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Lower Educated Workers and Part-Time Work

The Netherlands 1973–91

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ABSTRACT

The thesis of the article is that strong growth in the number of part-time jobs in The Netherlands between 1973 and 1991 negatively affected the labour market participation of men, especially lower educated men. The thesis consists of a behavioural component, which explains why lower educated men are not attracted and do not gain access to part-time jobs, and an institutional component, which explains why the labour market position of lower educated men in The Netherlands deteriorated relatively rapidly during the period 1973–91. The thesis is underpinned by an empirical analysis of labour market participation of lower educated male workers in part-time and full-time jobs. Competing theses, such as upgrading of the job structure, displacement by better educated workers and sector shift from manufacturing to services, are tested empirically, but prove to be less convincing explanations for the deteriorated labour market position of lower educated men than the explanation of the growth of part-time jobs.

KEYWORDS: educational credentials, labour markets, labour markets participation, part-time work, social stratification

1. Introduction

In the international labour market literature, The Netherlands is proclaimed to be the first part-time labour market in the world (Schmid, 1997; Freeman, 1998). In this article we study the effects of the transition from a full-time to a part-time labour market. We are interested particularly in the effects of the growth of part-time jobs on the labour market position of lower educated male workers. We elaborate the *part-time jobs thesis*, implying that the growth in the number of part-time jobs in The Netherlands has not only attracted women and students to the labour market, but has also negatively affected the labour market participation of lower educated men.

The argument that the labour market position of lower educated male workers suffers from the growth of part-time jobs is not new. In the literature about the increased flexibility in

employment relationships of the 1980s, it was predicted that the less expensive part-time contracts would threaten the position of the traditional working class in different ways. They were to fragment jobs, to attract new categories of workers to the labour market, and to undermine the position of trade unions in the labour market (Rubery, 1998). At that time, however, the argument could not be tested empirically, and when the growth in part-time jobs had deployed, it had fallen into oblivion.

It may have fallen into oblivion because it is not evident that the growth in part-time jobs leads to the deterioration of the labour market position of lower educated male workers. An alternative scenario is that an increase in the number of part-time jobs leads to an expansion in the number of jobs and of employment, because employers perceive new opportunities to create jobs and potential employees see new opportunities to earn an income. In this

scenario, the new labour market opportunities are complementary to the existing ones.

This is the established view of the growth of part-time employment in the Dutch labour market (e.g. Visser and Hemerijck, 1997). According to this view, the increase in part-time jobs stimulated both growth in the number of jobs and labour market participation in The Netherlands. The worsening of the labour market position of lower educated workers, that is workers who at best finished lower vocational training or lower secondary school, is attributed to a different process. We challenge that view in this article.

Another alternative scenario is that the growth in the number of part-time jobs leads to growth in the number of the 'working poor', that is workers accumulating a number of jobs to earn themselves a living. In this scenario the new part-time jobs are badly paid jobs, performed only because better opportunities to earn an acceptable income are not available. Since lower educated workers are at the back of the job queue, they have to take refuge to this kind of job. This scenario reflects the view of the growth of part-time work in the United States, where it was established that the increase of part-time work between 1970 and 1990 was mainly a growth of *involuntary* part-time employment, leading to an increase in the number of multiple-jobholders (Tilly, 1991). Here we elaborate on the institutional conditions that determine the relationship between the growth of part-time work and the growth in the number of multiple-jobholders.

We focus on The Netherlands during the period 1973–91, because it was during this period that the transition from a full-time to a part-time labour market took place. If the labour market position of lower educated men can be argued to have suffered from the growth of part-time jobs, it must have been in the 1970s and 1980s in The Netherlands. During these decades, the transition from a full-time to a part-time labour market took place (Visser and Hemerijck, 1997). The number of part-time jobs grew from 583.1 thousand to 2,153.9 thousand. At the end of the period, in 1991, the share of part-time jobs amounted to almost one-third of the total number of jobs. During the same period the labour market position of lower educated men was poor and appeared to be deteriorating.

The article is structured as follows. In section 2 we elaborate the part-time jobs thesis

as a behavioural model in terms of costs and benefits for employers and employees. In section 3 we focus on the institutional background of the part-time jobs thesis and present alternative interpretations and explanations for the deterioration of the labour market position of lower educated workers. In section 4 we present our data and in section 5 the evidence that the labour market position of the lower educated has suffered from the growth in part-time jobs. We put the alternative interpretations and explanations to the test in section 6.

2. Part-time employment relationships

In this section we present the part-time jobs thesis as a model in terms of costs and benefits for employers and different categories of employees.

From the employer's perspective, part-time jobs reduce labour slack, and thus increase labour productivity. In recent years the necessity to reduce labour costs through part-time jobs has increased, especially for organizations in the service sector. Because services cannot be produced on stock and are hard to automate, employers in this sector, confronted with the increasing productivity and wage rates in the manufacturing sectors, need to cut labour costs. Part-time employment relationships offer the opportunity to do so.

We distinguish between two different forms of part-time employment (following Hakim, 1997). *Half-time jobs* are jobs with a working week of between about 13 and 32 hours. Half-time jobs reduce the costs of slack, especially slack for employers that cannot produce on stock. By hiring the optimal amounts of labour, employers reduce labour costs. *Marginal jobs* are part-time jobs with a working week of less than 13 hours and, because they are so small, have low costs of dismissal. Marginal jobs reduce labour slack, but also contribute in other ways to the reduction of wage costs. Firstly, there is a reduction in the costs of dismissing someone. Employees may actually have retrenchment protection, but since the jobs are so minor, litigation is hardly worth the effort. It is easier for the employee to find another marginal job than to engage in the enforcement procedure. Furthermore, since the jobs are so minor that no worker is fully dependent on it for his living, in different countries and at different times in history, employers have been exempted from minimum

wage legislation and the payment of social security premiums. Employers in The Netherlands were exempted from this regulation until 1992.

From the perspective of employers, marginal labour is clearly the least expensive form of employment. The drawback of this kind of employment, however, is that workers are volatile, since, as a consequence of the actual absence of retrenchment protection, their employment is insecure. For this reason, workers in marginal jobs readily leave their jobs. Thus, neither the employer nor the employee will invest in the relationship. As a consequence, employees in marginal jobs are only assigned tasks that can be performed with minimal training.

Part-time jobs are not attractive for lower educated male workers, especially when they are the breadwinners in the family. Half-time jobs are not attractive, since, given the low wage rate for lower educated workers, a half-time job hardly brings in an income large enough to sustain a family. Marginal jobs are even less attractive because, in addition to the proportionally lower income, they provide neither security nor continuity. Thus breadwinner-workers will have a strong preference for full-time jobs over half-time, and certainly over marginal, jobs.

On the other hand, half-time and marginal jobs appear to offer good opportunities for 'secondary earners' (Hakim, 1997, 1998a, b), that is people who have obligations other than bringing in a good income. Half-time jobs are especially attractive for married women with children, offering them the opportunity to combine family responsibilities with steady work. Since the money earned is often the second income in the household, the low income does not deter from half-time work. The second income adds to the household income, and offers the married woman a certain independence. Over recent decades the labour market participation of married women in The Netherlands has increased considerably, mostly through part-time jobs (De Graaf and Vermeulen, 1997; Baaijens, 1999; Visser, 1999).

Marginal jobs mainly attract workers who want to supplement their income, and who are not interested in an employment relationship of indefinite duration. These may be women, especially lower educated women, who want to add to the household income, but have a bad labour market position and find it hard to gain

access to jobs with retrenchment protection. Students, who form another category, want to add to their study grants. Because students have a short time horizon, they are not very interested in job security. Since, in addition, students accept relatively low wages, have relatively low training costs, and are willing to work at irregular times and time intervals, they are attractive workers for employers that have a volatile demand for labour and at the same time want to cut labour costs. Such employers can be found in the restaurant and retail sectors. The labour market participation of students has increased enormously in recent decades, and their work effort has increasingly been concentrated in lower level jobs (Dekker and Dorenbos, 1997; Muffels et al., 1999; Steijn and Hofman, 1999; Vossensteyn, 1999; Van der Meer and Wielers, 2001).

So far, we have elaborated the thesis that women and students will be attracted to part-time jobs and male breadwinners to full-time jobs. The thesis predicts that, as a consequence of the growth in part-time jobs, women and students are attracted to the labour market, whereas lower educated male workers have greater propensities toward non-participation. This, however, is not the only possible outcome of the process. Since unemployment is clearly not the preferred outcome, male lower educated workers may decide to compete for the part-time jobs as the second best option. If successful, this does not necessarily lead to growth in the number of part-time workers, but to growth in the number of multiple-jobholders. The specific outcome depends on the institutional conditions.

The crucial condition is the extent to which the lower educated workers can and have to take refuge to price competition to avert the deterioration of their labour market position. If price competition is feasible, the lower educated workers are able to offer their labour at a relatively lower wage level than their competitors. This process hampers the growth of non-participation, but at the cost of a relatively decreasing wage rate. It produces a class of poor workers who have to accept multiple part-time jobs to earn enough to sustain themselves.

In The Netherlands, such price competition is absent for institutional reasons. Institutions governing wage formation processes take account of the vulnerable labour market position of lower educated workers. These workers and their families are protected by

minimum wage regulation, generous social security benefits for breadwinner earners and the support of trade unions in wage negotiations with employers. Note, however, that these same institutional conditions also limit their opportunities to access the labour market via price competition, because good wages and social security benefits increase the costs of finding and accepting a new job. Newcomers in the labour market, such as women and students, are less well protected. This is partly because they cannot fall back on acquired rights and organized support, and partly because their labour market position is perceived as less risky.

3. Institutional background and alternative theses

In this section, we describe the institutional and scientific background of the part-time jobs thesis. The institutional background was that government policies to increase job growth and labour market participation were successful, but that the policies towards increasing the labour market participation of lower educated workers failed. The scientific background is that the relevant literature does not offer a consensus about the state nor about the causes of the worsening labour market position of lower educated workers.

The growth of part-time jobs in The Netherlands was stimulated by government policies to increase labour market participation. Traditionally, the labour market participation rates of women and students in The Netherlands have been low. The special position of the mother in the family was emphasized, and barriers were erected to deter women from entry into the labour market. The number of students increased during the 1960s, but hardly any undertook paid work. Most received money from their relatively wealthy parents (who were partly compensated by the government's child allowance system), or, if their parents had only a modest income, they had a relatively generous grant, consisting of a gift in combination with an interest-free loan.

During the 1980s the manufacturing sector was hit hard by the economic crisis and many jobs were lost. The labour market participation decreased, and the costs of the social security system increased dramatically. The Dutch social security system in the late 1960s and early 1970s may be characterized as having

been relatively generous. Benefit levels were set to sustain a family, and access was meant to be limited mainly to the 'breadwinner' of the family. Unemployment and disability benefits were geared to the last income earned. A welfare benefit was granted to those in need but recently not in paid employment. During this period the number of singles and one-parent families increased dramatically and the appeal to the social security system increased continuously. Politically, it proved hard to implement a downward adaptation of the benefit levels or to change the social security system.

The only way out was to increase labour market participation, that is to increase the carrying capacity of the social security system. The new policies, inspired by neoclassical economics, were directed towards price adjustments in the labour market, so that labour costs were reduced, or, at least, their growth was countered. In addition, adaptations in the fiscal and social security systems had to stimulate non-participants to enter the labour market. The positions of men and women in the fiscal system were made equal, and employers were stimulated to hire women as workers and managers. Students faced reduced grants, but at the same time saw the margins to earn an extra income increased. These policies proved to be successful, as measured by the growth in jobs and by the increases in labour market participation that they generated (Visser and Hemerijck, 1997).

Nevertheless, the labour market participation of lower educated workers remained a persistent problem. The rate had decreased during the economic crisis of the 1980s and did not recover during the 1990s. To improve the labour market position of these workers, the government adjusted cost differentials in the labour market so that employers would start to recruit them again. Policy instruments were training and schooling and, especially, the lowering of social security costs. In addition, the government increased incentives in the social security system to accept a job. One measure was to increase the differential between the wages and the social security benefits. Despite these measures, the decreasing trend in the labour market participation of lower educated men persisted. Price adjustments were not sufficient to solve the problem of the worsening labour market position of lower educated workers.

This conclusion begs the question of the causes of the worsened labour market position

of these workers. The relevant literature, however, offers not a consensus but a number of perspectives and explanations. A first issue is whether the labour market position of lower educated workers has indeed deteriorated. If it is accepted that this is the case, the next issue is its explanation. Different explanations have been put forward, and evidence has been presented to support each of them. In the rest of this section we sketch the state of the literature in the form of a number of alternative theses.

No deterioration thesis

Several authors, mainly neo-classical economists (Van Ours and Ridder, 1995; Groot, 1996; Groot and Maassen van den Brink, 1998), have argued that there is hardly any evidence of a deteriorating labour market position of lower educated workers in The Netherlands. Their argument is that unemployment among lower educated workers has not increased, thus implying that deterioration of the labour market position of the lower educated is an exaggeration of the facts. We examine the evidence and argue that for a clear view it is necessary to take 'discouraged worker effects' into account. This implies that the perspective is broadened from the officially unemployed to the total category of non-employed people.

Upgrading the job structure thesis

If it is accepted that the labour market position of lower educated workers has deteriorated, rival explanations deserve attention. A first alternative explanation is that employment opportunities for lower educated workers have been decreasing as a consequence of the upgrading of the job structure (Blauner, 1964). The argument is that the number of jobs for lower educated workers is decreasing as a consequence of product differentiation strategies and technological development. Mass production has lost its appeal, and the demand for more differentiated products of high quality has increased. In addition, new technologies affect the labour market position of lower educated workers negatively in two ways. Firstly, the application of new technologies requires well-educated workers, such as systems analysts and programmers; and secondly, as a consequence of automation, jobs at lower levels disappear. As a consequence, the number of job slots for lower educated workers has decreased. The problem with this thesis is that it is not clear whether the decrease in lower

level jobs has indeed negatively affected the labour market position of lower educated workers, since, as a consequence of the educational expansion, the share of lower educated workers in the labour force appears to have decreased even more quickly (De Beer, 1996).

Displacement thesis

According to the displacement thesis, the decline in the labour market position of lower educated workers is caused by the increase in the number of better educated workers. Displacement is the consequence of a process of competition on the supply side of the labour market, which is thus independent of labour market demand. Individuals improve their own educational credentials to enhance their competitiveness on the labour market. Since each individual follows the same strategy, the result is a rapid increase in the educational credentials of the working population, with, nevertheless, every individual occupying about the same position in the labour queue (Hirsch, 1977; Thurow, 1975). Employers choose, *ceteris paribus*, the better educated worker because of the presumed higher productivity or lower training costs, even if the job is better suited for lower educated workers. The result is an allocation in which many workers have a job below their qualification level ('overschooling'), and the lower educated, due to the lack of jobs, have been pushed out of the labour market into the social security system. However, during the 1990s the displacement thesis was challenged by additional analyses on the distribution of wages (Van Ours and Ridder, 1995; Van der Reijen, 1996; Oosterbeek and Webbink, 1998). These analyses cast doubt on the validity of displacement as the mechanism that explains the deteriorated labour market position of lower educated workers.

Sector shift thesis

This last thesis is based on the argument that it is not the growth in part-time jobs per se, but the sector shift in employment from manufacturing to services that is the main cause of the deterioration in the labour market position of the lower educated workers (e.g. Steijn, 2001: 6). The sector shift thesis elaborates on the work of Bell (1973) and Touraine (1969), who have argued that the post-industrial society demands labour market qualifications that are not supplied by lower educated workers. Bell and Touraine emphasize the increased importance of abstract

knowledge, but sector shift might also imply other qualifications, such as the social skills necessary to serve customers or their willingness to work at irregular times. Women and students are arguably better suppliers of these qualifications than lower educated male workers, given their often better education, better social skills or willingness to work at irregular times. In this perspective, the deterioration in the labour market position of lower educated male workers is the consequence of the sector shift in employment, which rendered their qualifications obsolete. The sector shift thesis is poorly elaborated in the literature, but deserves a critical test.

In the empirical part of the article, we put these theses to the test as rivals of the part-time jobs thesis.

4. Data, operationalization and methods

The empirical evidence presented in the following sections is drawn mainly from the analysis of labour market data collected in 1973 and 1991. Our analysis is based on two large-scale labour force surveys, both established by Statistics Netherlands (CBS), the state agency that gathers and analyses representative survey data for The Netherlands. In both data sets, job level, educational level and economic sector are classified according to almost identical systems. The data sets used are the Labour Force Surveys of 1973 and 1991 (usually abbreviated to AKT73 and EBB91). Problems of comparability, mainly due to changes in the classification systems used, were solved by collapsing smaller categories into broader ones.

Following our analytical framework, we distinguish three different types regarding length of working week. A job is full-time if the working week is longer than 32 hours. It is half-time if the working week is 32 hours or below but not less than 13 hours. Marginal jobs form the residual category of very minor jobs. The 13-hour criterion was chosen because of its correspondence to the presence or absence of a legal framework embedding the relationship. The further category of 'no job' covers all other persons. The distinction between 'full-time', 'half-time', 'marginal' and 'no job' is referred to as the 'labour market position classification'.

To distinguish job levels, we used the so-called Huijgen scale, which is the standard job level classification system in The Netherlands

(Huijgen et al., 1983). The Huijgen scale distinguishes seven job levels according to complexity of tasks, time needed to train the worker and educational level required, with 1 as the lowest and 7 as the highest category. In our analysis, the term lower jobs or lower level jobs refers to the jobs on levels 1 and 2 of the Huijgen system.

As for sectors, we only distinguish between manufacturing and agriculture on the one hand, and services, on the other. This crude classification suits our theoretical argument; disaggregation did not lead to substantially different results. Agriculture, manufacturing industries, utilities and construction industries are collapsed into 'manufacturing and agriculture'; retail and restaurants, transport, business services, personal services, government agencies and government services into 'services'.

On the supply side of the labour market, we distinguish between five categories: students, lower educated men, higher educated men, lower educated women and higher educated women. We refer to this categorization, which corresponds to our theoretical framework, as 'the supply categories'.

To analyse the development of the labour market positions of these categories, we use labour market participation rates. Participation rates are computed as the number of people in that category belonging to the active labour force divided by the number of people in the same category belonging to the potential labour force. The active labour force is the aggregate of everyone in paid employment for at least one hour per week, thus excluding self-employed, unemployed and other non-employed people. The potential labour force is all people in the population between 15 and 65. Participation rates enable us to step beyond the framework of employed and unemployed as defined by government institutions.

To get a clear picture of the combined effects of gender and education, we use the Statistics Netherlands categorization of educational levels, the Standard Educational Categorization (in Dutch abbreviated to SOI). We use the term 'lower educated' for people who at best have completed lower vocational training (LBO) or lower secondary school (MAVO). The better educated are those who have finished upper secondary school (HAVO), upper vocational training (MBO) or higher. We excluded all students from the educational level categories, and classified them as a distinct category.

To estimate the relative effects of sectoral change and the growth of part-time jobs on labour market participation, we estimated a series of log-linear models. We report these in terms of decreases in Scaled Deviance, in reference to the decrease in the degrees of freedom.

To examine the upgrading of the job structure and the displacement theses, we had to compute the absolute numbers of jobs, workers and people in 1973 and 1991. We computed the absolute numbers on the basis of the sample attractions of 2.6 per cent and 0.75 per cent for 1973 and 1991, respectively. To increase readability, the real numbers of jobs and persons in the relevant tables are divided by 1000.

To describe the labour market position of lower educated workers, we draw on published statistics by Statistics Netherlands, such as the available Labour Surveys between 1973 and 1991 and the Labour Accounts. Since Statistics Netherlands follows the same categorization in all its published statistics, these data could be related to the results of our computations.

5. Part-time jobs and labour market participation

In this section we present the main evidence for our thesis that the weakening of the labour market position of lower educated workers and the strengthening of the labour market position of women and students are due to the increase in part-time jobs. We start by examining job distribution tables, and then elaborate on the absence of price competition and the relationship between part-time work and multiple-jobholding in The Netherlands. Table 1 presents the distribution of the different supply categories over the labour market position categories for 1973 and 1991.

The table shows the over-representation of different supply categories in different jobs. In both years men were over-represented in full-time jobs, women in half-time jobs and students in marginal jobs.

The 'no job' category shows the clearly increased non-participation of men. This increase was not caused by worsened labour market conditions, because the overall labour market participation increased. The table shows that participation of men decreased in full-time jobs and increased in half-time and marginal jobs. The increase in part-time jobs did not compensate for the loss of full-time jobs. The pattern is about the same for lower and better educated men, but the effects are stronger for lower educated men. This is evidence that the labour market participation of men, especially of lower educated men, suffered from the growth of part-time jobs.

The table also shows an increase in the labour market participation of women and students. Women had a particularly strong position in half-time jobs, and this position was strengthened between 1973 and 1991. The share of women working in full-time positions decreased, despite the increased labour market participation of women. This implies that many women gained access to the labour market via half-time jobs.

During the period under observation, many students entered the labour market, their non-participation ratio decreasing from 94.2 per cent to 71.8 per cent. Students were and are clearly over-represented in the marginal jobs, with only a minority working in half-time jobs. Whereas women gained access to the labour market via half-time jobs, students gained access via marginal jobs.

We have argued that the full effects of the

Table 1. *Distribution of supply categories by labour market position categories for 1973 and 1991 (row percentages and thousands of persons)*

	No job		Marginal		Half-time		Full-time		Total	
	1973	1991	1973	1991	1973	1991	1973	1991	1973	1991
Lower educated men	8.9	25.5	0.2	2.2	1.5	6.1	89.4	66.3	2,505.1	1,811.8
Higher educated men	3.6	11.7	0.3	2.1	5.6	8.4	90.6	77.8	1,042.9	2,730.9
Lower educated women	70.9	62.7	2.9	9.1	7.4	15.7	18.9	12.4	3,092.0	2,222.4
Higher educated women	48.5	32.5	4.9	9.3	15.6	27.4	31.1	30.8	555.6	2,254.8
Students	94.2	71.8	4.1	23.6	0.9	3.0	0.8	1.7	966.1	1,272.5
Total	3,630.7	3,820.2	164.7	808.8	418.4	1,345.1	3,947.9	4,318.3	8,161.8	10,292.4

Sources: AKT73; EBB91; our calculations.

part-time jobs thesis are established when price competition is absent. This is the case when lower educated workers are not able or willing to lower their wage rate to compete for the new jobs. Table 2 presents the available information about the relative wages of lower educated workers. Categories are dominated by men, but include also women and students.

Table 2 indicates that the wage differential between the higher and the lower educated workers decreased between 1973 and 1991. Note that these wage differentials do not conceal divergence between sectors. Wage differentials between sectors in The Netherlands are small in comparison to other countries (Teulings and Hartog, 1998). Wages are determined per sector, but this hardly influences wage differentials, because wage negotiations follow productivity increases. As a consequence, an increase in wages in one sector attracts workers from the other sector, but this does not lead to divergence in wage differentials between sectors.

Related research on the private rate of return to education offers further support to the interpretation that wage differentials between better and lower educated workers have decreased. Hartog et al. (1993) report a decreasing return of education from 12 per cent in 1960 to 7 per cent in 1985. Between 1985 and 1996 the rate of return was stable at about this 7 per cent level (Hartog et al., 1999). These are strong indications that Dutch lower educated workers did not face a relative wage decrease, despite their increase in non-participation. It is likely that the competition in the labour market forced them out of the labour market, whereas minimum wage and social benefits regulation hampered their re-entry.

A corollary of the part-time jobs thesis is that the number of part-time workers that hold multiple jobs is limited. Evidence on multiple-jobholders is not available for 1973, but in 1991 the number of multiple-jobholders in the Dutch labour force was limited to about 300,000, that

is 4.7 per cent of the working population. Only half of the multiple-jobholders were part-time workers, the other half held one job with a full-time contract. About 3.3 per cent of the workers with a full-time contract held a second job, against 8.1 per cent of the half-time and 7.1 per cent of the marginal workers. These figures indicate that the phenomenon of multiple-jobholding is not widespread in The Netherlands, and that its existence is only loosely coupled to part-time jobs. This supports our argument that workers in part-time jobs were attracted to these jobs because they were part-time, not because they were excluded from full-time jobs.

The evidence presented in this section suggests that growth in the number of part-time jobs has weakened the labour market position of men, especially that of lower educated men, and strengthened the labour market position of women and students. In the next section we scrutinize the alternative theses.

6. Measuring and explaining deterioration

In this section we elaborate on the rivalling theses concerning the deterioration in the labour market position of lower educated men. We start by examining the thesis of no deterioration, followed by upgrading of the job structure, displacement by better educated workers and sector shift.

A number of authors (Van Ours and Ridder, 1995; Groot, 1996; Groot and Maassen van den Brink, 1998) have argued that there is no evidence to show that the labour market position of lower educated workers has deteriorated. In particular, unemployment figures do not show a deteriorating labour market position of lower educated workers in The Netherlands. It is therefore necessary to focus not just on participation, but also on unemployment figures.

Table 2. Average hourly wages of employees according to educational level (SOI levels)

	1	2	3	4-5	Ratio 4-5/1
1973	7.74	8.09	10.92	15.81	2.04
1978	13.29	13.82	18.20	26.99	2.03
1983	17.15	17.74	21.37	29.74	1.73
1988	19.28	19.67	22.29	31.07	1.61
1991	21.25	22.30	23.71	33.70	1.59

Source: Labour Accounts, CBS (1996).

Table 3. *Unemployment rates for lower educated workers and the total work force (%)*

	1973	1979	1981	1985	1991
Lower educated	2.4	4.6	8.9	15.0	10.1
Total	1.7	3.5	6.3	10.0	7.1

Source: Labour Accounts, CBS (1996).

Table 3 indicates that unemployment among lower educated workers did not increase substantially more rapidly than that of the total population between 1981 and 1991, and that unemployment among lower educated workers decreased considerably between 1985 and 1991. Nevertheless, unemployment among lower educated workers during the entire period was considerably higher than the overall unemployment rate, and, in addition, lower educated workers were and are strongly over-represented among the long-term unemployed (see, for instance, De Beer 1996: 325). This suggests that lower educated workers were seriously at risk of becoming 'discouraged workers' who withdraw from the workforce as a result of a lack of employment opportunities.

The existence of discouraged worker effects is suggested by research on the geographical concentration of unemployment and non-employment. These studies show that a relatively high unemployment rate in an area is often combined with a relatively low wage level (Blanchflower and Oswald, 1994). The concentration of unemployment is part of a broader pattern of social problems, among them a high proportion of long-term illnesses in the male working-age population (e.g. Webster, 2000).

The plausibility of discouraged-worker effects among male lower educated workers is documented in Table 4. The table presents gross participation rates, that is the share of employed and unemployed in the potential labour force. It shows a considerable decrease in the gross participation rate of lower educated men during the 1980s, and thus their withdrawal from the

labour force. The table documents how this process of withdrawal of men developed against a background of an increasing number of lower educated women in the labour force.

Further evidence for the existence of the discouraged-worker effect comes from additional information about entitlements as granted by the Dutch social security system. Leaving the labour market often carries entitlements to early retirement pensions or disability benefits. Subsequently, the over-representation of lower educated workers eligible for early retirement implies a drop in labour market participation rather than an increase in registered unemployment. The very low labour market participation rate of 21 per cent for older lower educated workers in 1991 confirms this interpretation.

Leaving the labour market may also lead to disability benefits. The number of disabled workers in The Netherlands is high compared with other countries (Aarts et al., 1996). There is broad consensus in The Netherlands that this high figure is not the result of the poor health of the workers, nor of unhealthy employment conditions, but rather the result of the relatively attractive disability benefit system in combination with generously granted access. Many people who became redundant in the work organizations, and who would have found it hard to get a new job, successfully claimed disability benefits. The few statistics available show a clear over-representation of lower educated people among the beneficiaries of disability benefits. Whereas in 1990 the lower educated workers made up to 38 per cent in the active

Table 4. *Potential labour force (thousands) and gross participation (%) with students included*

	1973	1979	1981	1985	1991
Potential female lower educated labour force	3389	2783	2532	2513	2603
Gross participation rate of lower educated women	21.5	31.1	34.3	36.5	41.6
Potential male lower educated labour force	3151	2160	2052	1947	2245
Gross participation rate of lower educated men	83.8	87.7	86.2	84.3	73.6

Source: AKT73, AKT79, AKT81, AKT85, EBB91, our calculations.

labour force, their proportion in the group receiving disability benefits was 65 per cent (CBS, 1992).

It is worthy of note that this withdrawal from the labour force took place against the background of a relative wage increase (see Table 2). Apparently, despite this relative wage increase, the incentives to stay in the labour market were not sufficient. In The Netherlands it is an issue of public debate whether labour market conditions were so bad that the workers were forced out of the labour market, or whether social security benefits were so generous that the workers were attracted by them. We emphasize, however, that in arriving at a proper explanation of the labour market position of lower educated workers, the poor state of the labour market and the relatively generous social security benefits are necessary factors. With one of these elements lacking it is impossible to explain why so many workers withdrew from a labour market in which their wages were increasing.

In summary, the continuing high unemployment of lower educated workers and their over-representation among the early retired and disabled people are evidence of discouraged-worker effects. The 1980s saw a significant fall in labour market participation, especially of the lower educated men. Not only were lower educated workers at greater risk of unemployment, they were also those most often to withdraw from the labour market.

Three alternative explanations for this deteriorated labour market position of lower educated workers are tested. The first is that of *upgrading of the job structure* as a consequence of the introduction of new technologies. There is extensive evidence that job structures were upgraded in The Netherlands during the 1970s and 1980s. There was strong growth in the number of higher level jobs, and therefore a relative decline in the number of lower level jobs (Huijgen, 1989; Batenburg and De Witte, 2001). Case studies in The Netherlands have shown that new technologies, introduced to increase the competitiveness of companies, have raised the demand for better qualified workers (Alders and Christis, 1988; Ten Have, 1988; Van Veen and Wielers, 1999). In addition, survey research from The Netherlands as well as other countries has confirmed the positive relationship between the introduction of new technologies and an increased demand for better qualified workers (Nelson and Phelps, 1966;

Collins, 1972; Bartel and Lichtenberg, 1987; Batenburg, 1991). Research into the development of the job level structure shows an increase in the average job level, especially in industrial production, where the thesis of the upgrading job structure predicts the effect of technological development to be strongest (Huijgen, 1989; Batenburg and De Witte, 2001). However, upgrading of job structures is only a main cause of the deteriorated labour market position of lower educated workers if, first, the number of lower level jobs has indeed decreased, and, second, if and only if the number of lower level jobs has decreased faster than the labour market position of the lower educated workers.

De Beer (1996) has presented evidence that the number of jobs for lower educated workers in The Netherlands has decreased in a relative sense but not in an absolute sense. This is confirmed by our data. The share of lower level jobs in terms of the total number of jobs decreased from 33.2 per cent in 1973 to 26 per cent in 1991. However, the absolute number of lower level jobs increased from 1.2 million to almost 1.5 million, an increase of 18 per cent. The difference between absolute and relative figures is due to the growth in the total number of jobs from 3.7 million to 5.6 million. Thus, it is clearly not the absolute number of lower level jobs that is the main problem.

In addition, there is ample evidence that the share of lower educated workers in the population has decreased (see, for instance, Huijgen, 1989; Batenburg and De Witte, 2001). In our sample the share of lower educated persons in the potential labour force decreased from 68.8 per cent in 1973 to 39.1 per cent in 1991. This corresponds to a decrease in the total population of 5.6 million to 4.0 million.¹ The strong decrease was caused by the increased educational attainment of the Dutch population (Huijgen, 1989; Batenburg and De Witte, 2001). Accordingly, the upgrading of the job structure cannot be the main cause of the deterioration of the labour market position of lower educated workers. The absolute number of lower level jobs increased, whereas the share of lower educated people in the population decreased dramatically. These results refute the argument that upgrading of the job structure is the main cause of the deteriorated labour market position of lower educated workers.

The second alternative explanation is that the deteriorated labour market position of the

lower educated workers is their *displacement by better educated workers*. As a consequence of increased participation in education by the younger generations, the supply of better educated workers has increased and these new generations of better educated workers have driven out the older generations of lower educated workers from jobs that were perfectly suited for them. This thesis has found much support in the Dutch labour market literature (Huijgen, 1989; Salverda, 1990, 1997; De Beer, 1996; Asselberghs et al., 1998; Wolbers, 1998, 2000; Borghans and De Grip, 2000; Oosterbeek, 2000). There are also indications of the validity of the displacement thesis in our data. For instance, in our discussion of the upgrading thesis, we have argued that the share of lower educated workers in the active labour force has decreased much more quickly than the share of lower level jobs. This indicates displacement, since many of the lower level jobs must have been taken by better educated workers.

The problem with the displacement thesis is that it is not clear why employers are willing to pay a better wage for a higher educated worker if the job is perfectly suitable for a lower educated worker (Oosterbeek and Webbink, 1998). Research shows the persistent effect that workers with the same education on a certain job level earn a better wage than workers on a lower job level (e.g. Oosterbeek and Webbink, 1998; Hartog, 2000). Evidence thus points towards a relative wage increase for lower educated workers during the period under observation. This implies that wages of lower educated workers have not adapted downward despite their decreasing labour market participation. The plausible explanation for this consistent effect is that workers with a better education are more productive on the same job level, implying that displacement happened for good reasons.

Our data show additional anomalies. Table 1 indicates that, contrary to the displacement thesis, non-participation of better educated men increased and their share in full-time jobs decreased. This same table shows that the labour market participation of lower educated women increased, which implies that this category of workers was not displaced by better educated workers, but, instead, its labour market position improved. These effects are hard to reconcile with the displacement thesis.

The table suggests that it was not necessarily the better credentials of the better educated

workers that negatively affected the labour market position of lower educated workers. A case in point is that of the students. Students, in general, are better educated than lower educated workers, but their entrance into the labour market hardly seems to have affected the labour market position of the better educated workers. However, it did affect the labour market position of lower educated male workers. Many of the students' jobs were in the lower job levels, the domain of the lower educated workers. The students qualified for these jobs, apparently not because of their better educational credentials, but because of their willingness to accept minor, temporary jobs and to work at irregular times (Van der Meer and Wielers, 2001).

This evidence casts serious doubt on the validity of the displacement thesis. Lower educated workers have indeed been displaced by better educated workers, but the evidence suggests that not the educational credentials but the preference for part-time jobs was the main determinant of the development of the labour market position of different supply categories. Without taking into account the effects of the increased number of part-time jobs, the displacement thesis is seriously incomplete.

The last alternative hypothesis is that of *sector shift* in employment. The argument is that it is not the growth in the number of part-time jobs per se, but the sector shift in employment from manufacturing to services that was the main cause of the deterioration in the labour market position of lower educated workers.

The shift in employment as put forward in the sector shift thesis is well documented (Elfring and Kloosterman, 1989; Esping-Andersen, 1993; Steijn, 2001), but its relationship with the growth of part-time work is far from clear. Two assumptions seem critical. The first is that the services show a large increase in the number and share of part-time jobs. The second is that this sector shift in employment, and not the shift from full-time to part-time work, is the main determinant of the change in the labour market position of the lower educated male workers. This implies that there should be evidence that it is service sector jobs that attract women and students, not part-time jobs per se. If these assumptions do not hold, our thesis that the labour market position of the lower educated men has deteriorated due to the shift from full-time to part-time employment is more accurate.

Growth in the number of part-time jobs corresponds to a large extent with the growth of

Table 5. *Distribution of part-time jobs over sectors, 1991 and 1973 (%)*

Sector	1973		1991	
	Half-time	Marginal	Half-time	Marginal
Manufacturing	3.9	1.1	10.3	6.1
Services	13.9	5.8	25.3	14.5
Total	9.6	3.7	21.3	12.0

Sources: AKT73, EBB91, our calculations.

employment in the services. The share of jobs in the services increased from 55.5 per cent in 1973 to 70.5 per cent in 1991, all at the expense of the share of jobs in manufacturing. The strong growth of part-time jobs in the services is illustrated in Table 5.

The table indicates that in 1991 about 40 per cent of the jobs in the service sector were part-time, compared with about 16 per cent in manufacturing. In addition, employment has shifted from manufacturing to services. The combination of strong growth in the number of part-time jobs and an enormous expansion of that sector seems to support the thesis that the nature of the work has changed.

To test whether it was the service sector or the part-time jobs that attracted women and students to the new part-time jobs in the service sector, we estimated log-linear models, with both the sector and part-time effects specified. The dependent variable was the total number of workers in a cross-table category, based on the dimensions: supply category, labour market position category, sector and year.

The base model against which we tested the changing effects of jobs and sectors is the model with all interaction effects of supply categories, jobs and sectors and the independent effect of year. In this way we control for the marginal distribution over rows and columns. The scaled deviance of the base model is 18,115 with 59 degrees of freedom. We took this model as the base for estimating the effects of shifts in jobs and sectors. The results are specified in Table 6. Because of the strong effect of the change in supply categories, we controlled for that effect in the second round.

In both models, the effect of changes in the job structure dominates the effect of the sectoral change. The difference is even clearer after controlling for the changes in supply. These results imply that women and students were allocated

to the part-time jobs in the service sector mainly because these were part-time jobs. Clearly, it was not the sector shift per se that caused the deterioration in the labour market position of male lower educated workers, but the increase in the number of part-time jobs that was the corollary of this shift.

7. Conclusions and implications

The thesis developed and tested in this article is that increased part-time employment in the labour market is an important cause of deterioration in the labour market position of lower educated male workers, and stimulates the labour market participation of women and students. In proving the validity of our thesis we have presented evidence that the labour market position of lower educated men in The Netherlands has suffered from the growth of part-time work in the labour market, whereas that of women and students has benefited. In addition, we have shown that flexibilization of the labour market better explains the deteriorated labour market position of lower educated male workers, and the improved labour market

Table 6. *Log-linear effects of changes in jobs, sector, and supply categories on labour market allocation in The Netherlands, 1973–1991*

Variables	Scaled deviance	d.f.
Changes in reference to base model		
+year*job	-4017	-2
+year*sector	-1377	-1
+year*supply	-9818	-4
Changes in reference to base model, controlling for changes in supply		
+year*job	-2108	-2
+year*sector	-137	-1

position of women and students, than several partly competing theses, such as upgrading of the job structure and displacement of lower by better educated workers and the shift in employment from manufacturing to services. These results have implications for a number of current debates in sociology.

Labour market position of lower educated workers

In this article we have shown that the growth in the number of part-time jobs has contributed to the deterioration of the labour market of lower educated workers in The Netherlands. Current explanations, such as upgrading of the job structure and displacement by better educated workers, have proved to be less valid than the part-time jobs thesis. Upgrading of the job structure had to be refuted as a cause of deterioration, whereas the displacement thesis does not explain the relatively improved labour market position of lower educated women and the relatively deteriorated labour market position of better educated men. According to the foregoing analysis, the deterioration of the labour market position of lower educated workers in The Netherlands is mainly the problem of lower educated men who are unable to find suitable full-time jobs.

Evaluation of part-time work

In the Anglo-Saxon literature, the growth of part-time work is still mainly evaluated as a development that is undesirable in itself. Part-time jobs are insecure, pay low wages, offer no promotion opportunities, and are often taken involuntarily. They are secondary jobs, and their existence may even threaten the labour standards of full-time workers (for instance Rubery, 1998). Hakim (1997, 1998b) has developed an alternative perspective, arguing that despite poor employment conditions, part-time work is usually taken up voluntarily and offers higher levels of job satisfaction than full-time work. Her argument is that part-time work attracts other categories of workers, married women and students, who give priority to other non-market activity, such as family or study. The part-time job is mainly a means of adding to other sources of income. Our research, partly inspired by Hakim's work, supports this new perspective on part-time work. Part-time work in The Netherlands is taken up voluntarily by categories of workers that would not have acquired access to the labour market had part-time jobs not been

available. Surveys from the 1990s show consistently that part-time workers are relatively satisfied with the length of their working week, whereas full-time workers would like to work fewer hours (Baaijens, 2000; Smulders and De Feyter, 2001). The main labour market problem in The Netherlands is not the involuntary employment of part-time workers, but the involuntary *non-employment* of breadwinner-workers who want full-time jobs.

Inequality between families

A probable implication of our results is that the growth in part-time jobs has increased inequality between families. A plausible scenario following from the decreased labour market participation of men and the increased labour market participation of women is that families increasingly differentiate between those with both partners and those with neither of the partners doing paid work. This implies greater inequality in income and status between families. Evidence of such unemployment coming 'in couples' was established for The Netherlands in the 1980s (Ultee et al., 1988). Further differentiation may result in spatial and cultural segregation between families that either do or do not participate in the labour market.

Time squeeze

Our results contribute to the explanation of the phenomenon of 'time squeeze' that cropped up in The Netherlands in the 1980s and 1990s (Peters, 2000) as well as in other European countries (Sullivan and Gershuny, 2001). Whereas the average number of hours worked per week actually decreased (Breedveld and Van den Broek, 2001), the growth of labour market participation increased problems of time pressure in families and educational institutions. Employers, demanding that their part-time workers came in at specific hours, intervened in the time schedule of women and students. The time squeeze cropped up not just in two-earner families, but also in institutions for higher education, where many students gave priority to job rather than course attendance.

Comparison with other countries

In our theoretical elaboration we have emphasized the specific institutional conditions that have enhanced the decrease in labour market participation of lower educated workers. The labour market position of lower educated workers has worsened in a number of western

countries (OECD Employment Outlook, 2000), but it is not clear to what extent this has been caused by the growth in part-time employment. It is known, however, that the growth of part-time work in the United States during about the same period (1969–1989) has mainly led to growth in the number of multiple-jobholders (Tilly, 1991). Because developments in The Netherlands and the United States are so clearly different, results of analyses for other countries will deepen our understanding of institutional structures and labour market outcomes.

Note

1. This number is without the students and therefore lower than presented in Table 4.

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