Payroll tax reductions for the low paid

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INTRODUCTION

Since Pigou (1932) advocated them,[1] there seems to have been a broad agreement among economists, even of diverging doctrinal inspirations, about the usefulness of employment subsidies to increase employment and/or to lift up the wage of the low paid. The case has more recently been forcefully argued by Edmund Phelps in his monograph (1998) adding new arguments to demonstrate how such a scheme may increase social adhesion to the capitalist system. One then may wonder why, if economists are confident in what they write and say, such a remedy has not yet been implemented on a large scale in all countries suffering from unemployment and/or a too high level of incidence of low pay. A growing number of papers are devoted each year to the subject. It is true that in a number of countries, schemes which amount to employment subsidies are implemented but most of them are, to the best of my knowledge, too narrowly targeted.

The rationale behind such a broad consensus is straightforward: in decreasing for the employer the cost of hiring low-skilled workers, employment subsidies "enhance the employment opportunities for groups at the margin of the labour market – those with little work experience and/or low skills – while at the same time, maintaining socially acceptable wage rates and income distributions", as Ignazio Visco and Tom Alexander put it in the letter of invitation to the workshop. The reason why I am quoting this letter is to show, from the outset, that the purpose of this measure is not only to enhance *efficiency* but also, and perhaps mainly, to control the degree of income inequalities through redistribution, *i.e.* at least maintain *equity* at some socially acceptable level by increasing in-work benefits for the low paid. The employment subsidies policy is thus of a broader reach than purely economic measures to combat unemployment. It may lead to a new implicit "social contract", compatible with market economies, while reducing the degree of inequality in either income distribution or in employment opportunities.

This leads to a first issue: is it desirable to reduce the degree of wage-inequalities? Finis Welch, in his recent Richard T. Ely Lecture (Welch, 1999), makes the interesting observation that he believes that: "inequality is an economic 'good' that has received too much bad press". The main reason behind this assertion is that wages respond to investments in effort and in foregoing current income for enhanced future prospects. An increased educational wage premium, because it creates new opportunities, may deliver the good: a general increase in the

educational level of the population. But even if we believe in the merit of an increased wage-inequality as an incentive to invest in education, we may miss an important point: for some groups of people the wage corresponding to their productivity may be too low to allow any meaningful personal effort – a fact known and emphasised by all classical and neo-classical economists but most particularly by Mill and Marshall – or any kind of investment in education.

A natural way of implementing an employment subsidies scheme, in countries characterised by a high level of payroll taxes, is through the introduction of a certain degree of progressivity in the tax system. It may be useful to encapsulate the payroll tax system in the formula:

$$T = T^* + t(w).W$$

where T^* is a non-positive parameter and $t(.)$, a non-decreasing function of the wage rate.

Two types of subsidies have been generally advocated:

- In the first, T^* is strictly negative and t is a constant rate. Hence a given amount of every wage is exempted from social contribution. It is as if a fixed payment is made to firms for each employee, independent of the wage paid. Hence the payroll tax system becomes a progressive one.
- In the second, T^* is equal to zero, and $t(.)$ is an increasing function of the wage over some interval, for example between the minimum wage and twice the minimum wage.

Both schemes were considered in Dreze *et al.* (1993). More recently, Malinvaud (1999) proposed a scheme of the second type on the basis of cost effectiveness considerations.

The paper is organised as follows: the first part will review some of the recent theoretical literature on the subject, trying to assess if the favourable opinion about employment subsidies is too model dependent. A second part will compare in a sketchy way the different economic regimes in terms of the implicit social contract imbedded in them. As most of the models used are static, the third part will investigate some medium to long-term issues regarding possible adverse effects of employment subsidies. The last part will discuss, broadly, the cost effectiveness issue.

THEORETICAL NOTES

The case for employment subsidies has been investigated in the framework of (at least) three kinds of theoretical models, which I will review briefly. The models have been either of a general equilibrium type or of a partial equilibrium variety. But I will not distinguish between them on this basis. Rather the nature of competition and the heterogeneity of the labour force will serve as criteria.

Competitive general equilibrium with heterogeneous labour

Why would unemployment be higher among the low-skilled workers? As Phelps (1972) pointed out, when low-skill jobs become less desirable, workers' propensity to quit increases. Furthermore, reservation wages for these employment opportunities may be relatively higher, reflecting workers' aversion to jobs that are perceived as demeaning in view of their low social status.

Other reasons for unemployment can be found in some form of real wage inflexibility. In particular, a minimum wage legislation may cause workers whose marginal product is valued less than the minimum wage, to be permanently unemployed. Under these circumstances a trade-off can arise between wages and employment when the demand for unskilled workers falls.

This trade-off seems to be well grounded in General Equilibrium Theory. However, in such a framework – absent heroic assumptions on endowments – redistributive schemes have to be devised to obtain equilibrium wages above the (social) subsistence level. Minimum wage cum unemployment benefits and/or minimum income is an example of such a scheme. Dehez and Fitoussi (1996*a*, *b*) present a general equilibrium model with different categories of labour, each characterised by an inelastic supply and a specific level of productivity; they study the effect on employment and wages of introducing a minimum real income, while prices and nominal wages are otherwise perfectly flexible. Compensations are paid to unemployed workers and financed by an income tax. Together with the minimum real income, this induces a minimum real wage. The fact that individuals differ in terms of their skill is an important feature of the model. The distribution of skills is relatively rigid in the short term because the acquisition of new skills takes time. However there is always a certain degree of flexibility because workers are often qualified for a variety of jobs. Skill and qualification are thus distinguished: the skill structure is rather rigid while the qualification structure offers some flexibility. This flexibility is allowed for by assuming that the structure of qualifications is pyramidal in the sense that workers with a given skill are qualified for jobs corresponding to lower skill levels.

A simple characterisation of an equilibrium with unemployment is given in real terms. The emerging wage scale is such that wages in two successive categories are equal whenever unemployment prevails in the most qualified type.[2] The equilibrium distribution of employment may be characterised by under-employment because some workers may have to accept jobs corresponding to lower qualifications. It is then shown that the existence of a (short-run) equilibrium depends on the capacity of the economy to finance the unemployment compensations from income taxes, without the creation of money. Alternative institutional arrangements, like employment subsidies, perform better in such a framework. Firms receive a subsidy such that workers in category *j* cost their marginal productivity,

even if they receive a net real wage equal to the minimum income. In this setting, there is full employment and the authors show that it is actually possible to cover the subsidies from taxes. The employment subsidies regime is thus compatible with full employment and a balanced budget under minimal assumptions.

Full employment can be obtained through a wage subsidy scheme if, and only if, the minimum net income of the wage earner is strictly less than the weighted average of marginal productivities. Such a solution may be spontaneously achieved if the wage structure is such that the degree of inequality in the wage distribution is smaller than the degree of inequality of marginal productivities. Social norms may impose such implicit systems of subsidies. However, it may also be explicitly imposed through taxation if the high skilled workers do not reduce their supply of labour – as assumed in that model – because of the increased taxation.

To sum up, the introduction of a wage subsidy scheme will have two effects: in a country characterised by a relatively high level of the minimum wage (say France), it will "force" full employment, because the "high" minimum wage perceived by the worker is greater than the cost of labour paid by firms. In a country where the minimum wage is not binding but the problem arises from a too high level of the reservation wage – which amounts to saying that the wage effectively paid to the less skilled is too low – it will lead to an increase in the net real wage perceived by the workers and thus reduce the propensity to quit of these workers. In both situations, it will lead to an increase in in-work benefits.

Employment subsidies under monopolistic competition

Marc Fleurbaey (1998) investigates the impact of employment subsidies in a basic general equilibrium model with imperfect competition. Fleurbaey's is a very interesting and policy-relevant exercise conducted within the confines of an abstract equilibrium model with several realistic features. The author is careful to point out the many weaknesses from a policy or applied point of view of the novel results, so that the reader is given timely pointers on realism. Market power generated by imperfect competition and resulting in deviations from the Walrasian configuration of full employment, when subject to appropriate levels of employment subsidies, can be made consistent with Walrasian values. This is one of the main results for a variety of special cases. The model assumes homogenous labour and thus is not suitable to fully investigate the consequences of a minimum wage. Rather it casts light on the way employment subsidies will perform their aim in an economy characterised by two kinds of externalities, namely, the prisoner's dilemma induced by market power (all firms and households would benefit from increased activity, but it is in the interest of no firm to initiate it), and the tax burden of supporting unemployed people.

The author is thus able to show, considering different types of wage rigidity, how the same formula for the computation of the subsidy enables the government to drive the economy to the Walrasian equilibrium. The principle of the formula is simple: the subsidy is made of two parts, one compensating for the difference between the actual wage and its Walrasian value and the other compensating for the slowdown effect of market power (taking into consideration imperfect competition). Hence a Walrasian benchmark has to be computed first. Such a subsidy in effect makes every firm behave as if it were a price taker.

Despite the fact that employment subsidies are financed at least partly by a tax on profit and other incomes, they lead to a decrease in unemployment but also to an increase in all real incomes (real wages and real profits) and to an improvement in the government budget. The reason is the same as in the preceding model: full employment because it leads to a higher GDP increases the redistributive capacity of the economy. The paper considers two other thought experiments, subject to the same qualifications as above, which are also illuminating didactic sources. One of them shows the superiority, in all sorts of Pareto sanctioned ways, of employment subsidies over demand management under conditions of downward wage rigidities; the other shows the superiority of employment subsidies, when financed from profits, over Weitzman's profit sharing scheme. Again, although in a rather different framework, the same conclusions emerge: employment subsidies will not only reduce the unemployment level, but they will boost real wages thus increasing in-work benefits.

Partial equilibrium models

I turn now to another interesting exercise, but this time in a partial equilibrium framework, exploring similar policy issues: the effect of employment tax cuts on the level of (un)employment and wages. Pissarides (1998), in an exceptionally clear paper, explores the quantitative "impacts of the structure and level of employment taxes on equilibrium unemployment".

Pissarides considers four partial equilibrium models: the competitive case, a bargaining example, a search model and an efficiency wage model. Their unifying geometric theme makes it easy to compare and contrast policy effects in a lucid way and gives added strength to the quantitative exercise: "… employment and wages are determined at the intersection of a conventional labour demand curve and a wage setting function" (p. 157). This almost disarmingly modest claim hides some serious analytic meat in the paper but also shows the author's finesse in tackling some deep questions and coming up with illuminating insights on the basis of building blocks of a textbook variety. This simple Marshallian attitude and approach places the burden of the exercise, or rather, its description, on the fragile shoulders of the slope of the wage setting function. He is able to frame his models in such a way that the slope of the wage setting function contains within it "the

relation between taxes and unemployment benefits and the structure of taxation" (p. 157). That is a great deal of burden for such a slender creature but it does its job well, at least in the seasoned hands of this expert.

If the ratio of unemployment benefits to the post tax wage is not changed at the moment the employment tax cut is introduced, the four models considered have little hope for an employment effect of the tax cut. Most of it will show up in an increased wage. The reason is that when unemployment benefits are indexed to wages, real wages are flexible, and the wage setting function steeper. The structure of taxation matters only when wages are determined by a bargain as they are in the union and the search models. The reason is that an increase in the marginal rate of taxation allows firms and unions to save more when they renounce a given increase in wage. A shift towards progressive taxation will have a beneficial effect on employment in these two models even if the average rate of tax is unchanged. The merit of the paper by Pissarides is to show that the success of an employment subsidies scheme depends both on some critical parameters and on the way we portray the labour market of the economy where the scheme is to be introduced. But even in the pessimistic case, when the unemployment tax cut would have no employment effect, it will lead to an increase in real wages. It will thus serve a purpose in countries were the most serious problem is social integration through work, rather than unemployment.

So, where is the catch? It is in the fact that all of this is predicated upon models that rely on representative agent specifications. This makes it somewhat less than useful as a framework inside which specific questions about employment subsidies for the low paid or the unskilled and semi-skilled can be discussed. Is there a way out by some simple modification of the specifications? We think not. No representative agent model can be of use in the context of the questions we have on the agenda. Indeed, the agenda for discussion requires heterogeneous agent dynamic models in transition from one equilibrium to another – in disequilibrium. The challenge, then, is to construct them without compromising on the rationality underpinnings at the micro-level and the ethical framework by which the macroeconomy is circumscribed. Pissarides is not unaware of this (*cf.* p. 158 to his perceptive reference to the constraints imposed by a "political equilibrium"). The same remark applies, in fact, to all the categories of models considered so far.

The three types of models considered so far, even if the last one is the most cautious one about the effect of a reduction in the payroll tax, all point to some beneficial effects – *i.e.* an increase in employment and/or an increase in wages – of a employment subsidies scheme, except under special circumstances. We may consider that this is sufficient to go in that direction even if all models do not have the same purpose, and that in this respect are all partials. The first one considers a heterogeneous labour system in a perfect competition framework, both in the labour and the product markets. The two others have a homogenous labour supply

with imperfect competition either in the goods or the labour market. A more convincing proof of the usefulness of employment subsidies would require a theory able to combine a heterogeneous labour system with imperfect competition in all markets and some institutional features, such as a minimum wage and/or minimum income. Besides, none of the stories I have discussed consider investment and accumulation behaviour; they are, essentially, static models. So, in a sense, what the subsidies scheme is achieving in this kind of model is to modify the budgetary constraints of the agents in such a way that the change in their spending behaviour regarding employment and consumption leads to full employment. In this interpretation they are more accounting models than theoretical ones. Of course the outcome of the scheme is assumption dependent, especially regarding the diverse elasticities considered. But over a broad range of values for these elasticities, and provided the supply and demand functions are not pathological, the outcome will be positive. Maybe the accounting nature of the exercise increases the robustness of the conclusion rather than weakening it. Besides, when one considers the model with heterogeneous labour supply and institutions, the obvious point it is making is that it is welfare enhancing to let the price system perform its allocative function while dealing with redistributive issues through the tax system.

It is fair to conclude this sketchy survey of theoretical analysis, by noticing the fact that there exists enough theoretical indices in favour of employment subsidies to adopt such a scheme in countries where unemployment and/or a too high incidence of the low paid are problems. At least it appears that the case against employment subsidies and payroll tax reduction have not yet been made.

SOCIAL ACCOUNTING: IMPLICIT SOCIAL CONTRACTS AND ECONOMIC REGIMES

In the Dehez-Fitoussi model, imperfect as it is, it is possible to sketch a one for one correspondence between economic regimes and implicit "social contracts". The pure "Walrasian contract" is one where any equilibrium price vector is considered as acceptable, even if it leads to the (involuntary) decrease of the population, because even in this case it does not lose its welfare properties. The "unemployment compensation cum minimum wage contract" which is almost universal in industrial countries may be unsustainable as the occurrence of unemployment reduces the redistributive capacity of the economy. The spirit of this kind of social arrangement is to provide everyone with a minimum subsistence level even if some remain unemployed. Hence the idea of a third kind of social contract which could provide, theoretically, everyone with a decent level of (net of taxes) wages and a job. Intuitively, this regime is one where the basic payroll system is supplemented by a set of transfers going top down, from the highest paid jobs to the lowest, thus reducing their spread. Such a system might appear quite reasonable, especially

because wage distribution within a firm or industry always includes an element of arbitrariness.[3] It is well known that individual productivities are difficult to measure leading managers to focus on the global outcome of team (or firm) effort. While it is possible to rank jobs in terms of productivity, it is never easy to assign to each agent a precise cardinal measure of productivity. Again, this suggests that every system for assigning shares of aggregate income to individual jobs is to a certain extent a matter of social convention. And indeed even today the actual systems that we do observe differ quite substantially from country to country. That leaves to economic policy a possibility of controlling for the degree of inequality in income distribution.

But such a result can be achieved through different means leading to different consequences in terms of unemployment. It is convenient to reason as if a common factor were at the root of increased wage inequalities in the US and increased inequalities in employment opportunities in Europe, namely a skill biased technical change. On both sides of the Atlantic the same phenomena have led to an increase in earnings inequality, but in Europe this has been compensated for by a direct intervention on the price of labour, through the management of the minimum wage and tax and transfer policy changes, in such a way that the distribution of disposable income has remained roughly stable. A paradigmatic case is that of France where, as shown by Picketty (1998), the distribution of disposable income has been remarkably stable from 1970 to 1996,[4] a period during which the rate of unemployment has grown from less than 3 per cent to more than 12 per cent. But such stability could have been achieved at a much lower cost if instead of an "income maintenance" strategy, the French government had chosen a "job subsidy strategy".

Are the models promising too much – full employment with an acceptable degree of inequality – or are the political obstacles to the implementation of such a scheme too important? There is in effect a transition period where some agents, say the more qualified workers would have to pay for both the old system (*i.e.* unemployment compensation) and for the subsidies. And as Picketty rightly points out, this could be enough to prevent the implementation of the scheme, even if eventually all agents would be better off under the new scheme. The theoretical models above are not designed to say something about transition periods; they are all, by construction (as pointed out above), static models even if their authors forget it, sometimes.

Since I have argued that a case can be made to show that the implicit contract embedded in the "employment subsidies" regime dominates that embedded in the minimum wage regime, I will restrict our attention to comparing "employment subsidies" (ES) to "free market type" (FM) solutions. My claim is that there are strong reasons to believe that the employment subsidies regime is preferable and for reasons which have not been spelled out in the theoretical model.

Most of the advantages accruing to the ES solution can be related to the externalities that it generates in terms of human capital. The first and most obvious externality arises from the benefits associated with providing everybody with a job. While no "free" human capital accumulation can take place for agents that are unemployed, economic activity goes along with skill acquiring, training, and knowledge building, at a rate at least comparable to the free market solution and perhaps even larger, since it goes along with a better standard of life.

Moreover, employment subsidies, by reducing the risk of becoming unemployed, favours the development of long term job relations. Agents are more willing to invest larger resources in collective action and in return, firms are ready to provide them with long-run contracts. This has several effects. First, it leads firms to devote larger resources to workers' training and education, because they know that they will be able to derive benefits from their employees' improved abilities. Again, it is obvious that human capital accumulation is favoured.

A second effect relates to the fact that the cross-sectional transfers associated with employment subsidies have dynamic effects as well. The existence of long-run relations provides a way to introduce built-in incentives to work efficiently, precisely because income increases along with the stock of achievements. Hence, in the ES solution, both firms and employees can derive all sorts of externalities that cannot be achieved as efficiently through the Walrasian solution.

Of course, the trend that has developed in the past 20 years has pushed towards quite a different direction. Rising unemployment, along with high real interest rates have led to the unravelling of long-run economic relations. Faced with an increased risk of being laid off and with a more discounted future, agents have asked for higher pay whenever possible, and have been drawn away from intertemporal contracts. This has tended to increase competition for the low pay jobs. In turn, the situation of older and now "overpaid" workers has been contaminated.

THE MEDIUM RUN

To discuss the notion of *social acceptability*, within a formal economic model, whether of the micro- or macro-variety, one needs to bring in ethical considerations and these, even now, are uneasy bedfellows in a subject dominated by neoclassical orthodoxies. On the other hand, to incorporate (personal) income distributions in such a way that a macro-model, with suitable micro-underpinnings, can be made to speak with, and to, the stylised facts involves explicit dynamic considerations. In other words we need to work with a model of growth, which is intrinsically dynamic, that has *dynamic* microfoundations. The kind of dynamics that will enable the researcher to look at the growth and decay of firms, rather than technologies in the aggregate; the kind of dynamics that propels the distribution of personal incomes to show the dynamics that the stylised facts capture; and the kind of

dynamics that encapsulate the varying degrees of returns to scale at the firm level, even though the aggregate data are consistent with constant returns to scale. The first two points are obvious, as the models presented are of a static nature. But it does not need more than a modicum of historical sensitivity to remember that thirty years – or so – ago, in the wake of the publication of A T*heory of* J*ustice* by John Rawls, economic theorists began to mull over the theoretical conundrums posed by the conflict between equity and efficiency in formal growth contexts. Growth theory had, of course, come of age whilst development theory had branched off; the former becoming normative and the latter essentially descriptive and institutional. This normative underpinning to growth theory made it eminently suitable to discuss and frame Rawlsian issues – as Phelps, Sheshinski and others did with great finesse. Optimum taxation, mediated by *fairness* considerations, was a topic that dominated the decade. S*ocial Choice* T*heory* had also come of age and thus there seemed, in the horizon, a possibility for a normative growth theory to be embedded in a political equilibrium where efficiency was mediated by equity considerations – the latter referring predominantly to the distribution of personal incomes.

Now, thirty years on from John Rawls, the conundrums facing the policy activists today, paralysed by crude positivism instead of normative foundations, seem to be a lack of consensus on the ethical norms driving social forces. This is, perhaps, part of what Phelps (1994, 1997) is groping for and we feel it is a legitimate search, in the context of the stylised facts confronting us at this time.

On the third point, we may venture some preliminary thoughts, of almost an impressionistic nature to indicate another channel through which employment subsidies may work. This is more an avenue for future research, than a report on facts and/or theories. The question has to do with the size distribution of firms and its evolution over time. Stephen J. Davis and Magnus Henrekson (1995) have convincingly argued that such a distribution can easily be adversely affected by the fiscal cum social contribution system. In almost all countries, and this is particularly true in the Swedish case, the fiscal treatment of amortisation tends to favour large firms which have a history of being large, over small firms and new firms. This tendency is exacerbated by high payroll taxes, high marginal rates of income tax and labour protection, as the latter is much more deterrent to the entry of new firms in view of the higher level of uncertainty to which they are exposed. The bias towards being "big" has several adverse effects on employment and growth: it disfavours direct business ownership, smaller organisational forms and less capital-intensive production techniques. "For example, the successful development of markets for certain new products may require a form of flexibility that is best provided by smaller, newer companies" (Davis and Henrekson, p. 22). This is all the more important since growth in at least the last two decades has been motored by the development of the service sector which is, on reasonable assumptions, made

of smaller firms. We may add to that, referring to the theory of endogenous growth (Aghion and Howitt, 1998, particularly Chapters 4 and 9), that the process of innovation and creative destruction which account for Schumpeterian growth, depends heavily on the flow of new entries as "older" firms seem to have lesser incentives to innovate. Now two points are in order: the first is (relatively) well known; the second is of the order of a conjecture.

First, as empirically demonstrated by Picketty (1997), in a comparison between the structure of employment between the US and France, an industry which accounts for almost all the difference in overall employment between the two countries is that section of the service sector which contains Restaurants, Hotels and other Personal and Household Services. In the US this sector relies heavily on low skill labour and pays relatively low wages. The same holds true for Sweden (see Davis and Henrekson, *op. cit.*). Subsidies on low wages will undoubtedly increase the flow of entry of new firms in this sector. Hence the structural relation between the size and growth of firms must be coupled to the evolution of personal income (wage or earnings) distribution in some coherent way so that the macro-stories make sense.

Second, even if the aggregate data were consistent with constant returns to scale, there is a strong presumption that at the firm level, there exists varying degrees of returns to scale. Where is the cut-off point between increasing returns and constant or decreasing ones? On this question too there is a strong presumption that small firms, and especially new ones, are faced with fixed, lumpy, set-up costs at entry, in brief to a form of indivisibility which leads to increasing returns to scale. There is thus, for these firms, a clear-cut case for subsidies. Whether the subsidies should be targeted at investment and/or labour in these firms depends on the nature of their activity. Perhaps subsidies should apply to both, but even if they apply only to the latter, they will undoubtedly lead to a decrease of set-up costs. The important question remains whether new firms are likely to employ a comparatively larger proportion of low skilled labour. It is likely, for the types of services referred to above, that this is the case. But we have also to notice that the development of the service sector concerns some activities which are intensive in high skilled labour as well. But the point I wanted to make is that, considered in a broader context of a growth model with microfoundations, employment subsidies may be required even if there is no cost of labour problem, and if there is one they may perform other beneficial functions.

BACK TO EARTH: THE COST EFFECTIVENESS ISSUE

I will rely heavily in this section on a recent report by Edmond Malinvaud (1998). *Vis-à-vis* the literature cited until now, the paper by Malinvaud is an

exception: it is in effect extremely careful about the transition period following the modification of the payroll system, trying to evaluate the effects of the modification through time. This is achieved by using an approach which, albeit partial, is cast in terms of dynamic equations to evaluate the progressive effects of the measure on employment, wages and prices.

The case studied is that of payroll tax reductions for low-paid workers in France. From the outset, Malinvaud stresses the fact that the full effect of such a reform will show itself in 10 to 20 years, at a moment when we have reason to think that unemployment would be only of a structural nature, *i.e.* when the output gap will have disappeared. Hence the partial equilibrium nature of the exercise is justified by the fact that firms with this horizon will be on their demand for labour function. Besides the various problems posed by an ageing population, and which are shared by almost all OECD countries, the main impediment to full employment is that the price of unskilled labour is administered through minimum wage legislation, independently of market conditions.

The initial conditions are the ones prevailing in France: the rate of social contribution being 57 per cent of the cost of labour for all wages higher than 1.3 times the minimum wage. It starts at 41 per cent for the minimum wage and increase linearly to reach 57 per cent at 1.3 times this amount. The lower rate of social contributions at low wages has been the consequence of reforms implemented in 1994 and above all in 1995. It has been followed by huge debates about its efficiency. Two arguments were made: the first, empirical, was about the low wage-cost elasticity of the demand for labour. Empirical studies give widely diverging figures, from 0 to –0.8, although it is generally recognised that the elasticity is the higher, the lower the level of workers qualifications (*cf. e.g.* Dormont, 1997). The second was about the effect of the payroll tax cut on profit. If unemployment were of a non-classical nature, decreasing the rate of employer social contribution was considered by many politicians and a few economists as a gift to firms. The second argument is of a very short-term nature, but the first is still a question of debate between econometricians. But with almost five years of distance it appears that a strong consensus has emerged in favour of payroll tax reductions in the lower segment of the wage distribution. It also appears that the employment content of growth in the light of the present recovery seems to have significantly increased, in consequence at least partially of the reform.

The cost of the exemption between the minimum wage and 1.3 its value is currently evaluated *ex ante* at FF 48 billion (roughly, 0.6 per cent of GDP). Macroeconometric simulations have shown that in the long run this exemption will contribute to the creation of about 350 000 jobs, and its net cost would be FF 27 billion. The problem with such a scheme is that it leads to very high marginal rate of payroll taxes at the low level of the wage distribution leading to stagnant carriers and/or poverty traps. To avoid such an outcome – according to the formula

in the introduction – two strategies are possible: a uniform exemption on the part of all wages inferior to the minimum wage; or a less steep progressivity in the payroll tax. The first has much to recommend to it, as it amounts to a uniform subsidy per job, but it is too costly *ex ante*, about FF 220 billion, or almost 3 per cent of the GDP. Two instances of the second are considered by Malinvaud. The exemption will decrease linearly between one and two minimum wage units, with an *ex ante* cost of a bit more than FF 100 billion and a supplementary impact on employment creation of about 250 000. But all the methods considered by the author to finance the scheme – an increase in the VAT; an increase in the generalised social contribution (CSG) or an increase in the profit tax – will reduce significantly the effectiveness of the reform. Besides we are very uncertain of some of their effects. For example an increase in the taxation of corporate profit being also an increase on the tax on pure profit would decrease the return to entrepreneurship and may hinder growth. It is why the preferred measure proposed by Malinvaud is to finance the exemption by an increase in the rate of social contributions paid on higher wages. The scheme then proposed is to increase linearly the rate of social contribution, starting at the present rate of 41 per cent, until a wage corresponding to 1.8 times the minimum wage, reaching at that wage a payroll tax of 58.7 per cent of the cost of labour, an increase of 1.7 per cent of the tax paid on the wage higher than 1.8 times the minimum wage. This will create some unemployment among the higher skilled workers (15 000), which will be transitory because it will eventually lead to a decrease in their net wages. In toto, the supplementary job creation would be of the order of 150 000. (Malinvaud assumes an employment elasticity of 1.1 for the low wages and 0.7 for the higher ones.)

Another recent evaluation has been performed by Sterdyniak (1998) and Villa and although it was based on somewhat different assumptions, it leads to results entirely consistent with Malinvaud's results and estimates.

With the work of Malinvaud, we are back on earth: a decrease in payroll tax will not be the miracle solution which will solve at once our employment and distribution problems, but it will have, in the long run, some merit: an employment creation of almost half a million in ten years, *i.e.* 2 per cent of the actual volume of employment. It is good to record these figures at a time where we economists seem to have a tendency to oversell the measures we propose.

NOTES

1. There seems to be a tendency to assign pririties to Pigou (1932) for having considered employment subsidies, followed by Kaldor (1936) and Frisch (1949). However, this business of apportioning credit to pioneers is always tricky and almost never wholly satisfactory, especially when it is about issues of policy. For example it may be remarked that the genesis of the famous Frisch memorandum of 1949, to the UN, was based on the work done by Lindahl, Myrdal and Ohlin for various Swedish government commissions of the early 1930s. In particular, the framework adopted by Frisch, later codified by Tinbergen and Bent Hansen as the classical theory of economic policy of the target-instrument variety, descends directly, literally, from two of Lindahl's macropolicy monographs of the late 1920s and Myrdal's report to the Unemployment Commission of the Swedish government, in 1934, entitled: The Economic Theory of Fiscal Policy (*cf.* Bent Hansen, 1958, Chapter I, for references and some discussion on priorities and origins). Moreover, the specific proposals contained in Ohlin's monograph of the same year (1934), "Monetary Policy, Public Works, S*ubsidies* and Tariffs as Means against Unemployment", (italics added), is also relevant for our present discussion (in this, the year of the Ohlin Centennial!). Finally, there was also the Beveridge Report of 1944 where Appendix C was contributed by Kaldor and the question of wage subsidies was discussed, in the context of reaching full employment, albeit briefly.
2. See Fitoussi (1994) for a comparative study on wage distributions in the United States, United Kingdom and France.
3. On this issue, *cf.* Fitoussi (1992).
4. For example, the interdecile ratio P90/P10 of the household distribution of disposable income per consumption unit has gone has gone up from 4.9 in 1979 to 5.9 in 1986 in the US while it has been stable, around 3.5, in France (Atkinson *et al.*, 1995).

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