

Educational justice as equality of opportunity for achieving essential educational outcomes

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Comments are welcome.

Abstract

In this chapter, we claim that a reasonable normative goal in terms of educational justice consists of equalizing opportunities for achieving essential educational outcomes. The exposition is developed in four steps. Firstly, we briefly review some reasons that justify a shift from a welfarist perspective to a non-welfarist one, that is, from the space of utilities to that of “advantages”. Secondly, we argue in favor of a more specific perspective, namely an ‘educationist’ one, in which essential educational achievements become the relevant attribute. Thirdly, since inequalities of outcome variables, such as educational achievements, are caused by morally relevant and by morally irrelevant factors, some criterion has to be adopted to demarcate the frontier between the acceptable fraction of inequality and the unacceptable fraction. We discuss the pragmatic demarcation criterion proposed by Roemer in an ‘educationist’ perspective, taking into account particular features of the schooling process. Finally, we outline a concrete proposal of a procedure which aims at providing a basis for the assessment of the degree of fairness of an educational system.

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1 Introduction

We want to provide a conceptual and pragmatic definition of educational justice. For reasons that will become clear throughout this chapter, defining that requires the evaluation or the assessment of distributions of some particular types of educational outcomes.

According to Sen (1992), Cowell (1995), or Lambert (2001), evaluating distributions (usually of income in the literature) requires making three main choices, regarding the:

1. **Focal variable or attribute**, sometimes called “currency of justice” by philosophers or “relevant space” by economists;
2. **Aggregation and/or evaluation procedures**, used to compare distributions of a given currency of justice, sometimes called the “focal combination”; economists usually call them “social welfare functions”;
3. **Reference group or unit of analysis**, that is, the relevant geographic or demographic unit for comparing distributions of an attribute.

In this chapter, we will focus our discussion on the two first choices. The important topic of the *reference group* will not be discussed extensively in this chapter, but rather in chapters 3 and 4, which are devoted to empirical investigations that draw extensively on the framework outlined here.

As a result of our discussions, we shall claim that a reasonable normative goal in terms of social justice consists of “equalizing opportunities for achieving essential educational outcomes”.

The text is organized as follows. Section 2 contains an account of the main assumptions usually employed by economists, explicitly or implicitly, when they undertake a normative analysis. Such a schematic presentation will be referred to throughout the chapter. In section 3, first we discuss some difficulties associated with the standard welfarist approach. Then we briefly present some reasons that justify a shift from a welfarist perspective to a non-welfarist one, which implies abandoning the space of utilities in favor of the space of “advantages”. In section 4, we argue in favor of a more specific perspective, namely an ‘educationist’ one, in which essential educational achievements become the relevant normative attributes. In section 5, we discuss the criterion proposed by Roemer to draw the line that distinguishes acceptable from unacceptable inequalities, and then we transpose it to the educational sector, taking into account particular features of the schooling process. Finally, in section 6, we outline a proposal of a

procedure which aims at providing a basis for the assessment of the degree of fairness of an educational system. Section 7 concludes.

2 Evaluating social states: some crucial assumptions

Modern normative economics is mainly interested in describing fair social states, or in ranking different social states according to their degrees of fairness (Fleurbaey, 1996). But if we want to compare social states and rank them, what set of criteria should guide us? In this section, we discuss some assumptions which are frequently used by economists.¹

Economists often assume **consequentialism**, that is, they compare *end-states* (or *achievements* or *outcomes*), regardless of the process that conducted society to a given situation and not to another. Two identical social states are given the same value, and information concerning how we get to each of them is irrelevant.

Adopting consequentialism implies not giving any intrinsic value to *intentions* or *causes* that lead society to some particular state. More precisely, adopting it means that we only care about intentions and causes to the extent that they have relevant impacts over end-states. Accepting this criterion makes it difficult to take into account, for instance, human rights, since they are defined essentially in terms of rules or procedures, and not in terms of consequences or end-states, except, of course, if enforcing human rights leads society to a better outcome.

Many vectors of possible end-states may matter in the evaluation made by a consequentialist agent. He may value, for example: his set of material holdings ($x^1 \dots x^k$), the set of health characteristics that compose his health status ($h^1 \dots h^k$), his set of educational outcomes, such as his skills, the certificates he holds and so on ($e^1 \dots e^k$), variables related to the quality of the global environment ($g^1 \dots g^k$), a set of characteristics related to his security ($s^1 \dots s^k$), and so on. Let these sets be summarized by the following vectors: X_i, H_i, E_i, G_i, S_i , where i indexes the individual.

Nothing prevents a consequentialist individual from caring about other people's sets and not only about his own. Perhaps, it makes more sense, however, to take the "agent" to be, in fact, a preference-respectful social planner (in contrast with a paternalistic one). In

¹Section 2 is largely inspired by "Welfare Economics" lectures given by Professor Erik Schokkaert at the Katholieke Universiteit Leuven (Belgium) on Fall 2004. I assume full responsibility for errors, omissions, and misinterpretations.

such case, the social planner will take into account agent i 's outcome sets $(X_i, H_i, E_i, G_i, S_i, \dots)$, but also the outcome set of all the other individuals $(X_j, H_j, E_j, G_j, S_j)$, for all $j \neq i$.

From economists' viewpoint, more than consequentialism is required to rank social states in an organized way. One possibility is to assume **individualism**, which means that end-states are to be valued according to the benefit they provide to each human being. These benefits are aggregated by individual-specific indicator functions, $I_i(X_i, H_i, E_i, G_i, S_i, \dots)$, whose arguments are the end-states which are relevant for each of the n individuals.²

By assuming individualism, we ignore characteristics that could be valued for their own sake, and not to the extent that they are valued by individuals. For example, if we assume individualism, "the nature" or "the environment" might not have any intrinsic value beyond the value each individual assigns to it. A green party militant probably includes global environment variables (G_i) as an argument of his set of relevant variables, while other people may prefer not to do it - since they do not care about the environment. Assuming individualism does not imply assuming people are egoists, given that, just as mentioned before, nothing prevents a consequentialist and individualist person from caring about other people's sets and not only about his own set. An indicator function such as $I_1(X_1, X_2, H_1, H_2, E_1, E_2, \dots)$ is admissible under the conditions imposed so far.

Diagram 1. 'Goodness-of-society evaluation set'. From consequentialism to individualism. ($i = 1, \dots, n$).

$$\left[\begin{array}{c} X_1 \dots H_1 \dots E_1 \dots G_1 \dots S_1 \dots \\ X_2 \dots H_2 \dots E_2 \dots G_2 \dots S_2 \dots \\ \vdots \\ X_n \dots H_n \dots E_n \dots G_n \dots S_n \dots \end{array} \right] \rightarrow \left[\begin{array}{c} I_1(X_i, H_i, E_i, G_i, S_i, \dots) \\ I_2(X_i, H_i, E_i, S_i, \dots) \\ \vdots \\ I_n(X_i, H_i, E_i, G_i, S_i, \dots) \end{array} \right]$$

Let us call the set of valuable outcomes of a given society as the 'goodness-of-society evaluation set'. In diagram 1 above, we show how the goodness-of-society evaluation set changes when we move from assuming only consequentialism to assuming both consequentialism and

²Again, it is not excluded that individual i values the outcome set of individual $j \neq i$. Indeed, altruism can be formally included in economic models in such a way that an individual values, for example, the consumption set of people he cares about. Usually such valuation is done through the filter of the former individual's utility function - which means that he cares about his fellows to the extent that their well-being increases his own well-being.

individualism. The difference is that in the right-hand-side matrix, outcome variables are indexed by an individual indicator function, which is not the case in the left-hand-side matrix. In the right-hand-side matrix, we assume that individuals 1 and n are persons who care about global environment issues, represented by G_i , while individual 2 does not assign any value to it, so that G_i is absent in the second line.

Economists usually adopt further assumptions which eventually narrow down the set on which goodness-of-society is evaluated. The general indicator function, $I(\cdot)$, is often replaced by a very particular one, namely: the utility function. Doing so amounts to adopting **welfarism**. For our purposes the importance of including the assumption of welfarism to the picture is twofold. First, utility functions are supposed to represent individuals' *subjective* preferences over end-states or achievements. We will comment on this issue in the following sections. Second, assuming welfarism means that any information which is not reflected on individuals' welfare is *ignored*. For example, given that an individual chooses a good x and that this choice provides him the utility level $u(x) = \bar{u}$, it does not matter whether that individual had only that good x available or whether he was free to choose among a set of various goods. Freedom only matters instrumentally, that is, to the extent that it provides more utility (i.e., more welfare) to the individual. But, generally, we cannot be sure of the existence of an impact of the level of freedom an individual enjoys on his utility level.³

Economists frequently narrow down even further the goodness-of-society evaluation set, especially in empirical work, where particular utility functions have to be adopted. One common step is to assume individuals are **self-centered**, meaning that an agent's utility function contains only arguments referring to that very agent. For example, my own expenditures set is an argument of my utility function, but the expenditures set of my fellow citizens' is not.

According to the requirements - usually formal ones - of each particular model or empirical study, economists go further: (i) assuming a "representative consumer" (or homogeneity), that is, considering that all individuals have the same utility function; and/or (ii) using some observable variable to reflect, to some extent, individuals' utilities. The typical proxy is income. Since it can be exchanged against many other commodities individuals might want to consume, economists feel comfortable to assume that utility increases monotonically with income.

³For an account of the relationship between freedom and economics, see Laslier, Fleurbaey, Gravel, and Trannoy (1998).

Diagram 2 shows that when we combine all the restrictions commented above, the goodness-of-society evaluation set shrinks considerably.

Diagram 2. Goodness-of-society evaluation set. ($i = 1, \dots, n$)

1. From individualism to welfarism.

$$\begin{bmatrix} I_1(X_i, H_i, E_i, G_i, S_i, \dots) \\ \vdots \\ I_n(X_i, H_i, E_i, G_i, S_i, \dots) \end{bmatrix} \rightarrow \begin{bmatrix} U_1(X_i, H_i, E_i, G_i, S_i, \dots) \\ \vdots \\ U_n(X_i, H_i, E_i, G_i, S_i, \dots) \end{bmatrix}$$

2. From welfarism to self-centered individuals.

$$\begin{bmatrix} U_1(X_i, H_i, E_i, G_i, S_i, \dots) \\ \vdots \\ U_n(X_i, H_i, E_i, G_i, S_i, \dots) \end{bmatrix} \rightarrow \begin{bmatrix} U_1(X_1, H_1, E_1, G_1, S_1, \dots) \\ \vdots \\ U_n(X_n, H_n, E_n, G_n, S_n, \dots) \end{bmatrix}$$

3. From self-centered individuals to homogeneous individuals and an objective proxy. ($y = \text{income}$).

$$\begin{bmatrix} U_1(\cdot) \\ \vdots \\ U_n(\cdot) \end{bmatrix} \rightarrow \begin{bmatrix} y_1 \\ \vdots \\ y_n \end{bmatrix}$$

Depending on which assumptions one is ready to accept, the definition of the educational optimum will be different. Suppose for a while that the social planner has egalitarian concerns. Two individuals may reach the same level of welfare while having different levels of educational achievements. On the other hand, two individuals with the same educational achievements may have very different levels of welfare. So what kind of equality should the egalitarian social planner prefer: $E_i = E_j$, for any $i \neq j$, or $U_i(\dots, E_i, \dots) = U_j(\dots, E_j, \dots)$, for any $i \neq j$? In words, neither equal educational outcomes implies equal welfare, nor equal welfare implies equal educational outcomes: what to choose?

The broader questions suggested by this section are the following: where should the narrowing-down process stop? Particularly, if we are looking for a description of the educational optimum, which conditions should be accepted/imposed? Which of them shrink too much - and inappropriately - the goodness-of-society evaluation set? What currency of justice is better suited to deal with educational justice matters?

We will provide our answers to these questions in this chapter. But first, let us start our discussion from the natural point of departure for an economist: the welfarist perspective.

3 From social welfare functions to social advantage functions

3.1 The welfarist benchmark

Suppose the following properties are imposed: consequentialism, individualism, welfarism and self-centeredness. Also suppose for a while (until section 3.3.1) that it is possible to measure individuals' utilities and to compare their intensities, by assuming, for example, absolute scale comparability - as defined by Boadway and Bruce (1984). These assumptions presuppose high informational requirements, but let us abstract from the problems related to that for a while.⁴

Finally, suppose that the conditions which are required for the second welfare theorem to be valid break down.⁵ Since it is not possible to reallocate initial endowments in such a way that *any* Pareto-efficient allocation can be reached, it is not possible to partition "equity" and "efficiency" into two separate and distinct problems. Under these conditions, defining a social optimum necessarily requires simultaneous decisions concerning equity and efficiency. This idea has been accurately expressed by Stiglitz and Atkinson (1980), who claim that "both [are] subsumed on the objective of maximizing social welfare", according to the inequality aversion parameter of some specification of an objective function.

In such a framework, we can make use of a wide class of social welfare functions (SWFs), within the boundaries of the 'welfarist perspective', which is widespread in economics, and which constitutes an inescapable benchmark. Different SWFs describe different normative positions in the specific form of *social preferences in the space of utilities*, which provide different ways of resolving the equity-efficiency trade-off. Certain normative viewpoints reflect criteria and objectives that have a correspondence - sometimes an indirect one - with this or that theory of distributive justice. More practically, by means of SWFs, it is possible to rank distributions of welfare of different soci-

⁴On the informational requirements of different social welfare functions, see, for example, Sen (1979) or Boadway and Bruce (1984)

⁵A number of reasons can be evoked to deny the validity of the second welfare theorem in different settings. When the educational allocation problem is studied separately from general justice issues (cf. sections 4-6), the following issues pose problems: consumer sovereignty may not be a reasonable assumption (how then can we trust pupils' preferences?); educational outcomes usually cannot be directly traded among individuals; lump-sum transfers of educational inputs are not generally feasible, for instance, if the input at stake are agents' intellectual skills; and so on. We develop our argument in this chapter taking for granted that the second welfare theorem does not hold.

eties, or of a given society in different points in time. They provide, in fact, a useful device for aggregating and evaluating distributions of welfare (the second step in the task of assessing distributions, as we mentioned in the introduction).

3.2 The multi-fold relation between education and utility

Assuming *consequentialism*, *individualism*, and *self-centeredness* in educational issues do not add very much to assuming them in the general case - end-states are to be valued according to the benefit they provide to each person. Assuming *welfarism*, in turn, is a more intricate issue, since the relationship between the vector of educational variables, E_i , and individuals' welfare, U_i , is multi-fold.

Education can be seen as an important determinant of future earning capacity of individuals and, thereby, of their future well-being. This hypothesis postulates an *indirect effect* of educational variables, E_i , on welfare, possibly with an inter-temporal component, that is, $U_i^{t=2} = f(Y_i^{t=2}(E_i^{t=1}))$, where $t = 1$ and $t = 2$ stand for present and future time, respectively. This kind of reasoning is perfectly in line with a particular view on the economic role of education, which is probably the most widespread among economists, namely, the one that sees education essentially as an investment in human capital.

However, educational outcomes may have another, direct, effect on welfare. Being more educated may imply having a higher level of individual welfare regardless of the effect of education on income (see section 4). Without denying the effect of income on utility, we could assume one of the following statements: (i) that welfare depends on current income and past education, $U_i^{t=2} = f(Y_i^{t=2}, E_i^{t=1})$, or (ii) that welfare depends on past education, both directly and indirectly (through the channel of income): $U_i^{t=2} = f(E_i^{t=1}, Y_i^{t=2}(E_i^{t=1}))$.

If we think it is wise to pick both education and income as arguments of the utility function, is it not also as wise to pick other relevant vectors as well, such as those mentioned in section 2, namely: X, H, G, S, \dots ? In this case, we would have to take into account the possible complementarities between education and other goods in the generation of welfare, and the issue of defining the educational optimum would become quite complex or, more probably, indeterminate, unpredictable, and analytically unsolvable.

Another possibility is to treat education simply as a consumption good. Some people might have a 'good time' when they are at school (though other people not at all!). Some people might appreciate the social recognition they are given for the fact that they are studying

in some prestigious educational institution - regardless of the future benefits that their certificates will provide to them. Some people may, for example, decide to enroll in PhD studies, even having a quite accurate knowledge of the high opportunity costs it entails, in order to enjoy the rich intellectual and/or cosmopolitan environment offered to PhD students. Whatever the reason, the point is that some people extract instantaneous utility from studying, so that the benefits of education do not have to wait for the future to materialize, in which case, it would not be inadequate to consider that $U_i^{t=1} = f(E_i^{t=1})$.

The bottom line is that when we restrict our analysis to a welfarist framework, important choices have to be made regarding what the most appropriate description of the relationships between education, income and other relevant variables, and welfare is - a matter of defining a relevant positive ‘model of society’. Particularly, the role of education in generating present and future well-being, and the complementarities between education and other goods in that process, need to be addressed, a task that could be accomplished in different ways, such as: (i) relying on empirical evidence, (ii) using ad hoc choices depending on the nature of the problem under scrutiny, (iii) turning to a reasoned argumentation or a consistent formal model. We do not have the ambition to do either of those tasks here, because, *inter alia*, we do not believe the welfarist framework is the most suitable for dealing, neither with goodness-of-society issues in general, nor with educational justice issues in particular, as we will argue later on.

3.3 A brief account of the problems with welfarism

It is insightful to analyze how different SWFs relate to educational variables, using simple assumptions on the role of education in generating well-being - indeed, we have sketched that task in the previous chapter⁶, in a text which provides us with basic elements to understand what educational justice could mean to ‘caricatural’ normative positions, such as pure utilitarianism or pure egalitarianism.

In this chapter, in turn, we point out a number of problems associated with the *welfarist perspective* - defined here as an evaluation framework that simultaneously assumes consequentialism, individualism, welfarism and self-centeredness - with special attention to the

⁶In Chapter 1 we interpret what educational justice means according to SWF based on different normative positions: utilitarianism, a combination of an ordinal approach with utilitarianism (ie, the Pareto criterion), welfare-egalitarianism, welfare-maximin and welfare-leximin, as well as for some intermediate cases, where the inequality aversion is expressed by parameters in CES or egalitarian SWFs.

implications regarding the educational sector.

3.3.1 Technical difficulties: measuring and comparing utilities

There are controversies on the very definition of utility. A utility function has at least three different interpretations: (i) the classical one - utility functions indicate happiness of individuals; (ii) the choice-based one - utility functions express individuals' level of satisfaction of (informed and rational) preferences, (iii) the social-welfare one - utility functions are a normative tool to the social planner, who imposes ethical restrictions (i.e. assumes the utility function has certain characteristics) and derives conclusions from them. Definition (ii) could be seen as a variation, or a refinement, of definition (i). Definition (iii) can be placed in a more normative register, much more in line with the kind of exercise we are undertaking here.

Whatever the definition of utility one adopts, there are some difficulties related to its measurement and to the interpersonal comparison of utility levels. These problems hold for any kind of welfarist observer (i.e., whatever his degree of inequality aversion), but for concreteness let us consider for the moment the case of an utilitarian, who is a welfarist that adopts a particular kind of SWF, whose goal is to maximize society's well-being (the sum of utilities across individuals).

Utilitarians would support a particular policy if it implied an increased total utility. But *it is impossible to measure all gains and losses* derived from the implementation of any given policy. Consider the implementation of an affirmative action policy, which would allocate a certain fraction of places at good primary schools to minority group individuals. Those who benefit from such a policy are certainly better off in terms of present benefits, since they are entitled to consume a scarce good - studying at a good school - which would not have been available to them otherwise. And they are probably also better off in terms of future benefits: the policy could expand their probability of reaching higher stages in the schooling system and, eventually, of having a good social position in the future (higher wage, more prestigious occupational status, and so on).

Nevertheless, the same individuals could experience losses due to that very policy. The policy could have the effect of pushing down the average 'quality of students' in good schools. In this case aggregate quality of peers, and possibly other inputs, would decrease, leading to lower aggregate achievement.⁷ Such affirmative action pol-

⁷Of course, such policy *needs not necessarily* decrease the average achievements. For the sake of the argument, we overlook this empirical controversy here and we assume it

icy could have a negative effect on the quality of the best students, reducing future aggregate wages and aggregate utility level in that community. Thus, even the individual who directly benefited from that policy could possibly indirectly lose utility. Clearly, it is difficult to assess whether a particular policy provides more benefits than costs to each individual. Moreover, if we take into account that at least one individual would lose his place at the ‘good school’ to the benefit of the first one, the difficulties involved in actually calculating present and future gains and losses become enormous. Worse than that, it may become impossible to calculate them.⁸

The example above (on affirmative action) reveals another difficulty underlying the welfarist approach, especially on empirical grounds: it requires *interpersonal comparison of utilities*. What metrics should we use to measure gains and losses in the above example? How can we compare the intensity of the utility increase for individual A (who received the right to study at the good school) with the intensity of the utility loss for individual B (who lost this very right)? Should we assume that their utility functions are the same? Is it not an arbitrary assumption, given that people have so different preferences?

The difficulties related to defining, measuring and comparing utilities across individuals may not be so serious if one is interested in building economic models intended to serve as tools to understand particular aspects of reality. For example, one could adopt the definition of utility as a normative tool (definition (iii) above), assume it has some properties (e.g., it is measurable and comparable) and derive implications of different allocations of education to social welfare. However, such an approach is not satisfactory for more concrete and pragmatic interests - such as evaluating distributions of educational outcomes - and the technical problems described here become of great concern.

3.3.2 More fundamental problems: the monopoly of subjective information

There is no accurate utility information available; there is no satisfactory way to obtain it; we do not even know precisely what it is. Even

does decrease it.

⁸The strictly technical difficulty described here (i.e., informational costs of measuring utility are high) is not necessarily a problem if we are working with abstract models - we just need to assume they are measurable and work out the implications of the model. However, there is also an epistemic issue involved: *it is impossible to actually measure utilities*, that is, there is no possibility of inventing such thing as an “inter-temporal utilometer”, at any cost. For practical issues, the impossibility of measuring utilities is an important deficiency.

if technical problems were solved - for example, if it became possible to collect reliable and accurate information on each individuals' utility level - more fundamental problems regarding welfarism would remain. The most acute criticisms to welfarism essentially contest two inter-linked implications: (i) that non-utility information is ignored, and (ii) that every variable which impacts on utility is assumed to be relevant.

With regards to (i), we have already mentioned in section 2 that if we assume welfarism, freedom matters only to the extent that it provides more utility to the individual. However, observers from very different schools of thought consider that freedom is so important that it must be attributed some value for its own sake, regardless of its impact on welfare⁹. This is also true for other intangible values such as some individual and collective rights, emancipation, self-respect, or autonomy.

Even more tangible elements, such as the possession of some material holdings - say, shelter, food etc - matter to an extent which is not adequately captured by utility information. The classical example of 'entrenched deprivations' or '*cheap preferences*' is that of slaves who adapt to their condition up to the point of being happy or satisfied with their situation - a situation which is in fact miserable from an objective viewpoint, given that they are not entitled to none of the intangible or tangible values listed above. The same might happen to individuals in situations of serious material deprivation, or to groups of people (e.g., ethnic groups) whose social achievements are consistently lower than those of other groups. It does not matter how bad their situation is from an objective perspective, these individuals or groups might still be quite happy or satisfied, for example, because of deep religious faith. However, it does not seem reasonable to ignore all non-utility information (e.g., whether people have a minimal level of material holdings) and to focus social evaluations and social policies on 'cheap happiness' or 'cheap satisfaction' of people.

As for (ii) above, welfarism gives absolute priority to utility of individuals, assuming that they summarize all relevant subjective information concerning their well-being. Utility functions might depend on material resources (say, income), but also on personal preferences, aspirations, beliefs and desires. At a first sight, its respect for peoples' diversity - that is, for their preferences, aspirations, beliefs and desires - constitutes a great strength of welfarism, as opposed to paternalistic views that would impose to individuals the goodness of specific commodities. However, this respect may lead to embarrassing implications, whenever the preferences, the beliefs or the desires cannot be

⁹See, for example, Rawls (1971), Nozick (1974), Sen (1992), Van Parijs (1995), and Laslier, Fleurbaey, Gravel, and Trannoy (1998).

legitimated. For example, beyond the problem of adaptation to bad situations, such as those of entrenched deprivations, mentioned above, preferences may be problematic because they may include patterns of behavior society is not willing to accept. Conceding to people's desires such an important role implies having to deal with a problem which is the inverse of the 'entrenched deprivation' one: that of '*expensive tastes*'. Some individuals might develop so sophisticated preferences that society would have to spend a considerable amount of money just to make them happy or to satisfy them.

Other objections have been directed to the welfarist perspective. Some individuals may virtually be "*pleasure-machines*" such that every single dollar allocated to them generates a large amount of utility, what would ask for a policy which gave them absolute priority with respect to other individuals. It is difficult, on moral grounds, to adhere to such a policy. Finally, people might have inaccurate beliefs due to the possession of inaccurate information - and that might lead them to take bad choices. While a modest amount of paternalism could arguably 'help' individuals such that they make bad choices less often, paternalism is incompatible with welfarism.

To sum up, welfarism requires goodness-of-society to be evaluated in terms of an *aggregation of individuals' utility (welfare)*, an index that varies, according to individuals' own preferences, aspirations, beliefs, and desires, and the extent to which individuals are satisfied. Individuals' material holdings, as well as their degree of freedom, entitlement of rights, emancipation, self-respect and autonomy can also be valued, but only through their effects on welfare, and not per se. While utility may express individual welfare to a certain extent (with the technical and fundamental caveats already mentioned), it is difficult to defend it as a good basis for judging social evaluations and for designing social policies; unless if we are willing to base important (objective) choices a society has to make on a contestable (subjective) mental metrics, with a great risk of facing the problems of cheap and expensive preferences.

There are problems related to the other assumptions that compose the welfarist perspective - consequentialism, individualism and self-centeredness - but that we have taken for granted until now. We will turn to those issues in sections 4 and 5, and in other chapters of this thesis.

3.4 Social advantage functions

If we reject taking utility as the appropriate currency of justice, what alternative attribute could we turn to? Particularly, what is the appro-

appropriate currency of educational justice? And what are the implications of adopting another currency of justice for issues related to the second step of the evaluation of distributions procedure, namely, the aggregation/evaluation step (cf. section 1)? These issues are discussed in this section.

In section 3.3, we have argued that a number of crucial problems derive from assuming the welfarist approach, as it has been defined in section 2. Suppose now that we still accept consequentialism, individualism and self-centeredness, but that we reject welfarism. Goodness-of-society evaluation set would then be expressed in terms of individual-specific indicator functions, $I_i(E_i, H_i, \dots)$, whose arguments would be end-states relevant for each of the n individuals.

It is possible to provide some substance to this indicator function without having to replace it by a utility function. A series of alternatives have been suggested in the literature which can be gathered under the label of ‘non-welfarist’ or ‘post-welfarist’ approaches¹⁰, and that include those provided by Rawls (1971), Dworkin (1981a,b), Sen (various), Cohen (1989), Arneson (1989), Van Parijs (1995), Roemer (1998), among others.

A major non-welfarist approach has been stated by political philosopher John Rawls, whose theory of justice is a response to the welfarist conception of the good society, which prevailed as a dominant view among political philosophers and economists until the 1960s. Based on two principles of justice, Rawls (1999) claims that a just society is one that assigns the highest possible level of “primary goods” to the group of worst-off individuals, provided that a certain level of liberty for all is guaranteed¹¹. According to Rawls, primary goods are those which every rational individual would want, under appropriate conditions, whatever his or her conception of justice, and whatever his or her life plan.

Clearly, when we turn from welfarism to Rawls’ theory, the currency of justice shifts from a subjective measure (utility) to an objective one (a set of primary goods). All the problems related to the subjectiveness of utility vanish away when primary goods replace utility - for example, information not related to individuals’ welfare can be taken into account in the evaluation of society. However, the drawback is that the virtues related to the subjectiveness of utility also vanish away. For example, as argued by Sen (1992), Rawls does not take sufficiently into account the diversity of human beings and assumes that

¹⁰We borrowed these terms from Maguain (2002) and le Clainche (1999).

¹¹Rawls’ primary goods are: (a) basic liberties, (b) freedom of movement and choice of occupation, (c) powers and prerogatives of offices and positions of responsibility, (d) income and wealth, (e) social bases of self-respect, (f) leisure.

all individuals can benefit equally from a given set of primary goods¹². Individual preferences are taken into account only to the extent that they do not clash with the two principles of justice, but in fact Rawls imposes, so to speak, primary goods as the attributes to be valued by *all* individuals, in a paternalistic way (primary goods are defined by Rawls himself). In addition to that, there are difficulties regarding the procedure that should be employed in order to aggregate different primary goods, which creates obstacles to policy analysis.

While Rawls built his work as an alternative to welfarism, Amartya Sen built his own theory trying to go beyond both welfarism and Rawls's 'justice as fairness'. The theory outlined in Sen (1985) tries to put forward the ingredients of quality of life as the currency of justice. He defines two central concepts: (i) *functionings*: doings and beings that, taken together, constitute the quality of life; (ii) *capability*: represented by the set of functionings from which a person can choose. He claims that his "central idea is to see the basal space [i.e. the currency of justice] in terms of what people are able to be, or do, rather than in terms of the means they possess", in a clear contrast with Rawls' primary goods.

In the debate over the appropriate currency of justice, Sen's contribution consists of trying to reconcile the advantages of both objective and subjective approaches, placing his theory in a somewhat intermediary position between welfarism and Rawlsianism. Sen rejects the subjectiveness of welfarism, by putting forward an objective currency of justice, and in this respect, he is not far from Rawls. However, functionings are valuable objective *achievements* of individuals (and not *means to achievements* such as Rawls' primary goods). Moreover, while primary goods are defined by Rawls himself, and are to be evaluated according to a scale which is fixed across individuals, Sen's functionings are to be *defined by each society* and *valued by individuals themselves*. Each individual may convert means (say, primary goods) into ends (quality of life) in a different fashion, leaving room for individuals' diversity¹³. As compared to functionings, utilities are too subjective and primary goods are too objective. Finally, Sen also tries to integrate non-consequentialist concerns, namely freedom (capabilities), which were completely absent in the welfarist analysis, but already greatly emphasized by Rawlsian first principle of justice. We

¹²Rawls' view can be represented as follows: $I_i(\cdot) = I_j(\cdot), \forall i, j$, where I is the valuation function.

¹³Sen's view can be represented as follows: $I_i = f_i^m(\cdot)$, where the valuation function I_i is defined by $f_i(\cdot)$, an individual-specific function which converts tangible and intangible commodities into concrete functionings (achievements), and m indexes socially relevant functionings.

will return to that topic in section 4.

Other non-welfarist approaches provide alternative currencies of justice. Dworkin (1981a,b) defends “(extended) resources”, Cohen (1989) prefers “midfare”, while Arneson (1989) defends “opportunity for welfare” (not straight welfare). Roemer (1998), in turn, talks about “advantages”, without defining precisely what it is, exactly because he wants to give more generality to his framework. While each of these approaches works in a different space (i.e., a different currency of justice is selected by each author), they share the important feature of trying to simultaneously escape the difficulties encountered by the benchmark represented by the welfarist approach, and to go beyond Rawls. We shall not discuss in detail each alternative here, nor will we try to take position in favor of one of them, because this goes beyond the scope of this chapter.

Roemer’s terminology (“advantage”) seems to be a very general one, and so hereafter whenever we generally refer to non-welfarist approaches, an ‘advantage function’, $A_i(\cdot)$, will play the role that utility functions plays in the welfarist setting. More precisely, $A_i(\cdot)$ is taken to be a function of the vectors of all features which may be relevant for individuals according to each particular theory - it can include health status, educational outcomes, income etc.¹⁴ Importantly, if we adopt a non-welfarist perspective, we cannot use SWFs as such in the aggregation/evaluation step (the second task in the evaluation of distributions). We have to employ, instead, what is sometimes referred to as Social Advantage Functions (SAFs for short).

Just as it would be insightful to analyze different SWFs in relation with education as we mentioned in section 3.1, it would be even more instructive to analyze the relationship between different SAFs and education, given that they do not present some of the problems implied by the adoption of welfarism. For example, since Rawls does not classify education as a primary good, it would be interesting to understand the impacts of education, either on the *individual advantage function* derived from Rawls’ theory (whose argument is the set of primary goods held by each individual), or on a *SAF* derived from the Rawlsian conception of justice (that is, a maximin across individuals’ indices of primary goods). Alternatively, one could try to speculate on the effects of education on individual achievements and freedom as defined by Sen, or to scrutinize the relations between education and SAFs defined in the space of functionings and/or capabilities. The same reasoning could be employed for “midfare”, “extended resources”, and so on.

¹⁴We are not adopting Roemer’s theory at this point. We are only borrowing his terminology to rename the indicator function.

As in the welfarist case, some important choices would also have to be made in non-welfarist approaches in order to indicate the appropriate description of the relationships between education, income and other relevant variables and advantages. All the SAFs mentioned here would tend to consider education simply as one ingredient that can contribute more or less to social justice, via its impacts on individual advantage functions. In other words, all these theories adopt an integrated, or general justice, perspective. Kolm (2002) defines this view as “macrojustice”, which concerns “basic rights of a society and the resulting global distributive justice”. However, defining the appropriate level at which justice is to be assessed is not a settled issue. For example, while Fleurbaey (1996) claims that one essential element of any theory of economic justice is its “extent or field of application”, he concedes that in this respect there is not yet an appropriate device that allows us to determine the appropriate extent or field of application of a given economic theory of justice.

Kolm (2002) distinguishes three levels of justice: (i) *macrojustice*, already mentioned above, (ii) *mesojustice*, concerning “issues which are specific but widespread, important both intrinsically and in volume, and which elicit policies that can affect almost everybody”- justice in health and education would be included in this category, (iii) *microjustice*, which concerns particular, very local, situations where issues of justice are raised (say, allocation of resources inside a hospital or a school). Clearly, Kolm (2002) sets useful upper and lower bounds for ‘justice in education’ issues. In section 4 we argue why we think pursuing mesojustice is justified when we are addressing educational justice issues. Adopting such a mesojustice approach implies that, just as our analysis should not focus on SWFs, neither should it focus on macrojustice SAFs.

4 The educationist approach

4.1 Defining educationism

In this section we examine what is at stake when education is taken as the currency of justice. Note that we are still assuming *consequentialism* and *individualism*, so we only care about end-state variables as they are valued by individuals. In the educational sector, such variables could take the form of an individual’s total years of schooling, or the highest certificate she has obtained, or the score she gets in

a particular test.¹⁵ Most frequently we will take standardized test scores as the educational outcome variables that represent individuals’ advantages. In any case, selecting either test scores or any other educational outcome variable as currency of justice implies we also adopt *self-centeredness*, since each individual is assumed to value only his own educational achievement, independently of that of his classmates’ or his fellow citizens’.¹⁶

If the individual utility functions, $U_i(\cdot)$ have been redefined in section 3 as (general) advantage functions, $A_i(\cdot)$, now they have to be redefined once again. To be sure, the goodness-of-society evaluation set has now to be split into a series of subsets (see Diagram 3). Specific normative principles must be established in order to regulate the distribution of inputs and outcomes for each subset.

Diagram 3. Goodness-of-society evaluation set: From “advantages” to segmented justice.

$$\begin{bmatrix} A_1(\cdot) \\ \vdots \\ A_n(\cdot) \end{bmatrix} \rightarrow \begin{bmatrix} E_1 \\ \vdots \\ E_n \end{bmatrix} \cdots \begin{bmatrix} H_1 \\ \vdots \\ H_n \end{bmatrix} \cdots \begin{bmatrix} G_1 \\ \vdots \\ G_n \end{bmatrix} \cdots$$

The attribute in each subset is different. So, in the educational sphere, they are educational outcomes (E_i); in the health sphere, they are health-status variables (H_i); and so on. The particular sphere that interests us here is of course the educational one, and we shall label our approach an ‘educationist’ one¹⁷. ‘Social educational functions’ (SEFs) will have to be employed in order to aggregate and evaluate educational outcomes across a given population: $\tilde{E} = f(E_i)$, where \tilde{E} is a measure of society’s ‘social valuation of education’ or ‘educational advantage’, given by an aggregation/evaluation function, f , defined over individuals’ educational outcomes.¹⁸

¹⁵This choice is not so pressing in this chapter, although it certainly would be in empirical ones, such as Chapters 3 to 6.

¹⁶Educational outcomes may have some characteristics of a “positional good” - the value of the amount of what I have depends on the amount of what others have of that same good. In such a situation, self-centeredness would cease to be a reasonable assumption. While we acknowledge the positional-good aspect of education, we believe ignoring it does not harm our argument here. In chapters 3 and 4, we will return to that discussion. On positional goods and education, see, for example Brighouse and Swift (2004).

¹⁷The term ‘educationist’ is adapted from Schneider-Bunner (1997), who uses the term “healthist” to refer to a health-status-based approach.

¹⁸A “healthist” observer would be worried about $\tilde{H} = g(H_i)$, where \tilde{H} would represent ‘health-related advantages’ or ‘social valuation of health’.

4.2 Justifying educationism

We now justify the adoption of an educationist approach on three grounds. The first point we want to make is that education is a valuable asset for individuals, which implies it is relevant to care about the degree of fairness of its distribution. The second one is ‘technical’: treating educational justice as an independent sphere of justice is feasible not only in abstract terms, but also concretely. In our view good properties are associated with the adoption of educational outcomes as a currency of justice. The third point consists of claiming that adopting an educationist perspective does not necessarily imply a conflict with a macrojustice perspective.

4.2.1 The value of education

We first turn to the value of education and to why it is important to care about the degree of fairness of its distribution. At least since the seminal works of Schultz (1963) and Becker (1964) economists recognize that education has an important economic value. They saw educational outcomes basically as *important means* for achieving a wide array of personal goals. Educational achievements can be good predictors of the access to college, of future earnings capacity, and of the social position an individual holds.

But education is also likely to be positively correlated to outcome variables or “advantages” valued by *various theories of justice*, and not only within the normative framework usually adopted by economists (namely, welfarism, cf. defined in section 3.1). Being more educated enhances the probabilities that an individual becomes “happier”, at least up to a certain level of education (Hartog and Oosterbeek, 1998). But more educated individuals might also score higher in the distribution of primary goods defined by Rawls (1999), of functionings (achievements) and capabilities (freedom) defined by Sen (1985), but also of other “mesojustice” attributes, such as health status, for example (Grossman, 2005; Hartog and Oosterbeek, 1998).

Educational outcomes are also an end or an achievement, since they are attributes of a “good life”. In other words, being educated has an *intrinsic value*, regardless of the effect education might have over other, contemporaneous or future, objectives. Being more educated widens the capacity of processing information and understanding the world one lives in - in other words, it opens peoples’ horizons. To Amartya Sen, for example, a minimal level of education is a requirement for people to live decently. United Nations’ Human Development Index (HDI), inspired by the work of Sen, rank countries according, not to only their income per capita, but also to some rough measures

of health status and education.¹⁹ Education is defined by Fleurbaey (1995) as one of the core achievements of individuals which society should care about (“réalisations fondamentales”).

While correlated, *income and educational outcomes are not perfect substitutes*. When the currency of justice is income, for a given society to achieve social justice as defined by John Roemer²⁰, this society could opt, either to massively change the allocation of school resources (as suggested by Betts and Roemer (2004)), or to redistribute income massively (as suggested by Roemer et al. (2003)). However, while important for many reasons, massive income redistribution is, in a sense, a second-best solution for the problem of social justice, since it is a *curative* or *remedial* approach. The first-best situation would consist of educating people as well as possible, as Betts and Roemer (2004) suggest, such that they can earn a substantial fraction of their income on their own - a *preventive* or *empowering* perspective.

Rawls (1999, p. xiv) defends a property-owning democracy, which for a number of reasons, while relying on competitive markets, tries to disperse the ownership of wealth and capital. He specifies however that this should be done:

“not by redistributing income to those with less at the end of each period (...) but rather by ensuring the widespread ownership of productive assets and human capital (...) at the beginning of each period.”

Commenting on Rawls’ ideal society and relating it to educational justice, Van Parijs (2004) says:

“From this perspective, an educational system that equips all citizens with all they need not only to find a decently paid job, but also to get along in the other aspects of their lives, such as choosing a doctor, renting a flat or selecting an internet provider, is of paramount importance.”

According to such views, which we share, income redistribution should be employed to complement peoples’ income and to insure them, but not as a permanent and sustained substitute for peoples’ use of their own personal skills. Moreover, as Roemer (1998) warns us, redistribution mechanisms are not a panacea, for at least three reasons: (i) tax-and-transfer mechanisms create its own inefficiencies, (ii)

¹⁹Although there is a correlation between countries’ GDP per capita (evaluated at PPP exchange rates) and their HDI, the rankings based on each of the measures do not necessarily coincide. For example, in 2003, Sweden ranked 22nd in GDP per capita, while it was 6th in the HDI ranking. South Africa, in turn, was 52nd in GDP per capita, but only 120th in terms of HDI.

²⁰We will discuss Roemer’s theory more carefully in section 5

individuals may derive self-esteem from working at more skilled jobs, (iii) income taxation distributes money not only from advantaged to disadvantaged types of individuals, but also from high-effort to low-effort individuals (of similar types), which is ethically contentious.

The (factual) partial non-substitutability of income and educational outcomes suggests two interrelated implications. First, from an ethical viewpoint, we cannot be sure that transferring money to disadvantaged people will be as good, for them and for their descendants, as raising their skills. Second, from an efficiency viewpoint, it may be wiser to make people less dependent upon transfers, which is all the more important in the context of increasingly constrained welfare states and of an aging population in rich Western countries, but also for developing countries facing challenging trade-offs in the allocation of their restricted budget.

4.2.2 Technical benefits

Educational outcomes can be an *objective* currency of justice. Thus they can be measured (more accurately than utility and some kinds of advantages such as ‘freedom’, ‘extended resources’, or ‘opportunity for welfare’), and compared across individuals. Taking such currency of justice saves us from the difficulties faced by cardinal welfarism, which are related to measurement and interpersonal comparison of utilities, but also from the narrow perspective offered by ordinal welfarism²¹. In a welfarist framework, weighing losses and gains of a given policy is a potentially unfeasible task, since in actuality it is impossible to compare across individuals subjective attributes such as utilities²². In an educationist approach, instead, it is possible to assess and compare the scores of students in cognitive exams, to know more or less precisely the years of schooling or the highest schooling level attained, or to obtain rough measures of other educational outcomes. Even what we could interpret as the ‘ultimate educational outcome’, at least from a strict economic perspective, namely, individuals’ earnings, is also a measurable and comparable attribute.²³ The difficulties related to measuring attributes, and to comparing them across individuals do not constitute obstacles in an educationist approach.

²¹Ordinal welfarism has been proposed by the so-called New Welfare Economics, assuming away any possibility of interpersonal comparability, taking into account mainly dominance (unanimity) results.

²²Unless we impose further restrictive assumptions concerning the utility function, such as the “representative consumer” assumption discussed in section 2.

²³The difference between measuring income in an educationist approach and in a welfarist approach is that in the former we do not assume that income is a proxy for individuals’ (subjective) welfare, but rather that it is merely an (objective) educational outcome.

Another technical advantage of educationism is the *potential flexibility* in the definition of which educational outcomes are to be chosen as attributes of justice. At least in principle, many kinds of skills, competencies and even by-products of the educational process can be evaluated through an educational certification system. For example, not only one's literacy or numeracy skills can be assessed, but also, say, one's degree of ecological consciousness. The assessment can also be extended to skills that are typically important in the present time, such as the knowledge of English as a second language, or computer literacy (Van Parijs, 2004). The bottom line is that by adopting an educationist approach, we do not restrict ourselves a priori to attributing value only to academic achievements, but we are open to taking a wide array of skills to which a given society decides to give priority.

The third and final technical advantage of using educational outcomes relies on the fact that they can accommodate *non-welfarist and non-consequentialist concerns*. It is acknowledged that traditional welfarist approaches have difficulties in taking into account non-welfarist and/or non-consequentialist objectives such as freedom, emancipation (e.g., of women or ethnic groups), self-respect and autonomy - except to the extent that they impact a person's utility function. Educational achievements arguably contribute to the extent to which a person will attain these objectives. While a minimal level of education is required for a person to be minimally free, emancipated, autonomous and respect herself, it is possible that a higher level of education could help her to enlarge the extent to which these objectives are achievable (i.e. enlarging individuals' choice set).

4.2.3 Is educationism in conflict with macrojustice objectives?

We now raise three points supporting the idea that treating justice in a segmented fashion (as opposed to a unified justice perspective) is not necessarily a mistake.

The first point we would like to make is that *segmenting justice is not necessarily harmful to macrojustice*. One major drawback of segmented justice, according to Kolm (2002), is the risk of incurring in Pareto inefficient situations: "an equal allocation of each of several goods is generally Pareto inefficient because people have different tastes". For example, individual A might prefer to have more education and less health, whereas individual B might want exactly the opposite, and the achievement of equality in health and education separately may be sub-optimal in the Pareto sense. Both Kolm (2002) and Tobin (1970) believe this problem can be attenuated by partition-

ing the bundle of consumption in the particular fields at stake between those which are substitutable with other goods and those which are not. For example, in health issues, the former could be represented by drugs used for comfort, while the latter would be basic health care needs that are used to keep one alive: “the case where health can uncontroversially be considered in isolation is when it matters with priority”. In the case of basic health needs, treating justice in health as an autonomous separate entity is unlikely to produce (morally relevant) Pareto inefficient allocations. The drugs used for comfort, in turn, could arguably be dealt with within the framework of income distribution, that is, as a general justice problem. Obvious analogues in education are basic (compulsory) schooling which is not substitutable with other goods, and post-compulsory education, which is substitutable.²⁴

The technical requirements for justice to be segmented within John Roemer’s framework have been analyzed by Calsamiglia (2004). She points out that ensuring segmented justice is attained does not generally lead to macrojustice.²⁵ However, she then shows that the problem of global distributive justice (assumed to be Roemer’s equality of opportunity) can be solved by simultaneously solving a collection of local mechanisms. She claims that: “a collection of local mechanisms will decentralize the provision of equality of opportunity if it provides local equality of rewards to effort (...). That is, the incentives individuals are given should not depend on irrelevant characteristics”. With regards to this chapter’s focus, the main point of Calsamiglia’s paper is that she shows segmentation of justice is *not necessarily harmful* to the attainment of macrojustice. These results should ensure those who are not convinced that an educationist approach is appropriate.

A second point we would like to raise is that *people ordinarily think in a ‘segmented way’, that is, they intuitively want justice to be made in different sectors or aspects of life, and such concerns are not necessarily irrational or wrong*. Tobin (1970), for example, diagnoses that widespread tolerance of Americans towards general inequality is “tempered by a persistent and durable strain of (...) *specific egalitarianism*” (author’s emphasis). While the economist may be ‘instinctively’ tempted to want to provide people with more cash income through tax-and-transfers schemes, he claims that an economic rationale can also be employed to acknowledge and justify that some particular kinds of inequalities are more severe than others. He reminds us, for instance, of economic models that have been warning us about the limits of

²⁴We discuss how to partition the educational outcome bundle in sections 5 and 6.

²⁵She uses the terms “local” (cf. Elster (1992)) and “global” distributive justice, respectively.

income redistribution, a result which paves the way for focusing at distribution of specific goods.

Walzer (1983) goes even further. Not only he claims that people are not necessarily wrong to think in a segmented way, but he also defends it is indeed *correct* to do so. His seminal book published in 1983 contains a radical defense of segmentation of justice. Each sphere of justice (education, health, labor market etc.) produces a different kind of good, for different users, and the principles that should regulate the distribution of goods must be specific to each sphere. He rejects a unified conception of justice, and believes that the only general principle that has to be respected at the society's level is that of non-interference of one sphere into the other.

A third reason for not opposing segmented justice a priori is related to *feasibility and tractability*. Fleurbaey (1996) says that "feasibility is a practical value that is worth to be taken into account in the assessment and in the definition of justice". According to Kolm (2002), attaining macrojustice might be a too difficult task, and so pursuing justice in particular aspects or sectors may be a useful intermediary strategy for ultimately driving a society towards a macrojustice situation. Although less ambitious than welfarists', or Rawls', or Sen's, wide-encompassing conceptions of (macro)justice, an educationist approach may be easier to handle in empirical studies and for policy-related issues. And the same might be true for specific goods such as health care, housing, *inter alia*.

Summing up, we can say that segmenting justice is not, in itself, necessarily an irrational instinct or a misplaced reasoning. On the contrary, it may turn out to be a useful way of downgrading complex problems (e.g., achieving macrojustice) into simpler ones (e.g., achieving justice in different spheres). Mesojustice objectives might make sense as independent, autonomous, objectives. Alternatively, under particular technical conditions, or provided some appropriate partitions are undertaken (i.e., between substitutable and non-substitutable goods), segmenting justice objectives can even be compatible with a macrojustice objective and/or Pareto-efficiency.

In this section 4.2 we claimed that education is a scarce and valuable asset, the distribution of which qualifies to become the object of a normative scrutiny - treating educational justice as an independent sphere of justice is thus recommendable. But, importantly, it is actually possible to do so - we claimed educational outcomes possess good properties as a currency of justice. Finally, we defended the view that adopting an educationist perspective does not necessary imply a

conflict with a macrojustice perspective.²⁶ Hereafter, we will assume segmented justice is appropriate in the field of education, but first some objections will be discussed.

4.3 Authoritative, paternalistic, and disrespectful of peoples' needs?

Serious objections can be raised against educationism. First of all, objective attributes have their own problems, as mentioned in section 3, such as overlooking the diversity of human beings (e.g., people might have different goals in terms of educational outcomes²⁷) and assuming that all individuals can benefit equally from a given set of the attribute (here, of educational outcomes), which is not necessarily true. Related to that objection is the one that says educationism is too paternalistic or not democratic, given that some third party (the state, the scholar, the policymaker) decides, in the place of kids, that education is valuable for them.

We believe these important objections can be partially neutralized in three ways. Firstly, one can partition the schooling process in such a way that the respect for human diversity is partially preserved. An educationist policy-maker could state, for example, that society must make sure that all citizens will attain a minimal level of educational outcomes (e.g., finishing secondary school), whereas going beyond such level is a personal choice, dictated by each person's aspirations or preferences (Fleurbaey, 1995; Trannoy, 1999).

Secondly, another partition can be designed which is possibly orthogonal to the first one: subdividing the subjects into a subset of essential ones (say, mathematics, reading, and sciences, but also English and basic computer skills) and a subset of complementary ones (all the remaining subjects). According to each society's priorities, the educationist policymaker would confine his interest to the essen-

²⁶It should be clear that we did not try to make a full-fledged argument here *in favor* of segmenting justice. Other people have already expended considerable efforts in this sense - such as Walzer (1983), Elster (1992), Young (1994) - and such task is out of the scope of this chapter. The point we wanted to make was a weaker one, namely, that segmented justice *might* make sense.

²⁷In a backward region of a developing country, being capable of reading and writing might be enough to lead a 'fairly good life', while in a highly developed country, holding only that skill may not be enough even to find a low-paid job. Note that this problem is related to different *implications* of *educational outcomes*. This issue will be addressed in our discussion about the *unit of reference* in chapter 3. On the other hand, because of differential levels of talent, two individuals might have different *needs* in terms of *educational inputs* (say, one type of kid needs to spend more time with the teacher than another type), we address in section 5.

tial subjects - those which every person needs in order to live well in contemporary world - and ignore the other ones, which are not of concern of educational justice, but regards the private sphere of individuals.

Thirdly, these objections can be partially taken into account by an adequate definition of the reference group or unit of analysis. It is probably senseless to compare the education level of rural workers' kids in poor Brazil's North-East with top executives' kids in Manhattan. However, comparing the educational achievements of middle class' kids in different neighborhoods in a given city, or different regions in a given country, might be meaningful.

With appropriate partitions of the schooling process and an appropriate choice of the reference group, criticism on paternalism would be confined to the initial levels of the schooling process and to the essential subjects in the relevant unit of analysis. Initial levels of the schooling process (for which the paternalistic critique would hold) are essentially attended by kids, who cannot be considered as fully autonomous citizens, capable of taking informed and rational decisions. Children's outcomes depend strongly on the behavior adopted, and the decisions made, by their peers, parents, teachers and other school staff, and the educational authorities (e.g., decisions concerning education resource allocation). For these reasons, "consumer sovereignty" should not be taken for granted in the schooling sector, and because of that some degree of paternalism might be tolerated, and even recommended.

Moreover, the partition of the educational process into essential and non-essential subjects neutralizes criticisms on the non-essential subjects. The latter are taken to be substitutable, ordinary goods, which means that each individual is absolutely free to decide which amount he prefers to dispose of them. As for the essential subjects, it is difficult to claim they are not of paramount importance, firstly per se, and secondly as the ingredients for any other social goal people are to attain in their lives. If this is true, it should not be a problem to assume them to be non-substitutable. For these reasons, some degree of paternalism can be justified.²⁸

²⁸It should be noticed that schooling systems, as they function now, with compulsory attendance laws, are already paternalistic, and yet this fact is not contested to a great extent.

5 Equality of educational opportunities

Having agreed that a vector of essential educational outcomes can be taken as the currency of educational justice, we could turn to the stage of scrutinizing possible aggregation and evaluation procedures, that is, the second step mentioned in section 1. Concretely, it would consist of a discussion about the normative bases and the implications derived from the use of different SEFs. For example, we could investigate a normative position which would recommend maximizing the total sum of educational outcomes, regardless of the distribution of these outcomes (analogous to a utilitarian SWF, but in the space of educational outcomes). We could compare it with a an outcome-egalitarian one, which would not give any importance to the total amount of education in a given society, but only to the extent to which the distribution is close to equality. Both could be compared with a maximin objective, or with combinations of all these. To sum up, by the use of different SEFs various normative views could be scrutinized.

Something else has to be done, though, before turning to that second step in the analysis of distributions. Sen (1992) correctly warns us that human diversity has to be taken into account in a consistent analysis of justice - not only the diversity of observers mentioned above, but also the *diversity of the object itself*. Indeed, pupils differ in many senses: they have different preferences, beliefs and aspirations, as we have already mentioned. They are also differentially endowed in many dimensions: natural talent, social capital, family support, access to school resources (monetary and non-monetary). They exert different degrees of responsibility at school: some work hard; some do not. Some choose to spend more years studying; some spend only a few years. At the individual level, these features matter for the production of individual educational outcomes; at the aggregate level, they shape the distribution of educational outcomes of a given society.

Inequalities of outcome variables, such as educational outcomes, are caused by acceptable factors (say, differential effort accomplished by pupils) and unacceptable factors (say, differential capacity of parents to help children at school). For a normative goal to be legitimate, it has to take into account that while a fraction of the inequality is morally justified, the remaining fraction is unjustified. What was missing in our discussion until this moment was the inclusion in the picture of some criterion that helped us drawing a frontier between the acceptable and the unacceptable, otherwise the moral foundations of any of the SEFs commented above would run the risk of being too fragile. For example, it would be hard to justify on moral terms an

objective function that recommended the maximization of educational outcomes if the inequalities encountered in a given allocation of educational outcomes were caused essentially by unacceptable factors. It would also be difficult, in turn, to defend an outcome-egalitarian objective function, if an hypothetical equal allocation of educational outcomes were to be obtained as a result of educational policies which induced high-performance pupils to exert less effort than they would have exerted otherwise, in such a way that low-performance kids are now able to reach high-performance kids²⁹.

At first sight, ‘intermediate’ SEFs - defined as those whose inequality aversion parameters are such that they are placed somewhere between the extreme cases, that is, the egalitarian and the sum-maximizer SEFs - would constitute good compromises of ‘efficiency’ and ‘equality’. But making such a statement is not enough for providing a somewhat rigorous definition of educational justice.³⁰

To escape the limitations related to evaluating distributions only in terms of outcomes (regardless of their causes) we need to condition the distribution of the attribute at stake in some sense in order to, among the characteristics which lead individuals to obtain a given educational outcome, to distinguish the acceptable from the unacceptable ones. We do not have the ambition to provide a precise criterion on how to draw the cut that separates the acceptable inequalities from the unacceptable inequalities in the educational sector, since this would require another study. We prefer to work with a very general and pluralistic demarcation, according to which inequalities due to *circumstances* (what is out of control of the individual) are unacceptable, while inequalities due to *choices* made by the individual (what is under control of the individual) are acceptable, cf. Roemer (1998).

5.1 Roemer’s EOp transposed to education

Let us now briefly present what we consider to be a fruitful framework for providing some more structure to the general goal of equalizing educational opportunities.

²⁹Provided that the fraction of inequality caused by differential effort is acceptable.

³⁰An approach which consists of obtaining an unresolved ‘trade-off’ as a result of a reasoning or modeling procedure, is usual among economists. A remarkable example are public economic models where there is an inequality aversion parameter defining an ‘equity-efficiency trade-off’, which is left to be solved by the (imaginary) social planner. Rawls (1999) criticizes such an approach, which he labels “intuitionist”, on the grounds that it does not try to give guidelines on what society should do. While we see the interest of economists’ trade-offs, we believe it is important to take into account Rawls’s critique and try to go beyond the ‘neutral’ position economists usually adopt. We tend to support Rawls’ position when normative issues are being dealt with, as we do in this chapter.

Equal-opportunity ethics (Roemer, 1998) maintains that differences in the degree to which individuals achieve the goal in question that arise from their differential expenditure of effort are, morally speaking, perfectly all right. The partition of causes into circumstances and effort (or autonomous choice) is the central move that distinguishes Roemer's EOp ethic from a strictly *outcome-egalitarian* conception of educational justice. While the latter vision implicitly holds the individual responsible for nothing, EOp emphasizes that an individual has a claim against society only if he expended sufficiently high effort. But EOp has also to be distinguished, on the other extreme, from a merely *aggregative* normative position, which refrains from inquiring about the causes leading individuals to attain certain outcomes. Such a position implicitly attributes full responsibility to the individuals, ignoring their circumstances.

Pupils vary in their propensity of attaining some goal (e.g. get a certain score in maths), due to circumstances - such as their race, or the socio-economic status of their parents. And the bedrock of the EOp is to consider that they should not be held accountable for these circumstances-related achievement differences. In order to equalize opportunities for young people to acquire essential educational outcomes, the schooling system should be organized in such a way that a pupil's score in, say maths, is a function only of his effort and not of his circumstances.

Following Roemer (1998), we should divide pupils into types assuming that all pupils *within a type* face the same set of circumstances. All the variation of educational outcomes (say, test scores) of pupils within a given type would then be assumed to be caused by differential personal effort, and given that the amount of effort expended is a choice made by the individuals, there should be no compensation for score inequalities within type. The across-type differentials, in turn, would require compensation, since they would be assumed to be caused by circumstances.

Putting together all the elements outlined in the previous sections (namely, those which led us to defend the choice of essential educational outcomes as a relevant currency of justice) and this section's discussion (namely, the requirement of conditioning the evaluation of outcomes on individuals' circumstances and choices), we conclude that a reasonable normative goal in terms of educational justice consists of *equalizing opportunities for achieving essential educational outcomes*. Inequalities due to circumstances should be avoided *ex ante* or compensated for *ex post*, while inequalities due to choices should neither be avoided, nor compensated for.

We now have to shift from an evaluation set whose attributes are

unconditional educational outcomes, E_i , to one whose attributes are essential educational outcomes, EE_i (or simply S_i , for scores), conditioned upon individuals' circumstances, c_i , and individuals' choices or responsibility r_i , as we can see in Diagram 4.

Diagram 4. Educationist evaluation set: From unconditional educational outcomes to conditional/essential educational outcomes

$$\begin{bmatrix} E_1 \\ \vdots \\ E_n \end{bmatrix} \rightarrow \begin{bmatrix} (S_1 | c_1, r_1) \\ \vdots \\ (S_n | c_n, r_n) \end{bmatrix}$$

In addition to the definition of a precise currency of justice, we can now also define the aggregation/evaluation procedure which will be used in the following sections. Roemer (1998) defines the EOp problem as follows: “to find the policy φ that maximizes the minimum level of advantage [educational outcomes here], across all types, of individuals who expend the π^{th} degree of effort for their type.” The associated objective function, adapted to our purposes, is:

$$\max_{\varphi} \int_0^1 \min_t S^t(\pi; \varphi^t) d\pi \quad (1)$$

where: t indicates the type to which the individual belongs, S is the score function, π represents the within-type quantile, φ is the education resource allocation policy.

5.2 Is it reasonable to hold pupils accountable for their educational outcomes?

An important objection to the normative objective of equality of educational opportunity as we defined it consists of saying that the distinction between circumstances and choices is not relevant in education (De Villé, 2003). After all, is it reasonable to hold pupils accountable for their effort, given that they are not adults, but merely kids or teenagers? Can we consider them to be fully able to take autonomous and informed decisions? Can they be held totally accountable for important choices they have to make in their schooling years (e.g., allocation of their time between leisure vs. studying)?

During a large fraction of their school lives, individuals cannot be said to be perfect judges for what is good for themselves; kids are possibly “economically myopic”, since they are unable to evaluate all the future benefits that are made available if he or she acquires

education in the present time, and they make choices according to other, non-monetary, motivations, such as identification to their peers group (Akerlof and Kranton, 2002). If we push the argument far enough, we would conclude that circumstances account for virtually all the variability of educational outcomes, that is, that all inequality is unacceptable, which would amount to say that Roemer’s theory is not necessary in this case - we could trivially conclude that the policy objective must be one which consists of equalizing pupils’ scores (i.e., outcome-egalitarianism) or, alternatively, of maximizing scores of the pupil with the lowest score (i.e., straight maximin function).

The objection makes some sense. Indeed a great part of inequalities in educational outcomes could be attributed to circumstances. However, it is also true that a fraction of educational achievements can be credited to the pupil itself, at least to those of a certain minimal age. While it is clear that considering a 5 year-old pupil accountable for his efforts is not reasonable, the claim loses strength when we are talking about a 14-15 year-old youngster, who lives, and is being further prepared to live, in societies where people are, at least partially, held accountable for their acts (Trannoy, 1999). For his own (future) benefit, he should be prepared to respond for his acts. Acquiring knowledge and skills depends upon natural and social circumstances (talent, quality of family support etc.), but it also requires personal commitment and effort, and these variables can be considered to be under control of the individual to a certain extent.

For the design of our proposal in section 6 we will seriously take this objection into account and we will try to cope with it by attributing to circumstances a weight which will be decreasing with age.

5.3 ‘All are circumstances’: Roemer converging to Rawls?

Rawls’s maximin rule is carefully justified as the outcome of a “veil of ignorance” mental experiment and such rule takes efficiency into account. However, maximin has been criticized for being too extreme, since *de facto* only the situation of the worst-off individual is valued. To respect the maximin rule, any resource surplus that might exist must be allocated to the pupil whose performance is the worst, irrespectively of how large this surplus is and of how many people would have to forego this surplus (Fleurbaey, 1996; Sen, 1992). Moreover social priority is given to one individual (or group of individuals) regardless of the responsibility he or she (they) has (have) exerted.

In the general case Roemer’s solution avoids the problem of “dictatorship of the worst-off individual”, since its maximin runs *across*

types and not simply across individuals. A priori, at each percentile a different type can play the role of the ‘dictator’, a role which actually is never played fully, given that the weight of each percentile in the final averaging formula is only one percentile.

If a society believes circumstances fully determine a pupil’s achievements (that is, ‘all are circumstances’) then *each individual should be treated as a type* in Roemer’s objective function. In such case, the definition of types would then be a degenerate one, and Roemer’s objective function would collapse into a straight maximin objective function (Roemer’s maximand converges to Rawls’ maximand.). The associated score-EOp allocation rule would then require the maximization of the scores of the pupil with the lowest performance - precisely, a “dictatorship of the worst-off”.

Straight maximin objective would require decreasing the educational inputs allocated to other pupils and, consequently, their educational outcome. The reduction of inequalities that shall be obtained as a result of the application of such allocation rule would probably lead to a decrease in the average level of scores. This implication is a common critique of the maximin criterion, known as the “levelling down” objection. If an important role is to be assigned to efficiency concerns, it becomes more problematic to assume that circumstances account for all the variability of educational outcomes, since the implication could be an ex post pattern of lower average scores.

But what if it is a fact that ‘all are circumstances’? (That is, it is not a matter of assuming or not). In such case even if a given society is willing to erase educational inequalities for fairness reasons, doing so might be extremely costly, not only because of large talent gaps, requiring enormous investments to push up low-performing pupils, but also because detailed information accounting for all relevant circumstances and choices may be difficult to gather (Trannoy, 2003). Alternatively, a society may refrain from pursuing full equalization and may decide to pursue, instead, some less costly compromise (partial equalization).

In next section’s proposal, we embrace the idea of partial equalization for some stages of the schooling process.

6 A concrete proposal

6.1 Stating the proposal

Our proposal takes into account a series of aspects, some of which were discussed through this chapter. Let us emphasize four important elements:

- priority is given to essential skills in the definition of educational justice,
- the sequential and cumulative nature of the schooling process is taken into account,
- the fact that human capital is embodied in individuals and, as such, cannot be transferred, is also considered,
- the fact that the main agents at issue here cannot be held fully responsible for their outcomes is not ignored.

Roughly speaking, Roemer (1998) defends a policy which consists of an across-types maximin of the advantage at stake. It is a ‘one-shot’ policy, supposed to be applicable to various settings. However, we believe such an approach is not adequate for educational justice issues, due to the fact that schooling is a long, cumulative, and sequential process. Suppose, for example, that a compensatory policy is applied at the beginning, or in the course, of the schooling process, such that a distribution of the outcome which verifies equality of educational opportunity (EEOp) is implemented (i.e., a maximin of scores across types is obtained). It is not excluded that, for a number of reasons (e.g., differential family support), unacceptable inequalities could develop *after* that intervention, such that by the end of the schooling process, an unfair distribution of scores would be observed. The goal of equality of educational opportunities would not have been attained.

Suppose, instead, that the intervention takes place at the very end of the process, say, when individuals are around twenty-two years old. In this case, the intervention would have to take the form of income redistribution, since individuals who are left behind cannot easily catch up the winners of the ‘schooling race’ anymore (due to the cumulative nature of education, the gap may be too wide), nor are the former able to receive ‘skill transfers’ from the latter, given that skills are embodied in the individuals. An income redistribution policy has a number of drawbacks (it is remedial in nature and not preventive as the provision of skills; income and education are not perfect substitutes, with all the implications discussed in section 4, and so on). Finally, an intervention which is made when individuals are already adults does not really place itself within the limited scope

we are assigning here to educational justice, but rather in the broader scope of general justice or macrojustice.

Thus, ideally, an opportunity-egalitarian policy would consist of continuous and extensive interventions³¹ in the schooling process in order to make sure that outcomes which respect EEOp are achieved at each moment.

Even if we leave aside the doubts concerning its feasibility, such a continuous and extensive intervention scheme would not be desirable for reasons outlined in section 5.3. For sure, it would be extremely costly to gather information and implement compensations, for example, every single year. But there are two more fundamental reasons for being against such a continuous and extensive intervention scheme. First, it is important for pupils to gradually become aware that they are responsible and accountable for their own acts and choices (Tranoy, 1999). Second, not all the school subjects are essential - some of them can be seen as substitutable, or luxury, goods. The extent of the compensation needs not be the same when we are talking about kids and when we are talking about young adults, just as it needs not be the same when we are talking about essential versus non-essential subjects. Thus the extent of the compensation shall not be constant, but rather declining with the age (hence, the grade) of individuals.

We assume here that the ability to exert choice and responsibility grows with the age of the individuals. This assumption is implicitly accepted in many domains, for example, in determining that people up to a certain age (typically 16 or 18) do not have, neither the right to vote, nor full legal responsibility, while people above that age do have both. We are also assuming here that the first years at school are those which provide the individuals with the more essential skills (the more general ones) one needs in order to lead a meaningful life, while the last grades provide more specific skills, to be chosen by individuals depending on their aspirations and preferences.

Our proposal is then to assess the extent to which EEOp is verified at key stages of the schooling process, but adopting a gradually declining degree of aversion to inequality. The assessment/policy scheme that we propose is composed of four stages:

- 1. By the end of first half of primary school** (say, when pupils are around 10 years old): circumstances play a prominent role in pupils' performance and society does not wish to hold them accountable for their fortunes and misfortunes. Compensation should be extensive. Accordingly, the assessment should be quite intolerant

³¹'Extensive' should be understood here as being ambitious in terms of compensation for unfair unfavorable circumstances.

with regards to inequality.³²

Policy: to apply Roemer’s algorithm with a great number of types, tending to the pupil’s population size ($t \rightarrow n$). At the limit, this recommendation would be equivalent to Rawls’ maximin, but in the space of educational outcomes instead of primary goods.

$$\max_{\varphi} \min_{t, \pi} S^t(\pi; \varphi^t) \quad (2)$$

where: t indicates the type to which the individual belongs, S is the educational outcome (say, test scores), π represents the within-type quantile, φ is the educational resource allocation policy.

2. By the end of primary school (say, when pupils are around 14 years old): circumstances still play an important role in pupils’ performance, but individuals are older and so they understand - if not, they should start understanding - that they are partially responsible for their schooling performance. Compensation should be less extensive than in stage 1. That is, the assessment is more tolerant with respect to inequality.

Policy: to apply Roemer’s algorithm employing a smaller number of types (say, $t \simeq 10$).

$$\max_{\varphi} \int_0^1 \min_t S^t(\pi; \varphi^t) d\pi \quad (3)$$

where: $t = 1, \dots, 10$.

3. By the end of high-school (say, when pupils are around 17 years old): circumstances certainly still play an important role in pupils’ performance, but society attributes to individuals a further degree of responsibility. Compensation should be less extensive than in stage 2. The normative assessment becomes considerably more tolerant with respect to inequality.

Policy: to apply Roemer’s algorithm with a small number of types (say, $t \simeq 5$). The results of the assessment undertaken at this point could serve as a guideline, for example, to decide on what candidates should be admitted

³²It should be noted that our proposal for this initial stage of the schooling process is inspired by that of “equality of fundamental achievements” (in french: “égalité de réalisations fondamentales”), proposed by Fleurbaey (1995), inspired by the work of Sen (various), and further developed for the educational sector by Trannoy (1999).

to colleges. In the light of this assessment, some forms of affirmative action may be legitimated, while others may not.

4. By the end of college studies (say, when individuals are around 22 years old): now the population is smaller, since we are talking about those individuals who made their way through the whole educational system. Individuals are now already adults: circumstances fade away, and responsibility takes the prominent role. The assessment is insensitive to educational inequality, except to the restricted extent of the Pigou-Dalton principle³³. A country (or a country's region) can have its educational system evaluated and ranked exclusively in terms of efficiency, by means of an aggregative SEF, since equity is not of concern here anymore.

Policy: there is only one type ($t = 1$), that is, all individuals are assumed to have the same circumstances. Merit becomes the only relevant attribute, for examples, in the decisions regarding the selection of graduate students, or the allocation of candidates to jobs. The objective function is similar to an utilitarian one (that is, only caring about the sum total), but in the space of educational outcomes:

$$\max_{\varphi} \int_0^1 S^t(\pi; \varphi^t) d\pi \quad (4)$$

After the age of 22, injustices that might subsist are not under the scope of educational justice anymore. Graduate students who, so to speak, 'stay on the educational system', even after the age of 22, have chosen to do so, based on their own (now assumed to be genuine, sovereign) preferences - they are consuming a non-essential good, and educational justice has nothing to say about that. The relevant sphere of justice now becomes that of research or academia, a domain which is to be regulated by its own rules and principles of justice. Most individuals do not attend graduate schools, though; they rather go to the job market, another realm which is supposed to be regulated by its own criteria of justice.

More broadly, at the macrojustice, or general justice, level, society may now have particular concerns for those individuals whose skill levels are low, even with all the efforts of compensation made during the schooling process. In this case, income redistribution becomes a

³³The Pigou-Dalton could be roughly stated as follows: for a given "size of the cake" (or "total human capital stock") a less unequal distribution is preferred to a more unequal distribution. In chapters 3 and 4, we shall discuss this property more extensively

candidate for becoming an EOp instrument, along with specific social policies such as, say, programmes of education for adults, or the assignment of other forms of assets (cf. section 6.4).

In any case, conditional/essential educational outcomes make sense as the currency of educational justice only until a certain stage, which we defined here at around the age 22 and the end of undergraduate. After that, other currencies of justice become relevant for these individuals, either in specific spheres of justice (health-care status, housing conditions etc.), or for general justice (income, assets, primary goods, real freedom etc.).

6.2 An example: illiterate (lazy) pupils

To make clear the content of our proposal, let us discuss one concrete example, namely: deciding on what policy to adopt whenever we find out that some pupils are not capable of performing a certain task or do not have a particular skill. For concreteness, let us assume that although they do not have any serious mental handicap, such pupils do not know how to read because they did not expend enough effort. Let us also assume that since they are not able to read, they are placed at the bottom percentile of the distribution of an essential educational outcome (reading skills).

Now, according to our proposal, if some pupils are illiterate at the age of 10, educational resources should be reallocated in such a way that they are provided all the conditions to learn how to read. Given that at this stage all are circumstances (hence: $t \rightarrow n$), this large social effort required to teach these pupils how to read is legitimate, whatever the possible consequential decrease in resources assigned to other pupils.

Let us imagine now there is a group of pupils who are illiterate when they are 14 (or 17). We cannot say anything in terms of policy without knowing how these pupils perform with respect to pupils of other types who belong to the same percentile of within-type performance. If illiteracy is also affecting pupils of other types, then no particular effort should be undertaken in order to raise the achievements of the former. However, if illiteracy is a problem exclusively affecting pupils of the former type (say, those whose parents are not well-educated), then more resources will have to be allocated to those pupils in order to raise their reading skills. Clearly, the relative performance across-types matters a lot.

A third situation would consist of verifying illiteracy among individuals who are 22 or older. The educational policy prescription would not call for any compensation for these individuals. At this

stage, everybody belongs to the same type, so that those who are illiterate (and so belong to the bottom percentile of performance), made the choice of not making efforts in order to learn how to read, and they are deemed responsible for that. It is not society's duty anymore to make any further effort toward them.

6.3 Possible obstacles

6.3.1 What about cognitive handicaps?

What if some pupils do not know how to read, not because they *chose* not to make efforts, but because they simply *cannot* learn how to read, that is, their genetic endowment does not allow them to do so.

In our view, properly addressing this issue would lead us to a very controversial discussion about how to define the types. As such, this problem does not regard step 4 of our proposal: at that point, types actually need not be defined, since all individuals (including handicapped) are assumed to belong to the same type *as far as educational policy is concerned*. Other forms of compensation might intervene ex post, beyond the educational system (cf. section 6.4), both if a person is illiterate due to choice or to circumstances.

At step 1 ($t \rightarrow n$), in turn, each individual is assumed to be a type and a straight maximin function is the recommended aggregation procedure. Our proposal pushes society to make all possible efforts such that pupils learn how to read. Of course, budget constraints³⁴, but also technological constraints must be respected. Not being able to learn how to read can be understood as a technological constraint.³⁵

As for steps 2 and 3, an extreme solution would consist of creating a type labeled 'handicapped' or 'untalented' and then including in this category all individuals who cannot read due to some handicap. At any given percentile of the distribution of score, individuals belonging

³⁴In this chapter, we adopt a segmented-justice viewpoint and then try to spell out normatively sensible rules for allocating educational resources, taking the issue of the size of the educational budget as given. However, it is clear that deciding on the fraction of the overall budget which should be devoted to education is also an important debate. We believe it is a complex general-justice issue and, as such, should be dealt with in a larger framework by philosophers, economists, and other social scientists interested in general justice.

³⁵Teaching each individual how to read implies a cost, which varies from individual to individual. Then, due to efficiency and fairness concerns mentioned above (Sections 5.2 and 5.3), society will have to make a choice on the weight it will assign to teaching individual(s) who have more difficulties in learning to read. Extremely high costs will entail undesirable implications (both in terms of fairness and of efficiency), so a partial compensation might be preferred.

to this group would most probably be the worst-off when compared to individuals of other groups, so that the recommended policy, according to our proposal, for all individuals below 22 years old would consist of allocating more resources to them. That situation would constitute a ‘dictatorship of the untalented’. Morally there is nothing wrong with such a definition of types and with its implication. We would follow Roemer on this topic: there is no problem if a democratic society decides to give priority to handicapped, defining them as a type, and allocating a considerable amount of educational resources.

However, another possibility seems to be more promising, which consists of defining types according to other criteria, such as parent’s education, ethnic origin, place of birth etc.. In this case, handicapped pupils will most probably find themselves among the worst-off pupils within each type. Consequently, the optimal allocation of educational resources will depend much more on other sections of the performance distribution (where differential performance across types will be found) than in the lower percentiles of effort. In such case, the weight of cognitively handicapped in the determination of the optimal policy will be lower than in the case where an ‘untalented’ type is defined.

6.3.2 What if EEOp is not verified in previous steps?

Until this moment, we have been very optimistic with regards to the effectiveness of the EEOp policies. Indeed, at each stage, we have implicitly assumed that, through the application of Roemer’s algorithm appropriately parameterized in each stage, it was possible, not only to correctly identify the advantaged and the disadvantaged pupils, but also to implement an effective compensation scheme, accounting for all the unacceptable inequalities.

But what if the compensation is not extensive enough at some point? Consider, for example, that a given cohort arrives at the age of 22. If all went well in the previous stages in what regards EEOp assessments and compensatory policies, then we could comfortably be very tolerant with respect to performance inequalities at this age and we could reasonably adopt the solution presented in our proposal, that is, to consider that all the inequality is acceptable (hence, $t = 1$ and $SEF =$ an aggregative one). But what if we have doubts on the effectiveness of the previous compensations? If there are reasons to believe that no compensation at all has been performed, then it makes sense to turn to the opposite extreme case, which consists of fully compensating individuals, that is, to apply to individuals at the age 22 the version of the algorithm we suggested for individuals at the age of 10 ($t \rightarrow n$ and $SEF =$ maximin).

Trickier than these extreme situations (EEOp fully verified vs. EEOp not verified at all), however, would be to decide about how to set up our inequality aversion parameter in intermediate situations, namely, in those cases where there are reasons to believe that EEOp has been verified ‘to a certain extent’ in previous stages. If we face these intermediate situations, we believe there are at least two possible paths to explore, one of which involves shifting the number of types, the other of which involves replacing the objective function.

1. To define an intermediate number of types ($1 < t < n$) and then apply Roemer’s algorithm. In other words, that would mean applying for 22 year-old students the policy we have recommended for 14 and 17 year-old students. Such a solution is the one which is implicit in Roemer (1998: chapter 2), when he presents his algorithm as a general one, of which the utilitarian and maximin are particular, extreme, cases.
2. To set $t \rightarrow n$ (at the limit, treating each individual as a type), but then, instead of using a maximin aggregation function, to employ some more general SEF, such as the usual CES functions (Moreno-Ternerero, 2005). In this case, some trade-off would be left unresolved for the imaginary social planner in the form of an inequality aversion parameter.³⁶

These paths open interesting research possibilities. However, none of these two alternatives seems to offer an adequate device for dealing with situations in which one suspects EEOp has not been adequately verified in previous stages. Too much room is left for the policy maker, and a great amount of “intuition” is called upon. We would suggest, instead, to insist on our proposal (even with potential imperfections), combined with additional policies for young adults. These policies will be briefly discussed in section 6.4.

6.3.3 How to deal with drop outs?

We have not made any comment so far on the possibility that pupils drop out during the schooling process and on the implications this occurrence might have on the normative assessment procedure we have proposed.

³⁶This path has been discussed by Moreno-Ternerero (2005), who introduces an alternative mechanism to implement Roemer’s EOp, but whose aim is not to maximin over some advantage, but instead to minimize the inequality over such advantage, according to some inequality index. Such mechanism is presented as a generalization of Roemer’s algorithm. Furthermore, the author claims the mechanism he proposes is more in line even with Roemer’s own intuition concerning EOp.

We should distinguish two situations. First, suppose the probability of dropping out is orthogonal to the types. In this case, there is no reason to fear that our proposal will be unfair. From a EEOp viewpoint, if pupils decide to abandon the school and if the probability of doing so is similar across types, then drop outs could be viewed as those who choose to exert less effort within each type. Although we may be in face of a serious social problem, this kind of dropping out does not call for a compensation on the grounds of educational fairness. Our proposal is not affected.

The second situation is one in which the probability of quitting school increases with ages and, more importantly, that it is unevenly distributed across types of pupils. Indeed, in some countries, pupils who do not attain a given performance are retained by their teachers and have to repeat the same grade. Typically, repeated failure diminishes a pupil's prospects of finishing a given schooling stage and of acquiring the respective certificate, and it also increases the opportunity costs of staying at school. As a result, some pupils quit schools. Does our proposal have to be abandoned in the face of this problem? After all, how can we be so tolerant with regards to inequality at advanced stages of the schooling process if some pupils face more risks than others at preliminary stages? We believe that the *appropriateness of our proposal tends to be reinforced* in the face of: (i) an uneven distribution of the dropping-out probability across types, and (ii) a positive correlation between age and dropping-out probability. This is so especially because of the emphasis we assigned to compensation at early stages. Intervening at an early stage (say, at 10) might enhance the probability of staying at school since children from at-risk types will be those who will benefit the most from the ambitious reallocations we recommend for pupils of this age. The preventive nature of this early and ambitious intervention is precisely what allows us to be more tolerant with respect to performance inequality and dropouts at later stages.

Lastly, we should say that we have assumed in this subsection that compulsory education laws are indeed enforceable, an assumption which is reasonable for developed countries. If this is the case, dropping out is a phenomenon that will occur only at later stages of the schooling process. And that attenuates the importance of dropping out as an obstacle to our proposal. However, developing countries might face difficulties in enforcing compulsory education laws. In that case, reducing dropout rates becomes extremely important. We may be tempted to believe that reducing dropout rates is a problem which has to be dealt with priority, that is, that keeping pupils at school is more important than deciding on how to distribute schooling inputs

among them. We believe, instead, that while specific policies aimed at keeping pupils at school are undoubtedly important, there is no reason why policy makers should not be preoccupied, simultaneously, about educational distributive justice.

6.4 ‘Asset-based compensation’: a solution for the remaining inequality of opportunities?

‘How to deal with children who are (seriously) cognitively handicapped’; ‘equality of educational opportunity not being verified in previous stages’, and ‘dropouts being non-orthogonal to the types’. Admittedly, these are three major obstacles to our proposal. However, we believe they can be dealt with by a carefully designed educational policy scheme that correctly identifies at-risk pupils and provides them with adequate support and compensation.

But it seems to be clear that, however well-designed the scheme, and however generous the redistribution of resources aimed at equalizing educational opportunities, unfair inequality of opportunities will subsist (due to uncertainty, problems related to the implementation of the EEOp compensation mechanism, lack of information etc.). Some individuals will then arrive at adulthood facing a better life prospect before them than others - and this gap cannot be credibly attributed only to differential exercise of effort or responsibility.

In addition to that, some young adults may regret some decisions they made when they were kids or teenagers and which eventually led them to acquire a low level of educational achievement. Even if in this case the gap can be attributed to differential responsibility, society should still be concerned by the life prospects of these people and be willing to give them, so to speak, “a second chance”.

An easy solution for us would be to say that the object of our study is not equality of opportunity at the general level, and that our proposal is sufficient to deal with equality of educational opportunity - the issue at stake here - at a satisfactory level. This being said, it is also logical to provide at least some rough intuition on the way we believe equality of opportunity could be achieved after schooling. In certain sense, what follows is how we believe our mesojustice proposal can be combined with macrojustice theories.

Education, or human capital, is a form of asset for individuals. Both for morally acceptable and for morally unacceptable reasons, at early adulthood some individuals will have accumulated more of this kind of asset, while some others will have accumulated less. On the one hand, for the reasons explained before, it becomes impossible to redistribute this asset when individuals are, say, 22. On the other hand,

while in principle it is possible to compensate this gap through income redistribution, we know that, for a number of reasons, in practice this is unfeasible (e.g., for efficiency concerns) and insufficient (e.g., given that education, or human capital, has a value in itself, a value which is not substitutable with other goods such as cash income).

If our aim is “not simply to assist those who lose out through accident or misfortune (although this must be done), but instead to put all citizens in a position to manage their own affairs and to take part in social cooperation” (Rawls, 1999, p. xv), and the solution is neither redistributing education, nor redistributing cash income, what is alternative is left then? An interesting proposal has been advanced by Le Grand (2003), who claims that we have to provide young adults (especially those who are socially worst-off) with other kinds of assets, such as financial capital, that will empower them to face life with more opportunities than they would otherwise. He defends an “asset-based egalitarianism”, according to which each individual has the right to receive a capital grant - a “demogrant” - when he or she attains adulthood (at age 18 or 21). The amount is expected to be invested in some fruitful way - in higher education or to start paying for a house or to start up a small business. The aims are to encourage all individuals - even those with a low educational level or early dropouts - to “take responsibility for their own lives” and to “develop from a passive to an active citizen”.

We will not make any further comment about this proposal or about similar ones, because such discussion goes beyond the scope of our research objectives. We would just like to mention it as a possible logical sequence of the EEOp proposal we have outlined in this section 6. The point we want to make here is that, while the first-best would be to implement EEOp according to our proposal, whenever it is impossible to do so we would suggest to turn to some kind of post-schooling second-best schemes that will act in the sense of correcting the inequality of opportunities that were not erased by the EEOp policies.

7 Conclusions

In this chapter, we have claimed that a reasonable normative goal in terms of educational justice consists of equalizing opportunities for achieving essential educational outcomes. The exposition has been developed in four steps: firstly, we defended a shift from welfarism to non-welfarism; secondly, we exposed some reasons in favor of another shift, towards a specific justice perspective, which we labeled ‘educationism’; thirdly, we explained why and how we can adopt the

pragmatic normative criterion proposed by Roemer in an educationist perspective; fourthly, we have outlined our proposal of a procedure for the assessment of the degree of fairness of an educational system, addressing some of its possible drawbacks.

As mentioned in the introduction, we wanted to provide a conceptual and a pragmatic description of educational justice. From trying to accomplish this task, we think two main ‘results’, so to speak, emerge from this chapter. First, on *conceptual grounds*, we made the case for viewing the ‘educational optimum’ as one in which opportunities for achieving essential educational outcomes are to be equalized.

The second result is related to assessment and, therefore, to policy making (the *pragmatic aspect*). This result materializes in the proposal we have outlined in section 7. Such proposal is inspired by:

1. Sen (1992): in the choice of an equalisandum which is simultaneously a functioning (achievement) and a determinant of capabilities (freedom set),
2. Fleurbaey (1995); Trannoy (1999): in the adaptation of their “equality of fundamental achievements” proposal.
3. Roemer (1998): in strongly building upon his theory and in using his algorithm,

We have tried to accommodate specific features of the educational sector. We hope such proposal is, simultaneously, consistent with our conceptual definition of educational justice, and applicable to real-world problems and to available data sets.

In this chapter, we have focused our discussion on the first two of the three main choices one has to make when evaluating distributions - namely, on the focal variable or attribute; and on the aggregation and evaluation procedure. The important topic of the *reference group* will be taken up in the next two chapters, which are devoted to empirical applications of the framework and the proposal outlined here.

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