9 June 2007

Economic Macrojustice :

Fair Optimum Income Distribution, Taxation and Transfers

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Abstract

Judgments about distribution follow various rationales depending on the specific issues. The fairness of the overall distribution and of the corresponding general income taxes and transfers (beyond the specific relief of misery) appears to be directly concerned with people's means, possibilities, and liberties. Concepts of equal liberty imply a specific structure of distributive taxes and transfers, applied with more or less intensity depending on the sense of community and solidarity of the society, efficient, respecting the basic rights, rich in meaningful equivalent properties, simple and easily implementable by classical reforms with a large support and available information.

Keywords: economic justice, distribution, taxes, transfers, liberty.

J.E.L. classification: D31, D60, D63, H21.

1. Presentation[1]

What should income taxes, transfers, and hence distribution be is one of the most common economic topics. Analysis can be helpful in this debate, and its results have any chance to be applied, only if the values it applies belong to those that are deemed relevant *for this question* by society (citizens, officials). Indeed, the judgments and choices about distribution that we observe happen to follow different rationales depending on the specific issue. For instance, interpersonal comparisons of well-being or welfare or of their variations are used in many

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cases. They are met when the issue is the relief of suffering or pain, which includes very important instances, or when the concerned persons are more or less close to one another. In other judgments about distribution, however, the *direct* references, comparisons, or requirements happen to focus, rather than on pleasure, satisfaction, or enjoyment, on issues such as means, rights, possibilities, liberties, opportunities, or merit, desert and responsibility. Then, the pleasure or satisfaction people manage to derive may be acknowledged as something quite important, but they are considered a private issue for which the individuals are themselves accountable, rather than the relevant distributive reference by their comparisons (if it is possible). As we will see, the basic rules of our societies, norms of fairness, people's common judgments, the different actual political opinions about distribution (from classical liberalism to egalitarianism), actual concerns about the structure of general taxes, and some philosophers' observations (e.g. Rawls), all seem to hold this situation to be the normal case as concerns the *overall* allocation in a large society in a normal situation, and the corresponding *general* taxes and transfers ("macrojustice" shortly defined). Then, the corresponding liberties and equalities turn out to imply a simple, richly meaningful and easily implementable structure of the large and general taxes and transfers, with more or less redistribution depending on the society in question. This necessary paradigm shift in the question of optimum income taxation is presented here.

The question of the choice of the principle, which has priority in problems of optimality, is investigated in Section 2. Section 3 then notes the other bases of the solution: the relevant freedoms, Pareto efficiency, the importance of productive capacities and the different rights in them. The various definitions of equal liberty, for domains of choice that have to be non-identical for respecting efficiency and the basic "social liberty," are presented in Section 4. They give the same result, which amounts, equivalently, to an equal sharing of the proceeds of the same given labour inputs (ELIE for "equal-labour income equalization"); an equal tax credit and exemption of overtime labour from a flat tax (these features are actually implemented in various countries); a basic income financed by an equal labour of all; a general reciprocity where each yields to each other the proceeds of the same labour; and other meaningful properties (Section 5). This policy is incentive compatible – it induces people to work with their best skills and to reveal the value of their capacities –, it implies a minimum income, and it partially dissociates social liberty (notably of exchange) from full self-ownership (Section 6). It extends to all dimensions of labour and structures of earnings, and to unemployment compensations (Section 7). The needed information is more easily

obtainable than for most taxes (and it does not include individuals' utilities). Moreover, the scheme depends on a parameter which describes the degree of community, redistribution and solidarity of the society in question and which is theoretically determined and practically revealed in various ways (Section 8). This distribution relates to the other functions of the public economy and to a number of actual and proposed fiscal structures, and it can be implemented by simple and classical tax reforms with large public support (Section 9).

2. Which principle of overall economic justice?

2.1 The value and scope of welfarism

The aphorism "better be vaguely right than precisely wrong" does not say what is right or wrong, but it suggests that selecting the appropriate ethic should have priority over the question of information. One can compute no relevant second best without ascertaining what the first best would be in the first place. And it may be that, as if by immanent justice, the private information most difficult to obtain turns out to be irrelevant for some public policy (possibly, psychological structures for the income tax). Hence, a criterion of economic optimality should probably not be adopted without sufficient previous reflection. Is the same type of principle relevant for all applications? Welfare is important. Liberty is too. When they do not yield the same result, which one should we choose? Which can we choose in a democratic society where people's views matter? How do we face the contrast between the usual subtlety of common moral judgements and the a priori ethical dogmatisms sometimes found elsewhere? A few counter-examples about income distribution, transfers and taxes may help sort out the issues.

If, as it is said, the people of Northern Europe are better at producing and those of Southern Europe more skilful at enjoying consumption, should the European Union set up a vast program of intra-European North-South income transfers? Should it tax the industrious Swedes for subsidizing the Napolitans who make a feast from an olive and a chunk of bread? Or perhaps, on the contrary, the Portuguese supposedly afflicted by a kind of mild sadness, in order to soothe their *saudade*?

"I take the 10 euros you just earned because I like them more than you do:" Is this a good reason? Or perhaps, on the contrary, "I take your earnings because you like your euros

left more than I like mine." Is this a better reason? Am I entitled to (or should I) take your money because it pleases me more than it pleases you? Or perhaps, on the contrary, because you enjoy your money left more than I am able to enjoy my own? These two opposite consequences of comparing our tastes for income are respectively utilitarianism and maximin in utility, the two polar cases of classical welfarism.[2]

Should you pay a higher income tax than someone else because you like less the euros taken away or, on the contrary, more the euros left; because you have a cheerful character or because the other has a cheerful character (whatever the effects)? Has the Internal Revenue Service ever thought about sending questionnaires to inquire about these relative propensities or capacities to enjoy? Or does it think that this would be irrelevant and, perhaps, abusively intrusive; that these psychological characteristics are private matters and not the concern of overall and general public policy and the income tax; that, for this question, people are accountable for their own tastes, entitled to their beneficial effects and having to endure non-pathologically less favourable ones; and that such normal differences in tastes could not give rise to compensating claims on others' incomes or liabilities towards them?[3]

However, notwithstanding how normal and sound these views may seem, they might be morally mistaken, as those of people who fear that some welfarist pleasure principle could justify theft. Indeed, within a closely knit family of mutually loving people who feel others' pleasures and pains as if they were their own, transfers of the noted types and their reasons may be approved by all. Such a society, with the best of social sentiments, may be the best kind of society, and it may thus be welfarist in the sense – retained here – of maximizing a function of individuals' welfare represented by a utility function.[4] By the same token, these benevolent people would freely reveal any needed information about themselves. Unfortunately, however, most people do not carry such a strong altruism over to the larger society. They are only second-best individuals endowed with second-best sentiments. Hence,

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[2] The term coined by Hicks (1959) for criticizing the ethical reference to « welfare » rather than to liberty.

[3] Any more than, for instance, physical beauty. This self-accountability is a notion of self-ownership. Responsibility is only one possible cause of accountability among various others. People can be held "responsible" for their tastes (Kolm 1966b, Dworkin 1981) only in so far as they can influence them, which a priori has limits, but, more basically, this question raises deep conceptual issues (such as the place of the "weakness of the will;" see Kolm 2004, pp. 101-104).

[4] More exactly, this would be an "ophelimity" function in Pareto's sense if these individuals are moreover also concerned with others' welfare (see Kolm 2006a).

they would not be convinced by the corresponding panwelfarist principle. Now, in a free and democratic, non-dictatorial society, a principle cannot be applied if it does not have sufficient support. Hence, even though welfarism may well be first-best social morality *in abstracto*, actual social choice would have to follow actual individual values, and hence some morally second-best principle whose bases have sufficient endorsement.

Yet – need it be said? – deeply depressed people are justly helped. Misery is bad possibly because it implies limited freedom but certainly also because of the suffering it entails. Most people accept that I take your 10 euros if they enable me to buy the drug that saves my life. Readers of Victor Hugo's *Les Misérables* are indignant when Jean Valjean is convicted to forced labour for stealing a loaf of bread to save a starving poor. North-South transfers may help alleviate the miseries of Mezzogiorno's underdevelopment. Surgeons transplant the rare organ to the patient who suffers the most or whom it relieves the most. Emergency care is allocated similarly. Courts estimate *praetium doloris* for compensating harm. Relieving deep pain is a foremost duty. Hence, distributive choices are strikingly more prone to be derived from comparisons of welfare when welfare means lower suffering than when it means pleasure.[5]

Hence, welfarism is generally accepted when it is *dolorism* or *familism*. In the latter case, for instance, the family understands that you give the toy to your daughter rather than to your son because she enjoys it more than he does or because she is a little sadder today. This extends to looser relations of neighbourhood, encounter or acquaintance for issues of limited cost. In the end, welfarism seems to be more generally accepted when it has more of two properties, *suffering* and *proximity* in the meaning of welfare and in the relations between the concerned individuals. In other words, welfarism seems to be associated with the possibility of benevolence from compassion or empathy.[6] Social relations that are neither so good as to

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[5] That is, allocation among suffering people tend to take the individuals' different propensities to suffer into account, whereas allocation between normally satisfied people rather directly compare income and tend to discard the individual's different capacities to enjoy. This might be formalized in attributing to each person an index which becomes her utility when it is low and her income when it is high. However, the usual distinction between income inequality and poverty, or the focus on macrojustice, enable one to go in this way. Bentham (1789) wrote : "to minimize pain, or, which comes to the same, to maximize pleasure." This equivalence does not seem to be endorsed by common judgments for distribution in the noted cases.

[6] Utilitarian philosophers have often associated utilitarianism and benevolence (for instance, J.S. Mill, 1861, H. Sidgwick, 1874). However, the actual relevant comparison for welfarism may not be with A. Smith's (1759) universal a priori fellow-feeling but with the scope of possible strong and moral

be purely altruistic, nor so bad as to consist only of a balance of force and threats, have to rely on conceptions of justice.

Now progressivity of the income tax allocates neither between suffering poor nor between related taxpayers. Could its derivation from welfarist criteria gather sufficient approval and support? At least, the splendid theory of welfare-determined optimum taxation, refined and on an essential topic, unfortunately seems to be still waiting for an application after 36 years.[7] The possibility of actual application doubtlessly requires mitigating its normative principle in the direction of standard judgments about this issue (noted in Section 2.5).

The economists' concept of "utility" can describe various psychological (and physiological) facts, notably welfare, wellbeing, pleasure, satisfaction, enjoyment, happiness, lower pain or suffering, preference, tastes, liking, needs, wants, desires, or urges. This plurality and versatility has a beneficial aspect in the analysis of behaviour since it permits the generality of choice theory. Yet, it raises a major problem for normative analysis because different meanings can entail different judgements. The preceding remarks concern welfare, wellbeing, pleasure, satisfaction, happiness, pain, or suffering. Tastes, and preferences that describe them, by themselves, are usually not seen as implying distributive norms: you probably should give water to you thirsty neighbour, but must you finance her beverage because she only likes expensive wines (a handicap) or, on the contrary, because her taste for cheap beer permits her drinking to produce utility at low cost? Bar-Hillel and Yaari's (1984)

altruism in compassion or love (liking). Welfarism is probably generally demanded as an important principle for allocating within a family, for managing a hospital or a program of "welfare" or assistance, or, for a whole society, in case of general catastrophe such as war, famine, or natural disaster. For instance, most of Europe has been welfarist for seven years, from 1941 to 1947 in the sense of allocating consumption goods according to basic needs carefully adjusted to the various types of people and activities, thanks to coupon rationing, with an ideal equal satisfaction (only a partial one though – for instance, an adult daily diet in 1944 in France amounted to 900 calories rather than the needed 2000).

[7] In his exemplary "Exploration in the theory of optimum income taxation" of 1971, Jim Mirrlees considers that individuals have identical utility functions depending on their consumption (disposable income) and labour. This is not complete welfarism since individuals' utilitites actually differ from one another (the theory requires actual utilities maximized by individuals' choices). Yet, since individuals turn out to have different consumption and labour, both their relevant marginal utilities and utility levels differ. Moreover, when he considers the problem in full, Mirrlees (1986) states: "Since this case does not seem to me especially interesting or useful, it will not be given much attention." In a formally similar theory applied to the different topic of the optimum non-linear tariffs of public utilities, individual utilities were both different and uncertain for the policy-maker (Kolm 1970a, 1970b).

experiments show the evidence of unanimous ethical judgments about distribution, that make a large difference depending on whether the issue means tastes or needs. And "to each according to her needs" is a classical principle. Indeed, vital and basic needs probably have to be satisfied for alleviating pain (or securing freedom). Yet, no such norm seems to attach to the fancy "needs" of the amateur. Speaking of the question of "social justice," Rawls (1982) explains: "Desires and wants, however intense, are not by themselves reasons in matters of justice. The fact that we have a compelling desire does not argue for its satisfaction any more than the strength of a conviction argues for its truth."

2.2 Macrojustice

Hence, the principles of distributive judgments that are adopted, wanted, or found "normal" depend on the issue. However, one has to distinguish the multifarious cases of "microjustice," *defined* as being particular and *specific* as concerns people, goods, reasons, or circumstances (whose importance, yet, range from the trivial to the vital), from the issue of "macrojustice" which, *by definition*, refers to the general overall allocation according to *general* rules applied to most people, and determines the bulk of the distribution of resources and income as general purchasing power. The general rules of property and general taxes – notably the income tax – and main transfers are principal determinants of all this overall allocation. When macrojustice is achieved, in a society in a normal situation, what remains of suffering belongs to issues of microjustice.[8]

Allocating in large societies among people in normal situations, macrojustice seems to escape the usual domains of welfarist judgments, and this may explain the noted judgments and policies about it. Then, what values can it rest on if the basic reference to individuals is maintained?[9]

2.3 Equal liberty

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[8] It is sometimes also fruitful to distinguish a domain of "mesojustice" concerned with goods that are specific but can concern everybody and are important (e.g. education and health); yet, this is *prima facie* not substitute for macrojustice.

[9] Not basing a distribution on welfare implies neither jeopardizing Pareto efficiency nor finding happiness unimportant. For instance, Pareto efficiency can result from an efficient free market from a given allocation. And one can find happiness important and even the most or only important thing. The only issue is that, for a given question, individuals may be deemed accountable for part of it, and hence the criterion of division only refers to the other factors.

In economics, if, in choice theory, utility is taken off, there remains the possibility set and the freedom to choose in it. From the – possibly deeper – standpoint of philosophical anthropology, man is a two-faced Janus: both a sentient being feeling pleasure and pain, and an agent capable of free choice and action. Discarding welfare and its various meanings, there remains freedom (to which concepts of responsibility and – often – merit and desert are related). Hence the answer seems to have to be liberty and means. Moreover, rationality in the common sense of "for a reason," or "justified," implies an ideal "equal treatment of equals," i.e., the allocation of the relevant "material" among people who have no different relevant characteristics should ideally, *prima facie*, be equal.[10] Hence, the relevant basic principle would have to be an ideal of equal liberty.

Before drawing the practical policy consequences, let us notice that this conclusion for taxation and distribution is in tune with the basic tenets of law, opinion, and philosophy.

2.4 Constitutional rules

This result abides by our most basic constitutional and declarational rules, whose transgression is unlawful and punished. "Men are free and equal in rights." They should be secured the liberty and means to "pursue happiness" has they see fit, rather than levels of happiness.[11] The basically guaranteed property right is characterized in these texts by legitimate acquisition, essentially from free actions and exchanges, rather than by some beneficial consequence.

2.5 Actual opinions

Actual opinions about macrojustice include two polar views. Some people are indignant when money they have earned from free labour and effort and their capacities is taken away (for

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[10] I.e. in the absence of an overpowering reason, such as impossibility or the joint relevance of another criterion (which may be the ideal equality of something else, or the fact that some unequal states can give more to everyone than all equal ones). This derivation of equality requires some elaboration (see Kolm 1996a, pp. 35-38, 1998 (translation of 1971), pp. 34-41, and 2004, pp. 396-399).

[11] The 1789 Declaration of Rights and the American Declaration of Independence.

instance by the income tax). Call this classical liberalism.[12] Other opinions focus on inequalities in income or in the possibilities to obtain it, in judging their reduction favourably, and their increase or existence with reproof and sometimes indignation. Their ideal is equality of income or of opportunity. All these views share the reference to individuals, the absence of reference to individuals' utilities (since the latter differ, any kind of welfarism in any circumstances a priori does not yield equal incomes), and a concern with liberty in so far as income is freely spent general purchasing power (and all the more so for equal opportunities). For the rest, they seem to rely on very different rationales. One focuses on the origin of income and the other on the pattern of the resulting distribution. Although they oppose each other for determining policy, they seem to have no common grounds for comparison, argument and debate. However, they are associated often in people's minds and generally in political decisions. There is a common acceptance of some smaller or larger right in one's earnings, and of some mitigation of inequalities by redistribution or in sharing the burden of taxation, in proportions depending on countries. In fact, the analysis of the basic values and logic of these two ethics will show that their rational interpretation makes them two limiting cases of the same continuum.

2.6 Rawls's "reflective" philosophy

Considering "social justice" by which he means macrojustice (he uses once the term macro), and remarking that his "leading ideas are classical and well-known," Rawls distinguishes goodness sought by individuals' choice from fairness in the allocation of means and rights, and notes: "Justice as fairness rejects the idea of comparing and maximizing satisfaction" (1971). He also simply records that "The question of attaining the greatest net balance of satisfaction never arises in justice; this maximum principle is not used at all" (id). This does not concern utilitarianism alone but, more generally, welfarism, since "To interpret the difference principle [the solution he proposed] as the principle of maximin utility (the principle to maximize the well-being of the least advantaged person) is a serious misunderstanding from a philosophical standpoint"[13] (1982). Rawls' conclusion naturally is: "A principle of equal liberty." "A just social system defines the scope within which individuals must develop their aims, and it provides a framework of *rights and opportunities*

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[12] This view is a moral one and refers to rights, whereas the concept of "libertarianism" as introduced by Rothbard (1973) refers only to the balance of force and, as such, is not a moral view.
[13] Hence, this maximin in interpersonally comparable utility cannot be called "Rawlsian" (the leximin is eudemonistic "practical justice" in Kolm 1971, discussed by Rawls).

and the *means* of satisfaction within and by the use of which these ends may be equitably pursued" (1971). Despising this thought may turn out to be costly in terms of relevance.[14]

2.7 Information

However regrettable having to retreat from welfarism may be from the points of view of morals and aesthetics, from the standpoint of information, what a relief! As Mirrlees (1971) puts it: "the simple consumption-leisure utility function is a heroic abstraction from a much more complicated situation so that it is quite hard to guess what a satisfactory model of estimating it will be." Indeed, welfarist taxation would have to know all individuals' different utilities, generally cardinal utilities meaning satisfaction which have no actual meaning,[15] and interpersonal comparisons whose possibility is limited. It has to clean these utilities for perverse social sentiments (malevolence, spite, malice, *schadenfreude*, envy, jealousy, sentiments of superiority), perhaps for positive ones (altruism, sense of fairness),[16] probably for expensive or cheap tastes, and probably for irrationalities (e.g. in time preference). It has to choose between the person's various selves (in time, or the *id*, the *ego*, or the *superego*). Most of these operations imply some arbitrariness.[17] The very existence and meaning of preferences or utility in the flow of human psyche has raised questions. And the form of the social welfare function has to be chosen (given a famous theory which asserts that no good one exists).

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[14] Beyond these general conclusions, however, most of Rawls' more specific proposals are logically problematic for specific reasons. (1) His maximin in "primary goods" (the "difference principle") omits that the bases of transfers and taxation can be much less elastic (hence waste inducing) than they presently are – the issues of defining an index of these goods and of relating this to Pareto efficiency, are much more secondary matters. (2) The theory of the "original position" and of the "veil of ignorance," both in Rawls's version and in Harsanyi's (which gives a kind of utilitarianism or, at least, separable welfarism), are problematic because a selfish individual choice in uncertainty does not have the same structure (and objects) as a choice of justice (see Kolm 1996, pp. 191-194, and 2004, pp. 358-360). (3) The classical theory of equal and maximal real basic liberties does not hold (see note 20 below).

[15] See Kolm 1996a, pages 360-366. Orderings of intensity of preferences between pairs of states can have meaning but this does not generally imply cardinality, whereas such hedonistic cardinal utilities will generally be used for the social welfare function used (the issue is not the risk-relevant cardinal utilities). This jeopardizes the very foundation of the approach (except for co-ordinal maximin).

[16] Bentham wanted to add the pleasure derived from other people's pleasure, but modern utilitarians usually reject this. He also regrets that adding utilities of different individuals is "like adding apples and pears," and he proposes to measure utility in money "for lack of a better measure." In the end, his theory interestingly turns out to be a kind of surplus theory where distribution is determined by people's altruism (see Kolm 1966a, 2004).

[17] The exception concerns comparative social sentiments (Kolm 1995).

3. Bases: liberties, efficiency, capacities

The policy implied by these remarks also rests on the other essential facts of macrojustice, concerning liberty, efficiency and capacities, recalled as briefly as possible in this section.

3.1 Freedoms and social liberty

A liberty can be defined by the nature of the constraint or by the domain of choice. The former definition is crucial as regards individuals' interactions with the rest of society. Adding other rights and means determines the domain of possible choice.

"Social liberty" is the basic, constitutional and legal rule of our "free" democratic societies. It means that individuals' acts should *prima facie* be free from forceful interference by others individually, in groups, or in institutions. Individuals can only be forced not to force others.[18] Free exchange without forceful interference by a third party is an important application. Social liberty implies the respect of the intended consequences of individuals' respectful actions (including free agreements or exchanges) – such as rights they can create.[19]

Social liberty may have to be respected simply because it is the meaning of the constitutional basic rights and hence violating it should a priori be unlawful and punished. Moreover, it is wanted by practically everybody in societies where it prevails. It can also be intrinsically defended for its meaning of absence of direct violence (especially since – as we will see – it can be considered as compatible with a distribution banning poverty). Social liberty is non-rival. Indeed, each individual can have it at satiety, for all her actions that respect others. Hence, social liberty is equal for all in this sense. Incompatibilities and conflicts among individuals' actions are due to issues about the allocation of other means (in particular of other rights), and this allocation results from the question of the allocation of

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[18] Of course, constraints can also be necessary for palliating lack of information (safety regulations), in case of insanity, and so on, and public constraints can implement not only actual contracts but also implicit ones (e.g. for financing public goods).

[19] Social liberty is the full theory of related notions presented under various names such as "civic or social liberty" (J.S. Mill), "negative freedom" (Kant, J.S. Mill, Berlin), "formal freedom" (Marx), or "process freedom." The term liberty – rather than freedom – is sometimes restricted to social liberty (e.g. by some translators of Kant), but this has not gained general currency.

resources (several actions of an individual can also compete for this individual's means of various kinds).[20,21]

3.2 Efficiency and the distribution of resources

Pareto efficiency is also certainly a necessary criterion. Can a society be free and democratic if there exists another possible state that everybody prefers? At least, a contending party can propose another policy and win by a unanimous vote. Can a state be optimal if another possible state enhances everybody's welfare (even if the sharing is not determined by comparisons concerning welfare)? This considers all actual constraints (including issues of information, transaction, possibilities of coercion or exclusion, etc.). Yet, Ronald Coase (1960) asserts that, if all this is taken into account, Pareto efficiency always prevails. If this is true, then any policy proposal that does not secure Pareto efficiency has no chance to be achieved.[22,23]

Social liberty implies a free market which implies Pareto efficiency (with correction of "failures" by the "allocation branch" of the public sector if Coase's argument is wanting). Public distribution respects social liberty and, with efficient social liberty in the private sector,

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[20] Another classical conception wants to associate to each basic right – which is social liberty for a broad kind of application – material means that make it "real," and it wants the resulting freedom to be "equal for all and maximal" (Rousseau, Condorcet, the 1789 Declaration, Mill, Rawls). Yet, since there is no a priori limit to these associated means (to the size of the cathedral for freedom of cult, of the various means of communication for freedom of expression, of private planes and airports for freedom to move, etc.), this would determine the totality of the allocation of goods, with no rule for choosing among the various goods.

[21] Social liberty can also be supported by a logical requirement. Indeed, consistent individuals want not to be prevented to do what they want to do, that is, they want social liberty for themselves. Yet, their opinion about justice in society has to be impartial, from the nature and definition of a concept of justice. Hence, this opinion has to want social liberty for everybody, if this is possible, and it is possible from non-rivalry.

[22] Pareto efficiency and social liberty preclude that the solution of discarding individuals' preferences or utilities for the normative judgment, plus the rational requirement of equality, be taken to be an identity of individuals' bundles of consumption goods. This solution is generally not Pareto efficient (given that individuals have different preferences). And it is generally not the one chosen with social liberty (since, from it, mutually beneficial exchanges are generally possible). Yet, the solution that will be obtained amounts to letting social liberty, and notably free exchange and labour, from such an identical initial allocation (of disposable income and leisure/labour) for each.

[23] In any Pareto-efficient state, there exist classical social welfare functions (non-decreasing functions of individual utilities) that are maximum in this state. Yet, the choice of this state can be determined otherwise, for instance by a sharing of given resources and an accepted efficient free market. Then there is no meaningful structure of such a function that determines this state directly and by itself (without referring to the resulting state, hence tautologically).

Pareto efficiency, if it is based on inelastic items – items not affected by individual actions. If it allocates economic value, this happens when it is the value of the given resources, not produced by the concerned individuals.

3.3 Capacities and labour income

One of the most ancient and classical of economic ideas is that labour provides the very largest part of the value of the social output. Locke (1689) says "9/10 and in fact, if everything is counted, 99/100". Ricardo and Marx emphasize this fact. Nowadays, the contributions of labour, capital and "land" (non-human natural resources) to GNP are often like 80, 18, and 2. Yet, capital is itself produced, and hence the allocation to the basic resources gives an order of magnitude of 97,5% for labour and 2,5% for non-human natural resources.[24] Moreover, labour is produced by productive capacities but does not use all of them, whereas "land" includes residential land. Hence, the problem of macrojustice is that of the allocation of rights in productive capacities.[25]

Practically, capital income is labour income plus intertemporal exchange if the capital originates from savings from labour income. Hence, the remaining conceptual issue about capital income is the ethical and tax treatment of bequest. Another intertemporal question raised by distributive reforms is the treatment of wealth accumulated in the past under different rules. These classical questions will not be touched in this short paper.

3.4 Rights in capacities

Finally, in the rights concerning an asset one classically distinguishes the right to use this asset, or use-right, and the value of the possibility to use it, or rent. This distinction is essential for human capacities because social liberty implies that the use-right belongs to the holder of the capacity (who can rent it out for a wage). The rent of a productive capacity is equal to its productivity. Yet, the rent of someone's productive capacities, for a certain time or labour,

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[24] The same exercise can be made for produced human capital and education (also discussed below).

[25] Non-human natural resources are allocated in various ways including by criteria of microjustice (e.g. proximity, discovery, first occupancy, best use, needs, or various welfarist criteria); they are usually owned and have had several owners; they (notably new natural scarcities) or their value can be allocated in various ways (including equally shared, used for specific services, or for provisioning the public budget). (See Kolm 1985, Chapter 10, 2004).

may belong to some other person. Then, the former, who has the use-right, pays this rent to the other. She only is the tenant of this part of her capacities (yet, a necessary tenant since she has the use-right from social liberty). If a person owns the rent of her own capacities for a certain time or labour, she has the corresponding ownership since ownership is use-right plus rent. In particular, there can be full self-ownership. A person may both owe some rent of capacities of hers and own rents of others' capacities (a reciprocity of this kind will happen to be the result of the theory of equal liberty).

Self-ownership is the object of two very important, firm and opposite moral judgements. On the one hand, self-ownership of productive capacities given to people is sometimes criticized because people are not responsible for them and hence do not deserve them.[26] Both Rawls and Mirrlees, for instance, express this view, which is also shared by income egalitarians. On the other hand, full self-ownership is claimed by a widespread and classical view, of major historical importance, "classical liberalism." It has several – at least two – reasons or justifications, explicit or felt. The most refined (and "modern") one says it is either required by or identical to liberty. Having the use-right of one's capacities is, indeed, necessary for social liberty. One would add that requiring a payment from someone violates her freedom. Yet, we will see that justifying full self-ownership in this way is circular (Section 6.2). The second reason is, rather, a sentiment. It is that a person "naturally" owns herself (it used indeed to be called a "natural right"). There is here an association (let us avoid calling this a confusion or a play on words) between ownership and being part of: a person's capacities are hers because they "are her," they belong to her (property) because they belong to her (being a part of). This is a concept of selfhood and integrity of self.[27] It may be added that a person is the first occupant of her capacities. Finally, the general solution will happen to consist of a possible compromise between these two powerful values, in various possible degrees.

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[26] "They only took the pain to be born" (Beaumarchais).

[27] A difference is often seen, in this respect, between capacities to enjoy or choose (perhaps a utility function) and productive capacities because the latter are more instrumental and their product can be alienated (the former, being the person's capacities to choose and to derive pleasure or pain, can be seen as belonging to a more intimate "core self"). Classical liberalism and welfarism amount to allocating a priori to each person all of her capacities or none of them, respectively, whereas Rawls so allocates capacities to enjoy and choose but "socializes" all productive capacities (whose value is the wage rate).

Hence, the problem of distributive justice in macrojustice is the allocation of the value or rent of individuals' given productive capacities. We can now see how the general principle of equal liberty solves this problem, and the resulting policy.

4. Equal economic liberty

4.1 Possibilities

There remains to consider the consequences of equality in all the economic freedom individuals have, given social liberty and Pareto efficiency. First of all, equal economic freedom should be defined. Since there is (equal) social liberty to choose, exchange and earn, the remaining equality concerns the *initial given conditions*. This initial equality can take three forms:

      1 – Equal allocation.

      2 – Identical domains of choice.

      3 – Equal freedom provided by different domains of choice.

We will see that solutions 1 and 3 give the same result, whereas solution 2 is impossible in the sense that it violates Pareto efficiency and social liberty if individuals' preferences are not taken into account (from non-welfarism or ignorance) for defining the domain. Note that we have seen that differences in individuals' tastes represented by preference orderings only (or ordinal utilities), and not only utility levels or their variations, are deemed irrelevant for macrojustice.[28]

4.2 The simple case, notations

We consider to begin with the simple case of unidimensional labour and constant individual wage rates (linear wage functions), because it is an important case, it simplifies a little the presentation, the concepts and results extend straightforwardly to the general case of

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[28] There are other solutions that extend solution 2 into Pareto-efficient solutions, but they use still more individuals' preferences and have other intrinsic handicaps. One considers individuals' allocations that are equivalent, for each individual, to her best choice in the common possibility set (a case of "equivalence theory" – see Kolm 2004, Chapter 25). Another extends into an efficient maximin the property that individuals can choose their allocations on identical domains of choice if and only if no individual prefers any other's allocation to her own, but the domains of choice in question are a priori only notional (Kolm 1999b).

multidimensional labour (duration, intensity, formation, etc.) and non-linear production as it will be shown (Section 7.1), and the general case can often be reduced to the simple case in defining a duration of labour qualified for its other characteristics (*id.*). The case of involuntary unemployment will be considered in Section 7.2.

There are *n* individuals, and each is indexed by *i* and has labour ℓ_i (seen as duration), and hence leisure $\lambda_i = 1 - \ell_i$ by normalization to 1 of the total relevant time, a given wage rate w_i, and a tax or subsidy t_i ($t_i > 0$ for a subsidy and < 0 for a tax of $-t_i$). Her labour income is $w_i \ell_i$, her *disposable income* used to freely buy (non-leisure) consumption is

$$y_i = w_i \ell_i + t_i,$$

and her *total income*, which adds the value of leisure at its market price w_i, is

$$v_i = y_i + w_i \lambda_i = w_i + t_i.$$

We consider now a balanced distributive budget (Musgrave's (1959) "distribution branch"), and hence $\Sigma t_i = 0$. Issues of information will be discussed in Section 8.1 (Section 6.2 will show that the resulting policy is incentive-compatible in the sense that individuals choose to work with their most highly paid skills in spite of the tax or subsidy, and hence their actual wage rate reveals this value of their capacities).

4.3 Solution 1: Social liberty from an equal allocation

This solution is the classical (equal) social liberty from an equal allocation.[29] Social liberty implies free exchange. The allocation is that of the two goods, leisure (or labour), and income which can buy consumption (from free exchange). Free exchange is, first of all, of labour for earning.

If this initial equal labour is *k* (leisure $1-k$), it provides each individual *i* with the income kw_i, and, if this income is transformed into an equal disposable income with balance of the distributive budget and no waste, each now receives the average $k\overline{w}$, where $\overline{w}$ $= (1/n)\Sigma w_i$ is the average wage rate. Then, individual *i* is taken away kw_i and provided with $k\overline{w}$ instead, that is, she receives the net subsidy-tax

$$t_i = k \cdot (\overline{w} - w_i).$$

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[29] See Kolm 1971.

We have $\Sigma t_i=0$. The described operation is "Equal-Labour Income Equalization" (the equal sharing of the incomes produced by a given labour equal for all) or ELIE. Labour k is the "equalization labour."

Individual i freely chooses her actual labour ℓ_i and the corresponding earning $w_i\ell_i$. Equivalently, this can be described as her choosing labour ℓ_i-k above labour k, and hence earning the corresponding $w_i\cdot(\ell_i-k)$ in addition to the given $k\overline{w}$ (we will shortly see that, for the problem of macrojustice, $\ell_i>k$ will happen to hold). At any rate, her disposable income and her total income are, respectively,

$$y_i=w_i\ell_i+t_i= k\overline{w} +(\ell_i-k)w_i,$$
$$v_i=w_i+t_i= k\overline{w} +(1-k)w_i.$$

In 1974, John Rawls, at the instigation of Richard Musgrave (1974), added leisure to his list of "primary goods," thus bringing to two, income (related to wealth) and leisure, the economic primary goods. Rawls's solution consists of basic liberties whose best description is social liberty which is full and hence equal for all and maximal, and an ideal of an equal initial allocation of primary goods in so far as it is not wasteful. The above solution consists of an initial allocation where each individual has the same quantity of each good, 1-k for leisure and $k\overline{w}$ for income, from which each individual freely trades labour for income in application of social freedom. In no other possible initial allocation the individuals have more of both goods (and the outcome is Pareto efficient). This result can thus be said to be Rawls's full solution (as he posed the problem after 1974).[30]

The result is shown in figure 1, with axes λ_i and y_i, $\ell_i=1-\lambda_i$, budget lines with slopes $-w_i$, transfers t_i and total incomes v_i. The initial equal allocation is the point common to all budget lines $K(\ell_i=k, y_i=k\overline{w})$. When k varies from 0 to 1, point K describes the segment LM from point $L(\ell_i=y_i=0)$ to point $M(\lambda_i=0, y_i=\overline{w})$ – yet, only cases where $k<\ell_i$ will turn out to be relevant for macrojustice. The particular case $k=0$, and hence $t_i=0$ and $y_i=w_i\ell_i$ for all i,

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[30] Coefficient k reflects the relative moral/social value attached to the two goods, and the choice of this weight is a classical Rawlsian problem (see also Section 5-8).

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corresponds to the full self-ownership of "classical liberalism." The choice of the coefficient or "equalization labour" k will be considered in Section 8.2.

Figure 1

4.4 Solution 2: Identical domains of choice

If individuals' choices include the choice of effort or labour and they have different capacities, and if the policy maker does not take individuals' preferences into account, presenting identical domains of choice to all individuals violates both Pareto efficiency and social liberty (and hence it should be impossible in a democracy and it violates the basic rights).[31]

Indeed, the set of the following conditions is a priori impossible (except fortuitously): (1) Identity of domains of choice presented to the individuals; (2) Pareto efficiency and social liberty; (3) Individuals' marginal productivities are not all identical; (4) Individuals' preferences are not relevant or not known. This is easily shown as follows. In the space of leisure or labour and disposable income (consumption), at an achieved state, (1) Pareto efficiency and social liberty imply that each individual's marginal rate of substitution is equal to her marginal productivity (w_i); and (2) because this individual freely chooses in the domain offered to her, this state is on the domain's border B and the marginal rate of substitution is equal to the border's rate of transformation. Hence, at this state this latter rate is equal to the individual's marginal productivity. If these productivities are identical and constant, this border can be a straight line with this slope. If not, this border should respect the following condition. Call E_i the "curve" where individual i's rate of substitution is equal to w_i (an Engel curve). Then, the border B should cut each E_i at a point where its slope should be w_i ($-w_i$ if the variable is leisure). This condition depends on the curves E_i, which are derived from the individuals' preference orderings or utility functions. This border, and hence the common domain, cannot be built without these preferences or utilities. Figure 2 illustrates this condition.[32]

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[31] This is for instance done by proposals of equality (identity) of opportunity or of equal capabilities.
[32] More precisely, in the space (λ_i (or ℓ_i), y_i), call D such a common possibility set, B its border limiting it towards larger λ_i and y_i, and $t(\lambda_i, y_i)$ the set of slopes of the tangents to B at point $(\lambda_i, y_i) \in B$ ($|t| = 1$ if B is smooth). Call $u^i(\lambda_i, y_i)$ individual i's utility function assumed to be increasing and

Figure 2

4.5 Solution 3: Equal liberty of unequal domains

For defining equal freedom of choice for different domains of choice, consider that domains can offer more or less freedom. Using these relations usually implicitly imply their transitivity, which we assume. Domains of choice are thus ranked by a (partial) ordering, the freedom ordering. This ordering will be assumed to be representable by an ordinal function, the "freedom function," since this will suffice here. If D is a domain of choice, the freedom function $F(D)$ is such that, if D' is another domain, $F(D) = F(D')$ if D and D' offer equal freedoms, and $F(D') > F(D)$ if D' provides more freedom than D. Let us apply this to the budget sets considered here. A generic individual can provide labor $\ell \geq 0$, hence enjoy leisure $\lambda = 1 - \ell \geq 0$, and consume consumption goods bought with income $y \geq 0$. Let us choose an arbitrary unit of account for which the price of consumption goods or income is p ($p=1$ when they are taken as numéraire). Then the individual's wage rate is pw where w is her real wage rate (i.e. in terms of income or consumption goods, in purchasing power), given to her. Her total income writes pv and has real value (*idem*) v. She chooses her leisure λ (hence her labour $\ell = 1 - \lambda$) and her amount of income or consumption y in her budget set defined by

$$py + pw\lambda \leq pv, \quad y \geq 0, \quad \lambda \geq 0.$$

This budget set is classically defined by her total income pv, and the two prices p and pw. Hence, the freedom function can be characterized as $F(pv; p, pw)$. The freedom offered is a property of the domain in real space (y, λ). That is, it is a real concept in economists' sense. Therefore, it does not depend on the chosen unit of account, and hence on the level $p>0$. That is, function F is homogeneous of degree zero in its three variables pv, p and pw. For

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differentiable, u_1^i and u_2^i its two first derivatives, and $s_i(\lambda_i, y_i) = u_1^i(\lambda_i, y_i)/u_2^i(\lambda_i, y_i)$ the corresponding rate of substitution at point (λ_i, y_i). Denote (λ_i^*, y_i^*) for all i the realized state. Pareto efficiency and social freedom imply $s_i(\lambda_i^*, y_i^*) = w_i$. Individual i's free choice on D implies $(\lambda_i^*, y_i^*) \in B$ and $-s_i(\lambda_i^*, y_i^*) \in t(\lambda_i^*, y_i^*)$. Hence, $-w_i \in t(\lambda_i^*, y_i^*)$. Call $E_i = \{(\lambda_i, y_i): s_i(\lambda_i, y_i) = w_i\}$ individual i's relevant Engel curve. Therefore, B must satisfy the condition that, at its intersection with E_i, $(\lambda_i, y_i) \in B \cap E_i$, one has $-w_i \in t(\lambda_i, y_i)$. If all w_i were equal, any straight line with slope $-w_i$ can be such a B, whatever the E_i. Yet, if not all w_i are equal, the construction of B and D, for satisfying the condition, must take curves E_i into account, and, therefore, must take individuals' utility functions u_i into account. Therefore, if B is built without consideration of the u_i and the w_i are not all equal, the result violates Pareto efficiency and social liberty, except fortuitously.

describing market possibilities when incomes and prices can vary, the prices are usually summarized by a price index which is always taken as linear (as with the classical indexes of Paasche and Laspeyre and those derived from them). Write this index as $\pi=\alpha p+\beta pw$ where α and β are constant numbers non-negative and not both zero. One has

$$F(pv; p, pw)\equiv \phi(pv, \pi)= \phi(pv, \alpha p+\beta pw).$$

Since π is proportional to p, and level ϕ, equal to level F, does not depend on p (i.e., on the choice of the unit of account), there results that ϕ is homogeneous of degree zero in its two variables. Dividing these two variables by π (for $\pi>0$), one has

$$\phi(pv, \pi)=\phi(pv/\pi,1)=\phi[v/(\alpha+\beta w),1]=\varphi[v/(\alpha+\beta w)].$$

Since functions F, ϕ and φ are ordinal and are increasing functions of v, $v/(\alpha+\beta w)$ is a specification of function φ. Therefore, the pv, p and pw that provide equal freedom are such that

$$v/(\alpha+\beta w)= \gamma$$

for some given γ, or

$$v=\alpha\gamma+\beta\gamma w.$$

Hence, individuals i with possibly different wages w_i have the same freedom if their total real incomes v are

$$v_i=\alpha\gamma+\beta\gamma w_i,$$

respectively. This implies that individual i receives the net transfer

$$t_i=v_i-w_i =\alpha\gamma+(\beta\gamma-1)\, w_i.$$

But $\Sigma t_i=0$ entails

$$(1-\beta\gamma)\, \overline{w} =\alpha\gamma.$$

Then, denoting $1-\beta\gamma=k$,

$$t_i=k\cdot(\overline{w} -w_i).$$

This is the same result as that of solution 1.

Moreover, individual i's budget line in space (λ_i, y_i) is

$$w_i\lambda_i+y_i=v_i,$$

and it contains the point $(\ell_i=k, y_i=k \overline{w})$ since

$$(1-k)w_i+k \overline{w} =w_i+t_i=v_i.$$

This "equalization point" K, independent of i, is common to all budget lines (which, therefore, constitute a "pencil" of lines).

5. Equivalent properties and normative meanings

Judging something can, and a priori should, be done according to its various properties. The obtained scheme has in particular a number of characteristic (necessary and sufficient) properties or sets of properties, which have (more or less) different *meanings* (the key issue). Each can be taken as its definition, and as its justification (or it can participate to it). Looking at the result from these different angles is necessary for fully "understanding" and finally evaluating it.[33] There are some twenty such different (although logically equivalent) meanings, which regroup into several types of issues.

5.1 Equal liberty

The previous remarks have shown the following properties.

1. Social freedom from an equal allocation.

2. Equal freedom of choice (for possibly non-identical domains).

3. Rawls's solution with leisure (post 1974).

5.2 ELIE

A few other notable aspects are straightforward.

4. Equal-labour income equalization: Redistribute equally the product of the same labour k of all individuals. k is the "equalization labour."

5. Equal pay for equal work for labour k (the rate is the average wage rate $\overline{w}$). This is one of the most widespread claims of justice. Yet, it refers here to differences in productivities.

6. From each according to her capacities, to each equally (where "according to" is taken to mean, as it most commonly does, in proportion to): take kw_i proportional to w_i and give the same $k\overline{w}$. This associates two of the most widespread claims of justice.

7. Everyone works for everyone for the same labour (k) and for herself for the rest.

5.3 Desert and merit, equality and classical liberalism, work and works

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[33] The requirement that a principle should be evaluated from all its angles and possible meanings is a classical and basic meta-principle of social ethics, related, for instance, to Plato's "dialectics" in *Republic* and to Rawls's "reflective equilibrium."

Writing

$$y_i = k\,\overline{w} + w_i \cdot (\ell_i - k)$$

shows a decomposition of income into two parts induced by two different and opposed ethics which can be seen in various ways.

8. Equality and classical liberalism. The two parts are an equal income $k\,\overline{w}$ and the market remuneration $w_i \cdot (\ell_i - k)$ of labour ℓ_i–k. These are the two basic and opposed principles of distributive justice in our world. The level of coefficient *k* favours one or the other.

9. Each earns according to desert for labour k *and to merit for the rest.* Desert is according to labour or effort, here *k* for the share $k\,\overline{w}$. Merit means according to labour or effort and to capacities. This is the second part with individual labour ℓ_i–k and capacities w_i.

10. To each according to her work (effort, input) and to her works (product, output). This classical distinction refers here respectively to $k\,\overline{w}$ in proportion to work *k* and to the individual's product $w_i \cdot (\ell_i - k)$.

5.4 Financed universal basic income

11. Equal universal basic income financed by equal labour (equal sacrifice): The result $t_i = k\,\overline{w} - w_i k$ can be seen as providing the same basic income $k\,\overline{w}$ to each individual, and financing it by the same labour *k* from each (individual *i* pays the proceeds kw_i).

12. Equal universal basic income financed according to capacities (i.e. in proportion kw_i of w_i for individual *i*).

A universal, unconditional and equal basic income has often been proposed by scholars and political figures. Yet, Achilles's heal of such schemes is the specification of their financing which should be sufficient and fair (but unequal among persons in money terms), and should not induce Pareto inefficiency. ELIE satisfies these conditions.

5.5 Reciprocity

A basic principle of fairness is reciprocity.

13. General equal labour reciprocity: *Each individual hands out to each other the proceeds of the same labour (r=k/n).* Indeed, the ELIE operation amounts to equally sharing the proceeds

kw_i of each individual i's labour k, hence to yield to each individual the proceeds $(k/n)w_i$ of the labour k/n of each individual i (and what an individual yields to herself can be discarded). That is,

$$t_i = k \cdot (\bar{w} - w_i) = r\Sigma w_j - nrw_i = \Sigma_{j \neq i} rw_j - (n-1)rw_i.$$

This property has an aspect of fairness which is bound to be favourable to the acceptance of this scheme from sentiments of reciprocity.[34]

14. Each owns the rent of the same amount of each other's capacities (r).

5.6 Progressive transfers, total concentration

ELIE belongs to the question of reducing inequalities, in a particularly meaningful and straightforward way (see also note 38).

15. Equal partial compensation of productivity differences: Each individual yields to each other less productive the same fraction of the difference in their productivities, $r \cdot (w_i - w_j)$ from i to j if $w_i > w_j$. It suffices to consolidate the two transfers of the general equal reciprocity in each pair of individuals. Hence, ELIE amounts to a set of "progressive transfers" for total incomes. This set is, in fact, quite specific (property 17).

16. Each individual's total income is the weighted average between average productivity and this individual's productivity, with weights k and $1-k$, since

$$v_i = k\bar{w} + (1+k)w_i.$$

17. A concentration of total incomes: This formula also says that the set $\{v_i\}$ is a uniform linear concentration towards the mean of the set $\{w_i\}$, with degree k. This structure of transformation of a distribution is that which can be said to be the most inequality-reducing.[35]

5.7 Tax structure and reform

The fiscal structure and reform that realize ELIE are very simple, clear, natural, easy to implement, and made of a few elements each of which is classical.

18. An equal tax credit or rebate, and an exemption of overtime labour over some given labour, from a flat tax.

Indeed, the transfer can be written as the net tax

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[34] Cf. Kolm 1984, 2006b.
[35] Cf. Kolm 1966a, 1999a.

$$-t_i=(k/\ell^o)w_i\ell^o-k\overline{w}$$

for some given labour ℓ^o chosen such that $\ell^o \leq \ell_i$ for the chosen labours ℓ_i relevant for

macrojustice (see Section 6.1). The first, positive, term is the flat tax with rate k/ℓ^o on the

earnings $w_i\ell^o$ of labour ℓ^o, hence with a tax exemption of the corresponding overtime

earnings of labour $\ell_i - \ell^o$. The second term is the tax credit or rebate $k\overline{w}$ equal for all. This

tax structure is simple, clear, with two gratifications – an exemption and a rebate. For

example, the tax exemption of overtime labour over a low duration is the new general law in

France, which also has a universal equal rebate (resulting from an income tax credit).

19. Tax reform.

The ELIE distributive structure can be obtained from actual income taxation by a series of a

few simple and rather classical tax reforms:

- A *negative income tax* or *income tax credit* for low incomes, which exists in many countries.

- *Flatten* the tax schedule, which is often advocated for a reason of simplicity (and incentive),

and is for instance implemented in all Eastern European countries including the 9 fastest

growing countries of the European Union (an ELIE scheme can a priori be made as

redistributive as one wants by choosing a sufficiently high coefficient *k*).

- Replace actual labour by a *given labour* in the tax schedule, which is obtainable by

exempting earnings over a given labour not exceeding actual (full-time) labours.

- If the scheme concerns the "distribution branch" in "functional finance," *balance* the budget.

Formally, from the income tax on labour income $f(w_i\ell_i)$, one thus successively obtains,

with constants $a>0$, $b>0$, c, and $\ell^o >0$: $f(w_i\ell_i)<0$ if $w_i\ell_i<a$; $f(w_i\ell^o)$ or $bw_i\ell_i+c$; $bw_i\ell^o +c$; and, if

$\Sigma f(w_i\ell_i)=0$, $b\overline{w}\ell^o +c=0$ and hence, noting $b\ell^o=k$, $k\cdot(w_i-\overline{w})=-t_i$.

5.8 Other meanings

20. Bi-numéraire equal sharing of the value of productive capacities.

An amount of a productive capacity (with a given productivity) can be measured by the labour

that can use it (or time of use), or by the output it can produce. In an equal sharing, the choice

of this measure makes a difference because individual productivities differ. If an amount of an

individual's productive capacities is measured by the labour input that can use it, each

individual has initially 1 and the given allocation without any transfer is equal. Yet, if this amount is measured by the output it can produce, the total initial endowment of individual i is w_i. Both goods – income-consumption and leisure-labour-lifetime – can be taken as numéraire. Amounts of both are classically compared across individuals. The general solution consists of measuring a fraction of the capacities, say k, in income-value, and the rest, $1-k$, in labour-value. For individual i, the equalization of the first share transforms income kw_i into $k\overline{w}$, and the second share is already equal for all in labour-value, $1-k$. The result is the net income transfer $t_i = k \cdot (\overline{w} - w_i)$. One can also directly write the total income of individual i from the two parts, $v_i = k\overline{w} + (1-k)w_i$.[36,37]

6. Real gains, incentive compatibility, self-ownership and liberty

6.1 Irrelevance of non-realized advantages

As we have noted, a concentration transformation of a distribution is, in a sense, the most inequality reducing transfer structure. Hence, the inequality-reducing effect of a redistribution is meaningfully measured by the coefficient of the concentration which produces the same effect on some measure of inequality. For a redistribution and an inequality index, the "equivalent ELIE" produces the same "decrease" in inequality in total income: its k is the degree of inequality reduction or equalization of this redistribution.[38]

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[36] With ELIE as the solution of Rawls's full problem, k thus measures the relative importance attached to the two economic primary goods: income relative to leisure-labour. With the measure in labour value, equality is satisfied by full self-ownership which is classical liberalism, but is also Marx' view (he defines "exploitation" by theft of this property by low wages).

[37] ELIE has other interesting and meaningful properties. For instance, Maniquet (1998) derives, from a number of basic axioms, a state which is about that chosen by the individuals submitted to such a distributive scheme. Moreover, it is securing that ELIE can be derived from the most famous general presentation of principles of justice, that of Plato (*Laws*) and Aristotle (*Nicomachean Ethics*), with each person receiving the fruit of her labour $w_i \ell_i$ in "commutative justice," and an equal share (with the appropriate measure) of what is given to society in "distributive justice," achieved by compensatory transfers since their capacities are attached to the individuals ("*diorthic* justice") – see Kolm 2004, pp. 248-249.

[38] This degree of inequality reduction of a redistribution is equal to the *relative decrease in the absolute form of any synthetic index of inequality* (Kolm 1966b). Indeed, for any distribution of incomes (or other quantity) x_i whose set is x and average $\overline{x} = (1/n)\Sigma x_i$, one can, for an index of inequality, distinguish the absolute form $I^a(x)$ and the relative form $I^r(x) = I^a(x)/\overline{x}$. A synthetic inequality index is such that $I^a(x)$ is *equal-invariant* (invariant under any equal variation of all the x_i) and $I^r(x)$ is *intensive* (invariant under any multiplication of all the x_i by the same number). Then, the absolute form is also *extensive* (linearly homogeneous). A concentration of coefficient k of the distribution amounts to an equiproportional decrease of all x_i in proportion k, which similarly

Consider now the three following facts and judgments.

(1) Present redistributions in nations amount to equally redistributing the income of 1 to 2 days per week (from the USA to Scandinavia). Hence, de facto – even for the most redistributive policy a country could actually achieve –, for *normal full-time labour* one has $\ell_i > k$ (we will particularly see the cases of unemployment).

(2) Moreover, people commonly understand that individuals who benefit from a high wage rate be taxed for helping people who do not have this luck, but only when this provides an actual gain, not when it remains a mere possibility of income. Precisely, people do not agree with a tax on earning capacities that entail no earning because they are not used, that is, with a tax on leisure in measuring its value by the earning this time could provide were it used at labour (taxing for inducing work is something else and has to be justified). ELIE with $k > \ell_i$ would so imply demanding the value of leisure $k - \ell_i$, $(k - \ell_i)w_i$, in addition to the value of the whole product $w_i \ell_i$, or, if the redistribution of $k\overline{w}$ is taken into account, $(k - \ell_i)(w_i - \overline{w})$ for $w_i > \overline{w}$, in addition to $(w_i - \overline{w})\ell_i$. This opinion implies $k < \ell_i$. This common view has to be obeyed in a democracy.

(3) The very few productive individuals who choose to work very little mostly choose not to benefit from society's supply of a favourable wage, and hence arguably do not have to be taxed for this advantage. They choose to drop out of the cooperative venture of collective production (and division of labour), from its advantages, and, hence, from its liabilities. They are not, as Rawls (1982) puts it, "fully cooperating members of the society engaged in social cooperation over a complete lifetime for mutual advantage," and hence are not party in the sharing of benefits.

These last two remarks mean that what is at stake concerns actual advantages that people actually derive from their productive capacities and society's demand for them, rather than these capacities and demand per se – hence as available or potential earnings.

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decreases the absolute index, and an equal increase that restores the total sum or the mean, which does not affect this index. Hence the noted property. Examples of such indexes are $\Sigma * x_i - x_j *$ (absolute Gini), $\Sigma |x_i - \overline{x}|$, and the standard deviation.

The cases where the chosen ℓ_i is lower than k are particular cases: partial or full unemployment shortly considered, the few excentric productive people who drop out of cooperative social production, victims of particular handicaps, part-time jobs which are often second wages in families, etc. These particular cases deserve particular criteria and treatments. They are, therefore, out of the scope of overall distributive justice in macrojustice. Yet, some can also be more or less brought back to the general case, as with involuntary unemployment (Section 7.2), the case of people with capacities without market value ($w_i=0$), or the notional equal sharing of the labour of a household among its adults. The case of the tiny fraction of people – if any – who could earn high wages for a moderate effort but decide to live "on welfare" if they can is not a concern for macrojustice for three sets of reasons: the noted ethical reasons and opinions; it is a particular situation (out of the definition of macrojustice); and its rarity (not an issue for overall justice). These "fugitives from production" are the object of classical proposals and discussions.[39]

Finally, for all these related reasons, distributive macrojustice is only concerned with normal full-time labour and $\ell_i > k$ (the cases of unemployment will be added).

Therefore, for macrojustice,

$$y_i = w_i \ell_i + k \cdot (\overline{w} - w_i) = w_i \cdot (\ell_i - k) + k \overline{w} > k \overline{w} .$$

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[39] These are, for example, people who can earn 10 times the average income for some standard labour but would prefer to stop working and live on –for instance – 1/5 to 1/3 of average income. For the very few able people who choose to work very little, there are three classical proposals. (1) They should earn their sandwich, "he who does not work does not eat" (Saint Paul), the solution endorsed by Rawls. (2) They should have a "right to laziness" (Paul Laffargue) and perhaps receive a basic income(utilitarianism may support this position, which is eloquently defended by van Parijs (1995)). (3) We may try to persuade them that they should make other people somewhat benefit from the talents endowed to them by nature, the providence or their parents in working a little (at a high wage rate); relatedly, if they had to pay for their possible advantage in earning capacity, whether they choose to use it or not (which is their responsibility), they would pay $-t_i = k \cdot (w_i - \overline{w})$, for which they should work $k \cdot [1 - \overline{w}/w_i] < k$; however, if they still choose $\ell_i < k$, we will see that they may have an interest in hiding their skills and their value w_i (yet, diplomas, previous jobs, etc. often make some estimate possible). Note that freedom of choice should a priori refer to the full domain of possible choice in the space of income and leisure rather than to a subset of it only – such as the case $\ell_i = 0$ put forward by solution (2). Moreover, there are other distributive units than nations; for instance, transfers are intense in a family, but they are gifts rather than taxes (each likes others' enjoyment and consumption).

That is, there is a *minimum income* of $k\overline{w}$.[40]

As noted, the case $k=0$ is full self-ownership. A case of $k=2.5$ days a week for a nation would correspond to a very high redistribution (there can, in addition, be various policies of more specific microjustice).

6.2 Incentive compatibility and information

If w_i denotes the highest wage rate individual i can obtain, this individual can also generally earn various rates $w'_i < w_i$ in not using her best (most highly paid) skills at work.[41] She may make such a choice if she thinks that the fiscal authority bases her taxes and subsidies on this actual and observed w'_i, in order to diminish the tax or transform it into a subsidy if $w_i > \overline{w}$, or to augment the subsidy if $w_i < \overline{w}$ (hence she would benefit whatever $\overline{w}$ if $k>0$, and therefore she need not know $\overline{w}$ for behaving in this way). The individual may think that the government would take the observed w'_i as base either because it deems the actual wage rate to be the appropriate basis for the reasons presented in the previous section, or because it mistakes it for the value of capacities w_i, or for any mixture of these reasons.

Individual i thus chooses both labour ℓ_i and skills that earn $w'_i \leq w_i$, which maximize some increasing ordinal utility function

$$u^i[1-\ell_i,(\ell_i-k)w'_i+k\overline{w}'],$$

where $\overline{w}'=(1/n)\Sigma w'_j$.[42] The derivative $\partial u^i/\partial w'_i$ has the sign of ℓ_i-k+k/n if individual i takes the w'_j for $j \neq i$ as given (no collusion), but whatever they are. Therefore, individual i chooses $w'_i = w_i$ if $\ell_i > k\cdot[1-(1/n)]$. This is the case for macrojustice where $\ell_i > k$ (see the previous section and note 39). Hence, *the individuals choose to work with their best skills and*

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[40] One consequence is that, in a society, since $\overline{w}$ is given, choosing a minimum income and choosing a level of equalization labour k amounts to the same – given that the structural properties that lead to ELIE happen to be largely wanted (social liberty, Pareto efficiency, nonwelfarist macrojustice). The frequent rough consensus about a minimum income implies the same convergence of views about coefficient k. This relation is the more valid the more the minimum income refers to a norm of income (and consumption and lifestyle) rather than to the alleviation of physical suffering.

[41] See Dasgupta and Hammond (1980).

[42] Choosing a more remunerated but more painful or disagreeable activity, or the contrary, is considered as working more or less, and a corresponding full analysis has to consider, in a framework of multidimensional labour (see below), the relevant dimension(s) that affect both the productivity and the painfulness or intrinsic attractiveness of labour.

thus to "reveal" their capacities and to exhibit their economic value. The government can understand this (it does not need to know individuals' utilities, but only that individuals prefer higher disposable incomes for given labour). Hence, it does not need to raise questions about basing its taxes and subsidies on the actual values of capacities w_i or on the observed wage rates w'_i since using the latter as base makes them be the w_i. And the individuals can in the end know this conclusion.

6.3 Full self-ownership and liberty, a basic issue

The case $k=0$ is full self-ownership. It implies no redistribution from the market outcome ($t_i=0$ for all i). This is demanded by "classical liberalism," a central and historical ethics. This ethics often justifies this position on the grounds and from the values of liberty, in suggesting that both concepts are equivalent. Yet, the various kinds of freedom have to be distinguished. Full self-ownership certainly implies social liberty, because it implies the use-right of oneself, and from the very concept of property. But does the converse hold? An idea is that demanding a net lump-sum amount of money from someone amounts to forced labour if she has to work for earning it.[43] Yet, she can also consume or save less, or combine these various means. At any rate, this tax affects her actions, but because she has less overall given income, in so reducing her freedom of choice to a new domain included in the former one. Some other person who receives this amount as transfer sees her freedom of choice correspondingly augmented. Proposing that this tax amounts to theft presupposes the legitimacy of full self-ownership, that is, the conclusion sought. Now, without transfers a person with a higher wage rate w_i than another has more freedom of choice by inclusion of domains (she can have more income for the same labour and more leisure for the same income). Hence, a transfer from the former to the latter may equalize these freedoms of choice. This is the essence of the analysis of Section 4.5. There remains to choose the level of the distribution, coefficient k. The solution $k=0$ is a possible choice. Yet, it cannot be justified by liberty – this would return to the previous beginning of the argument. It has to rely on other values, which may not have the moral strength of liberty. As we have seen, the main one refers to the self and its integrity (and perhaps first occupancy). However, it is well admitted, nowadays and in a community,

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[43] "Taxation of earnings from labour is on a par with forced labour" (Nozick, 1974, p.169). Similarly, Dworkin (1981) speaks of the "slavery of the talented," although for an extreme redistribution ($k=1$) which cannot be a case of the scheme obtained here.

that people endowed with high earning capacities provide some help to others, although at a level which can be in discussion and evolution.

7. General labour and unemployment

7.1 Multidimensional labour, nonlinear production

Labour has a priori various dimensions, such as duration, individual effort and costs in previous education and training, intensity (strength, concentration), speed, etc. Moreover, output may not be a linear function of labour. Let ℓ_i denote a multidimensional labour of individual i, and $p_i(\ell_i)$ the corresponding earnings.[44] All the reasonings, results and meanings presented for the simple case can be repeated for this general case practically identically. The equalization labour k is now multidimensional. The tax-subsidy is

$$t_i = \bar{p}(k) - p_i(k)$$

where $\bar{p}(\ell) = (1/n)\Sigma p_i(\ell)$, and individual i's disposable income is $y_i = p_i(\ell_i) - p_i(k) + \bar{p}(k)$.

This multidimensional case can often practically be reduced to a unidimensional case with labour duration adjusted for the other characteristics of labour. Indeed, labour can generally be considered as a flow, and as steady in some given period (which can be taken as short as one wants). Then, if ℓ_i' denotes the duration of labour ℓ_i and ℓ_i'' the set of its other parameters, function p_i can be written as $p_i(\ell_i) = \ell_i' q_i(\ell_i'')$. If individuals' particular productivities are of the classical "output augmenting" type $q_i(\ell_i'') = a_i f(\ell_i'')$, then $p_i(\ell_i) = w_i L_i$ where $L_i = \ell_i' f(\ell_i'')$ is individual i's "labour duration augmented for the other characteristics of labour", and $w_i = a_i$ is the corresponding competitive wage rate.[45]

In the expression of earnings from labour ℓ_i, $p_i(\ell_i)$, labour ℓ_i represents items chosen by individual i, and the function $p_i(\ )$ the other items, that is, individual i's productivity and the labour market. Formation, education and training (as health care) increase later productivity.

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[44] For macrojustice, the effects of other persons' labour on an individual's earnings pass through the prices.

[45] The educational input can also be taken into account in "spreading" the formation time on later labour (that uses its benefits) (see details in Kolm 2004, Chapter 8).

They depend on the persons' given capacities for learning. Yet, they also involve acts of the individual and possibly various costs for her (time, effort, direct costs, foregone earnings, etc.). However, most formation and education in the first period of life is provided by the family, or determined by it through choice, support, information, and induced motivation. Globally, at a macro level and apart from exceptions, individuals' level of education is essentially a sociological phenomenon. Hence, for macrojustice and as a first approximation, its effects on earnings have to be incorporated in the productivity $p_i(\ )$ or the wage rate w_i under consideration. By contrast, training and formation undertaken later a priori constitutes a dimension of labour.[46] Note that the effects of different $p_i(\ )$ or w_i are equalized only for labour k and not for the rest of labour. This effect of the family should also be considered with the issue of bequest – its cost can be seen as a part of it.[47] Family-induced education could be sensitive to future taxation, but this is much attenuated by the fact that taxes decades later are very uncertain and by the non-pecuniary values of education as providing larger occupational opportunities and freedom of choice, jobs that are less painful and more interesting and gratifying, status of educational level and occupations, culture, and the pursuit of family traditions.

7.2 Unemployment

Situations of unemployment raise particular specific issues, but, given their importance, they should be related to the general results for macrojustice. If $w_i=0$, individual i's labour is neither supplied for income nor demanded, and the formula $t_i=k\cdot(\overline{w}-w_i)$ gives $y_i=t_i=k\overline{w}$, the minimum or basic income. If w_i is low, t_i and y_i are close to $k\overline{w}$, whatever ℓ_i. These people's actual labour level makes little financial difference.[48] Hence, the general principle can be applied to these cases (apart from the other policies of formation, education, taking care of handicaps, etc.).[49]

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[46] A refinement of the analysis can find ways of taking account of some individually chosen effort at the end of the educational period.

[47] There even is a ground for compensating sociological differences more than those due to intrinsic individual capacities which belong to the person's self, but this issue is not pursued in this simple presentation.

[48] For other levels of w_i, the case of individuals who choose to work very little ($\ell_i<k$) is treated as indicated in Section 6.1, whether $w_i>\overline{w}$ or $w_i<\overline{w}$ (people would not understand subsidizing leisure $k-\ell_i$ at rate $\overline{w}-w_i$ for the reason that this time would be paid at rate $w_i<\overline{w}$ if it were used at labour).

[49] Low w_i at a given time only is normally the object of an insurance (health, unemployment – see also below –, etc.).

In involuntary unemployment, the individual faces a constraint $\ell_i \leq \ell_i^o$. It can be partial or total (duration zero). It can be for duration or for other dimensions (for instance as underqualification for formation). Reasons for discarding cases $\ell_i < k$ from macrojustice may not hold any longer for this case: these people do not voluntarily abstain from participation to social production, and their number may not be small. Of course, good macroeconomic policy in the first place, unemployment insurance, and specific policies about the labour market and formation are in order. Yet, the obtained distributive policy can have three important positive effects on employment. In basing taxes and subsidies on items less elastic than actual labour, it generally induces higher labour. The other two effects concern involuntary unemployment in the strict sense. First, the income support to people with low wage rates provided by the obtained scheme can supersede, to everybody's benefit, a number of wage rigidities of public or private nature which are important causes of unemployment (minimum wages, collusions, etc.).[50] Second, the general results for macrojustice can also apply to the case of involuntary unemployment, in using the logical device of considering someone who cannot work more as someone who cannot earn more in working more (and works for earning). What the market presents to the individual is then described solely in terms of the remuneration of each labour (yet, for partial unemployment it cannot be a linear function of labour).

Considering unidimensional labour for simplicity in presentation, the outcome is that someone involuntarily unemployed at $\ell_i^o \leq k$ (in particular totally unemployed) has income $\tilde{p}(k)$ which derives from the average $\bar{p}(k) = (1/n)\Sigma p_i(k)$ in replacing the $p_i(k)$ of such individuals by $p_i(\ell_i^o)$ (0 for full unemployment).

This results from the application of the noted device in replacing the function $p_i(\ell_i)$ by its truncation at ℓ_i^o [51]: $P_i(\ell_i) = p_i(\ell_i)$ if $\ell_i \leq \ell_i^o$ and $P_i(\ell_i) = p_i(\ell_i^o)$ if $\ell_i \geq \ell_i^o$, with $p_i(0) = 0$ for full unemployment. Then, applying the ELIE scheme to functions P_i gives $t_i = \bar{P}(k) - P_i(k)$ and $y_i = P_i(\ell_i) + t_i = P_i(\ell_i) - P_i(k) + \bar{P}(k)$. If $\ell_i = \ell_i^o$ and $\ell_i^o \leq k$, $P_i(k) = p_i(\ell_i^o) = P_i(\ell_i^o) = P_i(\ell_i)$, and therefore $y_i = \bar{P}(k) = \tilde{p}(k)$. This is in particular the case for full unemployment, $\ell_i^o = 0$.

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[50] See Kolm 2004, Chapter 7.

[51] A particular case can be $p_i(\ell_i) = w_i \ell_i$.

Moreover, if, when $\ell_i^o > 0$, person *i* chooses to work less than ℓ_i^o, her income is reduced by the corresponding loss in output.

8. Information and community

8.1 Information

The implementation of ELIE, concerning information, primarily need only exempt overtime labour from the income tax, over some arbitrary labour duration (Section 5.7) – then the proceeds can be equally distributed for the "distribution branch", and the tax can be flattened. This implementation need not be concerned, for each taxpayer, with her wage rate (explicitly) and with her total labour and total income. The possibility of this implementation is practically shown by the fact that its basis, the tax exemption of overtime labour over some (low) level of labour is becoming the tax law in a country (France).[52] In fact, this scheme is in part achieved by the frequent lack of report of overtime labour when the lawful tax base is total income.[53] Moreover, in the same country there similarly exists a specific tax by which each person pays her earnings during a given time (the same for all).

These taxes, and notably the exemption of overtime labour, amount to basing the tax on the wage rate (for all normal full-time labour). This contrasts with a part of the traditional theoretical economic literature which used to assert that this is impossible! Neither the fiscal administration, nor the political opposition, said one word suggesting that it is impossible, that is, that it raises *larger* difficulties – overall – than the use of total earned income as base. In fact, with this tax structure, unreported or "black" overtime labour and earnings are no longer unlawful and tax evasion, and something that the tax administration should worry about and seek to know. Now, with earned income as base, the fact is that a total of some 30% of this base evades the tax (see Slemrod, 2002 for the US, and estimates are similar elsewhere). This

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[52] This was the main policy proposal of the winner of the 2007 presidential election (a proposal inspired by an early report of the findings of the present study).

[53] In France, the employer pays a tax on wages at a rate higher than that of the tax on profit. Hence, underreporting labour earnings benefits both the employer and the employee.

implies that the fiscal authorities do not know the total earned income they would like to tax – contrary to the assumption of the noted literature.[54]

Moreover, the whole ELIE scheme, being incentive compatible (Section 6.2), induces people to work with their best (i.e., most highly paid) capacities, and hence to reveal them and their market values, w_i. Now on standard working markets what is public knowledge are prices rather than quantities and payments exchanged, here the w_i rather than the $w_i\ell_i$ and ℓ_i.

The noted literature associates two elements. The most basic one is the "welfarist" assumption that the criterion is the highest level of a function of individual utilities, which, we have seen, has not been and cannot be implemented because it opposes the view of people (officials, voters, etc.) about what is relevant for macrojustice and the income tax (Section 2). This remark eliminates the informational requirement by far the most difficult to satisfy: that of knowing individuals' utilities and the social welfare function (see Section 2.7). The second element results from an incomplete reading of Mirrlees's (1971) influential and remarkable article. This article begins with saying that we tax earned income $w_i\ell_i$ because we do not know individual capacities w_i; yet its model assumes a knowledge of these capacities; and the article ends with saying that since we can observe labour duration ℓ_i, we can deduce w_i from total earnings $w_i\ell_i$ and take it as the tax base. Basing the tax on $w_i\ell_i$ came to be called "second best" with respect to lack of information on w_i which would be the base in "first best" taxation (this is often said with the welfarist criterion in mind, but that it is not necessary). The fact is that the *relative difficulty* for the fiscal authority in being informed about the *three* variables w_i, $w_i\ell_i$, and ℓ_i *depends* on the particular case of the person i. Earned income $w_i\ell_i$ can sometimes be known rather well, but we have seen that this is far from the case on average. Labour duration in factories, offices and stores can sometimes be wellknown, contrary to the case of many independent jobs. Hourly wages are common knowledge in many professions, but are not well defined for other occupations.

Dimensions of labour other than duration can be treated as duration in exempting corresponding premia when they exist, productivity premia for intensity or premia for previous formation or training. The treatment of education has been discussed (Section 7.1).

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[54] This is fully acknowledged for the occupations where the fiscal administration proposes the taxpayer to accept an arbitrary lump-sum figure as base of the income tax (an option for all farmers in France, for instance).

First of all, however, it should be remarked that, in developed countries, 9/10 of labour income is wage income for which there is a pay sheet. Pay sheets are official and legal document. Their falsification is punished by law. They include all the information needed: wage rate, total pay, labour duration, overtime work and pay, job specification, category of labour which often implies some type of intensity of work and previous formation or education, often educational level, and the various premia. For the remaining 1/10 of labour incomes, fiscal administrations have well-practised routines of standard procedures for obtaining the needed estimates and information about earnings and labour: demands of reporting, reports from both parts of transactions, checking, recoupments, penalties, tests of consistency, categorizations of activities and labours, comparison with other jobs or occupations (notably wage-earning ones), indirect or a priori estimates of durations (comparisons, opening hours and days), necessary previous formation, standards of type of activity with respect to gains and duration, and so on. A type of labour often implies a level of education and often more or less a type and level of intensity. For all labours, double reporting, comparisons, tests of consistency, checking, penalties, etc., can be applied as they standardly are. Yet, not to tax total earnings, the duration of labour, and its specific intensity and required training, often makes estimation much easier. In particular, cheating about these aspects is now irrelevant. Other fraud, cheating and lying can happen, as when the basis is full income and, indeed, for all kinds of taxes and subsidies. For instance, an employer and an employee who agreed not to report some labour and its remuneration can now do it in shifting some payment towards an exempted part (overtime or a premium); yet, the fiscal administration need not give up its vigilance, and detecting the fraud may be easier because at least there remains some trace of the payment. For all cases, the administrative cost is reduced by less frequent random checkings with higher penalties.[55]

8.2 The degree of redistribution

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[55] Kolm (1973). For instance, the tax on overall wealth in France, with unilateral declaration and improbable occasional checking, is sufficiently established by the high level of penalties. See also Slemrod and Yitzhaki (1987). Further analysis of the issue of information for the implementation of ELIE schemes can be found in Chapter 10 of Kolm 2004. A number of other analyses of second-best ELIE (with respect to information) have been proposed but cannot be presented here for lack of space. See also the chapters by Fleurbaey and Maniquet, and Simula and Trannoy, in Fleurbaey, Salles and Weymark (eds.) (2008).

Coefficient k, technically the equalization labour, is a degree of redistribution, equalization, and solidarity with regard to the unequal endowments of productive capacities. The value $k=0$ corresponds to full self-ownership and an absence of redistribution from it, and redistribution increases with k. Specifically, k is a degree of common ownership of the value or rent of given productive capacities (and $1-k$ is a corresponding degree of self-ownership) – and this commonly owned part is equally shared for lack of relevant other differences among individuals. Coefficient k also has the various important meanings derived from the various meanings of an ELIE distribution (Section 5). The structure of ELIE has been derived from properties which are essentially wanted by all for macrojustice. Could this also hold for the level of coefficient k, given that it has opposite effects on the interest of individuals depending on whether their w_i is above or below the average $\overline{w}$ (since $t_i=k\cdot(\overline{w}-w_i)$)? In any instituted society, it is largely held that people with insufficient means and earning capacities should be helped by some redistribution. More precisely, in a given society, there usually is some kind of consensus about what a standard minimum disposable income should be. Since this level is $k\overline{w}$ with ELIE and $\overline{w}$ is given, this common view determines a coefficient k (the poor can also benefit from more specific measures of microjustice).[56] Moreover, in a number of peaceful societies the overall level of income redistribution is generally directly more or less accepted or approved of, or the various standard opinions in this respect vary in a relatively limited range. Then, the coefficient k of an ELIE equivalent to the actual redistribution (the degree of this redistribution, see Section 6.1) provides an answer. Reforms towards this ELIE structure can *de facto* benefit everybody, as we will see. Yet, this level of redistribution also often evolves, and this is done more efficiently and in accordance with common views if the distributive structure also evolves towards an ELIE scheme.

For more direct inquiries, however, although the opinion of an individual "small in a large number" has in itself no actual influence – and hence no influence on this individual's self-interest –, people's expressed views are often influenced by their interest, even though people also have a social-moral judgment (the view of the "impartial spectator in their breast" as Adam Smith (1759) puts it). Yet, ELIE provides a neat possibility of obtaining people's social-moral views cleaned from their self-interest. It suffices to consider the opinion of individuals with an average wage rate $w_i=\overline{w}$. Indeed, for them $t_i=0$ whatever k: their interest

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[56] The standard minimum income particularly plays this role of revealing a consensual k of an ELIE distribution when it refers to a norm of income or consumption rather than to physical suffering of misery.

is not affected by the level of k. Their opinion about this level thus a priori only expresses their impartial social-ethical view. This would a priori provide an unbiased sample of these views in society.

Individuals' social ethical views are a priori globally closer to one another than their interests in questions of distribution (less polarized for an ELIE), because they are altruistic and because they are impartial (by nature and definition of a conception of justice).[57] Yet, they may differ. However, these views depend on the various influences the individuals have been submitted to, their life experiences, their reasoning – and, possibly, some given sensibility. Hence, they a priori become more alike when people are informed about others' arguments and know vividly about their experiences. The means are essentially information and social dialog. This has practical limits, but the dissensus can be reduced by showing the results of a number of analyses: a theory of dialog showing the tendency of the "ideal speech" (Habermas), the derivation of the individuals' own impartial views from their preferences and conducts about people close to them, theories of impartial judgments such as the theories of the "original position" or "moral time-sharing" (each individual assumes she is all individuals successively in time) corrected for the serious defects of their classical presentations, and so on.[58]

The distributive coefficient k depends on the society in which this distributive policy takes place. It expresses the extent to which this society considers itself a community of resources and solidarity. We have noted the levels of k of the ELIE equivalent to the present-day national distributions. These actual distributive policies are not based on the less inelastic possible items and also generally induce other waste. Simply reforming them – notably the income tax and the main aids to low incomes – with everybody gaining at each step can be done towards an ELIE with a similar coefficient k.[59] Yet, the social and political dialog about the degree of community, solidarity and redistribution will go on. Moreover, there can be, and often are, various communities of redistribution for the same person – for instance at levels of a region, a nation, or supranational (e.g. the European Community). Then, there can be an

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[57] See Kolm 2004, Parts 4 and 5.

[58] All these analyses, others for the same purpose, and their results, are presented in Part 4 of the volume Kolm 2004.

[59] This is a factual result rather than a theoretical necessity since ELIE solutions are only a subset of the Pareto-efficient states. It is in particular shown that ELIE schemes can supersede all present-day supports to low incomes with everybody benefiting (Kolm 2004, pp. 118-122).

ELIE and a *k* for each community, with a net addition of the transfers, and possibly some evolution and shift in time.

9 Policy

9.1 Place in public finance

If distributive justice is achieved by such a policy, the financing of other public expenditures should a priori be by the method which is neutral in this respect, benefit taxation.[60] This is the classical budget optimization by "functional finance" (e.g. Musgrave 1959). A number of services can then be associated with their financing, and they can be given financial and hence managerial autonomy, which is often favourable to efficiency. Users' benefits are more or less estimated by the usual benefit-cost analyses of public expenditures, but this is sometimes difficult. Yet, other principles of financing are also classically proposed. One of them is taxation "according to capacities" which, for earned income, should be capacities to earn, i.e., in proportion to w_i. Another principle is "equal sacrifice", which, if it does not simply means equally in income, should be equal sacrifice in labour. These two classical principles are in fact equivalent: each individual i pays $w_i L$ where L is both the coefficient of proportionality and the equal labour. This is in fact the ELIE financing of the basic income $k\overline{w}$. Each taxpayer i then pays the product $(k+L)w_i$ of her labour $k+L$, the same for all, and she receives the amount $k\overline{w}$ plus the benefit of other public expenditures. Of course, all these financing principles can be jointly present, for the various types of public goods.

9.2 Conclusion

Facts and necessary or commonly held judgments – Pareto efficiency, social liberty, private accountability of tastes for macrojustice – have been shown to imply a macrojustice policy which is simple, clear, understandable, richly meaningful, more easily implementable than present taxes and aids, and installable progressively or rapidly by largely supported reforms. Its central structure amounts to several distributive policies which are logically equivalent but have different and very important social meanings: equal and maximal social and real liberty;

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[60] With some rule for allocating the surplus for public goods (possibly the outcome of a fictive and implicit exchange or agreement for respecting the spirit of social liberty – a "liberal social contract," Kolm 1985, 2004, pp. 67-69).

a given tax credit and an exemption of overtime labour from a flat income tax; a universal basic income financed by an equal labour of all; an equal sharing of the proceeds of the same labour of all; each yielding to each other the product of the same labour; and a number of other meanings presented in Section 5. This is complemented, when needed, for possibly remaining issues of specific microjustice.

Most actual fiscal and distributive systems are the historical result of an accumulation of reforms taken in considering one or two effects, along the aleas of political development. They generally are contradictory, wasteful, and with wasteful economic effects.[61] In particular, there exist reforms of this system that would benefit everybody, and, in fact, ELIE schemes that make everyone better-off than in the present situation. The corresponding reforms, or reforms towards different degrees of redistribution, can be realized in various ways, rapidly or progressively according to political opportunity. An example of reform has been noted in Section 5.7. One can also add an ELIE scheme with a low coefficient k to existing policies and progressively increase k in correspondingly lowering or suppressing existing measures that become superseded.

The obtained ELIE distributive structure relates to a number of existing or proposed ones. As we have seen, a country exempts overtime labour from the income tax. There are taxes that levy the earnings of the same given labour time of everybody (the product can be equally shared). The basic income is discussed in many scholarly and political circles, with the problem of finding an efficient, sufficient and just financing (this can be the proceeds of an equal labour of all). One proposed such financing is a flat tax; this amounts to Mirrlees's (1986) final proposal of a flat income tax with a negative part, and is studied by Atkinson (1995) – ELIE only adds exemption of overtime income above some given labour.[62] All reforms that tend to base taxes or aids on less elastic items a priori go in the proper direction, and much is possible in this respect. Finally, if, as Kenneth Arrow (1963) proposes, "The fundamental function of any theory of social welfare is to supply criteria for income distribution," the ELIE tax-subsidy structure constitutes a solution to this general problem too.

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[61] Among the abundant evidence one can give, see, for instance, Bourguignon and Chiappori (1998).
[62] Hence, when studies of welfare-determined income taxation see that their refined and well worked-out second-best proposal is complex, not understood by the public and politicians who, at any rate, disagree with its ethics *for this application*, with a regressive tax for high incomes (Phelps 1973a, 1973b), informational and conceptual difficulties (utilities), and high administrative costs, they come to consider a pragmatic third best in the direction of the liberty-based first best implied by standard moral judgements.

The issue is that if "social choice" is derived from "individual values" – as Arrow's title suggests – and individual values are not welfarist *for this problem*, this social choice is not either. In fact, a large "overlapping consensus" (Rawls's term) of individual values points to the relevant concepts of equal liberty, which imply the solution described here.

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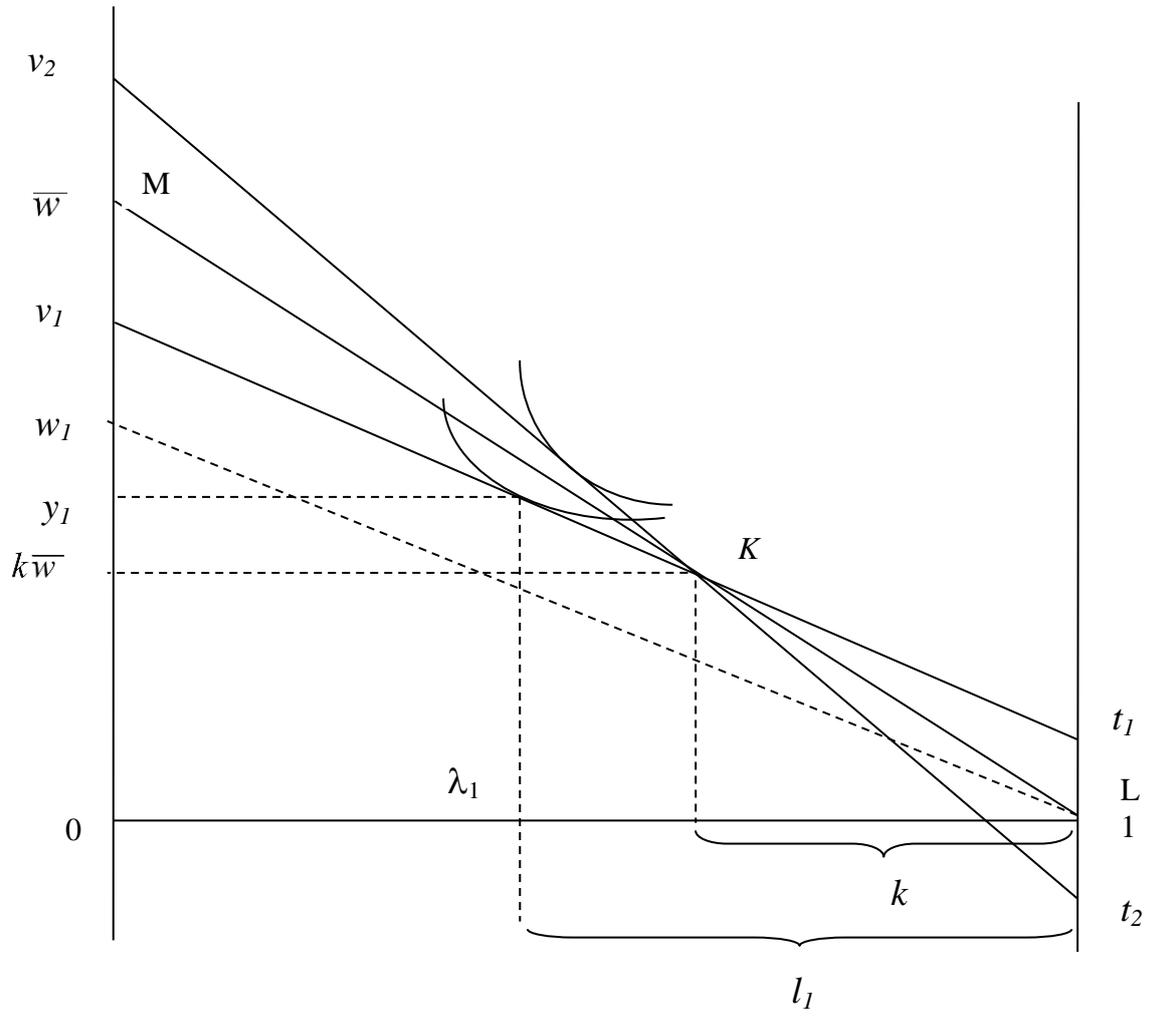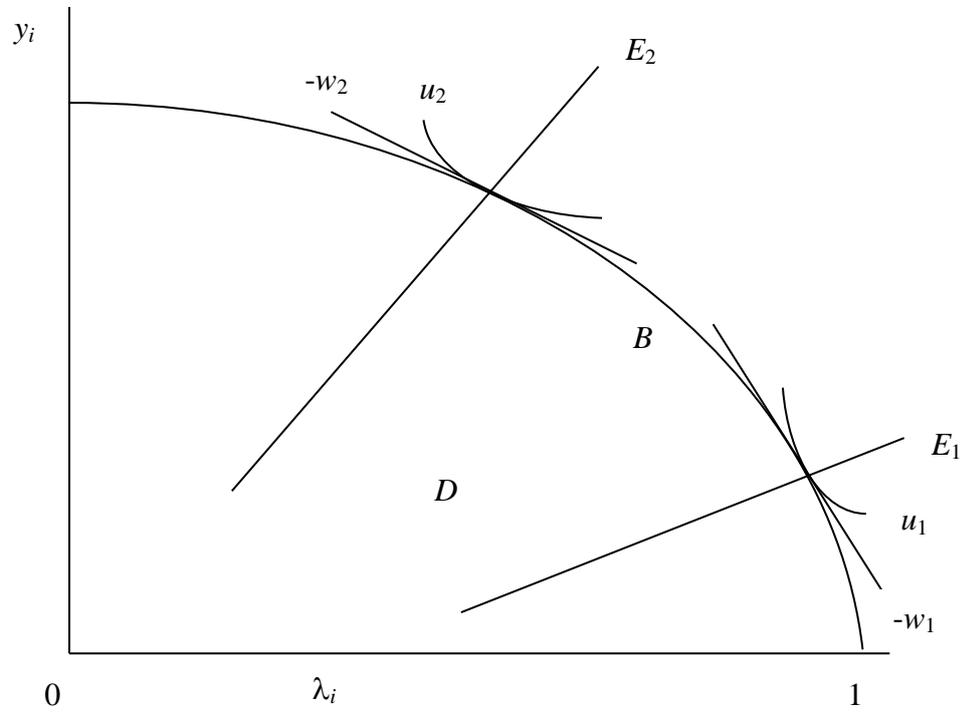Van Parijs, P. 1995. *Real Freedom for All*. Oxford: Oxford University Press.

Figure 1

Figure 2