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**Revisiting the « Making Work Pay » Issue:
Static vs Dynamic Inactivity Trap on the Labor Market**

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Revisiting the « Making Work Pay » Issue : Static vs Dynamic Inactivity Trap on the Labor Market

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Abstract

Theoretical and applied studies on gains for returning to employment and the economic policy recommendations they suggest in setting up social benefits, essentially derive from a static approach. We propose a dynamic evaluation of these benefits, taking into account the inter-temporal nature of the calculus made by unemployed workers and the impact of the return to employment on future employment perspectives. In this dynamic framework, which includes workers' mobility between jobs, we show that a low monetary gain upon return to employment is neither a necessary nor a sufficient condition to explain the existence of a low level of labor force participation originated in incentive problems. The Economic policy recommendations are thus modified ; in order "to make work pay", it is more than a matter of reforming social programs: priority must also be given to ascending professional mobility through policies supporting growth and active policies on the labor market. Temporary assistance for returning to employment can be just as efficient as permanent mechanisms inspired by income tax reduction devices, as well as less costly for public finances.

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1. Introduction

Means-tested benefits are often disparaged for penalizing the return to the labor market. Mechanisms of guaranteed minimum income, of a purely differential nature, lead to a marginal tax rates of 100% and can thus cancel out the monetary gains of returning to employment ; targeted benefits, reserved to recipients of guaranteed income or to the unemployed, magnify the phenomenon. Similarly, means-tested benefits, that depend on earnings brackets or that uniformly increase marginal tax rates when they are regressive with income, produce cut-off effects. When combined, all these devices seriously limit the interest of employment, creating inactivity traps and persistent unemployment.

This incentive or effectiveness problem is coupled with a problem of justice or equity. The way in which taxes and benefits are structured, results in the fact that a non-working person can receive the same income as a working person. If there are many concepts of justice, none seem to legitimize the fact that work should bring in less than non-work.

Given these problems of incentive and justice, the catch sentence “*to make work pay*”, widely circulated in publications by the OECD, progressively guides reforms in social benefits. Firstly, targeted benefits must be avoided, for example, those reserved to the unemployed or recipients of minimum income benefits. Secondly, the effect of cut-offs and regressivity on means-tested benefits must be limited. Finally, we recommend a supplement to earnings with benefits such as those provided by the EITC in the United States, the WFTC in the United Kingdom or the “*Prime pour l’emploi* ” in France. Beyond reforms, an improvement in the quality of jobs, working conditions and the level of earnings could also contribute to more equity and effectiveness in the functioning of employment markets.

Nonetheless, criticism of the social systems and the resulting economic policy recommendations come from a very static approach to the rewards of returning to employment : an incentive to work problem is identified based on the simple comparison between the income in benefits and those of work. This type of static approach remains the one chosen, for example, in most applied studies in France on the rewards of returning to employment (Laroque and Salanié [1999] and [2000]; Gurgand and Margolis [2001]; Bourguignon [2001]). The main limit of this so called “static approach” is that it does not allow to consider the perspectives opened by the access to employment . If part-time or low-paid employment positions are a springboard to full-time employment and higher wages, this necessarily modifies the incentive to fill them and this also modifies the associated injustice. Literature on employment and earnings mobility (Stewart and Swaffield [1999]; Riddell and Jones [1999]) has not been sufficiently stirred by studies on the rewards of returning to employment.

The purpose of this article is to offer a larger perspective for measuring the benefits achievable by work, by also taking into account the inter-temporal nature of the calculus made by the unemployed and the fact that accepting employment today can modify future employment perspectives. In such a dynamic framework, where the mobility of workers between jobs is taken into consideration, we look at the effects of an inactivity trap on incentives and equity. We also examine the consequences on economic policy recommendations that result from this dynamic perspective.

Section 2 presents static and dynamic approaches on the rewards of accepting a job. Section 3 provides an empirical example of the differences between the two approaches. Section 4 considers the consequences for carrying out economic policy. Finally, section 5 concludes the article.

2. How much does work pay?

After a presentation of the static approach to the gains of employment, we introduce the dynamic approach, followed by a modeling of the two perspectives.

- **Static analysis**

Employment incentive is most often analysed within a classic microeconomic framework, in which labor supply is derived from consumer choice, in the context of a consumption/leisure trade-off where a budget increase implies both “income and substitution effect”. In this model, the labor supply depends on the marginal disutility of work and the combined revenue associated with a transition between two states on the labor market : inactivity and employment, or part-time and full-time work, for example.

An individual who is offered to work more - going from non-employment to part-time or full-time employment, for example - compares what he/she will gain in refusing the offer with what he/she will gain in accepting. This comparison depends on the difference between earnings associated to each of the two situations, as well as the impact that the change in situation will have on the social benefits as a whole (means or status-tested subsidies) and overall taxes. All of the costs associated to employment (childcare, commuting, meals taken outside the home, clothing, gains linked to access to company benefits, etc.) or inactivity (costs related to seeking employment, gains linked to the fulfillment of domestic work, etc.),¹ also come into play.

Therefore, if the difference between all net incomes associated with high and low employment activities is small, one can say that there is a problem of incentive to work

¹ Non-monetary factors are also likely to come into play, such as social status or the subjective valorization of a professional activity. Although not easy to measure, these factors can play an important role.

given the marginal disutility and/or valuation of work. This situation, qualified as an *inactivity trap*, also raises a problem of equity.

The main limit of this approach is that it is inscribed within a static framework, where the problem of incentive to work is restricted to a comparison of the immediate gains associated with work and non-work, whereas consumption/leisure choices are by nature inter-temporal.

- **Dynamic Analysis**

The dynamic approach includes all the elements of a static approach and adds new ones, by adopting an inter-temporal framework. Immediate gains in income and perspectives for future improvements (accumulation of human capital, increased probability of access to a “better” job, increased rights to retirement benefits, etc.) are all taken into consideration. A low immediate monetary gain can therefore be compensated by favorable perspectives ; symmetrically, a high immediate gain can of course be compensated by unfavorable perspectives.

The new elements under consideration are, first of all:

(i) the probabilities of obtaining a better job in the future, are conditioned on the decisions taken by the individuals during the present period

(ii) the agent’s preference for the present *i.e.* the discount rate he/she uses in his/her arbitrage

Therefore, one needs to consider all the possible transitions on the labor market, associated with a decision taken in the current period. For this we use the matrix of probabilities of transitions between different situations on the labor market (full-time, part-time, unemployment, inactivity, etc.). The payment associated with the strategy “*I accept the job*” is thus evaluated by calculating the discounted expected value of all the

present and future gains implied by the application of this strategy ; the discount rate used for the computation indicates how the individual weights immediate gains and future gains.

It is then a matter of identifying the ultimate effects of dequalification linked to having passed through unemployment, or, symmetrically, the accumulation of human capital linked to the transitions *via* employment (gains in “employability”).

These new elements can modify the strategic choices of the individuals from those described in a purely static framework and lessen or reinforce the problems of incentive with regards to work and equity. In particular, *work can pay, even if it does not pay immediately and an inactivity trap situation does not have to be damaging in terms of incentive to employment.*

This is the case if accepting the job improves future wages perspectives and if the discount rate is moderate; it is also the case if job tenure increases the worker’s human capital – and thereby ulterior employability – and/or if the non-work deteriorates that of the unemployed or inactive individual. In these situations, work does not pay immediately, but it pays off in the end: an individual can therefore accept a job that pays nothing in the short-term (even incurring cost), because this job increases the probability of transitions to one or more better jobs in the future, *i.e.* the probability to get back on the “good” road.

The problem of justice or equity must also be reconsidered. To determine if an individual who accepted a job is the victim of an “injustice”,² relatively to another one who refused the same job, it is important to compare the *discounted flow of real incomes* associated with these two decisions, and not only the immediate incomes they bring about. If there is

² In the sense that he/she will not gain more by working than the individual who has refused work and decided to remain unemployed.

no dynamic trap, an individual accepting to work for an immediate income inferior to that obtained when remaining unemployed, gains more, *in terms of expected real incomes*, than an individual who chooses not to work: therefore, there is no inequity.³

- **Modeling**

The static approach requires building an income vector that corresponds to the net gains of each state on the labor market, ranking from the most to the least favorable situation.

$$W = (w_1, w_2, \dots, w_N).$$

The net gain of an agent who does not work (w_N) is equal to the replacement income, or basic income, increased by the marginal utility of leisure and all other elements of income associated with non-employment, whether monetary or not. The net gain of the “worst” job offered to this agent (w_{N-1}) - for example a part-time job paying minimum wage - includes the corresponding wage minus the marginal disutility of work, the valuation of the status and all other income elements associated with this job.

A static inactivity trap will exist insofar as:

$$w_N > w_{N-1}$$

The incentive of an individual to accept a part-time or full-time job, will thus be high when :

- (i) the net wage associated with the job is high
- (ii) the replacement incomes are low (basic or minimum income, unemployment benefits, social programs, etc.)
- (iii) The level of social programs' benefits are not too regressive with earnings

³ At least *ex ante* ; *ex post* the actual trajectory on the employment market of an individual who has accepted employment may result in a situation *in fine* in which he/she will earn less than if he had initially refused employment, despite the lack of a dynamic trap.

(iv) the marginal disutility of work is low and/or the valuation of the fact of working is high

A dynamic approach takes three additional elements into account. The first one is the matrix of transitions⁴ P that gives, for each period, the probabilities of shifting from one of the N possible states on the labor market to any other states. The second is the discount rate - or rate of preference for the present- $r > 0$, which defines the discount factor $\delta = 1/(1+r) \in [0,1]$. Finally, the strategies of the agents that can accept all types of jobs, or states, on the labor market (strategy A) or refuse certain states (strategy R) will be compared. For an “ A -strategy agent” who chooses to accept all types of jobs, the expected income for period $t+k$, according to the initial state, is given by $P^k.W$; in the case of a “ R -strategy agent”, that always refuses the worst jobs, expected income is no longer calculated with P but with another matrix P^* , whose second to last column is made up of zeros.⁵

The individual’s objective is to maximize the sum of discounted expected incomes, *i.e.*:

$$\left(\sum_{k=0}^{\infty} \delta^k \bar{P}^k \right) W = (\text{Id} - \delta \bar{P})^{-1} . W$$

If the sum above is higher in P^* than P , that is to say in refusing the bad jobs, then strategy R is preferred to A ; this indicates a dynamic trap, and eventually implies higher unemployment because the asymptotic probability of being unemployed is greater in P^* than P :

$$\sum_{n=0}^{\infty} \delta^n \sum_{k=1}^N (P_{ik}^n - P_{ik}^{*n}) w_k < 0$$

⁴ This matrix is subjective and respects the properties of Markov’s homogeneous chains in discrete time to finished number of states.

⁵ What interests us here is the refusal of the state $N-1$. If the N state is preferred when coming from N , we can show that it will be preferred when coming from any other state.

This dynamic approach stresses that the additional following conditions must be satisfied to take a job :

- (v) the rate of preference for the present of the agent is low
- (vi) the probabilities for transitions to better jobs are high
- (vii) the dequalification process associated to unemployment situations is strong *i.e.* the probabilities for transition to better jobs strongly deteriorate with the duration of unemployment⁶
- (viii) the number of years of work before retirement is high⁷
- (ix) the agent's risk aversion is low⁸

The more conditions (i) to (iv) are satisfied, the weaker the static trap, and the more immediately employment pays. The more the conditions (i) to (ix) are satisfied, the weaker the dynamic trap, and the stronger are incentives to work. These remarks highlight the following points:

- static and dynamic traps can coexist,
- the weaker the implications of the static trap, the weaker the occurrence of a dynamic trap

⁶ If non-employment is associated with a process of dequalification, the acceptance of a bad job can be a way to avoid it. The “investment” made by an unemployed who accepts employment that is not immediately remunerated can be interpreted as an investment in human capital that allows him/her to limit loss in employability, avoiding recurrent deterioration of probabilities of transition to better employment which generally occur with long-term unemployment.

⁷ The older, and thus closer to retirement age, an individual is, the more he/she has incentive to stay in non-employment, the return on investment being associated with choice **A** being insufficient to incite him/her to take a job; young people are more likely to make the “investment” of accepting a bad job.

⁸ The aversion relative to the risk of agents, *i.e.* the concaveness of the utilitarian function of payments, also plays a role: the more an individual is risk-averse, the more it is in his/her interest to adopt strategy **R** securing certain payment, replacement revenues, rather than strategy **A** associated with uncertain payment (whose real value expectancy can be stronger). To simplify here, we neglect the influence of aversion relative to risk by supposing that the utilitarian function of payments is linear.

- there can be a static trap without any dynamic trap, if conditions (i) to (iv) are such that a job does not pay immediately, but that the conditions (v) to (ix) are “strongly” satisfied and do more than counterbalance the influence of (i)-(iv) : for example, a low discount rate associated with strong probabilities of transitions to better jobs, can counterbalance the fact that employment does not pay in the short term and encourage an agent to accept such a job.
- There can be a dynamic trap without a static trap if the conditions (i) to (iv) are such that a job pays immediately, but that conditions (v) to (ix) are “strongly” unsatisfied and do more than counterbalance the influence of (i)-(iv).

In Laurent *et alii* [2000], we formally demonstrate that if the transition matrix respects certain favorable conditions of monotonicity (when bad jobs reinforce the chances of getting good jobs⁹), the existence of a static trap is a necessary condition, though not sufficient for that of a dynamic trap. In other words, there is a real problem of incentive to work when the monetary gains (earnings) provided by a return to work are low, even though, low earnings are not always associated with an incentive problem. In the general case where the matrix of transitions does not necessary respect such monotonicity conditions, the existence of a static trap is neither necessary nor sufficient for the existence of a dynamic trap : an incentive to work problem can then arise even if net short run gains associated with employment are high. The dequalification process associated with unemployment duration and, symmetrically, the human capital accumulation associated with employment tenure reinforce, in all cases, the incentive to work (*cf.* Laurent *et alii* [2001]).

⁹ A sufficient condition is that $\sum_{j=1}^p P_{ij}$ decrease with i for all p . Under that condition, the following propertie is satisfied: $\forall n, \forall i \in [1..N] \forall p \in [1..N] \sum_{j=1}^p P_{ij}^n - P_{ij}^{*n} \geq 0$

3. Example

To illustrate these mechanisms, the dynamic path of the expected income of an agent can be calculated according to different job acceptance strategies (A or R). Here, we consider a matrix of transitions providing the probabilities, in France, of going from one given labor market situation – unemployment, less than 15 hours/week part-time job, 16 to 29 hours/week part-time job, more than 30 hours/week job – to any other situation.¹⁰

Table 1 : Probabilities of transitions on the labor market

Situation in T in $T+1$	Job > 30 h	15h < Part-time Job <30h	Part-time Job <15h	Unemployment
Job > 30 h	0,66	0,35	0,25	0,41
15h < Part-time Job <30h	0,12	0,36	0,28	0,06
Part-time Job <15h	0,06	0,1	0,3	0,03
Inactivity/Unemployment	0,15	0,18	0,17	0,49

Source : Employment Survey, INSEE, 1995 and 1996. Field : Men and women. For the actively employed, private sector wage earners except apprentices, government assisted workers and students.

According to these French probabilities, an unemployed individual has a better chance to get an (almost) full time job than any worker that already has a part time job. Obviously, such a situation dramatically increases the incentive, for an unemployed individual, to refuse part-time jobs that does not pay immediately ; however, one will show bellow that, despite the static trap, it is always in the interest of an individual to accept such part-time jobs as long as his discount rate is not too high.

Each situation on the labor market can be associated with its corresponding income, as shown in the table below (the amounts listed are quite realistic but given only for the purpose of illustration). Given the differential character of the guaranteed minimum

¹⁰ For example, a wage earner working part-time less than 15 hours, has a 30% chance of being in the same situation the following year, a 17% chance of being unemployed and a 25% chance of having obtained employment of over 30 hours. His/her probability of having “improved” his/her situation is of $0.28+0.25=0.53$.

income (in France, the RMI), an individual working less than 15 hours gets *in fine* the same income as an individual without employment, *i.e.* the full amount of the minimum income support.¹¹

Table 2 : Income vector

Employment > 30 h	838 €
15h < Part-time <30h	595 €
Part-time <15h	381 €
Inactivity/Unemployment	381 €

Source : Employment Survey, INSEE and authors computations

Graph 1 shows expected income paths according to two different job acceptance strategies. The square symbols curve corresponds to the acceptance of all kind of jobs, *i.e.* whatever the working time : strategy **A**; an individual of this type thus accepts a job even if it does not pay in the short-term (for example, he/she accepts a part-time job of less than 15 hours/week, even though his/her gains are not immediately higher than the amount of guaranteed minimum income). The diamonds symbols curve corresponds to the acceptance of job only if it pays immediately – work time superior to 30 hours – and to the refusal of other kind of jobs¹²: strategy **R** ; the round symbols curve corresponds to the former strategy in adding a phenomenon of dequalification, which decreases the probability of transition to employment by 20% per year, from the second consecutive year of unemployment.

The fact that an unemployed individual has a higher probability of finding a full time job than one already working part-time, results, one year after the decision, in a lower

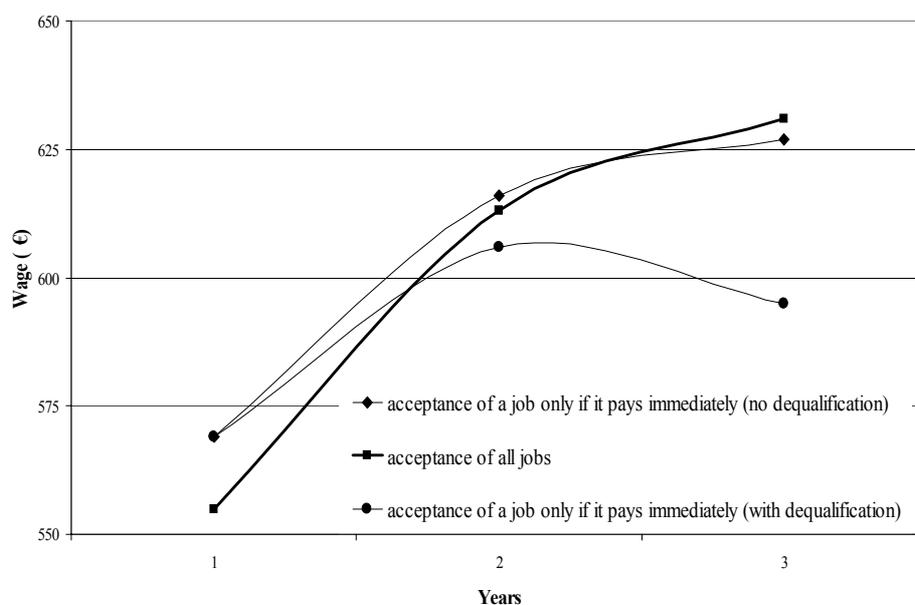
¹¹ Here, we are considering the case of a single. The role played by the family arrangement is thus not taken into account.

¹² This amounts to saying that the valuation of one hour of leisure for an individual is basically 3 € which does not seem excessive. In such a case, working 22.5 hours for 595 € is, in the end, equivalent to not working and receiving 381 € (taking into account the costs initiated by employment: meals, transportation, etc.).

expectation of revenue with strategy *A* than with strategy *R*, while the immediate gains associated with each of the two strategies are identical (381 €).

Thus, an unemployed individual receiving the full minimum income support, has no interest in accepting a part-time job, if he/she takes into account only the short-term gains: there is a strong static trap effect. Despite this static trap, the interplay of transitions on the labor market is such that strategy *A* begins to pay after three years. It does so more quickly if the dequalification linked to a long stay in unemployment is introduced.

Graphic 1 : Expected incomes according to different strategies of employment



The notion of an inactivity trap must be handled carefully: *the identification of a trap in a static framework has no reason to be associated with the same diagnosis in a dynamic framework*. A second example (*cf.* appendix), shows that the same result held even if accepting a part-time job immediately implies a net income loss : in an intertemporal perspective, it can be in one's interest to accept a job that not only does not pay in the short-term, but moreover causes a loss of income.

The 1998 INSEE survey on minimum income recipients (RMI) provides some elements to confirm this analysis (Afsa C. [1999]). First of all, nearly a third of beneficiaries of the minimum income support who return to work claim to have no financial gain (12.1% claim to be losing, 20.4% claim they are not gaining anything). Secondly, although the beneficiaries of the minimum income support generally claim that they are looking for a minimum wage full-time job, a majority have accepted a part-time job: among the 26% of beneficiaries of the minimum income support in December 1996 who held employment in January 1998, nearly two-thirds have a part-time job (in 90% of cases this part time job is involuntary, and people would strictly prefer to work more). Finally 28.1% of those who did receive the guaranteed minimum revenue and now have a job, qualify it as “a first step towards a real job” (32.9% claim it is “a job while waiting for something better” and 39% claim that it is a “real job”). In sum, beneficiaries of the minimum income support frequently accept – even when it is not a requirement stipulated in their insertion contract – a part-time job that does not immediately pay, which may even infer a cost, because it opens up perspectives for improvements in the future.

4. How to make work pay?

Several economic policy recommendations are often put forward in order to “make work pay”. It is first a matter of improving the quality of jobs, working conditions and the level of net earnings. Next, the architecture of social benefits must be reformed in three directions: limiting recourse to targeted benefits reserved to the unemployed or beneficiaries of the minimum income support; limiting the resource-based cut-off effects and regressivity of benefits; finally, complementing work income with benefits such as the EITC in the United States, the WFTC in the United Kingdom or the *Prime pour l'emploi* in France.

These recommendations are all inspired by a purely static approach. They only cover the income determinants and do not take into consideration the inter-temporal nature of the incentives, neither the possibilities of transition on the employment market ; in short, they suggest that the income vector must be modified, but not the matrix of transitions.

As these reforms are costly and public decision-makers must make, here and elsewhere, the best choices, it is important to discuss the effects of the different reforms in a dynamic framework.

- **The inadequacy of traditional policies**

The policies affecting only the income of those who have a job and those who do not, are in any case, inadequate. Of course, they are on the right track, since static traps can create the preliminary conditions for the existence of real incentive problems, but one must remember that static traps are not always a necessary condition and never a sufficient condition for the existence of incentive to work problems. Income policies should therefore be considered only as a favorable element of a large sets of possible measures..

Overall, policies that strive to improve transitions between jobs in the sense of a greater and ascending professional mobility are beneficial. Favorable business conditions, for example, play a favorable role by increasing the incentive to work. When growth is strong, the probabilities of transitions, from bad jobs to good ones, are higher, which increases the expectation of gains for the unemployed and favors the choice of the *A*-strategy (as opposed to the *R*-strategy) ; macroeconomic growth supporting oriented policies find here an unexpected justification : in a dynamic framework they make work pay more and, thus, have incentive virtues.

The so called “active policies on the labor market” also find new foundations ; such policies always contribute to improve the human capital of workers, whether they are training policies geared towards those who already have a job or actions to provide new

skills to those who lack them. In a static approach, these policies have no effect on incentive or equity ; in our dynamic approach, the active policies also become profitable. By improving the chances of access to better jobs, the training strategies make work pay more.¹³

- **Temporary aid better than permanent**

A dynamic perspective also allows to compare the respective advantages of permanent vs temporary mechanisms of income support to be discussed upon a return to employment. The permanent mechanisms correspond to the devices inspired by the negative taxes that are reserved to all those who have employment (EITC, WFTC, *Prime pour l'emploi* ...). Temporary mechanisms deal with the possibility to keep both part of the minimum income support and earnings from activity (for example the case of the French earning disregards mechanism attached to the RMI allowance- that allows 100% of the two types of income to be cumulative for two quarters after returning to work and 50% during the three following quarters).

A static approach does not allow these two types of mechanisms to be distinguished from each other. In France, where the two types of mechanisms co-exist, applied studies inspired by the static approach nonetheless ignore the existence of the temporary mechanisms (Laroque and Salanié, [1999] and [2000] ; Gurgand and Margolis, [2001] ; Bourguignon, [2001]).

To analyze the two types of mechanisms in a dynamic framework, let us assume there is a static trap, linked to the social benefits schedule design, and that we are looking for the

¹³ Only provided that access to the training expedient not be conditional to unemployed status. If not occupying a job in itself had little effect on the qualification of individuals and that an effective training expedient were reserved solely to the unemployed, the strategy of refusing employment would become more compensatory, all other factors being equal.

best way to curb it: permanent vs temporary aid. Two cases must be distinguished depending on whether there is or not a financial incentive problem.

The first case corresponds to weak possibilities of ascending mobility on the labor market : in this case the fact of occupying a part-time low paying job does not improve the chances of access to a full-time higher wage job, and the best strategy to access good employment is then to remain unemployed (**R**). In such a context, setting up a policy of temporary or permanent support for low income, may prove inadequate ; indeed, it does not solve the incentive to work problem – which results from the weak possibilities of transitions and not from low work income – and by simply increasing the income of low paid job, it has at best no effect on incentive. At worst, it can drive some unemployed people to accept bad jobs, that lead nowhere, and those who already hold them to keep them.

In the second case, there is a static trap but not a dynamic one and, therefore, no incentive problem; job is attractive given the probabilities for transitions characterizing the labor market (which results in an increase in the discounted value of expected incomes when one has a part-time job) and the risk of dequalification linked to extended periods of unemployment. In this framework, three categories of individuals can be identified for whom returning to employment raises a problem:

(i) “rational”¹⁴ agents, characterized by a high discount rate : the lack of earnings in the short-term is not compensated by the discounted future gains.

(ii) “irrational” or myopic individuals, who simply do not see the future gains associated with a return to employment decision and only perceive immediate gains.

(iii) “rational” individuals, characterized by a low discount rate, who perfectly know that it is in their own interest to accept all kinds of job, but cannot make the temporary

¹⁴ We mean those who correctly perceive the entire trajectory involved, on the employment market, by the decision of current employment.

investment it involves¹⁵ : it is just financially impossible for them to manage the immediate loss of revenues associated with part time returning to employment.

For individuals in the first category (i), a temporary financial aid is enough to make employment attractive, because given their high discount rate , they do not value gains set too far in the future. A permanent support would only add a weak incentive to return to employment for a much higher cost.

For individuals in the second category (ii), the same reasoning applies : because they do not value gains situated too far in the future at all, a temporary aid is just as effective as permanent one but far less expensive.

Finally, for individuals in the third category (iii), the most important is to give them the possibility of making the *investment* they wish to : a temporary subsidy solves this problem.

One sees that *temporary support for the return to employment finds strong justifications* : in reducing the immediate costs associated with the return to activity, such a device in fact shifts the individuals from the three preceding categories, from non-employment to employment. For these individuals, a temporary credit is enough to drive them to make the choice to accept part-time jobs ; this choice can then lead them, *via* the interplay of transitions on the labor market, to being trapped... in full-time employment.

One of the main advantage of a temporary financial aid to move to work , compared to a permanent one, is that *it targets the individuals belonging to “problematic” categories in terms of incentive to work* : such a device does not modify the long run behavior of other

¹⁵ This type of situation does not appear in a framework where all financial markets are perfect.

agents who, in any case, always prefer employment to unemployment, even when it does not pay immediately.¹⁶

5. Conclusion

Theoretical and applied studies on financial incentive to go to work are generally limited to immediate gains associated with the return to employment or to the increase in the work history, without taking into account the transitions of individuals on the labor market. In doing so, their conclusions remain partial. Through the interplay of transitions on the labor market, a job that does not pay immediately can pay later. Conversely, a job that pays immediately, can eventually lead to no improvement in earnings. An inactivity trap, clearly identified in a static framework, can therefore have no effect on agents' decisions when the latter are made in an intertemporal perspective, in a world where job tenure opens new possibilities for access to better job.

The size of disincentive to work created by the tax system and social programs should not, therefore, be exaggerated. Of course it does not justify the existence of income area characterized by very high marginal tax rates, but leads to a deeper understanding of the economic effects of these "static" traps ; in particular, situations of voluntary unemployment are probably less frequent in reality than often suggested by static analysis. Taking a look at the facts, it is usual to observe that unemployed or inactive individuals accept employment that does not pay immediately, or which may even cost them given the social programs which they could take advantage of. The expansion of part-time work in many countries, and especially in France, could not be explained by taking into account only the immediate gains. The beneficiaries of the minimum income support indeed have financial incentive to go to work , even if on a longer term : if they

¹⁶ The temporary bonus is a bargain for the latter, but this effect will be even more considerable with a permanent bonus for returning to employment.

are unemployed , most of the time, it is because they cannot find a job and not because they do not want to.

These remarks might have consequences in terms of Economic policy. Setting up a permanent mechanism allowing support for low income responds to two objectives: the incentive to work problems and the fight against inactivity traps, on the one hand, the reduction of inequalities in income among active workers, on the other.

From a financial incentive to work point of view, one sees that a permanent aid is not necessarily more efficient, for a given budget, than a temporary credit ; the problem of inactivity traps, when they are analysed in a dynamic perspective, does not necessarily plead in favor of permanent aid for returning to employment, temporary mechanisms being adequate to bridge the traps of inactivity.

Concerning the treatment of inequalities, however, a permanent subsidy is *a priori*, more efficient, because it acts on the stock of employed people , whereas the temporary mechanisms only act on the flows of unemployed people. Arguments on redistribution would thus be more relevant than financial incentive arguments in order to justify reforms in social programs.

Appendix

The exercise is the same as the one in section 3, but now the men's matrix of transition is used; to accentuate the "trap" effect, we suppose here that due to the local services associated with receiving full rate guaranteed minimum revenue and the regressiveness of housing benefits with revenues from activity, an unemployed individual receiving the full rate guaranteed minimum revenue has *in fine* a revenue higher (457 €) than that of a worker with a salary for less than 15 hours (381€). This new configuration accentuates, if we use static reasoning, the trap effect and, consequently, lowers the incentive for returning to work.

Probabilities for transitions on the employment market

Situation in T in $T+1$	Job > 30 h	15h < Part-time Job <30h	Part-time Job <15h	Unemployment
Job > 30 h	0,67	0,49	0,25	0,44
15h < Part-time Job <30h	0,11	0,24	0,33	0,05
Part-time Job <15h	0	0,05	0,19	0,02
Inactivity/Unemployment	0,22	0,21	0,23	0,51

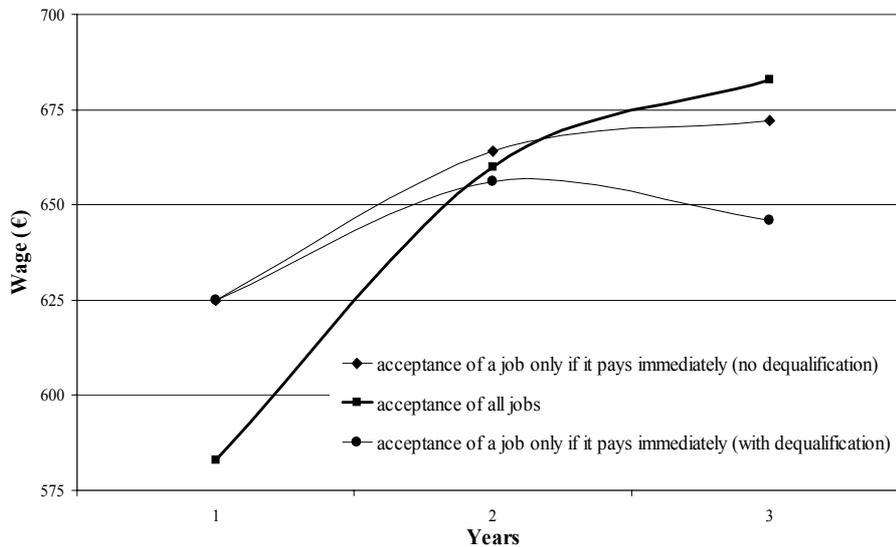
Source : Employment survey, INSEE, 1995 and 1996. Field : Men. For the actively employed, private sector salaried workers except apprentices, subsidized contracts and students.

Revenues associated with different employment situations (€)

Employment > 30 h	838
15h < Part-time <30h	595
Part-time <15h	381
Inactivity/unemployment	457

Given these new parameters, Graph 1, presented in the text, becomes:

Graph 4-b. Expected incomes according to different strategies of employment acceptance (for a man)



Like before, work does not “pay” in the short-term but “pays” in the long-term; the conclusions remain unmodified: a “static trap” in a dynamic framework does not necessarily imply the existence of incentive to work problems.

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