ARE SENIORITY PRIVILEGES UNFAIR?

AXEL P. GOSSERIES

*Fonds National de la Recherche Scientifique (Belgium) and Université
Catholique de Louvain*

What should maximin egalitarians think about seniority privileges? We
contrast a good-specific and an all-things-considered perspective. As to the
former, inertia and erasing effects of a seniority-based allocation of benefits
from employment are identified, allowing us to spot the categories of workers
and job-seekers made involuntarily worse off by such a practice. What
matters however is to find out whether abolishing seniority privileges will
bring about a society in which the all-things-considered worst off people are
better off than in the seniority rule's presence. An assessment of the latter's
cost-reduction potential is thus needed, enabling us to bridge a practice
taking place within a firm with its impact on who the least well off members
of society are likely to be. Three accounts of the profitability of seniority
privileges are discussed: the "(firm specific) human capital", the "deferred
compensation" and the "knowledge transfer" ones. The respective relevance
of "good-specific" and "all-things-considered" analysis is discussed. It turns
out that under certain circumstances, a maximin egalitarian case for seniority
privileges could be made.

Senior: Do you know that they are planning layoffs? Of course, it is only
fair that they lay-off the newcomers first! After all, I have been loyal to the
company for many years.
Junior: Did I choose to be a newcomer?

1. INTRODUCTION: WHY CARE ABOUT SENIORITY?

Companies rely on seniority for a variety of purposes ranging from ranking
employees for promotion or layoff, designing wage profiles, defining the

length of reasonable advance notice term, to defining who should have priority for deciding when to take holidays.[1] Despite repeated predictions of a decline in its use and/or practical importance,[2] seniority remains a significant basis for the allocation of all kinds of benefits from employment in the western world.[3] What should we think from an egalitarian point of view about the use of seniority for such purposes? This is the question I shall be addressing in this paper. I shall limit myself to two types of seniority-based practices: the existence of a wage–seniority (W-S) relationship, involving senior workers earning more on average than junior ones; and the "last in, first out" (LIFO) layoff rule by which layoffs affect workers in *inverse order* of seniority, so that new recruits are the first victims of layoffs.[4]

The egalitarian approach adopted here is of a *maximin* type.[5] By this I mean that the rules of social organization should be such that the involuntarily worst off people under those rules are better off than the involuntarily worst off under any alternative set of rules. This approach may sometimes lead to the acceptability of increases in inequalities – specifically, in any case in which increasing inequality is necessary to improve the situation of the worst off. I shall assume here that the fundamental reason why egalitarians advocate the reduction of inequalities has to do with the expectation that doing so will generally benefit the least well off.[6] In any instance where that is not so, the fate of the worst off takes priority over inequality reduction.

Why care about seniority privileges? On the face of things, any discrimination, be it gender-, nationality-, age- or seniority-based deserves close scrutiny. However, I believe that we need to go beyond mere *good-specific* or "local" maximin egalitarianism.[7] In my view, maximin egalitarianism, properly applied, requires that practices allocating specific goods (here: benefits from employment in private organizations) be assessed from the point of view of the "all-things-considered" worst off people in society at large. Ultimately, our concern should be directed at

---

[1] On the diversity of uses of seniority: Raymond (1967); Citera (1982: 753); Vallee (1995: 268); Javillier (1991: 389–91).

[2] E.g. Aaron (1962: 1563); Bessy (1994: 51); Engelstad (1998: 117). They mention four possible causes: increased observability of productivity, growing flexibilization of labor, decreasing unionization and development of early retirement schemes.

[3] Dulude (1995: 5–6) (Canadian data); Farber (1998: 9–15).

[4] See as well Romm (1995: 155) ("last-hired, first-fired"); compare Player *et al.* (1995: 320).

[5] E.g. Van Parijs (1995).

[6] There are of course a variety of possible specifications of what is to be the basis of "well-offness" for such purposes. For the present purposes this issue is irrelevant, but I tend to follow Cohen's (1989) "access to advantages" formulation. Note too that, as the reference to "*involuntarily* worse off" suggests, the distinction between choice and circumstance plays a role – but again that aspect is not central to my present purpose.

[7] "Local" refers here to the "local justice" literature; see Elster (1992).

those who are the all-things-considered worst off members of society, which requires that we do not limit ourselves to identifying the impact of a given practice (here: seniority privileges) on those who are worst off with regard to the specific good at stake. The present paper provides one illustration of the way in which *all-things-considered* maximin egalitarians should proceed.[8]

Three clarifications are in order. *First*, one might adopt the view that only discriminatory practices should trigger this kind of "all-things-considered" analysis. There is certainly no reason to adopt such a view, however. Some goods made freely available to all by the state – i.e. whose allocation does not exhibit any discriminatory nature – may very well turn out under certain conditions to benefit mostly the well off, as discussions in the fields of higher education and health care illustrate. The potential scope of "all-things-considered" analysis is therefore broader than one may think.

Second, there is a *normative* assumption at play. The reason that egalitarians should avoid myopia by trying to move towards the "all-things-considered" perspective is that the latter has a lexical priority over the "good-specific" one, at least for the kind of good we are looking at, namely *benefits from employment*. This is not self-evident. For example, in the case of benefits from employment, at least some Rawlsians defending a priority of fair equality of opportunity over the difference principle would not be ready to endorse our normative assumption.[9] Similarly, for goods other than benefits from employment, such as "basic liberties", the stricter the priority of liberty one would advocate, the more relevant good-specific analysis taken alone will become. Hence, for each type of good, we should reconsider the respective normative weight of "good-specific" and "all-things-considered" analysis.

Third, in the absence of full information, we may rely on rules of evidence regarding the connection between the "good-specific" least well off and the all-things-considered least well off. Hence, it may be reasonable to believe that a practice disadvantaging a given group from a good-specific

---

[8] For a similar "good-specific/all-things-considered" distinction, see Brighouse and Swift (2002).

[9] However, if the priority of Fair Equality of Opportunity (FEO) over the difference principle rests on the presumption that allocating jobs to people on a talent-blind basis will eventually turn out to be detrimental to the all-things-considered worst off, then it makes perfect sense to justify a violation of FEO whenever this will benefit those all-things-considered worst off people. Interestingly enough, as will later become clear, in the case of LIFO, under the "transfer of knowledge" view and provided that we interpret individual productivity in a strict way, FEO can be regarded as violated. But such a violation may be justified in some cases, since under certain conditions it may be beneficial to the least advantaged people in general. For a discussion on the priority of FEO over the difference principle, see Brighouse and Swift (2002). See as well, Van Parijs (2003).

point of view will contribute to disadvantage this group at an all-things-considered level as well. Hence, the burden of proof may be put on those who want to argue that the members of the "good-specific least well off" group will not tend to be members of the "all-things-considered least well off" one. Setting the burden of proof in this way gives "good-specific" analysis some special importance whenever the lack of data or the complexity of the causal chains prevent us from bridging the impact of a good-specific discrimination on how people will fare, all things considered.

I shall proceed in four steps. After having provided the reader with some relevant definitions (section 2), we shall assess seniority-based practices first from a *good-specific* (section 3), then from an *all-things-considered* maximin egalitarian point of view (section 4). The former type of analysis seeks to identify categories of involuntarily worst off workers or job seekers under the seniority rule. The latter introduces the efficiency dimension, which is relevant not only to the good-specific but – more importantly – to the all-things-considered maximin egalitarian assessment. This will leave us with a potential dilemma requiring a proper articulation of these two types of egalitarian analysis (good-specific and all-things-considered) (section 5).

2. DEFINITIONS

To understand *how* seniority is being used in practice, three distinctions are in order. A first one is to be drawn between various *units of seniority*. Seniority is a form of age, whose starting and end point will be *entrance* in and *exit* from a given "unit". It can be a service or department in a company, a company or a whole professional life. In general, seniority refers to "companywide" seniority (or "tenure"), i.e. to the length of service of a worker in a given company.[10] And this is the way in which it will be understood in this paper. However, it can also refer in practice, on the one hand, to *lower-level* plant-wide, departmental or occupational,[11] or even "*per age-group*" seniority,[12] and, on the other hand, to *higher-level* "inter-companies" (in case of merging) or "complete life" seniority.[13]

---

[10] I will not expand on the various forms of "intra-company seniority", i.e. forms where suspensions are either periodic (e.g. week-ends) or accidental (e.g. leaves of absence for health reasons), deducted or not from the computation of seniority. This issue is connected with the distinction between continuous and discontinuous obligations within an employment contract (Vallée, 1995: 275–6). Moreover, I will not discuss whether the calculation of seniority should include seniority accumulated either in former contracts with the same company, or with former companies newly acquired by the current company. See Raymond (1967) (France), Vallée (1992, 1995) (France and Québec), Zack and Bloch (1995) (US).

[11] Dulude usefully distinguishes "skill-based" from "working area" units (1995: 10–11).

[12] Romm (1995: 163) (e.g. electrician); Brink and Raaijmakers (1994).

[13] Vallée (1992: 876) (used for awarding honorary labor medals in France).

Type	Definition
1. Strict seniority	Seniority is the only criterion being taken into account
2. Minimum qualification	Seniority plays a role only if the worker reaches a minimum qualification threshold
3. Minimum seniority	Seniority plays a role only if the worker has a seniority of at least x years[18]
4. Minimum seniority difference	Seniority plays a role only if the difference in seniority between the two workers is higher than x years[19]
5. Relatively equal	Seniority plays a role only if the difference in qualification/expected productivity between the two workers is lower than x
6. Trade-off	Absence of *a priori* weighting of the relative importance of seniority *vis-à-vis* other criteria (age, qualification, etc.)

TABLE 1. Six types of combinatory clauses using seniority.

A second distinction is the "relative/absolute" one.[14] Seniority is *absolute* whenever it is used (cardinally) to grant workers certain rights (e.g. wage level) as soon as they reach a certain seniority threshold, no matter the seniority of the other workers. It is *relative* when it is used (ordinally or cardinally)[15] to rank the workers (e.g. in a downturn or for promotion purposes). In the latter case, the consequences of the worker's seniority will depend on the seniority of his colleagues. Granting the benefit to one worker will exclude other workers from it.

Finally, there are various ways of *combining* seniority with other criteria such as qualification, factors affecting the difficulty of getting re-hired (age, physical disability, etc.), number of dependants, etc.[16] In the layoff context, at least six types of combinatory clauses obtain *in practice*.[17]

As table 1 indicates, either we use a single criterion (*strict* clauses), or we use absolute thresholds (2 and 3), or relative thresholds (4 and 5), or we don't specify in advance the relative weight of the factors being taken into account (6). For example, if we take the "relatively equal" (in qualification)

---

[14] Vallée (1995: 260, 262, 269). For an alternative terminology see Dulude (1995: 8). The distinction is relevant to the literature on positional goods (Brighouse and Swift, 2002).

[15] Some clauses also take into account the *size* of the seniority gap separating an employee from the next most senior/junior one – see Romm (1995: 162).

[16] See e.g. Bessy (1994: 41).

[17] This table is partly inspired by Romm (1995: 161–2). See also Dulude (1995: 9).

[18] For a defense of such a clause see Dulude (1995: 49).

[19] See e.g. Vallée (1995: 266, fn. 22).

clause, it allows us to eliminate poor performers, keep outstanding ones, and to rely on seniority only for the intermediate range.[20] Hereinafter, we shall assume that *strict* seniority clauses are being used.[21]

3. SENIORITY AND EQUAL ACCESS TO BENEFITS FROM EMPLOYMENT

3.1 The complete-life view

Some of us, being asked to provide an opinion on seniority-based practices, may well look at the situation at a given moment and argue that people are indeed being allocated benefits from employment on a basis that should remain irrelevant. For, after all, isn't the moment we enter a company to a large extent beyond our control? Should we not conclude that, from an egalitarian perspective, there is indeed something seriously wrong with a seniority-based allocation? Not necessarily, provided that we adopt the view that access to benefits from employment should be assessed *over complete-lives*.

The complete-life view says that it is *not sufficient* to look at what happens at a given moment in time to conclude that someone *is* worse off than someone else. Take two people, A and B, each of them going through 10 life periods. Imagine that A is worse off at period 8 than B at the same period. This fact is certainly insufficient to justify redistribution from B to A, especially as it may turn out that B has been much more disadvantaged than A over all the previous periods. Conversely, features that are fully or partly unchosen (i.e., age and seniority, respectively) and that serve as a discriminatory basis *do not* necessarily have any discriminatory impact over people's complete (professional) lives as long as each of us will *in turn* benefit and suffer from the given rule's application to an equal extent. This is related to the fact that the complete-life view also incorporates not only the view that instantaneous inequalities will not necessarily entail complete-life inequalities, but also the idea that it is *not necessary* to require that equal access to a given good be granted to all at the *same time*, whatever people's age or seniority. One possible underlying view is that equal respect for each of us would in no way be violated by the absence of such constant equality.

Hence, this leads us to reject the "instantaneist" case against seniority privileges, along lines similar to those used, e.g. to defend the legitimacy of age-based practices[22] or of denying voting rights to dead people.[23] It

---

[20] Romm (1995: 213).

[21] The reader should bear in mind however that the "companywide" and "strict" seniority assumptions, motivated by a clarity requirement, may not fit in many cases with the types of clauses actually used in practice. See e.g. Dulude (1995: 9/41).

[22] E.g. Daniels (1988).

[23] Mulgan (1999).

does not follow however that the complete-life view should prevail for the allocation of *all* sorts of goods,[24] nor that the way access to such goods was spread *along* a person's life should not *also* be taken into consideration as part of this complete-life view. What follows is that in the context of allocating benefits from employment, we can confidently state that if she will herself equally benefit in the future from the effects of seniority privileges once she becomes senior, there is nothing *prima facie* unfair with disadvantaging a junior worker today.

Accepting the complete-life perspective does not, of course, do more than dispose of the more specious case against seniority privileges. Given a complete-life perspective, two further questions obtrude. First, is it true that even when consistently applied through time, the seniority rule will have a constant *impact*? Second, is it true that each of us will turn out to reach the same seniority over complete-lives, and that whenever one of us would not, it would be due to her own fault? These two questions will be addressed in turn, indicating for each of them a specific type of effect relevant to the egalitarian assessment of seniority privileges.

3.2 The inertia effect

Does the complete-life argument for seniority-based discrimination hold as long as seniority-based rules are being applied consistently through time? It is useful here to introduce the concept of "double queuing".[25] Seniority-based privileges entail that as soon as we enter a company (or any other seniority-relevant unit), we start queuing for benefits from employment. This is the "inside" queue. However, there is another queuing exercise that precedes the "inside" one. Different persons may have had more or less difficulty in entering the company in the first place: they may have faced a longer or shorter outside queue. In short, access to benefits from employment involves a combination of "outside" and "inside" queuing, hence "double queuing". And a person's position in the inside queue will clearly depend, at least in part, on what happened in the outside queue.

With the concept of "double queuing" in hand and the assumption that seniority-based practices would apply constantly across time, we can examine the impact of the seniority rule. Let us imagine two labor cohorts (e.g. sets of people who entered the labor market during different periods). *Ex hypothesi*, labor market conditions when the older cohort entered were favorable (i.e. full employment, high job stability and low relative seniority of the other employees), whereas the younger – and unlucky – cohort entered in a period of recession. My parents are members of the older

---

[24] See e.g. Daniels (1996: 268) (challenging the complete-life view in the case of voting rights among those alive).

[25] See Gersuny (1982: 524).

cohort, whereas I am a member of the younger one. Imagine that soon after I finally found my first job, there is a layoff in my company. The LIFO layoff rule is such that I shall lose my job. This is unfair to the extent that it is precisely the person who spent most time in the outside queue who will also be the first victim of the seniority rule. In such circumstances, the seniority rule *worsens* the already existing inequalities between the two labor cohorts.

Equally, however, there is the case in which the younger cohort is the luckier one, in which event it appears straightaway that the seniority rule is also capable of closing the gap between the two cohorts, hence serving perfectly egalitarian purposes ("buffering" effect). In a steady state regime where each labor cohort comes across identical labor market characteristics, we end up – *ceteris paribus* – with no inegalitarian impact of the seniority rule. In short, the latter rule is neutral only if it applies constantly to constant circumstances. However, as soon as the circumstances change, even applied constantly, the neutrality of the rule's impact will vanish, for the worst or for the best. Because it tends to preserve the situation of the eldest cohort against recent changes, the seniority rule has an *inertia* effect consisting in slowing down the effects of (positive or negative) recent changes.

With the notion of "inertia effect" in mind, we may proceed to a second illustration: the tension between LIFO and affirmative action.[26] Affirmative action schemes tend to give preference to groups especially vulnerable to discriminatory practices (e.g. Afro-Americans in the US). On the labor market, these programs change the relative position of the applicants for a job *in the outside queue*. Let us assume that the affirmative action scheme operates in a transition period.[27] Discriminatory practices tend to put their victims at the end of the queue. What preferential hiring does is to devise systems such as quotas allowing some people to be put ahead in the queue or in separate queues. However, when the time for a layoff comes, those *recently* hired as a result of a preferential hiring program will be the first to lose their job. They will have to start queuing again from scratch.

Hence, the *accelerating* move of affirmative action operating on the outside queue will be slowed down by the inertia effect of LIFO. It slows down the changes in labor market composition as it slows down the penetration of members of protected groups. However, this is again a contingent effect and one that could be cancelled by prolonging affirmative schemes within the inside queue – for example, by having

---

[26] See Vallée (1995: 267, n. 29); Romm (1995: 178-9); Player *et al.*(1995: 305-22); Dulude (1995: 39 ff.). For a skeptical look at the significance of this inertia effect, see Feinberg (1990).

[27] We may indeed imagine that despite attempts of affirmative action schemes to correct discriminatory trends (e.g. against women), the latter would be so socially embedded that affirmative action would have to be maintained in steady-state.

separate seniority lists (e.g. for white and black workers) and laying off a higher percentage of members of the non-protected group until a given compositional target is being reached.[28] Moreover, were we to find ourselves in a society introducing *illegitimate* forms of discrimination (e.g. Nazi-type measures), the seniority rule would mitigate the negative effects of such an evolution. Hence, the fact that LIFO tends to slow down the changes in the *composition* of the working community will lead at times to no impact at all (steady-state), to beneficial (Nazi case) or to detrimental effects (affirmative action case) from an egalitarian point of view.[29]

3.3 The erasing effect

Besides the inertia effect, a second type of effect deserves our attention. Some people may tend to be victims of involuntary mobility *more frequently* than others. In other words, they may have to leave the inside queue more often than others. Such victims of *involuntary external mobility* will have to start again from scratch not only in the outside queue, but *also* – were they to get re-hired – in the inside queue. What is at stake here is an *erasing effect*, namely the fact that you have to start again from zero once you leave the queue.[30] The erasing effect results from the fact that seniority is generally *non-transferable* (or non-portable) from one company to the next (and more generally from one seniority unit to another).[31]

---

[28] Romm (1995: 192–3); Elster (1992: 112) (multiple queues).

[29] Notice that inertia interacts with different kinds of inequalities in the "lucky *vs.* unlucky" cohorts case and in the affirmative action case. In the former, it tends to increase (or reduce) the advantage that one cohort has *over* the next (or previous) one. In the latter, it tends to perpetuate *across* successive labor cohorts the advantages that one group (e.g. white or male workers) has over another (e.g. black or female ones). Hence, in the former case, we are dealing with seniority's impact on *inter*-cohortal inequalities, whereas in the latter what are at stake are inequalities between identifiable groups within each cohort.

[30] Note that when a layoff turns out to be temporary, some (or all) employees may be recalled by the firm on a seniority basis. This does not affect our analysis since we can act as if the recalled (senior) workers (as opposed to the so-called "displaced" ones) had never been laid off (interruption time apart). See Fondeur and Sauviat (1999).

[31] The inertia and erasing effects may interact in interesting ways. One example is the use of *departmental* seniority units for *promotion* purposes. Take two departments, a white-dominated and a black-dominated one, the former having the most attractive jobs as a result of past racial segregation. Despite the abandonment of explicit segregation, seniority privileges may prevent desegregation from happening through a seniority-trap mechanism: "Black employees could not accept a promotion in the 'white' departments with higher paying jobs without losing all their accumulated seniority and starting again in entry-level positions, often with a reduction in pay" (Dulude, 1995: 42). The same holds for gender (46–7). Notice the difference with the inertia effect discussed above regarding LIFO and affirmative action. Here, inertia results from a strong disincentive to internal mobility whereas in the "affirmative action *vs.* LIFO" case, it is involuntary external mobility that generates inertia.

Of course, one may leave one's job because one has found another job with advantages that more than compensate for the loss in seniority rights. Such a case does not fall into the category of involuntary external mobility. In contrast, if an employer has to discharge half of his personnel because the demand for his products has collapsed, the worker clearly faces an instance of involuntary external mobility.[32] Women are often cited as paradigmatic victims of involuntary external mobility.[33] And there is indeed considerable evidence suggesting that women tend to see their situation aggravated by the seniority rule.[34] Examples are: where maternity leave would suspend the computation of their seniority;[35] when women do not get hired because of their (potential) pregnancy; when they interrupt their career because society is such that women are expected to assume the task of bringing up the children or taking care of their elderly parents; or when, anticipating the need for family-based external mobility, women tend to occupy (low-skilled and lower-paid) jobs where seniority plays a lesser role.[36]

Hence, concern for gender inequalities should certainly direct our attention to seniority privileges. It should be stressed however that other causes of involuntary external mobility (e.g. quit for economic reason) may affect men disproportionately, simply because they would affect sectors that are men-dominated.[37] Hence, if separate gender-based seniority lists, constructive seniority or the non-deduction of child-raising suspensions from seniority calculation are possible solutions in the case of women,[38]

---

[32] As pointed out by one of the editors, one could ask whether the actual proportion of voluntary and involuntary mobility affects the argument. My view is that even if external mobility were to involve only a small proportion of involuntarily mobile workers, this should suffice to generate concerns for the adverse impact of seniority privileges on them. I assume as well that the *involuntarily mobile* will tend to be worse off than the *involuntarily immobile*. This entails that even if we were unable to find out about the exact percentage of voluntarily and involuntarily (im)mobile, the worst off people are still more likely to find themselves in the group of externally mobile workers than among the externally immobile. It follows as well that the disadvantages generated by seniority privileges to the involuntarily mobile should weigh more in the balance than the compensation that seniority privileges can provide to the involuntarily immobile (when we compare their situation with the one of the voluntarily mobile workers).

[33] Blau and Kahn (1981: 563); Brink and Raaijmakers (1994: 15). Compare the position taken by the European Court of Justice in the 109/88 case, in Javillier (1991: 395). ECJ, Danfoss, §24 (applying a cohort-based and an involuntary-mobility-based anti-seniority argument to the case of women).

[34] See, e.g. Dulude (1995, ch. 2).

[35] Notice, however, that it is not the case in Canada – see Dulude (1995: 17, 131ff.)

[36] See Keith and McWilliams (1995). On women and seniority, see generally Dulude (1995).

[37] Keith and McWilliams (1995: 128, 131–4).

[38] E.g. French CNRS rules for applicants: upper age limit increased by one year per child; compare Savulescu (1998: 215) (increase in the age limit for postdoctoral scholarships in

such devices are not available to protect other less-well-defined categories of victims of involuntary mobility.

Hence, not only do we have an "inertia-effect-based" contingent case applying in certain circumstances against seniority privileges, we also have a strong steady-state *prima facie* case against seniority, focusing on the problem of *involuntary external mobility*. It may help here to connect this argument with a closely related argument against *age* discrimination. While in the case of age it is the *length* of the involuntary interruption that matters, in the case of seniority, it is the *frequency* of such interruptions that is crucial. Imagine that you have to change jobs very often due to no fault of your own. Your involuntary mobility is high and you will be disadvantaged by seniority-based rules. However, as long as on each occasion you can find another job directly, age-based mandatory retirement will *not* negatively affect your access to professional lifespan. The anti-seniority and the anti-age-discrimination arguments from involuntary mobility are thus distinct. In practice, however, many victims of involuntary mobility may well have to leave their job both *frequently* and for *long periods*. They will then be adversely affected by *both* seniority-based and age-based practices.

4. SENIORITY AND EFFICIENCY

4.1 Why should we care about the efficiency of the seniority rule?

So far, we have identified categories of involuntary victims of the seniority rule from the point of view of access to benefits from employment. We established a *prima facie* egalitarian case *against* a seniority-based allocation. For if the inertia-effects-based case against seniority privileges is a merely contingent one, the erasing-effect-based one is not. Victims of involuntary external mobility thus provide us with a group of least-well-off people whose situation is systematically worsened by the existence of seniority privileges.

Canceling the seniority rule is, however, not necessarily what maximin egalitarians should advocate. For, on the one hand, we should look at how substitution practices (if any) developing in the seniority rule's absence, would fare and, on the other, we should not merely care about access to benefits from employment alone. In other words, two further steps are needed. *First*, we need to identify the involuntary worst off *in terms of access to employment* under all the possible alternative rules. In order to enable us to identify such alternative rules, we need to uncover the *functions* played by the seniority rule – that is, *why* companies rely on it. The possibility and suitability of alternatives should be assessed on

England). Interestingly enough, separate lists have been detrimental to black and female employees – see Dulude (1995: 26ff.; see as well ch. 5).

the basis of their ability to fulfill the same functions as seniority as well as on the basis of these alternative rules' impact. The need for this step should be emphasized: analysts may often be tempted to simply look at problems raised by seniority rules without envisaging the possibility that substitution practices may fare even worse. It is worth remembering in this respect that in most cases, "the seniority system did not replace selection by measured ability . . . it replaced a system of subjective selection that had important elements of favoritism and guessing".[39] Subjective selection may provide expanded scope for racial and/or gender-based prejudice, for example. And, of course, there is no reason to expect that firms would replace seniority by a maximin egalitarian rule.

And as we shall see, even a good-specific maximin rule may be counterproductive from an all-things-considered maximin egalitarian point of view. For what matters to us is not merely maximin access *to benefits from employment*, but more generally, *all-things-considered* maximin (or maximin *general access to advantage*). Let us imagine that the replacement of the seniority rule by an alternative rule (R_x) would entail that the worst off in terms of access to benefits from employment under R_x would be worse off than those worst off in terms of access to employment under the seniority rule. It may well be, however, that at the same time, R_x would be such that the all-things-considered worst off under that rule would be much better off than the worst off in terms of access to advantage under the seniority rule. Ultimately, what we should care about is general access to advantage.[40]

How is it possible to draw a connection between the seniority rule as it is used within private companies as an internal organizational practice and its impact on society as a whole in terms of general access to advantage? Two aspects of the analytic setting need to be specified in approaching this issue. One is what alternative to the seniority rule it is envisaged firms would apply. In approaching this question, we need to get a sense of the *functions* that the seniority rule plays. To the extent that seniority allocation performs a function beyond its internal redistributive properties in the operation of the firm, we need to enquire whether some proposed alternative rule would perform similar functions and, if not, what the consequences for the all-things-considered worst off would be.

---

[39] Rees (1989) quoted in Dulude (1995: 50, see also 135). On the "Preventing Foremen's Arbitrariness" model: Gersuny (1982) (including historical evidence), Bessy (1994), Romm (1995), Golden (1997: 147–8) (connecting this model with why unions favor a seniority rule) and Engelstad (1998).

[40] Things might however be more tricky if it were to turn out that the impact on the all-things-considered worst off would be both very uncertain and at best marginal, whereas it would have a clear and significant impact on those (made) worst off in terms of access to benefits from employment in case the seniority rule were in place.

We also need to specify something about the objectives of government. Presumably, we are envisaging a situation in which the government will ban reliance on seniority. But if the government does this on the basis of maximin egalitarian considerations, it seems reasonable to suppose that the government would be disposed to insist on some appropriate alternative rule for firms that would serve the all-things-considered worst off better. On the other hand, a government so disposed might also be presumed to desire to use its other instruments – and particularly tax-transfer instruments – to aid the all-things-considered worst off. Conceivably, it may be best to leave seniority rules in place and focus on those other instruments. At least that possibility seems plausible if seniority rules play an important part in the efficiency of firms, because increased efficiency seems likely to lead to increased tax revenues *ceteris paribus* and hence greater capacity to aid the all-things-considered worst off via direct measures.

For both reasons, it will be helpful to enquire whether and to what extent seniority practices are *efficient*, and if so why. Efficiency is not taken here as Pareto-efficiency. Reliance on a given practice by a firm is regarded as more efficient than reliance on alternative practices if and only if it helps the firm to reduce its costs. Knowing about the efficiency of seniority privileges will help us understand something about the functions seniority performs and hence the alternative rules likely to emerge if seniority were simply abolished; it will also assist in judging whether abolishing seniority rules might inhibit the scope of governments to assist the all-things-considered worst off in other more effective ways.

Hence, *all-things-considered* analysis involves explanatory, predictive and normative steps.[41] What I shall do here is to present and discuss – in a necessarily sketchy fashion – three theories that attempt to explain the rationale and functions played by the seniority rule. I shall then be able, based on one example, to draw *some* normative conclusions about seniority-based practices. Two of these explanations bear specifically on the wage–seniority relation. The third is directed at dismissal practices and LIFO in particular.

4.2 The (firm-specific) human capital story

A first explanation for the existence of a W–S relationship is based on a human capital story.[42] The rising nature of wages would follow the growth

---

[41] Notice that, without a look at the "function" and "efficiency" dimensions, the analysis would even be incomplete from a strictly good-specific point of view, as it would not take into consideration the possible impact of seniority privileges on the aggregate amount and size of benefits from employment available.

[42] See, e.g. Hutchens (1989).

path of productivity due to the accumulation of *firm-specific* capital.[43] Is the prediction of productivity growth with seniority empirically confirmed? Do we have evidence that average productivity does *not* rise with seniority as much as wages do? Doubts as to the validity of the human capital story arise when we look at a few facts. First, earning profiles of the self-employed are flatter than those of employees.[44] Would such a difference between self-employed and employees obtain if the human capital explanation were the right explanation? Moreover, the fact that in the US older workers would wish to work more years than they actually do *may* indicate that they are being put out of the labor market because their productivity would be lower than their wage level at that age.[45] The existence of actuarially unfair pensions and mandatory retirement has been similarly interpreted.[46] Why would a firm want to get rid of employees who would have a spot wage at least equal to their spot productivity?

Two points are worth stressing. First, there is a methodological dilemma to be faced once we want to obtain direct evidence on the seniority–productivity relationship.[47] For, on the one hand, if we want to compare performance ratings among people who are at different job levels in a company, the nature of the tasks at stake is so different that their comparability becomes questionable. Moreover, even if comparability were to obtain, it would not be possible to separate the productivity differences resulting from (non)-promotion effects from those that result from increased seniority. On the other hand, once we stick to performance ratings within a given occupation or job level, the comparability of tasks is increased. However, in a system where the best performers tend to get promoted, those remaining within the same level are likely to be relatively poor performers (possibly both a cause and effect of their non-promotion).[48] After all, what we only manage to calculate in this case is the impact on productivity of "within-level seniority", which is not necessarily representative of the impact of "companywide seniority" in general.

Second, we have assumed so far that *wages* rise with seniority. Most of the time they *do*. Aren't there however other related indexes exhibiting a *more significant* relationship with wage level? Intracompany seniority necessarily increases *general-labor-market experience* (i.e. to-date-aggregate seniority) as well as in some cases *industry-specific experience* (i.e. the

---

[43] See Medoff and Abraham (1980: 703); Hutchens (1989: 52). The specific human capital story can also take a "jobs matching" form – see Farber (1998: 28).

[44] Lazear and Moore (1984).

[45] Kahn and Lang (1986); Kotlikoff (1988: 102). An alternative explanation is that older workers are time constrained as a result of ageist prejudices among managers.

[46] Lazear (1979, 1983).

[47] See, e.g. Medoff and Abraham (1980).

[48] Hutchens (1989: 54); Hellerstein and Neumark (1995: 90); Medoff and Abraham (1980: 731–3).

aggregate-seniority in a given sector), the latter variables being mono-tonically correlated with tenure. Each of them can be an index for the increase in, respectively, firm-specific, general labor market, and industry-specific human capital. US studies indicate that among general-labor-market, firm-specific and industry-specific capital, it is in fact *the latter* that has the most significant relationship with wage.[49]

Such empirical findings indicate, *first*, that theories relying to a large extent on the notion of firm-specific capital to explain wage profile should be questioned, and, *second*, that the role of seniority in allocating *wage* benefits is more limited than what one may expect. Such conclusions raise doubts as to whether the W–S relationship constitutes a serious disincentive for firms to keep their most senior workers,[50] hence being a major determinant of *age-based* discriminatory practices.[51] It also suggests that we should look for other possible explanations of seniority practices.

4.3 Increasing the costs of shirking and quitting

An alternative model is Lazear's "deferred compensation" one.[52] It assumes the existence of an information problem: when the worker's performance is difficult to monitor, employers may design a wage profile such that the worker has an incentive not to shirk. To do so, part of the compensation is deferred toward the end of the employment relationship, spot wage being lower than spot productivity during the early years and then higher during later years (the delayed wage premium being then added to the spot wage). The wage profile is thus steeper than the productivity profile. Workers will only reap the full reward of their effort if they remain in the firm, which increases the exit costs of an employee being dismissed for shirking. If they leave, they also lose the postponed part of their wage. Moreover, the model explains why both parties might be interested in agreeing in advance on a (surprisingly age-based) mandatory retirement date. While deferring part of the compensation protects the employer against shirking, the employee also needs protection against employer cheating as soon as the difference between spot productivity and spot wage becomes such that the employer has an strong incentive to get rid of the employee. Mandatory retirement helps in reaching an

---

[49] See Parent (1995); Farber (1998: 37–8); compare Altonji and Shakotko (1987: 438) (10 years of tenure leading to a wage increase of 6.6%, much of this occurring in the first year on the job); Abraham and Farber (1987: 295); Altonji and Williams (1997) (return to tenure of 1.1% per year); Altonji and Williams (1998: 268).

[50] It is distinct from the problem raised at re-hiring since in principle seniority is *not portable*, hence will not handicap the formerly senior worker towards a formerly more junior worker when it comes to hiring her in a new company.

[51] Kovarsky and Kovarsky (1974: 870); Drury (1993: 17; 1993: 56).

[52] Lazear (1979). See also Malcomson (1983: 6); Schwab (1993: 17); Hellerstein and Neumark (1995: 90).

equilibrium between the risks of firm cheating and employee shirking. It is important to add that while deferred compensation provides an incentive against shirking, it also provides an incentive against *voluntary quit* for the same reason (increase of the quitting costs for the worker). And since it is the most productive workers who are more likely to be offered job opportunities outside the firm, seniority wages may well reduce the probability that the firm will lose its best employees.[53] Finally, it is alleged that the introduction of LIFO is aimed at reducing excessive turnover as well as providing extra security to those who stay in the firm. This is of special importance in periods of supply-side shortage and might have been one of the determinants of the development of seniority provisions at the beginning of the last century in the US.[54]

The "deferred compensation" model can be tested by looking at situations where the information problem requiring deferred compensation does *not* occur. Let us take two examples.[55] Hutchens uses a "repetition-of-tasks" variable as a proxy of monitorability.[56] A job involving, for example, peeling vegetables, can use piece rates, and hence does not need to rely on deferred compensation. Hutchens concludes that "the data are consistent with the claim that, because of monitoring difficulties, firms establish compensation schemes with pensions, mandatory retirement, long job tenures, and wages that rise faster than marginal products".[57] Lazear and Moore compared the earnings profile of the self-employed (where no such information problem occurs) with the one of salary workers. The differences are significant. Under a series of assumptions, they consider that "only 11 percent of the increase in present value as the result of steeper age-earnings profiles is attributable to on-the-job training. The remaining 89 percent seems to reflect incentive effects that are not present for the self-employed".[58] These "repetitive tasks" and

---

[53] This is directly relevant to a "search theory" explanation of seniority wages. See Burdett and Coles (2001).

[54] Golden (1997: 155–6) (comparative evidence from the US, Italy, Britain and Japan).

[55] See as well Franck and Hutchens (1993) (study, on pilots, involving threshold effects, i.e. the fact that the required performance is supposed to be reached by any admitted pilot in any case, whatever her/his seniority).

[56] Hutchens (1987: 158–9).

[57] Hutchens (1987: 167).

[58] Lazear and Moore (1984: 292). There are alternative accounts, however, such as the absence of unionization among self-employed or a higher level of competition (depressing possible rents) among the self-employed. Still, Lazear and Moore's conclusion is reinforced by two factors that would normally lead to *steeper* earnings profiles for the self-employed, which suggests that the "deferred compensation" factor plays a significant role. *First*, there is the return to physical capital in the case of self-employed. *Second*, as pointed out by one anonymous referee, self-employment entails risk-taking. We can thus expect stronger earnings *fluctuations* among the self-employed than among salary workers. This does not lead to *steeper* profiles however. For whereas upward fluctuations will clearly make it

"self-employed workers" studies support the "deferred compensation" hypothesis. One problem remains: although the hypothesis is *compatible* with findings indicating that wage increases more than seniority, it does not fully *explain* why the general wage profile is a generally *rising* one (although there might be independent arguments for smooth profiles). We could for example imagine a wage profile such that the employee would be paid below productivity during the first year of his career, then paid at productivity level during the whole career, except during the last year where the bond posted at the beginning of the contractual relationship would be made available.[59]

4.4 Securing knowledge transfer

Another angle from which to look at the seniority issue involves putting it in an "insider-outsider" perspective, i.e. to look at seniority from the viewpoint of job holders in a firm trying to secure benefits to the detriment of outsiders willing to enter the firm. What is at stake here is competition between workers. One such theory applies to LIFO.[60] According to this theory, the introduction of seniority-based protections (LIFO) aims at gaining senior workers' cooperation in transmitting knowledge to new entrants ("knowledge transmission" model).[61] Recall that seniority can be calculated across different units (plant-wide, in-service). One mode of unitization consists in implementing LIFO per age-group, guaranteeing that at least some members of each age-group will remain in the company. The underlying rationale is to maintain a diversity of ideas (age and cohort differences) and of firm-specific experience levels (seniority difference) in the company. Interestingly enough, such a reference to knowledge levels is being used not only to justify an implementation of LIFO per age-group. It is also supposed to explain the LIFO rule in general, even when the

---

attractive to the self-employed to remain in their job, downward ones don't. Those self-employed who are adversely affected by downward income fluctuations may then decide at some point to quit and become salary workers instead. The sample will thus tend to be *truncated* and self-employed workers can thus be expected to have an average earnings profile *steeper* than the one of salary workers. This prediction is invalidated by the data of Lazear and Moore, which suggests that the risk-taking factor is less significant than, e.g. the deferred compensation one. I am indebted to E. Lazear for correspondence on this issue.

[59] A qualification is that the "theory only explains why wages grow with tenure in the firm; it provides no insight into why wages grow with labor market experience, holding tenure constant. In this sense, it can be only a partial explanation for the regression results presented earlier" (Hutchens 1989: 57).

[60] Other insider-outsider models applying the W–S relationship have been proposed: Blakemore and Hoffman (1989: 359); Spinnewyn and Svejnar (1999) ("prevention of unionization" model).

[61] Reagan (1992); Bessy (1994: 47).

age-group restriction is not being used. In the former case, the idea is to guarantee that people of various levels of experience *be available*. In the latter, the rationale consists in making sure that more senior workers will be *willing* to transfer such knowledge to more junior ones. In order for a transfer of knowledge within the company to be effective, it is not enough to make sure that people of different experience levels be represented. They also need to be ready to work together. As Reagan puts it, LIFO

> facilitates the transfer of firm-specific human capital from experienced workers to the younger worker that they train. On-the-job training . . . often cannot be divorced from the production process and therefore requires some degree of co-operation from experienced workers. However, experienced workers have no incentive to cooperate in the training process if they must subsequently compete for scarce jobs with the workers they train . . . firms offer seniority provisions to provide experienced workers with job security in order to enlist their co-operation in the training process.[62]

Such "transmission of knowledge" model is plausible on its face.[63] One interesting feature of this model is that it provides an explanation of the existence of LIFO that does not connect it with the existence of a W–S relationship. The "last in, first out" rule is indeed often said to partly protect senior workers from the side-effects of seniority-based wages. For seniority-based wages have the effect of making a senior worker more expensive for a given spot productivity than a junior one, hence providing an incentive for employers to fire older workers rather than younger.[64] Under the "transmission of knowledge" model, it may well be that a firm relying on LIFO will get rid of a junior worker having a better spot productivity/wage ratio than a more senior one, at least if we construe the latter's individual productivity in a narrow sense. Another way of putting the point is that in the *senior* worker's spot productivity/wage ratio, we generally omit the share of the junior's current productivity resulting from earlier senior-to-junior transfers of information enhanced by the seniority rule itself.

---

[62] The interesting additional element is that there are alternative ways to protect workers' property rights to jobs, including "restrictions on the time required for training, the ratio of apprentices to journeymen, and the number of hours that apprentices can work. Layoff by inverse seniority is a substitute for explicit restrictions on the transfer of idiosyncratic skills and may be more effective than explicit restrictions when training cannot be divorced from the production process" (Reagan 1992: 317).

[63] Also Bulkley and Myles (1996: 712) (analogous argument explaining academic *tenure*).

[64] See however Malcomson (1983: 20).

4.5 What do we learn from such explanatory theories?

We have examined a series of possible *explanations* of the use of seniority in the labor market.[65] None of them, taken alone, provides a single key to the understanding of seniority-based systems. In some jobs, monitoring problems are significant. In others it is firm-specific capital that may provide the main explanation for the reliance on seniority. In some countries, the role of unions may be crucial.[66] Among the theories examined above, the most plausible explanation for *LIFO* seems to me to be the "knowledge transfer" type of explanation, though as we noted "deferred-compensation" considerations might also be relevant. And the most plausible explanation for the *W–S relationship* appears to me to be the "deferred-compensation" one, possibly combined with a restricted version of the "firm-specific human capital" account to explain part of the wage profile.[67] However, it seems doubtful whether there is a positive correlation between a strictly construed individual spot productivity and seniority, as is assumed by the specific human capital story.[68]

In what sense does this help for the purpose of our normative maximin egalitarian assessment? To get a little more concrete, let us focus on LIFO and compare it with a layoff rule relying strictly on individualized productivity assessment (based on a set of observable features). Our good-specific analysis provided us with a paradigmatic "involuntary worse off" category, i.e. involuntary frequent movers. However, wouldn't egalitarians have similar misgivings about individualized productivity assessment? Note first that a productivity-based layoff rule fares no better from the point of view of access to benefits from employment: *involuntary poor performers* will simply replace *involuntary frequent movers* as the involuntarily worst off class. Second, there is an efficiency case for seniority as such, based on specific "deferred compensation" and "transfer of knowledge" considerations. Could a "productivity-based"

---

[65] Other models include (1) Franck and Hutchens' forced savings model (1993), to be connected with Slote's discussion on the alleged superiority of pleasures of anticipation over pleasures of memory (1983: 24); (2) an "insurance-"/"risk-aversion" model, the missing information being about future productivity (Franck and Hutchens 1993: 258; Cahuc and Zylberberg 1996: 263 (criticizing the model); Abraham and Farber (1987: 296) (criticizing the model); Citera (1982: 770) (insurance motive behind LIFO)); (3) a "respect for the old" model; (4) a "fairness costs" model (Quinn Mills 1985); (5) a "prevention of foremen's arbitrariness" model (see above, n. 39) and (6) three models explaining why unions favor seniority: the "median voter", the "rent maximization", and the "activists protection" one, the latter being the most plausible (Golden 1997: 147–8).

[66] For Canadian data see Dulude (1995: 5).

[67] Cahuc and Zylberberg (1996: 252–3).

[68] As Romm (1995: 157) adds, "there may be positive incentives (for getting more attached to one's job, and for working harder as a junior worker) conflicting with negative ones (given the lower pressure under which senior workers are being held)".

Worst off under this rule:	R₁: LIFO	R₂: Productivity-based layoff	Rₓ
with respect to access to benefits from employment	involuntary frequent movers	involuntary poor performers	. . .
with respect to general access to advantage	depends on deferred compensation + transfer of knowledge	depends on observability/ verifiability	. . .

TABLE 2. Maximin decision matrix, applied to LIFO.

rule be expected to fare better from an efficiency point of view than the seniority one? The answer will depend on the relative weight of, on the one hand, the observability/verifiability constraint in a given type of job and, on the other hand, the gains in cooperation made possible by seniority-based rules (transfer of knowledge model). In cases where observability/verifiability is limited, seniority may be expected to be a more efficient rule – and conceivably the only rule available. In such a case, maximin advocates should not call for the rule's abolition. And even when observability/verifiability issues hardly arise, it may still be worth considering how much cooperation between juniors and seniors may be lost by putting them in competition with each other. We can thus see that maximin egalitarians might have good reasons *not* to call for the cancellation of seniority privileges.

5. COST REDUCTION AND ITS INCIDENCE ON THE ALL-THINGS-CONSIDERED WORST OFF

The reader may be puzzled at this point. For is it not so that the situation of the worst off workers or job seekers as a result of seniority privileges does not matter as long as the condition of the all-things-considered worst off people is as good as it could possibly be (as compared to how it would be under any alternative rule)? Is good-specific analysis not irrelevant then? And should we not expect maximin egalitarians simply to look at whether a practice effectively minimizes costs to conclude, via a tax-and-transfer assumption, that such a practice is also the best possible one from the point of view of the all-things-considered least-well-off members of society?

Egalitarians should resist the temptation of a single answer to such questions. Seniority privileges are likely – as our analysis suggests – to have an impact on the marginal costs of firms. Hence, outlawing them may be expected to increase the firm's marginal costs. The beneficial impact of

seniority privileges may have repercussions on five categories of potential beneficiaries: consumers (through changes in the prices of consumer goods), factors of production (through higher rewards), shareholders (through increased profits), tax beneficiaries (through higher tax revenues) and taxpayers (through lesser fiscal pressure if taxes revenues are held constant). This illustrates the difficulty of an all-things-considered approach. For we need both to identify which of these categories is the most likely to include the worst off members of society; and we also have to anticipate which ones among these categories of beneficiaries are actually more likely to derive benefits from the firm's marginal costs reduction resulting from implementing seniority privileges. A relevant distinction in this respect is whether this firm operates in a society ruled by a reasonably maximin egalitarian government or not.

Consider first the case of a reasonably maximin egalitarian government. This is a society where the efficiency gains and the consecutive increase in profits resulting from the adoption of a seniority rule will effectively benefit the worst off, typically through tax-and-transfers – which requires an appropriate choice of tax base, of tax level, as well as properly targeted tax expenditures. In such a society, maximin egalitarians might well oppose the prohibition of seniority privileges *by the state*. However, would there not remain something unfair on the part of the *employees* in *accepting* such privileges?

Take an analogy. In order to improve the condition of the worst off, a state may want to tax upper wage layers at a low marginal rate, in order not to discourage the most productive people from working hard. Despite increasing income inequalities, this could improve the situation of the worst off. One may perfectly agree with such a state policy and still disapprove of this very productive worker being reluctant to work because of higher marginal income taxation. Her behavior amounts to telling people in misery: "Of course, were I to work harder, this would help you a lot, but I just don't find it worth it if I'm being taxed so much". For someone like Cohen, such an attitude may be unacceptable from an egalitarian point of view.[69] What about seniority? Would such a Cohenian argument hold against a senior worker who, in the absence of seniority protection, would tell his junior colleague: "Of course, were I to be more cooperative, I could help you to increase your productivity – thereby making the company more efficient and potentially more profitable – but I just don't feel like it!"? There are two key differences. *First*, the senior worker would have more to lose, for he would be in direct competition for his job with his junior colleague in case of layoff (all-or-nothing issue).[70]

---

[69] Cohen (1992), Cohen (2000: 8).

[70] Compare this with the view that it is worse to demand incentive payments when the good has positional aspects (Brighouse and Swift 2002: 20).

Second, it is not clear that the junior worker would necessarily be worse off than the senior one *over a complete-life*. Perhaps these considerations make the reluctance of the senior worker more acceptable than in the case of the tax-averse highly productive worker. It remains in any case that, *from the perspective of the state*, given the workers' attitude – and provided that state policies aimed at modifying the ethos of citizens are relatively ineffective – leaving companies free to grant seniority privileges while taxing the consequent gains in profits so as to benefit the worst off in priority may be the best available maximin policy. In such a well-ordered society, at least, it seems clear that the abolition of practices that are objectionable when considered in isolation may be shown by an all-things-considered analysis to be better left in place.

Let us then imagine that we live in a society ruled by a non-egalitarian government. In such a case, it is not necessarily true anymore that the more efficient and profitable the companies, the better our world would be from a maximin point of view. How should we proceed here? If we can show that efficiency gains will only affect the pockets of the richest and luckiest capitalists, with no benefits to the worst off, maximin egalitarians should then, as a second best, follow the results of good-specific analysis to campaign *against* seniority privileges. This is so at least if seniority does not prove to be the best practice from the point of view of the worst off in terms of access to benefit from employment. But showing that there would be no benefits to the all-things-considered worst off people may be a very hard task. For even in societies ruled by non-egalitarian governments, there are many ways in which efficiency gains may still end up benefiting the all-things-considered worst off. For example, a pharmaceutical company producing vaccines for the third world could decide to pass the efficiency gains flowing from seniority privileges on to lowering its prices (or increasing the vaccine's quality), which would clearly benefit the worst off consumers.

Thus, whereas we should mainly be concerned with all-things-considered analysis if the firm operates in a society ruled by a reasonably maximin egalitarian government (and as long as basic liberties are not violated in the workplace or elsewhere), it does not follow that, once we find ourselves in a society ruled along non-egalitarian lines, we would be forced to stick to good-specific analysis as a default position. Good-specific analysis focuses on those who are the worst off *workers or job-seekers* under a given practice (in terms of access to benefits from employment). If our society is ruled by a maximin egalitarian government, we will be able to re-distribute the (likely) gains in profits, identified through a all-things-considered analysis, to the benefit of the worst off *citizens* (in terms of general access to advantage). But even in a society ruled by a government relatively indifferent to maximin egalitarian concerns, efficiency gains may still benefit the worst off *consumers*, e.g. if the company becomes

able to lower the price or increase the quality of first necessity products. Tax-and-transfer is not the only way in which cost-minimization by the firm may benefit the least well off members of society.

The general lesson here is that the relevance of good-specific as opposed to all-things-considered assessments of a company's internal practices will vary according to context. Such features as the relevant state's fiscal policy, or the type of goods being produced, also have bearing. The analysis also serves to remind us that a society ruled by a maximin egalitarian government is not the only one in which the efficiency gains taking place within a company might conceivably benefit the worst off members of society.

6. CONCLUSION

The purpose of this paper has been to assess seniority-based allocation of various benefits from employment from an all-things-considered maximin egalitarian point of view. We started with assessing the use of seniority from a good-specific egalitarian point of view, focusing specifically on LIFO as a dismissal rule and the W–S relationship. These practices raise identical problems. Merely pointing at the fact that such practices discriminate between junior and senior people is not enough, for such discrimination will not necessarily lead to a discrimination *over complete lives*. A more refined analysis is needed. We identified categories of involuntary victims (over complete-lives) of the seniority rule, some being contingently affected by the rule's *inertia effect*, others by its *erasing effect* that systematically disadvantages the victims of involuntary external mobility. We thus had a clear *prima facie* egalitarian case *against* the seniority-based allocation.

Such a *good-specific assessment* is not enough, however. For, on the one hand, what matters is not just access to benefits from employment but general access to advantage. On the other hand, alternative rules have to be comparatively assessed as well, because they might fare worse than seniority from the point of view of access to benefits from employment and, more importantly, from the one of general access to advantage. We thus proceeded to an *all-things-considered analysis*, which involved the (selective) examination of three explanatory theories relating to seniority: the "(firm-specific) human capital" story, the "deferred compensation" model and the "knowledge transfer" hypothesis.

Taking "LIFO *vs*. productivity-based assessment" as an example, we have shown that a good-specific analysis of this alternative rule also revealed the existence of involuntary worse off workers or job-seekers (involuntary poor performers). Moreover, there are cases where direct performance assessment is unavailable due to observability/verifiability constraints. In such cases, seniority privileges may be preferred. When, on

the contrary, observability/verifiability constraints are limited, there may be an "efficiency" case – and, provided the relevant assumptions are met, a maximin one – for a direct productivity-based assessment, provided that the loss in senior–junior cooperation due to the cancellation of the seniority rule does not outweigh the gains from more precise targeting of the best performers. The same test should be applied to the W–S relationship.[71]

We added some considerations about the way various circumstances affect the relevance of the good-specific and of the all-things-considered maximin impact assessments. Seniority privileges may be unfair from the point of view of maximin access to benefits from employment. But, at least in a society ruled by a maximin egalitarian government, it may be even more unfair to cancel them, because of the loss of efficiency that could follow and the possible implications for the all-things-considered worst off. In a society where maximin egalitarianism is not part of the governmental agenda, things are less clear-cut. For maximin egalitarians will then be justified to call for canceling seniority privileges *only if* they can show that efficiency gains will not benefit the all-things-considered worst off *and* that seniority privileges do not constitute the best possible rule from the (good-specific) point of view of access to benefits from employment.[72]

The present paper *does not* provide us with firm evidence that seniority privileges minimize costs better than any other available practice fulfilling the same functions. This would require extensive economic research considering the whole set of functions that seniority can fulfill, the whole range of alternative practices that could substitute it, their respective merits both from a good-specific and an all-things-considered point of view, and all the possible circumstances (government with or without a maximin egalitarian agenda, type of product, etc.). We have however established that there are *good reasons* to believe that seniority privileges bring some significant efficiency benefits. And we also specified the extent to which this may be relevant for a full maximin egalitarian assessment of seniority privileges, depending on whether or not these efficiency gains will benefit the all-things-considered worst off members of society. The "good-specific/all-things-considered" distinction is of course entirely general and could be used to assess other practices within companies (such as greater or lesser wage dispersion within the firm).

REFERENCES

Aaron, B. 1962. Reflections on the legal nature and enforceability of seniority rights. *Harvard Law Review* 75:1532–64

[71] For example, what should we think about a proposal based on a concern for justice between age-groups in favor of wage profiles that would be less steep, i.e. less affected by seniority? See Anon. (1998: 2).
[72] For a comparable reasoning in the case of patriotism, see Van Parijs (1993).

Abraham, K. and H. Farber. 1987. Job duration, seniority and earnings. *American Economic Review* 77:278–97

Abraham, K. and J. Medoff. 1984. Length of service and layoffs in union and nonunion work groups. *Industrial and Labor Relations Review* 38:87–97

Abraham, K. and J. Medoff. 1985. Length of service and promotions in union and nonunion work groups. *Industrial and Labor Relations Review* 38:408–20

Altonji, J. and R. Shakotko. 1987. Do wages rise with job seniority? *Review of Economic Studies* 54:437–59

Altonji, J. and N. Williams. 1997. Do wages rise with job seniority? A reassessment. Working Paper No. 6010. National Bureau of Economic Affairs (US)

Altonji, J. and N. Williams. 1998. The effects of labor market experience, job seniority, and job mobility on wage growth. *Research in Labor Economics* 17:233–76

Anon. 1998. Hoge loonkosten bevorderen uitstroom ouderen. *Voor Alle Leeftijden* 5:2

Bessy, C. 1994. La sélection des salariés licenciés: économie d'une règlementation. *Travail et Emploi* 58:38–54

Blakemore, A. and D. Hoffman. 1989. Seniority rules and productivity: an empirical test. *Economica* 56:359–71

Blau, F. and L. Kahn. 1981. Race and sex differences in quits by young workers. *Industrial and Labor Relations Review* 34:563–77

Brighouse, H. and A. Swift. 2002. Equality, priority and positional goods (unpublished typescript, version: Oct. 18, 2002), 27 pp.

Brink, M. and G. Raaijmakers. 1994. Last in, first out, *Arbeidsrecht*: 13–16

Bulkley, G. and G. Myles. 1996. Why do labor contracts offer guaranteed annual wage increments? *Southern Economic Journal* 62:710–22

Burdett, K. and M. G. Coles. 2001. Equilibrium wage/tenure contracts, University of Essex. Working paper on file with the author, June 2001, 38 pp.

Cahuc, P. and A. Zylberberg. 1996. *Economie du travail. La formation des salaires et les déterminants du chômage.* De Boeck

Citera, F. 1982. Vested seniority rights: a conceptual approach. *University of Miami Law Review* 36:751–78

Cohen, G. A. 1989. On the currency of egalitarian justice. *Ethics* 99:906–44

Cohen, G. A. 1992. Incentives, inequality and community. In *The Tanner Lectures on Human Values.* University of Utah Press. 261–329

Cohen, G. A. 2000. *If You're an Egalitarian, How Come You're So Rich?* Harvard University Press

Daniels, N. 1988. *Am I My Parents' Keeper? An Essay on Justice Between the Young and the Old*. Oxford University Press

Daniels, N. 1996. *Justice and Justification. Reflective Equilibrium in Theory and Practice*. Cambridge University Press

Drury, E. 1993. *Age Discrimination Against Older Workers in the European Community*. Eurolink Age.

Dulude, L. 1995. *Seniority and Employment Equity for Women*. Industrial Relations Centre Press (Queen's University, Kingston)

Elster, J. 1992. *Local Justice. How Institutions Allocate Scarce Goods and Necessary Burdens*. Cambridge University Press

Engelstad, F. 1997. Needs and social justice: the criterion of needs when exempting employees from layoff. *Social Justice Research* 10:203–23

Engelstad, F. 1998. The significance of seniority in layoffs: a comparative analysis. *Social Justice Research* 11:103–19

Farber, H. 1998. Mobility and stability: the dynamics of job change in labor markets. Working Paper No. 400, Princeton University, Industrial Relations Section

Feinberg, W. 1990. The inertia of social structure: affirmative action or seniority in layoffs? *Journal of Mathematical Sociology* 15:117–35

Fondeur, Y. and C. Sauviat. 1999. Une transformation durable du système d'emploi? *Chronique internationale de l'IRES* 56:1–10

Frank, R. and R. Hutchens. 1993. Wages, seniority, and the demand for rising consumption profiles. *Journal of Economic Behavior and Organization* 21:251–76

Gersuny, C. 1982. Origins of seniority provisions in collective bargaining. *Labor Law Journal* 33:518–24

Golden, M. 1997. *Heroic Defeats. The Politics of Job Loss*. Cambridge University Press

Hansman-Van As, A. 1997. Het anciënniteitsbeginsel. Een juridisch onderzoek naar de inhoud en de toepassing. Unpublished Dissertation, Utrecht University, Law Faculty

Hellerstein, J. and D. Neumark. 1995. Are earnings profiles steeper than productivity profiles? Evidence from Israeli firm-level data. *Journal of Human Resources* 30:89–112

Hutchens, R. 1986. Delayed payment contracts and a firm's propensity to hire older workers. *Journal of Labor Economics* 4:439–57

Hutchens, R. 1987. A test of Lazear's theory of delayed payment contracts. *Journal of Labor Economics* 5 (2):153–70

Hutchens, R. 1989. Seniority, wages and productivity: a turbulent decade. *Journal of Economic Perspectives* 3:49–64

Javillier, J.-C. 1991. Fidélité et rémunération. *Droit Social*: 386–400

Keith, K. and A. McWilliams. 1995. The wage effects of cumulative jobs mobility. *Industrial and Labor Relations Review* 49:121–37

Kotlikoff, L. 1988. The relationship of productivity to age. In *Issues in Contemporary Retirement*: 100–25. R. Ricardo-Campbell and E. Lazear, eds. Hoover Institution Press

Kovarsky, I. and J. Kovarsky. 1974. Economic, medical and legal aspects of the age discrimination laws in employment. 27 *Vanderbilt Law Review* 5:839–925

Lazear, E. 1979. Why is there mandatory retirement? *Journal of Political Economy* 87: 1261–64

Lazear, E. 1983. Pensions as severance pay. In *Financial Aspects of the United States Pension System*, ed. Z. Bodie and J. Shoven, University of Chicago Press for the NBER

Lazear, E. 1988. Discussion. In *Issues in Contemporary Retirement*:126–29. R. Ricardo-Campbell and E. Lazear, eds. Hoover Institution Press

Lazear, E. and R. Moore. 1984. Incentives, productivity, and labor contracts. *Quarterly Journal of Economics.* 275–96

Malcomson, J. 1983. Work incentives, hierarchy, and internal labor markets. Working Paper. University of York

Medoff, J. and K. Abraham. 1980. Experience, performance and earnings. *Quarterly Journal of Economics* 95:703–36

Medoff, J. and K. Abraham. 1981. Are those paid more really more productive? The case of experience. *Journal of Human Resources* 16:186–216

Meitzen, M. 1986. Differences in male and female job quitting behavior. *Journal of Labor Economics* 4:151–67

Mincer, J. 1980. Human capital and earnings. In *Wealth, Income and Inequality*: 103–28. A. Atkinson, ed. Oxford University Press

Mulgan, T. 1999. The place of the dead in liberal political philosophy. *Journal of Political Philosophy* 7:52–70

Parent, D. 1995. Industry-specific capital and the wage profile: evidence from the NLSY and the PSID. Working Paper No. 350. Princeton University, Industrial Relations Section

Player, M., E. Shoben and R. Lieberwitz. 1995. *Employment Discrimination Law. Cases and Materials*. West Publishing

Quinn Mills, D. 1985. Seniority versus ability in promotion decisions. *Industrial and Labor Relations Review* 38:421–25

Rawls, J. 1999. *A Theory of Justice*. Revised edition. Oxford University Press

Rawls, J. 2001. *Justice as Fairness: A Restatement*. Harvard University Press

Raymond, G. 1967. L'ancienneté des services. *Droit social* 3:164–74

Reagan, P. 1992. On-the-job training, layoff by inverse seniority, and the incidence of unemployment. *Journal of Economics and Business* 44:317–24

Romm, S. 1995. Layoffs: principles and practices. In *Local Justice in America*: 153–226. J. Elster, ed. Russell Sage Foundation

Savulescu, J. 1998. Consequentialism, reasons, value and justice. *Bioethics* 12:212–35

Schwab, S. 1993. Life-cycle justice. accommodating just cause and employment at will. *Michigan Law Review* 92 (1):8–62

Slote, M. 1983. *Goods and Virtues*, Clarendon Press

Spinnewyn, F. and J. Svejnar, 1999. The efficiency of wage-employment bargains in a consistent dynamic setting (unpublished typescript)

Vallée, G. 1992. La notion d'ancienneté en droit du travail français. *Droit Social* 11:871–81

Vallée, G. 1995. La nature juridique de l'ancienneté en droit du travail. Une comparaison des droits québécois et français. *Industrial Relations* 50:259–96

Van Parijs, P. 1993. Rawlsians, Christians and patriots. Maximin justice and individual ethics. *European Journal of Philosophy* 1:309–42

Van Parijs, P. 1995. *Real Freedom for All. What (if anything) can justify capitalism?* Oxford University Press

Van Parijs, P. 2003. Difference principles. In *The Cambridge Companion to Rawls*: 200–40. S. Freeman, ed. Cambridge University Press

Zack, A. and R. Bloch. 1995. *Labor Agreements in Negotiation and Arbitration*. Washington, DC: BNA