in full for its projected spending if current fiscal policy were to remain unchanged.<sup>108</sup> Recent calculations put the fiscal gap at somewhere between \$44 trillion and \$73 trillion.<sup>109</sup> The fiscal gap for the social security program alone has been estimated at \$7 trillion.<sup>110</sup>

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<sup>105</sup> Alan J. Auerbach and Laurence J. Kotlikoff, "The Methodology of Generational Accounting," in Alan J. Auerbach, Laurence J. Kotlikoff, and Willi Leibfritz (eds.), *Generational Accounting Around the World* 31 (1999); Jagadeesh Gokhale and Kent Smetters, *Fiscal and Generational Imbalances: New Budget Measures for New Budget Priorities* 7 (2003).

<sup>106</sup> Alan J. Auerbach, Jagadeesh Gokhale, and Laurence J. Kotlikoff, "Using Generational Accounting to Assess Fiscal Sustainability and Generational Equity," in David F. Bradford (ed.), *Distributional Analysis of Tax Policy* 183 (1995); Gokhale and Smetters, *supra* n.\_\_\_\_, at 7.

<sup>107</sup> Gokhale and Smetters, *supra* n.\_\_\_\_, at 8.

<sup>108</sup> Gokhale and Smetters, *supra* n.\_\_\_\_, at 3. Alternatively, some define the fiscal gap as the present value amount needed to prevent the ratio of government debt to gross domestic product from increasing over a specified measuring period. See, e.g., Auerbach, Gale, Orszag, and Potter, *supra* n.\_\_\_\_, at 123; United States Government Accountability Office, "The Nation's Long-Term Fiscal Outlook," 5 (2006)

<sup>109</sup> See Gokhale and Smetters, *supra* n.\_\_\_\_, at 3 and 25-7 (calculating the fiscal gap at \$44 trillion as of 2002); United States Government Accountability Office, *supra* n.\_\_\_\_, at 5 (calculating the fiscal gap, under a "realistic simulation," at \$61 trillion as of 2006); Shaviro, *supra* n.\_\_\_\_, at 1299 (calculating the fiscal gap at \$73 trillion as of 2004).

<sup>110</sup> Gokhale and Smetters, *supra* n.\_\_\_\_, at 26-7 (calculated as of 2002).

The fiscal gap includes revenues and expenditures attributable to current, past, and future generations.<sup>111</sup> By subtracting from government spending attributable to current and past generations the sum of future government revenues attributable to those generations and the value of current government assets, one can determine how much of the unfunded cost of government is shifted from current and past generations to future generations.<sup>112</sup> Recent calculations put this net cost imposed on future generations just for social security at approximately \$8.8 trillion.<sup>113</sup>

Generational accounting provides a second method for measuring how fiscal policy distributes the costs of government among different generations. It was adopted briefly by the U.S. government in the early 1990s as a supplement to deficit accounting,<sup>114</sup> and it has been used widely for other countries and by multilateral development agencies such as the World Bank and the International Monetary Fund.<sup>115</sup> Generational accounting first separates current and past generations into birth cohorts up through children born in the year of the calculation;<sup>116</sup> it then determines the lifetime net taxes paid and expected to be paid by each birth cohort on the counterfactual

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<sup>111</sup> Gokhale and Smetters, supra n.\_\_\_\_, at 8.

<sup>112</sup> Gokhale and Smetters, supra n.\_\_\_\_, at 11.

<sup>113</sup> Gokhale and Smetters, supra n.\_\_\_\_, at 26-7 (calculated as of 2002). This \$8.8 trillion value is higher than the overall fiscal gap of \$7 trillion for the social security program because future generations are projected to pay more than \$1.7 trillion more into the program than they receive from it.

<sup>114</sup> Office of Management and Budget, *Budget of the United States Government, Fiscal Year 1995: Analytical Perspectives* 21-31 (1994); Office of Management and Budget, *Budget Baselines, Historical Data, and Alternatives for the Future* 531-40 (1993); Office of Management and Budget, *Budget of the United States Government, Fiscal Year 1993* III-7 to III-13 (1992).

<sup>115</sup> Alan J. Auerbach, Laurence J. Kotlikoff, and Willi Liebfritz, *Generational Accounting Around the World* 1 (1999).

<sup>116</sup> Laurence J. Kotlikoff, *Generational Policy* \_\_\_\_ (2003); Auerbach, Gokhale, and Kotlikoff, supra n.\_\_\_\_, at 59.

assumption that current fiscal policy continues indefinitely.<sup>117</sup> For this purpose, “net taxes” comprise income taxes, payroll taxes, property taxes, and excise taxes paid to federal, state, and local governments less government transfer payments made in cash and certain cash equivalents (such as social security benefits, medicare and medicaid benefits, food stamps, and unemployment insurance).<sup>118</sup> These lifetime net taxes are expressed, relative to lifetime income, as a net tax rate. Then, proceeding from the premise of the government’s intertemporal budget constraint, generational accounting allocates to all future generations the costs of government not paid for by current and past generations.<sup>119</sup> This total residual cost of government for future generations also is expressed as a lifetime net tax rate.<sup>120</sup>

In short, generational accounting shows both how fiscal policy has treated past generations relative to current generations and how the continuation of current fiscal policy would treat future generations relative to current generations. Recent calculations (which do not take into account legislation enacted since the year 2000) put the lifetime net tax rate of newborns at 22.8 percent and the lifetime net tax rate of future generations at 32.3 percent.<sup>121</sup> In the language of generational accounting, this reveals a “generational imbalance” in government fiscal policy.<sup>122</sup>

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<sup>117</sup> Kotlikoff, supra n.\_\_\_\_, at \_\_\_\_ [GP].

<sup>118</sup> Auerbach, Gokhale, and Kotlikoff, supra n.\_\_\_\_, at 59; Congressional Budget Office, supra n.\_\_\_\_, at 9.

<sup>119</sup> Auerbach and Kotlikoff, supra n.\_\_\_\_, at 33. Additionally, generational accounting generally assumes that the residual unfunded cost of government is allocated equally across all future generations (after allowing for an adjustment for “real productivity growth”). Auerbach, Gokhale, and Kotlikoff, supra n.\_\_\_\_, at 61.

<sup>120</sup> Auerbach and Kotlikoff, supra n.\_\_\_\_, at 33.

<sup>121</sup> Kotlikoff, supra n.\_\_\_\_, at \_\_\_\_ [GP].

<sup>122</sup> Kotlikoff, supra n.\_\_\_\_, at \_\_\_\_ [GP]; Jagadeesh Gokhale, Benjamin R. Page, and John R. Sturrock, “Generational Accounts for the United States: An Update,” in Alan J. Auerbach, Laurence J. Kotlikoff, and Willi Leibfritz (eds.), *Generational Accounting Around the World* 498 (1999).

Application of generational accounting to social security demonstrates that the program imposes a net tax on participants born between the end of the Second World War and the end of the Twentieth Century.<sup>123</sup> For these participants, total employment taxes paid into the program exceed total benefits payable from the program by approximately 5 percent of lifetime earnings.<sup>124</sup> This net fiscal burden is considerable: it represents roughly one-sixth to one-seventh of the total lifetime net tax rate for these participants.<sup>125</sup> Similarly (though not unexpectedly), generational accounting indicates that legislative reforms aimed at program solvency generally would increase lifetime fiscal burdens both for future generations and for younger members of current generations.<sup>126</sup>

Both fiscal-gap and generational accounting represent improvements over deficit accounting in understanding the intergenerational effects of government fiscal policy. The architects of these newer measures argue that fiscal-gap and generational accounting therefore should replace deficit accounting as the preferred standard for assessing fiscal policy.<sup>127</sup> More pointedly, they argue that government fiscal policy should ignore the federal budget deficit and instead should aim to achieve both “fiscal balance” – the elimination of any fiscal gap – and “generational balance” – the elimination of any shift in the cost of government from current generations to future generations.<sup>128</sup>

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<sup>123</sup> Caldwell, Favreault, Gantman, Gokhale, Johnson, and Kotlikoff, *supra* n.\_\_\_\_, at 130-4.

<sup>124</sup> Caldwell, Favreault, Gantman, Gokhale, Johnson, and Kotlikoff, *supra* n.\_\_\_\_, at 130.

<sup>125</sup> Auerbach, Gokhale, and Kotlikoff, *supra* n.\_\_\_\_, at 200.

<sup>126</sup> Caldwell, Favreault, Gantman, Gokhale, Johnson, and Kotlikoff, *supra* n.\_\_\_\_, at 134-9; Alan J. Auerbach, Jagadeesh Gokhale, and Laurence J. Kotlikoff, “Social Security and Medicare Policy from the Perspective of Generational Accounting,” NBER Working Paper No. 3915 (1991).

<sup>127</sup> Gokhale and Smetters, *supra* n.\_\_\_\_, at 1-2; Kotlikoff, *supra* n.\_\_\_\_, at 217-8.

<sup>128</sup> Gokhale and Smetters, *supra* n.\_\_\_\_, at 2; Kotlikoff, *supra* n.\_\_\_\_, at 218-9.

This proposed redefinition of the end of fiscal policy can be set forth in a weak version or a strong version. The weak version is predictive. It argues that, given the stubborn fact of the government's intertemporal budget constraint, the existence of a fiscal or generational imbalance demonstrates that current fiscal policy is unsustainable and that government cannot avoid changing its fiscal policy in some manner at some point.<sup>129</sup> The weak version predicts that government policy will change, but it does not predict when or how it will change. The strong version, by contrast, is normative. It argues not only that government fiscal policy *will* change but that it *should* change because of the otherwise inequitable outcomes for future generations.<sup>130</sup> Quite apart from the notion that changing those outcomes is inevitable, the strong version argues that changing those outcomes is right.

#### B. Limitations of Fiscal-Gap and Generational Accounting

Although fiscal-gap and generational accounting represent important developments in assessing government fiscal policy, those measures have limitations. Both rely on projections not only of future government behavior but also of future economic conditions, and those projections likely will prove incorrect. Both treat all future generations as an undifferentiated group – so that those born next year are not distinguished from those born many years in the future. Both make assumptions about how the benefits and burdens of government policy should be attributed to current and future generations, thereby raising difficult – if not intractable – problems. Both provide for the asymmetric treatment of significant benefits and burdens under fiscal policy. Finally, and perhaps most importantly, both make arbitrary framing assumptions about

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<sup>129</sup> Gokhale and Smetters, *supra* n.\_\_\_\_, at 2; Kotlikoff, *supra* n.\_\_\_\_, at \_\_\_\_ [GP]; Gokhale, Page, and Sturrock, *supra* n.\_\_\_\_, at 490.

<sup>130</sup> Kotlikoff, *supra* n.\_\_\_\_, at 219-20; Alan J. Auerbach, Jagadeesh Gokhale, and Laurence J. Kotlikoff, "Generational Accounting: A Meaningful Way to Evaluate Fiscal Policy," 8 *J. Econ. Persp.* 73, 82 and 84-5 (1994). But see Laurence J. Kotlikoff, "Reply to Diamond's and Cutler's Reviews of Generational Accounting," 50 *Nat'l Tax J.* 303, 308 (1997) ("[N]either I nor my colleagues have suggested that generational balance is a *sine qua non* for generational equity.").

what aspects of government policy can or should be analyzed to measure intergenerational effects.

### 1. Uncertainty of Assumptions

As critics of fiscal-gap and generational accounting have noted, any effort to quantify the intergenerational effects of current or reformed fiscal policy necessarily requires assumptions about future conditions – including economic growth, interest rates, risk premia, population growth, mortality rates, incomes, and the costs of specific goods and services relative to those of other specific goods and services.<sup>131</sup> Thus, for example, calculating the fiscal gap attributable to social security depends critically on assumptions about a wide array of economic data, and variations in those data can alter the analysis significantly. Assumptions can, of course, prove right or wrong.

The possibility of error in the assumptions needed to calculate the fiscal gap and generational accounts is much more significant than it is for deficit accounting because of the longer time frame. Deficit accounting typically looks forward over a five- or ten-year period, but fiscal gap and generational accounting typically look forward over a 75-year period or even the infinite future. The longer horizon makes assumptions about future economic conditions inherently more speculative: for example, determining the size of the unfunded liability for medicare benefits over a 75-year period requires assumptions about the cost of health care over the next 75 years. The longer horizon also magnifies the effect of erroneous assumptions: for example, the present value of an obligation to pay a \$10,000 social security benefit 75 years from now is just under \$1,100

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<sup>131</sup> Neil H. Buchanan, "Social Security, Generational Justice, and Long-Term Deficits." 58 Tax L. Rev. 275, 313-4 (2005); Peter Diamond, "Generational Accounts and Generational Balance: An Assessment," 49 Nat'l Tax J. 597, 602-3 (1996); Dean Baker, *Robbing the Cradle? A Critical Assessment of Generational Accounting* 16-9 (1995); Congressional Budget Office, *supra* n.\_\_\_\_, at 29-32; Robert Haveman, "Should Generational Accounts Replace Public Budgets and Deficits?" 8 J. Econ. Persp. 95, 101-4 (1994); Richard Goode and C. Eugene Steuerle, "Generational Accounts and Fiscal Policy," \_\_ Tax Notes 1027, 1030-1 (1994).

if discounted at an interest rate of 3 percent, but the present value of that same obligation is less than half that amount if discounted at a rate of 4 percent.

Still, the problem of uncertain assumptions does not undermine the central project of fiscal-gap and generational accounting. Any attempt to quantify the future effects of government fiscal policy necessarily makes assumptions about future states of the world; the question is not whether the assumptions ultimately prove correct but whether they incorporate the best available information and follow appropriate methodologies.<sup>132</sup> Taken to the rational end point, these objections imply that no analysis of the intergenerational effects of government fiscal policy can provide meaningful information. Although the uncertainty of the assumptions implies a corresponding uncertainty of the results, it does not imply that the results are meaningless.

## 2. Non-Differentiation of Future Generations

Both fiscal-gap and generational accounting begin with the government's intertemporal budget constraint and calculate as a residuum the unpaid cost of government that will be borne by all future generations. Thus, both measures determine a net cost imposed on future generations as a whole rather than on particular future generations separately. Fiscal-gap accounting simply measures the total unfunded cost of government as a single net burden for the future. Although generational accounting does measure lifetime tax rates for members of current and past generations, it does not make a similar measurement, for example, with respect to the cohort born 10 years from now or 100 years from now.<sup>133</sup> Therefore, as both critics and defenders of fiscal-gap and generational accounting have noted, these measures tell us how governmental fiscal

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<sup>132</sup> Sensitivity analyses generally indicate that varying the relevant assumptions within reasonable parameters alters the magnitude, but not the existence, of fiscal-gap and generational imbalances. Gokhale and Smetters, *supra* n.\_\_\_\_, at \_\_\_\_; Kotlikoff, *supra* n.\_\_\_\_, at \_\_\_\_ [GP].

<sup>133</sup> Gokhale, Page, and Sturrock, *supra* n.\_\_\_\_, at 496.

policy has treated separate generations up through the one born today, but they do not tell us how government fiscal policy will treat any specific future generation relative to any other specific future generation or relative to any specific current or past generation.<sup>134</sup>

### 3. Incidence of Fiscal Benefits and Burdens

Even where fiscal-gap and generational accounting do make distinctions among generations, there are reasons to question how they attribute the benefits and burdens of fiscal policy. Perhaps of necessity, these measures make simplifying assumptions about the incidence of taxation that may or may not withstand scrutiny. For example, individual income taxes generally are considered to be borne by the individual paying the tax, and taxes on capital income generally are attributed to the owners of capital.<sup>135</sup>

No less importantly, both fiscal-gap and generational accounting flatly assume that there is no “sliding” of government benefits among family members.<sup>136</sup> When government makes a transfer payment to an individual, fiscal-gap and generational accounting treat the nominal recipient of the payment as the only beneficiary. This effectively assumes, for example, that the adult children of social security recipients derive no economic benefit from the fact that their elderly parents receive income

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<sup>134</sup> Gokhale and Smetters, *supra* n.\_\_\_\_, at \_\_\_\_; Kotlikoff, *supra* n.\_\_\_\_, at \_\_\_\_ [GP]; Diamond, *supra* n.\_\_\_\_, at 603-4; Haveman, *supra* n.\_\_\_\_, at 97 and 100.

<sup>135</sup> Kotlikoff, *supra* n.\_\_\_\_, at \_\_\_\_ [GP]; Auerbach and Kotlikoff, *supra* n.\_\_\_\_, at 34; Congressional Budget Office, *supra* n.\_\_\_\_, at 37-8; Haveman, *supra* n.\_\_\_\_, at 98-9 and 104-6. The proponents of generational accounting concede that, although it “attempts to understand the generational *incidence* . . . of fiscal policy changes,” the measure “incorporates a set of incidence assumptions that will not, in general, capture the full range of either microeconomic or macroeconomic responses to policy changes” and “should be viewed as a method of approximating the policy-induced welfare changes experienced by different generations.” Auerbach, Kotlikoff, and Liebfritz, *supra* n.\_\_\_\_, at 4 (emphasis in original).

<sup>136</sup> Gokhale and Smetters, *supra* n.\_\_\_\_, at \_\_\_\_; Auerbach, Gokhale, and Kotlikoff, *supra* n.\_\_\_\_, at \_\_\_\_; Congressional Budget Office, *supra* n.\_\_\_\_, at 37-8. Haveman, *supra* n.\_\_\_\_, at 104-6; Office of Management and Budget, *supra* n.\_\_\_\_, at 23.

support from the government and that parents of young children derive no economic benefit from the fact that their children receive publicly financed education.

To appreciate the problems this causes, assume that the government introduced a program to pay full post-secondary education costs for anyone under the age of 25. In the absence of this program, many parents of individuals under the age of 25 pay for all or part of those costs; this implies that, at least initially, parents would capture part or all the benefit of the program. But fiscal-gap and generational accounting would consider individuals under the age of 25 to be the sole recipients of the program benefits – resulting in a miscalculation of the generational effects of the program. Assume further that, over time, some families respond to the existence of the program by increasing their support of older family members. Thus, because mother no longer pays the college costs of son, she increases the amounts she pays to support grandmother. At this point, part of the cost of repealing the program would be borne by mother and part by grandmother, but fiscal-gap and generational accounting would show the full burden of repeal as falling on son.<sup>137</sup> The assumption that the benefits of the program do not slide between family members can result in misattribution.

The architects of fiscal-gap and generational accounting defend the assumption that benefits do not slide by attacking the position – generally referred to as “Ricardian equivalence” – that individual saving and dissaving responds directly to changes in government fiscal policy and, in fact, offsets the effects of government fiscal policy.<sup>138</sup> Even if full Ricardian equivalence is implausible, it does not follow that there is no sliding at all.<sup>139</sup> Plainly, many adults would take their elderly parents into their homes

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<sup>137</sup> Of course, if mother responded to the program simply by increasing her bequest to son by an amount equal to what she otherwise would have paid for his post-secondary education, son would capture the full benefit of the program and would bear the full cost of its repeal.

<sup>138</sup> See Robert J. Barro, “Are Government Bonds Net Wealth?” 82 J. Pol. Econ. 1095 (1974). See also Leimer, *supra* n.\_\_\_\_, at 43-4; Shaviro, *supra* n.\_\_\_\_, at 1288.

<sup>139</sup> See Robert J. Lampman and Timothy M. Smeeding, “Interfamily Transfers as Alternatives to Government Transfers to Persons,” 29 Rev. of Income and Wealth 45 (1983).; but see Li Gan,

or otherwise provide for them in the absence of government-provided support such as social security and medicare, and, plainly, many parents of young children would finance their children's education in the absence of publicly financed education.<sup>140</sup> To attribute every dollar of every government transfer payment only to the nominal recipient of that payment is to ignore the important relationships existing among family members of different generations that imply commitments of support. Fiscal-gap and generational accounting improperly assume a false dichotomy: either there must be full Ricardian equivalence, or there is no intergenerational sliding at all. To the extent that fiscal policy benefits slide in part, the actual incidence of those benefits is more nuanced and obscure than fiscal-gap and generational accounting assume.

#### 4. Asymmetric Treatment of Fiscal Benefits and Burdens

Proponents and critics of fiscal-gap and generational accounting both have noted that these measures do not account for all the benefits of government spending, including government spending to purchase goods and services and government spending that results in public goods.<sup>141</sup> In other words, many of the benefits produced

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Guan Gong, and Michael Hurd, "Net Intergenerational Transfers from an Increase in Social Security Benefits," The Levy Economics Institute of Bard College, Working Paper No. 482 (2006).

<sup>140</sup> Steuerle and Bakija argue that social security benefits "may . . . be viewed as replacing transfers that workers would have made otherwise to their retired parents" and that, correspondingly, "[t]he smaller lifetime private transfers these workers receive from their children might be viewed as an offset to large public transfers given to them." Steuerle and Bakija, *supra* n.\_\_\_\_, at 132 n.32. See also Congressional Budget Office, *supra* n.\_\_\_\_, at 38 (discussing uncertainties regarding "how or how much transfers slide"); Achenbaum, *supra* n.\_\_\_\_, at 53 (describing benefits conferred on children of earliest program participants through relief from family support obligations). As Robert Haveman puts it: "On what basis can one presume that health care benefits – or retirement pensions – assigned to the elderly represent net benefits to them, as opposed to their adult children on whom the burden could have fallen were not the public program in place?" Haveman, *supra* n.\_\_\_\_, at 105.

<sup>141</sup> Buchanan, *supra* n.\_\_\_\_, at 311-3; Gokhale and Smetters, *supra* n.\_\_\_\_, at \_\_\_\_; Willem H. Buiter, "Generational Accounts, Aggregate Saving and Intergenerational Distribution," 64 *Economica* 605, 606 (1997); Daniel Shaviro, *Do Deficits Matter?* \_\_\_\_ (1997); Haveman, *supra* n.\_\_\_\_, at 97 and 100-1; Kotlikoff, *supra* n.\_\_\_\_, at 168. But see Gokhale, Page, and Sturrock, *supra*

by fiscal policy are not attributed by fiscal-gap or generational accounting to *any* generation – past, present, or future. Thus, the benefits of political liberties and civil rights, national defense against foreign enemies, a functioning system of justice, maintaining a constitutional government, and many similar goods are simply disregarded in comparing the intergenerational distribution of fiscal policy benefits and burdens.<sup>142</sup> This treatment is asymmetrical to the treatment of the cost of government spending to produce those benefits: both fiscal-gap and generational accounting attribute the burden of providing these benefits to those paying the taxes that finance them, but the benefits are attributed to no one. The asymmetry presents a much more significant limitation on fiscal-gap and generational accounting than either proponents or critics have recognized.

Fiscal-gap and generational accounting do not account for these benefits because they cannot account for them.<sup>143</sup> Any attempt to determine the value of these benefits would be arbitrary. One might consider using the cost to government as a first approximation for value, but that method would produce striking anomalies. As Peter Diamond argues, it is important to distinguish distributional calculations based on costs and distributional calculations based on utilities;<sup>144</sup> there is little reason to suppose, for

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n.\_\_\_\_, at 498-501 (attempting generational attribution of some, but not all, government purchases).

<sup>142</sup> Auerbach, Gokhale, and Kotlikoff, *supra* n.\_\_\_\_, at 88.

<sup>143</sup> Gokhale and Smetters, *supra* n.\_\_\_\_, at \_\_\_\_; Kotlikoff, *supra* n.\_\_\_\_, at \_\_\_\_ [GP]; Cutler, *supra* n.\_\_\_\_, at 66; See also Auerbach and Kotlikoff, *supra* n.\_\_\_\_, at 32 (“With the exception of government expenditures on health care and education, which are treated as transfer payments, [generational] accounts do not impute to particular generations the value of the government’s purchases of goods and services because it is difficult to attribute the benefits of such purchases.”); Congressional Budget Office, *supra* n.\_\_\_\_, at 45 (“Trying to assign the benefits of most [government] purchases to specific generations . . . is impracticable”). Willem Buiter notes that “[c]onceptually, there is no special problem in valuing public consumption” but that “[i]n practice, of course, the quantification of welfare consequences of public consumption is likely to be an extremely complicated job.” Buiter, *supra* n.\_\_\_\_, at 616.

<sup>144</sup> Diamond, *supra* n.\_\_\_\_, at 598-9.

example, that individuals value freedom from foreign invasion exactly at the amount spent by government on national defense.<sup>145</sup> And assuming that the value of such benefits could be determined, actual attribution of that value to specific generations also would be arbitrary. David Cutler points out that we have no idea how much one particular generation benefits from national defense relative to any other particular generation, even if one faces greater threats to its security than the other.<sup>146</sup>

This is a serious limitation on fiscal-gap and generational accounting as measures of fiscal policy and as reference points for judgments about intergenerational equity. The failure to account for these benefits not only affects the analysis of the government spending that is obviously devoted to the provision of public goods, such as national defense;<sup>147</sup> it also undermines the analysis of government transfer programs – programs supposedly at the core of fiscal-gap and generational accounting. Government transfer payments for social security, medicare, and food stamps provide more than just cash or cash equivalents to the recipients and their family members; they also provide public goods. Past, present, and future generations derive a substantial benefit, of the public-good variety, from living in a society that limits poverty among the elderly through the social security and medicare programs. Similarly, members of past, current, and future generations who never have seen and never will see a food stamp or a welfare payment realize a benefit from government programs intended to prevent children from starving in the streets.

These and similar non-cash benefits attributable to government fiscal policy are genuine and substantial. They provide individuals who receive no government transfer payments with returns on the taxes they pay to the government, and they legitimize

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<sup>145</sup> Diamond, *supra* n.\_\_\_\_, at 605 (Diamond’s example uses the interstate highway system, but the point is applicable across a broad range of government purchases).

<sup>146</sup> Cutler, *supra* n.\_\_\_\_, at 66.

<sup>147</sup> See, e.g., Staff Paper for the President’s Commission to Study Capital Budgeting, “Generational Accounting” (1998); Diamond, *supra* n.\_\_\_\_, at 605.

political decisions made by individuals as to how great a tax burden they are willing to accept. But fiscal-gap and generational accounting treat all these public-good benefits – which simply cannot be collapsed into the cash transfer payments that facilitate them – as though they were provided entirely to the individuals who receive the transfer payments or to no one at all. In other words, even though the project of fiscal-gap and generational accounting is to determine how the benefits and burdens of government fiscal policy are distributed across different generations, fiscal-gap and generational accounting do not account for many of the benefits that justify those burdens.

Failing to account fully for the benefits of government fiscal policy and failing to attribute those benefits to the appropriate generations critically undermine our ability to judge whether government fiscal policy, as measured by fiscal-gap and generational accounting, is *fair* to different generations. Any meaningful norm of intergenerational equity must, at a minimum, account for both burdens and benefits. Consider the absurd results implied by the contrary position; consider, in other words, the possibility that we undertake normative judgments about intergenerational equity by considering only burdens but not benefits. Assume, for this limited purpose, that we had broad agreement that treating different generations equitably required treating each separate generation the same.<sup>148</sup> Now posit a new program under which government imposes a tax on members of generation A (many of whom are parents of young children) in order to provide universal pre-school care to all members of generation B (all of whom are young children). A normative evaluation of this program that considered only the imposition of burdens would find the policy unfair to generation A; but the emptiness of that conclusion becomes readily apparent when we acknowledge that the beneficiaries of the policy are the members of generation A who are themselves parents of young children. The program may present questions of equity within a single generation because it redistributes wealth from members of generation A who are not parents of young children to members of generation A who are parents of young children. But to

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<sup>148</sup> This assumption is made solely for convenience of presentation.

label the program unfair or inequitable across generations is to miss the mark by quite a wide margin.

Indeed, pushed toward its limits, the proposition that the intergenerational equity of fiscal policy can be evaluated without accounting fully for the benefits of that policy would lead to conclusions that we generally would reject outright. Consider, for example, the case of a government that imposes large fiscal burdens on future generations by borrowing heavily to finance national defense against an impending foreign invasion.<sup>149</sup> If the intergenerational equity of government fiscal policy were appropriately evaluated, as a normative matter, by considering only the burdens imposed on different generations, one might consider the government's decision to borrow excessively during time of war to be intergenerationally inequitable. But that conclusion rightly strikes one as absurd and dangerously wrong. Few could agree that a government policy of devoting all available resources of present and future generations to preserve the nation's security against an invading enemy is *unfair* to the future generations who otherwise would be born into a state of occupation. Yet that is precisely the implication of making normative judgments about how the costs of financing national defense are distributed among current and future generations without also accounting for how the benefits of that spending are distributed.

This shortcoming prevents fiscal-gap and generational accounting from serving as a basis for making normative judgments about the past or future intergenerational effects both of government fiscal policy generally and of specific tax-and-transfer programs. As demonstrated in Part I, the social security program has redistributed approximately \$13 trillion from program participants born after 1937 to program participants born before 1938. But any effort to make normative assessments about the intergenerational equity of the program break down once we recognize that these numbers fail to take into account *all* the program's benefits. We can label the

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<sup>149</sup> Congressional Budget Office, *supra* n.\_\_\_\_, at 45. Consider, for example, the debts incurred by Great Britain during the Second World War.

participants born after 1937 as net losers under the program based on the \$13 trillion transfer, but we cannot know whether we would still regard them as net losers if the non-cash benefits that they derive from social security were included in the analysis. Most of those born after 1937 derive a genuine benefit from the existence of a government program that provides cash support to the elderly and disabled, and many would be willing to pay taxes into the program even if they understood that they will receive substantially less than the economic value of what they contribute. Certainly the analysis of fiscal-gap and generational accounting reveal useful and interesting information about social security, but they do not provide us enough information about its intergenerational effects to make meaningful normative judgments.

#### 5. Framing Problems

Even if fiscal-gap accounting and generational accounting successfully addressed the problems outlined above, there would remain a basic conundrum in framing what the models should measure. This problem is foundational: any effort to measure the intergenerational incidence of part or all of government policy requires the drawing of clear – but inescapably arbitrary – boundaries between different segments of government fiscal policy, between fiscal policy and other aspects of government policy, or between all governmental activity and all non-governmental activity. However interesting the analysis may be when models of intergenerational effects are applied within one or more of these possible frames, the outcomes remain contingent on the selection of frame. A government policy that appears inequitable toward future generations when considered within the frame of a single governmental program, such as social security, may appear entirely fair or even unduly generous toward them when considered within the frame of fiscal policy as a whole or the frame of all governmental activities having intergenerational effects. The decision to analyze only a particular segment of government fiscal policy or to separate fiscal policy from other aspects of government policy may be useful or even necessary for organizing information such

that intergenerational effects can be measured, but unless that decision can be grounded, it will be fundamentally arbitrary and inherently limiting.<sup>150</sup>

The first and perhaps most intuitively appealing framework for analyzing intergenerational effects is to separate each governmental transfer or spending program from every other governmental transfer or spending program. This is the intuition that underlies, for example, the extensive analyses of whether past, current, and future generations have been or will be treated fairly by social security,<sup>151</sup> and it is the intuition that underlies much of the debate over various proposals to reform that program.<sup>152</sup> But framing the inquiry this way suggests conclusions that are deeply suspect. First, most government transfer and spending programs are not self-financed in the manner of social security. Although social security benefits and administrative costs are funded (at least for now) by dedicated employment and income taxes, most other programs – such as food stamps, medicaid, national defense, and scientific research – are funded by general government revenues.<sup>153</sup> This makes it difficult to match the intergenerational distribution of costs with the intergenerational distribution of benefits.

More importantly, even programs such as social security that are self-financed do not exist in isolation. The collection of employment taxes and the payment of social security benefits are not the only tax-and-transfer interactions between program

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<sup>150</sup> The analysis in this Part II.B.5 benefits from Daryl Levinson's penetrating study of common law transactional frames in constitutional adjudication. See Daryl J. Levinson, "Framing Transactions in Constitutional Law," 111 Yale L.J. 1311 (2002). Additionally, the analysis here is analogous to, although distinct from, the argument of Liam Murphy and Thomas Nagel that tax equity can be meaningfully assessed only as a component of social justice as a whole. See Liam Murphy and Thomas Nagel, *The Myth of Ownership: Taxes and Justice* 3-39 (2001).

<sup>151</sup> See Part I.B, *supra*.

<sup>152</sup> See Part I.C, *supra*.

<sup>153</sup> Many would argue, and not without reason, that governmental spending outside of social security is financed in part by the employment taxes and income taxes nominally dedicated to the social security program because surplus revenues from those taxes are invested in government debt.

participants and the government. Instead, fiscal policy sets up myriad points of contact between government and individuals. It makes little sense, for example, to conclude that the generation born in the two decades after the Second World War has been treated unfairly by social security if medicare benefits, government-financed research in gerontological medicine, and preferential treatment for older citizens under the federal income tax offset their net burden under the social security program. The arbitrariness of the framework becomes self-evident when one considers that the assessment of social security could change entirely if Congress simply redefined the program to include these and other aspects of government fiscal policy: suddenly, net losers would become net winners by re-labeling social security to pull in a sufficient amount of benefits currently provided by “other” programs.<sup>154</sup>

That suggests framing the analysis of intergenerational effects to include all aspects of government fiscal policy. And, in fact, both fiscal-gap and generational accounting generally do attempt to analyze fiscal policy in its entirety (in addition to analyzing certain individual programs such as social security). But this framework also has arbitrary boundaries that leave out aspects of government policy – aspects that any sensible evaluation of intergenerational equity would have to consider relevant. For example, generational accounting finds that the generations born prior to the Second World War generally were net winners not only under the social security program but under fiscal policy as a whole.<sup>155</sup> However, fiscal policy does not include other costs imposed on those generations by other aspects of government policy. The enormous contributions that the federal government demanded from these generations during the Second World War do not register as a cost of fiscal policy any more than the liberty and prosperity that their wartime sacrifices secured for subsequent generations register as a

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<sup>154</sup> Medicare was enacted as an amendment to the Social Security Act, although it is not administered by the Social Security Administration and, for most public-policy purposes, is analyzed separately from social security.

<sup>155</sup> Kotlikoff, *supra* n.\_\_\_\_, at \_\_\_\_ [GP].

benefit of fiscal policy.<sup>156</sup> Government policies that conscript members of generation A to fight and die in battle and then pay generous retirement benefits to the remaining members have not obviously preferred generation A to generation B, none of whose members are conscripted and all of whose members receive smaller retirement benefits. If one looks forward rather than backward, a hypothetical policy under which government implements immediate and substantial restrictions on carbon emissions might impose considerable costs on current generations and confer considerable benefits on future generations. But any attempt to measure intergenerational effects would miss those costs and benefits entirely if the frame were limited to government fiscal policy.

Widening the frame still further does not eliminate the anomalies. At least in theory, one could attempt to measure the intergenerational effects of government policy in its entirety. Assuming that the substantial problems of valuing costs such as compulsory military service and benefits such as reductions in adverse climate change could be overcome and that the values of those costs and benefits could be made commensurable with taxes and transfer payments, a framework broadly defined to include all governmental activities makes sense only if those activities do not cause individuals and institutions to adjust their behavior. If government loosens restrictions on carbon emissions, a model for measuring the intergenerational effects of government policy presumably would account for that change as a reduction in costs for current generations and an increase in costs for future generations. But if current generations respond by reducing their carbon emissions (spurred to do so, perhaps, by the increased salience of climate-change concerns resulting from the new government policy), the intergenerational effects of the government policy might be partly or entirely reversed.

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<sup>156</sup> See, e.g., Goode and Steuerle, *supra* n.\_\_\_\_, at 1029 (“Note in this context [generational accounting] that generations that dedicated lives, as well as forgone earnings, to defense of the country are not measured as having paid any additional ‘tax’ or having made any additional transfer to other generations.”); Shaviro, *supra* n.\_\_\_\_, at 159 (“[G]enerational accounting is limited to fiscal policy and thus mostly cannot adjust for generational differences in benefit from the noncash goods and services that the government provides, in detriment such as regulatory burden, and in noncash contributions to the government such as conscripted military service.”).

In such a case, it would be more than misleading to conclude that government policy, as a whole, had made current generations better off at the expense of future generations.<sup>157</sup>

When conceived broadly – as this frame purports to do – government is little more than one medium through which people interact with their contemporaries and with their successors; but it is only *one* medium in which they do so. Analyzing distributional outcomes along one dimension of intergenerational interaction (such as government policy) is still incomplete if it fails to account for other dimensions of intergenerational interaction (such as non-governmental wealth transfers or changes in non-governmental consumption patterns) that complement or offset activity along the first dimension. Although we can make interesting observations about how government treats different generations through its policies, those observations hardly seem to be a sound basis for making judgments about intergenerational equity if we ignore all non-governmental activity that occurs in response to those policies.<sup>158</sup>

However, a frame so expansive that it draws no distinction between governmental activity and non-governmental activity does not provide a basis for making judgments about the equity or inequity of how *government* treats different generations.<sup>159</sup> To be able to measure the intergenerational effects of government policy – as opposed to the intergenerational effects of all human activity – requires a less

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<sup>157</sup> See, e.g., Shaviro, *supra* n.\_\_\_\_, at 160 (“[E]ven focusing purely on the overall activities of the government provides too narrow a focus for assessing generational equity. . . . [G]overnment policy embraces only a small portion of the total interaction between present and future generations.”).

<sup>158</sup> See, e.g., Shaviro, *supra* n.\_\_\_\_, at 153-4.

<sup>159</sup> At best, this expansive frame may suggest a baseline of total intergenerational wealth distribution against which one can assess potential changes in the status quo. But, even there, to treat the status quo as the proper baseline for making normative judgments about discrete policy changes makes sense only after making an independent normative judgment about the status quo itself. If the existing distribution of resources inappropriately favors current generations over future generations, a policy change that transfers resources to future generations would appear equitable; but that same transfer would appear inequitable if the existing distribution inappropriately favors future generations over current generations.

expansive frame. That less expansive frame would have to treat non-governmental activity as exogenous so that the particular effects of governmental activity can be assessed. At that point, one is back into the thick of choosing among the frames of specific government programs, government fiscal policy, and government policy in its entirety. Any such choice would be arbitrary and unreliable.<sup>160</sup>

Each of the possible frames for measuring intergenerational effects is problematic, and none presents itself as the clear basis for analysis insofar as that analysis is to support normative conclusions. The case can always be made that a broader or narrower frame is more appropriate, and government programs, policies, or actions that might appear equitable to future generations when the intergenerational effects from one frame are considered may appear entirely inequitable when the effects are considered from a broader or narrower frame.<sup>161</sup> The problem is tolerable where the purpose of the inquiry is limited. If all we want to know is the intergenerational effects of the taxes and transfers that fall under the official label of social security, we can undertake the analysis within that framework. The results we obtain are, of course, limited by the arbitrary parameters of what we are analyzing.

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<sup>160</sup> In his book *Do Deficits Matter?*, Daniel Shaviro criticizes generational accounting as dependent on too narrow an analytic frame. See Shaviro, *supra* n.\_\_\_\_, at 159-60. But rather than rejecting generational accounting as a useful analytic measure, he argues that it is “[p]erhaps the best tool for enhancing our understanding of who wins and loses from alternative reforms.” Daniel Shaviro, “Understanding the Generational Challenge,” 75 *Tax Notes* 714, \_\_\_\_ (1997). In fact, Shaviro’s answer to the framing problem is simply to widen the scope so that the question of intergenerational equity is posed as to the “*overall* nature and amount of what we take and what we leave” – which “depends in part on savings rates and net capital formation, construed to include human capital and all changes to depletable and degradable resources.” Shaviro, *supra* n.\_\_\_\_, at 164 (emphasis in original). But Shaviro’s broader frame still does not account for non-material benefits and burdens that can affect different generations differently and that should inform an account of equity among generations. Rather, he frames the problem of intergenerational equity as a problem of allocation between current and future consumption.

<sup>161</sup> As Daryl Levinson puts the point in the context of constitutional adjudication, determinations of whether a transaction between government and private citizens increases or reduces the welfare of the private citizens “depend . . . crucially, on which government harms and benefits are included within the relevant transaction.” Levinson, *supra* n.\_\_\_\_, at 1378.

But the framing problem becomes much more significant when we use the results to ground normative conclusions about government policy. The judgment that an older generation unduly benefits under the social security program at the expense of later generations suggests that, to the extent possible, the older generation should give back its windfall and reverse the inequity. But that policy prescription would appear fundamentally wrong if a broader frame indicated that the older generation on the whole had been treated no better than its successors; and, then again, it would appear fundamentally right if a still broader frame indicated that the older generation has benefited at the expense of those successors after all. The arbitrary choice of analytical frame may well determine the specific policy prescription.

### C. Normative Implications of Fiscal-Gap and Generational Accounting

The problems discussed above sharply limit the potential role of fiscal-gap and generational accounting – the best existing measures of the intergenerational effects of government policy – within the broader project of intergenerational equity. Those models oversimplify important questions about intergenerational attribution, provide asymmetric treatment of benefits and burdens, and rely on arbitrary decisions about what aspects of government policy should fall within the scope of analysis. Those problems confirm that neither fiscal-gap nor generational accounting can provide a credible basis for meaningful normative judgments about intergenerational equity.

This does not imply, however, that these measures are not important analytic tools for evaluating fiscal policy. Their strength lies in their capacity to project current policy forward and determine, within the parameters of reasonable assumptions, which generations have borne or will bear many of the cash costs of government. That, in turn tells us whether the costs that will be borne by future generations are manageable in light of their anticipated incomes, and it therefore indicates whether current the cash-flow effects of fiscal policy likely will be sustainable over the long term. Fiscal-gap and generational accounting thus predict whether – and, in rough terms, when – we will have to modify fiscal policy so that the cash needs of the federal government can be met.

But, for all that, fiscal-gap and generational accounting do not move us closer to answering the important question of whether current fiscal policy or any specific reform to current fiscal policy is *fair* to current and future generations.

### III. Normative Problems in Assessing Intergenerational Equity

As indicated above, attempts to evaluate the intergenerational equity of government policy must address both how to measure intergenerational effects and what it means for those effects to be fair. Part II analyzed measurement issues, and this Part III analyzes fairness issues. More specifically, this part considers three normative approaches to intergenerational equity: defining intergenerational equity in a manner specific to fiscal policy; defining intergenerational equity more generally; and resolving intergenerational equity exclusively through political processes.<sup>162</sup>

#### A. Specific Theories of Intergenerational Equity for Fiscal Policy

Public-finance economists and legal scholars have proposed norms intended to advance intergenerational equity in government fiscal policy. These norms necessarily encounter the framing problems, discussed in Part II.B.5, that undermine fiscal-gap and generational accounting. By arbitrarily segmenting fiscal policy from other aspects of government policy and from non-governmental activity, these norms yield policy prescriptions that ignore intergenerational effects bearing on the question of fairness across generations. As such, these norms cannot be reliable. Consider how the framing problem arises in several such accounts.

Daniel Shaviro discusses – and rejects – a “no-transfer” norm under which government fiscal policy should effect no intergenerational transfers of wealth.<sup>163</sup> As

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<sup>162</sup> The discussion of these approaches is not exhaustive; it does not purport to survey the economic, legal, and philosophical literatures for all interesting or credible stances on intergenerational equity. For a broader account, see Lawrence B. Solum, “To Our Children’s Children: The Problems of Intergenerational Ethics,” 35 Loy. L. A. L. Rev. 163 (2001).

<sup>163</sup> Shaviro, *supra* n.\_\_\_\_, at 152-7.

Shaviro notes (drawing on Cass Sunstein's work), the no-transfer norm is set against an arbitrary baseline; it takes the status quo as normatively correct and condemns any tax or transfer program that changes the status quo.<sup>164</sup> Moreover, the scope of the norm is limited by the boundaries of its frame: the no-transfer norm has nothing to say about intergenerational transfers made outside government fiscal policy, which may complement or offset the intergenerational transfers made through fiscal policy and which may correct or exacerbate intergenerational inequities in the status quo.<sup>165</sup>

Laurence Kotlikoff argues that the proper end of fiscal policy in its treatment of different generations is "generational balance."<sup>166</sup> For Kotlikoff, generational balance is achieved when government imposes the same net tax burden on each generation.<sup>167</sup> Thus, Kotlikoff's analytic work on generational accounts – which indicates that net tax burdens increased steadily throughout the Twentieth Century and will increase sharply for future generations<sup>168</sup> – demonstrates, in his view, intergenerational inequity. Kotlikoff's position has the virtue of suggesting specific prescriptive outcomes for fiscal policy: where generational accounts are out of balance, they should be rebalanced either by increasing taxes on current generations or reducing spending for current generations.<sup>169</sup> But, as with the no-transfer norm, Kotlikoff's principle necessarily is cabined by his frame. If government confers benefits on future generations or imposes costs on current generations that are not captured in generational accounts – either

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<sup>164</sup> Shaviro, *supra* n.\_\_\_\_, at 153.

<sup>165</sup> Shaviro, *supra* n.\_\_\_\_, at 153-4.

<sup>166</sup> Kotlikoff, *supra* n.\_\_\_\_, at 218-9; Jagadeesh Gokhale and Laurence J. Kotlikoff, "Generational Justice and Generational Accounting," in John B. Williamson, Diane M. Watts-Roy, and Eric R. Kingson (eds.), *The Generational Equity Debate* 76-82 (1999).

<sup>167</sup> Kotlikoff, *supra* n.\_\_\_\_, at 218-9; Gokhale and Kotlikoff, *supra* n.\_\_\_\_, at 82-3.

<sup>168</sup> See Part II.\_\_\_\_, *supra*.

<sup>169</sup> Gokhale and Kotlikoff, *supra* n.\_\_\_\_, at 82-3; Auerbach, Gokhale, and Kotlikoff, *supra* n.\_\_\_\_, at 84-5.

because the accounts do not incorporate all aspects of fiscal policy or because the benefits and costs are provided outside fiscal policy – the imperative that government should take corrective action to rebalance generational accounts becomes suspect at best and wrong at worst. Additionally, Kotlikoff’s norm assumes away the intergenerational effects of non-government activities.

Tyler Cowen offers a more expansive fiscal-policy norm in what he calls the “principle of growth.”<sup>170</sup> That principle – which Cowen grounds in “deep concern for the distant future”<sup>171</sup> – requires that we structure fiscal policy to maximize the rate of sustainable economic growth.<sup>172</sup> Thus, he would evaluate policy decisions by “simply ask[ing] whether a given policy is likely to increase or decrease the rate of economic growth.”<sup>173</sup> His principle suggests that the choice between current and future consumption generally should be resolved in favor of future consumption.<sup>174</sup> This would imply that each generation should prefer the well being of its successors over itself, so that consumption always will be deferred. But, as with the no-transfer and generational-balance norms, Cowen’s norm has framing problems. Although Cowen has set a broader frame than has Kotlikoff, his principle of growth does not account for

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<sup>170</sup> Tyler Cowen, “Caring about the Distant Future: Why It Matters and What It Means,” 74 U. Chi. L. Rev. 5, 16 (2007). It is actually not clear what status Cowen contemplates for the principle of growth. He refers to it both as a “rough-and-ready rule of policy evaluation” and as “a useful practical rule.” *Id.* at 16-7.

<sup>171</sup> Cowen, *supra* n.\_\_\_\_, at 13-6.

<sup>172</sup> Cowen, *supra* n.\_\_\_\_, at 16. By “economic growth” he means gross domestic product, modified to include “leisure time, household production, and environmental amenities.” Cowen, *supra* n.\_\_\_\_, at 17. He tempers his claim by conceding that sustainable economic growth should not override “inviolable human rights.” Cowen, *supra* n.\_\_\_\_, at 17.

<sup>173</sup> Cowen, *supra* n.\_\_\_\_, at 27.

<sup>174</sup> Cowen’s treatment of this question is equivocal: he recognizes that the Solow model of economic growth and the increasing-returns model of economic growth yield inconsistent implications on the trade-off between current and deferred consumption, and his own discussion never reaches closure – although he intimates a preference for the increasing-returns model. Cowen, *supra* n.\_\_\_\_, at 29-31.

non-economic governmental benefits and burdens or for non-governmental activities that may affect different generations differently.

In contrast to these accounts, Shaviro suggests that perhaps there should be no norm of intergenerational equity for fiscal policy.<sup>175</sup> He argues that the question of intergenerational equity in fiscal policy cannot meaningfully be separated from the question of how much saving is appropriate.<sup>176</sup> Unless one can establish the complete absence of Ricardian transfers, any intergenerational transfers implemented through government policy can be wholly or partly undone through private transfers.<sup>177</sup> Thus, the proper question, Shaviro maintains, is the overall savings rate.<sup>178</sup> On that point, Shaviro argues that “[t]he most defensible stance” is “skepticism concerning *any* strong claims about the proper level of saving.”<sup>179</sup> However appealing that conclusion, it too is dependent on a prior framing decision. Arguably, Shaviro has set the broadest frame of all: he tries to account not only for government-mandated transfers but also transfers through non-governmental activity. Still, his focus remains stubbornly on transfers of material resources among generations. He does not account for non-material benefits and burdens, even though the intergenerational distribution of these benefits and burdens may well be just as important as the intergenerational distribution of material benefits and burdens.

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<sup>175</sup> Shaviro, supra n.\_\_\_\_, at 180-5. Shaviro is elusive on this point. Shortly after publishing his skeptical argument, he suggested in a brief article that “the best course . . . may be to spread the pain [of fiscal sacrifice] widely by requiring all age groups to share it in some measure, rather than deeply by making a few pay in full.” Daniel Shaviro, “Understanding the Generational Challenge,” 75 Tax Notes 714, \_\_\_ (1997). More recently, he argued that “it is difficult to specify the optimal intergenerational distribution policy,” Shaviro supra n.\_\_\_\_, at 1332, but he pointedly declined to dismiss the idea of intergenerational equity in fiscal policy as not meaningful. Thus, it is not quite clear how deep his skepticism on this point runs.

<sup>176</sup> Shaviro, supra n.\_\_\_\_, at 168-76.

<sup>177</sup> Shaviro, supra n.\_\_\_\_, at 160-4.

<sup>178</sup> Shaviro, supra n.\_\_\_\_, at 170.

<sup>179</sup> Shaviro, supra n.\_\_\_\_, at 184 (emphasis in original).

These and other attempts to formulate a normative account of intergenerational equity for government fiscal policy in particular or even for government policy as a whole are inherently incomplete. It makes little sense to evaluate whether fiscal policy treats different generations equitably when other aspects of government policy also bear on the distribution of benefits and burdens across generations; and it makes little sense to evaluate whether government policy in its entirety treats different generations equitably when non-governmental activity complements and offsets the intergenerational effects of governmental activity.<sup>180</sup>

### B. General Theories of Intergenerational Equity

Political and moral philosophers have examined the problem of intergenerational equity from various stances – including consequentialism, libertarianism, contractarianism, and classical liberalism. At the threshold, there is at least a question as to whether current generations owe any obligations at all to future generations, but the philosophical literature generally accepts the existence of such obligations. Derek Parfit does not doubt that current generations owe duties to future generations, but he nonetheless identifies difficult problems in determining the basis for those duties.<sup>181</sup> Once Parfit takes account of the fact that “we can easily affect the identities of future people” – what he famously calls the “Non-Identity Problem” – he encounters an inability to ground “our beliefs about our obligations to future generations.”<sup>182</sup> Although we might pursue actions that would have bad effects for future generations

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<sup>180</sup> See also Louis Kaplow, “Discounting Dollars, Discounting Lives: Intergenerational Distributive Justice and Efficiency,” 74 *Univ. of Chi. L. Rev.* 79, 87-8 (2007) (arguing that “it is incomplete and potentially misleading to suggest that the present generation does (or does not) have an obligation to a future generation to do one specific thing or another, such as cleaning up the environment, conserving nonrenewable resources, or avoiding accumulation of a large debt”).

<sup>181</sup> Derek Parfit, *Reasons and Persons* \_\_\_ (1984).

<sup>182</sup> Parfit, *supra* n. \_\_\_, at \_\_\_.

(such as depleting natural resources), the Non-Identity Problem implies that those actions are “worse for no one” because our actions, in addition to depleting natural resources, will also change the identities of future people.<sup>183</sup> Parfit struggles – and, by his own account, fails – to identify a moral theory that both justifies our notions about what we owe future generations and avoids unacceptable implications.<sup>184</sup> He does not, however, surrender the underlying claim that those notions ultimately can be justified.

Jan Narveson appeals to “person-regarding utilitarianism” to establish the existence of obligations to future generations.<sup>185</sup> Narveson argues that utilitarianism implies that “what we owe to future generations is neither Everything nor Nothing, but merely Something.”<sup>186</sup> It cannot be that current generations owe future generations nothing, he argues, because between current generations and future generations are overlapping relationships of older persons and younger persons who are, for some time, contemporaries. To maintain that current generations owe nothing to future generations, it would be necessary to argue that older persons owe nothing to younger persons – that is, that the self-interest of older persons would be served by denying resources to their younger contemporaries. That runs counter to the self-interests of older persons and, in any event, cannot be reconciled with the duties of parents to their children.<sup>187</sup> Similarly, it cannot be that current generations owe future generations everything; at a minimum, the implication of that position would be continual sacrifice by all generations on behalf of future generations – such that no generation would ever enjoy the benefits of the sacrifices made by its predecessors.<sup>188</sup> If current generations

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<sup>183</sup> Parfit, supra n.\_\_\_\_, at \_\_\_\_.

<sup>184</sup> Parfit, supra n.\_\_\_\_, at \_\_\_\_.

<sup>185</sup> Jan Narveson, “Future People and Us,” in R.I. Sikora and Brian Barry (eds.), *Obligations to Future Generations* 38-60 (1979).

<sup>186</sup> Narveson, supra n.\_\_\_\_, at 60.

<sup>187</sup> Narveson, supra n.\_\_\_\_, at 57-8.

<sup>188</sup> Narveson, supra n.\_\_\_\_, at 59-60.

owe future generations more than nothing but less than everything, they must owe “merely [s]omething” – which “need not be the same for all.”<sup>189</sup>

Other theorists have ventured more specific claims about the content of intergenerational equity. Robert Elliot extends Robert Nozick’s work to conclude that libertarianism implies “extensive obligations to future generations.”<sup>190</sup> Elliot argues that Locke’s proviso about the acquisition of resources – that “enough and as good be left for others”<sup>191</sup> – implies that any individual, “no matter where the person is located historically,” has a right to “how things would have been for him in the state of nature.”<sup>192</sup> Although this suggests a duty to conserve resources, the duty is limited to those resources that would have been available in the state of nature – such as “clean air, pure water and even aesthetically appealing landscapes.”<sup>193</sup> But one would be hard pressed to agree that this constitutes an “extensive” obligation to future generations. On its face, this duty applies to no portion of the stock of human wealth beyond natural resources. It implies, for example, that one generation could consume all its own capital and all the capital of the next several generations. As long as the profligate generation preserved “clean air, pure water and . . . aesthetically appealing landscapes,” it would discharge its intergenerational obligations.<sup>194</sup>

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<sup>189</sup> Narveson, *supra* n.\_\_\_\_, at 60.

<sup>190</sup> Robert Elliot, “Future Generations, Locke’s Proviso and Libertarian Justice,” 3 *J. of Applied Phil.* 217, 218 (1986).

<sup>191</sup> Elliot, *supra* n.\_\_\_\_, at 219.

<sup>192</sup> Elliot, *supra* n.\_\_\_\_, at 224.

<sup>193</sup> Elliot, *supra* n.\_\_\_\_, at 224-5.

<sup>194</sup> Elliot in fact retreats somewhat from his claim his final formulation of the duties to future generations, saying that “[i]t is theoretically possible that these obligations will be extensive given a reasonably strong understanding of the baseline.” Elliot, *supra* n.\_\_\_\_, at 226.

A duty to preserve resources is implied as well by Bruce Ackerman's notion of "trusteeship" in "the liberal state."<sup>195</sup> Ackerman argues that each generation must "arrange its affairs so as to refrain from making members of the next worse off than the present occupants of our planet."<sup>196</sup> More specifically, Ackerman argues that, in the liberal state, each child is "entitled to an endowment that is no worse than . . . that provided to any of his agemates . . . [and] that obtained by any older citizen with whom the younger citizen can converse."<sup>197</sup> In other words, the "per capita wealth" of each generation must be "equal to" that of its predecessor generation.<sup>198</sup> This implies that each generation has a duty to preserve and transfer to its successors resources sufficient to satisfy the requirement of equal endowments among generations.<sup>199</sup> This, Ackerman indicates, ensures that persons of different generations enjoy undominated equality.<sup>200</sup>

Ackerman's articulation of the notion that intergenerational justice requires equal treatment of different generations has considerable appeal; "the intuitive idea," as James Fishkin observes in his own provocative account of intergenerational equity, "is that

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<sup>195</sup> Bruce A. Ackerman, *Social Justice in the Liberal State* 223 (1980).

<sup>196</sup> Ackerman, *supra* n.\_\_\_\_, at 213.

<sup>197</sup> Ackerman, *supra* n.\_\_\_\_, at 217.

<sup>198</sup> Ackerman, *supra* n.\_\_\_\_, at 223.

<sup>199</sup> In a similar vein, James Fishkin suggests as a possible norm of intergenerational equity "a requirement of equal per capita sacrifice (over the long term) for generational cohorts for the contributions they are required to make for dependent portions of the population (whether those portions are for the elderly, the disabled, or the young)." James S. Fishkin, "The Limits of Intergenerational Justice," in Peter Laslett and James S. Fishkin (eds.), *Justice between Age Groups and Generations* 72 (1991). Similarly, Kotlikoff's notion of intergenerational equity requires the same net tax rates for every generation. See Part III.A, *supra*. Where Ackerman posits the intergenerational equity norm in terms of equal endowments, Fishkin posits the norm in terms of equal sacrifice and Kotlikoff posits the norm in terms of equal tax rates. Each, however, takes the position that just or fair relations between generations demand equal treatment of persons born into different generations.

<sup>200</sup> Ackerman, *supra* n.\_\_\_\_, at \_\_\_\_.

justice should be neutral among generational cohorts.”<sup>201</sup> Still, Ackerman’s requirement of “equal endowments” suggests that total wealth likely would remain stagnant over time. The trusteeship envisioned by Ackerman merely requires that each generation pass along to the next generation the level of wealth that it inherited. Thus, any wealth generated by the activities of a generation that exceeds the wealth of the initial endowment may be freely consumed by that generation. If this principle were taken to its limits by each generation, the endowment that would pass from one generation to the next would be little, if anything, more what would be found in the state of nature.<sup>202</sup>

More importantly, Ackerman’s trusteeship principle does not fit all that well with other demands of liberalism. Ackerman specifically argues that intergenerational trusteeship follows from the “plainest . . . obligation” of the first generation to pass along its “inheritance” of undominated equality; earlier generations may not, he argues, exercise the “distinctive form of power” that “temporal priority gives the old . . . over the young.”<sup>203</sup> In seeking to safeguard the right of a later generation to undominated equality, however, Ackerman effectively has forced upon the later generation preferences that it may or may not actually have. Assume, for example, that several generations leave endowments to their successors that are greater than the endowments they inherited; assume, in other words, that the liberal state accumulates wealth over time. Assume also that, at a point of economic hardship, one generation, Generation A, that has inherited wealth from previous generations observes Ackerman’s requirement of trusteeship and, in acting to ensure equal endowments for successor generations, makes substantial sacrifices to its own well being. If on reaching maturity, the next

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<sup>201</sup> Fiskhin, *supra* n.\_\_\_\_, at 72. Cf. Dexter Samida and David A. Weisbach, “Paretian Intergenerational Discounting,” 74 U. Chi. L. Rev. 145, 153-4 (2007) (adopting assumption that “intergenerational equity requires each generation to have the same marginal utility of consumption (or absolute utility, depending on our social welfare function)”).

<sup>202</sup> Ackerman makes clear that trusteeship does not require a generation to transfer to its successor any wealth beyond that received from its predecessor. Ackerman, *supra* n.\_\_\_\_, at 224.

<sup>203</sup> Ackerman, *supra* n.\_\_\_\_, at 221.

generation, Generation B, regrets the sacrifices made by Generation A and expresses a preference that Generation A have devoted significantly greater resources to the well being of Generation A, Generation B will find that Generation A has in fact exercised its “distinctive form of power” – not by transferring too few resources to Generation B but by transferring too many.

Thus, if Congress in 1935 had refused to enact President Roosevelt’s proposal for the social security program or if Congress in 1939 and later years had refused to expand the scope of social security benefits payable to early program participants, later Americans might sincerely regret that so many of their predecessors lived their final years in poverty; they might sincerely regret, in other words, inheriting a society in which government policy permitted widespread deprivation among older citizens. Certainly, a response that these earlier generations were acting to preserve the equality of endowment that future generations should have in a liberal state would fail to persuade the later generations that the earlier generations had in fact acted improperly.

This parallels the point made by Fishkin when he argues that credible notions of intergenerational equity stand in tension with basic principles of liberal theory.<sup>204</sup> Although Fishkin’s objective is to demonstrate that the demands of intergenerational equity can conflict with the liberties of earlier generations (so, for example, with the earlier generations’ liberty to procreate), the conflicts also arise in the case of the liberties of later generations. First generations come first, and their actions necessarily affect the world as inherited by later generations. Ackerman tries to neutralize the “distinctive form of power” that arises from “temporal priority” by insisting on equality of endowments, but he does so by running roughshod over the prerogative of later generations to make their own determinations about their own preferences. Only by dictating to later generations exactly what it is that they want from a liberal state that gives them “undominated equality” can Ackerman claim to reconcile intergenerational duties with liberalism.

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<sup>204</sup> Fishkin, *supra* n.\_\_\_\_, at 62 and 71-3.

John Rawls presents a considerably more robust conception of intergenerational obligations.<sup>205</sup> As applied to generations over time, Rawls's difference principle requires improvement in the "long-term prospects of the least favored extending over future generations."<sup>206</sup> This implies that each generation must not only "preserve the gains of culture and civilization, and maintain intact those just institutions that have been established" but that each generation must also "put aside in each period of time a suitable amount of real capital accumulation."<sup>207</sup> This saving must continue until just institutions are established; at that point, no new intergenerational saving is required, and "a society meets its duty of justice by maintaining just institutions and preserving their material base."<sup>208</sup> In other words, for Rawls (but not for Elliot or Ackerman), intergenerational justice requires actual saving for the benefit of future generations.

The specific rate – or, more precisely, rates – of such savings would, of course, be determined in the original position.<sup>209</sup> Rawls contemplates that the savings rates will be dependent on the state of society at various stages. Although "the persons in the

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<sup>205</sup> John Rawls, *A Theory of Justice* 284-93 (1971). See also John Rawls, *Political Liberalism* 274 (1993) (revising his earlier account of intergenerational justice).

<sup>206</sup> Rawls, *supra* n.\_\_\_\_, at 285.

<sup>207</sup> Rawls, *supra* n.\_\_\_\_, at 285.

<sup>208</sup> Rawls, *supra* n.\_\_\_\_, at 287.

<sup>209</sup> Rawls, *supra* n.\_\_\_\_, at 287. Ackerman argues that Rawls's own conclusion here – that a choice made in the original position would yield a positive rate of saving – is inconsistent with the maximin approach that runs throughout *A Theory of Justice*. Specifically, Ackerman argues that the just savings principle would necessarily lead to lower well being of the worst off in the earliest generations. Ackerman, *supra* n.\_\_\_\_, at 223-5. Ackerman's objection assumes that any positive rate of saving as between an early generation and a later generation must reduce the well being of every member of the early generation, including the least well off. This is by no means necessary, however. A society that observes the progressive redistribution of wealth on an intragenerational basis could maintain a steady – or even increasing – level of well being for its least well off while still making net contributions to capital accumulation that allow for intergenerational transfers consistent with the just savings principle. It does not necessarily follow, then, that those in the original position would choose the equal-endowment principle of Ackerman's trusteeship over Rawls's just savings principle.

original position are to ask themselves how much they would be willing to save at each stage of advance on the assumption that all other generations are to save at the same rates," the poorer (presumably earlier) generations will be saving at lower rates and the wealthier (presumably later) generations will be saving at higher rates.<sup>210</sup> Still, this just savings principle would always require a positive rate of savings because, in Rawls's view, intergenerational transfers can be made only from earlier generations to later generations.<sup>211</sup>

But that hardly seems right. Societies can and do transfer wealth from later generations to earlier generations – as the United States has under the social security program – by funding payments to earlier generations through the accumulation of debt, whether explicit or implicit, that must be borne by later generations.<sup>212</sup> To the extent that a society uses such later-to-earlier intergenerational transfers to improve the position of the least well off in the earlier generations, it would seem to act consistently with Rawls's difference principle but contrary to his just savings principle. In short, it is not at all clear why just savings could not include a negative rate of savings in order to improve intragenerational justice, and it is not at all clear that, under just savings, concern for the "least favored" must necessarily be viewed as a "long-term" enterprise. Critically, Rawls recognizes that concern for intergenerational justice must be linked to concern for intragenerational justice. However, he minimizes the tension between the two, indicating only that former is a "constraint" on the latter.<sup>213</sup>

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<sup>210</sup> Rawls, *supra* n.\_\_\_\_, at 287.

<sup>211</sup> Rawls, *supra* n.\_\_\_\_, at 291.

<sup>212</sup> If later generations default on debt incurred by earlier generations to fund benefits for those earlier generations, one or more generations will bear costs from the default. If the debt is an explicit debt, evidenced (for example) by government bonds, default will cause the generations alive at and after the time of default, to the extent they are creditors, to bear the costs of default and, to the extent they are borrowers, to incur higher costs of government borrowing. If the debt is implicit, as in the case of the social security program, default will cause the generation or generations that are the obligees of the implicit debt to bear the default.

<sup>213</sup> Rawls, *supra* n.\_\_\_\_, at 292.

This brief and incomplete survey of how political and moral philosophers have addressed intergenerational equity suggests the very great difficulty of the problem. No consensus emerges from the philosophical literature on what duties current generations owe to future generations, even on such fundamental matters as whether intergenerational equity requires that current generations accumulate wealth for the benefit of future generations. There is reason, of course, for optimism: the question of intergenerational equity is relatively new,<sup>214</sup> and it may be that theorists will make substantial advances on these important points. Still, a robust theory of intergenerational equity must overcome significant obstacles.

First, a normative account of intergenerational equity will have a complex relationship to government policy. As argued above, framing the problem of intergenerational equity – whether for measurement or for normative purposes – in a way that excludes non-governmental activity necessarily yields incomplete and arbitrary outcomes. The activities of private individuals and institutions have substantial effects on the intergenerational distribution of benefits and burdens and may complement or offset the intergenerational distribution effected through government policy. In this respect, non-governmental activity has much greater importance for intergenerational equity than it does for intragenerational equity.<sup>215</sup> Thus, a norm of intergenerational equity must take account of both governmental and non-governmental activity when it addresses the distribution of benefits and burdens across generations.

Second, as suggested by Rawls's efforts to reconcile the just savings principle with the difference principle, any norm of intergenerational equity must address the inherent tension between intergenerational equity and intragenerational equity. Obviously, a norm of intergenerational equity must provide meaningful guidance on the

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<sup>214</sup> Peter Laslett and James Fishkin argue that “justice over time did not exist as a subject of analysis or discussion, even as a concept, before the 1970s, or before the 1960s at the earliest.” Laslett and Fishkin, *supra* n.\_\_\_\_, at 14.

<sup>215</sup> Particular thanks are due here to Mitchell Kane for emphasizing the importance of this point.

balancing of deferred consumption against current consumption. The tension there is obvious: resources that are consumed today cannot also be saved for the future, and resources that are set aside for the future cannot also be consumed in the present. But there is also a basic tension between intergenerational equity and intragenerational equity. When current generations save or otherwise transfer resources to future generations in satisfaction of what the current generations understand to be their obligations to future generations, the current generations enhance the well being of future generations. At the same time, however, current generations limit their own ability to contribute to the well being of their own members, including those who are least well off. Thus, intergenerational obligations potentially interfere with equitable redistribution among members of current generations.

To the extent they share our normative commitments, members of future generations benefit from equitable redistribution within current generations. Thus, if members of current generations were to engage in no redistribution so that they could transfer every available resource to the future, future generations might be less well off simply by virtue of the inequalities in the society they inherit from current generations. And yet, resources devoted to redistribution among members of current generations cannot be used for redistribution among members of future generations. This is simply a corollary of the tradeoff between deferred consumption and current consumption. Even if greater intragenerational redistribution by current generations means that future generations inherit a more just society, one cost of that increased redistribution may be greater intragenerational inequities in the future.

Thus, it is not enough for a substantive norm of intergenerational equity to balance deferred consumption against current consumption; it must also balance *that* balance against the demands of intragenerational equity for both current and future generations. The goals of preserving resources for our successors and improving the condition of our contemporaries yield potentially inconsistent directives. But any substantive norm of intergenerational equity that fails to take account of how a balance

between deferred and current consumption furthers or undermines the separate objective of intragenerational equity will be incomplete.

Third, a norm of intergenerational equity must provide a cogent account of how benefits and burdens are to be distributed among current and future generations without the benefit of any fixed baselines. Contrast the case of intragenerational equity: there, normative accounts typically address the question of how the sum of all benefits and burdens should be distributed or redistributed among existing persons. Although not known with precision, the quantum of benefits and burdens and the number of persons involved in the calculus effectively can be treated as fixed; that allows for an analytical baseline, whether the baseline is the existing distribution or a counterfactual distribution. In the case of intergenerational equity, however, neither the quantum of benefits and burdens nor the number of persons among whom the benefits and burdens are to be distributed can be taken as given.<sup>216</sup>

In fact, both factors are as much determined by the normative analysis as they are determinants of it. How much wealth and well-being there is to distribute among all generations and how many future generations there will be depend in part on how one defines the obligations of current generations to future generations. A normative account (such as Ackerman's) that requires nothing more than passing to the next generation what was received from the prior generation implies a smaller sum of benefits and burdens for distribution than does a normative account (such as Rawls's) that requires savings for the benefit of future generations.<sup>217</sup> Similarly, the number of

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<sup>216</sup> See also Cass R. Sunstein and Arden Rowell, "On Discounting Regulatory Benefits: Risk, Money, and Intergenerational Equity," 74 *Univ. of Chi. L. Rev.* 171, 200 (2007).

<sup>217</sup> Consider, for example, the point made by Geoffrey Heal in attempting to establish the proper discount rate for intergenerational effects: "If . . . future generations are richer than the present generation, then within a utilitarian framework the value of a marginal unit of consumption to them will be less than to us, and this will be reflected in the consumption discount rate. . . . If consumption were to be falling rather than rising over time, this effect would go into reverse and future increments of consumption would be more highly valued than present ones. The discount rate could be negative." Geoffrey Heal, "Discounting: A Review of the Basic Economics," 74 *U. Chi. L. Rev.* 59, 65 (2007). The relative wealth of current and future generations is, of course, the point that a norm of intergenerational equity would be meant to resolve. As Douglas Kysar

future generations and the number of people within each future generation is not (as Parfit's Non-Identity Problem indicates) exogenous to the choices made by current generations. To the extent those choices are informed by normative considerations, the number of future persons is both input and output of the analysis.

This is not to suggest that the normative analysis is inescapably circular; it is, however, to suggest that the normative analysis is difficult – considerably more difficult than the normative analysis of intragenerational equity. Approaches and concepts that are familiar from intragenerational equity break down in the case of intergenerational equity. Intuitively appealing norms, such as treating everyone the same, fail us when we lack any baseline or point of reference. We cannot take any particular level of wealth or well-being of future generations as given; indeed, we cannot even take the existence of future generations as a given. That makes it difficult to determine what it means for current generations to treat future generations equitably.

### C. Political Approaches to Intergenerational Equity

The skeptical analysis developed thus far offers little to policymakers whose duties include policy matters having intergenerational effects. Consider again the social security program. A conscientious lawmaker may rightly regard the long-term insolvency of the current program to be a pressing issue; she may rightly believe that program reform should be addressed at the earliest possible time. However, she may also understand, correctly, that any program reform inevitably will redistribute benefits and burdens among current generations and future generations. To advise this conscientious lawmaker that intergenerational equity cannot be assessed within the parameters of the social security program or even with the parameters of government

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argues: “[E]very distribution of resources between generations gives rise to a different market equilibrium, including within that equilibrium a resultant market rate of interest that reflects the opportunity cost of capital”; thus, where (as in environmental law) the inquiry “is concerned precisely with the analytically prior question of resource distribution among generations, it does not make sense to hinge such policymaking on the existing discount rate.” Douglas A. Kysar, “Discounting . . . on Stilts,” 74 U. Chi. L. Rev. 119, 130-1 (2007).

fiscal policy as a whole is to offer her no help at all. To advise her that the only meaningful way to assess intergenerational equity is to take into account the distribution of *all* benefits and burdens, whether governmental or non-governmental, is to suggest either that she ignore intergenerational equity when she undertakes social security reform or that she simply rely on her general and potentially wrong inklings about what outcomes would be fair.

One might object that, in the context of actual policy questions such as social security reform, we can address concerns about intergenerational equity in the same way that we address concerns about intragenerational equity: through the political process. All the analytic and normative problems presented by the attempt to establish a categorical account of intergenerational equity arguably could be avoided if we set aside the premise that achieving intergenerational equity requires both a way to measure intergenerational effects and a substantive standard of whether those effects are fair. After all, we do not hold questions of intragenerational equity to those exacting requirements.

The affirmative case would run along the following lines. Although intragenerational equity has long been a policy concern, we effectively use full representation and political participation by interested parties as a proxy for substantive intragenerational equity. As long as everyone with a stake in the outcome has an opportunity to engage in the processes of government – or, as Daryl Levinson puts it, “[a]s long as a group can compete on roughly fair terms in the pluralist political marketplace”<sup>218</sup> – we treat the decisions made through those processes as valid and binding, whether or not everyone would agree that that the outcomes are equitable as a substantive matter. Our conceptions of intragenerational equity provide a basis on which to evaluate policy outcomes, but they do not validate or invalidate those outcomes. Against that background, one might question whether problems of intergenerational equity might similarly be left to the political process.

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<sup>218</sup> Levinson, *supra* n.\_\_\_\_, at 1351.

The obvious difficulty here is that future generations cannot participate directly in the current political processes that may affect their interests.<sup>219</sup> The participants in the social security program born after the Second World War, for example, did not even begin to vote until well after the program participants born before the Second World War had established windfall benefits for themselves that would be funded by their successors; and many program participants who will pay for those windfall benefits have not been born even today. Additionally, there is no obvious reason to suppose that the generations who do participate in the current political process can adequately represent the interests of future generations – especially where the question in play involves the possibility of substantial intergenerational transfers.<sup>220</sup>

This point may be overstated; arguably, the political process does or at least could take into account the interests of future generations. First, the existence of overlapping generations and the strong ties among members of those overlapping generations suggest that current generations are not indifferent to the interests of their immediate successors. Thus, we take it for granted that parents will vote in the interests of their children on matters such as education, health, and compulsory military service. The notion that adult citizens serve more than capably as trustees for their children in the political process hardly seems open to doubt. Still, this suggests that the adequacy of proxy representation extends only a little into the future: it suggests that parents will protect the interests of their children (and perhaps their grandchildren) in matters of public policy, but it suggests nothing about the inclination or capacity of current generations to represent the interests of the many generations born in the more distant future.

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<sup>219</sup> This point often is made in the context of political decision-making on matters having intergenerational effects. See, e.g., Cowen, *supra* n.\_\_\_\_, at 6; Eric A. Posner, “Agencies Should Ignore Distant-Future Generations,” 74 *Univ. of Chi. L. Rev.* 139, 141 (2007); Congressional Budget Office, *supra* n.\_\_\_\_, at 1.

<sup>220</sup> Of course, no claim is made that the political process adequately represents all interests affected even in matters of intragenerational equity.

One might consider as well whether potential changes could enhance the ability of the political process to take the interests of future generations into account. Thoughtful commentators have suggested “mock referenda” to improve policymaking on issues having intergenerational effects.<sup>221</sup> The notion there is to provide a select group of voters with complete information about the likely near-term and long-term effects of various policy options in order to elicit information about those voters’ preferences.<sup>222</sup> Although the mock referenda are proposed as a means of understanding the weight that current generations attach to different intergenerational effects, arguably it could be adapted to gather information about the weight that current generations believe future generations would attach to different intergenerational effects. There is, after all, a difference between political views formed after little or no serious reflection and political views formed after thoughtful deliberation.<sup>223</sup> If a deliberative opinion poll, as proposed by James Fishkin, can improve the quality of decision-making by current generations on matters affecting their own interests,<sup>224</sup> it should at least improve decision-making by current generations on matters affecting the interests of their successors as well. Still, although a mock referendum or a deliberative opinion poll may make members of current generations better informed about the intergenerational effects of various policy options, neither device can remove the potential conflict between the interests of current generations and the interests of future generations; in other words, neither a mock referendum nor a deliberative opinion poll can make

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<sup>221</sup> Raymond J. Kopp and Paul R. Portney, “Mock Referenda for Intergenerational Decision-making,” in Paul R. Portney and John P. Weyant (eds.), *Discounting and Intergenerational Equity* 87 (1999).

<sup>222</sup> Kopp and Portney, *supra* n.\_\_\_\_, at 91-6.

<sup>223</sup> See generally James S. Fishkin and Peter Laslett (eds.), *Debating Deliberative Democracy* (2003) and James S. Fishkin, *Democracy and Deliberation: New Directions for Democratic Reform* (1991).

<sup>224</sup> Fishkin, *supra* n.\_\_\_\_, at 81-104.

members of current generations adequate proxies for future generations in the current political process.<sup>225</sup>

Alternatively, the interests of future generations could be made a counter-majoritarian check on the legislative process. For example, the lawmaking process could require that legislation having intergenerational effects not impose any burden on any future generation greater than the greatest burden imposed on any current generation. For this purpose, a “future generation” would be any generation that, by reason of its age or by reason of not yet having been born, is not eligible to participate in the processes of representative government; a “current generation” would be any generation that, by reason of its age, is eligible to participate in the processes of representative government. In this way, if any one current generation wants to impose burdens on future generations, it must be willing to impose a burden of at least the same size on itself.<sup>226</sup> But this approach also would suffer from significant limitations. It would incorporate all the measurement and framing problems developed in Part II.B, and it would presuppose a workable mechanism for invalidating legislation that failed to meet the required balance of burdens on future and current generations. More fundamentally, it would not constitute an attempt to introduce the interests of future generations into the political process; rather, it would allow those interests to trump the political process.

In sum, the relegation of questions concerning intragenerational equity to the political process does not provide a satisfactory model for questions concerning intergenerational equity. In the case of intragenerational effects of policy issues, we at

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<sup>225</sup> See also Sunstein and Rowell, *supra* n.\_\_\_\_, at 178 (arguing against determining the interests of future generations “by consulting the preferences of the present generation”).

<sup>226</sup> This suggests a weak analogy to the constitutional guarantee of equal protection when understood as “reserv[ing] special judicial solicitude for those few groups . . . that are systematically disadvantaged by some failure in the political market and likely to get less than their ‘fair share’ of favorable outcomes.” Levinson, *supra* n.\_\_\_\_, at 1351. For a fuller development of that analogy in the context of intergenerational equity, see R. George Wright, “The Interests of Posterity in the Constitutional Scheme,” 59 U. Cin. L. Rev. 113 (1990).

least attempt to ensure full participation by all affected interests and then treat the outcome as valid, even if we might reject the outcome on the basis of a substantive norm. In the case of intergenerational effects, we cannot reasonably claim that all affected interests participate, either directly or by reliable proxy. Potential modifications to the political or legislative process arguably could make limited improvements to the quality of decision-making, but they could not provide any real assurance that the political processes have weighed the interests of current generations against the interests of future generations.<sup>227</sup>

### Conclusion

Assessing government policy decisions from the perspective of intergenerational equity presents substantial problems. There are genuine limitations on our ability to measure intergenerational effects and, importantly, a fundamental arbitrariness in defining the relevant framework. Even perfect measurement of intergenerational effects, however, would remain useless without a robust norm of intergenerational equity to assess whether those measured effects are fair. And yet the question remains overwhelmingly important. Government policy affects people alive today and people who will be alive in the future, and we cannot responsibly make decisions about those policy matters in ignorance or disregard of how they affect future generations. The question of intergenerational equity is hardly misplaced; but, at least for now, we have no good answers.

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<sup>227</sup> See also Shavero, *supra* n.\_\_\_\_, at 177-8 (rejecting notion that political process can adequately take account of future generations' interests).