



UNDERSTANDING THE MECHANISMS OF
TAXATION AND PUBLIC TRANSFERS
WHICH PREVAIL IN OUR CONTEMPORARY ECONOMIES

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based on a research report from Bertrand Lemennicier

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The actual width of the mechanisms of redistribution

In all OECD countries taxation and redistribution mechanisms exist which reduce income inequalities.

A way of presenting these facts consists in using what economists call the Gini coefficient. The Gini coefficient of a population can vary between 0 and 1. When the coefficient is 0 that means everyone has the same income. The further it moves away from zero, the more important inequalities are. Consequently, the greater the ratio of the values of the Gini coefficients before and after redistribution (ratio PRE/POST in Table 1), the more important redistribution is.

Table 1: Gini coefficients for 19 OECD countries 1990-2000

<i>Gini Coefficients for 19 OECD Countries</i>	<i>mid-1990s</i>	<i>mid-1990s</i>	<i>mid-1990s</i>	<i>2000</i>	<i>2000</i>	<i>2000</i>
<i>Name of countries</i>	<i>POST Disposable income</i>	<i>PRE Market income</i>	<i>PRE/POST Ratio of Gini Coefficients</i>	<i>POST Disposable income</i>	<i>PRE Market income</i>	<i>PRE/POST Ratio of Gini Coefficients</i>
<i>Japan</i>	0,29	0,338	1,17	0,31	0,362	1,17
<i>United States</i>	0,351	0,417	1,19	0,346	0,42	1,21
<i>Switzerland</i>	0,285	0,336	1,18	0,264	0,324	1,23
<i>Greece</i>	0,322	0,405	1,26	0,335	0,413	1,23
<i>Portugal</i>	0,342	0,431	1,26	0,348	0,433	1,24
<i>Canada</i>	0,287	0,389	1,36	0,305	0,39	1,28
<i>New Zealand</i>	0,324	0,428	1,32	0,33	0,43	1,3
<i>Italy</i>	0,349	0,464	1,33	0,345	0,456	1,32
<i>Netherlands</i>	0,254	0,377	1,48	0,25	0,332	1,33
<i>United Kingdom</i>	0,304	0,424	1,39	0,319	0,432	1,35
<i>Norway</i>	0,249	0,341	1,37	0,26	0,363	1,4
<i>Australia</i>	0,294	0,423	1,44	0,295	0,421	1,43
<i>Finland</i>	0,234	0,382	1,63	0,26	0,371	1,43
<i>Poland</i>	0,39	0,553	1,42	0,37	0,532	1,44
<i>Germany</i>	0,27	0,363	1,34	0,272	0,393	1,45
<i>France</i>	0,277	0,414	1,49	0,272	0,403	1,48
<i>Czech Republic</i>	0,251	0,371	1,48	0,26	0,404	1,55
<i>Sweden</i>	0,216	0,374	1,73	0,242	0,375	1,55
<i>Denmark</i>	0,214	0,348	1,63	0,226	0,355	1,57
<i>Average OECD : 19</i>	0,29	0,399	1,38	0,295	0,4	1,36

Gini coefficients are based on market and disposable income for working-age population. Data for Germany refer to old länders. Data for Canada and Sweden take account of breaks in series in the mid-1990s..Source: Calculations from OECD questionnaire on distribution of household incomes. Countries are ranked in function of the intensity of public income redistribution in 2000.

The object of Bertrand Lemennicier’s study was to identify more precisely who are “the winners and the losers” in our modern mechanisms of income redistribution financed through taxation and to understand why it is like this, that is, which are the key parameters which control the nature and the amount of the redistribution policies.

A simple example will enable us to understand the type of analysis which will be conducted below.

Pierre, Paul and Jean have respective incomes of 1,000, 600 and 200. If a majority vote must take place to decide on the redistribution policy, what will be the outcome? One could

anticipate for example that a proportional tax of 10% with redistribution towards the poorest will be chosen. If this is the case, the incomes after redistribution will be respectively of 900, 540 and 340 for Pierre, Paul and Jean. The income variations will have been reduced, the redistribution being done indeed from the two richest towards the poorest. But two citizens, Pierre and Paul, have their income reduced. There are thus strong chances that this will not be the outcome of a majority vote. As long as the redistribution policies chosen are “continuous” (that is, as long as one chooses lump sum, proportional or progressive taxes, and redistribution policies based on incomes¹), then the key character in this history will be Paul. For a redistribution project to be adopted by a majority it is necessary to have Paul’s consent, otherwise Paul will collude with the other loser to block the project. Thus, in a system where key decision are submitted to majority votes, any redistribution policy will have to get the favour of the average income households and, therefore, will be beneficial to them. This claim is known in economy as “Director Law”, of the name of the economist Aaron Director who suggested it to George Stigler who then made it known to all the economists’ community.

Is the middle class the first beneficiary of existing mechanisms?

Our little story (or, if you prefer, the Director’s Law) suggests a positive answer to this question. And, indeed, that seems well confirmed in the facts if we analyze Table 2 below: the middle class tends to profit from the taxation and transfer mechanisms (contributing for 49% to public revenues from taxes and receiving 56% of the transfers). But the poor remain nevertheless the first beneficiaries since they pay only for 4% of the revenues from taxes and receive 30% of the transfers. (I say nevertheless because the strong version of the Director Law is that only the middle class sees their fate improved by these mechanisms.)

Table 2a: Redistribution of public income: who gets what? (%)

<i>OECD Countries : Average</i>					
<i>Transfer programs</i>			<i>Taxation (including social security)</i>		
<i>20%-Low income</i>	<i>60% Middle</i>	<i>20% High income</i>	<i>20%-Low income</i>	<i>60% Middle</i>	<i>20% High income</i>
30	56	14	4	49	47

Source: OECD: Forster M. and Mira d’Ercole M. “Income Distribution and Poverty in OECD Countries in the Second Half of the 1990s”, Document de Travail sur les affaires sociales, l’emploi et les migrations, n° 22, OECD.

Table 2b: Redistribution of public income: who gets what? (%)

<i>Countries</i>	<i>Transfer programs</i>			<i>Taxation</i>		
<i>Data around 1994-1995</i>	<i>Low income D1-D3</i>	<i>Middle D4-D7</i>	<i>High income D8-D10</i>	<i>Low income D1-D3</i>	<i>Middle D4-D7</i>	<i>High income D8-D10</i>
<i>Denmark</i>	45,8	37,5	16,7	12,7	36,5	50,8
<i>Germany</i>	38,6	40,1	21,3	5,3	31,7	62,9
<i>Finland</i>	39,8	41,4	18,7	9,5	32,9	57,6
<i>Italy</i>	20,8	44,7	34,5	5,8	29,8	64,4
<i>Netherlands</i>	43,6	35,7	20,7	10,7	34,5	54,7
<i>Sweden</i>	32	41	27	11	34,9	54,1
<i>USA</i>	37,2	38,2	24,6	5,2	26,5	68,2
<i>Australia</i>	58	34,6	7,4	1,9	27,8	70,4
<i>Canada</i>	41,7	41	17,3	2,9	29,2	67,9

Source: Fiorella Kostoris Padoa Schioppa, 2001, “Commentaire”, table 5, in *Inégalités économiques*, éd. T. Atkinson, M. Glaude and T. Piketty, La documentation Française.

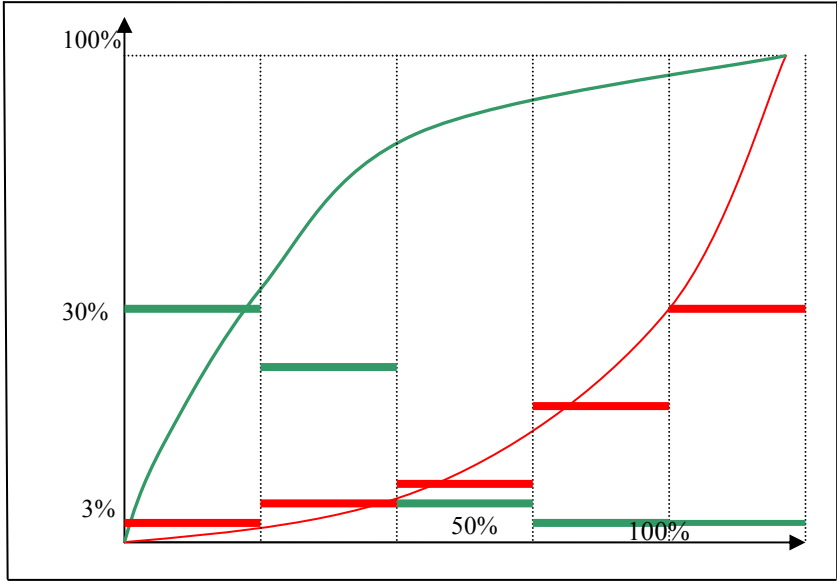
¹ A “discontinuous” policy would be for example a policy where only average income pays taxes and where only the richest and the poorest benefit from redistribution policies. In such a case one could imagine that the rich persons and the poor persons unite themselves against the middle class.

Table 2b shows that this is a general pattern even if in some countries redistribution from the rich persons towards the poor is stronger (Australia breaking all records).

The tables above also shows that, in absolute value and in many countries (exceptions here being Australia, Canada, Netherlands and Denmark), the middle class receives the greater share of transfers. On the other hand, taking into account their contribution to public revenues, their profits are quite irregular; sometimes negligible (case of Denmark, Holland or of Australia), and sometimes very important (case of Italy, the USA or Canada).

Figure 1 illustrates the phenomenon at work. On the horizontal axis we have placed the households by order of increasing incomes. One assumes here a proportional income tax and transfers which are also inversely proportional to incomes. The continuous red curve gives the proportion of the total revenues from taxes perceived as one includes the taxes paid by higher incomes. The green curve gives the same information for the proportion of total transfers which has already been transferred as we consider households with higher incomes. The broken lines represent the average for the quintile concerned. For example, 20% of the households with the weakest incomes (first quintile) receives 30% of the total transfers and contribute all together for 3% of the revenues from taxes. One can hence easily visualize which quintiles should logically support such a redistribution policy.

Figure 1: Diagrammatic representation of the situation



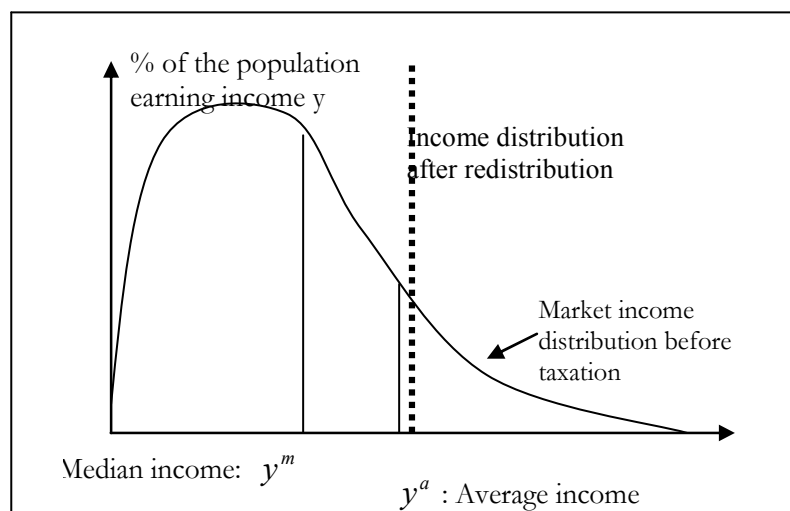
A simple model of public decision making in a democracy: The role of the median voter

Rather than to base their reasoning on the fuzzy concept of income classes (middle class, higher classes, etc), economists preferably rely on the more precise concepts of average income and median income. If one observes the income distribution in an advanced economy, one realizes quickly (see the figure below) that the market incomes (that is, here, income before redistribution) are not distributed in a symmetrical way around the average income (y^a): the distribution is skewed towards high incomes; one of the statistical consequences of this being that the median income (y^m) is below the average income (the median income being

defined as the income which divides the population in two equal parts: there are as many individuals who gain more than the median income, that individuals who gain less).

The consequences of this asymmetry in market incomes distribution (and therefore of having a median income below the average income) are important. Indeed this implies that, whenever a simple majority vote is chosen, the only proposal concerning the redistribution policy which cannot be beaten is the one that corresponds to the preferences of the median income voter. The result of such a vote is then easy to anticipate (in theory...): **since the median voter has income below the average income, he will prefer that mechanism which leads to the steeper increase of his personal income.** Now, the further up that the median voter can go is the average income (if he asked for more, someone else would be in his situation and would be able to ask for a new redistribution). In other words, this simple model of public decision-making concerning the redistribution policies predicts that, when starting with an asymmetrical income distribution, the majority vote will lead to a situation of perfect income equality. After redistribution, everyone has the average income (which becomes, at the same time, the median income!).

Figure 2: Market income distribution before taxation



This “basic” model leads therefore to a paradox since it predicts that, to the extent that individuals primarily wish a redistribution that increases their present wellbeing, then a decision mechanism based on majority voting should lead to a level of redistribution much higher than the one we observe in reality.

Why thus, in our modern democracies, don't we have more redistribution than we already have? This is what we will try to understand.

Taking into account the in kind transfers makes the citizens with an average income the larger beneficiaries of the redistribution mechanisms...

This assertion may appear paradoxical; it is, however, well explained by economists. An example will help understand the mechanisms at work.

Let us take the case of education. The government can decide to finance it either by income transfers, or by subsidizing the price of education (until it becomes “free” for). In the first case –monetary transfer– the rich will be dissatisfied because it is their money which one

takes to distribute to others. The poor will be charmed because they receive money, which they can spend for other things. The average income, however, does not receive much in this income redistribution which goes mainly from the rich towards the poor; they will thus not be very enthusiastic. In the second case –in kind transfer– things are different: Public education is financed by the rich persons who are thus not very satisfied. Certainly, their children have access to the subsidized school, but they paid it the full price through taxes. The poor are not very happy either: they would have largely preferred a money transfer which would not have “constrained” them to consume as much education. Only the average incomes are satisfied as they were actually planning to consume education and that education is now partly subsidized by the higher income group. Hence, the average income group appreciates such in-kind transfer.

Besides, it is precisely in-kind transfers that Stigler –and before him Director– had in mind when they claimed that the middle class is the biggest beneficiary from redistribution policies.

Table 3 tends to confirm this analysis. Contrarily to average and higher incomes, the lowest incomes hardly draw any favours from in-kind transfers offered to them.

Table 3: Percentage of students at the university by socio-economic classes in France (2004-2005)

	<i>% of households</i>	<i>Social origin of French students 2004-2005 in%</i>	<i>Market income declared to fiscal authorities</i>
<i>Small shop keepers, merchants, entrepreneurs,</i>	6,2	6,7	70655
<i>Upper class</i>	10,7	32,2	54733
<i>Intermediary</i>	15	15,5	44826
<i>White collard</i>	10,7	12,9	29660
<i>Peasants</i>	2	2	27023
<i>Retired people</i>	26,8	11,4	25018
<i>Blue collard</i>	23,5	10,5	24246

Source : *Annuaire statistique de la France, édition 2006, Table B.04-6, p. 87 and Table G.01-12, p. 227.*

Disincentive character of taxes and transfers

The model, in its simple version, supposes that neither the taxes, nor the transfers modify the pace of wealth creation and therefore market income distribution. This assumption is clearly abusive. In reality, granting transfers leads certain economic agents to reduce their working time (the economist says that the opportunity cost of work has increased since when working the agent gives up leisure *and* transfers). This effect will very possibly (although not certainly) be reinforced by the fact that a tax increase will lead economic agent to work less (or to work on the black market, or to work home). Pushing things at the limit, the economic agent who knows that he will be taxed at 100% can decide not to work anymore. The median voter who takes into account those considerations will quickly realize that a strong redistribution policy leads, in a more or less short term, to a fall of the average *before tax* income, or, at least, to a slower increase of the average income. For this reason, he can express a preference for a more moderate redistribution policy. Differently said, a median voter who understands the *Laffer curve effect* will revise downward his redistributive claims, even if he has an income lower than the average income. He does not want to see the branch on which he is sitting.

The belief in social mobility can slow down the redistributive impetus

An average or weak income who hopes to join soon the high income club should more easily accept incomes inequalities than someone in the same situation but with diverging expectations. If we generalize this: in an economy where the dominant perception is that of a great social mobility and of increasing wealth for all in a medium term (which is perhaps the case of China today or was the case of America when Tocqueville visited it), income inequalities are more easily accepted and we will therefore get less redistribution. We therefore have another possible explanation to the observations made at the beginning of the study.

On a more normative level, it is also appropriate to recall that social mobility is probably good cement for society (a point emphasized by Vilfredo Pareto, an economist and sociologist of the early 20th century). More important still, it should be recalled that most income inequalities should not be imputed to exogenous factors: they are rather imputable to the price system which, when functioning freely, works as a signalling device. Hence, if some individuals have higher income than others, it is often because they have perceived a better way to serve the needs of others, and have consequently invested in the right direction. Thus income diversity is natural, or logical, in a world of progress and change (that is, in the real world!). Fighting against income diversity by the means of redistributive policies amounts to a rejection of one of the most useful tool to fight scarcity and build realistic expectations. It is to go against nature. This reinforces our preceding remarks on the **disincentive** character of taxes and transfers.

Everyone will not vote...

Even when the possibility is offered to them, certain voters abstain from voting. Consequently, the distribution of those who vote is not identical to the income distribution. The income of the median voter (if one takes into account only those who will vote) could therefore be different from the median income of the whole population.

Let us take an extreme case to illustrate the idea. If voting rights are reserved exclusively to landowners then the outcome of the vote will depend on the preferences of the median landowner. If the incomes of this median landowner are above the national average income, then he will probably be opposed to any redistribution and consequently a majority vote will bring no income redistribution within the population. What happens in reality? Who goes to vote and, when they vote, for whom do they vote?

A first observation is that the implementation of redistributive policies is strongly correlated with the enlargement of voting rights. To be convinced of this enough is to recall the great dates of the widening of voting rights (first the right was given to “poorer men”, then to women, and finally to young people) and the rise of public expenditure and redistribution which each time followed. This phenomenon can easily be reconciled with our previous analysis if we assume (and it is a realistic assumption) that the new voters had each time incomes located below the income of the median voter and therefore could reasonably expect to benefit from in kind as well monetary transfers.

Now, if one reasons by socio-professional categories (which must always be done with prudence), one notes that the first winners at the redistribution game are the “blue collars”, and the main losers are entrepreneurs and business men.

Table 4: Average annual income in 2003 by socio-economic classes in France

	<i>% of households</i>	<i>Market income declared to fiscal authorities</i>	<i>Disposable income</i>	<i>Difference</i>
<i>Merchants, entrepreneurs, medical doctors, lawyers, accountants,</i>	5,4	70655	57453	-13203
<i>Engineers (public and private) managers, scientists</i>	9,3	54733	47963	-6770
<i>Teachers, novelists and artists</i>	3,9	34920	32217	-2703
<i>Managers and intellectual professions (sum and means of the two precedent lines)</i>	13,2	44826	40090	-4737
<i>White collar</i>	14	29660	28752	-649
<i>Peasants</i>	1,5	27023	26770	-253
<i>Retired people</i>	35	25018	23390	-1628
<i>Blue collar</i>	18,5	24246	25411	1166
<i>People working at home</i>	4	17260	19200	1940
<i>People helping others at home</i>	1,8	14670	17020	2350
<i>Weight means by % of households</i>	93,4	28482	26778	-1668
<i>Median income</i>	59	25000		

Sources : *Annuaire Statistique de la France, édition 2006, Table D.01-1, p. 121.*

Table 5: Elections of the Parliament (1997)

	<i>Merchants, entrepreneurs, medical doctors, lawyers, accountants, (all those who held the monopoly on professional status) (5,4%)</i>	<i>Managers and intellectual professions (13,2%)</i>	<i>White collar and middle wage earners employees (14%)</i>	<i>Peasants (1,5%)</i>	<i>Retired people (35%)</i>	<i>Blue collar (18,5%)</i>
<i>Extreme left</i>	2	4	4	0	1	3
<i>Communist party</i>	5	7	12	5	9	14
<i>Left wing ecologists</i>	3	8	5	0	3	4
<i>Independent left</i>	4	2	2	0	2	2
<i>Socialist party</i>	15	30	30	26	23	28
<i>Centre right (UDF) and ex Gaullists (RPR)</i>	38	31	23	57	39	20
<i>Right wing ecologists</i>	4	2	5	0	2	3
<i>Undefined right</i>	2	4	1	0	3	2
<i>Independent right</i>	6	3	3	6	3	1
<i>National front (extreme right)</i>	20	7	14	3	14	23

It is then interesting to look at who actually use their voting right and if, as predicted by the model, those who benefit from the redistribution vote for more redistribution. We note that, contrarily to the prediction, a vast majority of the winners do not vote for the parties which traditionally favour redistribution policies and, conversely, that a vast majority of the losers (the wealthiest) do not bring their support to those parties which oppose the redistribution.

Tables 4 and 5 seem clearly to indicate that electoral choice is *not* solely guided by the impact on the voter of the redistribution policies advocated by the various parties.

This result is not completely surprising. Indeed, economic analysis of voting behaviours shows how difficult it is to predict the outcome of a vote when this vote relates to several issues. And, as a matter of fact, what is at stake in an election seldom relates exclusively to the issue of redistribution. Each candidate, or each party, defends a certain vision of what a government should do; a vision which includes not only positions regarding redistribution but also positions regarding national defence, foreign policy, personal freedom, environmental policies, etc.

In short, it is difficult to support the thesis according to which the reason why we do not have “too much” redistribution is that the population of voters is not representative of the population as a whole.

The influence of the political regime on the choice of redistribution policies

A first explanation to the paradox of ‘not as much redistribution as we would expect’ is that, contrarily to what our simplified model of the democracy operation supposes, it is not always the majority which decides in our modern democracies. In fact, depending on the political regimes, the power will sometimes be in the hands of the majority and sometimes in the hands of groups of various sizes. Among the democratic regimes it is possible to distinguish, for example, between the Presidential regime (as in the United States), where the powers of the Parliament and those of the presidential team are in competition, and parliamentary regimes which are closer to our “ideal” model of majority voting.

Table 6 confirms this: the level of redistribution is correlated with the nature of the parliamentary regime.

Table 6: Gini Coefficients Calculated on Disposable Income Period 1988-1991

<i>78 countries</i>	<i>Democracies</i>			
	<i>Dictatorial left (communist or ex communist)</i>	<i>Dictatorial right</i>	<i>Presidential</i>	<i>Parliamentary</i>
Poor countries : income per capita < \$3000 (48)	10	10	23	5
Gini Coefficients %	25,6	47,5	46	41
Per capita income in dollars 1991	1902	1255	1240	1602
Middle countries : income between \$3000-\$10000 (8)	3	1	2	2
Gini Coefficients %	26,4	60	44,3	33
Per capita income in dollars 1991	3386	6320	4680	6135
Rich countries >\$10000 (24)		2	2	20
Gini coefficients %		43	37	30,6
Per capita income in dollars 1991		13820	27925	19363
Average Gini coefficients by political regime	25,5	47	46	30,2
Per capita income in dollars 1991	2200	3577	3471	15094

Sources: Klaus W. Deininger, Lyn Squire, 1996, *Measuring Income Inequality Database*, World Bank. Completed with UNU-WIDER 2a. See Appendix A.

Powerful trade unions are often associated with ambitious redistribution policies

The fact that strong trade unions and strong redistribution go together seems well established, especially if one does not confuse the real power of the trade unions (in particular, the force given to them by the law, such as the obligation for employers to negotiate with them) with the number of members they have.

Table 7: The Gini coefficient and power of the trade unions of employees

<i>Name of countries</i>	<i>Coverage of collective bargaining</i>	<i>Membership of union in % of the work force OECD</i>	<i>Gini coefficient for disposable income</i>	<i>Gini coefficient for market income</i>	<i>Ratio of Gini coefficients market income on disposable income</i>
<i>Japan</i>	15	22	0,31	0,362	1,17
<i>United States</i>	14	13	0,346	0,42	1,21
<i>Switzerland</i>	40	18	0,264	0,324	1,23
<i>Canada</i>	32	28	0,305	0,39	1,28
<i>New Zealand</i>	25	23	0,33	0,43	1,3
<i>United Kingdom</i>	30	31	0,319	0,432	1,35
<i>Average</i>	28,00	21,86	0,31	0,38	1,25
<i>Portugal</i>	80	24	0,348	0,433	1,24
<i>Italy</i>	80	35	0,345	0,456	1,32
<i>Netherlands</i>	80	23	0,25	0,332	1,33
<i>Norway</i>	70	54	0,26	0,363	1,4
<i>Australia</i>	80	25	0,295	0,421	1,43
<i>Finland</i>	90	76	0,26	0,371	1,43
<i>Germany</i>	68	25	0,272	0,393	1,45
<i>France</i>	90	10	0,272	0,403	1,48
<i>Sweden</i>	90	79	0,242	0,375	1,55
<i>Denmark</i>	80	74	0,226	0,355	1,57
<i>Austria</i>	95	37	0,227	0,316	1,39
<i>Belgium</i>	90	56	0,23	0,29	1,26
<i>Average</i>	82,75	43,17	0,27	0,38	1,40

Source : Perspectives de l'emploi de l'OCDE, 2004, Chapitre 3, Tableau 3-3.

It is well known that where trade unions have the greatest political power (again, not necessarily the greater number of members) the redistribution is stronger. As is always the case in social science, the difficulty then consists in explaining the correlation found. Two explanations seem here to hold the attention. First of all, by raising the level of the legal minimum wage, the market incomes distribution is modified (a quarter of French employees are paid the minimum wage). We approach thus a distribution similar to that of Figure 2 (skewed to the right) and, consequently, the median income is lower than the average income. That observation surely gives more realism to our basic model in which, let us recall, it is logic to expect a high degree of redistribution. Furthermore, in a country where, thanks to trade unions, the minimum wage and the protection of employee is high, a greater number of individuals will be left without employment (in the queue!), making it even more urgent to envisage redistribution policies.

To summarize, the power of trade unions makes it possible to explain, at least partly, first, the asymmetry of the distribution of incomes before taxes and transfers take place, and second, the implementation of strong redistribution policies.

Are we well represented by our representatives?

We have just seen that the opinions expressed through the votes do not reflect directly the individuals' preferences regarding redistribution. It is therefore not surprising that the redistribution is not as strong as it would have been if the only issue at stake during the election was the level of taxes and redistribution.

But the decisional mechanism is, in reality, even more complex because it relies on intermediaries who are the political parties and the politicians who, once elected, will not defend necessarily the point of view of their electors.

This suggestion, which can at first appear shocking, becomes rather natural if one makes a parallel with what happens in a public company. Voters are in a situation somehow similar to that of the small shareholders of a large company: they have voting rights but they don't weight that much on the choices of the managers (this is the reason why they frequently abstain from voting, and even don't inform themselves about available policies. Rational ignorance will say the economist).

It is hence quite possible that the opinions of our managers (our elected officials and members of the government) regarding the desirability of redistribution policies do not represent, or poorly represent, the opinions of the population. That could explain the facts that we mention in the beginning: there is more and more redistribution, but not as much as one could expect it in a democratic regime.

And if redistribution was only profitable to those who hold power?

So far we have maintained the assumption of a political regime where, in a more or less perfect and a more or less direct way, it is up to the citizens to choose the redistribution policy. In other words, we maintained the assumption of benevolent statesmen and dedicated public administrators who try to satisfy the very heterogeneous preferences of the citizens regarding redistribution, using the degree of freedom they are left with and taking into account pressures from groups such as trade unions, . Is this assumption realistic? Certain analysts doubt it, and it is interesting to see how, assuming a less glorious vision of the men who govern us, they consider the redistribution mechanisms.

What, to be more precise, is the starting point of these concurrent analyses? To use the image, undoubtedly severe, of Mancur Olson, the concurrent assumption is that statesmen and administrators are not benevolent but behave instead as brigand! As Gordon Tullock explains it, we have two ways of thinking about government. One way is to see it at the materialization of our desire for co-operation; our desire to insure that social life does not turn in a negative sum game. But one can also see it as the exploitation by a group of individuals which has the power of the remaining citizens. The question is then to know whether this new assumption provides a more tangible explanation for the redistributive patterns observed in reality.

According to this vision, the politicians, who hold power, will seek to "tap" their "subjects" as much as they can. In doing so, however, they will have to take into account the costs associated with such exploitation. These costs go well beyond the costs of collecting taxes. In

particular, they will have to prevent the exploited from leaving the territory, the jurisdiction (this is why those who champion redistribution are often the most fierce opponents to globalization). Tax revolts, or other forms of revolt, will also have to be prevented. It will also be necessary to pay those who will be the arms of this exploitation: the bureaucrats. In order to make this predatory position sustainable, it will be necessary, finally, to guard itself against other organized predatory groups: organized crime and trade unions are two serious competitors. Alliances could be tied with them.

On their side, the exploited subjects will try to defend themselves! But this defence is itself expensive. Exploited individuals will then balance, on one side, how costly are the efforts made to resist and/or reduce the degree of exploitation (for example, the costs of efforts engaged in order to pay less taxes), and on the other side, the profits which they could withdraw from this battle against the power if they were to win. These costs and these profits will not be the same for all. A key idea of this approach is that costs and benefits will vary not only with the income level but also with the nature of these incomes.

Indeed, one can think, for instance, that it is easier for an independent businessman to avoid paying taxes than it is for an employee. If such is the case, the predator will work hard to reduce the weight of independent professions and expand the group of the employees. Table 8 seems to indicate that this process is well advanced: during the last twenty years, the group gathering the non-wage earners and wage earners of the private sector has decreased, while the group of civil servants and intellectuals (that is, professors, scientists, teachers, artists, trades of the media, communication and clergy) has become more important.

Table 8: Evolution of the categories of returned over 20 years

<i>% of socio economic group in working population</i>	<i>1982</i>	<i>2000</i>
Non wage earners	14,8	9,2
Wage earners in private sector	53,3	50,9
Wage earners in public sector	17	20,6
Intellectuals	5,8	6,5
Unemployed	9,1	12,8
Sum	100	100

Source: Chauvel L., 2001, *Le retour des classes sociales?*, OFCE, Table 1, p. 325, Working Paper.

In parallel, the power holders will grant a preferential treatment to the employees of the public sector in order to make them flexible. This preferential treatment is partly statutory (a life-time job), and partly monetary as the Table 9 indicates.

Table 9: Comparison of the distributions of income among employees from the private and the public sectors

<i>Net Annual wages in euros</i>	<i>Civil servants central state: number: 1.867 400</i>		<i>Civil servants local state: numbers: 1.600000</i>		<i>Wage earners in the private and mixed private-public sectors</i>	
	<i>All sample</i>	<i>Managerial staff (44% of all)</i>	<i>All sample</i>	<i>Managerial staff (8% of all)</i>	<i>All sample</i>	<i>Managerial staff and entrepreneurs (16% of all)</i>
<i>D1</i>	15663	19476	12838	20075	11527	22329
<i>D2</i>	17956	21808	14090	22960	12894	25945
<i>D3</i>	19677	23983	15033	25459	14173	28833
<i>D4</i>	21242	25667	15939	27722	15555	31666

D5 median	23076	27480	16927	29975	17142	34898
D6	25059	29697	18101	32342	19098	38807
D7	27407	32497	19571	35454	21687	44025
D8	30753	36416	21797	40054	25818	51803
D9	36997	43021	26055	47565	34206	66161
D9/D1	2.36	2.21	2.03	2.37	3	3

Source: Fiches thématiques INSEE : <http://www.insee.fr/fr/ppp/sommaire/SALFRA05.PDF>.

In this quest for the most profitable use of their power, the predatory group will save no one. Even the poor could be exploited. One way could be, for example, to give them some visible transfers which maintain them in the jurisdiction (in particular, one can provide them with cheap public housing) and to get back what has been given to them by levying a rather invisible tax such as the VAT.

Conclusion

We started this study from a simple observation: redistribution is large and tends to increase in most countries. We also wanted to know who benefits from this redistribution. A first analysis indicates, without surprise, that it seems to benefit the poorest incomes but that the average incomes draw some benefit as well.

Then we attempted to find what could explain such a pattern of redistribution and its evolution. On the basis of a simple model with majority voting (which corresponds, at least in a first approximation, our modern democracies work), we saw that the outcome of such a public decision mechanism should mirror the preferences of the median voter. And because the income of the median voter is lower than the average income (at least in our modern economies), this decision mechanism should lead to widespread redistribution. Pushing this reasoning to its limit, we should end up with a total equality of all incomes once taxes and transfers taken onto account. However, in reality and in spite of an increasing redistribution, we are still far from such a pattern of disposable income.

Our task consisted then in enriching or modifying the assumptions of the basic model to provide a better account of those aspects of reality. Several tracks were explored.

Dynamic consideration 1: Taking the point of view of the long term, if one wishes to benefit from redistributive policies for many years to come, one must be careful not to drain market incomes. Too much redistribution could damage redistribution just like (and because of) too much taxation reduces tax revenues. Knowing this, the median voter will moderate his demand for redistribution. Perhaps will he also perceive that income inequalities are signals which direct investments in physical and human capital in the the direction most likely to increase global wealth. Getting rid of all inequalities would most probably deprive oneself of any potential redistribution in the future.

Dynamic consideration 2: "It is not because I am poor today that I will be poor tomorrow". If this belief is widespread among the lower incomes earners, it will be, once again, very natural to moderate the span of redistribution policies.

Role of in-kind transfers. When the basic model is modified to take into account the specificity of in-kind transfers, the conclusions of the model approach reality. There are indeed good reasons to think that the first beneficiaries of these transfers are the average income earners (see the case of education). We therefore have now a model with a

democratic (majority voting) mechanism which tends to support the median income group.

Not everyone votes. The difference between reality (where redistribution is important but not extreme) and the model's predictions (a redistribution which leads to income equality) could be also explained by the fact that those voters most interested in the adoption of redistribution policies, will not exercise their voting rights. We found some evidence that such is the case. First of all, the degree of redistribution was enhanced each time voting rights were granted to a new population. Secondly, one can check that parliamentary regimes (as in Europe) have more redistribution than presidential regimes (as in the United States). Other observations contradict however this line of reasoning: the surveys reveal that the voters who are more (less) likely to benefit from redistribution, do not vote in mass for the parties which recommend a strong (weak) redistribution.

Trade unions are more powerful than the median voter. Another line of reflection opposes the theoretical power to the real power. In theory the majority decides (as in our basic model), but, in reality, the law often gives the power to negotiate crucial elements of the redistribution process to trade unions. The trade unions work primarily in the interest of their members. It is therefore natural to observe redistribution from the employers towards the employees. In order not to lose their legal privileges, trade unions must nonetheless worry about the fate of those which are non members, namely, the unemployed (often unemployed due to trade union activism). They will thus support a minimum of redistribution towards the poorest. The data show that where trade unions are strongest, the redistribution is more important.

This last point invites us to consider what could well be a more fundamental weakness of the basic model. Indeed, the basic model starts from the implicit assumption that we live in a representative democracy based on the research of a consensus between all its members. But what would be the result of the model if we were to make the more radical assumption that those who have power use it efficiently to extort the most they can from the other members of society? The assumption of a "brigand state" invites us to see the pattern of redistribution as the outcome of this confrontation. The power holders, who must take into account the appetite of other well organized groups, will increase tax pressure as far as possible, and will redistribute the proceeds to themselves first, and second, to that part of the population from which they expect a support (the employees of the public sector or the intellectuals). For this strategy to work, however, it is important to close all exits for the oppressed taxpayers. This would explain why redistributive states are often hostile to globalization and why we observe a rise in the number of wage earners, and, among them, of civil servants. It would also explain the relative decline of non-wage earners which have typically more means available to counter the various attacks from the power's holders.

This modified model leads us to predict that the level of redistribution will be all the more important where the jurisdictions have been able to shelter themselves from tax competition and have suppress any possibility for an individual or a group of individuals to secede.