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French youth unemployment: An overview

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Foreword

This paper represents a contribution to the ILO's Action Programme on Youth Unemployment being undertaken in the 1996-97 biennium. The Action Programme is intended to: (i) raise awareness amongst constituents concerning the problems associated with the labour market entry of young people; (ii) to improve their understanding of the advantages and disadvantages of the principal policy and programme options for tackling the problem of youth unemployment; and thus, (iii) enhance the capacity of member States to design and implement policies and programmes for promoting youth employment. The Action Programme includes country case studies from all over the world as well as policy reviews concentrating on specific topics within the ambit of the youth unemployment "problem". The country case studies will be used as the basis for the first major output of the Programme, a comparative report on youth unemployment and youth employment policy.

Over the last twenty years, youth unemployment has become a major issue of the French labour market situation. This explains the increasing public intervention in the labour market targeted to young people. This paper tries to shed some light on two main aspects of the youth labour market situation : the impact of the minimum wage on the youth unemployment and the adequacy of qualifications acquired at school to the needs of firms. It compares also the unemployment situation among young people and adults, so as to identify the specific features of the former. An econometric analysis is conducted using annual stock and flows data from the Employment Survey on youth unemployment by sex and educational qualification.

Overall, it emerges that a single dynamic process underlies fluctuations in youth and adult unemployment, showing that labour market conditions, themselves linked to the level of economic activity, are determinant in explaining the level of unemployment. Furthermore, our results suggest no evidence of an effect of the minimum wage on youth unemployment as a whole over the past 25 years. However, distinguishing between levels of qualifications of young people reveals substantial heterogeneity in their situations on the labour market: in particular, because of the shortage of jobs, the less qualified find themselves forced to the back of the 'queue for jobs' and may therefore seem "too expensive" compared to other categories of workers. But to state that it is the rigidity of the wage system which is responsible for unqualified youth unemployment or that it is the unsuitability of training for works offered by firms, are simply two sides of the same coin. In the face of the inequality in unemployment situations and of the shift in the pattern of demand for unskilled labour, access to qualifications as well as a better matching between these qualifications and the needs of firms should be emphasised as priorities.

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1. Introduction

Over the last twenty years, youth unemployment -e.g. of unemployment among the under 25's - has become a major issue of the French labour market situation, and therefore a key challenge for all successive governments. Indeed, since 1983, the rate of unemployment (according to the ILO definition) among young people has rarely fallen below the 20 per cent mark - twice the average for the labour force as a whole - even if there has been a slight decrease in 1986; at the end of 1996, the rate was 26 per cent. This French experience, however, is by no means unique in Europe: in Italy in 1996 one young person out of three was unemployed, and in Spain two out of five, although in Germany the corresponding figure was only 1 in 10 (Eurostat, 1996). By contrast, in Germany, only out of ten was jobless (Eurostat, 1996). Germany is often taken as an example, since it is the only western country where the youth unemployment rate is lower than the overall unemployment rate, over the 1970-1990 period (Elbaum, Marchand, 1994).

The persistence, in France, of a high youth unemployment rate is all the more surprising given that during the same period the school enrolment rate has continued to rise, leading to a progressive and significant reduction of their participation in the labour force¹. Furthermore, governments have undertaken very large-scale initiatives in support of young people: youth employment programmes have become ever more diversified and above all ever more numerous during the same period, while expenditure on active employment programmes has multiplied by six in twenty years (Gélot and Osberg, 1995). Demographic factors do not worsen the youth situation on the labour market: total youth population has been decreasing compared with total population since the beginning of the seventies. Finally, the growing demand for labour in sectors that employ more than the average of young people (retail trade, catering etc.) during the last twenty years (OECD, 1996), should also have contributed to a reduction in French youth unemployment.

Instead, unemployment would appear to have become an obligatory stage for most school leavers, for whom direct entry into a job has increasingly become the exception (Meron and Minni, 1995). Furthermore, young people frequently are employed on a series of fixed-term contracts punctuated by periods of unemployment (the 'carousel' effect), so that the average length of each period of unemployment is shorter for young people than for adults², even though their total time spent out of work is greater. Thus another feature of the position of young people on the labour market is the problems they encounter in finding a stable job.

In the face of these problems the debate on youth unemployment has focused in France on two issues : qualifications - it concerns either the shortage of a qualified workforce or the inadequacy of qualifications acquired in school to the needs of firms - and labour costs - young people are not employed because labour costs are too high. For instance some European countries as Belgium or The Netherlands are sometimes taken as examples, since they have chosen to create youth minimum wages in order to reduce youth unemployment. But these considerations may not be sufficient to explain youth unemployment. In France, job shortage falls disproportionately upon young people. So far, youth unemployment may be understood

¹ In 1996 the labour force participation rate of youth aged 15-19 was the lowest of all western countries.

² 8 months for young people and 16 months for adults in 1995.

as a « queuing for jobs » problem. One must therefore take this fact into account when debating about youth labour costs or qualifications.

Before examining these different aspects of the problem, we first compare the unemployment situation among young people and adults, so as to identify the specific features of the former. We then review the determinants of youth labour market situation, by proceeding to an analysis of wage costs, the educational qualifications system and employment policy. Finally, we conduct an econometric analysis since we have data on youth unemployment by sex and educational qualifications, to find out whether the training offered in the educational system offers effective insurance against unemployment: were this to be the case, young people would have an incentive to pursue their studies for as long as possible, *other things being equal*. We also evaluate the ‘queuing for jobs’ effect in the job market into which young people are channelled.

2. The specificity of youth unemployment: A dynamic approach

We use stock and flow data in order to analyse youth unemployment in France since 1970. These data come from the Employment Survey that is carried out in March by the National Institute of Statistics (INSEE)³. Inflows into unemployment and outflows from unemployment⁴ are available by age⁵.

2.1. Variations in youth unemployment and in adult unemployment: Common or idiosyncratic shocks?

The correlation coefficients between youth/adult unemployment and the business cycle⁶ are respectively 0.35 and 0.48. This means that both unemployment rates vary countercyclically: in case of recovery, the unemployment rates decrease. We find the same relationships for the inflows into unemployment, which decrease with an economic expansion (table 1). We would expect however that outflows from unemployment increase in case of economic recovery. Our results show the opposite: outflows are also countercyclical. These results are confirmed by others studies (see for example, Burda and Wyplosz, 1994). They could be explained by the existence of a strong correlation between the flows (whatever their origin or their destination). Another explanation could be that, in case of recession, more instable jobs are created compared to regular ones. Outflows from unemployment (and in particular to employment) increase because the unemployed constitute the bulk of those hired in these newly created unstable jobs.

³ All the analysis refers to annual rates: inflows rate (inflows into unemployment as a percentage of employment) and outflows rate (outflows from unemployment as a percentage of unemployment).

⁴ Inflows into unemployment ($\div U$) are coming from inactivity ($I \div U$) or from employment ($E \div U$); destinations of outflows from unemployment ($U \div$) are inactivity ($U \div I$) or employment ($U \div E$). In the following tables, y represents young people, a adults.

⁵ 15-24, 25-49, 50 and over.

⁶ We have a measure of the business cycle, Y , using a GDP smoothing approach based on the Hodrick-Prescott filter.

Table 1. Cyclicalities of youth and adult unemployment flows

Flows	$U_y \div E_y$	$U_a \div E_a$	$U_y \div I_y$	$U_a \div I_a$	$E_y \div U_y$	$E_a \div U_a$	$I_y \div U_y$	$I_a \div U_a$
$C(, Y)$	-0.61	-0.50	-0.38	-0.44	-0.46	-0.39	-0.29	-0.31

Source : Enquête Emploi, INSEE.

Our portrait of the dynamics of the youth labour market situation needs to be supplemented by Aoki factorisation, which decomposes each unemployment rate into a common component and an idiosyncratic one. The common component is defined as follows:

$$\bar{u} = (u_a + u_y) / 2$$

the idiosyncratic one, as follows:

$$\delta = (u_a - u_y) / 2$$

where u_a represents the adult unemployment rate and u_y , the youth unemployment rate. We can also write:

$$u_a = \bar{u} + \delta$$

$$u_y = \bar{u} - \delta$$

These components can be interpreted as follows: if variations in unemployment rates are due only to common shocks, the variance of delta will be equal to zero; in the opposite, if variations are due only to idiosyncratic shocks, the variance of sigma will be equal to zero.

Table 2. Common and idiosyncratic shocks for youth and adult unemployment

Youth	Adult	$V(\delta)$	$V(\bar{u})$
u_y	u_a	14.97	86.20
$U \div E$	$U \div E$	0.12	0.76
$U \div I$	$U \div I$	0.11	0.96
$E \div U$	$E \div U$	0.05	1.77
$I \div U$	$I \div U$	0.01	1.00

Source: Enquête Emploi, INSEE.

Note: $V(\delta)$ = variance

Table 2 shows that common shocks are clearly responsible for variations in youth and adult unemployment, in terms of stocks as well as flows. This result confirms the idea that both unemployment rates follow a similar pattern.

2.2. Causality between youth unemployment and adult unemployment

In defining the nature of the relationship between youth and adult unemployment we use Granger's sense of causality. Granger's definition of causality (1969) states that variations in x are caused by variations in y if, to predict x , the history of y provides additional information which applies exclusively to the history of x . The causal relationship between the two variables can thus be decomposed as follows: a causal direction going from x to y (C_{xy}), a causal

direction going from y to x (C_{yx}) and an instantaneous causal relationship (Gourrieroux, Monfort, and Renault, 1987).⁷ Table 3 shows a measure of dependence for each pair of variables decomposed into one-directional and instantaneous causalities estimated in percentages of the total dependency.

The youth and adult unemployment rates, and the flows of both youth and adult into unemployment from employment and into employment from unemployment, all constitute variables which depend upon one another in the Granger sense, this dependence being explained by instantaneous causality. In contrast, there is no similar mutual causal relationship between the flow of young people into unemployment (whether from a job or from having been outside the labour force altogether) and the flows of adults out of unemployment into a job. This result constitutes a real contribution to the debate on youth unemployment in France, since it shows that adults who do find work do not do so at the expense either of young people losing a job or of young people out of the labour force becoming unemployed.

Table 3. Causality between youth and adult unemployment (per cent)

Youth (y)	Adult (a)	Dependence ⁽¹⁾	$C_{y,a}$	$C_{a,y}$	Ci
u_y	u_a	1.28*	8	2	90
$\div U_y$	$\div U_a$	1.21*	0	0	100
$U_y \div$	$U_a \div$	0.61*	17	16	67
$E_y \div U_y$	$E_a \div U_a$	0.99*	0	2	98
$U_y \div E_y$	$U_a \div E_a$	0.71*	10	14	76
$E_y \div U_y$	$U_a \div E_a$	0.24	87.5	12.5	0
$I_y \div U_y$	$U_a \div E_a$	0.16	94	6	0

Source: Enquête Emploi, INSEE.

Note: (*) significant at 5 per cent level.

We calculate the mutual dependance for each pair of variables, which can be decomposed as follows: for example, a causal direction going from u_y to u_a ($C_{y,a}$), a causal direction going from u_a to u_y ($C_{a,y}$) and an instantaneous causal relationship Ci. The percentages can be interpreted as follows: the mutual dependance of u_y and u_a is due for 8 per cent to a causal direction from u_y to u_a , 2 per cent to a causal direction from u_a to u_y and to 90 per cent to instantaneous causality.

We have also examined, in Table 4, the causal relationship - in Granger's sense - between youth unemployment, the flows of young people into unemployment as a result of losing their jobs, and a minimum wage indicator⁸. Table 4 shows that as this indicator increases the number of young people losing their jobs and becoming unemployed also increases. This result would seem to show that wage cost variable would play a determining role in the movement of young people out of work and into unemployment. In contrast, the level of wage is not the principal concern of young people who find work: there is no Granger-type causal

⁷ The statistical tests required to estimate the causality are applied to variables in a stationary process: Dickey's and Fuller's tests show that stock and flow variables exhibit stationary differences as pointed out by Hénin and Jobert (1993). Prior to carrying out causality tests it is necessary to determine the number of lags required to eliminate residuals.

⁸ We have used four minimum wage indicators: the gross minimum wage as a proportion of the average wage; the gross minimum wage cost as a proportion of the average gross wage cost; the real gross minimum wage; and the real gross minimum wage cost. The results do not change with a change in the indicator used. Before calculating the measures of causality we calculate the correlation between youth (and adult) unemployment on the one hand, and the wage indicator (w) on the other. This latter correlation is positive for both stocks and flows of youth as well as adult unemployment.

link between the minimum wage indicator and the inflows into employment.

Table 4. Causality between unemployment and minimum wage (per cent)

Variable 1	Variable 2: min. wage	Dependence	C1,w	Cw,1	Ci
u_y	w	0.28*	29	57	14
u_a	w	0.38*	66	18	16
$E_y \div U_y$	w	0.47*	25	75	0
$E_a \div U_a$	w	0.30*	66	34	0
$U_y \div E_y$	w	0.21	9	91	0
$U_a \div E_a$	w	0.46*	17	33	50

Source : Enquête Emploi, INSEE.

Note: (*) significant at 5 per cent level.

For adults the situation is completely different: it is the adult unemployment rate which causes - in the Granger sense - the variations of the minimum wage indicator, and the same goes for the flow of adults from jobs into unemployment. These results point towards a segmentation of the labour market whereby adults in employment possess superior bargaining power, and wage claims are highly sensitive to the level of unemployment. Conversely, unemployed adults who do find a job make concessions on the wage front: thus we observe an instantaneous causal relationship between wage levels and the flow of adults out of unemployment and into jobs.

2.3 Young people are most vulnerable than adults to unemployment

A stock and flow approach enables us to show that although youth unemployment has been high for twenty years, that does not imply that the youth labour market is stagnant. In fact, in a typical year three times as many young people as adults will become unemployed, while the rate of moving from unemployment into jobs is the same for both groups (Table 5). Stated more precisely, the number of unemployed young people finding a job is comparable to the number of unemployed adults: since 1990 the relationship between the two has remained constant. On the other hand, young people were two to three times more likely to lose their jobs in any given year during the 1970-1994 period. Thus, the flow of young people into unemployment emerges as an adjustment mechanism in the French labour market: when there is a downturn in economic activity businesses will first cut back on jobs held by young people while protecting those held by adults.

Table 5. Comparison of youth and adult unemployment stocks and flows

Youth/Adults	1970	1975	1980	1985	1990	1994
u_y / u_a	3.26	3.13	3.60	3.01	2.11	2.15
$U_y \div E_y / U_a \div E_a$	0.89	1.13	0.91	1.25	1.20	1.20
$E_y \div U_y / E_a \div U_a$	2.19	2.52	3.28	3.42	3.66	2.92

Source: Enquête Emploi, INSEE.

Table 6 confirms that young people in employment are more vulnerable than adults to unemployment: in 1970 1.2 per cent of them became unemployed as compared to 0.5 per cent in 1994, while the corresponding rates for adults were 0.5 per cent and 5.3 per cent. However, the ratio between the vulnerability of the two groups has not changed over the period, throughout which three times as many young people as adults became unemployed in any given year.

Table 6. Annual inflows to unemployment (per cent)

	Youth	Adult
1970	1.2	0.5
1975	3.0	1.1
1980	5.8	1.7
1985	10.1	2.9
1990	11.4	3.1
1994	15.6	5.3

Source : Enquête Emploi, INSEE.

To round off the analysis of youth labour mobility, it is interesting to observe the annual flows of labour in and out of employment (Table 7): throughout the 1970-1994 period the movement of young people into employment either from unemployment or from outside the labour force, is higher than that of adults, and the same goes for movement from employment out of the labour force or into unemployment.

Table 7. Annual flows into and out of employment (per cent)

Flows	1970	1975	1980	1985	1990	1994
$\div E_y$	9.8	11.3	14.2	15.1	13.8	17.9
$\div E_a$	5.7	5.3	5.7	3.9	4.8	5.4
$E_y \div$	10.1	12.2	14.6	17.9	20.0	24.9
$E_a \div$	3.4	3.0	3.7	4.4	4.4	6.7

Source : Enquête Emploi, INSEE.

In conclusion, this first section seems to show that although for the most part youth and adult unemployment have common causes, the position of young people on the labour market does have some idiosyncratic features. In particular the causal relationship in the Granger sense shows that the positive link between the minimum wage indicator and unemployment goes from wage to unemployment for young people, but in the reverse direction for adults. However, if youth employment policies are taken into account this link between the level of the wage and youth unemployment ceases to be significant, as will be shown below. Furthermore movements of young labour force (towards inactivity and unemployment) completely cannot be explained by those of adults (notably by the return of unemployed adults into jobs).

3. The determinants of youth labour market situation

3.1. Labour costs

The scale of unemployment among certain sections of the labour force in France (especially the young and the unskilled) has fed the debate about the need for structural adjustments in the labour market. Economic studies often state that the high rate of youth unemployment is a result of the high relative level of the wages paid to them (Moghadam, 1993)⁹. Proposals are regularly advanced for the establishment of a “youth minimum wage”, like in Belgium and the Netherlands.

However, France does have in practice a variety of mechanisms that bring youth wages below the level of the SMIC (the minimum wage).¹⁰ Thus it is possible to fix the wages of 16-18-year-olds on the basis of a floor equal to 80 per cent of the SMIC, and some 600,000 young people (i.e. 20 per cent of those under 26 years in the labour force) were employed under ‘insertion’ contracts which enable businesses to reduce their labour costs (Cette et al., 1996). Besides, opponents to the “youth minimum wage” highlight that the main features of youth unemployment are those of ‘labour market access unemployment’: a high incidence of entry into unemployment combined with a high probability of exiting the pool of unemployment. Several studies have shown how difficult it is for young people, whatever their educational qualifications, to achieve a rapid and direct entry onto the labour market (CSEC, 1996). The overall shortage of jobs in France would tend to penalise the most recent market entrants and to place them at the back of the queue (Gautié, 1994). In that context the labour cost argument seems to be a second choice argument in the debate about youth unemployment.

However, the debate is not so simple: on the one hand young people, who constitute one quarter of those earning less than 1.33 times the SMIC, are over-represented among the low paid, the level of youth employment is likely to be particularly sensitive to the SMIC, and on the other because of the substantial proportion with no qualifications among the young unemployed. Indeed, those without any qualification accounted for practically half the unemployed under the age of 26 in 1996. Certain European countries have decided to sever the connection between youth and adult wages. In this context Germany - the only major industrialised country in which the unemployment rate for young people and adults is practically the same - constitutes a special case, since here the delinking of youth and adult wages occurs in the framework of a system in which professional training is guaranteed, and the lower level of youth wages is justified in terms of the cost of the system to the employer - though of course the training is undertaken as part of an investment in human capital. Another interesting case is Holland where youth unemployment declined from 25 per cent in 1983 to 10 per cent in 1996 in the wake of the vigorous application of a policy to reduce the costs of employing young people: the legal minimum wage was cut in 1984, the increase in the

⁹ For an example of recent press discussion, see the article by A. Fourçans in *Libération* 6 February 1997.

¹⁰ The SMIC, which was established in January 1970, is a gross hourly wage indexed to the consumer price index; in July of each year it is adjusted by at least half the increase in the average hourly wage, in constant Francs, and its level may also benefit from occasional upward ‘nudges’.

difference between the 'young people's minimum wage' and the minimum wage itself¹¹, and then the freezing of the level of both until 1990 all contributed to a substantial reduction of the 'youth minimum wage' in both real and relative terms. It should be recalled that this cost-reduction policy was undertaken together with a substantial increase in the flexible working hours (including a growth in part-time work and the frequent use of temporary workers during the period) leading to an overall reduction of unemployment (OECD, 1996). Finally let us recall that in the first part of this paper we drew attention to the link between youth unemployment and the minimum wage indicator, in which Granger-type causality went from the minimum wage level to the unemployment rate. This labour cost approach to youth employment continues to be relevant in France, and more generally it leads to a consideration of the effects of the minimum wage on young people's position in the labour market.

A review of recent literature shows that at the theoretical level there are as many arguments for as against the minimum wage (Dolado et al., 1996). One approach finds an inverse relation between employment and the level of the minimum wage (Cahuc and Zylberberg, 1996). According to this argument, in an economy with a variety of types of labour the minimum wage has several effects - influencing both the structure of demand for labour and the distribution of wages, and thus employment as a whole. Furthermore, the 'downwards stickiness' of labour costs which a minimum wage brings about imposes particularly painful costs on unskilled workers (i.e. the young) as the cost of employing them becomes more expensive to that of other types of worker. However, it is also possible to argue for a positive relationship between the minimum wage and employment, especially where businesses have a monopsony power in the labour market enabling them to determine wage levels unilaterally (Stigler, 1946).¹²

Empirical studies are no less in disagreement among themselves. There are numerous studies seeking to estimate the effects of the level of the minimum wage on employment and unemployment.¹³ At the beginning of the 1980s, one review of the literature on data and methods used, concluded that, other things being equal, a rise of 10 per cent in the minimum wage would reduce youth employment by between 1 per cent and 3 per cent in the United States (Brown, Gilroy and Cohen, 1982)¹⁴. However, in bringing their study up to date in 1983, the authors found a lower employment elasticity (-0.1) and no effect at all on youth unemployment.

Several studies were subsequently undertaken in the US, especially to assess whether rises

¹¹ Passed in early 1974, the youth minimum wage is based on a percentage of the minimum wage itself and increases with age: thus between the ages of 15 and 22 it rises gradually from 30 per cent of the minimum to 85 per cent - percentages which themselves were revised upwards in 1981 and 1983.

¹² So long as the minimum wage is below the equilibrium level of wages, the level of employment is determined by the supply of labour which will rise together with the wage level. The monopsony model therefore produces a rising correlation between the level of the minimum wage and employment at low levels of the former, and a declining correlation at high levels (for a more detailed account of the model see for example Machin, 1994; Manning, 1994; Cahuc and Zylberberg, 1996).

¹³ These studies generally try either to establish a correlation between the variations of employment and those of the level of the minimum wage, or to use experimental data with a control group (one receiving a wage differing from the minimum and the other not) - a method widely applied in the United States, as in the work of Card and Krueger (1994); or, in a further variant, to study the direct effect of the minimum wage on the cross-section distribution of wages (Meyer and Wise, 1993).

¹⁴ This study compared the results of various studies using both time series and cross-section data: the former provide a view of the change over time in the level of the minimum wage in relation to wages as a whole, while the cross-section data compare the effects of the minimum wage, at a given point in time, but under different conditions - such as differences in legislation, in the number receiving the minimum wage etc.

in the minimum wage which had occurred in certain states had had an effect on employment.¹⁵ For example, in their study of the effect of increases in the minimum wage in different states Card and Krueger (1995) found a positive correlation between the minimum wage and employment in the New Jersey fast-food industry after the level had been raised in that state, but they did not find a significant correlation in other states.

Likewise, the results of studies undertaken in France are not very conclusive. The econometric tests carried out by Bazen and Martin (1991) on the relationship between the minimum wage and youth employment produce negative elasticities between -0.1 and -0.3, but even then the authors express some doubts concerning their results: 'We have not, from the econometric point of view, been able to establish satisfactorily that the increase in the real cost of youth labour has had a negative effect on youth employment - even if we believe this in fact to be the case'. And in updating a study originally carried out in 1990, Benhayoun (1994) found that the effect of the minimum wage on youth employment was so weak that it could not justify the introduction of measures such as the 'youth minimum wage' in France.¹⁶

A recent macro-economic study concludes that the reduction of the cost of employing young people through the creation of a 'youth minimum wage' or through a reduction of employers' contributions, would have a small, but significant, effect on employment (Cette et al., 1996). These prospective gains remain nonetheless small - 100,000 extra jobs to be gained from a 20 per cent average reduction in the minimum paid to young people, and even then at the cost of significant losses of jobs for adults. On the basis of longitudinal individual data Abowd et al. (1996) reach stronger conclusions: starting from an analysis of the effect of changes in the minimum wage on movements between employment and unemployment among workers earning different levels of wages, they conclude that the minimum wage has quite significant effects on employment levels, but very important wage effects on workers earning the minimum itself: 'a rise of 1 per cent in the real minimum wage increases by 4.3 per cent the probability that a man employed on the minimum wage will lose his job'. These results suggest that the minimum wage does tend to lead to job losses among certain types of worker, such as the unskilled and the young.

3.2 Educational and training qualifications

Direct entry into employment among school-leavers is increasingly unusual because experience is an increasingly widespread factor in hiring decisions, so that for any given level of qualifications employers will prefer the more experienced of the young candidates. During the 1980s the proportion of young people employed declined in all sectors, even those which witnessed a growth in jobs. In general, the rate of entry into employment among young people¹⁷ did not rise perceptibly during the 1970-1994 period (Table 5) while the rate of exit from employment grew until 1990. This despite the continuous improvement in the educational level of the labour force, as measured by the highest level of educational qualifications declared in successive censuses (Table 8). More precisely, the entry into the labour market of ever better educated generations of workers has produced an increasingly well educated workforce. The

¹⁵ In the US the federal government fixes a floor, but thereafter each state is free to fix a higher level of minimum wage.

¹⁶ The elasticities produced were at a very low level of significance.

¹⁷ That is, the ratio of the number of hirings in the active population of young people.

distribution of qualifications among those leaving the educational system provided by the 'Direction des Etudes Prospectives' of the Ministry of Education is instructive in this regard (Table 9).

Table 8. Structure of the labour force by educational qualification, 1962-1990 (per cent)

Year	No qualification	CEP	BEPC	CAP or BEP	BAC	> BAC
1962	49.8	28.7	4.0	9.0	5.8	2.7
1968	37.7	30.2	5	15.4	7.9	3.8
1975	30.7	25.8	6.5	19.4	9.3	8.3
1982	29.7	19.1	7	22.2	11.1	10.9
1990	21	14.5	8.1	28.1	13.1	15.2

Source: Enquête Emploi, INSEE.

Notes: CEP= basic vocational training certificate. BEPC = basic general secondary certificate. CAP or BEP= secondary vocational training certificates. BAC = "baccalauréat", the school-leavers certificate (before the university).

Table 9. School leavers, including apprenticeship, by educational qualification (1975-1993)

	1975	1980	1985	1990	1994
< CAP (per cent)	22.3	15.8	15.4	11.7	8.3
CAP or BEP (%)	41.7	47.5	45.2	34.7	26.1
BAC level (%)	10.9	10.4	8.8	8.8	13.4
> BAC (%)	25.1	26.3	30.8	44.8	52.2
Outflows (thousands)	764	832.2	796.4	770.4	775.2

Source: DEP, Ministère de l'Education nationale.

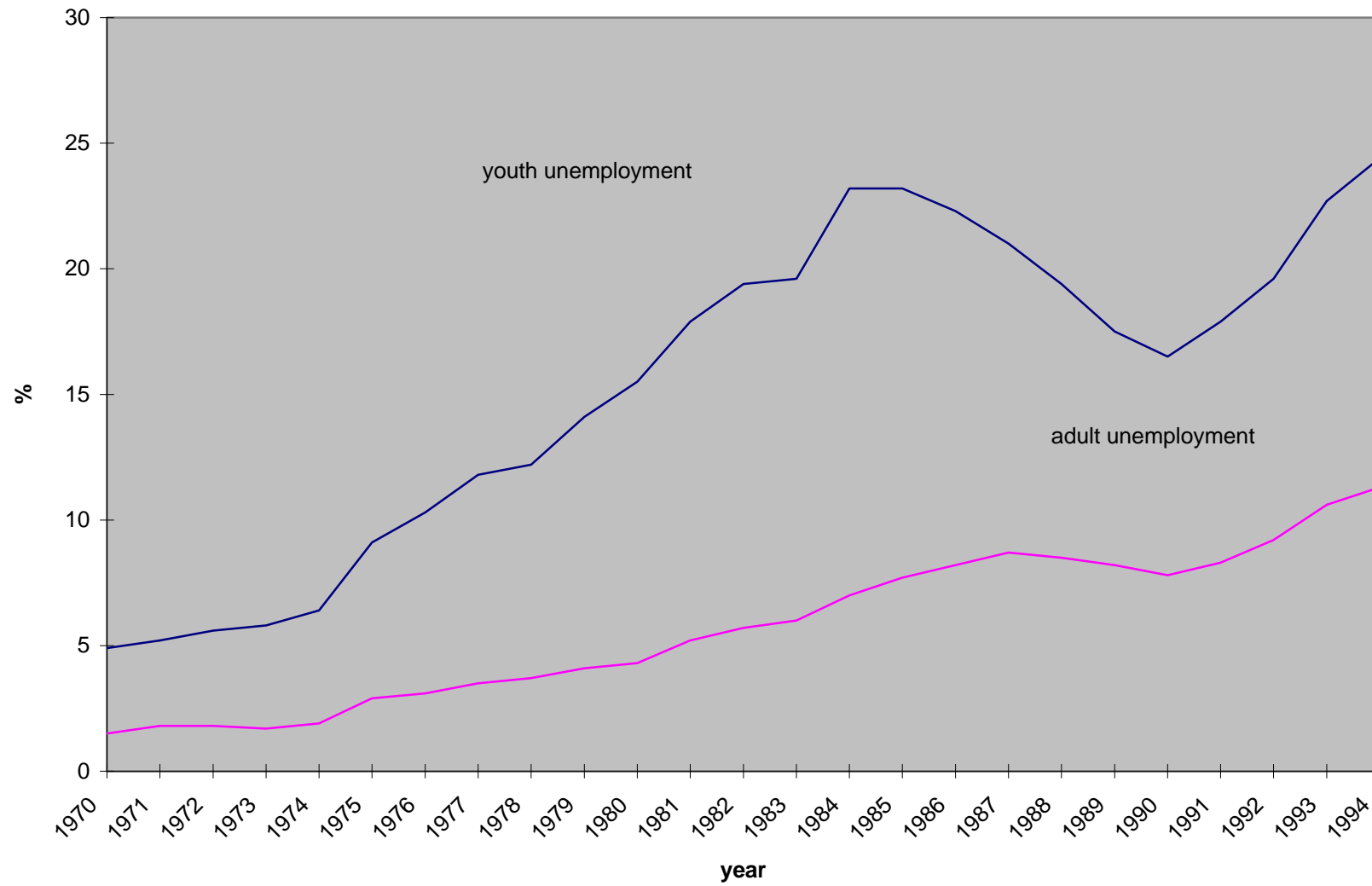
Despite the uninterrupted growth in education during the past twenty years in France, youth unemployment continues to grow, especially relative to adult unemployment (Chart 1). One explanation is that youth unemployment consists mostly of those without qualifications, who are more vulnerable to unemployment than their more highly educated contemporaries, and who do indeed represent more than half of the young unemployed over the past twenty years (Table 10). However, it is also the case that as the numbers of young educated people has increased, so also both their share of youth unemployment and their rate of unemployment have grown continuously (Table 10), leading us to conclude that educated young people are also having great difficulties entering the labour market.

Table 10. Youth unemployment by educational qualification

(Per cent)	1983	1986	1992	1996
Unemployment rate among the unqualified (< CAP)	25	31	28	36
Part of unqualified in youth unemployment rate	54	53	52	47
Unemployment rate among the young educated (> BAC)	10.3	14.8	12.2	18.8
Part of young educated in youth unemployment rate	9.7	9.6	12.5	24.5

Source: Enquête Emploi, INSEE.

Figure 1. Youth and adult unemployment



Thus as youth unemployment grows, so the young seem to choose en masse to go on studying. This visible extension of education, and the considerable growth of the number of people with secondary and higher education qualifications, produces a supply of educated young people which is increasingly in tune with the development of a labour market which requires ever-increasing standards of training in response to technical progress and growing competition. In 1996 France cannot reasonably be said to be suffering from a shortage of skilled workers. The growth of the labour market's requirement in skills has been paralleled by the growth in the level of education, and the rate of unemployment of young educated people¹⁸ has in fact risen in the 1983-1996 period: it grew at first, between 1983 and 1986, and then declined between 1986 and 1992, only to grow again between 1992 and 1996 (Table 10).

The demand for highly qualified work-force has not increased sufficiently to absorb the growing numbers of educated young people, especially during the 1990s. As Goux and Marin (1993) have shown, career positions, especially those at the middle level, are by no means being filled by higher education graduates, as businesses choose to fill them by internal promotion of less formally qualified, but more experienced, employees.¹⁹ Thus the lack of jobs has been more of a burden for young educated people than for less educated, but more experienced, adults.

Another explanation of educated youth unemployment is in terms of a mismatching between the educational system and the real needs of the economy.²⁰ For example, Sneessens (1994) has shown that during the period 1974-1994 there was an increase in structural unemployment in France arising from skill mismatching. However in the light of his observation that few businesses experienced a shortage of educated labour force in the late 1980s, the author recognises that the persistently high levels of unemployment cannot be a direct effect of qualified labour force. Bourdet and Persson (1991, 1994) have used the Beveridge curve to study unemployment arising from the mismatching in France and Sweden, and they find that the persistence of youth unemployment in France is a result of the inadequate level of aggregate demand and of a faltering adjustment mechanism between supply and demand for jobs - although they go on to state that youth employment measures have compensated for this failure. However, both their methodology and their interpretation of the results give cause for concern.²¹

Despite the continuous improvement in the educational level of the young during the last twenty years²², some 280,000 young people without any educational qualification were unemployed in 1996. This is not a new, but rather a recurrent situation especially since 1983 (Table 10). Thus the unemployment rate among the unqualified young people, after briefly falling until 1992, has not ceased to increase since then, reaching 36 per cent in 1996

¹⁸ By 'young educated people' is meant those possessing at least the equivalent of a general or professional 'baccalauréat', the school-leavers' certificate.

¹⁹ Among the jobs created between 1982 and 1991, 17 per cent of the senior positions and 35 per cent of the middle-level ones were filled by people holding qualifications equivalent to the 'baccalauréat' or less.

²⁰ The Beveridge curve, which links the unemployment rate and the number of job vacancies is the standard measure of unemployment due to the mismatching. The relation between the two is normally inverse: when the economy expands the vacancies rate rises while the unemployment rate declines. A shift of the Beveridge curve to the right indicates a deterioration of the matching process between supply and demand for labour, since it denotes a growing number of vacancies for a constant level of unemployment.

²¹ Gautié (1996) contains an exhaustive criticism of the work of Bourdet and Persson (1991, 1994).

²² In 1996 the proportion in education was 91 per cent among the 15-19 year-olds; 44 per cent among the 20-24 year-olds, and 5 per cent among those aged 25 to 29.

(Table 10). To be precise, the unqualified young unemployed²³ account for practically half of all youth unemployment since 1983, except in 1996. The inequalities that arise from leaving school before the end of the upper level of secondary school are accentuated by systems of continuous training which tend to favour the better qualified workers. Thus someone who drops out of school at the start of their adolescence eventually drops out of the labour market too, having little chance of finding a job or to improve his or her productivity, and unable to compete with either adults or young people in jobs.²⁴ It is possible with appropriate training policies, to avoid a situation of high unemployment and low growth, as shown by the frequently demonstrated positive theoretical and empirical relationship between education and growth (Mankiw, Romer and Weil, 1992; Barro and Sala-i-Martin, 1995). Indeed, low investment in human capital hampers growth and weak growth does not improve employment, leading in turn to a lack of incentive to invest in human capital. Thus a training policy can change the composition of the supply of labour and adapt its structure to the growing demand for skills. However, since investments in training are costly and subject to numerous externalities, public sector involvement is necessary.

Table 11 shows that if we look at the cyclical and persistent pattern of unemployment for men and women²⁵ aged 15-24, by qualification, in the 1970-1995 period, the unemployment rate is all the more counter-cyclical if the young unemployed, male or female, are unqualified. That is to say that it is the unqualified among the young who are the first to be affected by short-term fluctuations in the labour market, as demonstrated by Merino and Minni (1995).

Table 11. Cyclicity and persistence of youth unemployment rates, by qualification, 1970-1995

Unemployed	< CAP (men)	< CAP (wom)	CAP/BEP (men)	CAP/BEP (wom)	BAC (men)	BAC (wom)	> BAC (men)	> BAC (wom)
C(, Y) (1)	-0.43	-0.38	-0.35	-0.29	-0.18	-0.21	-0.16	-0.16
AC(1)(2)	0.87	0.86	0.84	0.86	0.62	0.76	0.36	0.66

Source: Enquête Emploi, INSEE.

Notes: (1) C(, Y) represents the correlation of one variable with the business cycle. (2) AC(1) represents the order one auto-correlation.

Likewise the rate of unemployment is less persistently high where young people, male or female, are highly qualified. This reflects the fact that a qualified young unemployed person has a better chance of finding a job than an unqualified one.

3.3 Active employment policy measures

During the period under consideration expenditure on active employment policies has multiplied some six times and more than fifty different measures have been put forward to fight the growth of youth unemployment (DARES, 1996). It is therefore important that these policies be taken into account in the analysis. Active employment policy measures comprise various

²³ By unqualified is meant those not even possessing a CAP (certificat d'aptitude professionnelle), a basic vocational training certificate.

²⁴ We have shown that there is no link between the flows of adult unemployed finding jobs and the flows of young people into unemployment, or being unemployed, drop out the labour force.

²⁵ No study of youth unemployment by level of education is complete without taking sex into account, which is the reason for the presentation of the data for young men and young women separately.

types of measures including the provision of information and guidance, training and the promotion of both commercial and non-profit employment. These affect the level of unemployment in various ways: information and training can improve the workings of the labour market through a better balance between supply and demand²⁶, they can raise the skill level of labour, raise its productivity and reduce its unit costs (whence a change in the real level of labour supply and repercussions for the overall level of employment and the equilibrium rate of unemployment); the effects of employment promotion measures are more difficult to capture because they bring into play complex and sometimes contradictory mechanisms - deadweight effects, substitution effects between subsidised and regular employment, and both crowding out and crowding in effects²⁷.

It is therefore very difficult to assess the impact of the measures. One, imperfect, method of taking them into account in an econometric analysis would be through the introduction of a dummy variable reflecting the effect of the most significant youth training schemes in 1987 and 1988 (Benhayoun, 1994). Another would reconstruct detailed series of youth employment subsidies based on Ministry of Labour sources. However, apart from the apprenticeship system which has existed throughout the period, most of the policies have been applied only for a limited period lasting a few years. Thus, even if one combined the different types of measures under three main headings - subsidies for youth hiring in commercial sectors (including apprenticeship); subsidies for youth hiring in non-profit sectors, and training schemes - the fitting of the three series into a single regression poses a serious problem. For example, subsidised youth employment only got under way in the non-profit sector from 1985²⁸ with the community service jobs (TUC, "travaux d'utilité collective"), replaced in the early 1990s by the employment solidarity contracts (CES, "contrats emploi-solidarité"). Work experience schemes and subsidised employment in the commercial sector got under way in the mid-1970s and grew rapidly in the 1980s, with subsidised employment reaching its height in 1987 because of the proliferation of different types of contract offered to young people (apprenticeship contracts, adaptation contracts etc.), while work experience schemes were created in 1985 and then abolished in 1990 (Chart 2). Finally, we choose to merge all these programmes into one single employment promotion variable (see below).

3.4 Shortage of jobs

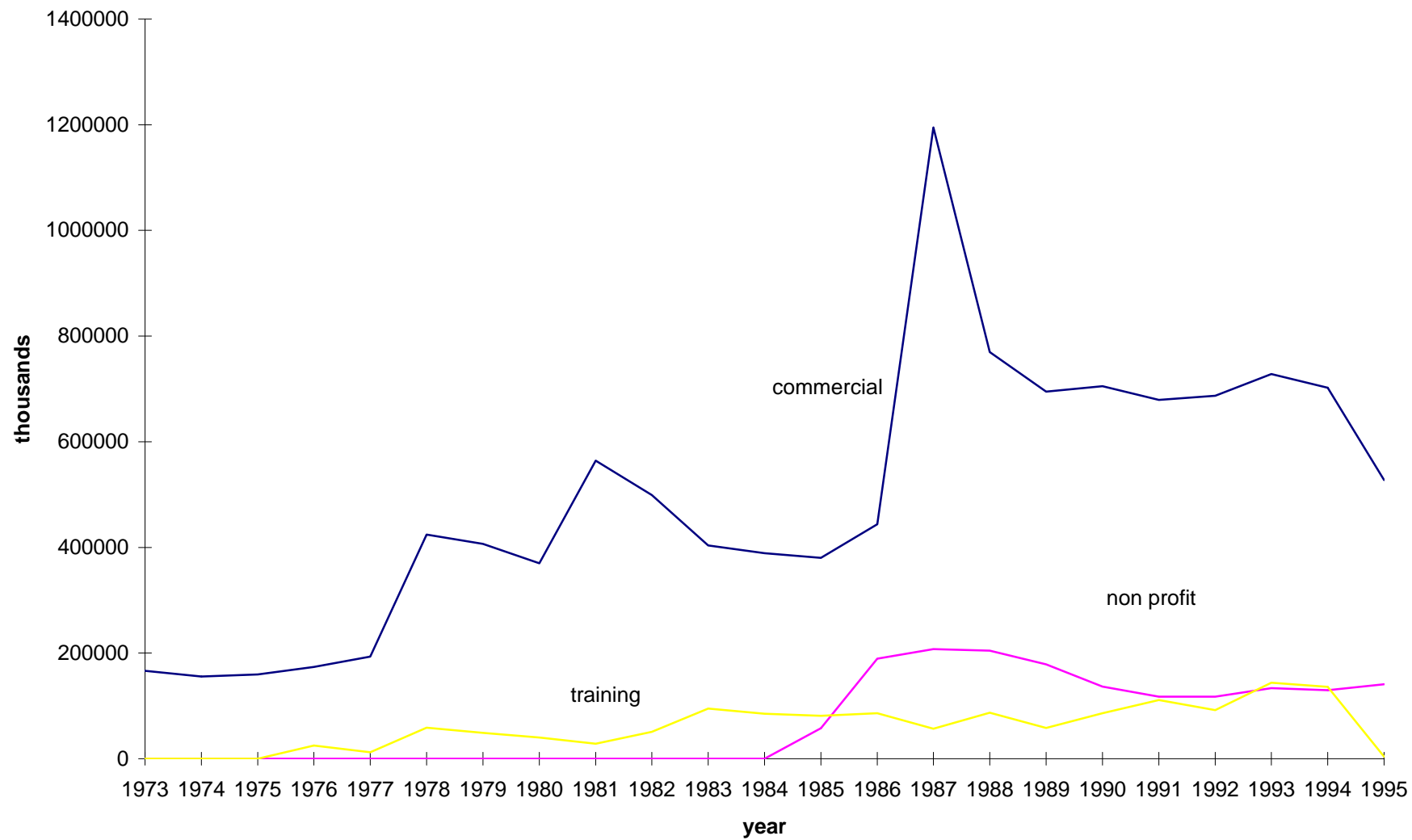
To assess the shortage of jobs, we construct a "queuing for jobs" variable which measures the queuing phenomenon which young people must undergo in the labour market. The variable is the residual of an equation that explains adult unemployment on the basis of the level of economic activity, a minimum wage indicator and the lagged variable of the adult rate of unemployment. By removing from this residual the elements that are common to youth and adult unemployment we can then account for the influence of adults' situation on young

²⁶ In that case, they are more likely to affect the structural unemployment.

²⁷ A measure of the net effects on unemployment of these measures would need to take into account leakages such as the pure deadweight effect (where a business would have created a job anyway and would have filled it with a person having the same characteristics as the beneficiary of the measure); the substitution effect (where the firm would have created the job, but would have filled it with a person having different characteristics); the crowding out effect (where regular employment declines due to competitive behaviour of firms who take advantage of subsidized jobs to increase market share and to wage increases arising from those schemes), and the crowding in effect (bringing more people into the labour force). For a more detailed account see Gautié, 1996.

²⁸ In fact they began in 1982 with the 'young volunteer' programmes, but these did not affect many young people.

Figure 2. ALM programs



people in the labour market. The residual can therefore capture the queuing for jobs phenomenon faced by young people. To understand this 'queuing for jobs' variable, take a firm which only employs people between the ages of 25 and 60 and which then closes down. As a result, all other things being equal,²⁹ the flow of adults into unemployment rises and, holding educational level constant, school-leavers and the young unemployed looking for work go to the back of the queue behind these newly unemployed adults.

In the estimation of the rate of youth unemployment, we only consider the past business cycle - which is contained into the lagged youth unemployment rate - and not the contemporaneous one, as it is very often done by using the rate of adult unemployment as a proxy. This is because of multicollinearity problems arising between u_{at} and u_{yt-1} .

4. Some econometric elements: The estimation of the rate of youth unemployment

In order to establish whether the existence of a minimum wage in France has had an influence on the position of young people in the labour market in the 1971-1994 period, it might be relevant, in the context of simple regression coefficients, to treat youth *employment* as a dependent variable, so as to show a direct effect of labour costs. However, the trend of youth employment since the beginning of the 1970s has differed notably from that of employment as a whole (Charts 3a and 3b). It therefore seems that while youth employment has been almost completely insensitive to short-term fluctuations, it has been strongly determined by demographic trends (the sharp decline, since the beginning of the 1970s, of the share of young people in the total population) and by the lengthening period of time spent in education. This is why in our estimations we have chosen the youth *unemployment* rate as the endogenous variable.

4.1 The specification of the equation

The equation³⁰ estimated is as follows:

$$u_{yt} = a_0 + a_1 \log(\text{cost}_t) + a_2 \text{queue}_t + a_3 \log(\text{Pol}_t) + a_4 u_{yt-1} + \epsilon_t$$

where:

- u_{yt} represents youth unemployment at time t (as defined in the Employment Survey, that is in the ILO definition); u_{yt-1} at time $(t-1)$.
- cost : several variables appear in the literature to represent the impact of the minimum wage.³¹ In France the minimum wage (SMIC) applies to wage-earners as a whole and is

²⁹ More precisely, for unchanged levels of economic activity and labour costs.

³⁰ We do not present a theoretical model from which to derive this equation, but it could be possible to derive a comparable form of it from various orthodox models (for example a bargaining model).

³¹ Some studies use the minimum wage, others the ratio of the minimum wage to the average wage (for example Burns, 1966; Adie, 1971; Benhayoun, 1994); some take gross wages others wages net of social security contributions; yet others argue on the basis of wage cost -i.e. including employer's social security contributions (Hamernesh, 1981; Benhayoun 1994) - or of the real minimum wage (Adie and Chapin, 1971; Adie, 1973; Gramlich, 1976; Abowd and Killingworth, 1981; Benhayoun, 1994); finally the 'Kaitz index' is often used (Kaitz, 1970).

Figure 3a. Youth employment

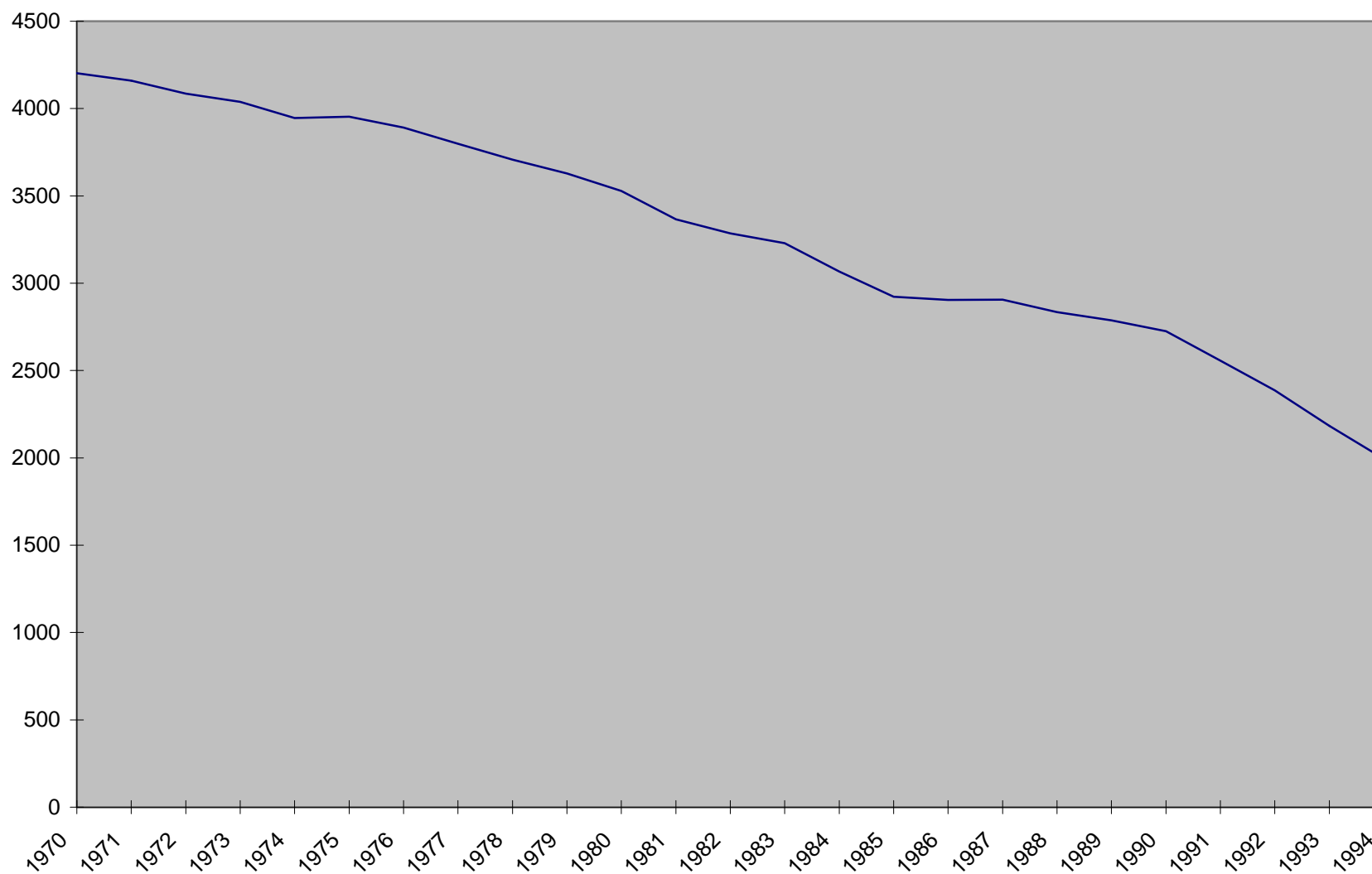
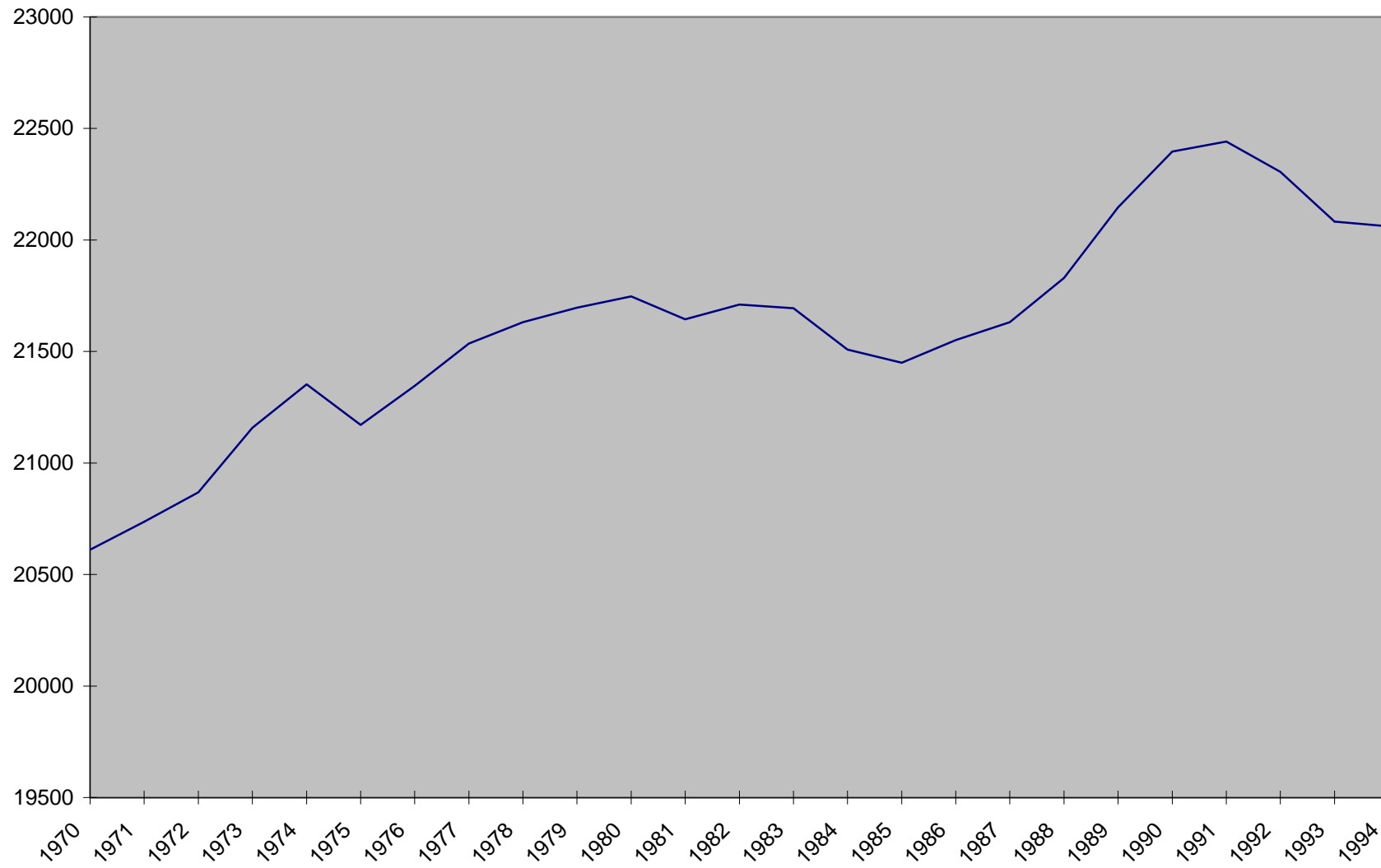


Figure 3b. Total employment



calculated as an hourly wage. Therefore we have used the minimum hourly wage: the cost variable reflects the evolution of the cost of labour (that is including employers' social security contributions) associated with the minimum wage, in relative or absolute terms. Thus we use either (i) the ratio between wage costs -the ratio between the minimum and the average wage cost - thus enabling measures to reduce wage costs to be taken into account together with changes in the relative cost of employing young people; or (ii) the real hourly cost of work paid at the level of the minimum wage.

- queue is an indicator for the queuing for jobs phenomenon (see before).
- Pol represents the total number of subsidised jobs in the commercial and non-profit sector (including work experience) for young people relative to the number of young unemployed.

The econometric specification being tested is semi-logarithmic³², and therefore differs from the log-linear relationship first developed by Mincer (1976). The specification can be obtained through a simple theoretical model (Forgeot, 1996) and suggests that the higher the minimum wage - by definition fixed at a level higher than the equilibrium wage in the labour market - the higher the increase it brings about in the rate of unemployment. The specification also has the advantage of offering a simple interpretation of the estimated coefficients: for example the coefficient assigned to wage costs represents the variation of the unemployment rate resulting from a 1 per cent rise in wage costs. We also choose to explain the rate of youth unemployment overall, then by educational qualifications, in terms of its past evolution because, except in the case of young educated men, youth unemployment is a very persistent phenomenon. This persistence is taken into account by drawing on past history rather than a trend. Thus, the estimation of the youth unemployment rate is as follows: taking into account its past evolution, the youth unemployment rate, holding educational qualifications constant, is influenced by the cost of labour, employment policy and the 'queue for jobs'.

4.2 Results of the estimation

Tables 12 and 13 respectively present for the 1974-1994 period estimates of the youth unemployment rate and the rate for young men and women by educational qualifications.

Considering the unemployment rate of all young people, we find that unsurprisingly, it rises faster the greater the shortage of jobs, taking into account its past evolution. The active labour market variable is also significant and has the expected sign: mechanisms put into place to help young people seem to have had a strong influence in reducing youth unemployment.³³ In contrast no influence was detectable of the wage cost indicator on youth unemployment, and this remains the case whichever specification is used (Table 12); in fact even the use of the gross hourly minimum wage rather than the real hourly cost of labour, or of the ratio of the minimum to the average hourly wage does not change this result. But another study (Forgeot, 1996) finds an effect of the minimum wage on youth unemployment: it concludes that successive increases in the real value of the minimum wage may have increased youth unemployment in France by 2.8 per cent between 1980 and 1994 - equivalent to 32 per cent

³² Bazin and Martin (1991) first suggested that strong increases of the SMIC may have introduced a non linear relationship between the minimum wage and the unemployment.

³³ This is particularly the case for training contracts and subsidized employment in the voluntary sector ('TUC' -travaux d'utilité collective- and 'SIVP' -stage d'initiation à la vie professionnelle-) where the stocks of participants were particularly high in 1987 and 1988.

of the overall increase in unemployment among 15-24 year-olds during the period. It seems therefore that the quantification of the effects of the minimum wage on youth unemployment is quite sensitive to the econometric specification used. Furthermore, Forgeot uses quarterly series that enable him to make a particularly focused study of the 1980-1994 period.

Table 12. Estimation of the youth unemployment rate (1974-1994) (1)

Youth unemployment rate	[1]	[2]
Constant	-12.8 (-1.24)	-10.8 (-0.95)
Lagged youth unemployment rate	0.61 (4.64*)	0.6 (4.59*)
Queue indicator	2.15 (2.15*)	2.33 (4.77*)
ALM program	-1.71(-2.41*)	-1.46 (-2.24*)
Minimum wage	0.25 (1.41)	0.3 (1.90)
R ²	0.96	0.97

Source: Enquête Emploi ; DARES ; INSEE.

Notes: (1) T-Student statistics are presented in brackets. (2) The estimation (1) takes the real hourly minimum wage cost and the estimation (2) takes the ratio hourly minimum wage cost / hourly mean wage cost as wage cost indicator. (*) significant at 5 per cent level.

Table 13 presents the results of the same regression, by level of qualifications and by gender.³⁴ Distinguishing between “less qualified” young men and women (here, those leaving school at best with the ‘baccalauréat’), from those who are educationally qualified (those having a qualification superior to the baccalauréat), we find a very clear borderline between them, be they male or female. For young women with an educational qualification, for example, the present unemployment trend is explained exclusively by past evolution, whereas for both less qualified young men and women unemployment is explained by the same set of variables than for the whole young population (see table 12), plus the minimum wage indicator³⁵. These striking differences according to the level of qualification, and particularly the effect of the minimum wage on the non graduates, are all the more significant given that all young people have problems entering the labour market. The development of temporary jobs and the progression of wage costs exemption measures targeted on the less qualified, which were widely reintroduced in 1986 to compensate for the supposed inferiority of the productivity of unskilled, may have contributed to affect the nature of all youth labour market situation, but particularly those less qualified: they may have confined them to secondary segments of the labour market and to sectors which often combine wage and employment flexibility. For example, they are concentrated in the tertiary sector, especially hotels and catering, which hire them on the basis of fixed-term contracts, training schemes, or even work experience. Less qualified young people are thus particularly vulnerable in the labour market. Furthermore, the change in the structure of employment in France during the 1980s took place to the detriment

³⁴ We have used only the absolute cost of labour, because the estimates obtained on the basis of relative cost produced results which were very difficult to interpret.

³⁵ As explained before, the chosen specification has the advantage of offering a simple interpretation of the estimated coefficients. For example, the coefficients assigned to wage costs in the unemployment equation are respectively for the less qualified men: 0.27; for the less qualified women: 0.37 (table 13). They can be interpreted as follows: a 1 per cent rise in wage costs will lead to a 0.27 point increase of the youth less qualified male unemployment rate and to a 0.37 point increase of the youth less qualified female unemployment rate.

of less qualified people, among both the young and the adult population.³⁶ This shift in the pattern of demand for unskilled labour is often explained with reference to growing competition from low-pay countries and to the introduction of new technologies.

Table 13. Estimation of youth unemployment rates by qualification (1974-1994) (1)

Youth unemployment rate	Less qualified (men)	Less qualified (wom)	Qualified (men)	Qualified (wom)
Constant	-0.74 (-4.31*)	-0.97 (-3.30*)	1.74 (0.98)	-0.04 (-0.40)
Lagged youth unemployment rate	0.66 (7.01*)	0.49 (3.52*)	0.04 (1.28 ³⁷)	0.77 (2.70*)
Queue indicator	0.03 (2.33*)	0.03 (2.14*)	0.03 (1.26)	0.01 (0.75)
ALM program	-0.04 (-3.66*)	-0.03 (-2.33*)	-0.04 (-1.00)	0.00 (0.24)
Minimum wage	0.27 (4.37*)	0.37 (3.42*)	0.76 (1.10)	0.02 (0.54)
R2	0.96	0.95	0.53	0.72

Source: Enquête Emploi, INSEE.

Notes: (1) T-Student statistics are presented in brackets. (*) significant at 5 per cent level.

Finally, it is very difficult to speak of youth unemployment in general: the situation of a qualified unemployed is quite different from that of one who has no qualifications, even if both have difficulties entering the labour market. It appears that educational certificates remain the best defence against unemployment: highly qualified young unemployed people are less vulnerable than the less qualified to movements in the business cycle and spend less time unemployed. Thus, rather than pursuing a decrease of the labour costs of the less qualified young workers (which is not sustainable, since the level of qualifications required for the employment is continuously increasing), access to qualifications as well as a better matching between this qualifications and the needs of firms should be emphasised as priorities.

Moreover, it is important to keep in mind that econometric results are very sensitive to the chosen specification and therefore quite unstable. One of the main problems in choosing an econometric specification lies in the search for an underlying theoretical model: it seems, for example, that the potential effect of the minimum wage on youth unemployment (or employment) depends on the “real” individual’s status in the labour market. According to Marsden and Ryan (1991) the relationship between employment and pay varies by sector, by types of employment and by the mechanism of access of young people to the labour market: three typical modalities can be distinguished - the apprenticeship model, the commercial sector, in which young people compete with adults, and the voluntary sector.³⁸ One of the problem is that as a result of the numerous policy mechanisms developed in the past fifteen years in France a multiplicity of hybrid forms have appeared in the labour market, so that it has become difficult to distinguish between employment, unemployment, and non-participation in the labour force: how, for example, can one classify statistically an individual undergoing work experience or training for which he receives remuneration, yet at the same time in search of a job? The Employment Survey no longer counts such individuals as unemployed: persons engaged in a work experience programme to initiate them into the world of work (SIVP -

³⁶ During this period, the growth of employment of unskilled workers was 2.7 per cent, while the one of skilled workers was 0.6 per cent (OECD, 1994).

³⁷ in this equation, we consider a trend and not the lagged youth unemployment rate as explicative variable.

³⁸ See the article by Freyssinet in *Les Jeunes et l'Emploi* (1996).

'stage d'initiation a la vie professionnelle'), or in receipt of a 'solidarity-employment contract' (CES - contrat d'emploi-solidarité') in the voluntary sector are now counted as employed. It follows that any expenditure on these measures leads directly to a reduction of the stock of unemployed - and all the more so since the participation to such programmes increases with unemployment.³⁹

5. Conclusion

In conclusion, it emerges from this study that a single dynamic process underlies fluctuations in youth and adult unemployment, showing that labour market conditions, themselves linked to the level of economic activity, are determinant in explaining the level of unemployment. Furthermore, we could not show in the econometric analysis over the past 25 years, using annual data from the Employment Survey, that young people as a whole were not employed because labour costs were too high. However, distinguishing between levels of qualifications reveals substantial heterogeneity in their situations on the labour market: in particular, as there is a strong unfavourable competition between young people and adults, the problems of qualifications are exacerbated by the fact that the shortage of jobs facing young people in general is worse for the unqualified who find themselves forced to the back of the 'queue for jobs'. Therefore, unqualified young labour force may seem "too expensive" compared to other categories of workers. But to state that it is the rigidity of the wage system which is responsible for unqualified youth unemployment or that it is the unsuitability of training for works offered by firms, are simply two sides of the same coin. In the face of the inequality in unemployment situations and of the shift in the pattern of demand for unskilled labour, access to qualifications as well as a better matching between these qualifications and the needs of firms should be emphasised as priorities.

Besides it is worth questioning the relevance of employment policy measures targeted at a particular section of the population - in this case young people.⁴⁰ In France since 1973 there has been a roughly sixfold increase in expenditure on active youth employment policy measures, and more than 50 measures have been put forward to deal with the growth of youth unemployment. Thus employment policy has been focused on an ever-increasing number of beneficiaries of whom an average of 45 per cent were aged 16-25 in the 1973-1994 period (DARES, 1996). Now, we found in this paper that "young unemployed" are a very heterogeneous population, and that they were hit by a "labour market access" problem. So, should government keep targeting on young people? Or should they rather target on the unqualified? Should they even have a fine tuning approach, by targeting very specific group of young unemployed? Surely a targeted policy has substitution effects if it changes the distribution - but not the level - of unemployment. Has not the increase in expenditure on active measures to deal with youth unemployment taken place at the expense of other, equally vulnerable, categories, such as the long-term unemployed, the unqualified and women? Finally, even if overall employment policy can hold back the increase in unemployment, especially in the downward phase of the economic cycle, it is no substitute for an expansionary macro-economic policy which is the only way to create jobs on a massive scale.

³⁹ For example, there was a positive correlation between the number of participants in active employment programmes and the unemployment rate in France of 0.76 for the period 1985-1994 (Scarpetta, 1996).

⁴⁰ See in this connection the article by D. Cohen, in *Libération*.

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