

**ECONOMICS DEPARTMENT
WORKING PAPERS
No. 185**

OECD SUBMISSION TO THE UK LOW PAY COMMISSION

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ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Paris

59372

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FOREWORD/AVANT-PROPOS

The Government of the United Kingdom has announced its intention to introduce legislation for establishing a National Minimum Wage and has appointed an independent Low Pay Commission to make recommendations on the level at which the National Minimum Wage may be set. To assist it in making its recommendations, the Low Pay Commission invited the OECD to submit written evidence. The OECD's submission, which is re-printed herewith, was based on both past and on-going work in the Directorate for Education, Employment, Labour and Social Affairs and the Economics Department.

Le gouvernement du Royaume-Uni a annoncé qu'il a l'intention de présenter un projet de loi dans le but d'établir un salaire minimum national et a nommé une commission indépendante des bas salaires qui doit faire des propositions sur le niveau éventuel du salaire minimum national. Afin de la conseiller dans la rédaction de ses recommandations, la commission des bas salaires a invité l'OCDE à soumettre une proposition écrite. La proposition de l'OCDE, qui se trouve ci-après, est basée sur des travaux terminés ou en cours à la Direction de l'éducation, de l'emploi, du travail et des affaires sociales et au Département des affaires économiques.

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KEY POINTS

- **Statutory minimum wages exist in the majority of OECD countries.** 17 OECD countries have a national or statutory minimum wage, while in some others there may, in practice, be effective minimum wages because collective bargaining has widespread coverage or the results of collective bargaining are administratively extended to non-organised firms and workers.
- **But key features of statutory minimum wages differ across countries.** Main differences concern the level of the minimum relative to average wages; the extent of differentiation by age or region; mechanisms for indexation; and the respective roles of governments and the social partners in setting minimum wages.
- **OECD recommendations on statutory minimum wage systems take due account of these significant differences across countries.** As part of the *OECD Jobs Study* and the subsequent follow-up work, the OECD has made a number of recommendations to modify existing policy stances in this field.
- **The level chosen for the minimum wage would determine where the United Kingdom would be situated within the international range.** The wide range of proposals put forward for a UK minimum wage span from close to the lower North American levels relative to average wages to the high end of continental European levels.
- **Above a certain level, a statutory minimum wage is likely to reduce employment.** But, the sensitivity of employment to the level of the minimum wage depends, *inter alia*, on how skills and experience are distributed across the labour force and the level at which the minimum wage truncates the wage distribution.
- **Employment of young and inexperienced workers may be particularly vulnerable to a high level of the minimum wage.** For that reason, most countries set reduced minimum wages for young workers, though the size of the youth differential varies greatly across countries.
- **A statutory minimum wage is likely to reduce the incidence of low pay, but may be less efficient in reducing family poverty.** Countries with relatively high minima tend to have fewer low-paid workers, but at the same time there is evidence that poor households often do not have any adults in work.
- **The role of a minimum wage should be seen in the context of other policies aimed at poverty alleviation.** Its effectiveness in raising the incomes of low-paid workers will depend on its interaction with tax/benefit systems, including in-work benefits.

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OECD SUBMISSION TO THE UK LOW PAY COMMISSION

A. Introduction

1. This submission provides a brief factual survey of statutory minimum wage systems in OECD countries (Section B) as well as a summary of recommendations concerning minimum wages which have been presented in the OECD *Jobs Study* and recent OECD Economic Surveys (Section C). This is followed by a discussion of the factors which should be considered when reviewing the likely effects of statutory minimum wages on employment and unemployment (Section D), and on low pay and poverty (Section E). It is based on recent empirical evidence from OECD countries and, whenever possible, discusses the relevance of the different factors characterising minimum wage for the UK context. The need for further research is discussed in Section F.

B. Minimum-wage systems in OECD countries

2. The description of minimum-wage systems in this section has been derived from a number of sources, including national submissions in response to an OECD questionnaire. However, it should be noted that the information presented has not yet been verified for factual accuracy by the relevant national authorities.

Arrangements for setting minimum wages

3. The majority of OECD countries have some form of minimum wage-setting arrangements in place in accordance with one or several of the ILO conventions concerning minimum wages. In 15 OECD countries, minimum wages are set by the government unilaterally or following recommendations by a tripartite body (Table 1). Belgium and Greece have a hybrid system in which the minimum wage is set through a national agreement between the social partners, but is legally binding in all sectors (the private sector only in Greece). Most countries opt to set a single national minimum rate, although there is regional variation in minimum wage rates in Canada, Japan, Mexico and the United States.

4. In a number of other countries, collective agreements at the national or sectoral level set effective minimum wages for unionised workers and, in some cases, such agreements are administratively extended to cover whole sectors of activities. However, the description here covers only those countries with a statutory or national minimum which cuts across all sectors¹.

1. It includes those countries where statutory minimum wages vary by region but nevertheless apply to all sectors in each region.

Table 1. Summary of minimum wage systems in OECD countries with a national minimum

Country	Name and type of determination	Employees excluded	Rates for younger employees (age and % of adult minimum)	Indexation or "uprating" procedures	Other remarks
Belgium	The minimum monthly wage -- <i>garantie du revenu minimum mensuel moyen</i> (RMMMMG) -- is set by a national collective agreement.	Public sector workers, apprentices, trainees and workers in sheltered workshops.	20, 94%; 19, 88%; 18, 82%; 17, 76%; and under 17, 70%.	RMMMMG, like all pay, is indexed to consumer prices. It is also increased when the central agreement is renegotiated, usually every two years.	Since 1991, additional steps to the RMMMMG have been added for adult workers with more than 6 or 12 months tenure.
Canada	Statutory minimum hourly wages are set at both the Federal and provincial levels.	Certain groups of agricultural, hunting and fishing workers under provincial regulations.	Lower Federal and provincial rates for the under 17 and, in some provinces, the under 18.	No automatic indexation for general price or wage inflation.	Since July 1996, the Federal rate has been aligned with the rate in each province and territory.
Czech Republic	A basic minimum wage and Minimum Wage Tariffs (MWTs), on an hourly and monthly basis, are set by statute.	MWTs only apply to employees not covered by collective agreements. Public sector pay levels are set separately by the government.		No automatic indexation for general price or wage inflation.	Lower rates than the basic minimum are set for disabled employees. MWTs vary according to complexity, responsibility and physical difficulty of job performed.
France	The minimum hourly wage -- <i>salaires minimum interprofessionnel de croissance</i> (SMIC) -- is set by statute.	General government workers and disabled workers (who are covered by separate rules).	17 and 18, 90%; and under 17, 80%.	The SMIC is indexed to consumer prices (for rises of 2% or more) and must rise by at least half the rise in manual hourly wages. It can be raised by more than this amount by decree and is also reviewed annually by the National Collective Bargaining Board.	Apprentices and trainees entitled to 30% to 75% of the SMIC, depending on age and stage of training.
Greece	Minimum wages are set by the National General Employment Agreement between the central employer and employee organisations.	Applies to employees in the private sector only. Public sector pay levels are set separately by the government.		No automatic adjustment for price or wage inflation. Rates are increased when central agreement renegotiated, usually every one to two years.	Minimum wages are set at a daily and monthly rate for blue- and white-collar workers, respectively. They also vary according to job tenure and marital status.
Hungary	The minimum hourly (and monthly equivalent) wage is set by statute.				
Japan	Statutory minimum daily wages are set for each of the 47 prefectures.	Disabled workers.		Minimum wages are revised every year, taking into account increases in wages and commodity prices and after consultation with local tripartite minimum wage councils.	Minimum wages are also set for selected industries within each prefecture and at a national level for the coal and metal mining industries.
Korea	The minimum hourly wage is set by statute.			There is no automatic indexation. The minimum wage is regularly adjusted by the Minister of Labour after consulting the tripartite Minimum Wage Council.	

Table 1. **Summary of minimum wage systems in OECD countries with a national minimum** (cont.)

Country	Name and type of determination	Employees excluded	Rates for younger employees (age and % of adult minimum)	Indexation or "uprating" procedures	Other remarks
Luxembourg	The minimum monthly wage -- <i>salaire social minimum</i> (SSM) -- is set by statute.	Only covers private sector employees.	17, 80%; 16, 70%; and 15, 60%.	The SSM is indexed to consumer prices. Also reviewed biennially in line with economic and pay growth.	Rates are 20% higher for skilled and experienced workers. The minimum rate also varies according to marital and family status.
Mexico	Daily minimum wages for broad geographical zones are fixed by the tripartite Council of Representatives of the National Minimum Wage Board.		No reduced rate for youth.		
Netherlands	The minimum weekly wage -- <i>Minimumloon</i> -- is set by statute.		22, 85%; 21, 72.5%; 20, 61.5%; 19, 52.5%; 18, 45.5%; 17, 39.5%; and 16 34.5%.	Former link with collectively-agreed wage rate index abolished in 1991. Since 1984 has been frozen in nominal terms for periods covering several years. No automatic indexation for general price or wage inflation.	
New Zealand	The minimum weekly wage is set by statute.	Apprentices and other trainees.	Under 20, 60%.		
Poland	The minimum wage is set by statute.				
Portugal	The minimum monthly wage -- <i>remuneracao minima mensal garantida</i> (RMMG) -- is set by statute.	Disabled workers are covered under separate regulations.	Under 18, 75%.	Updated annually by law after tripartite consultation, taking into account inflation and economic performance.	Lower rates are set for domestic staff and apprentices.
Spain	The minimum monthly wage -- <i>salario minimo interprofesional</i> (SMI) -- is set by statute.	Apprentices.	Under 18, 89%.	Updated annually by law after tripartite consultation, taking into account inflation and economic performance.	
Turkey	The minimum monthly wage is set by the tripartite Minimum Wage Setting Commission.	Apprentices.	Lower rate for workers under 16.		
United States	Federal and State minimum hourly wages are set by statute.	From Federal minimum, executive, administrative and professional employees and certain other specific, but small, groups of workers.	No reduced Federal rate for younger workers over legal minimum working age.	No automatic indexation for general price or wage inflation.	Subject to certain conditions, employers may pay trainees 85% of the Federal rate as well as lower rates for full-time students and disabled workers.

Note: The information in this table has not been verified by the relevant national authorities.

Source: Incomes Data Services, *Employment Europe*, various issues; *European Industrial Relations Review*, various issues; and national submissions to the OECD Secretariat.

5. There is substantial variation across countries in terms of groups of workers who are not covered by minimum wages and in the treatment of apprentices and younger workers. Disabled workers are often not covered or come under the scope of separate regulations. In some cases, public servants are also not covered (France, Greece and Luxembourg). In several, mainly European, countries, younger workers are only entitled to a reduced adult rate. In the Netherlands and Belgium, the lower age limit for the adult rate is 23 and 21 years of age, respectively; in other countries, the reduced minimum wage applies below ages 18 or 19. In a few countries, experienced and/or qualified workers are entitled to higher minima than the basic rate. There is also some variation in the minimum wage according to marital and family status in Greece and Luxembourg.

6. Countries also differ in how the minimum wage is initially set, its subsequent “uprating” and in whether it is automatically indexed or not for inflation. Minimum wages are set on either an hourly, daily, weekly or monthly basis, although usually there is provision for some standard number of working hours in order to convert the minimum from one basis to the other. Only Belgium, France and Luxembourg appear to automatically index their statutory minimum wage for price inflation, while in France, Greece, Japan, Portugal and Spain, both price and wage movements are either explicitly or implicitly taken into consideration in annual reviews of the minimum rate. In a few countries, other economic criteria such as the impact on employment and unemployment and on competitiveness are explicitly taken into account in annual or biennial reviews of the minimum wage (Luxembourg, New Zealand, Portugal and Spain). Tripartite minimum wage bodies or councils have a consultative role in a number of countries (France, Japan, Korea, Portugal and Spain).

7. There are many other aspects of the determination of minimum wages in which there are also substantial differences across countries, e.g. with respect to special provisions for taking into account non-standard hours of work, such as overtime and part-time work, and for the treatment of other supplements to basic pay.

International comparisons of minimum wages

8. Minimum wages are often compared both within and across countries in relative terms, i.e. relative to some measure of average wages. This provides some indication of how many workers are likely to be affected by the minimum wage. However, even within a country this ratio can vary substantially depending on how both the numerator (minimum wage) and denominator (average wage) are measured. Using the *median*, rather than the mean, in the denominator is probably a better measure of the potential “bite” of minimum wages. It also provides a better basis for international comparisons given large differences across countries in the dispersion of wages and earnings. The gap between minimum and average wages varies considerably for different groups of workers and this may affect international comparisons because of differences in the age, gender and skill composition of each country’s workforce.

9. Bearing in mind these considerations, a comparison of minimum wages in OECD countries, both in absolute terms and relative to average hourly wages for manual workers in manufacturing and median earnings for full-time workers, is presented in Table 2. The data generally refer to the situation in mid-1997. In terms of US\$ measured at current exchange rates, minimum hourly wages range from under 50 cents per hour in the Czech Republic, Hungary and Mexico to \$7 and over in Belgium and the Netherlands. Clearly, a substantial part of this variation reflects overall differences in labour productivity between countries. When measured relative to average wages, the ratio tends to be highest in Belgium, France and Portugal (between 60 and 70 per cent) and lowest in the Czech Republic, Korea and Mexico (between 25 and 35 per cent). Despite the recent rises, the minimum wage in the United States also appears to be at the lower end of the spectrum relative to the average or median.

Table 2. Minimum wages in US\$ and relative to average wages in selected OECD countries, 1997¹

	Minimum wages per hour in US\$ ²	Minimum wages as a percentage of:			
		Mean hourly pay of manual workers in manufacturing ³	Median earnings of full-time workers ⁴		
			All	Men	Women
Belgium	7.30	60.6	68.4	65.9	74.3
Canada	4.65	38.5	39.1	33.6	47.3
Czech Republic	0.43	..	22.7	20.7	26.3
France	6.82	71.2	57.3	55.2	63.3
Greece	2.85	52.3	..	..	..
Hungary	0.46	..	38.1	..	..
Japan	5.11	45.3	42.2	36.1	57.4
Korea	1.57	33.7	23.9	20.7	36.5
Luxembourg	7.95	55.1	..	..	..
Mexico	0.38	27.2	..	..	..
Netherlands	7.00	59.0	48.8	46.5	60.5
New Zealand	4.83	52.4	45.9	41.6	51.1
Portugal	1.90	67.3	..	..	..
Spain	2.65	40.3	27.3	25.4	35.7
United States	5.15	39.3	41.3	36.0	48.1

Memorandum item:

United Kingdom, assuming
hourly minimum of:

£3.00	4.91	42.7	38.5	34.7	46.8
£3.50	5.73	49.9	45.0	40.4	54.6
£4.00	6.55	57.0	51.4	46.2	62.4
£4.50	7.36	64.1	57.8	52.0	70.2
£5.00	8.18	71.2	64.2	57.8	78.0

1. The data for 1997 for hourly pay of manual workers and median earnings of all full-time workers are estimates based on extrapolating data for earlier years in line with other indicators of average earnings growth. All earnings data are gross of employee social security contributions. For Greece, Hungary, Japan, Luxembourg and Portugal the data refer to 1996.
2. Converted using the average exchange rate for each country in the second quarter of 1997.
3. Hourly pay for time worked only, i.e. excluding sick pay, holiday pay and other bonuses and supplements. For Korea, Mexico, Portugal and Spain, hourly pay for time worked has been estimated from data on total direct pay (i.e. including sick pay, etc.) by assuming that the ratio between the two earnings measures is the same as for: Japan, in the case of Korea; the United States, in the case of Mexico; and Italy, in the case of Portugal and Spain.
4. For the UK, the data refer to total weekly earnings of full-time workers on adult rates of pay and whose pay was not affected by absence and it is assumed that a minimum-wage worker is paid for a 40 hour week.

Sources:

Minimum wages: OECD Minimum Wage Database; hourly pay of manual workers in manufacturing: US Bureau of Labor Statistics, *International Comparisons of Hourly Compensation Costs for Production Workers in Manufacturing, 1975-1996*; and median earnings for full-time workers: OECD Distribution of Earnings Database (see Chapter 3, *OECD Employment Outlook*, 1996, for further details).

- In Table 2, the ratio of the minimum to the various average and median measures has also been computed for the United Kingdom, based on different hourly rates which span the range that have been proposed by various bodies. The ratios appear to lie within the existing range observed in other OECD countries: at the low end, it would be close to North American levels; and, at the high end, it would be closer to the higher minimum-wage European countries of Belgium and France.

10. Despite the potential impact of statutory minima on employment and unemployment, relatively little comparative information is currently available on the *incidence* of employment at minimum wages. Moreover, it is difficult to make direct international comparisons in this area because of country differences in the way the incidence of minimum-wage work is measured and in the groups of workers covered by the statutory minimum. From the limited information available, there appears to be a fairly consistent and positive relationship both across and within countries over time between the level of minimum wages relative to average wages and the proportion of workers earning the minimum or less. In the United States, 5.3 per cent of workers paid at hourly rates were earning at or less than the Federal minimum in 1995. In France, 11 per cent of employees in the private and semi-private sector, excluding agriculture, were receiving wages at the level of the SMIC in July 1996.

11. The incidence of minimum-wage work tends to be highest amongst younger and female workers. It also tends to be much higher than average in certain service sectors such as retailing and hotels and restaurants and in smaller firms. In fact, apart from differences in the overall incidence, the profile of minimum-wage workers corresponds quite closely to the profile for low-paid workers which was reported in the 1996 OECD *Employment Outlook* (Chapter 3, Table 3.5)².

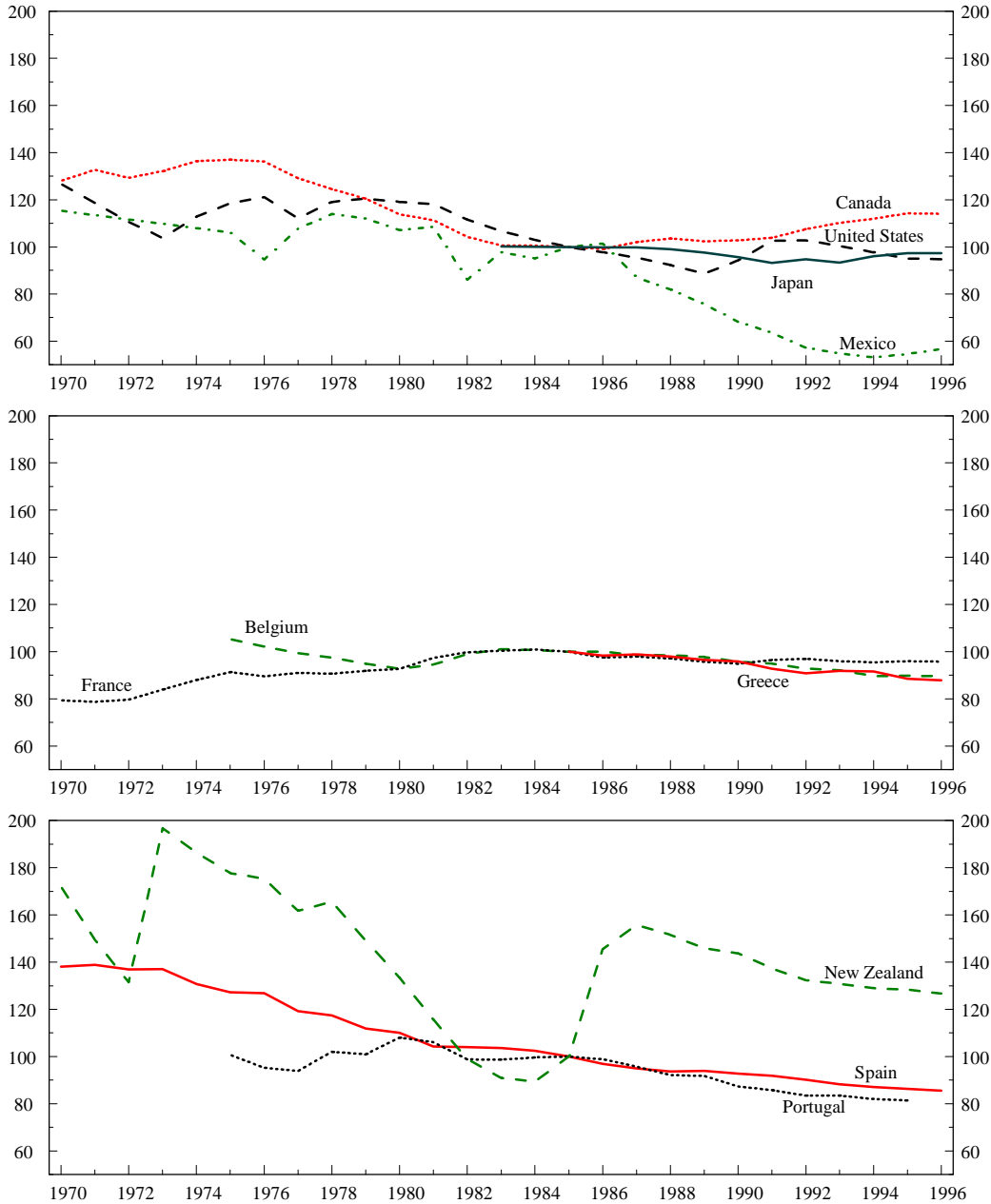
- The profile of low-paid workers in the United Kingdom is similar to most other OECD countries. However, the risk of low pay for older workers and, to a lesser extent, women is somewhat higher relative to the average for all workers than in most other countries.

Developments over time in statutory minimum wages in OECD countries

12. For a subset of OECD countries for which time-series data are available, the ratio of minimum wages to average wages is plotted in Chart 1. In many countries, this ratio has declined over the past 10 years, particularly so in Mexico. The ratio has risen somewhat from a low level in Canada in recent years. It has remained stable in France, where it has been boosted by the occasional "coup de pousse" over and above the rise in inflation. In some countries, such as the United States and, more recently, the Netherlands, the ratio has declined because the minimum wage has been fixed in nominal terms and only adjusted irregularly. In Belgium, Portugal and Spain, minimum wages have been adjusted regularly in line with price inflation but, given rising real wages, have fallen behind the growth in average wages.

2. Low-paid workers were defined in the *Employment Outlook* as all full-time workers earning less than two-thirds of full-time median earnings. Both countries with and without statutory minimum wages were covered by the study.

Chart 1
Minimum wage relative to average earnings, 1970-1996
 Index: 1985 = 100



Notes:

- Belgium:* Minimum adult monthly wage divided by monthly equivalent of average hourly earnings of manual workers in industry.
- Canada:* Weighted average of provincial minimum hourly wage divided by average hourly earnings in all industries.
- France:* Net minimum hourly wage divided by hourly equivalent of average annual net earnings of all full-time employees in the private and semi-public sectors.
- Greece:* Minimum daily wage for an unqualified single worker divided by daily equivalent of average hourly earnings of manual workers in manufacturing.
- Japan:* Hourly minimum wage (average for 47 prefectures) divided by average hourly scheduled earnings for all full-time workers.
- Mexico:* National average daily minimum wage divided by the daily equivalent of average hourly earnings of manual workers in manufacturing.
- New Zealand:* Minimum weekly wage divided by average weekly earnings of employees with ordinary working time.
- Portugal:* Minimum monthly wage for non-agricultural workers aged 20 and over divided by average monthly earnings in the business sector.
- Spain:* Minimum monthly wage divided by average gross monthly earnings per person.
- United States:* Federal minimum hourly wage divided by average hourly earnings of production and non-supervisory workers on private non-agricultural payrolls.

Source: OECD minimum wage database.

13. The setting of statutory minimum wages with respect to younger workers has changed in the course of the 1990s in two countries: in Spain, the separate rate for workers aged under 17 was adjusted upwards to be the same as the rate for workers aged 17; and, in New Zealand, a separate youth minimum wage (60 per cent of the adult minimum) was introduced for workers aged between 15 and 19.

C. Minimum wages in OECD countries: policy recommendations

14. The 1994 OECD *Jobs Study* argued that wages have an important allocative role to play in labour markets by providing signals to workers and firms about potential job, employment and production opportunities. Hence, there is a need for policies to encourage wage flexibility in both the public and private sectors and, in countries where the scope for increasing flexibility is limited, but labour costs for some groups of workers are thought to be excessive, to reduce non-wage labour costs. If the wage floor set by statutory minimum wages is too high, this may have detrimental effects on employment, especially among young people. At the same time, it was acknowledged that there are concerns about growing wage inequality and in-work poverty and that countries differed in their degree of acceptance of inequality in wages and incomes. Nevertheless, in the current context of high and persistent unemployment in many countries, it was suggested that more weight be given to the market-clearing role of wages, while pursuing equity objectives through other instruments. Moreover, the greatest concerns about in-work poverty often relate to adults, particularly those with family responsibilities. Many young workers gain useful experience in low-wage jobs and then subsequently move up the ladder into higher-paying jobs. Therefore, as part of a wide-ranging package of reforms in taxation, social policy, competition policy, collective bargaining and other fields, the following recommendation was put forward:

- “Reassess the role of statutory minimum wages as an instrument to achieve redistributive goals, and switch to more direct instruments. If it is judged desirable to maintain a legal minimum wage as part of an anti-poverty strategy, consider minimising its adverse employment effects, including by:
 - Indexing it to prices, rather than average earnings;
 - Ensuring sufficient differentiation in wage rates by age and region” (OECD, 1994, p. 46).

15. As part of its follow-up work to the *Jobs Study*, the OECD has developed country-specific recommendations, taking into account the specific institutional, historical and political contexts of individual countries. In the area of minimum wages, the recommendations have been of an incremental nature rather than calling for an abolition of statutory wage floors. Below are listed the main recommendations for modifying minimum wage arrangements made by the Economic and Development Review Committee (EDRC) of the OECD in the context of implementing the Jobs Strategy in each Member country (see OECD, 1997b).

- In the *Netherlands*, there is statutory minimum wage which is graded by age. However, collective agreements can set a minimum wage above the statutory minima. While recognising the efforts to reduce the statutory minimum (especially for young workers) in recent years, the EDRC encouraged the Netherlands to lower its level further.
- *France* has been urged to reform the SMIC, by differentiating it by age and region. Likewise, the EDRC cautioned against automatic indexation of the minimum wage and against revisions that affect wage settlements. It was recognised that, under present

circumstances, it may be difficult to implement a reduction in the SMIC. Therefore, France was recommended to consider the introduction of employment-conditional benefits to support the incomes of low-paid workers and to continue lowering employer social security contributions on low wages.

- In *Belgium*, the guaranteed minimum monthly income (*revenu minimum mensuel moyen garanti*) which, in many respects, is equivalent to a binding legal minimum wage, is differentiated by age for workers under 21 and also by seniority in the enterprise. The EDRC recommended that the administrative extension of the minimum wage should be relaxed and that exemptions should be introduced for various groups, including older persons, youth and the long-term unemployed. Belgium was also recommended to lower further employer social security contributions on low wages.
- In *Finland*, the setting of a minimum wage is part of each wage agreement negotiated at the industry level, which is subject to administrative extension to non-organised workers and employees in firms with more than 50 per cent union coverage. The EDRC recommended abolishing sectoral negotiations of minimum wages and administrative extensions, and replacing them with a low universal minimum wage.
- In *Luxembourg*, there is a statutory minimum wage which is fully indexed and reviewed at least every two years. The EDRC recommended that the minimum be reduced relative to the average, perhaps by stopping full indexation and biennial reviews.
- *Canada* and *Greece* have been encouraged to allow special minimum wages for young workers. Greece was also encouraged to lower employer social security contributions on low wages.
- *Portugal*, where an age differential already exists, has been encouraged to increase the gap between youth and adult minimum wages.

16. While the EDRC made no explicit recommendations to modify minimum wage agreements or the system of wage formation in *New Zealand*, the EDRC recommend monitoring the effects of the minimum wage, especially on teenagers. Moreover, the Committee recommended avoiding indexing or upgrading the minimum wage regularly in a fashion which risks setting a precedent in wage bargaining.

17. With respect to recent the increase in the minimum wage enacted in the *United States*, the EDRC, while recognising that the minimum is relatively low in comparison with most other OECD countries, noted that a key issue for policy was whether any redistribution benefits of a higher minimum would outweigh any costs and whether other policies, such as the Earned Income Tax Credit to the extent allowed by fiscal concerns, might be more efficient.

D. Impact of minimum wages on employment and unemployment

18. Depending on the level and other specific features, minimum wages may have detrimental effects on employment, especially among young people. This section discusses some of the factors which should be considered when reviewing the likely impact of minimum wages on employment and unemployment. It is based on recent empirical evidence from OECD countries.

19. **A minimum wage may price low-productivity workers out of jobs.** In a competitive labour market, any increase in the wage of low-productivity workers above the market-clearing level will lead to lower equilibrium employment. Relaxing the assumption of a competitive labour market leads to less clear-cut results. For example, in the presence of employer power in the labour market (i.e. workers being paid less than their marginal product), the introduction of a minimum wage (up to the marginal product of labour) may actually lead to a higher equilibrium employment³. The question then becomes: how plausible is the assumption of monopsony? Recent studies suggest that a certain degree of monopsony may exist in any case where individual firms face an upward sloping labour supply (Boal and Ransom, 1997)⁴. However, at the aggregate level, empirical evidence suggests a steeply sloped or simply vertical (i.e. perfectly inelastic) labour supply and, thus, increases in the minimum wage may show up in higher wages with either little or negative effects on overall employment.

20. The introduction of a minimum wage may increase the supply of labour with possible distributional effects, i.e. more workers may enter the labour market and displace employed workers with relatively lower qualifications. For any given level (relative to the average or median wage), a minimum wage may have different impacts on employment depending on the distribution of skills and individual productivity levels across the labour force. Likewise, high levels of the minimum wage may have detrimental effects on product market competition. Insofar as new firms offer wages which are below the sectoral average, the introduction of a minimum wage may create an implicit barrier to entry in low-pay industries, thereby reducing competition⁵.

21. **Whether dis-employment effects are important or not depends on the level of the minimum wage.** At low levels, both economic theory and empirical evidence are ambiguous as to the impact of the minimum wage relative to the average or median wage on employment, but above a certain level the minimum wage is likely to reduce the employment prospects of low-productivity workers. Empirical evidence for the United States -- where the minimum wage is currently just under 40 per cent of the hourly wage for manual workers in manufacturing and has tended to decline over time in relative terms -- is inconclusive, while studies of the French SMIC -- which is just over 70 per cent of the average hourly wage in manufacturing -- suggest a significant negative impact on youth employment and, in some cases, on overall employment (see Box 1). Hence, the choice of the level, whether the minimum wage is indexed or not and, if it is, whether the link is to prices or earnings are crucial decisions.

3. Similar conclusions can be reached if efficiency wage considerations play an important role in the wage-setting process (Rebitzer and Taylor, 1995).

4. A certain degree of monopsony can prevail at the firm level if employers face upward sloping labour supply schedules (Boal and Ransom, 1997). This may occur, for example, if information about job vacancies is imperfect and/or if job search and labour mobility are costly. Within the framework of imperfect information, some studies (e.g. Burdett and Mortensen, 1989) have put forward the idea of a dynamic monopsony, where employers who offer higher wages face lower quit rates and lower hiring costs. These elements lead to an elastic supply curve faced by these employers. However, low-pay sectors are often characterised by high degrees of competition or high geographical density (i.e. retail trade outlets), offering highly substitutable products and employing similar workers.

5. A recent Danish study suggests that about one per cent of jobs are in new firms (firms that did not exist a year earlier) and that these firms have a larger-than-average share of low-paid workers across all sectors. See *Danish Economy*, June 1994. In addition, several studies suggest that new entrants to manufacturing industries typically have productivity that is substantially below the industry average which can justify the need to pay lower than average wages. See, amongst others, Baily *et al.* (1992); Baldwin (1995); and Griliches and Regev (1995).

Box 1. Empirical studies of minimum-wage effects on employment in the United States and France

There is a considerable literature on the effects of statutory minimum wages on the labour market, especially with reference to the United States and France. Both countries have minimum wages, but their levels differ markedly. In the United States, the hourly (Federal) minimum wage is about 40 per cent of the average hourly wage of manual workers in manufacturing, while in France it is around 70 per cent (Table 2).

United States

Until the late 1980s, there seemed to be a clear consensus from empirical studies on the United States: the minimum wage had a negative (albeit modest) impact on employment, while the effects on youth employment were somewhat more important (Brown, Gilroy and Cohen, 1982 offer a comprehensive survey of the U.S. literature). Studies based on time-series data suggested that the elasticity of employment with respect to the minimum wage was in the range between -0.2 and -0.1 (between -0.3 and -0.1 in the case of teenage employment).

At the beginning of the 1990s, the federal minimum wage was raised by a significant amount after having been kept constant throughout the 1980s, and this offered the opportunity to study the effects of these increases on employment (Card, 1992; Katz and Krueger, 1992). These studies were unable to detect any significant impact of the minimum wage increase on employment. More recently, Card and Krueger (1994) exploited the 1992 rise in the hourly minimum wage in New Jersey (to \$5.05) on employment in fast-food restaurants (using as a control group similar restaurants in Pennsylvania, which maintained the federal minimum of \$4.25) and confirmed that the impact of minimum wage increases on employment was insignificant (“*the weight of this evidence makes it very unlikely that the minimum wage has large, negative employment effects*”, p. 390). However, Neumark and Wascher (1992, 1995a) studied the effects of minimum wage on the employment and education enrolment of teenagers using panel data and reported a (small) negative effect of the minimum wage on youth employment: a rise in the minimum wage leads to (small) dis-employment effects for teenagers as a whole, with significant enrolment and employment shifts among teenagers, with the more qualified displacing the less qualified young workers who tend to become non-enrolled and non-employed. The two latter analyses have stimulated a lively debate among the respective authors and other scholars: in particular, both approaches have been criticised on theoretical as well as empirical grounds (see Card, Katz and Kreuger, 1994; Neumark and Wascher, 1995b; Kennan, 1995; and Freeman, 1995).

France

The literature on the French *salair minimum interprofessionnel de croissance* (SMIC) has mainly focused on the effects on young workers (less than 24 years of age). Amongst the most recent studies, Martin and Bazen (1991) found a significant negative impact of the SMIC on youth employment with an elasticity ranging from -0.23 to -0.1. Skourias (1992) used different approaches to analyse the effects of the SMIC on youth employment, unemployment and labour force participation. The estimated employment effects of the SMIC were somewhat below those of Martin and Bazen, albeit significant. In a more recent study, Skourias (1993) obtained elasticities of youth employment with respect to the SMIC in the range between -0.12 and -0.15. On the basis of these results, the author estimates that the rise in the SMIC over the period 1970-90 led to the loss of between 93 000 and 375 000 jobs for young workers. Following a similar approach, Benhayoun (1993) confirms the results for male youth employment, but not for total youth employment.

Dolado *et al.* (1996) analysed wage and employment dynamics in two sub-periods of the 1980s in France: from 1981-85, when the SMIC (relative to average earnings) was raised and the period from 1985-89, when the SMIC did not increase relative to average earnings. They found little evidence of a higher pace of low-earnings growth in the early 1980s compared with the second half of the decade, while their results suggested that the SMIC was responsible for some of the fall in employment. However, the authors stressed that the different wage and employment dynamics observed could also be explained by different business-cycle conditions in the two sub-periods, a factor which they could not control for in their empirical analysis. Abowd *et al.* (1997) used individual wage and employment data for young people in France over the 1980s. Their results suggest that the probability of being in employment fell significantly for young people whose wages had been overtaken by subsequent increases in the minimum. Some of them were protected by employment promotion programmes, but when their participation in these programmes ended the probability of subsequent non-employment rose dramatically. Cohen *et al.* (1997) suggested that the SMIC might have some effects on the hiring of young/low-skilled workers, but no significant effects on other workers.

Two recent studies have also estimated the role of minimum wages, as well as a number of other policy and institutional factors on structural unemployment in France. Jackman and Leroy (1996) found that increases in the SMIC led to higher wage pressure and a rise in the equilibrium unemployment rate. Using a dynamic structural model of unemployment, the OECD (Economic Survey of France, 1997) finds a significant positive impact of the SMIC (relative to the average wage) on unemployment. Following these results, a 10 per cent rise in the SMIC (relative to the average wage) would lead to an increase in the structural unemployment rate of about 0.9 percentage points.

22. **There is a case for differentiating the minimum wage by age.** As noted in Section B, several countries grade their minimum wage by age⁶ on the argument that a high minimum wage for teenagers and inexperienced young workers may negatively affect their employment opportunities. Indeed, while the empirical literature tends to disagree about the overall employment effects of the minimum wage, many studies do confirm that a high minimum wage has detrimental effects on youth employment. Moreover, distributional arguments in favour of a minimum wage may be less relevant in the case of young workers since low-paid jobs for many of them are often a stepping stone into better ones in the future⁷.

23. Empirical evidence suggests that changes in the grading of the minimum wage by age have produced significant impacts on youth employment and unemployment. In the Netherlands, where the negotiated youth minimum wage tended to fall behind both the negotiated minimum wage for adults and the average wage in the past decade⁸, there is some evidence of an increase in youth employment⁹. Evidence from Canada comparing youth unemployment across two contiguous provinces with fairly similar adult unemployment (Ontario and Quebec) also suggests a positive correlation between youth unemployment rates and the level of the minimum wage (OECD, 1996a). Evidence for New Zealand confirms a strong impact of the minimum wage on youth employment: a 10 per cent increase in the minimum wage was associated with a fall in the employment of young workers (aged 20-24) of about 3.5 per cent, while the absence of the minimum wage for teenagers (until 1994) was found to have beneficial effects on their employment opportunities (OECD, 1996c).

24. High minimum wages may also affect the incentives for education among young people. While there is little recent empirical work on this topic, Neumark and Wascher (1995), using US states as the unit of observation, estimated that a higher minimum wage was associated with lower school enrolment.

25. **A nation-wide minimum wage may have detrimental effects in regions with many low-productivity workers.** The *Jobs Study* recommended delegating minimum wage determination to the regional level to reduce the risk of having a large number of workers being unable to price themselves into work in certain areas. The purchasing power of a given level of the minimum wage may differ significantly across regions, and a differentiated minimum wage may help in establishing a more equitable structure of real minimum wages across a country.

26. **In a context of differentiated minima, changes in minimum wages should be closely co-ordinated.** Where differentiated minima exist, there is a good case for co-ordination of changes. Increases in the minimum wage for one group may lead to substitution effects across low-paid workers. In Spain, the minimum wage for those aged 16 and under was raised to the level for those aged 17 in

6. Amongst the countries with statutory minimum wages, Luxembourg, the Netherlands, Portugal and Spain have a differentiation by age. In France, teenagers with apprenticeship and qualification contracts may be offered a wage below the SMIC. The United States has some provisions for the payment of lower minimum wages for young workers, but the take-up of this sub-minimum is low. Among the countries with negotiated minima, Austria, Belgium, Denmark, Finland, Germany, Sweden and Switzerland have also a differentiation by age.

7. For evidence in support of this proposition, see OECD (1996b, 1997a).

8. Available evidence for the 1980s suggests that, while the lowest negotiated wage for adults increasingly diverged from the legal minimum and, instead, followed the negotiated average wage, the negotiated minimum for youth followed the legal minimum (Dolado *et al.*, 1996).

9. Van Soest (1994) suggested that the minimum wage had a large negative impact on the employment prospect of young workers. However, Dolado *et al.* (1996) did not find a strong adverse effect of the minimum wages on youth employment.

1990. As a consequence, it has been estimated that the employment rate of teenagers dropped significantly, while that of young workers (20-24 years of age) rose (Dolado *et al.*, 1996). In France, it has been estimated that the recent reduction of social security contributions on low wages (up to 133 per cent of the SMIC) could eventually produce 75 000 more jobs for those paid at the level of the SMIC, but at the expense of job losses estimated at 20 000 among those with higher wages, due to substitution effects¹⁰.

27. **Enforcement of minimum wages is an issue to consider.** Minimum wage regulations may be difficult to monitor, especially if there are different minima across age groups, regions etc. The past experience of the United Kingdom with the Wage Boards and Councils suggests that their wage rates were often not binding because of significant non-compliance due to inadequate enforcement (Bell and Wright, 1996).

E. Minimum wages, low pay, poverty and interactions with the tax/benefit system

28. One of the main justifications for statutory minimum wages is the pursuit of distributional or social policy objectives, i.e. to bring living standards of the lowest paid workers to some minimum acceptable level. However, their effectiveness in reducing the incidence of low pay and alleviating poverty depend on a number of factors. First, if spillover effects from minimum wage increases are important and existing wage differentials are effectively preserved, there may be little impact on the incidence of low pay. Second, the evidence from several OECD countries suggests that a significant proportion of low-paid workers live in relatively well-off families and that, conversely, a substantial proportion of poor families have no working adults. Hence, the potential for a statutory minimum wage to alleviate poverty may be limited, particularly if it results in a reduction in employment. By contrast, the impact on inequality amongst working families is likely to be greater. The potential for minimum wages to enhance earnings of the low paid and incomes of poorer households will also depend on their interaction with the tax/benefit system. However, only limited research has been undertaken in this area which makes it difficult to draw any firm conclusions about the optimal design of policy. Evidence and issues of particular relevance to the United Kingdom are noted in the text that follows.

Impact on low pay

29. **The impact of minimum wages on the incidence of low pay will depend partly on the extent of spillover effects.** Whether the introduction of a statutory minimum wage in the United Kingdom will lower the incidence of low pay will depend on the extent of the “spillover” into wage rates above the minimum. If existing wage differentials are effectively preserved, there may be little impact on the incidence of low pay. The evidence from some studies, both in the United Kingdom and elsewhere (see Box 2), suggests that spillover effects from increases in the minimum are limited and, therefore, that changes in minimum wages may have a significant impact on the incidence of low pay.

- The incidence of low pay has risen over the past twenty years in the United Kingdom, and is now relatively high compared with other OECD countries (OECD, 1996b).

10. These estimates are from a partial equilibrium analysis and do not take into account the effects of increased public expenditures for the financing of the programme (estimated at around FF 10 billion). See Conseil Supérieur de l'Emploi des Revenus et des Coûts, “L'Allègement des Charges Sociales sur les Bas Salaires - Rapport au Premier Ministre”, Paris 1996.

Box 2. Empirical studies of the impact of minimum wages on low pay and poverty

Impact on low pay

DiNardo *et al.* (1996) have suggested that declines in the Federal minimum wage relative to average wages accounted for a substantial proportion (around one-third) of the rise in male earnings inequality in the United States over the 1980s. Card and Kreuger (1995) estimate that the 1990 and 1991 increases in the Federal minimum may have subsequently accounted for a reversal of around 30 per cent of this rise in inequality. For the United Kingdom, Dickens *et al.* (1994) suggest that the Wage Councils, prior to their abolition in 1993, did have an equalising impact on the earnings distribution. For the period 1976 to 1990, they regress changes in minimum wages set by the Councils on changes in wages at each decile in the earnings distribution and find that the impact of minimum wage increases is strongest at the lowest earnings levels and insignificantly different from zero for the median and higher deciles.

Impact on family incomes and poverty

Several studies have concluded that minimum wages do have an equalising effect on the incomes of working households, i.e. households with at least one member working. Card and Kreuger (1995) report on the characteristics of low-paid US workers affected by the 1990 and 1991 increases in the US Federal minimum wage rate. They find that this group is over three times more likely to be living in poverty than all workers and that lower-income families received a disproportionate share of the earnings gains arising from the minimum-wage increase. Bernstein and Schmitt (1997) report similar findings with respect to the 1996 rise in the US Federal minimum. For the United Kingdom, Gosling (1996) has simulated the effect of a national minimum wage on net disposable income of working households (actually tax reporting units). She finds that, while income gains are spread throughout the income distribution, they tend to be concentrated in the poorest families. Machin and Manning (1996) also find that low-paid workers in Britain are concentrated in poorer working households. In 1992, around one-quarter of workers paid at or less than £4 come from the poorest 10 per cent of worker households.

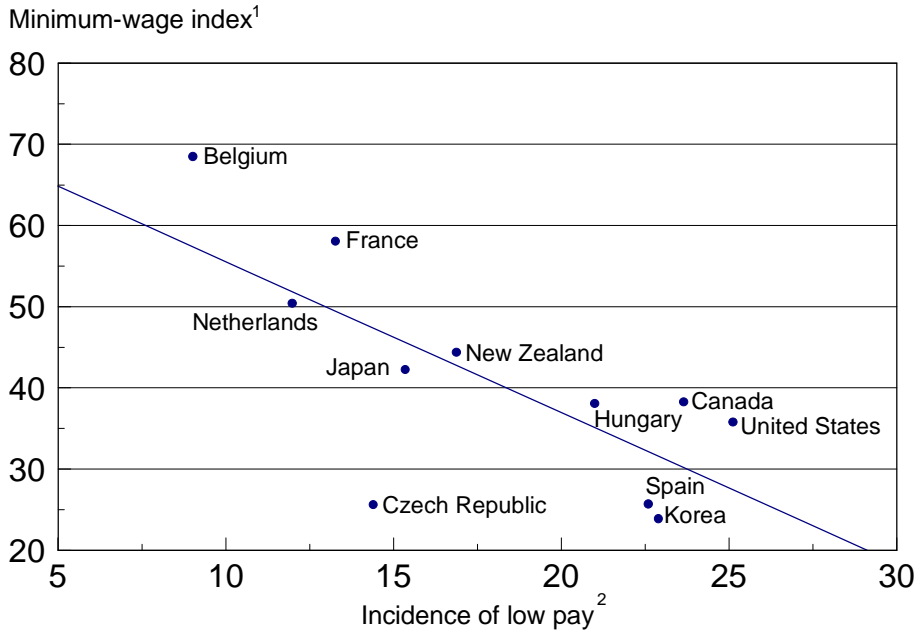
The evidence is weaker for a positive effect of minimum wages on poverty rates among all households, including those with no member in work. Using changes in poverty rates at the state level, Card and Kreuger (1995) do not find any significant impact of changes in minimum wages on poverty. Neumark and Wascher (1997) use matched March CPS surveys and state-level changes in minimum wages and suggest that, over a one-to-two year period, minimum wage increases are associated with a higher probability of both exits from and entries into poverty. However, most of this redistribution of income appears to occur *among* low-income families. For the United Kingdom, Gosling (1996) reports that when *all* families are taken into consideration, including those with no wage and salary income, then the introduction of a national minimum, at even relatively high levels, would result in a very small reduction in the overall poverty rate.

30. Across OECD countries with statutory or national minimum wages, there appears to be a negative association between the level of minimum wages relative to median earnings of full-time workers and the incidence of low pay: countries with a relatively low (high) minimum wage tend to have a high (low) incidence of low pay (Chart 2, Panel A). More generally, high relative minima appear to result in some compression of the bottom half of the earnings distribution (Chart 2, Panel B). Clearly, other factors will also be important in determining how close is the match between the level of the minimum wage and the incidence of low pay. If there is high collective bargaining coverage and the minima set in these agreements are higher than the statutory minimum wage, it is conceivable that even a low level of the statutory minimum might be associated with a low incidence of low pay. Conversely, a relatively high minimum wage may be associated with a high incidence of low pay because of non-compliance.

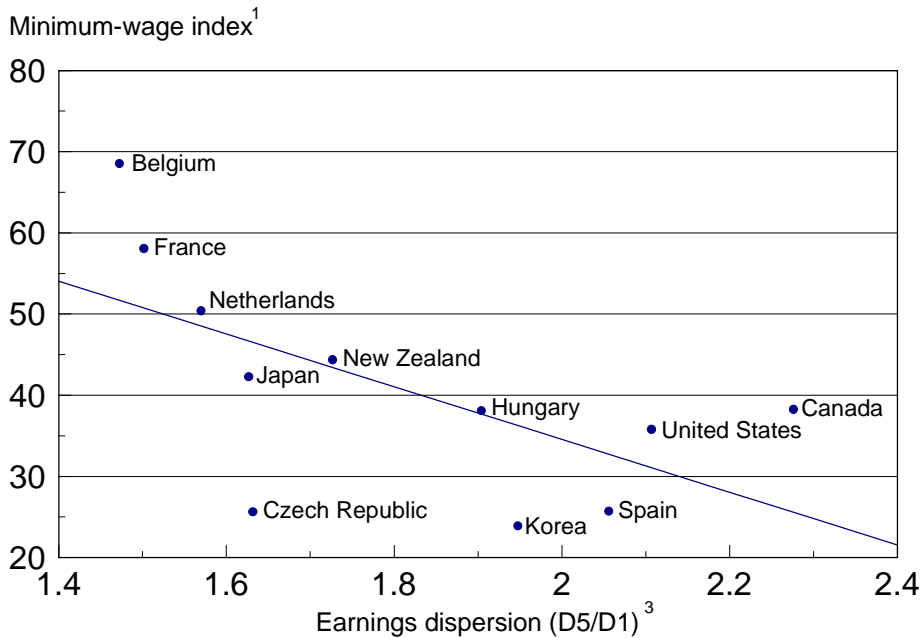
Chart 2.

Minimum wages, low pay and earnings dispersion, mid-1990s

A. Minimum wages and incidence of low pay



B. Minimum wages and earnings dispersion



1. Minimum wages as a percentage of median full-time earnings.
 2. Percentage of full-time workers receiving less than two-thirds of median earnings.
 3. Ratio of median earnings to upper limit of earnings received by bottom 10% of full-time workers.
 Source: OECD.

Impact on poverty

31. **The impact of minimum wages is likely to be larger on income inequality amongst working families than on overall poverty rates.** Several studies in the United States and the United Kingdom (see Box 2) suggest that minimum wages can have a substantial equalising effect on the income distribution of working households, i.e. household with at least one member in paid employment. However, the impact of statutory minimum wages on reducing poverty tends to be less clear. As noted above, this is because a significant proportion of low-paid workers may be living in relatively well-off families and, conversely, a substantial proportion of poor families may have no working adults.

- In the United Kingdom, poverty seems to be most prevalent in families with long-term unemployed and among non-working lone parents (Freeman, 1996).

Interactions with tax/benefit system

32. **The role of a minimum wage should be seen in the context of other policies aimed at poverty alleviation.** There are a range of traditional social assistance measures which are used to support poor individuals and their families¹¹. Moreover, there are several alternative instruments which countries use to bolster the demand for low-skilled workers and their earnings from employment. Payroll tax reductions on low wages are an instrument used in France, Belgium, the Netherlands and Ireland to reduce non-wage labour costs and stimulate the employment of low-productivity workers¹². At the same time, other countries have employment-conditional benefits and tax credits to simultaneously encourage employment and support the low paid¹³. These means-tested in-work benefits are likely to interact closely with minimum wages. Thus, the introduction of a national minimum wage may need to be considered as part of a package of reforms in order to effectively deal with the problems of low pay and poverty.

33. In the case of the United Kingdom, interactions of a statutory minimum wage with the existing tax/benefit system include:

-
11. The reason for the existence of combinations of policies such as unemployment benefits and statutory minimum wages in many OECD countries is examined by Marceau and Boadway (1994). In line with the optimal tax literature, they construct a model where government can only observe incomes of the population, but not skill levels. They show that, under certain weak conditions, the introduction of a minimum wage which causes involuntary unemployment along with unemployment benefits can be welfare-improving.
 12. Employers' social security contributions in Belgium were reduced by up to 50 per cent on low salaries in 1994. France has lowered employers' social security charges on two occasions since 1993, resulting in a 40 per cent reduction in social security contributions for workers earning the minimum wage and payroll taxes were reduced in the Netherlands in 1996 by a fixed amount for workers earning up to 115 per cent of the minimum wage, implying cuts of 25 per cent in payroll taxes at the level of minimum wages. Ireland has also introduced a lower rate of employer social security contributions for lower-paid workers.
 13. In addition to the UK Family Credit, employment-conditional tax credits and benefits are also used in Canada, Ireland, Italy, New Zealand and the United States. See Chapter 2 of the 1996 OECD *Employment Outlook* for an analysis of the pros and cons of these tax credits and benefits.

- A minimum wage will interact with Family Credit, Housing Benefit and Council Tax Benefit. It is likely that part of the gains arising from the wage increase for the low paid will be offset by reductions in these benefits¹⁴.
- Beneficiaries of Family Credit, on the one hand, and of the minimum wage, on the other hand, may be different and the distributional and efficiency effects of the joint operation of the two schemes need to be considered. As in most OECD countries, means-tested in-work benefits in the United Kingdom are characterised by high effective marginal tax rates (METRs) in the phase-out range that reduce the reward for increased work hours and efforts¹⁵. In this context, the introduction of a minimum wage may push certain low-paid workers outside the phase-out range, reducing METRs and producing efficiency effects (Freeman, 1996). In addition, the fact that a minimum wage will take some people off the family credit scheme may raise incentives for their spouses to enter the labour market, since this will not produce a reduction in benefit entitlement.
- Moreover, in-work benefits in the United Kingdom may have led to lower wages at the bottom of the wage scale, depending on supply and demand elasticities. A minimum wage may limit the extent of such shifting. However, the 1996 OECD *Employment Outlook* reports evidence for the United Kingdom (Callender *et al.*, 1994) suggesting that employers have not deliberately manipulated wages or hours of work so as to shift wage costs onto the public purse. This suggests that shifting may be limited under the current system.
- The financial burden of different schemes to support low-productivity workers falls on different groups. In the case of in-work benefits or payroll-tax reductions, it is the taxpayer who faces the burden. Depending on supply and demand elasticities in low-pay sectors, the immediate burden of a minimum wage will be shared between the employers of low-paid workers and the purchasers of their goods and services.

34. **Minimum wages, by establishing effective wage floors, may alter the effects of other policies affecting the labour market.** A range of such interaction effects were identified in the context of reviewing individual countries' progress in implementing the OECD Jobs Strategy (OECD, 1997b). One example has already been quoted, that of preventing in-work benefits from putting downward pressure on low wages. At the same time, a high minimum wage would, by compressing the wage distribution, tend to make such benefits costly. Moreover, higher social security contributions would be fully reflected in labour costs for workers paid at the minimum wage, whereas some backward shifting into lower wages may take place for workers above the minimum. Similarly, minimum wages may prevent the costs of job protection legislation from being shifted into wages.

14. Estimates by Sutherland (1995) suggest that, for workers with dependent children, a very high proportion of the gain from a minimum wage would be paid back in the form of reduced benefits from Family Credit, higher income tax and national insurance payments.

15. As reported in the 1996 OECD *Employment Outlook*, empirical evidence suggests that the reduction in the minimum number of hours required to be eligible for Family Credit (from 24 to 16 hours per week) in 1992 might have pushed some 3.5 per cent of lone parents to reduce their hours worked from above the old ceiling to between 16 and 24 hours. At the same time, however, the reform of the hours rule in the UK has stimulated labour force participation of a significant number of lone parents. The net effect in terms of the aggregate number of hours worked was, therefore, limited, but hours of work were shared by a relatively larger workforce.

F. Further OECD work on minimum wages

35. The OECD recently undertook a review of different possible policy responses to improving employment and pay prospects for unskilled jobseekers and low-paid workers (OECD, 1997*d*). One conclusion was that there is still insufficient evidence on the best way to achieve high employment rates while both addressing equity concerns relating to low-paid jobs and maintaining fiscal balance. Further work is required in the context of each country's own institutional set up and tax/benefit system.

36. In this context, a study of minimum wages in OECD countries has been launched by the OECD Secretariat. Research is being carried out on the following issues: i) the setting and operation of minimum wages in OECD countries; ii) their impact on employment; iii) their interaction with the tax/benefit system; and iv) their effectiveness in terms of boosting the earnings and incomes of low-paid workers. It is planned to publish the results of this study in the OECD *Employment Outlook* in July of next year.

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