REGULATION, UNIONS, AND LABOR MARKETS

IN OECD COUNTRIES, HIGHER UNIONIZATION EQUALS HIGHER UNEMPLOYMENT

by Edward Bierhanzl and James Gwartney

SINCE 1954, the unionized portion of the American work force has dropped from 32 percent to 14 percent. Unionized workers now constitute only 10 percent of the employment in the private sector. However, bitter strikes at United Parcel Service in 1997 and General Motors and Northwest Airlines in 1998 are indicative of increased union aggressiveness. Further, the federal government has imposed additional mandates, for example, parental leave and health care portability, on employers during the past decade. By raising the costs of hiring nonunion workers, such policies reduce the relative costs of unionized workers who otherwise tend to price themselves out of the market. As the United States looks to a future increasingly characterized by global markets for goods, services, and capital, it is time to consider the relationship between the structure and the performance of labor markets.

EMPLOYMENT IN OECD COUNTRIES

The past decade has seen persistently high unemployment rates in most Organization for Economic Cooperation and Development (OECD) countries, with double-digit levels especially common in Europe. The rate in the United States, however, is about half the European rate. Those facts raise the question, "Do differences in labor market structures and policies, especially concerning unions, contribute to the observed differences?"

Table 1 contains the standardized unemployment rates during various time periods since 1956 for the twenty-one largest OECD countries. Those data first show that, judged by today's standards, the unemployment rates of the countries were low before 1975. The twenty-one country average rate of unemployment was 2.6 percent during both the 1956-1966 period and the 1967-1974 period. The average rate began rising in the mid-1970s and has continued to do so ever since. The 8.8 percent average unemployment rate for 1991-1996 was more than three times the comparable figure for the 1956-1974 period. The unemployment rate in every OECD country is now higher, and in most cases substantially so, than during the 1950s, the 1960s, and the early 1970s.

Second, the data show that before the mid-1980s the United States's unemployment rate persistently exceeded the OECD average, and it was substantially higher than the rate for most European countries. That pattern has now changed. During both 1986-1990 and 1991-1996, the American unemployment rate was below the OECD average and well below the rates of the more populous European Union (EU) nations. The unemployment rate in Canada also has risen relative to that of the United States. Prior to 1980, the rates of those two countries were quite similar. Since 1980, however, the Canadian rate has generally been between 2 percent and 4 percent above the American rate, and the gap appears to be widening.

Employment growth in Europe also has lagged well behind that of the United States and Japan. Total employment for the fifteen EU countries in 1996 was only 1.7 percent higher than the figure for 1980. Employment actually declined in Italy during the 1980-1996 period. The total growth of employment in Germany, France, the United Kingdom, and Spain was 5 percent or less during the same period. By way of comparison, during this same period the employment growth of Japan was 17.2 percent and the figure for the United States was 26.8 percent.

OECD LABOR MARKET STRUCTURES

Labor market structural characteristics and policies differ substantially among OECD countries. Compared with the United States and Japan, the labor markets of Europe and Australia are characterized by (a) higher rates of unionization and a centralized wage-setting process, (b) greater regulation of employee dismissal policies, and (c) more generous unemployment assistance. Charts 1-3 illustrate those points.

Centralized Wage-Setting. Chart 1 (left column) shows that 50 percent or more of the nonfarm labor force is unionized in Belgium, Denmark, Finland, Ireland, Norway, and Sweden. The union density figures, however, are often misleading indicators of the role and power of unions in the wage-setting process. The wages of all employees—both union and nonunion—are set by a centralized bargaining structure throughout most of Europe, as well as Australia and, until quite recently, New Zealand. Negotiations between a union (or federation of unions) and an association of employers set the wages for all or most workers in various industries, occupations, or regions. Statutes extend the agreements to both

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Table 1

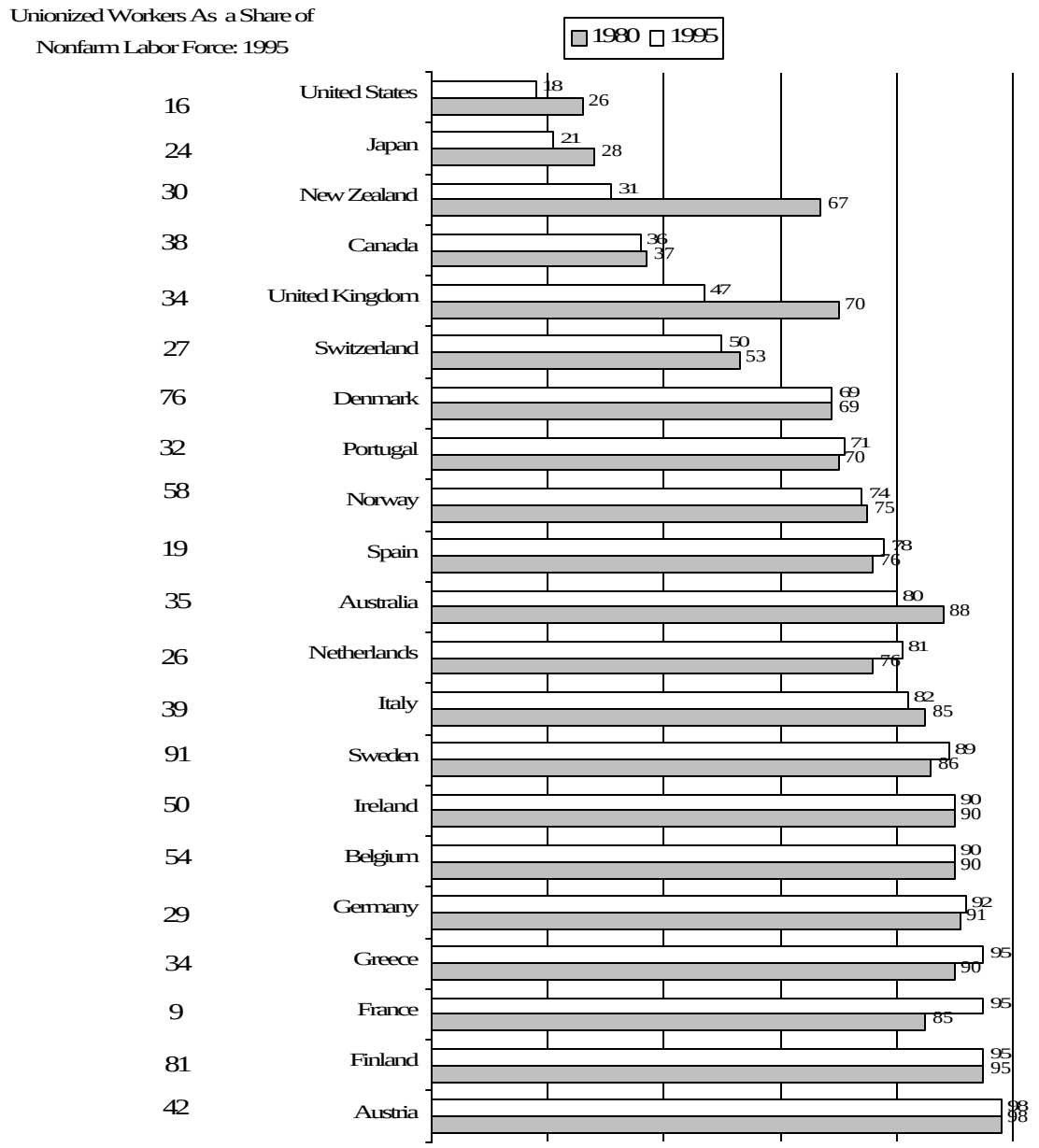
OECD Standardized Unemployment Rates, 1956-1996

	Rate of Unemployment: Average during Period					
	1956-66 (%)	1967-74 (%)	1975-79 (%)	1980-85 (%)	1986-90 (%)	1991-96 (%)
Australia	2.2	2.1	5.5	7.7	7.3	9.7
Austria	2.4	1.5	1.9	3.2	3.4	3.9
Belgium	2.6	2.6	7.0	10.3	8.7	8.8
Canada	4.9	5.2	7.5	10.0	8.4	10.4
Denmark	2.3	1.3	6.5	9.2	6.4	8.4
Finland	1.6	2.5	5.1	5.9	4.5	14.2
France	1.5	2.5	4.9	8.1	9.7	11.3
Germany	1.4	1.1	3.5	5.6	5.9	7.0[1]
Greece	5.1	3.7	1.9	6.1	7.0	9.3
Ireland	5.4	5.6	7.0	12.5	15.5	14.0
Italy	6.5	5.6	6.8	7.1	9.6	10.6
Japan	1.7	1.3	2.0	2.4	2.5	2.7
Netherlands	1.2	2.2	5.3	8.1	7.4	6.4
New Zealand	0.1	0.3	1.0	4.1	5.7	8.4
Norway	2.3	1.7	1.9	2.6	3.5	5.5
Portugal	2.5	2.4	6.8	7.9	6.1	5.9
Spain	2.1	2.7	5.8	6.4	18.9	21.1
Sweden	1.7	2.2	1.9	3.1	2.1	8.0
Switzerland	0.1	0.0	0.4	0.6	0.6	3.2
United Kingdom	2.5	3.4	5.8	10.1	9.0	9.3
United States	5.0	4.6	6.9	8.1	5.9	6.4
Average	**2.6**	**2.6**	**4.5**	**6.6**	**7.1**	**8.8**

[1] Average is based on 1991-92 data for West Germany and 1993-96 data for unified Germany.

Source: The 1956-79 data are from C. R. Bean and P. R. Layand, "The Rise of Unemployment: A Multi-Country Study," Economica 53, s1-s22. The 1980-96 data are derived from OECD Economic Outlook (Dec. 1997) and OECD Labour Force Statistics, 1976-1996.

Chart 1 **Percent of Employees Whose Wages Are Set by Collective Bargaining Contracts: 1980 and 1995**



Source: OECD, *Employment Outlook,* July 1994 (Table 5.7), OECD *Employment Outlook*, July 1997 (Table 3.3), and OECD, *Country Surveys* (various years),

nonunion employees and nonassociation employers who neither participated in the bargaining process nor agreed to wage contracts. Sometimes political officials also are actively involved in the wage-setting process.

Therefore, as the data of Chart 1 highlight, the percentage of workers whose wages are set by collective bargaining is often substantially greater than the union density rate. For example, in France, where only 9 percent of the nonfarm labor force was unionized in 1995, contracts between unions and employer associations set the wages for 95 percent of French employees. Similarly, unionized workers constituted only 29 percent of the German labor force in 1995, but labor-management contracts set the wages for 92 percent of the employees. Except in Switzerland and the United Kingdom, collective bargaining contracts set the wages for two-thirds or more of the employees throughout Europe in the mid-1990s.

In contrast with Europe, the United States, Canada, and Japan are characterized by decentralized collective bargaining. Unionized wage contracts in these countries reflect bargaining between a union and a single employer, or in some cases, a single plant of the employer. Those contracts do not apply to other firms. Under these circumstances, the union density fig-

ures and the share of workers whose wages are set by collective bargaining are similar. Moreover, both of these figures are likely to be smaller. As Chart 1 shows, the wages of only about 20 percent of employees in the United States and Japan, and 36 percent in Canada, are set by collective bargaining contracts. These figures are far below the comparable data for the countries of the EU. They are also only a fraction of the figure for Australia, another country with a labor market characterized by centralized collective bargaining.

Before 1990, the United States, Canada, and Japan were the only OECD countries with a decentralized structure of collective bargaining. In the late 1980s and early 1990s, the United Kingdom and New Zealand also joined this group. As the two countries eliminated or weakened various regulations encouraging industry-wide bargaining and the extension of labor contracts to nonparticipating parties, both union membership and the share of employees with wages set by collective bargaining contracts declined sharply.

REGULATIONS THAT MAKE IT MORE COSTLY TO DISMISS WORKERS ALSO MAKE IT MORE COSTLY TO HIRE THEM.

Does it make any difference whether wages are set at the firm level or for an entire industry, occupation, or region? Economic theory indicates that it does. When union members and unionized firms compete with nonunion workers and firms, the ability of a union to use its monopoly power to raise union wages is limited. If the union pushes wages significantly above the competitive level, it will be more difficult for unionized firms to compete effectively with nonunion rivals. With decentralized bargaining, wages that are above the market level in the unionized sector will push both output and employment toward nonunion firms.

In contrast, the discipline of market forces is eroded by centralized contracts that set wages for all workers and firms in an industry, occupation, region, or for the entire economy. A one-size-fits-all approach to labor contracts pushes up wages, increasing the costs of both union and nonunion employers in the industry. Investors will have no incentive to move capital to nonunion firms. Thus, neither unionized workers nor their employers will have much to fear from nonunion workers and firms.

Of course, market forces will not be totally absent. Higher wages will encourage the substitution of capital for labor and make it more difficult for domestic firms to compete in international markets. The predictable result will be slow employment growth. New workers entering the market, including those willing to work for lower wages, will find fewer job opportunities.

Centralized wage-setting will have fewer adverse effects in small countries with labor forces that are relatively homogeneous in skills and education. In large countries with regional differences in cost of living and greater diversity among labor force participants, centrally determined wage rates will predictably lead to a substantial excess supply of workers in some areas and excess demand in others. In large countries with diverse labor markets, unions will be able to extend their monopoly over a larger geographic area. In fact, unions and employers in high-wage regions can use the centralized wage-setting process to foist higher costs on rival firms and workers in regions where wages, reflecting educational and skill levels, would normally be lower. By pushing wages up in those regions, lower-wage and lower-skill workers are priced out of the market and rendered less competitive. The incentive for capital to move toward the low-wage regions is thus reduced.

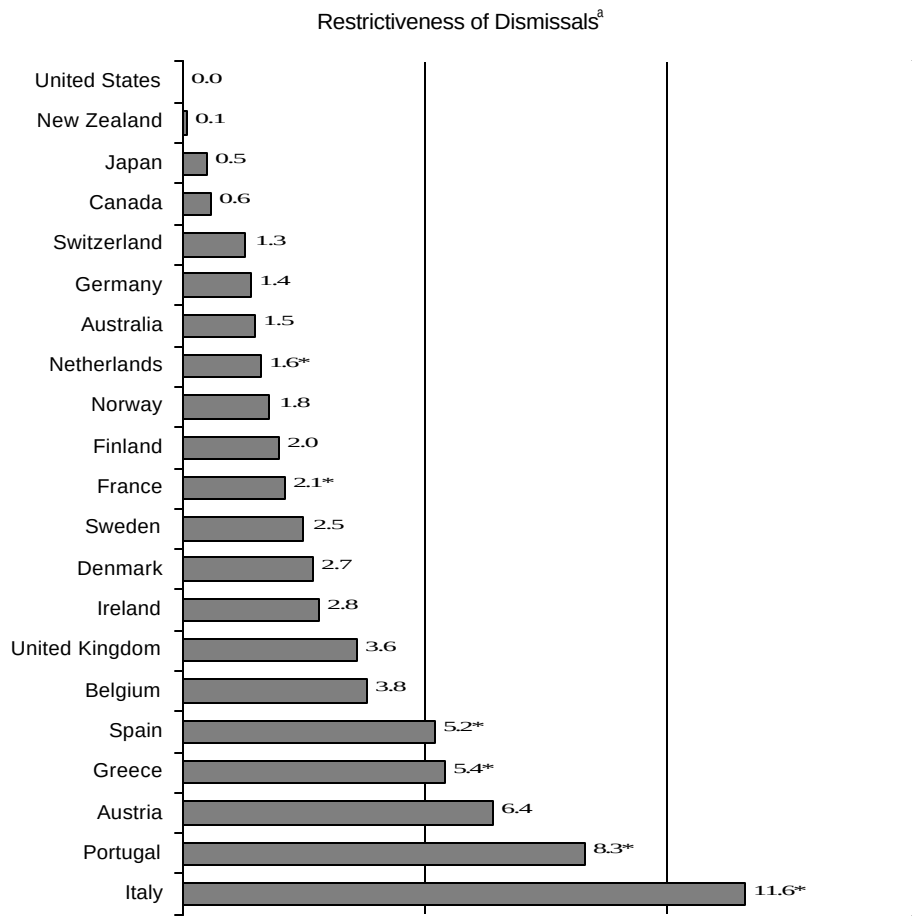
Northern and southern Italy illustrate the significance of this strategy. Workers in southern Italy generally have less skill and education than their counterparts in the north. With centralized labor contracts, however, wages in the various job categories are the same in both regions. As a result, workers in the south are less competitive and the incentive for capital to move toward that region is substantially reduced. Obviously, the northern workers and their union representatives find this arrangement attractive. In the south, however, the results are disastrous. In recent years, unemployment rates in southern Italy have ranged between 20 percent and 30 percent—three or four times the rates of the north. Centralized wage-setting has also reduced competitiveness of low-skill workers in several regions of Spain. As in Italy, the policy has led to both a high overall rate of unemployment and substantial regional disparity.

Dismissal and Severance Pay. European labor markets are also characterized by statutory requirements mandating various periods of prior notification or months of severance pay for the dismissal of a worker. Chart 2 presents data on the restrictiveness of dismissal regulations in OECD countries. The graph indicates the number of months of severance pay plus one-half the months of prior notification required for a no-fault dismissal of an employee. Because these mandates generally vary with employment seniority, the figures are the average for two workers, one with four years and the other with twenty years of seniority.

The sum of the months of severance pay and prior notification required for a dismissal are relatively short in the United States, New Zealand, Japan, and Canada. In contrast, they are lengthy in Italy, Portugal, Austria, Greece, and Spain. For example, Italian employers are required to give a dismissed worker with four years of seniority1.1 months of notification and 3.5 months of severance pay. If workers had twenty years of seniority, the employers must give them 2.2 months of prior notification and 18 months of severance pay. In addition, several European countries require political approval for mass layoffs. Before reducing their work forces by a sizeable amount, employers in Italy, Portugal, Greece, Spain, France, and the Netherlands must convince various political officials that the move is necessary for the health of the enterprise.

Proponents argue that regulations mandating notification and severance pay help protect workers against arbitrary dismissal and provide them with greater job security. However, regulations that make it more costly to dismiss workers also

Chart 2 **Restrictiveness of Dismissals: The Average Months of Mandated Severance Pay and Notification for a No-Fault Dismissal: Mid-1990s**



[a]The average months of mandated severance pay plus 1/2 the average months of mandated notification for the no-fault dismissal of a worker (average for workers with four years and twenty years of employment).

* Indicates that collective dismissals required authorization from political authorities.

Source: OECD, *OECD Jobs Study: Evidence and Explanations*, 1994, Part II (Table 6.5) and OECD, *Country Studies* (various years).

make it more costly to hire them. When dismissal costs are high, employers will be reluctant to add workers during periods of strong demand because it will be costly to dismiss them if future business conditions are less favorable. Thus, firms will often find that it is cheaper to expand output—particularly if the expansion is expected to be temporary—by using more capital, contracting out, or hiring part-time workers not covered by the dismissal regulations.

While "fairness" to workers is the principal justification for restrictive dismissal policies, the anticompetitive effects of those policies cannot be overlooked. Restrictive dismissal policies reduce the competition between workers with jobs and those seeking employment. They make it more expensive for employers to substitute current job seekers for established workers. This restraint provides the support base for restrictive dismissal legislation among established workers and their union representatives.

Restrictive dismissal policies will increase employment costs and make it more expensive for employers to adjust their work force to changing conditions. In the long run, those effects will result in sluggish employment growth and high rates of unemployment, particularly among new labor force entrants. The data are consistent with this view. The unemployment rates of countries with restrictive dismissal policies are extremely high in the age category fifteen years to twenty-four years old where new labor force entrants are most likely to be found. The unemployment rate among that group in 1996 was 42 percent in Spain, 34 percent in Italy, and 27 percent in Greece. These rates were the three highest among the OECD countries. The unemployment rates of Belgium and Portugal

were also well above the OECD average for the age group. Among the six nations with the most restrictive dismissal policies (see Chart 2), only Austria had a below-average rate of unemployment in the new-entrant age category.

Unemployment Benefits. There are two general types of unemployment benefit programs: unemployment insurance and unemployment assistance. Other forms of general assistance also are often available to the unemployed. Unemployment insurance, as the name implies, is based on the insurance principle. Employees qualify for benefits after maintaining employment and paying taxes into the system for a certain period of time. Upon dismissal, the employee qualifies for benefits, usually proportional to a reference wage, for a specified length of time. Unemployment assistance generally uses a means test as a qualifying criterion. Benefits, which are not commonly related to previous wages, are payable as long as a person is unemployed and is means-qualified. Benefits of this type are funded from general revenues rather than a specific tax on employers or employees.

MORE GENEROUS UNEMPLOYMENT BENEFITS AND RESTRICTIVE DISMISSAL PRACTICES ARE ASSOCIATED WITH HIGHER RATES OF UNEMPLOYMENT.

Seven OECD countries (Canada, Greece, Italy, Japan, Norway, Switzerland, and the United States) rely exclusively on an insurance-based program to provide benefits for workers laid off or dismissed from a previous job. Australia and New Zealand provide only general assistance to unemployed workers. All other OECD countries have both insurance-based and assistance programs.

Interestingly, the initial replacement rate—that is, the percent of one's previous earnings initially replaced by the benefits—is fairly similar among the OECD countries. This is particularly true when considering the net (after-tax) replacement rate for a couple with children. Several countries provide housing subsidies, in addition to cash benefits, for unemployed workers. As Chart 3 shows, when housing subsidies are taken into consideration, the initial net replacement rates are relatively similar among OECD countries. Except for Italy, which is a special case because it relies on severance pay rather than unemployment compensation to help displaced workers, the initial net replacement rates for a couple with two children are between 59 percent and 85 percent in OECD countries.

In contrast with the initial benefit levels, there is considerable variation among OECD members with regard to the length of time persons are permitted to draw benefits. The shortest duration periods for the benefits are found in Italy, the United States, the United Kingdom, Germany, Canada, Austria, and Japan, where the benefits for most unemployed workers expire in a year or less (see chart 4). The means-tested unemployment assistance benefits provided in Australia and the New Zealand can be drawn indefinitely. Among the countries providing insurance-based benefits, the duration period for those benefits is longest in Belgium, Denmark, France, and Netherlands. Economic theory indicates that the combination of high benefits and lengthy duration periods of eligibility will push unemployment upward.

CENTRAL PLANNING VS. MARKETS

Clearly, there are substantial differences among OECD countries in the structure of labor markets. Two broad models emerge that can be used to describe how countries determine wages and other conditions of employment: central planning and market-directed.

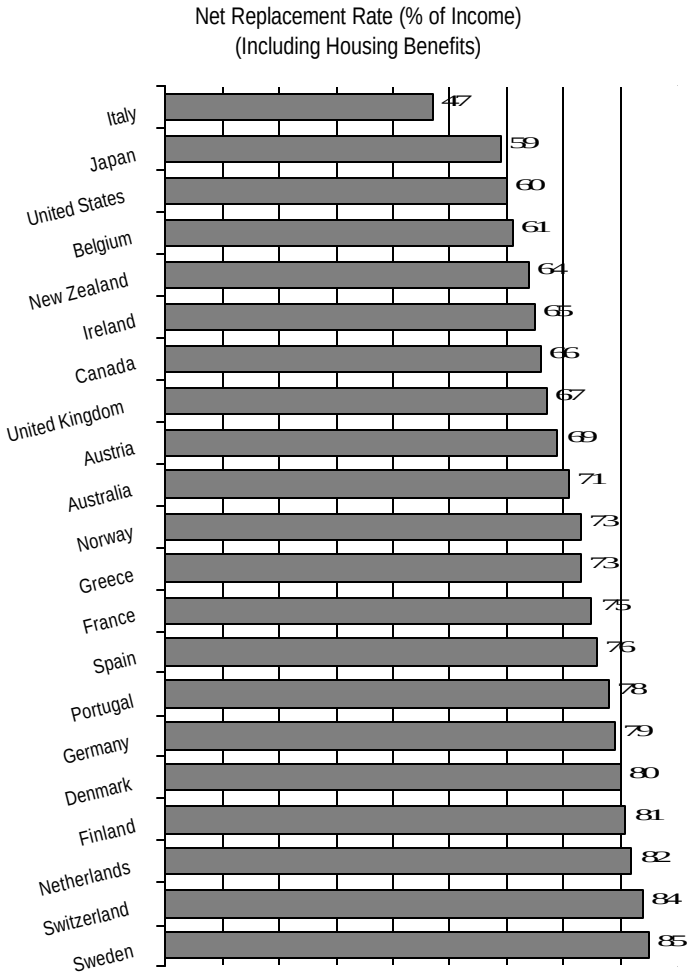
In centrally planned labor markets, wages are set centrally by either collective bargaining or a combination of collective bargaining and "incomes policies." There is little variation in wages and other conditions of employment across regions and firms. Dismissal policy, medical leave, maternity leave, and number of holidays are set by statute and are generally generous. When workers are dismissed, unemployment benefits are set at levels and, most important, for duration periods that make them attractive relative to working on a job. Essentially, centrally planned labor markets are dominated by political forces rather than competitive markets. In varying degrees, this model is descriptive of labor market conditions throughout the European OECD countries, as well as Australia. Until recently, New Zealand also would have fit this model.

Under the market-directed model, wages and other conditions of employment are determined by agreements between employers and employees or their agents, including union representatives. They are generally determined at the firm level and therefore there is considerable opportunity for variation in both wages and conditions of employment among firms, regions, and workers in the same occupations. Conditions of dismissal, type of employment contract (if any), and fringe benefits also are determined by agreements between employers and employees and they are likely to vary considerably. In addition, the duration of unemployment benefits, particularly when they are attractive relative to work opportunities, will be relatively short. The labor markets of the United States, Japan, and New Zealand (since the mid-1990s) best fit the market-directed model.

COMPLEXITIES OF EMPIRICAL WORK

Several researchers have analyzed cross-country differences in labor market policies. Their findings have generally supported the view that more generous unemployment benefits and restrictive dismissal practices are associated with higher rates of unemployment. With regard to the impact of centralized collective bargaining, the results have been mixed. As the data of Table 1 and Chart 1 indicate, a couple of countries—most notably Austria and Norway—with a highly centralized collective bargaining structure have nonetheless achieved relatively low rates of unemployment. Regulations often distort both employment and unemployment statistics and reduce their comparability across countries and time periods. Before considering the empirical evidence in more detail, it is necessary to consider several factors that distort the statistics and

Chart 3 **The Net Initial Replacement Rate for an Unemployed Married Worker with Two Children: 1995**



Source: OECD, *Job Strategy: Making Working Pay*, 1997 (Table 9) and OECD, *Database on Taxation and Benefit Entitlements*. These data are for a 40-year-old worker (with spouse and two children) employed continuously since age 18.

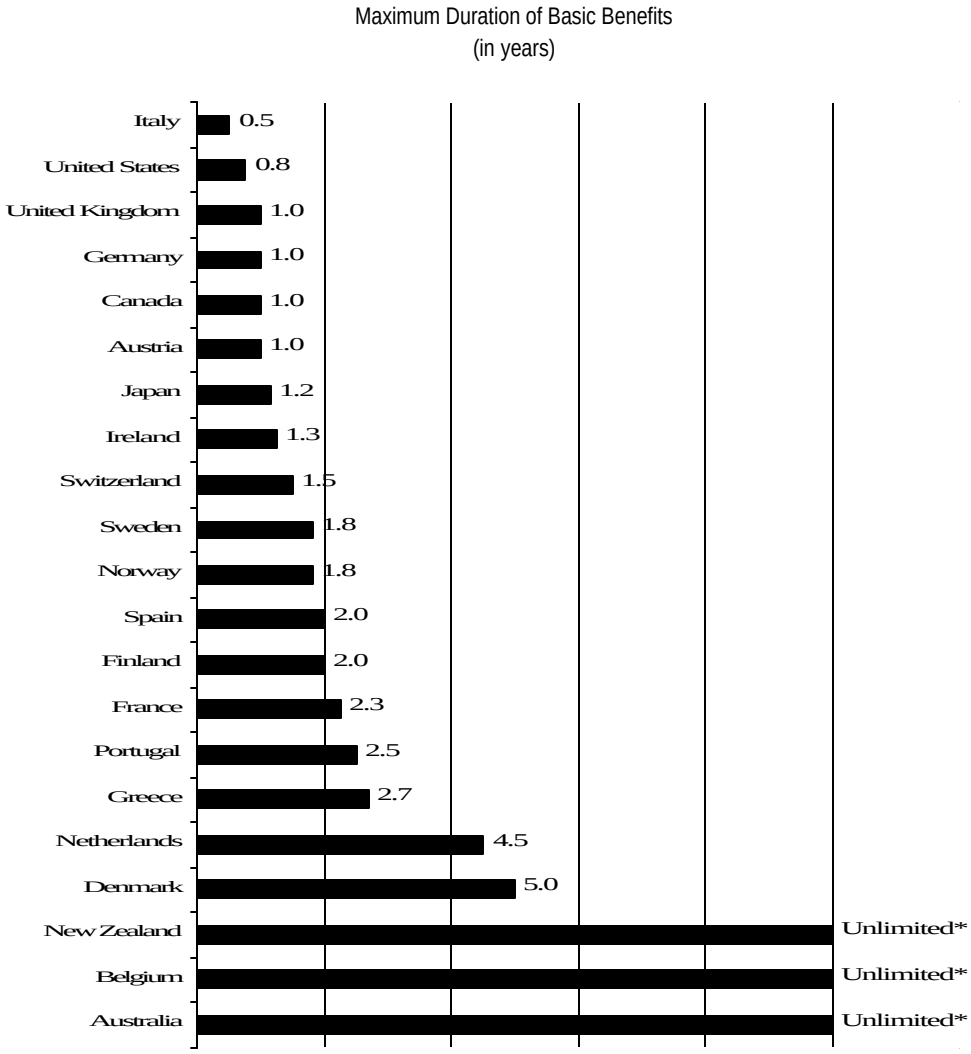
contribute to the complexity of empirical work in this area.

The Distortion of Employment Statistics. Labor market regulations are complex and their impact is often subtle. The difficulties are compounded by the fact that seemingly similar policies and programs are sometimes enforced differently across countries and at different times within the same country. For example, countries differ with regard to work registration requirements for unemployment benefits, and the differences influence the number of persons who are counted as unemployed. Countries such as Belgium permit part-time workers to draw unemployment benefits, thereby confounding the measure of unemployment. Countries also have a variety of retirement, invalidity, and sickness programs that further complicate the matter. These differences between countries reduce the comparability of even the standardized data on rates of unemployment.

Furthermore, in response to high rates of unemployment, several OECD countries have adopted programs involving training, public sector employment, subsidized employment, and subsidized early retirement. Those programs are often lumped together under the heading of Active Labor Market Policies (ALMPs). Various inducements, including income supplements and renewed eligibility for other transfer benefits, make the programs attractive for participants. Expenditures on programs of this type are larger in Europe, particularly northern Europe, than in Japan and the United States. Even though there is little evidence that ALMPs permanently reduce unemployment, they will influence the "measured" rate. Because persons involved in training programs are not looking for work, they are not counted among the unemployed. Persons induced into early retirement are moved out of the labor force. Subsidized private employment and sheltered government employment not only reduce the observed rate of unemployment, they also add to the number counted as employed.

Differences in the enforcement of eligibility criteria and the

Chart 4 **The Duration of Unemployment Benefits**



*In these countries, unemployment assistance is available after the basic unemployment insurance benefits have been exhausted.

Source: OECD, *Jobs Strategy Making Working Pay*, 1997 (Figure 3) and OECD, *Database on Taxation and Benefits Entitlements*.

size of ALMPs can exert a substantial impact on unemployment statistics. Comparisons between the standard unemployment rate and the "broad unemployment" rate illustrate this point. In addition to persons counted as unemployed, the "broad unemployment" measure adds the number of working-age persons involved in government training programs, subsidized employment, early retirement, and disability programs. When calculating the broad unemployment rate, the number of persons involved in those programs is added to the number unemployed in the numerator and the number in the labor force in the denominator.

For countries with sizable expenditures on ALMPs, the differences between the standard and broad rates of unemployment are striking. For example, the broad unemployment rate of the Netherlands was 27.0 percent in 1994, while the standard unemployment rate during the same year was only 7.1 percent. In the 1990s, the broad unemployment rate of the Netherlands has persistently been three or four times the standardized rate. Furthermore, as expenditures on ALMPs have increased since the 1970s, the gap between the broad and standard rates has widened.

To a large degree the ALMPs of the Netherlands and other European countries—particularly those in the north—conceal both the severity of the employment problem and the degree to which the situation has worsened. The popularity of ALMPs is understandable. They permit politicians to project the image

that they are "fighting unemployment," and they may temporarily make the statistics look better. But they do little to improve incentives or remove the fundamental obstacles hindering the operation of the labor market.

Long and Variable Lags. Economic theory indicates that more generous unemployment benefits will reduce the opportunity cost of job search and lead to more lengthy spells of unemployment, pushing the unemployment rate upward. This "search-time effect" may exert some impact on the unemployment rate after only a short time lag. It will become more readily observable as the number of persons searching for work increases during a recession following the adoption of the more generous benefits.

However, there are also reasons to expect that the generosity of the benefits will influence unemployment in more subtle ways, and only after lengthy periods. With the passage of time, individuals will become more aware of ways to qualify for benefits and use them to supplement other income sources. Employers, particularly those in seasonal and other industries offering erratic employment, will also become more knowledgeable about the ways the benefits can be used to reduce their wage costs. Unless the unemployment insurance is fully experience rated—and this is seldom the case—the system subsidizes businesses offering unstable employment and encourages the expansion of such employment. With time, employees are likely to become more skilled at finding, and employers more adept at providing, "off the books" jobs as a means of supplementing income and avoiding taxes. Such practices are also likely to become more acceptable with the passage of time.

UNEMPLOYMENT INSURANCE USUALLY SUBSIDIZES BUSINESSES OFFERING UNSTABLE EMPLOYMENT AND ENCOURAGES THE EXPANSION OF SUCH EMPLOYMENT.

More generous benefits also reduce the political repercussions of high unemployment rates. When wages are determined by highly politicized, centralized bargaining processes like those present throughout most of Europe, political officials will have less reason to resist the wage demands of unions representing workers with jobs, even when the higher wages mean fewer jobs and higher rates of unemployment in the future. Once again, however, there will be a lengthy and unpredictable time lag between the passage of legislation providing the more generous benefits and the occurrence of significant increases in the rate of unemployment.

These indirect effects and lengthy time lags make it difficult to isolate the full adverse impact of higher unemployment benefits and labor market regulations. They also explain why the short-term relationship between unemployment benefits and the rate of unemployment is sometimes tenuous.

IMPACTS OF LABOR MARKET REGULATIONS

Unemployment benefit systems are highly complex. The replacement rate—the share of previous earnings replaced by unemployment benefits—often varies with previous level of earnings, family size and situation, previous length of employment, and duration of unemployment. The OECD has calculated the replacement rate of member countries for recipients at two different income levels, three family situations, and three time periods of unemployment. The replacement rates in these eighteen different categories were averaged to derive an "index of generosity" for the unemployment system of each country. As previously discussed, the initial replacement rates among OECD countries are similar. Thus, differences in the length of time that recipients are permitted to draw benefits is the primary source of the cross-country differences in the average replacement rates.

Table 2 presents the average replacement rate for OECD countries for various years between 1961 and 1995. The pattern of these data highlights several points of interest. First, on average, the replacement rate in OECD countries has increased substantially since 1961. The 30 percent average replacement rate in 1995 is almost twice the level of 1961. The increase was particularly sharp during the 1970s, when the average benefit level rose from 18 percent at the beginning of the decade to 25 percent at the end.

Second, while the overall trend of benefit levels has been sharply upward, this trend has not been universal. The average replacement rates in Japan and United States changed only modestly. The Japanese replacement rate declined from 12 percent in 1961 to 10 percent in 1995. In the United States, the 12 percent replacement rate of 1995 was only modestly higher than the 9 percent figure for 1961. In contrast with other OECD countries, the average replacement rates of both Japan and the United States were well below 20 percent throughout 1961-1995.

Third, the average replacement rates of five countries (Belgium, Canada, France, Germany, and New Zealand) have been persistently high—20 percent or more—throughout the 1961-1995 period. However, there has not been much of an upward trend in these countries. In fact, the benefit levels in the mid-1990s are actually slightly lower in Germany and New Zealand than they were in the mid-1960s.

Fourth, there is another set of countries where benefit levels increased substantially during the period. Between 1961 and 1980, the average replacement rate increased 15 percentage points or more in Denmark, Finland, the Netherlands, Norway, Spain, and Sweden. In most cases, the average replacement rates of those countries continued to rise in the 1980s and 1990s. These previously "low benefit" countries are now members of the "high benefit" club.

Recognizing the difficulties originating from lagged effects and measurement problems, is there any evidence that differences in replacement rates have exerted an observable impact on unemployment? Table 3 compares the average unemployment rates during decades at the beginning (1956-1966) and ending (1986-1996) of the period. Interestingly, there was little difference in the beginning and ending unemployment rates for

Table 2

Unemployment Benefit Gross Replacement Rates Based on Average for Two Earnings Levels, Three Family-Status Situations, and Three Duration Periods of Unemployment: 1961-1995

	Average Gross Replacement Rate [1]							
	1961	1965	1970	1975	1980	1985	1990	1995
Australia	17	17	14	22	22	23	26	27
Austria	18	16	22	22	29	29	31	26
Belgium	41	32	41	47	45	45	42	42
Canada	21	20	21	29	25	28	28	27
Denmark	23	23	32	37	54	53	52	70
Finland	6	6	8	23	23	35	39	43
France	23	24	24	26	30	34	37	38
Germany	31	31	29	29	29	28	28	26
Greece	7	7	7	7	7	7	17	22
Ireland	17	17	17	20	28	27	29	26
Italy	3	3	3	2	1	1	3	20
Japan	12	12	13	13	9	8	10	10
Netherlands	13	47	48	48	48	52	51	46
New Zealand	43	32	29	29	27	30	30	30
Norway	7	7	7	9	29	39	39	39
Portugal	0	0	0	5	9	20	34	35
Spain	10	17	13	21	28	32	33	32
Sweden	5	5	6	20	24	28	29	27
Switzerland	1	1	1	3	13	21	22	30
United Kingdom	23	24	25	21	24	20	18	18
United States	9	10	17	12	15	15	11	12
Average	**16**	**17**	**18**	**21**	**25**	**27**	**29**	**30**

[1] Average for two earnings levels (2/3 average and average earnings), three family situations (single, married with dependent spouse, and married with working spouse) and three duration periods (1 year, 1 to 3 years, and 3 to 5 years).

Source: OECD, OECD Jobs Strategy: Making Work Pay, 1997 (Figure 2), and OECD, Implementing the OECD Jobs Strategy: Member Countries' Experience, 1997 (Table 5).

Table 3

Changes in the Rate of Unemployment for Countries with Persistently Low Replacement Rates Compared with Those with (a) Persistently High Replacement Rates and (b) Those With Large Increases in Benefits between 1961 and 1980

	Average Gross Replacement Rate[a]				Average Rate of Unemployment		
Category	1961	1980	1995	Change Between 1961 and 1980	1956-66	1986-96	Change
Countries with Persistently Low Replacement Rates							
Japan	12	9	10	-3	1.7	2.6	+0.9
United States	9	15	12	+6	5.0	6.1	+1.1
Unweighted Average	**10.5**	**12.0**	**11.0**	**+2.5**	**3.4**	**4.4**	**+1.0**
Countries with Persistently High Replacement Rates[b]							
Belgium	41	45	42	+4	2.6	8.8	+6.2
Canada	21	25	27	+4	4.9	9.4	+4.5
France	23	30	38	+7	1.5	10.5	+9.0
Germany	30	29	26	-1	1.4	6.5	+5.1
New Zealand	43	27	30	-16	0.1	7.1	+7.0
Unweighted Average	**31.6**	**31.2**	**32.6**	**-0.4**	**2.1**	**8.5**	**+6.4**
Countries with Large Increases in Replacement Rates During 1960-80[c]							
Denmark	23	54	70	+31	2.3	7.4	+5.1
Finland	6	23	43	+17	1.6	9.4	+7.8
Netherlands	13	48	46	+35	1.2	6.9	+5.7
Norway	7	29	39	+22	2.3	4.5	+2.2
Spain	10	28	32	+18	2.1	20.0	+17.9
Sweden	5	24	27	+19	1.7	5.1	+3.4
Unweighted Average	**10.7**	**34.3**	**42.8**	**+23.6**	**1.9**	**8.9**	**+7.0**

[a] The average benefit replacement rate is for two earnings levels, three family situations, and three durations of unemployment. See OECD Jobs Strategy: Making Work Pay (Figure 2).

[b] OECD countries with an average replacement rate of 20% or more throughout the 1960-95 period.

[c] OECD countries with a 15 or more percentage point increase in the average replacement rate between 1960 and 1980.

Source: Derived from OECD Jobs Strategy: Making Work Pay, 1997, and OECD Employment Outlook (various issues).

Table 4

Changes in the Rate of Unemployment for Countries with Persistently Low Replacement Rates in the Mid-1970s but High Replacement Rates in the Mid-1990s

	Average Gross Replacement Rate				Average Rate of Unemployment		
Country	1975	1985	1995	Change	1970-79	1993-96	Change
Greece	7	7	22	+15	2.3	9.9	+7.6
Norway	9	39	39	+30	1.7	5.1	+3.4
Portugal	5	20	35	+30	4.6	6.8	+2.2
Switzerland	3	21	30	+27	0.4	3.6	+3.2
Unweighted Average	**6.0**	**21.8**	**31.5**	**+25.5**	**2.3**	**6.4**	**+4.1**

Source: Derived from OECD, Jobs Strategy: Making Work Pay, 1997, and OECD, Employment Outlook (various issues).

the two countries—Japan and the United States—that maintained low average replacement rates throughout the period. For Japan, the unemployment rate was 2.6 percent during 1986-1996, less than a percentage point higher than the 1.7 percent of 1956-1966. In the United States, the rate of unemployment during the more recent decade was 6.1 percent compared with 5.0 percent during the earlier decade. In contrast, every one of the five countries—Belgium, Canada, France, Germany, and New Zealand—with persistently high replacement rates experienced substantial increases in unemployment. The average rate of unemployment in those five countries jumped from 2.1 percent during 1956-1966 to 8.5 percent in 1986-1996, an increase of 6.4 percentage points. The smallest increase within this "high benefit" group was Canada's jump from 4.9 percent during the earlier period to 9.4 percent during the more recent decade.

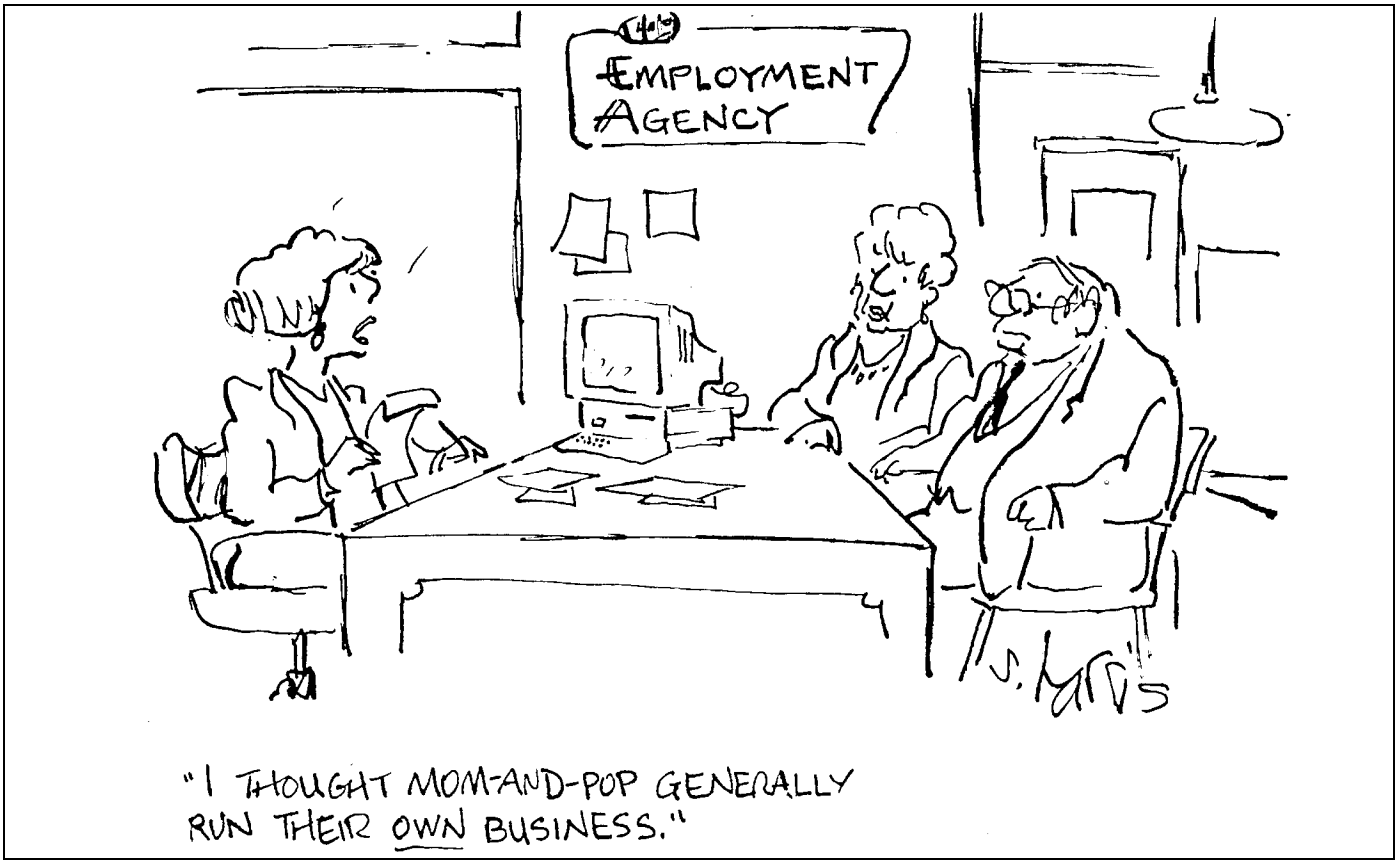
During 1956-1966, the average unemployment rate of the five "high benefit" countries was less than the average rate for Japan and the United States. Just the reverse was true during the more recent period. In fact, the average unemployment rate for the "high benefit" group during 1986-1996 was nearly twice the average rate for Japan and the United States.

Finally, Table 3 also presents the data for the six countries—Denmark, Finland, the Netherlands, Norway, Spain, and Sweden—that substantially increased unemployment benefits during 1961-1980. While our analysis suggests that higher benefits will affect unemployment with a substantial and unpredictable time lag, the impact of the 1961-1980 benefit increases should be at least partially observable during the 1986-1996 period. Of course, the predicted result is that the higher benefits levels will push unemployment rates upward. The findings here are consistent with this view—the unemployment rate in every one of these countries was substantially higher during the latter period. The average unemployment rate for the six countries rose from 1.9 percent during 1956-1966 to 8.9 percent during 1986-1996, a 7 percentage point increase.

Table 4 presents data for the four countries—Greece, Norway, Portugal, and Switzerland—that had relatively low benefits levels in 1975 but high replacement rates in 1995. In the case of Greece, Portugal, and Switzerland, a substantial part of the benefit increase has taken place during the last decade. Because the benefit increases are relatively recent, their full impact has probably not yet been felt. When the replacement rates of the four countries were low during the 1970s, each had a low rate of unemployment. The recent data, however, are beginning to register the predicted upward trend. During 1993-1996, the average unemployment rate of the four rose to 6.4 percent—still low by OECD standards, but nearly three times the comparable figure for the 1970s. If our analysis is correct, it may well be ten or fifteen years before the higher employment rates resulting from the more generous unemployment benefits are fully observable. It will be interesting to follow the unemployment rates of Greece, Norway, Portugal, and Switzerland during the next decade.

UNITED KINGDOM AND NEW ZEALAND REFORMS

In recent years two countries—the United Kingdom (UK) and



New Zealand—have adopted significant reforms designed to protect the rights of workers and make their labor markets more competitive. In the UK, the reforms focused on promotion of democratic decisionmaking and the protection of workers' rights. The Employment Act of 1980 required secret ballot approval before the establishment of a closed shop. Later, legislation was adopted (a) requiring worker approval every five years for the continuation of a closed shop and (b) making strike action to establish a closed shop unlawful. Like union members, nonunion members were granted legal protection against dismissal and discriminatory actions as the result of their nonunion status. Union members were given the right to join the union of their choice and granted protection against unions seeking to discipline them for failure to support a strike action.

These actions weakened the monopoly power of unions. Union membership in the UK fell from 50 percent of the work force in 1980 to 34 percent in 1995. More important, centralized bargaining became less commonplace and the share of employees having their wages set by collective bargaining contracts declined from 70 percent in 1980 to 47 percent in 1990 and 1995.

In New Zealand, the Employment Contracts Act of 1991 restructured the labor market even more rapidly than the English reforms. That act allowed all employees to "choose whether or not to associate with other employees for advancing the employees' collective employment interests." Employees were granted the right to negotiate labor contracts, with or without the assistance of an agent. Most significantly, while rights to strike and lockout were explicitly recognized, those weapons were permitted only at the expiration of labor contracts and then only after employee approval was obtained at the *enterprise* level. That effectively changed the wage-setting process in New Zealand from a centralized to a decentralized system. As in the UK, union membership fell and the share of employees having their wages set by union contracts declined from 67 percent in 1990 to 31 percent in 1995.

How have the labor markets of the two countries reacted to economic liberalization? In Britain, the economy expanded rapidly throughout most of the 1980s and the unemployment rate declined. Following the recession in the early 1990s, the economy rebounded and by February 1998, the rate of unemployment in the UK had fallen to 6.4 percent, the lowest rate achieved since the 1970s. In New Zealand, the results have been similar. New Zealand's rate of unemployment fell from 10.3 percent in 1992 to 6.1 percent in 1996. The unemployment rates of both countries are now significantly lower than the rates of similarly situated countries that have followed more interventionist policies. The UK unemployment rate stands in contrast with the double-digit levels of the other populous European countries (France, Germany, Italy, and Spain). New Zealand's unemployment rate is well below that of Australia, a country that continues to rely on centralized wage-setting processes.

CONCLUSION

Despite the measurement problems that accompany complex policies and regulations, OECD countries provide ample evidence that the central planning of labor markets has pushed

unemployment rates upward. Among the more populous OECD countries, the labor markets of France, Germany, Italy, and Spain are the most highly regulated, while those of the United States and Japan are more market-directed. In recent years, the unemployment rates in France, Italy and Germany have been approximately twice the rate of the United States and more than twice that of Japan. The unemployment rate of Spain has been even higher. The labor markets of the four European countries are large and diverse. It is precisely in this situation that one would expect that a highly centralized wage-setting mechanism would have the most negative side effects.

Movement toward more liberal labor market policies makes a difference. The two countries that have made the most significant moves toward more liberal labor policies—the United Kingdom and New Zealand—have achieved positive results. The unemployment rates of both have fallen and they are now significantly lower than the rates of their more interventionist neighbors.

Comparisons between the American and Canadian labor markets are quite revealing. While the Canadian labor market is less regulated and more decentralized than those of the major European economies, it is clearly less liberal than that of the United States. Compared with the United States, the share of employees with wages set by collective bargaining is greater, dismissal regulations are more restrictive, and unemployment benefits are more generous in Canada. Further, the Canadian labor market has been drifting toward the centrally planned European model. These factors show up in the statistics. In contrast with the 1960s and 1970s, the Canadian unemployment rate is now significantly greater than that of the United States and the gap appears to be widening. During the 1990s, the Canadian unemployment rate was, on average, 4 percentage points higher than that of the United States, compared with approximately 2 percentage points during the 1980s.

In many ways, the European labor markets reflect the Marxist fallacy that low wages are indicative of weak worker bargaining power and capitalist exploitation. Their architects believed that government regulations promoting monopolistic unions and mandating various employee benefits such as severance pay, dismissal restrictions, unemployment benefits, longer vacations, and a shorter work week would strengthen the position of workers relative to their capitalist exploiters. As France's recently mandated thirty-five hour work week indicates, this view persists.

The economy-wide unionization that is commonplace throughout Europe also reflects the fallacy of composition. It is one thing for a union to increase the wages of workers *in a specific occupation*—teachers or machinists, for example. It is quite another for an economy-wide union to increase the wages of all workers. When a union monopoly is limited to a specific occupation or industry, often it will be able to restrict the labor supply into that industry or use its bargaining power to push the wages of the unionized workers upward. The gains of workers in the specific occupation or industry are primarily at the expense of other workers who now face more intense competition for jobs and confront higher prices for the goods produced by the union monopoly.

When all or most all workers are unionized, however, it will not be possible to foist the cost of higher wages for union members onto other workers. In this case, the higher wages will merely lead to higher costs, a lower level of total output, and less employment. This is particularly true in today's global marketplace. Higher wage costs will make it difficult for domestic firms to compete in global product markets. Further, to the extent the higher wages reduce the rate of return on capital, domestic investors will seek more attractive returns elsewhere. This is what has happened in OECD countries that have used labor monopolies and government regulations to push wages upward. As wages and labor costs have risen, domestic capital formation has slowed, firms have expanded their operations abroad, and employment has fallen or grown only modestly. Correspondingly, unemployment has risen and remained persistently high even during periods of economic expansion.

Important lessons can be learned from this experience. As we push toward the millennium, policymakers in Europe and other places with highly regulated labor markets should understand that the road to lower unemployment is through market liberalization. And policymakers considering additional labor market regulations in the United States and elsewhere need to reflect on the higher unemployment rates and sluggish job growth that have accompanied such interventions in other countries.

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