



HAL
open science

Access to Higher Education: What counts as fairness in both an individual and systemic perspective?

Marie Duru-Bellat, Thibault Gajdos

► To cite this version:

Marie Duru-Bellat, Thibault Gajdos. Access to Higher Education: What counts as fairness in both an individual and systemic perspective?. 2012. hal-01069535

HAL Id: hal-01069535

<https://sciencespo.hal.science/hal-01069535v1>

Preprint submitted on 29 Sep 2014

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution - ShareAlike 4.0 International License



SciencesPo.

LIEPP

Laboratoire interdisciplinaire d'évaluation des politiques publiques

Access to Higher Education: What counts as fairness in both an individual and systemic perspective?

Methodological Discussion Paper

October 2012, n°1

Marie Duru-Bellat

Sciences Po, Observatoire sociologique du
changement (OSC), CNRS

Discussion by **Thibault Gajdos**

CNRS, Groupement de recherche en économie
quantitative d'Aix-Marseille (GREQAM)

Sciences Po | LIEPP
27 rue Saint-Guillaume
75337 Paris Cedex 07
Tel : 01 45 49 83 61
www.sciencespo.fr/liepp

Access to Higher Education: What counts as fairness in both an individual and systemic perspective?

Marie-Duru Bellat

Fairness issues are quite widespread in educational research. However, despite the large number of empirical studies on this topic, few question the precise way in which equality is defined and assessed. That is especially true with regards to access to higher education. In most empirical studies, it seems straightforward to consider fair any situation in which the rates of access to both higher education in general as well as to the most desirable tracks are equal irrespective of students' personal characteristics (gender, social background, etc.). Conversely, one considers unfair any differences for example in the access to tracks according to gender, class or ethnic origin; any difference between groups is read as revealing some inequality or discrimination. The purpose of this note is to discuss this common view, and more specifically the pitfalls that must be overcome when making a diagnosis of fairness at the level of higher education, since this is a preliminary step to implementing a fair process of selection or to designing compensatory devices.

We will highlight that access to higher education is at the intersection of a previous educational career and the outset of an occupational career, as it is supposed to prepare the entry into the job market. We maintain that the fact that the transition from the secondary to the tertiary level of education lies at this specific position makes it necessary to discuss the issue of fairness in a specific manner.

1. Distinguishing fair/unfair inequalities, taking into account previous schooling

Nowhere do entire generations reach the degree or exam required to be eligible for higher education. This means that previous selections have already taken place, which obviously matters as far as fairness is concerned.

A necessary time perspective

A perspective focused on fairness at the individual level may fail to take into account the fact that any fairness consideration is nested in the overall operation of the educational system. That is especially important when comparing the fairness of educational systems at some precise level across countries: here, the share of the population that participates at different levels of the system does matter. It has been shown that social inequalities in overall educational attainment are inversely correlated with the diffusion of tertiary education (Hout, 2007). The “timing” of the selection should also be included in any cross-countries comparisons. For example, when comparing France and Germany (Duru-Bellat, Kieffer and Reimer, 2008), one should consider that social selection that took place prior to the degree required to enter higher education is both less marked and occurs later in the former, with the consequence that there will be more inequality at the transition to higher education.

The distribution of educational resources across the different levels should also be taken into consideration. For example, for two countries mobilizing the same amount of educational resources and showing similar patterns in terms of the amount of resources spent per pupil, structural inequalities may differ strongly based on the share of the population participating (“covered”) at each level of education.

At the individual level, when considering access to higher education, if the amount of prior selection has been substantial, the student population eligible for higher education will be more homogeneous. In addition, if this selection was grounded on academic basis, it most likely homogenizes students’ chances of success in their tertiary studies. Moreover, research shows that schooling careers are currently marked by social inequalities, concerning both attainment and choices of tracks or subjects. Sociologists often conclude that students from disadvantaged families reaching the final stage of secondary education are generally “over-selected” and/or channeled into less valued tracks, often less demanding academically speaking. Consequently, in some cases, students may have equal chances of success in higher education, which obscures the fact that the amounts of selection they have previously undergone may differ. The diagnosis of fairness is not straightforward here, since even if equal transition rates to higher education are observed across the groups under consideration, only part of the whole cohort – which varies in size across the social groups under study – has “survived” through the previous streaming and related selection.

In France for instance, about 40% of the less-qualified manual workers’ children (versus about 85% of the most privileged children) pass the baccalauréat, which is the key to transition

into higher education. So even if, among these eligible students, access to the most prestigious tracks of higher education were as widespread as it is among more advantaged students (which is not actually the case), the situation, while appearing “fair” at that level, would be far from fair across the board. In other words, a specific transition may appear fair (showing no significant differences of access between the groups under study, beyond those related to their academic level), while the overall educational career would not be judged so, since it has generated, through biased processes of attainment and choices, a variety of sub-populations of eligible students (generally strongly linked to the students’ social backgrounds).

This results from the fact that social inequality of attainment occurs from the beginning of the schooling career and accumulates over time, due to the cumulative dimension of academic progress. Said cumulative dimension is reinforced by tracking and subject choices in most countries, so that, all in all, the social inequality of schooling careers results equally from inequality of attainment and from inequality specifically linked with tracking and students’ choices (see for example Erikson and Jonsson, 2000). This generates unequal streams, based on academic achievement (meritocratic at least at the precise time of the tracking process) while generally including social biases.

It is crucial to note –as far as fairness is concerned- that, to an extent, some of the inequalities in transition or in success in higher education may be fair: they may result from the students’ cumulative academic value or judicious choices. Concretely, when focusing on the fairness of the transition from secondary to higher education, is it then unfair if students leaving the weakest tracks are excluded (e.g.

through a formal selection process) from the most demanding ones, or if they fail to succeed once they are in tracks open to any and all students (as it is the case in French universities)? The answer to this is “no” whenever the formal selection did not incorporate any specific biases (relying only on academic value, as a reliable criteria of later success), or when the student’s previous level of attainment, as it stands, is too weak to allow success. One could consider this a situation of fair inequalities.

Some might argue that the precise role of schooling is to reveal and create “fair” inequalities between students. This point is certainly debatable when considering compulsory education. Although a common core curriculum should result in a homogeneous level of attainment, shared by the whole generation, the necessary differentiating role of schooling is more defensible at the higher education level; there, diversified forms of schooling take place, with the objective of preparing a young generation for employment. In any case, and even if the bulk research in sociology of education does show that some of those previous inequalities are far from fair (especially given that they incorporate some social bias, such as self-selection, beyond purely academic aspects), the whole process of school selection and student ranking cannot be completely delegitimized. Moreover, at that level, a tension may exist between efficiency and equity, since the most efficient way to regulate access to higher education would be to select those students having the best assets needed for success, even if, in the meantime, we know that some of these assets are not the result of fair competition.

All in all, even if it is legitimate to focus on a specific point in students’ schooling career, one cannot discard a time perspective especially at such a “final” level of education. Prior

schooling generates some inequalities of educational attainment that cannot be ruled out as illegitimate, and which may be taken into account due to a concern for efficiency. The problem is that these inequalities in academic value “incorporate” social inequalities, which have been generated gradually over the previous schooling career. Thus, the analysis of the generation of the academic value itself is part of the story as far as justice judgment is concerned.

From observing differences to assessing fairness...

A third point which complicates any judgment of fairness concerns the interpretation of what appears as inequalities in the academic level of eligible students. The issue at stake is how these inequalities have been generated. Concretely, how should we interpret the concentration of blue collar workers’ children in the vocational tracks, which results in much weaker chances of access to and success in higher education? It is appealing to try to separate what would result

- i) from a lower level of prior academic attainment (in France, the weakest pupils are channeled into such tracks),
- ii) from a more frequent channeling into those tracks by the board in charge of the tracking process, beyond what should result based purely on academic achievement, and
- iii) from the “choices” made by students themselves.

This is an important, complex and policy-relevant issue. The results of the institution’s method of operation must be disentangled from an individual’s own responsibility.

The simplest case is that where most of social biases are rooted in the decisions made by the school boards themselves (ii). In such a case, the pupil's social or ethnic background may be taken into account (implicitly or not) in the tracking decisions, rather than simply the pupil's academic value. This may be due to some social prejudices (resulting in discrimination) or material constraints (places to be filled in some tracks). In such a case, the school is responsible, and should compensate for this injustice.

The first explanation (prior inequalities in attainment) is more mixed as far as the respective weight of institutional versus individual responsibility. In some cases, the responsibility of the school as an institution is, again, clearly involved, for example when pupils belonging to a certain group were systematically attending less efficient schools (i.e. schools in which pupils do progress less). Here again, school should compensate. However, personal student responsibility may also be involved – one cannot maintain that students have no responsibility at all in their educational success. Of course, they cannot be judged responsible for the early difficulties some of them encountered in the first years of schooling, notably those based on their family's socioeconomic and cultural resources. In any case, it is impossible to compensate for all the negative conditions and events individuals have faced and endured since birth. However, the later in the schooling career this observation is made, the more difficult it becomes to discard any personal responsibility in one's academic level of achievement.

Assessing the part played by inequalities of “choices” raises similar questions. To some extent, students are not responsible for the preferences they inherit from their family. However, they do also develop their own preferences, and some choices which may, at

first glance, appear to be inequalities may in fact result from these preferences. This is especially true at the “final” school level, when students are making life and career plans. Not all differences can be considered inequalities, since every person grows up within a group, with social and personal models and influences, leading to social preferences.

It is of course difficult, or perhaps even impossible, to separate socially conditioned and authentic preferences. Beyond that debate, one may admit that the only thing policy-makers should examine is whether or not individuals with both the capacity and the will to pursue certain courses of study have been prevented from doing so. Unfortunately, this is not easy to assess. Implicitly, compensatory program promoters tend to consider all differences between groups as inequalities, which amounts to postulating that every pupil is both able and willing to choose what is considered to be the most desirable tracks. However, preferences cannot be considered universal, and students may choose not to seize the chances that are actually offered to them. Thus it is impossible to draw conclusion regarding equality of opportunities solely on the basis of inequality of choices. Chances that exist at the start are never visible, only those that have been grasped are...

For example, to what extent should we consider as inequalities the different choices made by boys and girls? Certainly, they result from social influences – family gender roles, gender segregation on the job market, the social definition of masculinity and femininity – none of which are “chosen” by individuals... However, students may have “chosen” to adapt to those constraints and it would certainly be more relevant and efficient to change these social parameters if they are judged unfair, than to strive to have boys and girls make exactly the same choices when entering higher education,

which may appear to prevent freedom of choice. One may note at that point that the rationale of freedom and choice is currently considered legitimate at the individual level (it would lead to random variance); it is only when systematic differences between groups are observed that this question arises.

Lastly, in some cases, students entering higher education may choose to cultivate true interests, whatever the opportunities that these studies may or may not offer later on in the job market, so that the studies they choose, at that stage, look more like consumption than a rational investment. This may occur more frequently when entry is open and attendance free, which is the case in France for example. In this case, is that fair that public funding is being allocated to financing private choices, while less funding is available at previous educational levels (due to the scarcity of financial resources), the level where some pupils are definitively excluded from further studies? This perspective is all the more relevant as higher education remains a scarce public good, a problem especially acute in the poorest countries. It is also especially relevant in a second sense, because access to this publicly funded level of studies is supposed to bring some public benefits. The second part of this note is devoted to these issues.

2. Downstream inequality: inequality of what?

A well-established tenet of the sociology of education (and other areas) is that the scarcer a good – i.e. something that has a value and is sought – is, the larger the social inequalities in acquiring it are. When the availability of that good increases (through a reduction in price or institutional mechanism), the indicators used to measure inequality in the access to that good diminish while the characteristics of those who

do not have access become all the more socially disadvantaged.

Opening is not enough...

In this context, since increasing equity is one aspect of public policy for higher education, it is tempting to extend coverage in access, with the hope that expansion benefits the least privileged students more. This policy has been, at least implicitly, followed by most countries. The expansion of coverage of secondary education did occur in all countries, albeit at different times. These evolutions have also been pushed by the idea that the production of more human capital, in particular at the higher level, is an efficient way to foster economic growth. Putting the focus on this “knowledge economy” is also supposed to reduce social inequalities and foster social cohesion. This specifically has been the European rationale for promoting higher and higher levels of education, although many sociologists have expressed some skepticism (Wolf, 2002, Brown, 2003).

This trend has helped to open the doors of higher education to some students from disadvantaged groups in the population, even if the benefits on that count remained contingent on progress in equity at lower levels of schooling. For the students involved, staying in school longer and increasing their level of knowledge may certainly be considered progress. While this dimension of the benefits associated with longer schooling is not to be downplayed, this evolution may be judged differently with regard to the variety of the countries’ economic contexts. Anderson (1961) and Boudon (1973) previously mentioned the tendency of systems of education to move faster than economies and job availability. This could potentially lead to deterioration in the match between graduates and jobs. Since that first warning, the vast majority of studies have demonstrated the reality

of the devaluation of diplomas in many European countries (see for example, Hadjar and Becker, 2009; Büchel et al., 2003). Obviously, the educational system has no power over the effective market value of the degrees it distributes, which itself results from the structural distribution of jobs and the peculiar relationships that prevail between degrees and qualifications.

However, individuals with a secondary education diploma are led to register for higher education in spite of their knowledge that the subsequent prospects are likely not as good that they would have wished – to not do so would be worse from their point of view, in particular if existing structures, rules and incentives are not appropriate.

Fairness without efficiency makes no sense...

To analyze fairness in the access to higher education, it is necessary to take into account the value of the good itself: there is no point in being equitable if what is offered is a good without value. We must start identifying the characteristics of the type of good the secondary school graduates are seeking to acquire. At this juncture, two related distinctions are worth considering:

The first is to determine the nature of the studies under consideration. To what extent is it a public or a private good? It is a private good whenever the individual who embarks on the course of study later on appropriates the benefits deriving from the knowledge and credentials related to the studies privately. It is a public good if the benefits associated with the studies under consideration are mostly public in nature. Within this formal categorization, higher education is of a mixed nature, public since it may benefit the society to have better educated citizens and enjoy a higher rate of growth of the

economy, and private because graduates may enjoy a better life style and remuneration.

In this context, it is clear that an oversupply of graduates resulting in unemployment and/or access to low qualified jobs would jeopardize the value of the “higher education” good. This is obvious if we focus on the public dimension, since in that case society cannot draw benefits from the skills produced. Concerning the private dimension, the case is a bit more complicated. Particularly when the private cost of studies is limited to the opportunity costs (when registration costs are almost free, as in most public higher education in France), the decision a secondary-school graduate makes to continue at the higher level is made by comparing the earnings he (she) foregoes now and those he (she) expects as an outcome of his (her) “investment” in higher education. If what is foregone has little value (given the conditions of the labor market for secondary school graduates), the private incentives to enroll in higher education are still strong since more education is the best thing an individual can do, thereby creating a disconnect between the public and the private perspective, and consequently an inflation in higher education credentials.

The second concept worth considering is whether higher education is pursued as consumption or investment. Pursuing education with a consumption perspective implies that the benefits from registering in higher education are not expected to carry a professional or a monetary dimension. Rather, students register for such studies because it is considered interesting and enjoyable. By contrast, the investment perspective does not bank on the interest of the studies themselves but on the fact that they are expected to bring a good job and command high earnings. Here again, the reality is somewhere in between these two poles, since

there is probably always some amount of enjoyment in studying the subject one has chosen, as well as some marketable value in any domain of knowledge. However, the intersection is clearly not located at the same distance from the two focal perspectives for all types and fields of study.

It is necessary to determine to what extent these two concepts and classification have a bearing upon the discussion about fairness in access to higher education. The aim (a policy-relevant one) is to achieve a mix of efficiency and equity. However, efficiency comes first, and the real issue is how to make equitable a process that needs be efficient.

The classification of the goods acquired in higher education allows us to create the different combinations (which are like ideal-types), which set the scene in which access to education and fairness issues have to be discussed.

1. The good is a “pure” consumption
2. The good is considered an investment.
 - 2.1. It has high public and high private returns
 - 2.2. Its private returns are its main characteristics
 - 2.3. It has high public value but relatively low private returns
 - 2.4. It has less (or less obvious) value, both in its private and public dimensions.

A first question is whether access should be encouraged or regulated. The two main tools for that are the implementation of some academic selection (through a variety of devices), and registration fees.

1. In the first case – a “pure” consumption good – a spontaneous vision would result in open access to this kind of studies (no selection, and

free of charge, as are most humanities tracks in French universities). However, efficiency consideration for the public system suggests the implementation of some fees, because if there is no public benefit, there are some public costs, which carry an opportunity value.

2.1 In this case, since a high private value exists, this kind of studies may be privately financed. However, this should not prevent students from registering nor should it exclude poor students. Moreover, access should be encouraged since it has a high public value. To regulate access to these types of tracks, academic selection to attract the best students should be implemented jointly with access to financing, e.g. with the State subsidizing loans especially for the poor students.

2.2 When public returns are more moderate, in spite of high private returns, private financing is again fair. Academic selection is less central and can be, at least to some extent, geared by the students themselves. Some targeted loans should also be implemented for poor academically capable students.

2.3 A more complex case occurs whenever both a high public value and only moderate private returns coexist. Here, what is at stake is to attract students with a good academic value, without any social bias. One way of doing this is to combine some academic selection and substantial subsidies to allow free studies.

2.4 Whenever public and private returns are seen to be on the low side, a variety of strategies may be implemented with two political objectives: the private costs should be set so that they do not encourage students too much, on the one hand, and are politically acceptable, on the other.

Academic selection plays a significant role, in cases 2.1 and 2.2 (as well as in case 2.3).

Discussions can be lively both about the specific features by which academic selection can be implemented and about the extent to which it is a fair mechanism.

Moreover, especially for studies providing high private returns to students later on the labor market, one should consider private contributions. On the efficiency side, this is positive for two reasons: firstly, it creates positive incentives to the services providers to boost quality and relevance, while providing them with resources to do so, and secondly, it helps to expand the supply through private schools, which may be desirable. In France for example, the vast majority of engineering schools are both public and free, a context that does not help private schools to operate in that field, even though some suggest there is consistent under-supply of such engineering graduates on the labor market.

The common wisdom, however, is that tapping a private contribution from students would prevent both good and poor students from enrolling and encourage them to select other types of studies. This is obviously to be expected if there is not an appropriate capital market for these students to finance their studies. Whenever some mechanism allows academically bright and socially disadvantaged students to easily borrow the money needed to finance their studies, the case is totally different. They invest in their own human capital and they will be able to pay the loan back when they hold a good job. Moreover, the equity consequences of private financing in these studies may also carry positive outcomes on equity from a wider perspective. The point is that the public resources that have been saved can potentially be used to provide better opportunities to underprivileged students either in higher or secondary education.

Recall, at the outset of these developments, that here the private returns are considered as exogenous, resulting from present market forces, while public policies may also consider to change them.

Conclusion

In this note, we have maintained that the issue of fairness must be tackled in a specific manner due to higher education's position as the final step within the schooling system: a time perspective must be implemented that includes the fact that students do not arrive at this educational stage on "equal" footing, as well as the fact that the studies themselves have an unequal value, dependent on the benefits that can be drawn from them on the job market. A concern for fairness should take into account these two slopes, upstream and downstream.

To tackle this double-sided issue, so that fairness may be achieved, some specific regulations and provisions should be implemented. Policies are basically structured around three elements, namely public/private financing, the use of academic selection and specific compensatory devices. Those regulations and provisions should be tailored according to the nature of the "good" delivered by higher education: the fairness issue has a different meaning based on whether the studies are considered a private consumption or a public/private investment.

Fairness may only exist and be pushed forward in a global system where efficiency considerations are taken into account, and regulations are implemented to achieve it. That is why it is legitimate to consider that efficiency comes first, even if it may appear at first glance more generous to focus only on fairness. It should also be stressed that the fairness issue should not be tackled solely via the use of anti-discriminatory devices focused on individuals.

The systemic perspective should not be taken as incidental.

References

- Anderson, A. 1961. "A Skeptical Note on Education and Mobility" in Halsey A.M. et al., *Education, Economy and Society*, New York: McMillan, p.164-179.
- Arum, Richard, Adam Gamoran, and Shavit Yossi. 2007. "Inclusion and Diversion in Higher Education: A Study of Expansion and Stratification in 15 Countries" in *Stratification in Higher Education: A Comparative Study*, ed. Y. Shavit, R. Arum, and A. Gamoran. Palo Alto: Stanford University Press.
- Attewell, Paul, and Katherine S. Newman (eds). 2010. *Growing Gaps. Educational Inequality Around the World*. Oxford: Oxford University Press.
- Boudon, Raymond. 1973. *L'inégalité des chances: la mobilité sociale dans les sociétés industrielles*. Paris: Colin (Education, Opportunity, and Social Inequality). New York: Wiley, 1974).
- Breen, Richard, and John H. Goldthorpe. 1997. "Explaining Educational Differentials - Towards a Formal Rational Action Theory". *Rationality and Society* 9 (3): 275-305.
- Breen, Richard, and Jan O. Jonsson. 2005. "Inequality of Opportunity in Comparative perspective: recent research on educational attainment and social mobility." *Annual Review of Sociology* 31: 223-243.
- Brown, Phillip. 2003. "The Opportunity Trap: education an employment in a global economy." *European Educational Research Journal* 2 (1): 141-179.
- Büchel, Felix, Andries de Grip, and Antje Mertens (eds). 2003. *Overeducation in Europe*. Cheltenham: E. Elgar.
- Duru-Bellat, Marie. 2006. *L'inflation scolaire: les désillusions de la méritocratie*. Paris: Seuil.
- Duru-Bellat, Marie. 2008. "Recent trends in social reproduction in France: should the political promises of Education be revisited ?." *Journal of Education Policy* 23 (1), 81-95.
- Duru-Bellat, Marie, and Annick Kieffer. 2008. "From the Baccalauréat to Higher Education in France: Shifting Inequalities." *Population*, 63 (1): 119-154.
- Duru-Bellat, Marie, Annick Kieffer, and David Reimer. 2008. "Patterns of Social Inequalities in Access to Higher Education in France and Germany." *International Journal of Comparative Sociology* 49 (4/5): 347-368.
- Duru-Bellat, Marie, and Alain Mingat. 2011. "Measuring Excellence and Equity in Education: Conceptual and Methodological Issues," in *Equity and Excellence in Education*, ed. K. van den Branden, P. van Avermaet, and M. van Houtte. New York: Routledge.
- Erikson, Robert, and Jan O. Jonsson. 2000. "Understanding Educational Inequality: the Swedish Experience." *L'Année Sociologique*, 50 (2): 345-382.
- Hadjar, Andreas and Rolf Becker (ed.). 2009. *Expected and Unexpected Consequences of the Educational Expansion in Europe and the US*. Bern: Haupt.
- Müller, Walter, and Wolfgang Karle. 1993. "Social Selection in Educational Systems in Europe." *European Sociological Review* 9 (1): 1-23.
- Wolf, Alison. 2004. *Does Education Matters ?* London: Penguin Books.

Discussion by: Thibault Gajdos

The design of education policies is one of the most challenging issues faced by governments. One reason is that, as Marie Duru-Bellat shows, one expects the educational system to be both fair and efficient. These two objectives are clearly distinct, and might be conflicting. Marie Duru-Bellat offers a clarification of these two objectives, a necessary prerequisite in the design and the evaluation of public policies. In this short comment, we will put our (economic) feet in her (sociological) steps, and try to figure out how the conceptual clarification that she provides can be translated into operational tools for evaluating educational policies.

1. Fairness

Marie Duru-Bellat starts by making two crucial observations. First, the distribution of individual transition rates at between two given stages of the educational system (e.g., between secondary school and university) cannot be taken as a good measure of inequalities. Indeed, in order to be eligible for the considered transition, students had to go through an education and selection process that may have generated unfair biases. Moreover, the benefits students would get from attending higher education should also be taken into account. Second, all inequalities are not unfair. In particular, individuals might, at least to some extent, be considered responsible for their academic success. Let us consider these two questions successively.

1.1 *Inequality of what?*

Certainly, studying may be, and often is, enjoyable *per se*. But public policies tend to focus more on the output than of the process of education. Still, there are many ways to measure this output. Thus, one has to take a clear stand on this point. Marie Duru-Bellat focuses on earning abilities. This is certainly reasonable, but one should stress that other choices are possible. It can be the cognitive and social abilities of the individuals. It can also be their earning capacities, their freedom to choose the way of life (including the kind of job) they desire, or even respect and recognition. The policy maker (and not the social scientist) has here to make a decision. Access to higher education might be a step in reaching one of these objectives, but can hardly be considered as the final goal of education.

Being clear enough on this point dissolves one of the tensions between equity and efficiency identified by Marie Duru-Bellat. Indeed, the fact that equalizing access to higher education does not necessarily entail improving earning capacities (either because of mismatch between jobs and degrees, or because of a "devaluation" of diploma) should not be considered as a conflict between efficiency and equity, but between two distinct objectives (earning capacities and access to higher education *per se*). Thus, Marie Duru-Bellat's argument should be read as a convincing demonstration that access to higher education is not a pertinent objective, and cannot even be considered as a good *proxy*; not that there is a conflict between efficiency and equity.

In passing, Marie Duru-Bellat makes a very important point. All *curricula* cannot be considered as equivalent with regards to the earning capacities they confer. One should thus carefully distinguish among them when studying efficiency and equity of education. This is actually true for other dimensions than earning capacities as well. Thus, Marie-Duru Bellat's arguments call for designing a fine-grained analysis, which contrasts with the usual practice in economics of education, which generally take a broad view and consider higher education globally. This would be particularly important in a very segregated system such as the French one.

1.2 *What Inequalities?*

The second point made by Marie Duru-Bellat is that not all inequalities should be considered unfair. As she clearly states, "the results of the institution's method of operation must be disentangled from an individual's own responsibility". Marie Duru-Bellat points that one difficult problem is "to separate socially conditioned and authentic preferences". This echoes a long-lasting debate in philosophy (Cohen, 1989; Arneson, 1989), and is precisely the aim of John Roemer's theory of Equality of Opportunity (Roemer, 1998).

Roemer's idea is to distinguish between variables that are under the individual's control (for which they are thus responsible), and those that are beyond their control (i.e., circumstances). An equal-opportunity policy aims at "leveling the field", by ensuring that all individuals that make the same effort obtain the same result, regardless of the circumstances (e.g., family background) they face. This theory can be translated into operational tools, and has actually been used to evaluate the fairness of education (Betts and Roemer, 2006). The basic idea is the following. Assume that there are two types of individuals: those who come from

wealthy families, and those who come from poor families. Assume for the sake of simplification that the educational performance of a student only depends on their effort *and* on their type. As noted by Marie Duru-Bella, a difficulty here is that students' *choice* of effort level might depend on their types (e.g., because rich families value more education). Now, for each type, rank individuals by their effort levels. Equality of opportunity requires that two individuals with the same rank (regardless of their type) be offered the same outcome. Doing so, one neutralizes the effect of circumstances, including on the preferences of individuals. This is a very operational way to solve the problem raised by Marie Duru-Bellat. Of course, it requires the first question ("Equality of what?") to have been solved. But it also requires that one clearly distinguish between what the individual should be taken as responsible for, and what should be considered as "circumstances". This is an important and difficult question, that should also be answered by the social planner (and not the social scientist).

2. Efficiency

Exactly as one should answer the question: "equality of what?" when measuring the fairness of the educational system, one should be clear about the outputs expected from higher education. Again, Marie Duru-Bellat focuses on earning capacities. This is certainly legitimate. But education produces other outputs, both private and public (see Lochner (2011) for a review). In particular, there is consistent evidence that more education induces better health, greater life-expectancy, lower crime rates, and improves citizenship (vote registration and participation, support of democratic values, etc.). Taking these effects into account may completely change the picture.

This is certainly not an easy task, but recent studies show that it is not impossible. One approach consists in taking a global point of view. One tries to evaluate education through the amount people are ready to pay for an increase in education (whether they are directly concerned or not). This method is well known among economists under the name of "contingent-valuation", and has recently been used to evaluate higher education in Kentucky (Blomquist and coll., 2009). One drawback to this method is that it does not allow one to disentangle the value of the different outcomes of education (income, health, and social outcomes). More sophisticated econometric strategies are necessary for this, and have been proposed by Heckman and collaborators (2011). It is thus in principle possible to go beyond the analysis proposed by Marie Duru-Bellat, and to investigate the return of higher education across all its dimensions. This would be a necessary step to complement the picture we have of the efficiency of the educational system.

But evaluating the output of the educational system is not yet measuring its efficiency. The same output could perhaps be

obtained using less resources (which is the notion of efficiency used among economists). Or, similarly, might a better result be obtained using differently the same amount of resources? A first step towards an answer to this question can be made using Marie Duru-Bellat's observation, according to which what matters is not only the situation of students at a given time, but their complete life cycle of education. In particular, one may wonder if a better result would not be obtained by transferring resources from one stage (say, higher education) to another stage (say, primary school or even pre-school). Such is precisely the point made by James Heckman and his colleagues (see Heckman (2006) for a review). They show that early investments in education have higher returns. Moreover, the return of educational investments in early childhood are considerably higher for disadvantaged children than for others. Investing in early education might thus be more efficient *and* reduce inequalities. This suggests, at least, that thinking about equity in access to higher education requires one to consider the educational system as a whole – with a particular attention to its early stages.

References

- Arneson, R.J. (1989). "Equality and equal opportunity for welfare", *Philosophical studies*, 56 (1) : 77—93.
- Betts, J. and J. Roemer (2007). "Equalizing Opportunity for Racial and Socioeconomic Groups in the United States through Educational Finance Reform," in P. Peterson (ed.), *Schools and the equal opportunity problem*, MIT Press.
- Blomquist, G., Coomes, P., Jepsen, C. Koford, B. and Troske, K. (2009). "Estimating the social value of higher education: willingness to pay for community and technical colleges", *IZA DP* n.4086.
- Cohen, G.A. (1989). "On the currency of egalitarian justice", *Ethics*, 99, 4:906—944.
- Heckman, J.J. (2006). "Skill formation and the economics of investing in disadvantaged children", *Science*, 312, 5782:1900—1902.
- Heckman, J.J., Humphries, J.E., Urzua, S. and Veramendi, G. (2011). "The effects of educational choices on labor market, health, and social outcomes", Unpublished manuscript, University of Chicago, Department of Economics.
- Lochner, L. (2011). "Non-Production Benefits of Education: Crime, Health, and Good Citizenship" in E. Hanushek, S. Machin and L. Woessmann (eds.), *Handbook of the Economics of Education*, Vol. 4, Chapter 2, Amsterdam: Elsevier Science..
- Romer, J. (1998). *Equality of opportunity*, Cambridge Univ Press.