

Are Generational Savings Unjust?ⁱ

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Abstract

In this paper, we explore the implications of a Rawlsian theory for intergenerational issues. First, we confront Rawls's way of locating his « just savings » principle in his *Theory of Justice*, with an alternative way of doing so. We argue that both sides of his intergenerational principle, as they apply respectively to the accumulation phase and the steady-state stage, can be dealt with on the basis, respectively, of the principle of equal liberty (and its priority) and of the difference principle. We then proceed by focusing on the implications of applying maximin to his steady-state stage. One central claim is that, in principle, Rawlsians should consider not only generational dis-savings, but also generational savings as unfair. This principle suffers a series of exceptions on which we focus in the last section of the paper. In some cases, growth can be maximin-compatible.

Keywords

Generations, Egalitarianism, Maximin, Sustainability, Growth, Difference principle, Rawls

Introduction

According to Rawls, justice between generations “subjects any ethical theory to severe if not impossible tests”.ⁱⁱ Still, he ends up defending a “principle of just savings”. There are savings if one generation transfers to the next more than what it inherited from the previous one. In contrast, there are dis-savings whenever one generation transfers to the next one less than what it inherited from the previous generation. (Dis-)savings are thus understood here as generational (dis-)savings.

Rawls's view on intergenerational justice is a two-stages one, involving an accumulation phase followed by a steady-state. During the accumulation phase, each generation is supposed to transfer to the next more than it inherited from the previous one. During that phase, the expected rate of positive savings increases from one generation to the next: “When people are poor and saving is difficult, a lower rate of saving should be required; whereas in a wealthier society greater savings may reasonably be expected since the real burden of saving is less”.ⁱⁱⁱ There is thus an *obligation* to save for each generation during that phase, albeit a “growing” one as we move from poorer to richer generations. At some point however, we shift to the steady-state stage. As Rawls writes, “eventually, once just institutions are firmly established and all the basic liberties effectively realized, the net accumulation asked for falls to zero”.^{iv} This quote provides us with a criterion as to when positive savings would stop being required. He is explicit on that point: “I follow Mill's view that the purpose of saving is to make possible a just basic structure of society; once that is safely secured, real saving (net increase in real capital) may no longer be necessary”.^v It is also clear from the two last quotes that while it is not prohibited, savings are certainly not required as a matter of justice once we have entered the steady-state stage.

Numerous questions can be asked about this model. Among the important ones that will not be addressed here, let us mention two. We will not try to provide elements on whether it is plausible to defend the view that at the world level, the capital accumulated would now be sufficient (given a proper redistribution) to support just institutions and help guaranteeing

basic liberties. Nor will we discuss which is the most appropriate way to design the original position in order to deal with issues of intergenerational justice.^{vi} In fact, our argument will mostly focus on the principle proposed by Rawls at steady-state stage, leaving aside a full defense of the one for the accumulation phase.

We shall proceed in three steps. First, after having presented the way in which Rawls proposed to locate the just saving principle in the general architecture of his theory of justice, we will suggest an alternative understanding of Rawls's two-stages intergenerational principle (I). While assuming that it is legitimate to adopt a two-stages model, and while agreeing with Rawls on the principle he adopts for the accumulation phase (obligation to save), we will reject the principle that he defends for the steady state. We will argue that if we take maximin seriously, the principle applicable at steady state should be "neither dis-save, nor save". The underlying intuition will be spelled out as well as some of its implications (II). Finally, we will examine some of the objections to the proposed steady-state principle (III). Let us stress upon the fact that besides some rather exegetic developments aimed at convincing strict Rawlsians, what we really aim at in this paper is to unfold the true implications of a liberal egalitarian view.^{vii} We want to show that Rawls's theory clearly contains the premises of a really solid theory of intergenerational justice.

Before proceeding, one more point of terminology. There is growth if a generation transfers to the next one more resources *per capita* than what it has received from the previous one. Our concept of growth refers to growth in the capital-population ratio, not growth in GDP per capita. In a normative enquiry, there are good reasons for this departure from the common notion of growth. In a small open economy, growth in capital and in consumption are more or less disconnected from the actual timing of production (i.e. the path of GDP) because the economy can borrow or lend on the international capital market, e.g. running an external debt. In a closed economy such as the whole world, this option is obviously unavailable but overlapping generation models have shown that there are important and effective policy leverages^{viii} that transfer resources from the future to the present, at least at the scale of a country if not at a private level. It is therefore fair to neglect the timing of production and to focus on the timing of capital accumulation and consumption. In most of our arguments below, the underlying question is the choice of the "just" steady-state path of capital. When transition to a new steady-state is the issue (e.g. in case of exogenous disadvantage below), the temporary change of focus will be made explicit in the text.

The chosen focus identifies trivially "growth" (capital growth) with savings. On the one hand, there are *intra-generational* savings. This behavior consists in funding late age consumption beforehand, be it privately or through a public pension system. Once we consider a person's whole lifetime, the net impact of her intra-generational savings on the stock of capital is by definition zero, since it amounts to delayed consumption. Any bequest, whatever its motive, constitutes on the other hand *intergenerational* savings. In this paper, "growth" and inter-generational savings are therefore one and the same thing. This deviation from everyday language is useful in clarifying the actual stakes of inter-temporal fairness rather than settling positive and managerial issues such as the timing of production.

Of course, intra-generational savings may have an impact on future generations, in particular because generations do overlap. In other words, intra-generational savings will generate some inter-generational savings in the form of spill-over effects. The mechanisms through which this phenomenon happens are not within the scope of this paper, but we have to state clearly from the beginning that our argument neither ignores the overlap between generations, nor disregards intra-generational savings.

A final point clarifies our notion of capital and its link to consumption. We include, as part of the resources being transferred from one generation to the other, human capital and the state of technology. Sometimes, for simplicity of the modeling, authors do not include the state of technology in the capital stock and assume instead some exogenous rate of productivity growth. We do not use the latter convention in the present work. We rely on a broad notion of capital, in line with Rawls.^{ix} Therefore, if a generation transfers to the next one less than what it has received from the previous one, the difference must be due to a consumption bonus for that particular generation. Maybe it worked insufficiently and enjoyed leisure instead, thereby failing to renew part of the existing capital stock. Alternatively, it may have simply eaten up physically part of the resources it inherited from its predecessors. To put it briefly, since we disregard the timing of production, the inter-temporal path of capital is intimately linked to the vector of generational consumptions.

1. Just Savings in the Rawlsian Architecture

1.1. Rawls's own view

The three central principles of Rawls's standard (so-called « special ») conception of justice are the following ones :

“FIRST PRINCIPLE

Each person is to have an equal right to the most extensive total system of equal basic liberties compatible with a similar system of liberties for others

SECOND PRINCIPLE

Social and economic inequalities are to be arranged so that they are both
(a) to the greatest benefit of the least advantaged, consistent with the just savings principle, and
(b) attached to offices and positions open to all under conditions of fair equality of opportunity”.^x

The first principle (the principle of equal liberty) has lexical priority over the second and within the latter, sub-principle b (the principle of equal opportunity) has lexical priority over sub-principle a (the difference principle). To give just one example of what this can mean, a policy requiring a violation of some basic liberties (e.g. freedom of expression) in order to achieve redistribution towards the poor would certainly violate the first priority rule.^{xi} Similarly, a society will not be expected to provide jobs or university degrees to all, irrespectively of their differences in talents and the fact that some people may not have the necessary level of talents to fill in such jobs in a minimally satisfactory way, or to obtain such diplomas.

Now, let us focus more closely on the way in which the principle of just savings is supposed to find its place in the midst of these three principles.^{xii} Rawls's view on the matter is rather clear, not only from the quote above, but also from an even more explicit one:

« We now have to combine the just savings principle with the two principles of justice. This is done by supposing that this principle is defined from the standpoint of the least

advantaged in each generation. (...). They undertake in effect to constrain the application of the difference principle. In any generation their expectations are to be maximized subject to the condition of putting aside the savings that would be acknowledged. Thus the complete statement of the difference principle includes the savings principle as a constraint. Whereas the first principle of justice and the principle of fair opportunity are prior to the difference principle within generations, the savings principle limits its scope between them ».^{xiii}

Rawls's way of locating the principle of just savings is very explicit. In the hierarchy of principles, it comes third, below the principle of equal liberty and the one of fair opportunity and above the difference principle.^{xiv} There are two problems with this approach though. First, there is no argument justifying such a location in the Rawlsian architecture. Second, Rawls does not provide us with reasons to justify the need for adding still another principle to the existing ones.

Hereinafter, we defend an alternative approach such that the twofold principle of just savings can be derived from two of the existing three principles, without the need for considering the just savings principle as still another principle requiring independent justification. Hence, the principle applicable to the accumulation phase will be derived from the principle of equal liberty. And the one applicable to steady state will be derived from the difference principle (or *maximin*). Admittedly, this will require a modification of the content of Rawls's principle of just savings insofar as it is applicable to the steady state stage. Still, we believe that this should leave room for a theory more in line with the liberal-egalitarian spirit. To paraphrase Solow, we want to propose a theory that is more consistently Rawlsian than Rawls's own view on the matter and more in line with Rawls's own claim that "persons in different generations have duties and obligations to one another just as contemporaries do" and that "the conception of justice as fairness covers these matters without any change in its basic ideas".^{xv}

1. 2. The priority of liberty as a justification for the accumulation phase

Let us turn first to the component of the principle of just savings applicable to the accumulation phase. The way Rawls defines the point at which accumulation may end suggests that accumulation could simply be justified on the basis of the priority of the principle of equal liberty over the two other Rawlsian principles. This is prompted by sentences such as the following one where reference is made to "basic liberties" but not to the second principle: "the objective of the accumulation phase (... is...) a state of society with a material base sufficient to establish effective just institutions within which the basic liberties can all be realized".^{xvi} Space does not allow us to fully unfold our argument here.^{xvii} It can however be briefly stated as follows. The very aim behind accumulation could thus be defined as the gathering of resources such that the protection of basic liberties would be guaranteed. A full argument would mobilize empirical evidence as to the extent to which such an ability to protect basic freedoms is resource-dependent, Rawls insisting on the fact that "great abundance" is not necessarily needed in this respect.^{xviii} Yet, the very idea of accumulation, once it takes an intergenerational form, can be considered as violating the difference principle. The intuition at play here is stated by Rawls himself in his critique of the utilitarian doctrine which "may direct us to demand heavy sacrifices of the poorer generations for the sake of greater advantages for later ones that are far better off".^{xix} More technically, the idea is the following: asking the first generation(s) - that are also supposed to be the poorest ones -, to transfer to the next generation(s) more than what they inherited themselves, leads us to an intergenerational world in which the least well off is not as well

off as it could possibly be. In other words, it is plausible – *ceteris paribus* – to argue that the least well off people in an intergenerational world involving accumulation would be worse off than the least well off members of an intergenerational world in which each generation neither dis-saves, nor saves.^{xx}

Hence, on the one hand, accumulation can be justified in the name of reaching a level of wealth enabling a society to minimally guarantee the protection of basic liberties. On the other hand, accumulation would in principle violate maximin once applied intergenerationally. Yet, given the lexical priority of the principle of equal liberty over the difference principle, Rawlsians are able to defend such an accumulation phase. Admittedly, not the *same* people will both suffer from the violation of maximin (earlier generations in the accumulation phase) and benefit from society's ability to protect basic liberties (generations beyond the end of the accumulation phase). However, this is also the case in the intragenerational case. For example, the goal of redistribution cannot justify violations of freedom of expression (e.g. trying to keep silent wealthy right-libertarians willing to foster opposition towards redistributive taxation). In such a case, those who could benefit from redistribution (the least wealthy) will not necessarily be the same as those benefiting from a ban on significant violations of freedom of expression (*ex hypothesi*, the most wealthy members of society).

Let us now look at two possible challenges to the view proposed here. Each of them implies that the priority of liberty simply *does not apply* during at least part of the accumulation phase. This could be so because just institutions are not yet in place, which only leaves room for our natural duty to set them up, rather than to the principles of justice themselves. Alternatively, it would result from the fact that below a certain threshold of wealth, while principles of justice would apply, the priority rules connecting them would not hold, leaving room either to a mere trade-off, or even to the priority of an even more basic principle of sufficiency. We briefly examine these two challenges in turn.

Regarding the first one, let us contrast our interpretation of the underlying justification of an accumulation phase with another one suggested by Rawls when he writes that the principles of justice “tell us what to strive for. The savings principle represents an interpretation arrived at in the original position, of the previously accepted natural duty to uphold and to further just institutions”.^{xxi} This could imply that intergenerational justice be of a different nature from intra-generational justice, having to do with a natural duty to preserve just institutions rather than with genuine obligations of justice.^{xxii}

There are two important remarks to be made about the idea of substituting the “natural duty” view to the “priority of liberty” interpretation. *First*, they are not necessarily incompatible. Rawls suggests that the two motives may be operating in parallel as the phrase “in addition” indicates in the following passage: “The present generation cannot do as it pleases but is bound by the principles that would be chosen in the original position to define justice between persons at different moments of time. *In addition*, men have a natural duty to uphold and to further just institutions and for this the improvement of civilization up to a certain level is required”.^{xxiii} *Second*, since the notion of just institutions is often focusing exclusively on basic liberties,^{xxiv} it tends both to leave aside a concern for furthering institutions oriented towards *intra-generational* maximin, and to leave unexplained the absence of *intergenerational* maximin if “natural duty” had to turn out to be the only intuition underlying the idea of just savings. And when Rawls applies the notion of “natural duty” to a broader object, he then indicates that that in acting upon one’s “natural duty to remove any injustices” one may have to abide if possible to the broader scheme of priority rules.^{xxv}

Hence, while the idea of “natural duty” can certainly occupy its own niche in the reasoning, it does not need to fill in the whole space, nor do we actually think that it is needed at all in our Rawlsian reconstruction.

The second challenging view can be introduced by Brian Barry’s discussion on another piece of textual evidence from the original edition of *A Theory of Justice*.^{xxvi} It appears there that the priority of liberty should only hold from a certain level of average wealth onwards. The idea was that « as the conditions of civilization improve, the marginal significance for our good of further economic and social advantages diminishes relative to the interests of liberty (..) ».^{xxvii} This claim, if endorsed by Rawlsians, would definitely constitute a second challenge to the applicability of the priority of liberty to at least part of the accumulation phase, hence a challenge to its use as a justification for the latter. Here, a threefold reply is in order, the first one being of a mere clarificatory nature. First, both our view and the one discussed by Barry involve a transition point. Yet, such a wealth threshold plays a different function in each case. In the present paper, we are dealing with a threshold above which just institutions become stable enough. In Barry’s analysis, it is a threshold at which wealth becomes large enough for the principle of equal liberty to acquire priority over the second Rawlsian principle. Second, if below the wealth threshold pointed at by Rawls, there really were room for a mere trade-off between the principle of equal liberty and maximin - rather than a clear priority of the former over the latter -, it would be even harder to justify the violation of maximin constituted by the accumulation phase. Hence, it would be even harder to preserve the consistency of Rawls’s view.

Our third remark on this second challenge is that while the claim regarding the non-priority of the first principle below a certain wealth threshold seems to have been abandoned in the revised edition of *A Theory of Justice*, there is a possibly related claim in *Political Liberalism*, one that can be referred to as the *priority of sufficiency*. According to Rawls, “the first principle covering the equal basic rights and liberties may easily be preceded by a lexically prior principle requiring that citizen’s basic needs be met, at least insofar as their being met is necessary for citizens to understand and to be able fruitfully to exercise those rights and liberties. Certainly any such principle must be assumed in applying the first principle”.^{xxviii} The quote is ambiguous since it oscillates between seeing a focus on basic needs independent from the endorsement of the principle of equal liberty, and understanding the provision for such basic needs as mere means of guaranteeing the effective ability of people to exercise their basic freedoms.^{xxix} It is only in the former case that there could be room for a significant tension between a principle of sufficiency and the principle of equal liberty, possibly detrimental our “priority of equal liberty” defense the accumulation phase.^{xxx}

Our position is twofold, assuming that someone would try to justify an accumulation phase on sufficiency grounds alone. Either, such sufficientarianism is of a non-consequentialist type and it will experience problems of take off comparable to a non-consequentialist maximinist. If one is not ready to care for some people’s needs less than for those of other future people in order to invest and enable all the following generations to meet the basic needs threshold, we remain unable to justify the positive savings that Rawls requires from the first generations. Things look more promising if one is ready to adopt a consequentialist reading of sufficientarianism (leaving the basic needs of a few partly unmet to enable members of coming generations, after investment, to meet the threshold with more certainty and constancy), then an accumulation phase could be justified. Yet, this approach will only be able to justify a degree of accumulation insufficient to reach the higher threshold at which just institutions could be sustained. This means that sufficientarianism will *at best* have to operate together with the idea of priority of equal liberty. The only thing that the priority of

sufficiency easing is that until the accumulation has reached the sufficiency threshold - which is only half way to reaching the higher threshold necessary to guarantee just institutions -, there are two ways of justifying what can rightly be seen as a violation of maximin, i.e. either the priority of equal liberty, or at a more basic level, the priority of sufficiency over the other principles. Hence, both sufficientarian and non-sufficientarian readers of Rawls will need the priority of equal liberties to justify the accumulation phase in a complete manner. It is thus worth concluding that the latter principle is able to justify such an accumulation phase either in tandem with sufficientarianism, or alone. On top of not being necessary, relying on sufficientarianism will only make sense here if and only if we are ready to defend a consequentialist version of it, and one that does not look at basic needs as mere preconditions for the exercise of our basic liberties.^{xxxii}

1. 3. The applicability of maximin to the steady-state stage

Hence, it seems perfectly possible to justify the accumulation phase by reference to the principle of equal liberty (and to its priority). Still, how should we deal with the steady state side of Rawls's just savings principle? Before exploring in the next section what maximin entails once applied to the intergenerational steady state, we shall first reject possible reasons why maximin could be regarded as *inapplicable* to this stage. Despite its lesser lexicographic status, maximin is certainly not a negligible component of Rawls's theory. This appears clearly e.g. from the central role it plays once we shift to the so-called « general » (as opposed to « special ») theory of justice.^{xxxiii} Claiming that maximin should be abandoned at steady state thus requires good reasons. Rawls's own writing on intergenerational justice suggest both that unless reasons exist to abandon it, maximin should indeed remain the default principle at steady state stage,^{xxxiii} and that a *prima facie* reason to abandon maximin *does* exist at that stage. Actually, reading Rawls points at three possible reasons to reject maximin at steady-state stage. We examine and reject each of them in turn.

The first possible reason why maximin would not apply at that stage actually holds for any stage. It is a radical argument that has to do with the intuition that in the intergenerational context, the "circumstances of justice" would not apply,^{xxxiv} possibly because the objective circumstances making cooperation possible and necessary are not met. This would entail that the principles of justice, including maximin would not apply to intergenerational relations. Rawls explicitly recognizes that the intergenerational context raises specific problems in this respect.^{xxxv} And he writes that "It is a natural fact that generations are spread out in time and actual economic benefits flow only in one direction. This situation is unalterable, and so the question of justice does not arise".^{xxxvi}

However, there are at least four ways of rejecting this first claim from the inapplicability of the principles of justice in general and of maximin in particular to the intergenerational context. *First*, Rawls suggests the possibility of deriving obligations of intergenerational justice from other conditions than the standard ones defining the circumstances of justice. This is so when he discusses the possibility of adding a motivational assumption or a full compliance proviso in the original position.^{xxxvii} *Second*, the quote above does not fully apply to the case of *overlapping* generations, one that is envisaged by Rawls when he refers to "adjacent generations".^{xxxviii} This should not be underestimated as remote generations can be reached by transitivity through the prism of overlapping generations. *Third*, despite the sentence above and while Rawls seems slightly hesitant about the exact nature of the adjustments needed in the original position - "If this is right..."-^{xxxix} there is clear textual evidence indicating that we are within the circumstances of justice, no matter how broadly we end up construing them. Rawls writes for example that "the just savings principle applies

to what a society is to save *as a matter of justice*".^{xi} Fourth, the closer we focus on Rawls's developments on the matter, the more we realize that exclusive reliance on the "mutual advantage" motive implicit in the narrow definition of the circumstances of justice is hard to justify, even for Rawls himself as in *Justice as Fairness* he seems to aim at a position intermediary between mutual advantage and impartiality, referred to as "reciprocity".^{xii} In fact, when we look more specifically at the intergenerational case, Rawls clearly mobilizes ideas of mutual advantage,^{xiii} but also notions of reciprocity in the standard non-rawlsian sense^{xliii} and of impartiality.^{xliv} All such reasons plead for regarding the principles of justice as applicable.^{xlv}

Now, a second reason for abandoning the difference principle at steady state could be identified in to the following quote : « (...) 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 ». ^{xlvi} By unfolding such an argument, Rawls implies that rejecting maximin should be justified. The first reason provided (« either no saving at all ») can be interpreted in various ways, one of them referring to the central claim of our paper. What seems most plausible however is to interpret the whole quote as referring us back to Rawls's justification for violating maximin during the accumulation phase. This still does not provide us with a reason to abandon it at *steady-state* stage.

Rawls offers still a third possible reason for abandoning maximin, one that could potentially apply across both stages: « 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 (...) ». ^{xlvii} In contrast with Rawls, we think that this is not a good reason to abandon maximin at steady-state stage. Why? Let us begin with the view that, in order to conform with maximin, our society should be organized in such a way that its very least well off (class of) member(s) is not worse off than the least well off (group of) person(s) under any alternative organization of the society in which we live. Rawls's claim above is threefold in this respect. First, the earliest generations can be seen as the least fortunate.^{xlviii} Second, there is no way we can improve their situation now since their members are now dead. Third, whenever the situation of the least fortunate individual or generation cannot be improved, maximin would simply not apply. While leaving the two first claims unchallenged, we shall briefly argue against the third one. And there are actually two ways of doing so.^{xlix}

The basic reason for our rejection of Rawls's view has to do with what we believe to be the rationale of maximin. If we really care about the least well off to a significant extent, there is no good reason why, if the situation of this very least well off individual cannot be improved, we should remain *indifferent* to how the next least well off fares. If maximin advocates are ready to call for significant redistribution to the benefit of the very least advantaged, why should they not call for nearly as much redistribution to the benefit of the next least well off once the situation of the very least well off individual cannot be improved?

If we agree that the narrow reading of maximin should be abandoned, there are two ways of reformulating it. Either, we stick to the idea of focusing on the very least well off individual, but we do so more precisely by sticking to the very least well off *accessible* individual. By « accessible », we mean « whose situation can be still improved through social policy ». ¹ This move would be sufficient to reject Rawls's objection to the applicability of maximin in the intergenerational context.

Alternatively – and more satisfactorily –, we can shift from maximin to *leximin*.^{li} This would be more in line with the idea that the reasons to care about the second (and third, etc) least well off are only slightly weaker than those we have to benefit the very least well off. Leximin constitutes a sequential version of maximin. One way of defining leximin egalitarianism consists in the following principle : in the presence of two alternative worlds, if the worst off category in each of them is equally badly (or well) off, this should not be seen as a sufficient reason to remain indifferent between these two possible worlds. Instead, we should look then at the second worst off category in each world and if there is a difference, prefer the policy choices bringing about the one in which the second least well off is better off than the second least well off in the alternative world. If however, the second least well off are equally badly (or well) off in both worlds, we should then look at the third worst off in each of both possible worlds, etc.^{lii}

Implicit in the fact of comparing two scenarios containing one distinctly badly off person is the assumption that no third scenario is available in which the least well off person could be levelled up to the level of the second least well off person. The fact that the least well off is out of reach in these two scenarios may be due to physical reasons (e.g. the person is dead) or to other reasons (e.g. the willingness to redistribute of the most wealthy has been used up). Hence, in such a version of leximin, the very idea of caring about the situation of the second least well off once the situation of the very least well off individual cannot be improved is there by definition.^{liii} Hence, besides the possibility of defending strict maximin among accessible (or improvable) people, it is even more plausible to shift to leximin. Given such options, the case against the applicability of maximin at steady-state fails.^{liv} It is now time to explore what relying on maximin at that stage may entail.

2. The maximin case against savings in steady state

2. 1. The basic idea

Having defended the view that maximin is applicable to steady state, let us now indicate which implications this can have once we are in steady state. Rawls's own position is certainly that in principle, dis-savings should be prohibited. In other words, each generation should not be entitled to transfer less to the next one than it inherited itself from the previous one. Given a few assumptions that we shall state below, this is certainly in line with maximin. What needs to be added however is that not only should dis-savings be prohibited. In principle, at steady-state stage, maximin egalitarianism should prevent us from saving as well. This is a much more surprising proposal, and one that does not find any explicit support in Rawls's writing who does not seem to disallow savings in steady state.^{lv} Hence, we would end up with a so-called closed principle: *neither dis-savings, nor savings should be allowed*.^{lvi}

How do we end up with the idea that savings might be intergenerationally unfair? When it comes to private savings, many parents, especially of poorer origin, may believe that it is even their duty to transfer to their children more than what they inherited themselves from their own parents. One may thus ask *towards whom* generational (as opposed to merely private) savings would be unfair? The answer is: towards the least well members of the *current* generation. Poor parents who are willing to bequeath to their children more wealth than what they inherited themselves do not adopt Rawls's principles as their conception of the good. They are too altruistic from the perspective of a Rawlsian conception of the good life. Still, Rawlsian principles are not necessarily expected to be complied with beyond society's basic structure. The principles of justice apply in a well-ordered society where

heterogeneous conceptions of the good are welcome. Observing excessive altruism with respect to a Rawlsian view on savings is not an exception to the principles.^{lvii}

Stated more precisely, the idea is the following one. 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 intra-generational maximin by each generation,^{lviii} this is the scenario in which the least well off person, whatever the generation she is in, will end up being at least as well off as the least well off person under any alternative intergenerational scenario. Not complying with such a rule would thus impose an unjust opportunity cost on the least well off members of the current generation. It is worth stressing that such a position is perfectly in line with (and required by) impartiality across generations. Nor does this argument presuppose any priority of intra-generational justice over inter-generational justice. For maximin egalitarians, the latter cares about the least well off person, whatever the generation she is in. It naturally incorporates concerns for intragenerational justice as well.

2. 2. Further Specifications

There are of course a certain number of implicit assumptions here. It will not be possible to discuss and justify each of them. Significant assumptions include a finite horizon, the absence of uncertainty, full compliance with the requirements of intergenerational justice by future generations,^{lix} the absence of future exogenous disadvantage (see 3. 2) and the likelihood of a veto on savings by the least well off members of the current generation (see 3. 1). Let us just focus at this stage on four points.

First, we will not justify for example the view that such a principle should be used in a “per capita” version (population-sensitivity). This has significant implications. Hence, when using words such as “generational savings” or “growth”, we should always add in our heads a “per capita” proviso. If there is population growth, growth understood will only be unjust if it goes beyond what a closed rule *per capita* would require. If we choose to double the population from one generation to the next, we should also transfer twice as much to the next generation as what we inherited from the previous generation. For simplicity’s sake however, let us assume hereinafter that population is constant.

Second, we shall assume that the “private savings objection” can be successfully rejected. It consists in the following claim. If we think that there should be some room for private inheritance at the individual level, the idea of rejecting savings at the generational level might be seen as a problem.^{lx} And if the right to bequeath wealth to our children were to be considered as a basic liberty (or as within the range of exercising one of the liberties considered as basic), then, if there turned out to be an incompatibility, this should have priority over pursuing intergenerational maximin (due to the first priority rule stated above). For the argument’s sake, let us leave unquestioned the claim that a basic liberty is at stake. A member of generation G1 should thus not be prevented from increasing the consumption of a member of generation G2 at the expense of her own consumption. It is part of the right to make use of one’s own resources in the way prescribed by one’s own conception of the good. This may appear to be *prima facie* problematic at the intergenerational level, even for those who believe that, a member of generation G2 cannot be held responsible for, and hence should be compensated for, a low degree of altruism expressed towards her by the previous generation. Hence, we could think that while the right to bequeath constitutes a basic liberty,

and while this does not preclude the state from taxing at least part of such inheritance, one might still hold the view that allowing for private savings to be transferred to the next generation will jeopardize compliance with our closed principle. Here is a counter-argument however. 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.

Third, another exception to the closed rule would postulate the existence of some kind of growth that does not hurt the current generation, so that its suppression is not required by the application of intergenerational maximin. A useful point here is to observe that growth does not depend only on the accumulation of physical capital, but also on intangible assets.^{lxi} For example, destroying some forms of practical knowledge will hardly generate any current gains. Experience naturally accumulates from one generation to another, at no extra cost for the present generation. It is possible for a fisherman not to teach fishing to his offspring, but this choice won't enable him to consume more now because it is not really costly for the fisherman to perform the required on-the-job training with his children.

Were we to stop at this stage, there could be some growth left after the application of intergenerational maximin. Still, there is a way for the current generation to appropriate such future benefits generated by the growing experience of mankind, namely through public debt. It is possible for the aforementioned fisherman to teach his children how to fish productively, and at the same time to benefit from a deficit-spending policy funded by the future productivity gains generated by his teaching. The fruits of the growing productivity would then be shared across generations and no growth in consumption would be observed. This possibility is easy to understand in an open economy^{lxii}. Knowing that experience in the country is accumulating over time, a foreign bank is willing to fund current expenses if the repayment of the debt by the next generation is guaranteed. A financial debt is appended to the otherwise growing stock of capital (which includes experience). Although gross domestic production will increase over time, part of it is devoted to debt repayment, while the remaining part to be consumed is equal to every past generation's consumption. There is no growth in this scenario, either in the capital stock or in the consumption flow.

To sum up, will there be some growth left after the application intertemporal maximin, because of the accumulation of non-rival and inexhaustible forms of capital? In principle, the answer is negative because of the possibility to summon now the future benefits of accumulating experience. Silvestre's claim to the contrary hinges upon the practical difficulty of doing so, via the public debt.^{lxiii}

Fourth, it should be stressed that this case of zero growth does not correspond to a steadily poor world ("eternity in misery" scenario), where no physical capital is accumulated. The amount of wealth generated throughout History is in principle independent of the way it is apportioned between the generations. At least, this holds in an idealized, competitive model of the economy. Investment decisions can be taken in such a way that total historical wealth is maximized. This presumably implies the accumulation of physical capital. Then, through public debt, every generation can in principle reap the benefits of a whole history of production, whether production is taking place today or in the future. This is, again, easier to imagine in an open economy where a foreign bank is willing to fund current consumption when repayment by the future generations is guaranteed. Financial debt accumulates at the same rate as physical capital, so that the all-encompassing stock of resources does not grow.

Neither does consumption per capita^{lxiv}. A vast amount of wealth is produced over the course of History and it is equally shared by all generations.

Yet, practically, this story seems far-fetched because it is very difficult to anticipate now the future technological evolution and to compute the right amount of public debt that would redistribute the fruits of such an accidental growth across all generations. However, at the level of principles, there is nothing wrong with a no-growth outcome, because it can correspond to a steadily prosperous economy rather than to a situation of eternal misery.

3. The possibility of maximin-compatible savings

3.1. Are the least well off likely to support generational savings?

The rationale underlying the prohibition on savings is that such savings would impose an opportunity cost on the least well off members of the current generation. Of course, if those people, once fully informed about the negative impact on them of such positive generational savings, were to decide *not* to veto it, there would be no objection towards savings anymore.^{lxv} In other words, growth could be fully compatible with maximin if the least well-off were to freely decide to incorporate positive bequests in their lifetime consumption plans. At the level of principles, this point would make growth compatible with intergenerational maximin.

The challenge we need to address here is therefore not directly a normative one. It is not about asking ourselves whether the least well off should be *allowed* to veto generational savings (the private savings objection above). Rather, we have to ask ourselves whether such a veto would be *unlikely* in practice, once the least advantaged would be fully informed about the whole argument. In order to actually answer this question on the basis of empirical evidence, at least *two* strategies are available. *First*, we can look at private savings behavior according to wealth, assuming that those individuals adopting a significantly less future-oriented behavior would be unlikely to support positive generational savings in our hypothetical world with full ethical information. In this respect, empirical evidence suggests that private savings rates tend to be much higher in industrialized countries than in developing ones. Although macro-economic data do not fully capture what we mean by savings (e.g. they poorly incorporate the extraction of natural resources), we are talking about differences in the region of 20% of GDP or more (as in Belgium or Japan) and 5% or less for developing countries.^{lxvi} A plausible explanation of such differences is that the ratio of consumption to income must be high for people close to the subsistence constraint, while saving is an option when basic needs are more than satisfied. Of course, this argument suffers from the poor significance of macro-economic accounting and from major counter-examples to the conjecture that poor people save less, such as the low private saving rate in the USA despite a very high income per capita.

Second, we may also observe the extent to which poorer countries tend to adopt lower “green” savings rates than richer countries, hence moving away from the evidence on private savings. “Green” saving rates are macro-economic data encompassing private and public savings while adjusting the figure for environmental degradation and resource depletion. When the technical difficulties for doing so are overcome, a “green” saving rate is closer to our view on savings than a private saving rate. Hamilton & Clemens provide us with an interesting indicator, referred to as the “genuine savings rate”. These authors essentially adjust national private and public saving rates on the basis of natural resource extraction and CO₂ emissions. The results of these computations show figures below 10% or even negative for sub-Saharan Africa whereas Western European countries exhibit figures of

10%, if not 20%.^{lxvii} More strikingly, focusing on the Far East in order to improve comparability, one finds in their estimates “green saving” rates above 20% for Singapore, Taiwan, Hong Kong and South Korea, while their poorer neighbors of Myanmar, Philippines and Indonesia do not reach 10%. This suggests that in that region of the world characterized by very large international discrepancies in income per capita, poorer countries tend to exhibit significantly lower “green saving rates”.

This is in line with the claim that environmental concerns are often ignored in poor areas whenever development opportunities arise, be they in the form of industrialization or of agricultural intensification.^{lxviii} Although the literature on resource management in rural communities clearly points out to a tendency for poorer people to adopt behaviors that are harmful to the environment, the causality is not obvious from a theoretical viewpoint however.^{lxix} Still, there is a preference for current consumption at the expense of savings on behalf of the poorest members of society. Hence, while the data presented above should be read with caution, they indicate that, while an absence of veto from the least well off (once made fully aware of the impact that collective savings may have on them) is certainly a possibility, it is an unlikely one however. They are likely to veto positive savings. And such a veto on their part would certainly not have anything unjust, at least in principle, as the next two sections will indicate.

3. 2. When does (dis)-savings become compulsory?

Another possible reason to depart from our closed principle of intergenerational justice is illustrated by the “exogenous disadvantage” case. Let us imagine a world in which we would dispose of the full information regarding what we would end up bequeathing to the next generation as well as regarding the natural circumstances that this next generation will have to endure. Let us then envisage the following scenario. The Earth’s population is very small, human activities thus having a negligible impact on the environment. Our excellent climatological knowledge enables us to anticipate with full certainty that in about fifty years, a major climatological phenomenon resulting e.g. from the fall of a meteorite, will negatively affect to a very significant extent the size of the resources available for the next generation. This will certainly disadvantage the next generation over the current one. Such a disadvantage is clearly exogenous. Neither is it caused by the current generation, nor could its effects be mitigated by this very same current generation.

In such circumstances, intergenerational maximin requires positive savings from the current generation, aiming at compensating the predictable disadvantage that will negatively affect the next generation. In other words, in this case, not only is the current generation *allowed* to transfer more (*per capita*) than what it inherited from the previous generation. It is *required* as a matter of justice to do so. The obligation to save is such that, *ceteris paribus*, the members of the next generation should not end up being worse off as a result of such climatic circumstances than those of the current one. Notice that the reverse situation may occur as well. Imagine that we are able to establish that an exogenous disadvantage currently affecting the existing generation will *not* repeat itself in the future. In such a case, *ceteris paribus*, we have an obligation to *dis-save*.

Hence, the “exogenous disadvantage” case illustrates the fact that intergenerational maximin in steady state may sometimes require (rather than prohibit or allow) from a generation to save or to dis-save. It is worth mentioning that a reciprocity based (or commutative) theory of intergenerational justice is unable to advocate such a view. For if we justify the very existence of our obligations towards the next generation and if we define the content of such obligations towards the next generation by reference to what we received from the previous

one, such a commutative approach is unable to justify a departure from the obligation to transfer at least as much to the next generation. If we transfer less to the next generation (i.e. if we dis-save), we will not fully get rid of our debt towards the previous generation. And there is similarly no reason, from a commutative point of view, to ask the current generation to do anything more than just emptying to the benefit of the next generation, the debt we have towards the previous generation.^{lxx}

One more element worth noticing is that in the savings case (predictable exogenous disadvantage) our theory implies that the current generation could end up being worse off than the previous generation, for the sake of making sure that maximin egalitarianism will be complied with between the current and the next generation. And conversely, at least in an environment in which generations do not overlap, the compulsory dis-savings scenario (predictable absence of future exogenous disadvantage) features a case in which the current generation could end up being better off than the previous generation, due to a concern towards (their least well off members) not being worse off than (those of) the next one.

3. 3. What if the most well off are very redistribution-averse?

We now turn to another case in which growth may be “pro-poor” i.e. in which the least well off (all generations considered) are better off than in other scenarios involving no growth. In doing so, we will explore the true implication of our simplifying assumption according to which our general rejection of positive savings only makes sense if each generation applies maximin intragenerationally.

Let us compare a first set of alternative intergenerational worlds. For simplicity’s sake, we limit ourselves to three categories of agents present in each generation. There are three consecutive non-overlapping generations (G1, G2, G3). The level of primary good index reached by each category in each generation in the reference scenario is indicated the first three columns (left). Equivalent data are provided with a growth scenario in mind (last three columns on the left). To make things a little bit more vivid, let us assume that each of the three categories corresponds respectively to a prosperous bourgeoisie, a rural aristocracy and a constantly least-advantaged category.

	BouR	AriR	WorR		BouG	AriG	WorG
G1	6	7	5		5	6	4
G2	8	8	5		8	8	5
G3	10	9	5		11	10	6

Table 1: Profile of primary goods index, where growth cannot be a maximin policy

By assumption, the reference scenario is a case where maximin is applied within each generation. Part of the population is leaving bequests that are redistributed and some activities are subject to accidental technical progress. This explains the positive trend enjoyed by agents in the bourgeois category : in any given period, if there were more intra-generational redistribution, incentives would be so distorted that the welfare of the least well-off would diminish. What about inter-generational redistribution? Workers enjoy the same resources in all periods. If we want an improvement for all three generations of workers, it is necessary to levy taxes on other classes, but since intra-generational maximin is already applied by assumption, the limit to this policy has already been reached. In other words, more taxes would not improve the lot of the working class. Notice that this argument has been phrased in terms of distortionary taxes, i.e. fiscal measures generating disincentives. However, any other reason why maximin does not result in full equality

would do (e.g. administrative costs). In table 1, to sum up, if society wants more growth, sacrifices must be performed by all classes of the population in the first generation, in particular by the least advantaged agents (workers in all generations). Hence more growth can't be a maximin policy.

The growth scenario presented in table 1 is not the only possible one however. Here is another one. It is presented in table 2 in which only the three leftwards columns have been modified. Here, in the reference scenario, the least well-off agent in history is part of the third generation (G3) of the working class (WorR). According to the *inter*-generational maximin requirement, we should prefer here the growth scenario to the reference scenario. For the least well off in the reference scenario (given its level of 4 in terms of primary goods index) is clearly worse off than the worst off member in the growth scenario (given its level of 5 in terms of primary goods index).

	BouR	AriR	WorR		BouG	AriG	WorG
G1	6	7	6		5	6	5
G2	8	8	5		8	8	5
G3	10	9	4		11	10	5

Table 2: Profile of primary good index with “pro-poor” growth

If we can show that such a “pro-poor” growth scenario is both economically meaningful *and* compatible with the idea that intra-generational maximin would be respected, we will have identified one more case in which we should depart from our closed rule (“neither save, nor dis-save”). Actually, the growth configuration depicted in Table 2 is not only possible. It is also likely if unqualified labor in rural areas of Third-world countries becomes less and less productive compared to other inputs. Agents who own only this kind of endowment are then bound to become poorer as time goes by. But what kind of economic forces can cause this phenomenon? The answer is twofold: “capital-augmenting” technical change^{lxxi} and declining terms of trade for Third-world outputs. When these two causes combine, rural labor receives a diminishing share of a diminishing price. Actually, in such conditions, it is no wonder that a significant fraction of rural Third World workers would decide to give up commercial production and to fall back on subsistence crops. Whether this really happens is an empirical question and presumably depends on the point in time and space where the question is raised.

Still, while the growth scenario presented in table 2 is plausible, one could argue it would violate the assumption according to which our closed rules should only hold whenever we can assume that each generation applies maximin intra-generationally. Hence, the fact that the growth scenario is more favourable to the least well off than the non-growth scenario in table 2 would simply result from a violation of maximin. This is not necessarily so. The answer depends upon an argument long known to Rawlsians and economists. The scope for redistribution is limited, not only at the global scale due to the declining willingness to redistribute, but more generally and fundamentally due to the incentive-equity trade-off. Hence, we may very well have a State implementing maximin and having to face the unwillingness of the most productive to pay high taxes. Maximin would not be violated and would be compatible with inequalities of the type of those present in the growth scenario at table 2. Intragenerational maximin does not guarantee strict intragenerational equality. And this is why we may end up with scenarios of this type that are compatible with maximin while allowing with inequalities. As a result, it opens the door to maximin compatible « pro-poor growth » scenarios, i.e. growth scenarios that would be preferable from an

intergenerational maximin perspective while not relying on violations of intra-generational maximin.

Notice that there is yet another qualification to add before stating that we have found a plausible case where Rawlsians should recommend growth. The cost of growth for the least well-off members of the current generation must not bring them below the prosperity of their future counterparts. In Table 2, it is assumed that workers, in the first period of the growth scenario, drops at a level of primary goods equal to 5, i.e. the same level made accessible to workers in period 3 thanks to the growth. If a figure of 4 or even 3 were in the upper right corner of Table 2, we would have said that growth is no bit of an improvement from the viewpoint of intergenerational maximin.

To sum up, the profile of primary goods index shown in Table 2 seems conclusive about the possibility of Rawlsian growth. Despite the fact that each generation is Rawlsian, some categories of agents may suffer from a negative trend in their primary good index, while there is a positive trend in aggregate economic prosperity: in other words, intra-generational maximin is not sufficient to guarantee that bequests and autonomous growth benefit to all groups in the population. And this is true even in a well-ordered society. Notice the relationship between the argument for growth developed in this section and the notion of an exogenous disadvantage. Here the disadvantage does not strike any generation as a whole, but only the least well-off class within future generations. The nature of the disadvantage simply consists in an increasingly tough limit to intra-generational redistribution, be it due to the decreasing willingness of the wealthy to redistribute and/or to the increasing effectiveness of their tax-evasive strategies.

Conclusion

In this paper, we have argued in support of three claims. *First*, Rawls's own way of locating his principle of intergenerational justice is not the only possible one. We have shown on the one hand that the part of his principle of just savings applicable to the accumulation phase can be derived from the principle of equal liberty. On the other hand, we have argued that the difference principle (and more precisely the lexicographic version of maximin) is applicable to the steady-state stage. *Second*, intergenerational maximin in steady-state leads us to a closed principle, i.e. a principle of intergenerational justice prohibiting both dis-savings and, - more surprisingly - , savings. We have defended this claim against a few possible objections. *Third*, we have shown that this principle suffers three important exceptions, one of them being illustrated by the « exogenous disadvantage case » and another one by the case of a « pro-poor growth ». Hence, while growth is in principle not maximin-compatible, there are some cases in which it can be so.

ⁱThis article explores further, partly in new directions, the justification and implications of an idea first defended in two pieces of work: Axel Gosseries "What do we owe the next generation(s)?" , *Loyola of Los Angeles Law Review* 35 (2001): 293-354, and Axel Gosseries, *Penser la justice entre les generations. De l'affaire Perruche à la réforme des retraites* (Paris: Aubier-Flammarion, 2004), chap. 4. It results from discussions that initially took place at a workshop entitled "Are Growth and Justice Compatible?" (Chaire Hoover d'éthique économique et sociale, Univ. cath. de Louvain, May 2004). Many thanks to the participants to this workshop, and especially as well to P. Dietsch, M. Dilhac, S. Dumitru, C. Fabre, O. Godard, L. Lauwers, C. McKinnon, L. Van Liedekerke, V. Muniz-Fraticelli, I. Schumacher, Ph. Van Parijs, C. Wolf, as well as to two referees from *PPE* and one of the associate editors. E-mail for correspondence: gosseries@etes.ucl.ac.be

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- ii John Rawls, *A Theory of Justice. Revised edition* (Oxford/New York: Oxford University Press, 1999) (hereinafter: *TJRev*): 251. See however p. 254: « (...) although the relation between generations is a special one, it gives rise to no insuperable difficulty ».
- iii Rawls, *TJRev*, p. 255
- iv Rawls, *TJRev*, p. 255
- v John Rawls, *The Law of Peoples, with « The Idea of Public Reason Revisited »* (Cambridge/London, Harvard University Press, 1999):107, note 33.
- vi For a quick sketch of the problem: Gosseries, “What do we owe the next generation(s)?”, pp. 311-312.
- vii In some sense, our project is similar to the one of John Roemer, « Intergenerational Justice and sustainability under the leximin ethic », (2005, downloaded from his webpage). He spells out the consequences of intergenerational maximin in a simple two-goods model. We discuss cases that are not covered in Roemer’s model and this paper should be seen as a philosophical companion to his.
- viii Paradoxically, those instruments are often studied in the macro-economic literature on Ricardian equivalence, which deals predominantly with the private choices, motivated by descending altruism, that try and undo the transfers at the expenses of future generations!
- ix Rawls, *TJRev*, p. 256
- x Rawls, *TJRev*, p. 266
- xi On this first priority rule: Brian Barry, “John Rawls and the Priority of Liberty”, *Philosophy and Public Affairs*, 2(3) (1973): 274-290; Robert Taylor, “Rawls’s Defense of the Priority of Liberty: A Kantian Reconstruction”, *Philosophy and Public Affairs* 31(3) (2003): 246-271
- xii Thanks to Marc Dilhac for pressing us on this.
- xiii Rawls, *TJRev*, p. 258
- xiv See as well John Rawls, *Justice as Fairness: A Restatement*, ed. Erin Kelly (Cambridge, Mass.: Harvard University Press, 2001): 159 where he writes that « the principle of just saving holds between generations, while the difference principle holds within generations ».
- xv Rawls, *TJRev*, p. 258; Robert Solow, “Intergenerational Equity and Exhaustible Resources”, *Review of Economic Studies* (1974): 30; See as well Rawls, *TJRev*, p. 257 (« The life of a people is conceived as a scheme of cooperation spread out in historical time. It is to be governed by the same conception of justice that regulates the cooperation of contemporaries »).
- xvi Rawls, *TJRev*, p. 256. See as well: Rawls, *Justice as Fairness*, p. 159.
- xvii For further developments : Gosseries, *Penser la justice entre les générations*, pp. 206-221
- xviii Rawls (1999 : 257). It is also worth stressing that the idea that some level of wealth would be needed to guarantee a reasonable degree of stability to just institutions, differs from another one according to which the fact that aggregate wealth would keep *growing* (rather than just have reached a given threshold) could also increase the stability of just institutions. Thanks to Olivier Godard for this point. For a related distinction : Steven Wall, « Just Savings and the Difference Principle », *Philosophical Studies*, 116(1) (2003) : 93 (« Savings might be required to make just institutions possible in the future when they are not possible in the present. Alternatively, savings might be required to preserve or maintain just institutions that exist in the present »).
- xix Rawls, *TJRev*, p. 253
- xx We will come back later to this claim that is at the heart of the whole paper. Compare e.g. with Solow, “Intergenerational Equity and Exhaustible Resources”.
- xxi Rawls, *TJRev*, p. 257
- xxii See e.g. Roger Paden, “Rawls’s Just Savings Principle and the Sense of Justice”, *Social Theory and Practice* 23(1) (1997): 27-51.
- xxiii Rawls, *TJRev*, p. 258 (our italics)
- xxiv e.g. *Ibid.*, p. 256
- xxv *Ibid.*, p. 216. See however our discussion just below.
- xxvi Barry, « John Rawls and the Priority of Liberty ».
- xxvii John Rawls, *A Theory of Justice* (Oxford/New York, Oxford University Press, 1971) (original edition), p. 542
- xxviii John Rawls, *Political Liberalism* (New York: Columbia University Press, 1993/1996), p. 7. We are indebted to Clark Wolf for having attracted our attention on this Rawlsian sufficientarianism.
- xxix Looking at Rawls, *Political Liberalism*, p. 166, it is the latter interpretation that should prevail.

^{xxx} The other question is whether this priority of sufficiency would prevent from defending the view we defend at the accumulation phase? Yes, since it is not a maximizing principle, it would allow us to transfer more at the detriment of those who are the intergenerationally least well off, provided that all have enough. And still, this should not be the final word since by granting priority to a basic needs principle, Rawls never claims that it should not remain supplemented by his other principles, including leximin. To that extent, our argument as it applies to the accumulation phase remains unaffected.

^{xxxi} For a comparison with a consequentialist (maximin) egalitarian defense of the accumulation phase: Gosseries, *Penser la justice entre les générations*, pp. 214 ff.

^{xxxii} Rawls, *TJRev*, p. 55

^{xxxiii} See e.g. Rawls, *TJRev*, p. 258 (asking the reader to suppose that the just savings principle is defined from the standpoint of the least advantaged in each generation. It is the representative men from this group as it extends over time who by virtual adjustments are to specify the rate of accumulation») and p. 285 (« The appropriate expectation in applying the difference principle is that of the long-term prospects of the least favored extending over future generations »).

^{xxxiv} *Ibid.*, §22

^{xxxv} *Ibid.*, p. 111

^{xxxvi} *Ibid.*, p. 254

^{xxxvii} See above note x

^{xxxviii} Rawls, *TJRev.*, p. 255

^{xxxix} *Ibid.*, p. 111

^{xl} *Ibid.*, p. 255, our italics

^{xli} Rawls, *Justice as Fairness*, p. 77. See as well Brian Barry, *Justice as Impartiality* (Oxford : Oxford University Press, 1995). Thanks to Victor Muniz-Fraticelli for having attracted our attention on this point.

^{xlii} Rawls, *TJRev*, p. 255 (“(...) since it is to our advantage if our predecessors have done their share”) and 256 (“The process of accumulation, once it is begun and carried through, is to the good of all subsequent generations”).

^{xliiii} *Ibid.*, p. 256 (“this equivalent is in return for what is received from previous generations (...)”)

^{xliiv} *Ibid.*, p. 253 (“from a moral point of view there are no grounds for discounting future well-being on the basis of pure time preference”).

^{xliv} And one way or re-interpreting Rawls’s quote above consists in reading it as : « the question of justice does not arise » *towards those who are already dead*, which is in line with the second possible argument against intergenerational maximin that we will now turn to.

^{xlvi} Rawls, *TJRev*, pp. 253-254

^{xlvii} Rawls, *TJRev*, p. 254. See as well : « It is a natural fact that generations are spread out in time and actual economic benefits flow only in one direction. This situation is unalterable, and so the question of justice does not arise » (*Ibid.*, p. 254).

^{xlviii} The statement according to which the least well-off member of History belongs to the earlier generation is apparently challenged by any economic model involving descending altruism and a finite number of generations. Indeed, the earlier the altruist is being located in the chain of generations, the most numerous his intergenerational offspring will be. Therefore, as an altruist, his utility achievement can be higher than the one of his successors. Of course, one should remember that utility is a device for the representation of choices and that the role of the utility function is to assert what the agents will do with their resources. Rawlsian theory explicitly precludes any form of value judgment on idiosyncratic conceptions of the good, i.e. on how people make use of their resources. Furthermore, if each generation is composed of several individuals with a varying degree of descending altruism, comparisons of individual utilities are normatively unconvincing. For, if the offspring’s consumption enters the utility of an altruistic parent, the latter would be deemed better off than a purely selfish parent even if their respective starting wealth were equal. A welfare egalitarian policy would then amount to a “slavery of the altruists”. Rawls insists that agents should be mutually disinterested in the original position in order to avoid this problem. Although we cannot deny the positive relevance of a model with descending altruism, it should not be interpreted as embodying a refutation of the claim that the least well-off member of History belongs to the earlier generation.

^{xlix} Thanks to Speranta Dumitru for having pressed us on that.

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- ⁱ As will soon become clear, this does not commit us to deal with fixed identities.
- ⁱⁱ On leximin: Amartya Sen, *Collective Choice and Social Welfare* (North-Holland, 1970), p. 138.
- ⁱⁱⁱ Roemer (2005) adopts leximin for a very similar reason, i.e. the large number of maximin solutions among which leximin can still discriminate.
- ⁱⁱⁱⁱ The situation of the least well off member of society should be levelled up until it reaches the one of the second worst off member, at which point the situation of the then two worst off members should be levelled up to the level of the third worst off, etc. We find here the intuition that there is nearly as much reason to care about the least advantaged than to care about the next least advantaged, etc. Again, as we show for the definition of leximin adopted in the main body of the text, despite not flowing logically from such a rationale, it is clear that the idea of not remaining indifferent to how other disadvantaged people fare once the situation of the very least well off person is inaccessible, is very much at home here as well.
- ^{liv} It also follows that there is no need to shift from maximin to a laxer principle that would allow for imposing a small sacrifice on the least well off, if it could entail substantial benefits to the better off, hence possibly leaving room for intergenerational savings in this way. See Jane English, « Justice Between Generations », *Philosophical Studies* 31 (1977) : 101 ; Wall, « Just Savings and the Difference Principle », p. 88 & 94. See as well: Marc Fleurbaey & Philippe Michel, « Quelle justice pour les retraités ? », *Revue d'économie financière* 23 (1992) : 59 (restriction of such sacrifices to « infinitely efficacious sacrifices », which is of course problematic if the number of generations is infinite or indefinite).
- ^{lv} Rawls, TJRev, p. 257 (“the just state of things beyond which no further net saving is required”)
- ^{lvi} Compare this to Roemer (2005) (idea of constant utility paths, that solve the leximin problem in his model in the realistic case where each generation would deplete natural resources more quickly under laissez-faire than if constrained by a leximin policy.
- ^{lvii} See as well sect. 3.1. below
- ^{lviii} For further discussion on this assumption : 3. 2.
- ^{lix} We are indebted with Cécile Fabre for having pressed us on this.
- ^{lx} See e.g. Lawrence Solum, « To Our Children’s Children’s Children : The Problems of Intergenerational Ethics », *Loyola of Los Angeles Law Review* 35(1) (2001): 231-232.
- ^{lxi} Joaquim Silvestre, « Progress and conservation under Rawls’s maximin principle », *Social Choice and Welfare*, 19 (2002): 1-27. For a strategy close to the one of Silvestre: Clark Wolf, “Intergenerational Justice and Just Savings”, *Values, Justice and Economics* (G. Gaus, C. Dawn Favor & J. Lamont eds., forthcoming).
- ^{lxii} In a closed economy, the above argument is also applicable because of the overlap between generations. Resources can be summoned from the future by taking from the youngsters and giving to the elderly, provided that the State commits itself to do so in every time period.
- ^{lxiii} Silvestre, « Progress and conservation under Rawls’s maximin principle»
- ^{lxiv} Actually, the current generation could do far worse by means of a public deficit. Notice that it could effectively appropriate the whole wealth generated in the future. This is a market-based substitute for selling the future generations as slaves to the foreign bank. Such a morally indefensible possibility simply demonstrates that the application of intertemporal maximin (by ways of a much softer public indebtedness) is definitely not a technical impossibility.
- ^{lxv} See Rawls, TJRev, p. 131 (idea of veto of the worst-off). See as well Ibid., p. 258 (the just savings principle « is defined from the standpoint of the least advantaged in each generation »)
- ^{lxvi} Robert Summers, & Alan Heston, “The Penn World Table (Mark 5): An Expanded Set of International Comparisons, 1950-1988”, *Quarterly Journal of Economics*, 106 (1991): 327-368.
- ^{lxvii} Kirk Hamilton & Michael Clemens, “Genuine Savings Rate in Developing Countries”, *The World Bank Economic Review*, 13(2)(1999): 333-356.
- ^{lxviii} True, agricultural intensification does not occur whenever and wherever possible, but the welfare of future generations is rarely the reason why it is rejected.
- ^{lxix} For a very balanced account of the facts and theories on this matter: Jean-Marie Baland & Jean-Philippe Platteau, 1996, *Halting Degradation of Natural Resources Is There a Role for Rural Communities?* (Oxford: Clarendon Press, 1996). And for something more recent: Jean-Marie Baland & Jean-Philippe Platteau, « The Ambiguous Impact of Inequality on Local Resource Management », *World Development*, 27(5) (1999): 773-788.

^{lxx} For further developments on this point : Gosseries, *Penser la justice entre les generations*, p. 175 ff.

^{lxxi} “Capital-augmenting” technical change is a modification of the production possibility frontier that enhances the marginal productivity of capital compared to that of labour. This modification of the technical production parameters should not be confused with “substitution of capital for labour”, which is a behavioural response, namely a change in the producers’ input choices.