Response

Does Intergenerational Justice Require Rising Standards of Living?

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I. Introduction

In his provocative and insightful contribution to this symposium, *What Do We Owe Future Generations?*, Neil Buchanan takes issue with the conventional wisdom that the United States is harming its future generations by running large and persistent federal budget deficits.¹ He focuses particular attention on the claim, which has “often been couched in the language of intergenerational justice,” that “currently-living generations are harming future generations by refusing to change [Social Security] policies that will ultimately require large changes in future benefits or taxes.”² In response to those critics, he points out that even under the most pessimistic of the long-term scenarios envisioned in the 2009 *Social Security Trustees’ Report*, material standards of living in the United States are expected to more than double over the next seventy-five years.³

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2 Id. at 133.
With this projection in mind, Buchanan posits the question: "If future generations will almost certainly be significantly richer than current generations, why must current generations make still more sacrifices to prevent any erosion at all in the (much higher) living standards of future generations?" Buchanan offers, somewhat tentatively,

a surprising and potentially unsettling conclusion: we might want to make the deliberate choice to lower the living standards of future generations in order to raise current living standards. Because future Americans are highly likely to have much higher living standards than current Americans, we are arguably moving in the wrong direction when we call for current sacrifice in the name of intergenerational justice. Whether or not one agrees with Buchanan's conclusion, his paper makes an important contribution by questioning the common assumption that the anticipated improvements in living standards in the absence of budget deficits establish a normative baseline, such that any government action which would reduce improvements below that baseline must overcome a strong presumption of illegitimacy. Although he does not cite them in this connection, Buchanan's argument on this point closely resembles the claim of Liam Murphy and Thomas Nagel that the pretax distribution of income has no moral significance, and that there should be no presumption against the fairness of government tax-and-spending programs that alter the pretax distribution of economic resources. Just as pretax income is a myth (as Murphy and Nagel explain) because there could be no income in the absence of the social structure provided by tax-financed government, so it is a myth that there is some natural level of growth in living standards in the absence of government action. In both cases, it makes no sense to imagine some mythical natural condition—of income distribution or of economic growth—in the absence of government, and then to impose a heavy burden of justification on any government policy (such as taxation in the one case, or budget deficits in the other) which interferes with that supposed state of nature.

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4 Id. at 136.
5 Id. at 145.
6 Id. at 133, 136.
Buchanan does not go so far as to argue that present generations would be justified in pursuing a policy of no per capita economic growth (and thus of no improvement across generations in standards of living). He does not need to go that far to defend the direction of current fiscal policies, which are likely merely to slow growth compared with the assumed baseline of a no-deficit policy, rather than to eliminate growth. Nevertheless, his analysis suggests the further question of whether a no-growth policy might be justifiable. In this paper, I examine whether justification for such a policy can be found in either the political theory of John Rawls or in the application of utilitarian principles to intergenerational ethics. I conclude that under a Rawlsian analysis there is a strong argument that the current generation of Americans has no obligation to strive for higher standards of living for future generations, but that under utilitarian principles there is such an obligation.

Part II of this paper explains, in broad outline, how a society which rejects the goal of increasing living standards for future generations might arrange its economy so as to produce a constant standard of living across generations. Part III considers whether the actions of such a society would be compatible with Rawlsian principles of justice, and Part IV asks the same question with respect to utilitarian principles. Part V briefly concludes.

II. Achieving a Steady-State Standard of Living

As Buchanan notes, the Solow Growth Model (named after Robert M. Solow) is "the preferred method for explaining economic growth to millions of economics students worldwide."\(^8\) According to the model, unless there is technological progress an economy will eventually reach a steady state in which per worker levels of output, consumption, and capital stock remain constant over time.\(^9\) However, once technological progress (which produces improvements in the efficiency of labor) is taken into account, per capita output and consumption can and do increase in the otherwise steady state, even as capital per worker remains constant.\(^10\)

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10 *Id.* at 236 ("In the very long run, according to the Solow model, only these continuing increases in productivity [i.e., technological progress] hold the promise of perpetually better living standards.").
If maintaining a steady state level of capital stock can result in rising standards of living through the miracle of technological progress, then it ought to be possible to maintain a steady (rather than increasing) standard of living by means of a decrease in the capital stock designed to offset—in terms of its effect on the standard of living—the consequences of technological progress. In other words, as technology progresses it should be possible to maintain any given standard of living with a lower level of capital stock per capita. If the current generation desired to equalize its standard of living with that of future generations, taking into account the effects of anticipated technological advances, it could do so by dissaving, thus devoting an appropriate portion of the capital stock to current consumption.\footnote{11} This might be done by literally converting capital stock into consumption goods (beating ploughshares into iPods?), or by devoting resources to consumption rather than to making good the effects of depreciation on the capital stock. It might also be done, however, by keeping the physical capital stock constant while incurring intergenerational public debt (i.e., debt the proceeds of which are used to support consumption by the current generation, while the burden of the debt is bequeathed to future generations) owed to foreign lenders.\footnote{12}

\footnote{11} Peer Ederer, Philipp Schuller, and Stephan Willms have proposed that each economically developed nation adopt an “economic sustainability indicator” measure as a guide to long-term economic policy. Peer Ederer, Philipp Schuller & Stephan Willms, The Economic Sustainability Indicator, in Handbook of Intergenerational Ethics 129 (Joerg Chet Tremmel ed., 2006). Their premise is that each generation should consider itself obligated to bequeath to the next generation as much net capital (i.e., physical capital, human capital, natural resources, and structural capital, net of intergenerational debt) as it inherited from the preceding generation, so that living standards will not decline across generations. A government’s policies satisfy the criterion of economic sustainability if they are expected to produce a ratio of bequeathed capital stock to inherited capital stock of at least 100%. \textit{Id.} at 131. In keeping with standard accounting practices, the formula proposed in the essay for measuring net capital does not take technological progress into account. As a result, satisfying the 100% standard for economic sustainability will actually result in rising living standards across generations. The authors do not, however, insist on rising living standards as a matter of justice. Rather, they seem to view the rising living standards as resulting from a technical defect in the measurement of net capital:

\begin{quote}
    The higher growth is due to the productivity growth, which is not adequately captured by the production functions typically in use.
\end{quote}

This weakness of the production function is also a weakness of the Economic Sustainability Indicator. However, with the advances in structural capital and human capital measurement, the gap between theoretically explainable (and therefore foreseeable) growth and observed economic growth is closing. \textit{Id.} at 139. Thus they accept the concept of maintaining a constant standard of living by offsetting technological progress with intergenerational debt, to the extent the problems in measuring and predicting technological progress can be overcome.

Although, as Buchanan points out, the fiscal path of the United States is not expected to come close to eliminating all growth in standards of living,\(^\text{13}\) the structural budget deficit can be understood as a step in that direction.

Even if one believes, at the level of theory, that it would be appropriate for the government to run budget deficits large enough to eliminate technologically-driven improvements in standards of living, and even if foreign lenders would cooperate with such a project, there would still be daunting problems of implementation. One obvious concern is the difficulty of accurately predicting the pace of technological progress. Should we be risk averse in favor of future generations, borrowing against only those technological advances as to which we are very confident, in order to minimize the risk of declining standards of living? Declining standards of living may be sufficiently problematic (for example, in terms of demoralizing effects on the populace) that strong risk aversion is called for; but in that case we will adopt a fiscal policy under which significant expected growth in living standards remains. Another concern relates to questions of substitutability. If we rely on technological progress to replace decreases in tangible capital, we may be assuming (for example) that a family enjoys the same standard of living in a 1500 square foot house with 200 channels of HDTV, high speed internet access, and state-of-the-art climate control, as a family of an earlier generation enjoyed living in a 3000 square foot house with four channels of low-definition television, no computer, and no air conditioning. Such questions of substitutability will inevitably require difficult and debatable judgment calls.\(^\text{14}\)

As significant as these problems may be, it remains the case that a society that desired to equalize present and future standards of living could go a long way towards doing so—certainly, much further than the United States has gone to date or proposes to go. Whether it could do so and satisfy the demands of intergenerational distributive justice is the topic of the next two parts of this paper.

\(^{13}\) Buchanan, supra note 1, at 1270–73.

\(^{14}\) For a thoughtful discussion of substitutability issues, see Axel P. Gossseries, Intergenerational Equity: What Do We Owe the Next Generation(s)?: 35 Loy. L.A. L. Rev. 293, 337–44 (2001). Gossseries poses the question this way:

\[\text{[H]ow do we decide how much technology needs to be transferred to the next generation to make up for the depletion of oil reserves? How do we make sure that what we leave them is as much as what we received, even though the content of the basket that we are transferring is very different?}\]

Id. at 340.
III. Rawls and the Just Savings Principle

A. The Analytical Framework

John Rawls devotes nine pages of the original edition of *A Theory of Justice* to "The Problem of Justice Between Generations," with significant additional discussion in the 1999 revision of *A Theory of Justice* and in *Justice as Fairness*. Rawls identifies a just savings principle, according to which "[e]ach generation must . . . put aside in each period of time a suitable amount of real capital accumulation." Rawls does not, however, demand real capital accumulation by each generation until the end of time. Rather, he envisions a two-stage process. In the first stage, "[s]aving is demanded as a condition of bringing about the full realization of just institutions and the fair value of liberty." In the second stage, "once just institutions are firmly established, the net accumulation required falls to zero. At this point a society meets its duty of justice by maintaining just institutions and preserving their material base." A crucial question under this for-

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17 Rawls, *supra* note 15, at 285. In deriving his principles of justice, Rawls generally relies on the device of an imagined "original position," in which persons meet to agree on "the principles that free and rational persons concerned to further their own interests would accept in an initial position of equality as defining the fundamental terms of their association." Id. at 11. He imagines these persons to be behind a "veil of ignorance," such that "no one knows his place in society, his class position or social status, nor does anyone know his fortune in the distribution of natural assets and abilities, his intelligence, strength and the like." Id. at 12. The persons do know, however, that they are contemporaries, all members of a single generation. Id. at 140. This same-generation conception of the original position creates a problem for Rawls, when he considers questions of intergenerational justice, because it does not permit him to imagine agreements between members of different generations. And there is no obvious reason to suppose that contemporaries, in the original position, would agree to save anything at all for future generations. In the original version of *A Theory of Justice*, Rawls deals with this difficulty by assuming "that a generation cares for its immediate descendants, as fathers say care for their sons." Id. at 288. With this assumption in place, Rawls is able to derive the just savings principle. Evidently troubled by the ad hoc nature of the assumption of limited altruism (which is not otherwise assumed for persons in the original position), Rawls later drops the altruism assumption and replaces it with the requirement that persons in the original position (who know they are contemporaries) "ask themselves how much . . . they are prepared to save at each level of wealth as society advances, should all previous generations have followed the same schedule." Rawls, *Justice as Fairness, supra* note 16, at 160. Although this assumption of appropriate savings behavior by all previous generations is arguably more elegant than the earlier altruism assumption, it is also an ad hoc departure from Rawls’s general analytical framework.
19 Id. at 290.
20 Id. at 287.
mulation is how to determine whether “just institutions are firmly established.” Rawls refers here to his two principles of justice:

(a) Each person has the same indefeasible claim to a fully adequate scheme of equal basic liberties, which scheme is compatible with the same scheme of liberties for all; and

(b) Social and economic inequalities are to satisfy two conditions: first, they are to be attached to offices and positions open to all under conditions of fair equality of opportunity; and second, they are to be to the greatest benefit of the least-advantaged members of society (the difference principle).21

The first principle (equal basic liberties) has lexical priority over the second principle, which means that (for example) a denial of equal basic liberties could never be justified on the grounds that it improved the material welfare of the poor, regardless of how great the welfare gain might be.22 Similarly, the first part of the second principle (fair equality of opportunity) is lexically prior to the second part of the second principle (the difference principle).23

B. Two Arguments Against a Savings Requirement

Assuming a Rawlsian framework, there are two different ways of arguing that a duty of real capital accumulation does not apply to a particular generation. The first approach is to argue that Rawls’s conclusions concerning the first (accumulation) stage of the just savings principle are inconsistent with Rawls’s overall theory of justice. The second approach is to accept Rawls’s own account of the just savings principle, but to argue that society has already reached the second stage of the just savings principle, so that no further capital accumulation is required. I now consider each of those arguments.

The first argument claims there is an inconsistency between the difference principle and the requirement of capital accumulation during the first stage of the just savings principle. In a review of A Theory of Justice, John Harsanyi notes that later generations are likely to be much better off than earlier generations as a result of technological progress even in the absence of net savings, and thus concludes, “any positive net saving would be inconsistent with the difference principle since it would amount to a transfer of economic resources from a

21 RAWLS, JUSTICE AS FAIRNESS, supra note 16, at 42–43. This is Rawls’s final formulation of his two principles of justice. For his original formulation of the two principles, see RAWLS, supra note 15, at 302–03.
22 RAWLS, JUSTICE AS FAIRNESS, supra note 16, at 43.
23 Id.
much poorer generation to much richer generations.”24 Similarly, Kenneth Arrow claims that “the logic which derives the maxim[in] principle from the ‘original position’ is equally applicable to intergenerational comparisons.”25

Rawls’s fullest explanation of why the difference principle does not apply in the intergenerational context is in the revised 1999 edition of *A Theory of Justice*:

[When the difference principle is applied to the question of saving over generations, it entails either no saving at all or not enough saving to improve social circumstances sufficiently so that all the equal liberties can be effectively exercised. In following a just savings principle, each generation makes a contribution to those coming later and receives from its predecessors. There is no way for later generations to help the situation of the least fortunate earlier generation. Thus the difference principle does not hold for the question of justice between generations and the problem of saving must be treated in some other manner.26

This could be clearer, but it seems to offer two distinct reasons for rejecting the intergenerational application of the difference principle: (1) the least well-off generations are past generations, and thus beyond our help; and (2) during the first (accumulation) stage of the just savings principle the difference principle is overridden by the lexically prior principle of equal basic liberties. As Axel Gossieries has noted, Rawls’s first reason is not persuasive:

>[As soon as we shift from strict maximin [i.e., maximizing the welfare of the least advanced] to leximin, this problem disappears. The idea of leximin is that if the situation of the very worst-off cannot be improved, we should then care about improving the situation of the second worst-off, etc. . . . We could thus meaningfully apply maximin between the generations whose condition can still be changed.27

The second reason, however, is a different matter. It is easy—perhaps especially for economists—to overemphasize the centrality of the difference principle to Rawls’s theory, forgetting that it is lexically inferior to both equal basic liberties and fair equality of opportunity.

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27 Gossieries, supra note 14, at 318.
Given Rawls's lexical priorities, and assuming that some particular level of social wealth is necessary before it is possible to institutionalize equal basic liberties, it is entirely reasonable to conclude that generations below that level of wealth must save to make possible equal basic liberties for later generations, even though those savings worsen the material well-being of those already poor generations. It is better, in a Rawlsian framework, to achieve equal basic liberties at the cost of exacerbating intergenerational inequalities, than never to achieve equal basic liberties at all. In short, the claim that the accumulation stage of the just savings principle is inconsistent with the place of the difference principle in the overall architecture of Rawls's theory ignores the priority of equal basic liberties. Once that priority is recognized, the accumulation stage fits neatly within the general Rawlsian framework.

That leaves the second argument against intergenerational savings—that no further savings are required of a particular society, because that society has reached the stage at which the two principles of justice are satisfied. Rawls himself offers no opinion as to whether the United States at the beginning of the twenty-first century (or any other nation, for that matter) has reached this stage. He does, however, state emphatically that reaching the second stage of the just savings principle does not require great social wealth:

The last stage at which saving is called for is not one of great abundance. . . . Further wealth might not be superfluous for some purposes; and indeed average income may not, in absolute terms, be very high. . . . It is a mistake to believe that a just and good society must wait upon a high material standard of life. . . . To achieve this state of things great wealth is not necessary. In fact, beyond some point it is more likely to be a positive hindrance, a meaningless distraction at best if not a temptation to indulgence and emptiness.

Discussing this same question in *Justice as Fairness*, Rawls adds, "We certainly do not want to rule out Mill's idea of a society in a just stationary state where (real) capital accumulation may cease."

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28 See id. at 319; Gaspart & Gossers, supra note 12, at 197–98.
29 Rawls, supra note 15, at 290.
I know not why it should be matter of congratulation that persons who are already richer than any one needs to be, should have doubled their means of consuming things which give little or no pleasure except as representative of wealth; or that
Considering that the question of whether the economically advanced nations have reached the non-accumulation stage is crucial in any attempt to apply Rawlsian principles to the real world, it is perhaps surprising that there is (to the best of my knowledge) no sustained discussion in the literature of this question. Axel Gosseries suggests, however, that "we may have already reached the steady-state stage," and offers in support of that conjecture Rawls's remark that "there is no society anywhere in the world—except for marginal cases—with resources so scarce that it could not, were it reasonably and rationally organized and governed, become well-ordered." 31

In order to decide whether the principles of justice are satisfied in the United States today, some elaboration of the two principles of justice—beyond the summary formulation quoted above—is needed. According to Rawls,

The basic liberties of citizens are, roughly speaking, political liberty (the right to vote and to be eligible for public office) together with freedom of speech and assembly; liberty of conscience and freedom of thought; freedom of the person along with the right to hold (personal) property; and freedom from arbitrary arrest and seizure as defined by the concept of the rule of law. 32

The mere formal existence of these rights is not sufficient. Rather, institutions must ensure the "fair value" of the basic liberties; 33 for example, "those similarly endowed and motivated should have roughly the same chance of attaining positions of political authority irrespective of their economic and social class." 34 Great inequalities of wealth can threaten the fair value of the basic liberties, because "[t]he liberties protected by the principle of participation lose much of their value whenever those who have greater private means are permitted to use their advantages to control the course of public

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32 Rawls, supra note 15, at 61.

33 Rawls, Justice as Fairness, supra note 16, at 149.

34 Rawls, supra note 15, at 225.
debate." In order to preserve the fair value of the basic liberties in the face of significant wealth inequalities, various reforms—such as public funding of elections and limitations on campaign contributions—may be needed.

Similarly, fair equality of opportunity—the first part of the second principle of justice—is not satisfied by a mere lack of formal restrictions on rights of access to advantaged social positions. Fair equality of opportunity "means that in addition to maintaining the usual kinds of social overhead capital, the government tries to insure equal chances of education and culture for persons similarly endowed and motivated either by subsidizing private schools or by establishing a public school system." Finally, the difference principle requires both maximizing the long-run expectations of the least advantaged and the provision of a government-guaranteed social minimum. The Rawlsian social minimum is more demanding than a utilitarian social minimum. Whereas a utilitarian would require a guarantee of "only the needs essential for a decent life," for Rawls a social minimum must be sufficient to enable the least advantaged citizens "not to withdraw from their public world but rather to consider themselves full members of it."

With these concepts in mind, is it plausible to conclude that the two principles of justice are satisfied in the United States today? Without attempting to evaluate any particular society at any particular time, Rawls comments that it is generally easier to determine whether the first principle is satisfied than to evaluate compliance with the second principle:

Whether the constitutional essentials covering the basic freedoms are satisfied is more or less visible on the face of constitutional arrangements and how these can be seen to work in practice. But whether the aims of the principles covering social and economic inequalities are realized is far more difficult to ascertain. These matters are nearly always open to wide differences of reasonable opinion; they rest on complicated inferences and intuitive judgments that require us to assess complex social and economic information about topics

35 Id. at 198.
36 Rawls, Justice as Fairness, supra note 16, at 149.
37 Rawls, supra note 15, at 275.
38 Id. at 277.
39 Id. at 275.
40 Rawls, Justice as Fairness, supra note 16, at 129.
41 Id. at 130.
poorly understood. Thus, although questions of both kinds are to be discussed in terms of political values, we can expect more agreement about whether the principles for the basic rights and liberties are realized than about whether the principles for social and economic justice are realized.\textsuperscript{42}

Rawls’s prediction is certainly correct, as applied to the United States today, with respect to the principles for social and economic justice. While formal equality of opportunity generally exists, it would be impossible to reach a national consensus as to whether the public schools (and subsidies for private schooling) are generally adequate to provide equal life chances for persons with equal natural talents and motivation. Similarly, there is considerable room for disagreement as to whether the nation’s large (and growing) inequalities of wealth and income are to the long-term benefit of the least advantaged, and as to whether the social minimum (as supplied by Temporary Assistance for Needy Families, Medicaid, Food Stamps, and the Earned Income Tax Credit, among other programs) is sufficient not merely to meet basic human needs, but also to make the least-advantaged view themselves as part of political society.

Rawls may be too sanguine, however, about the ability to reach consensus on the satisfaction of the first principle of justice. Although there should be fairly widespread agreement that the United States formally guarantees the basic liberties (at least for the most part), whether the fair value of some of the basic liberties is insured may be just as controversial as whether the requirements for social and economic justice have been met. Most obviously, there is room for debate over the extent to which the fair value of the right of political participation is actually realized by the poor, and even by the middle class.

As the above discussion indicates, if Rawls is read literally on the question of when the requirement for intergenerational savings disappears—“[e]ventually once just institutions are firmly established, the net accumulation required falls to zero”\textsuperscript{43}—then it is more-or-less equally plausible to conclude that the United States today is still in the accumulation stage of the just savings principle, or that it has graduated to the non-accumulation stage. It would seem more reasonable, however, not to take Rawls literally on this question, and to decide instead that a society has graduated from the accumulation stage when it is rich enough that it could satisfy the principles of justice,

\textsuperscript{42} John Rawls, Political Liberalism 229–30 (1993).

\textsuperscript{43} Rawls, supra note 15, at 287.
whether or not it has actually done so. After all, it would be plausible enough to conclude both (1) that the United States does not fully satisfy the principles of justice today, and (2) that continued accumulation would not help and might even make things worse (if accumulation produces even greater inequalities of wealth and income, and those greater inequalities interfere with the fair value of political liberties, and perhaps with the fair value of equal opportunity as well). If additional capital accumulation is not likely to bring the nation any closer to satisfaction of the two principles of justice, and might even move the nation in the wrong direction, it would be pointless or worse to take the just savings principle as requiring the accumulation anyway. Rawls requires savings only for the purpose of making possible the satisfaction of the principles of justice, and in this situation additional accumulation would not serve that purpose.

It is certainly possible to imagine a special case in which (1) a nation is currently wealthy enough to satisfy the principles of justice but has not done so, and in which (2) with sufficient additional wealth some future generation of the same nation would satisfy the principles. For example, a nation might be wealthy enough now to fund public schools at the level necessary to insure fair equality of opportunity, but be unwilling to do so. If future generations of the nation are even richer, however, at some point those generations might be willing to fund schools at the required level. In that case, there would be a continuing obligation to save for future generations, despite the fact that the principles of justice could be satisfied at the existing level of resources. Of course, this imagines a decidedly non-ideal second-best sort of world, in which the duty of intergenerational savings exists only because the duty of ensuring fair equality of opportunity has been shirked. A society that shirked one duty would likely shirk the other as well, although it is conceivable that a society could have more solicitude for future generations than for the least advantaged members of the present generation.

In any event, absent some particularly compelling reason to believe that intergenerational savings by a society wealthy enough to satisfy the principles of justice now but unwilling to do so would lead to the satisfaction of the principles by some future generation, it seems more consistent with Rawls's analytical framework to conclude that the last stage of society is reached—that is, that the net accumulation obligation disappears—when the society is wealthy enough that it

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44 See supra text accompanying note 29.
could satisfy the principles of justice. Under this reading of Rawls, the crucial question is not whether the United States has satisfied the principles of justice, but whether it is rich enough that it could. Because there is only one possible answer to that question, applying the better reading of Rawls to the current situation of the United States leads to the conclusion that intergenerational savings are not required by justice.

C. Do Rawlsian Principles Prohibit Savings in the Second Stage?

According to Rawls, intergenerational savings are not required once a society has satisfied the principles of justice, but neither are they prohibited: “[T]he just savings principle applies to what a society is to save as a matter of justice. If [its citizens] wish to save for various grand projects, that is another matter.” Rawls reaches this conclusion—that intergenerational savings are permissible in the second stage—without discussion or explanation. He does not consider the possibility that his own fundamental principles might prohibit such savings. Frederic Gaspart and Axel Gosseries argue, however, that Rawlsian principles prohibit intergenerational savings, as well as dis-savings, once the principles of justice have been satisfied. Their argument assumes—quite plausibly—that the difference principle applies intergenerationally once the non-accumulation stage has been reached, with the result that social and economic inequalities must be arranged so that they are to the greatest advantage of the least well-off persons regardless of the generation to which they belong. With that assumption in place, their argument for prohibiting savings in the second stage is that permitting savings would violate the difference principle with respect to the well-being of the least advantaged members of the present generation. That is, if savings are permitted, and if

45 Rawls, supra note 15, at 288.
46 Gaspart & Gosseries, supra note 12, at 203–12.
47 Rawls’s own writings suggest that the difference principle never applies in the intergenerational context. According to Rawls, “There is no way for later generations to help the situation of the least fortunate earlier generation. Thus the difference principle does not hold for the question of justice between generations . . . .” Rawls (1999), supra note 16, at 254. Gaspart and Gosseries convincingly argue, however, that Rawls’s objection to the intergenerational application of the difference principle is easily answered, either by “focusing on the . . . least well-off accessible individual,” or by “shift[ing] from maximin to leximin.” Gaspart & Gosseries, supra note 12, at 203. Leximin is a refined version of the maximin difference principle. Under leximin, if the least advantaged people fare equally well (or badly) in two alternative worlds, but the people in the next-worst-off group fare better in one world than in the other, we should prefer the world in which the members of next-worst-off group fare better. See supra notes 26–27 and accompanying text.
the present generation and each future generation satisfy the difference principle intragenerationally, then we can expect that the least advantaged members of the present generation will be worse off than the least advantaged members of any subsequent generation. This follows because the future generations will be wealthier than the present generation (as a result of the savings), and some portion of that wealth will redound to the benefit of the least advantaged members of those future generations. To prevent this result, claim Gaspart and Gosseries, justice requires that any surplus in the present generation (that is, any wealth beyond that which is necessary to transfer to the next generation as much as the present generation inherited from its predecessor) be used to improve the lives of the least advantaged members of the present generation. They present the argument as follows:

Imagine that a given generation anticipates that at the end of its existence a surplus is likely to be transferred to the next generation on top of the equivalent of what the current generation inherited from the previous one. If the constitution of such a surplus is likely, it should benefit the least well-off members of the current generation rather than the next generation as a whole. For if each generation were to stick to this closed principle, and if we can assume compliance with the intragenerational maximin by each generation, this is the scenario in which the least well-off person, whatever the generation they are in, will end up being at least as well off as the least well-off person under any alternative intergenerational scenario.48

In evaluating their claim, the first step is to consider the possible sources of the imagined surplus. After all, the idea of the non-accumulation steady state is that each generation inherits just enough wealth to enable it to consume at the same level as its predecessor, while leaving to the next generation as much as it received. Where, then, might the surplus come from? There are two major possibilities (setting aside as unacceptable the possibility that the current generation might choose to consume at so low a level that the principles of justice cannot be satisfied for the current generation). First, the savings might result simply because some members of the present generation (presumably not the least advantaged members) choose not to consume at the same level as their counterparts in the previous generation. As Lawrence Solum has noted, the principles of justice cannot

48 Gaspart & Gosseries, supra note 12, at 204.
reasonably be interpreted to prohibit such a choice. Second, the savings might result from technological progress. The current generation might be able to consume at the same level as the previous generation, leaving the next generation the same amount of tangible capital as it inherited, and yet bequeath higher expected consumption opportunities to the next generation because technological progress has made the stock of tangible capital more productive.

According to Gaspart and Gossseries, however, under neither of these scenarios (discretionary private savings and technological progress) does justice permit leaving greater consumption opportunities to subsequent generations rather than improving the circumstances of the least advantaged members of the present generation. In the case of private savings, Gaspart and Gossseries call for the private savings to be offset by public dissavings:

States are able to know roughly how much wealth is being transferred to the next generation through the private inheritance channel. If this is so, a generation could compensate for the existence of such positive savings by reducing public transfers to the next generation. This would mean that, at the end of the day, a generation could still stick to the zero rate of savings principle while allowing for private inheritance. The fruits of the public dissaving could then be used to benefit the least well-off members of the current generation.

Public dissaving is also central to their analysis of the case of technological progress. They write: "[T]here is a way for the current generation to appropriate such future benefits generated by the growing experience of mankind, namely, through public debt. . . . The fruits of growing productivity would then be shared across generations and no growth in consumption would be observed." Again, the proceeds of this borrowing (from foreign lenders) against anticipated technological progress could be used to improve the situations of the least advantaged persons in the current generation. Gaspart and Gossseries recognize that there are limits to the practical ability to borrow against future technological progress. A willing foreign lender may not exist even with respect to anticipated technological progress, and to the extent a future generation realizes unanticipated technological

50 Gaspart & Gossseries, supra note 12, at 205.
51 Id. at 206.
progress it will have been impossible for an earlier generation to have captured some of that benefit through borrowing.\textsuperscript{52} Gaspart and Gossseries insist, however, that to the extent such borrowing is possible, justice requires that it be done: “[G]rowth is in principle not maximin compatible . . . .”\textsuperscript{53}

At the level of high theory, abstracting from real world impediments to borrowing, the substance of their analysis of technological progress seems sound from a Rawlsian perspective. I disagree, however, with their description of their normative position as permitting no intergenerational savings in the second stage. That description depends on the assumption that technological progress should not be considered a form of savings. It is true, as a matter of accounting conventions, that technological progress is generally not considered savings, but that is only because of the difficulties of measurement. In fact, technological progress is a form of savings, and it would be treated as such if only it could be measured with reasonable accuracy.\textsuperscript{54} If technological progress is understood as a form of savings, the analysis of Gaspart and Gossiers does not, in fact, prohibit savings in the Rawlsian second stage.

To clarify this point, consider an example in which the accounting problem does not exist, because the windfall to society consists not of technological progress, but rather of a huge and totally unexpected natural resource discovery in the current generation. If the current generation followed the substance of the approach called for by Gaspart and Gosseries with respect to technological windfalls, it would “redistribute the fruits of such [a windfall] across all generations.”\textsuperscript{55}

Obviously, the way to distribute the benefits of the windfall among the present generation and all future generations is not for the current generation to exhaust the windfall in a consumption binge. Rather, the windfall would be used to improve the well-being of the present generation and all future generations, with the just distribution being that which equalized and maximized the well-being of the least advantaged members of every generation. Thus, some portion of the windfall would be consumed in the current generation, but the re-

\textsuperscript{52} Id. at 207.

\textsuperscript{53} Id. at 213.

\textsuperscript{54} See Ederer et al., supra note 11, at 139 (“[P]rodutivity growth . . . is not adequately captured by the production functions typically in use. . . . However, with the advances in structural capital and human capital measurement, the gap between theoretically explainable (and therefore foreseeable) growth and observed economic growth is closing.”).

\textsuperscript{55} Gaspart & Gosseries, supra note 12, at 207 (emphasis supplied). In place of “windfall,” the original has “accidental growth.”
remainder of the windfall—in all likelihood, the overwhelming majority of it—would be saved for the benefit of future generations.

This is presumably what Gaspart and Gossries would call for in this situation, but it is not accurately characterized as a no-savings principle. No savings would entail a consumption binge by the current generation, which would violate the difference principle by raising the well-being of the least advantaged members of the current generation (who would enjoy some of the benefit of the binge) above the well-being of the least-advantaged members of future generations (who would not). Thus, Gaspart and Gossries would require that the bulk of the windfall be saved for the benefit of later generations (and their least well-off members in particular). This is, of course, the same sort of distribution that they call for in the case of technological progress. And, although the point is obscured by the accounting convention that does not treat technological progress as a form of savings, when they call for this sort of intergenerational distribution of the benefits of technological progress, they are calling for the saving—not the current consumption—of the bulk of such progress. Sharing the benefits of a technological innovation across all generations is not not saving; to the contrary, such sharing is possible only if the windfall is largely saved rather than consumed.

In short, Gaspart and Gossries misstate the substance of their own position when they describe it as prohibiting intergenerational savings in the steady state. On the other hand, since they would permit savings only after the present generation has captured enough of the windfall to equalize its well-being with the expected well-being of all future generations, their position does generally prohibit savings for the purpose of increasing consumption levels across generations.56

Considering Rawls’s own analysis of just savings, the Rawlsian extension by Gaspart and Gossries, and the economic situation of the United States today, it seems reasonable to conclude: (1) that in-

56 Of course, even with adherents of Rawls in charge of all economic decisionmaking in society, increasing consumption levels across generations could occur by accident, as in the case of technological progress against which earlier generations are unable to borrow. Gaspart and Gossries also discuss several special cases in which intergenerational savings would be permissible under their interpretation of the intergenerational difference principle, including savings needed to offset the effect on future generations of a "predictable disadvantage that will negatively affect the next generation." Id. at 209. They also approve of savings in the unusual situation in which the predictable disadvantage will strike only the least advantaged members of some future generation (with savings thus required to raise the level of well-being of those least advantaged future persons to the level of well-being of the least advantaged members of the current generation). See id. at 209–11.
tergenerational savings are not required by justice, because the United States either has satisfied the two principles of justice, or at least is wealthy enough to do so; and (2) that although all intergenerational savings are not prohibited at this stage, so far as possible such savings should be designed so that average per capita consumption levels do not increase from generation to generation. Many people—even people initially sympathetic to the Rawlsian project—may be uncomfortable with one or both of these conclusions, which may lead them to reconsider their willingness to subscribe to Rawlsian principles. If so, they may want to examine the treatment of intergenerational savings under a utilitarian framework, to see if utilitarian principles produce results more in keeping with their ethical intuitions.

IV. Intergenerational Savings in a Utilitarian Framework

How would a utilitarian determine the utility-maximizing level of intergenerational savings? At first glance it might seem that a utilitarian would argue against all such savings, based on the standard assumption of the declining marginal utility of wealth and consumption, and on the likelihood that future generations will be better off than the current generation even in the absence of savings (because of technological progress). Given these premises, any savings would transfer consumption opportunities from the poorer current generation with a higher marginal utility of consumption to richer future generations with lower marginal utilities, thereby decreasing total utility across generations.

This analysis is incomplete, however, because it disregards the productivity of capital. To take a stylized example, suppose the present generation must choose between (1) no intergenerational savings, in which case the average member of the present generation will have lifetime consumption resources of $100x and the average member of the next generation will also have lifetime consumption resources of $100x; or (2) intergenerational savings of $10x per member of the present generation, which will (because of the productivity of capital) support increased consumption opportunities of $15x for the average member of the next generation, with the result that the average member of the present generation will have lifetime consumption resources of $90x and the average member of the next generation will have lifetime consumption resources of $115x. How should a utilitarian choose between these two options (assuming, for simplicity’s sake, that there are no other generations to be taken into account)?
In attempting to answer the above question, the first step is to consider whether the utility of members of future generations should be discounted merely because of their distance in time from the present. Writing in 1992 in opposition to the discounting of interests of future generations, Derek Parfit and Tyler Cowen noted that although “[e]conomists have devoted little explicit attention to the issue of intergenerational discounting[,] . . . Cowen’s discussions with economists confirm the nearly unanimous acceptance of a positive intergenerational discount rate.” 57 On the other hand, among those philosophers and economists who have explicitly considered the issue, the weight of opinion is against discounting. In 1928, Frank Ramsey described “discount[ing] later enjoyments in comparison with earlier ones” (either within a lifetime or across generations) as “a practice which is ethically indefensible and arises merely from the weakness of the imagination.” 58 Decades later, Rawls concurred: “[F]rom a moral point of view there are no grounds for discounting future well-being on the basis of pure time preference . . . .” 59 And in their 1992 essay on the topic, Cowen and Parfit rather convincingly refute every conceivable argument in favor of discounting. 60

It now appears that the no-discounting view has more-or-less prevailed, with a large part of the credit probably belonging to the efforts of Cowen and Parfit. Writing in 2007, in an introduction to a Chicago Law Review symposium on intergenerational equity and discounting, David Weisbach and Cass Sunstein noted: “Most analysts (and we believe all of the essays in the conference) take the position that future generations should count, and most likely count equally to those currently alive.” 61

Assuming our imagined utilitarian analyst rejects the discounting of the well-being of future generations, she must then decide whether, in the absence of discounting, the combined utility of the two generations is greater in the first scenario (with $100x$ average lifetime consumption opportunities in each generation) or in the second scenario (with $90x$ average lifetime consumption opportunities in the first generation, and $115x$ in the second). That question cannot be answered,

57 Tyler Cowen & Derek Parfit, Against the Social Discount Rate, in Justice between Age Groups and Generations 144, 159 n.1 (Peter Laslett & James S. Fishkin eds., 1992).
59 RAWLS, supra note 15, at 287. For further discussion of the issue by Rawls, see id. at 294.
of course, without information on how marginal utility declines over the relevant range (from $90x$ to $115x$). The utility gain from the extra $15x$ of lifetime consumption opportunities for members of the later generation may or may not exceed the utility loss from the $10x$ decrease in lifetime consumption opportunities for members of the earlier generation. More generally, what a utilitarian analyst needs is a technique for identifying the intergenerational savings rate that maximizes utility across generations, taking into account both the productivity gains and the distributional losses created by savings. The problem is closely analogous to the more familiar optimal tax problem of identifying the income tax rate schedule that maximizes a utilitarian social welfare function (as applied within a single tax-and-transfer period), taking into account both the deadweight loss from taxation and the utility gains from redistribution.

The necessary technique exists; it was first presented by Frank Ramsey in a classic 1928 article. Ramsey assumes the existence of a "bliss" point, beyond which further accumulations of capital produce no utility gains. He explains:

[The] increase of the rate of enjoyment with the amount of capital may . . . stop for either of two reasons. It might, in the first place, happen that a further increment of capital would not enable us to increase either our income or our leisure; or, secondly, we might have reached the maximum conceivable rate of enjoyment, and so have no use for more income or leisure. In either case a certain finite capital would give us the greatest rate of enjoyment economically

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62 Kenneth Arrow has stated the problem very well:
The intertemporal problem of justice differs from the contemporary problem fundamentally only in one empirical point: namely, that resources are productive, so that a transfer from an earlier to a later generation means, in general, that the later generation receives more (measured in commodity units) than the earlier generation gave up. In this case, our egalitarian presuppositions are somewhat upset; clearly, if we have any regard at all for the future generations (as justice demands) and if the gain from waiting is sufficiently great, then we will want to sacrifice some for the benefit of future individuals even if they are, to begin with, somewhat better off than we are. Arrow, supra note 25, at 324.


64 Ramsey, supra note 58.

65 See id. at 545.
obtainable, whether or not this was the greatest rate conceivable.66

Assuming an infinite number of generations and no discounting of the well-being of later generations, under Ramsey’s framework it is clear that maximizing utility across all generations requires sufficient savings to reach the bliss point eventually (or at least to approach it asymptotically). As Ramsey notes,

For in this way alone is it possible to make the amount by which enjoyment falls short of bliss summed throughout time a finite quantity; so that if it should be possible to reach bliss or approach it indefinitely, this will be infinitely more desirable than any other course of action.67

This is a striking insight, but by itself it does not identify any particular utility-maximizing route to the bliss point. In particular, it does not imply that the bliss point should necessarily be reached as quickly as possible. Ramsey again: “[T]his does not mean that our whole income should be saved. The more we save the sooner we shall reach bliss, but the less enjoyment we shall have now, and we have to set the one against the other.”68

Ramsey proceeds, however, to explain how a utility-maximizing savings rate can be mathematically determined, for an assumed set of utility functions.69 As it happens, Ramsey’s calculations produce some counterintuitive and probably unacceptable recommendations. For example, if the bliss point is £5000 of family income per annum, Ramsey’s calculations indicate that a family with an annual income of £500 should save well over half of it (about £300).70 Ramsey concedes that this “rate of saving . . . is greatly in excess of that which anyone would normally suggest.”71

John Harsanyi has suggested, however, that this problem can be solved by revising Ramsey’s utility functions in a more realistic direction.72 Although Harsanyi considers Ramsey’s functions to be “reasonable enough if they are meant to measure the utility that a given

66 Id. at 544–45. Kenneth Arrow makes the same point: “We will not [save for future generations] indefinitely; this is usually formalized by assuming that they and we have diminishing marginal utility, so that at some point the gain in commodity terms ceases to be a gain in utility terms.” Arrow, supra note 25, at 324.
67 Ramsey, supra note 58, at 545.
68 Id.
69 Id. at 545–48.
70 Id. at 548.
71 Id.
72 Harsanyi, supra note 24, at 602–03.
individual in the present generation would derive from higher income levels (on the assumption that other people’s incomes would remain more or less unchanged),” he argues that “they greatly overstate the extra utility that future generations are likely to derive from higher incomes as a result of substantially increased saving and investment by the present generation,” for three reasons. First, Ramsey’s functions do not reflect the “risk that future changes in technology and in social customs will drastically reduce the benefit that future generations would derive from investments undertaken by the present generations.” Second, Ramsey’s functions seem to assume a relative-income effect, under which utility is created for an individual when his income rises relative to the incomes of his contemporaries; as Harsanyi notes, however, this utility gain would not be realized by members of future generations, to the extent their higher incomes (relative to members of the present generation) are matched by higher incomes of their contemporaries. Finally, Harsanyi observes that Ramsey’s functions do not reflect the possibility that “if society as a whole inherits very high levels of material abundance, so that there is very little pressure on the average man to earn a living by serious work, then the negative effects are likely to predominate.” Although Harsanyi does not propose particular utility functions embodying these three adjustments, and performs no calculations using the Ramsey model, he claims, “if the likely utility of much higher incomes to future generations is reassessed in a more realistic manner then utilitarian theory will yield much lower levels of optimal savings, and in fact will furnish a completely satisfactory solution for this problem” of optimal intergenerational savings levels.

As Axel Gossories insightfully remarks, Rawls on intergenerational savings and Ramsey on intergenerational savings (either in the original form or as revised by Harsanyi) are alike in the important respect that they both employ a two-stage analysis, with an initial accumulation stage followed by a permanent non-accumulation second stage. Of course, the difference (as Gossories also notes) is that

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73 Id. at 603.
74 Id.
75 Id.
76 Id. Rawls makes a similar point in support of his claim that accumulation may cease once the principles of justice have been satisfied, even though the society is not wealthy: “[B]eyond some point [wealth] is more likely to be a positive hindrance, a meaningless distraction at best if not a temptation to indulgence and emptiness.” Rawls, supra note 15, at 290.
77 Harsanyi, supra note 24, at 603.
78 Gossories, supra note 14, at 336.
transition from the first to the second stage occurs at a much lower level of social wealth under the Rawlsian analysis than under Ramsey’s utilitarian analysis.\textsuperscript{79} For Rawls, intergenerational savings may cease when society has accumulated the modest level of wealth necessary for the realization of the two principles of justice, whereas for Ramsey the transition is delayed until the much later point at which society is wealthy enough to produce consumption satiation for its every member. This point would not be delayed as long under Harsanyi’s revision as it would be under Ramsey’s own analysis, but it would still wait upon a much higher level of social wealth than under the Rawlsian approach.

As discussed earlier in this essay, it seems quite reasonable to conclude that the United States today has more than adequate resources to situate it in the non-accumulation stage under Rawls’s analysis.\textsuperscript{80} It is far less plausible—in fact, it seems utterly implausible—to conclude that the United States has sufficient resources to provide consumption satiation for its every citizen, even taking into account Harsanyi’s caveats concerning what satiation might entail.

\textbf{V. Conclusion}

Under both the political philosophy of John Rawls and utilitarianism, whether or not intergenerational savings are called for depends on the existing level of social wealth. The crucial difference, however, is that it would be reasonable to conclude that the United States has achieved the level of wealth necessary for entry into the Rawlsian non-accumulation stage, whereas it would not be reasonable to conclude that the United States has arrived at the utilitarian non-accumulation stage. Accordingly, one searching for a justification for a policy of no intergenerational savings will do better to consult Rawls than to consult utilitarian philosophers.

Although a policy aimed at a steady state standard of living is philosophically defensible, I question whether such a policy could be implemented in a politically legitimate manner. It is difficult to imagine political leaders explaining to the public that they have decided to incur massive intergenerational debts (to the benefit of the current generation and the detriment of future generations) up to the point at which no future improvements in living standards are to be expected, and that the political philosophy of John Rawls supplies the justifica-

\textsuperscript{79} See id.

\textsuperscript{80} See supra notes 31–44 and accompanying text.
tion for their decision. Even among those members of the public initially sympathetic to Rawls's theory of justice, there might be many who would defect out of unwillingness to accept the conclusion that there is no moral obligation to strive for higher living standards for future generations once a society is wealthy enough to satisfy the two principles of justice. As Buchanan suggests, the intuitive "better than me' standard" of intergenerational justice may be so hard-wired ("almost pre-cognitive," in Buchanan's words) as to be unshakeable by any philosophical theory, no matter how plausible.81

The public is probably much more receptive, however, to a less radical claim—which I take to be, in fact, Buchanan's basic claim. That claim has three parts: (1) that no normative significance should attach to the probable rate of improvement in living standards in the absence of federal budget deficits; (2) that significant improvements in standards of living over the next few generations are overwhelmingly likely even in light of current and anticipated deficits; and (3) that the slower rate of improvement with deficits than without does not constitute an injustice to future generations.

81 Buchanan, supra note 1, at 1257–58.