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Thomas Le Barbanchon

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THE IMPACT OF THE GENEROSITY OF UNEMPLOYMENT BENEFITS ON THE DURATION OF UNEMPLOYMENT AND MATCH QUALITY

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Thomas Le Barbanchon

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Summary

The main purpose of unemployment insurance is to ensure income replacement for those involuntarily deprived of employment. While the policy meets this aim, there are questions about its effectiveness in other aspects. In theory, generous unemployment benefits slow re-entry into the workforce but are also likely to improve the quality of employment found. This study is an empirical assessment of the impact of the extension of the maximum period of unemployment benefits in France between 2000 and 2002. When the benefits limit was extended from seven to fifteen months, the rate of return to work decreased by 28 per cent (representing an increase in the duration of unemployment by around two and half months), while the stability of work found and wages paid did not noticeably improve. ■

- When the period of unemployment benefits was increased from seven to fifteen months, the period of unemployment increased by about two and a half months.
- This increase in the length of unemployment was not accompanied by an improvement in match quality of new employment found.

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The effectiveness of unemployment insurance

The main purpose of unemployment insurance is to ensure income replacement for those involuntarily deprived of work. While the policy meets this aim, there are questions about its effectiveness in other aspects. Generous unemployment benefits can result in reduced efforts by recipients to find work, a slowing of the return to work and an improvement in the quality of employment found. The slow-down, which results in an increase in the unemployment rate, can be considered an inefficiency, except that it is accompanied by an improvement in the quality of the conditions of work found.

« From a theoretical point of view, the impact of generous terms of unemployment insurance is ambiguous »

From a theoretical point of view, the impact of generous terms of unemployment insurance is ambiguous. First, the most generous scheme can improve the quality of employment on re-entering the workforce because it encourages recipients only to accept stable and well-paid work. It means that when faced with an offer of badly-paid work, the unemployed person can refuse it in the hope that a better opportunity will present itself later. In addition, more generous benefits can give the unemployed the financial autonomy and minimum period of time in which to find suitable work. It takes a certain amount of time to devise a professional strategy and to understand how the job market operates.

On the other hand, extended unemployment allowances can have a negative impact on the quality of work found. By lengthening the period of unemployment, the "human capital" of the job-seeker can depreciate. When someone stays unemployed for too long, she can lose certain competences, thereby reducing her chances of finding skilled work. Increased time spent looking for work, together with generous unemployment benefits, can also lead to a lowering of the quality of work available to that beneficiary if employers begin to read the period of unemployment as an indicator of the quality of the job-seeker.

This study (Le Barbanchon, 2012) presents for the first time in France an empirical evaluation of the effects of the maximum unemployment benefits period on the duration of unemployment and the quality of new work found. The challenge was twofold. First, the study sought to quantify empirically the disincentive effect predicted by the theory: is it economically significant or negligible? Second, since the effect of the generosity of unemployment insurance payments on match quality is, a priori, ambiguous, we also measured that.

Studies conducted in other countries tend to show that more generous unemployment insurance payments significantly slow down the return to work. On the other hand, there is little empirical evidence by which to judge the impact on the quality of the work found. The few studies available conclude that the generosity of benefits has no effect on the wages or stability of the new employment. Our French study confirms these results.

In our study, the effect of the maximum period of unemployment insurance payment was estimated by **comparing the outcome for new recipients in two insurance streams between 2000 and 2002**. The limited period was determined by availability of data. In this period, if a new beneficiary had worked between six and eight months of the year preceding their unemployment, he or she was insured for a maximum of seven months (*"stream 2"*, in unemployment-insurance terminology). If they had worked more than eight months during the preceding year, then they could receive benefits for fifteen months (*"stream 3"*). Those in streams 2 and 3 made up 28 per cent of new recipients in the period 2000-2002. Compared with the average new beneficiaries of unemployment insurance payments, those in streams 2 and 3 are younger, less qualified and before becoming unemployed, held the least stable and lowest-paid jobs.

Box 1: Regression discontinuity design

Regression discontinuity design is a micro-econometric method of evaluating public policy ex-post. It is based on a discontinuity in the eligibility criteria for a program. In other words, it can be used when entry into a program is triggered once a variable assignment (continuous) exceeds a given threshold. Thus, attachment to a program is discontinuous and any discontinuity in the outcomes (at the threshold) can be attributed to the effects of the program.
This quasi-experimental method is valid as long as the attachment variable is not perfectly manipulable. In this case, some individuals randomly land just below or just above the threshold: the comparison of their trajectories shows no bias in selection. Regression discontinuity design is a method for local evaluation because it is valid for a sub-population for whom the variable of assignment is near the threshold of eligibility. This parameter is also nevertheless **the factor of interest for the decision makers who plan to expand or reduce a program.**

Assessing the impact of extending the maximum insurance period

In order to assess the impact of a longer period of unemployment benefits, it would be tempting simply to compare the rhythm of the return to work of the beneficiaries of streams 2 and 3. However, such a simple comparison would not allow us to isolate the effect of the length of the benefits period because the beneficiaries of streams 2 and 3 are quite different. Thus, some recipients in stream 3 had worked for the full twelve months of the year before they became unemployed, while some in stream 2 had only worked for six months. It is therefore likely these job-seekers have different characteristics, including different lengths of time unemployed, regardless of the unequal level of benefits between the two streams.

« This evaluation method uses the discontinuous character of the rule of the fixed term of benefits payment »

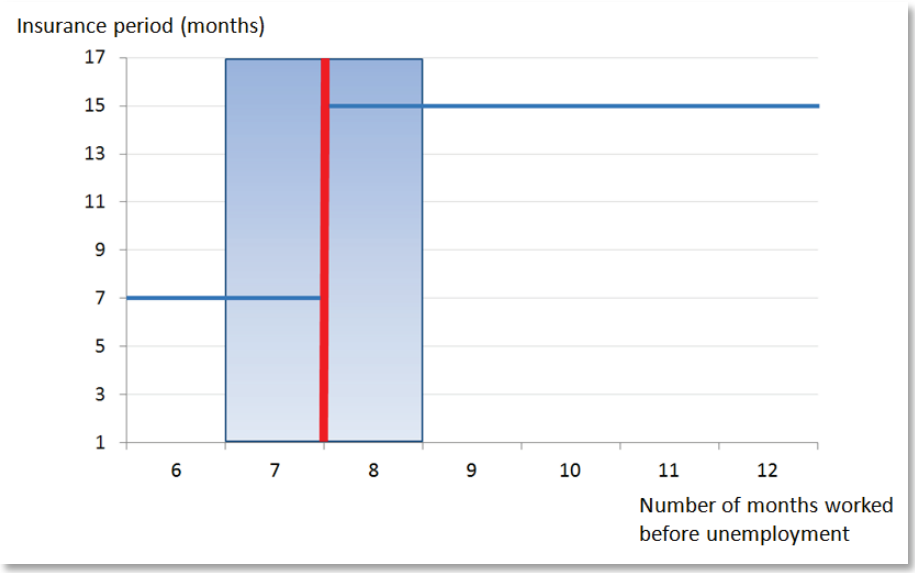
In order to isolate the causal effect of an extension of the maximum benefits payment period, we compared the future of beneficiaries in stream 2 who would have been in stream 3 had they worked just one month longer in the twelve months before becoming unemployed (that is, those who worked between seven and eight months) with the future of those in stream 3 who would have been in stream 2 had they worked one month less (that is, who had worked between eight and nine months in the preceding twelve). Schematically, this evaluation method, which uses the discontinuous character of the rule of the fixed term of benefits payment (see box 1) restricts the comparison to one between beneficiaries close to the eligibility threshold (the blue area of figure 1).

For the results to be valid, the beneficiaries must have worked between seven and eight months or between eight and nine months, to be comparable with each other. We verified that they were, in fact, very close in terms of observable individual characteristics (gender, skills, previous work). We also had to assume that the beneficiaries of stream 3 had not tried to work longer in order to be eligible for the most generous benefits. If this kind of behaviour were frequent, then the number of beneficiaries who worked a little less than eight months would be slightly higher than the number who had worked more than eight months, which is not obvious from the data.

« To implement this estimation procedure, we took advantage of a new statistical source »

To implement this estimation procedure, we took advantage of a new statistical source that merges at the individual level unemployment registers and company employment reports (files called FH-DADS). These data told us about the time spent working before the period of unemployment, and allowed us better to identify the re-entry to work from the unemployment registers and to measure the quality of jobs found (the stability of the employment and the wages paid).

Figure 1 : Regression discontinuity



Sources : Authors' calculations

Note: Beneficiaries who had worked between six and eight months (exclusively) were entitled to seven months of unemployment payments; those who had worked between eight and twelve months were entitled to fifteen months benefits. The vertical red bar separates the beneficiaries of streams 2 and 3. Our estimates focus principally on the sub-population in the blue rectangle.

The most generous benefits slow the return to work, without improving match quality

We present here the principal results, derived from **the sub-population of beneficiaries who had worked between seven and nine months in the year before becoming unemployed**. The analyses of different sub-populations around the eight-month threshold are available in the full study (Le Barbanchon, 2012). The closer this sub-population is restricted to the immediate vicinity of the threshold, the more the beneficiaries of the two streams (to the left and the right of the threshold) are comparable and the more we can be sure of our results. Unfortunately, restricting the focus population also reduces the precision of the results: choosing to take the 7–9 months beneficiaries is thus a compromise between these two goals.

The main findings are presented in table 1. In the first column, we report on the change in the rate of exit from unemployment following the increase in the maximum duration of benefits. In the second and third columns, we show the effect on wage rates (relationship between the real hourly rate of the new job and that paid at the last job held) and the rate of separation from the new employment. The wages at recruitment and the stability of the position are complementary indicators of employment quality.

The rate of unemployment exit is reduced significantly, by 28 per cent, when the maximum benefits period is increased from seven to fifteen months. This effect is significant because it implies an increase in the order of two and a half months of the duration of unemployment, while the average beneficiary in stream 2 stays unemployed for ten months. The estimated effect in the French case is twice as significant as that found in comparable studies in Austria and Portugal.

The impact of the increase in the maximum benefits payments period on the wage level is not, however, significant. This result seems to be stable regardless of sub-population or estimation methods used. It is possible that in the labour markets in which the unemployed of this study seek work, wage negotiations are quite rigid and that salaries do not range far from the minimum wage. Wages do not, therefore, necessarily constitute the best indicator of employment, so we have complemented our analysis with another qualitative indicator: duration of employment.

The margins for negotiating the length of an employment contract can be more significant than for those to fix wages. As well as negotiations during the hiring process, the tenure of employment can also be a learning process for employee and employee. Through working, employees can demonstrate their productivity and employers can get past what looked like shortcomings during the recruitment process. **Hence, the duration of employment is a pertinent indicator of the quality of the match between employee and employer**. The third column in table 1 shows that the rate of failure of new employment increased slightly (3%) but not significantly when the beneficiary received unemployment payments for a longer period. This is a minor effect since it indicates that the proportion of workers who quit their new jobs at the end of eight months rose by just one point.

Conclusion

When the maximum period of unemployment benefit payments increases from seven to fifteen months, the period of unemployment also lengthens and the quality of new-found employment does not improve. From this point of view, the longer benefits period is not economically efficient for those job-seekers who had worked eight months in the year before becoming unemployed.
However, **our study does not allow us to draw conclusions regarding purely the insurance role of the unemployment benefits system**. Those who benefit from more generous unemployment insurance can also gain in well-being, thanks to income smoothing. A complementary study is required to evaluate that dimension of the question. Moreover, the conclusions of this study are limited to a specific population, at a specific moment. It is not clear how the magnitude of the effect of the prolongation of the benefits payment period would be extrapolated to other contexts (a population more likely to find work, a different economic conjuncture). However, our results are consistent with those of studies carried out in other countries.

Reference - Le Barbanchon (2012). "*The Effect of the Potential duration of Unemployment Benefits on Unemployment Exits to Work and Match Quality in France*", Crest working paper, n°2012-21, September 2012.

Author
Thomas Le Barbanchon is Economist at the Centre de Recherche en économie et Statistique (Crest).

Table 1 : Effect of the maximum benefits period

	Effect on the rate of unemployment exit	Effect on wages	Effect on the rate of new employment failure
Estimated Effect	- 28%	- 3%	- 4%
Standard deviation	0,09	0,04	0,10
Significance	***		
Number of observations	3837	1803	1803

Sources : FH-DADS, Pôle emploi-DARES-Insee

Note : An increase in the duration of the maximum benefits period of eight months has the negative effect of reducing the rate of return to work by 28%, but has no significant effect on the wage levels of the new work found (-3%), and has a positive though insignificant impact on the rate of failure of the new employment (+4%). These effects are calculated with the help of Cox's model of the rate of unemployment exit and failure of new employment. The impact on wage rates is estimated using an ordinary least squares regression (standard deviations being corrected for heteroscedasticity). As is usual in RDD regressions, we control for linear dependence between outcomes (unemployment exit, wages, failure of new employment) and the duration of past employment; the form of this control can vary above and below the eight-month threshold. The following control variables are included in the regressions: gender, nationality, age, past salary, reason for employment failure, sector in which work is sought, the year and the quarter of the year of entry to unemployment. For columns 2 and 3, we add the economic indicators of the labour market on the date of the return to work. In the third line of the table, we see the statistical significance of the estimated factor: *** means significant at 1%, ** at 5% and * at 10%.