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Labour markets and the crisis

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ABSTRACT/RÉSUMÉ

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The deep recession has led to a marked deterioration in labour market conditions in the OECD area. This paper, which draws heavily on other ongoing analytical work at the OECD, takes stock of recent labour market developments, highlights some of the key uncertainties in the early stages of the upturn, and discusses the policy options available to damp any further, structural deterioration in labour markets and facilitate an eventual, sustained, job-rich recovery.

JEL Classification: E24, J08, J20

Keywords: Crisis, recovery, employment, unemployment, policies

Les marchés du travail et la crise

La profonde récession qui a frappé l'économie de la zone OCDE a entraîné une dégradation marquée de la situation des marchés du travail. Ce document examine l'évolution récente du marché du travail, quelques-unes des principales incertitudes pendant les phases initiales de la reprise et examine les options de politiques économiques disponibles pour amortir une nouvelle dégradation structurelle durable de leurs marchés du travail et faciliter à terme une reprise pérenne riche en emplois.

Classification JEL ; E24, J08, J20

Mots clés : La crise, la reprise, l'emploi, le chômage, les politiques

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LABOUR MARKETS AND THE CRISIS[1]

1. Introduction

The deep recession in the OECD economy has led to a marked deterioration in labour market conditions. The numbers unemployed in the OECD rose by over 16 million people over the two years to February 2010, employment declined by 2¼ per cent, and many employees are working fewer hours than before the crisis. While this aggregate pattern is a familiar one from previous downturns, underlying it are some unusual developments in individual countries compared with past experience. These developments will affect employment patterns during the recovery, and condition the actions countries take to offset any further, long-lasting structural deterioration in their labour markets and facilitate an eventual, sustained, job-rich recovery.

This paper, which draws heavily from other ongoing analysis at the OECD, focuses on labour market developments and challenges in a group of 11 OECD economies, comprising the G7 economies plus the Netherlands, Belgium, Sweden and Switzerland. Although employment in these economies represents only around two-thirds of total employment in the OECD, the employment declines in them since the advent of the crisis account for more than 90% of the net job losses in the OECD area. Thus they are at the heart of the jobs crisis which OECD governments are now having to tackle.

Key recent developments and uncertainties in these economies include the following:

- The combined responses of hourly labour productivity and total hours worked were large in the recent recession, reflecting the severity of the downturn. Past differences in adjustment patterns between the North American economies, Japan and the European economies were reinforced, with large declines in total hours worked in both the United States and Canada, offset by a rise in hourly labour productivity relative to trend, an unusual development during a recession. Elsewhere, hourly productivity fell even more than usual, while declines in total hours worked were more muted.

- The decline in total hours worked was accounted for mainly by lower employment in the United States, but by declines in average hours worked in most other economies, with enhanced use of short-time working schemes accounting for only a small part of the reduction in the latter in most economies.

- Unemployment rose in all of the countries with the exception of Germany. The rise was greatest in those economies in which hourly labour productivity held up relatively well, and smallest in

1. This paper was drafted by Sveinbjörn Blöndal and Nigel Pain, Head of Division and Senior Economist, Macroeconomic Policy Division, OECD Economics Department, with statistical support provided by Patrice Ollivaud. Valuable comments were received from colleagues in the Directorate for Employment, Labour and Social Affairs. A preliminary version of this paper was discussed in a meeting of Working Party No. 3 of the OECD Economic Policy Committee on 13 April 2010.

those in which average hours worked shrank the most. There has been considerable heterogeneity in labour force participation during the recession. As in the past, participation barely changed in the United States. However, unusually, it rose in Japan and some European economies.

- Given past experience, job growth in the upturn could be especially weak, or even remain negative, for several years in countries that had a pro-cyclical productivity and working-hours response during the recession. In a typical economy, at the trough of the recession, there was scope to raise output by over 5½ per cent from returning average hours worked per person and labour productivity per hour to their normal trend levels. There is considerable cross-country variation around this average and also considerable uncertainty over the extent to which the crisis will have adversely affected the level of trend productivity.

- Thanks to past reforms, vulnerability to long-lasting reductions in participation or increases in structural unemployment after a prolonged period of labour market slack may be somewhat less than in the past. Nonetheless, the current crisis could reduce trend labour force participation on average by up to a full percentage point in the OECD in the medium term, and raise the long-term unemployment rate by around half a percentage point in the five years following the onset of the recession. There is considerable cross-country variation around both of these estimates and uncertainty about their size. Both will negatively influence potential output and fiscal positions.

Going forward, the lessons from past experience can help guide the mix of labour market and other structural policy settings in the recovery. Difficult choices will have to be made, reflecting the need to implement reforms whilst pursuing sustained fiscal consolidation in a context of limited political capital. The following are some pointers for policies that would improve the functioning of the labour market coming out of the crisis:

- Countries have avoided major structural policy mistakes made in earlier crises, notably the encouragement of early retirement, but some crisis-related measures need to be phased out. Short-time working schemes helped to maintain workplace attachment during the downturn, but should soon begin to be wound down, to avoid trapping workers in reduced hours and slowing the necessary reallocation of resources towards new and more productive activities. Increases in either the level or duration of unemployment benefits introduced during the recession will also need to be addressed, to avoid damaging job-search incentives.

- Marginal employment subsidies, which have been introduced or expanded in a few countries in the wake of the crisis raise complex design issues, and entail budgetary costs, but could help to raise employment in the early stages of the recovery. Cuts in labour taxes would in normal circumstances also provide an avenue for better employment performance, but may be consistent with the current fiscal environment only occasionally. Even so, fiscal consolidation should, as far as possible, refrain from raising taxes on labour income.

- Existing disincentives associated with high and long-lasting unemployment benefits need to be countered with stricter work-availability and willingness-to-work requirements and stronger activation in general.

- Increased expenditure on effective active labour market programmes, including measures to further enhance job search and increase training for those most at risk of long-term unemployment, would also help to reduce structural unemployment. Though the efficiency of various activation schemes in adverse labour market conditions has yet to be tested, such measures may be particularly useful as the recovery takes hold and vacancies rise. Such expenditure would, however, require budgetary offsets elsewhere.

- A reform package including a rebalancing of employment protection, with less strict protection for regular workers but more protection for atypical workers, combined with more effective activation and more competitive product-market regulations could make the recovery relatively job-rich, facilitate necessary structural reallocation in the economy and minimise the risk of growing labour market duality from the crisis.

2. Labour market performance since the onset of the downturn

This section provides an overview of some of the key labour market developments since the onset of the recent recession, a period in which the aggregate labour market adjustment to the decline in output included both a number of familiar features and some new ones. The primary focus is on developments through the recession - here taken to be the period from the peak level of real GDP to the trough, augmented by an initial look at developments during the early stages of the recovery.

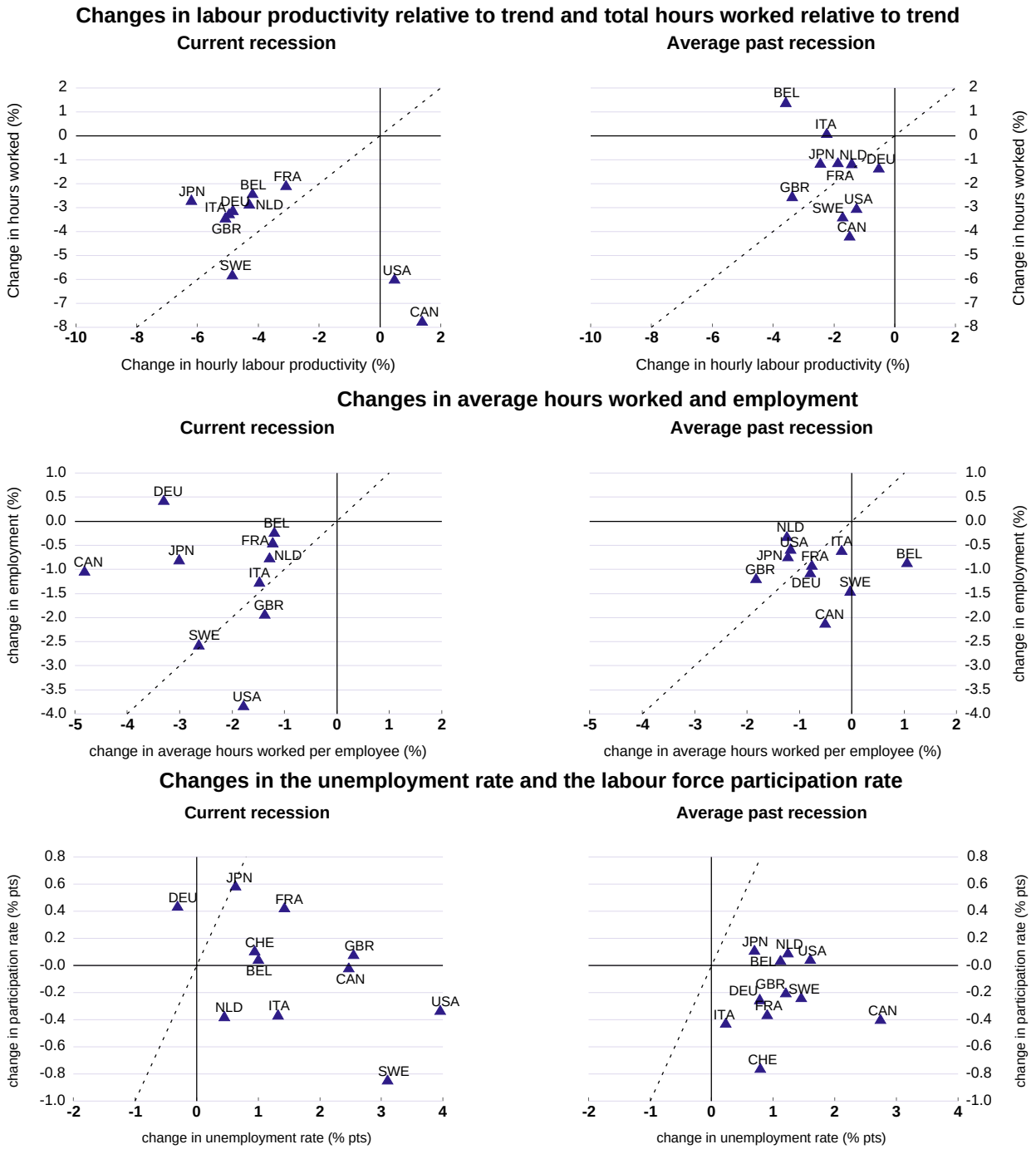
The aggregate response of the labour market during the recession

With the recent recession being unusually deep, the combined responses of labour productivity per hour and total hours worked were much larger than on average in earlier recessions (Figure 1, upper panel).[2] As in the past, a decline in total hours worked relative to trend was the dominant form of adjustment in the North American economies (and Sweden); in contrast, the decline in productivity relative to trend was the dominant source of adjustment in Japan and most European economies, where employment protection for regular workers is comparatively strong.[3] Such differences were accentuated in the recent recession, with hourly productivity actually rising relative to trend in the United States and Canada, and declining more than in the past in Europe and Japan. The rise in productivity per hour worked in the United States and Canada during the recent recession indicates the considerable attempts made by businesses in these economies to restructure and improve efficiency. It may also reflect the extent to which reductions in hours were concentrated amongst lower-productivity employees.

2. The dates for the most recession are given at the foot of Figure 1. Recessions are defined as occuring between local peaks and the troughs of the level of real GDP. A local peak (trough) occurs at time t when $y_t > (<) y_{t\pm k,}$ where k = 1, 2. The turning points are further refined by the requirements that: the peaks and troughs must alternate; each cycle must have a minimum duration of five quarters; and each phase (expansion, recession) must be at least two quarters long.

3. The estimates of trend hourly labour productivity and trend hours are taken from the calculations reported in OECD (2009d). The trend hours series is constructed from separate estimates of trend average hours worked and equilibrium employment.

Figure 1. Comparison of peak-to-trough evolution in the current downturn compared to past downturns



Note: The output peak and output trough in the recent recession are defined in all charts as: Belgium 2008Q2-2009Q2; Canada 2007Q4-2009Q2; Switzerland 2008Q2-2009Q2; Germany 2008Q1-2009Q1; France 2008Q1-2009Q1; United Kingdom 2008Q1-2009Q3; Italy 2008Q1-2009Q2; Japan 2008Q1-2009Q1; Netherlands 2008Q1-2009Q2; Sweden 2008Q1-2009Q4; United States 2008Q1-2009Q2. Dotted lines are 45 degree line.

Source: OECD Economic Outlook 86 database; OECD, Quarterly National Accounts database; OECD, Main Economic Indicators database; and various national sources for data on hours worked.

The extent of the contraction in total hours and the form it took differed considerably across countries. The fall in hours worked was reflected in Germany, Japan and Canada to an unusually high degree in lower working time per employed person rather than in reductions in the number of persons employed (Figure 1, middle panel). In contrast, employment bore the brunt of the adjustment in the United States, despite a marginally higher decline in hours worked per person than in the past. Elsewhere, the decline in working hours per employed person broadly matched the decline in employment.

The declines in average hours worked reflected three factors. First, the normal endogenous changes in working time may have been strengthened by the unusually good employment situation prior to the recession, with firms keen to hold on to new skilled recruits, amidst possible concerns about future recruitment difficulties arising from demographic changes, especially in Germany and Japan. Second, the downturn was concentrated in sectors that traditionally have relatively long hours worked (construction and manufacturing). Thirdly, a much publicised, but in practice fairly modest, direct contribution came from new or expanded short-time working schemes (see Section 4 and Box 1). Even in Germany, whose longstanding scheme was expanded strongly during the crisis, it accounted for only about a quarter of the fall in working time.. However, such schemes could have had a somewhat higher impact than pure accounting decompositions might suggest, since widespread expectations of their use during the recession may have influenced collective bargaining decisions and, hence, damped wage settlements and job losses.

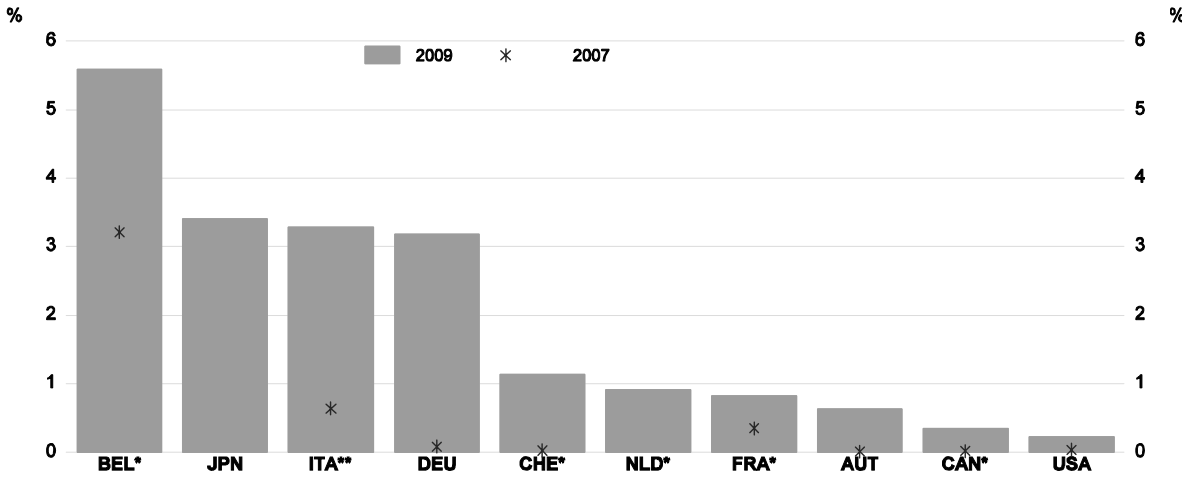
Box 1. The impact of short-time working schemes

Short-time working schemes (STW) are one of several mechanisms that can result in an endogenous adjustment of hours worked rather than employment in response to output shocks. Such schemes, which have been expanded in many countries since the recession began, are clearly one factor behind the reductions in working hours that have been seen in many countries, although they are estimated to cover only a small fraction of employees, typically less than 5 per cent (see the Figure below; OECD, 2010b). Given this, it is clear that other factors are likely to have also contributed to the reduction in average hours worked in most economies. For instance, in Japan, assuming that a typical employee in a short-time working scheme moved from working average hours to half-time, then use of STW schemes (covering around 3-3½ per cent of employees) can account for no more than one-half of the overall decline in average hours worked over the course of the recession.

Evidence for Germany suggests that the direct impact of the STW schemes could be even smaller than this. One recent study suggests that the STW scheme accounts for only one-quarter of the reduction in average hours worked between 2008 and 2009 (IAB, 2009). The principal source of flexibility, accounting for approximately 40% of the recent reduction in working time, has been employer-initiated reductions in working time, implemented within existing collective agreements. Other important factors were reductions in the volume of paid over-time work (20% of the total reduction) and encouraging employees to run down the positive leave balances accrued in their individual working-time accounts (another 20%). Such factors are likely to be reversed over time as the economy recovers. This accounting decomposition may understate the broader effects of short-time working schemes because of the extent to which their existence encourages firms and workers to trade-off lower real wages and hours worked for job preservation.

Nonetheless, the use of STW schemes has brought some benefits. In particular, it has helped maintain workforce attachment during the recession. An econometric analysis using industry-level data for a number of European countries provides preliminary evidence of the effectiveness of STW schemes during the recession (OECD, 2010b). The results suggest that STW schemes do achieve some of their goals, reducing the employment sensitivity of *permanent* workers to output changes and increasing the sensitivity of average hours worked, although they do not appear to have reduced the sensitivity of *temporary* employment to output shocks. They also suggest that the typical STW scheme has had only a 50% deadweight cost during the recent recession, although there are differences across countries, reflecting differences in the design of the schemes. As discussed in the main text, a well-designed scheme, such as that in the Netherlands, can reduce costs.

Box Figure 1. Employees participating in short-time work schemes as percentage of all employees



Source: OECD (2010b). Data on short-time workers are from an OECD-EC questionnaire, except in the following cases. * indicates that data are from national sources. ** indicates that data are OECD estimates using flows data from an OECD-EC questionnaire or from national sources. Data on employees are from OECD, Main Economic Indicators Database.

In past recessions, declines in employment have typically been accompanied more by rising unemployment rates than by falling participation rates (Figure 1, lower panel). This pattern has been particularly pronounced in the United States, as compared with the main continental European countries (where early retirement schemes and state-supported education may have constituted alternatives to labour supply). This time, there was considerable heterogeneity in labour force participation during the recession, with the participation rate rising in around half of the economies shown, but declining in the others.[4] The participation-rate response continued to be muted in the United States, but in continental Europe and Japan participation rates actually increased in the recent recession - in many cases a break with past patterns. One factor holding up participation in these countries could be that employment losses were particularly concentrated in male-dominated activities (manufacturing, construction) and that males are likely to have a stronger labour force attachment.

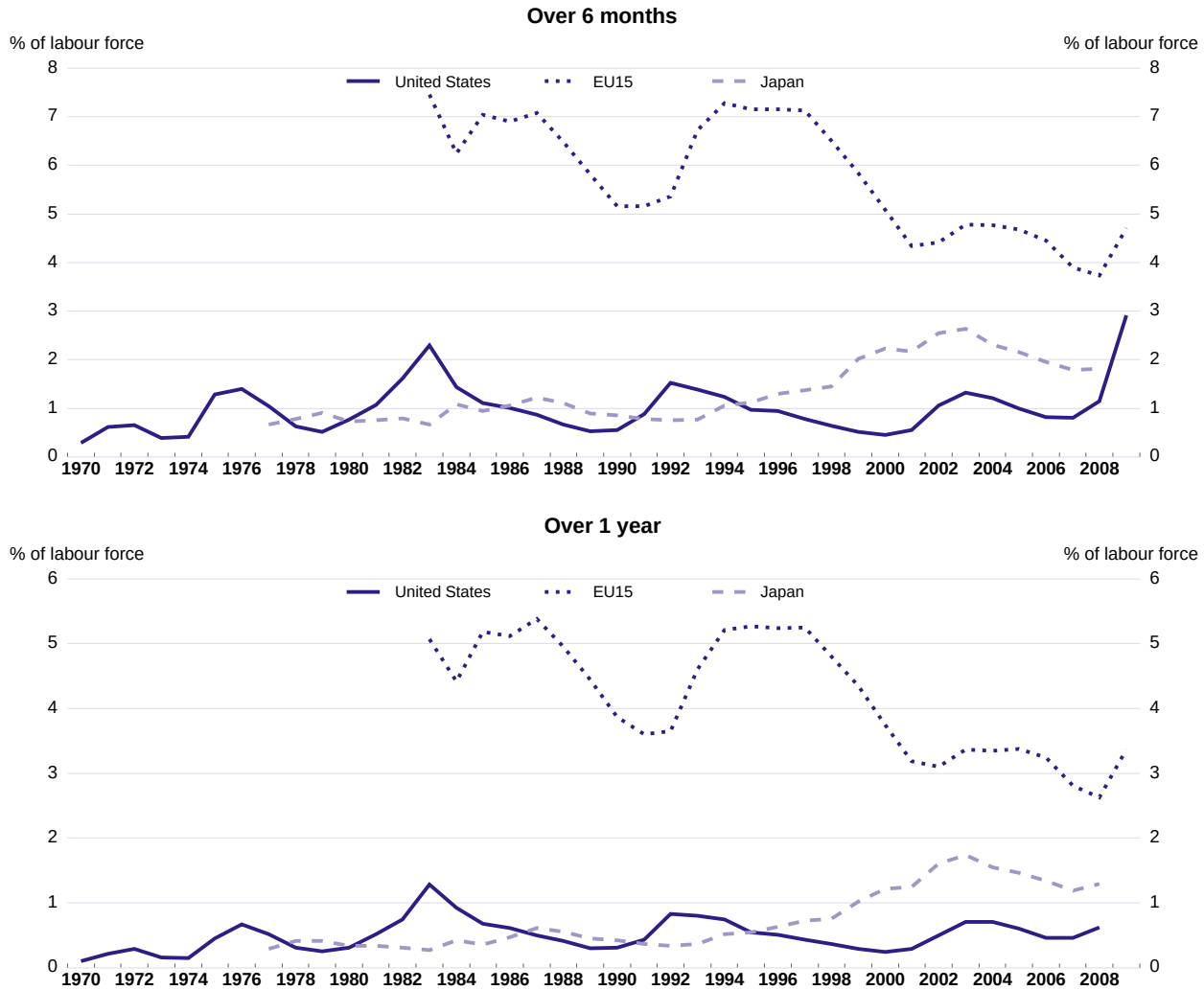
These various adjustments affected the highly varied unemployment response to the crisis. Hence, the recent recession generated a strong rise in unemployment in the United States, with labour productivity holding up, working hours per employed person declining only modestly and participation responding little. In Japan, both labour productivity and working time per employed person fell by more than normal, helping to cushion the rise in unemployment, although this was offset by an unusual rise in participation during the recession. Germany experienced a stronger cyclical fall in productivity and a larger drop in working time per person than usual, which was only modestly offset by higher participation; the end result was that unemployment declined slightly during the recession. In Canada, the rise in unemployment was relatively large given the decline in output and the experience, on average, of past recessions (OECD,

4. The heterogeneity of participation-rate effects, both across countries and across time, will reflect a number of opposing forces. The loss of family income and the wealth losses associated with the asset price declines increase the incentive of individuals to find work, while the difficulties of finding a new job discourage job search and lead to exiting from the labour market (through early retirement for older workers and increased education for young workers for example).

2010b); in contrast, in most European economies the change in the unemployment rate during the downturn was small by historical standards, given the fall in output.

The increase in aggregate unemployment has been accompanied by a rise in long-term unemployment, especially in the United States where the six-month-plus rate has risen to historical peaks (Figure 2). In part, this development may be associated with (causality running both ways) the exceptionally prolonged extensions made to unemployment benefit duration during the current downturn (Feroli, 2010), although it will also reflect the natural dynamic of inflows and outflows from unemployment, and the tendency for long-term unemployment to rise as a share of total unemployment with a lag of 12-18 months. As in earlier downturns, the rise in unemployment in the OECD area has been particularly marked for youths and for temporary workers. But, in contrast to past experience, male unemployment has risen much more rapidly than female unemployment, reflecting the concentration of the recession in industrial and construction sectors (OECD, 2010b).

Figure 2. Unemployment rate by duration



Source: OECD, Labour Force Statistics database; Eurostat; and OECD, Main Economic Indicators database.

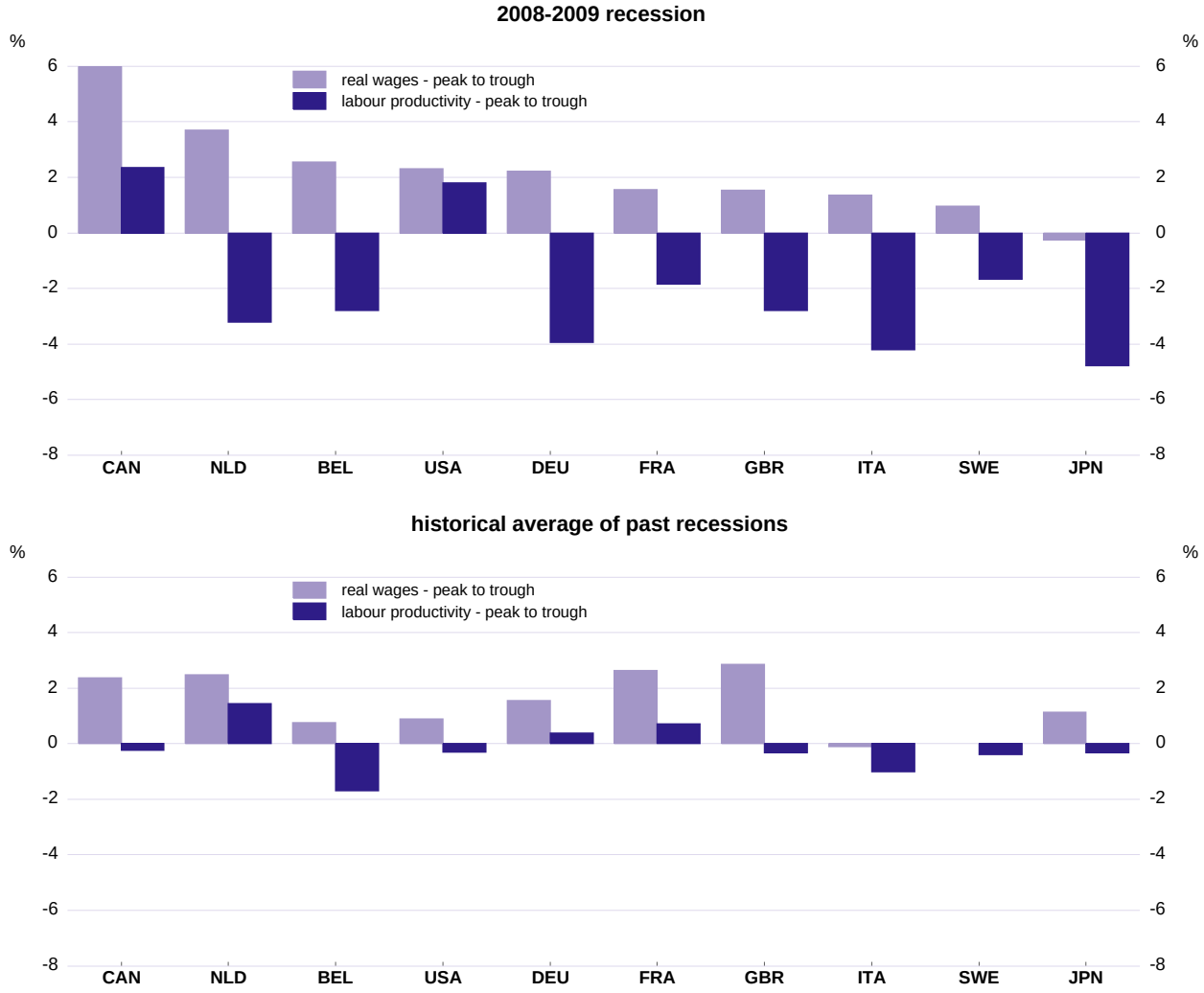
In most countries, real hourly compensation per employee continued to rise through the recession, despite the reductions in hourly productivity and increasing labour market slack (Figure 3).[5] Real wage increases were broadly in line with advances in productivity only in the United States. Elsewhere, there continued to be evidence of real wage rigidities. The growth of real wages was, however, weaker than in past recessions in France, the United Kingdom and Japan. This enhanced wage moderation should have served to offset the fall-out on jobs from the recession in these economies but may, on the other hand, also have weakened aggregate demand. In the euro area and United Kingdom, around one-third of firms instigated pay freezes during the downturn (ECB, 2009; Hackworth, 2009),[6] although only a small proportion sought to cut wages.[7]

5. Real compensation is calculated using nominal compensation per hour and the GDP deflator. In contrast to Figure 1, the hourly productivity series shown in Figure 3 is derived using actual productivity per hour rather than hourly productivity relative to trend.

6. The survey evidence in ECB (2009) indicates that a little over one-third of the firms surveyed in euro area countries had instigated pay freezes as of mid-2009. Only 2-3% of firms had cut wages. In the United Kingdom, just under 35% of employees experienced a freeze in pay settlements in 2009, with only 1% having a negative settlement (Hackworth, 2009).

7. The relatively strong real wage growth observed in the Netherlands in the recent downturn partly reflects the impact of collectively negotiated agreements for employees on fixed-term contracts concluded prior to the onset of the recession. In Sweden, a large fraction of employees also had their contracts renewed close to the peak of the business cycle.

Figure 3. Real hourly wages and hourly labour productivity during the recession



Note: Real wages are defined as nominal compensation per employee hour, deflated by the GDP deflator. Due to a lack of consistent data, the number of historical episodes for real wages is typically smaller than for productivity per worker.

Source: OECD Economic Outlook 86 database; OECD, Quarterly National Accounts database; and various national sources for data on hours worked.

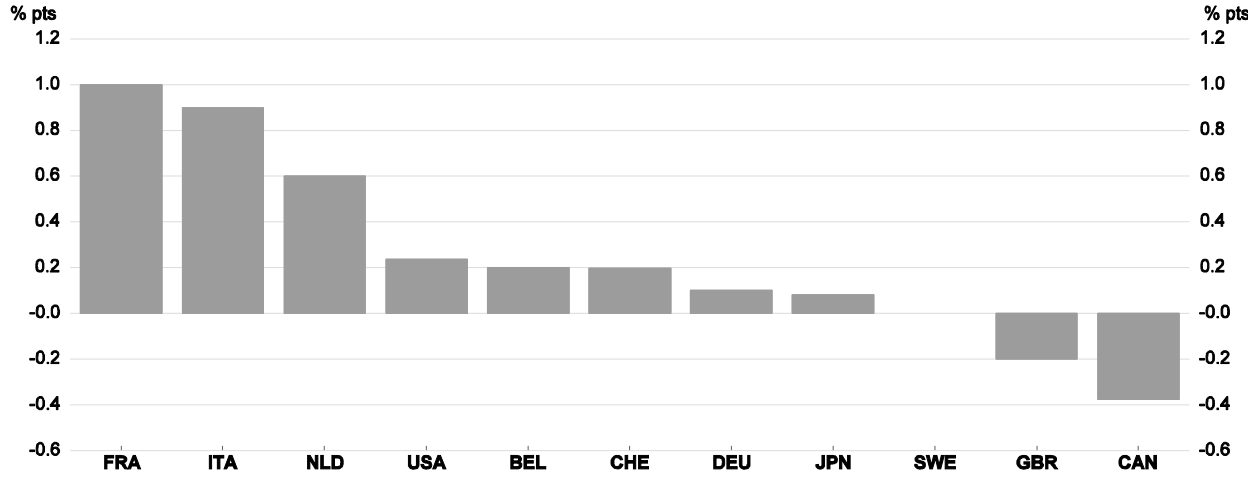
Labour market developments since the trough in output

The trough of aggregate output in the OECD economy was reached in the second quarter of 2009.[8] Aggregate unemployment has subsequently continued to rise and employment continued to contract, as is usual in the early stages of any upturn (Figure 4). However, the extent of the further deterioration differed across countries and has been somewhat smaller than anticipated. Indeed, recent monthly data have shown signs that the (harmonised) unemployment rate may have already peaked in some countries, with small declines being seen in the United States and Canada, alongside some increase in total hours worked. In

8. In some of the economies considered in this paper, the trough was a quarter earlier; in others it occurred only in the latter half of 2009.

Japan, the unemployment rate has also now fallen back from the peak rate last July and in the United Kingdom it has edged down since the turn of the year. However, in the euro area, aggregate unemployment has continued to rise, albeit at a diminishing pace, and total hours worked have continued to contract. The participation rate has changed little in most economies subsequent to the trough in GDP, with the exceptions of the United States and Canada where participation has declined, consistent with enhanced discouraged-worker effects. The counterpart to the continued job losses since the start of the recovery in output has been some improvement in labour productivity per worker in most economies, although with the exception of the United States and, to a lesser extent, Canada, productivity per worker remains well below that at the onset of the recession. Timely data for labour compensation tend to lag behind the availability of labour force statistics, but the data available indicate that real wages have picked up somewhat in around half of the economies since the trough in output, notwithstanding the persistently large slack in labour markets.

Figure 4. Changes in the harmonised unemployment rate since the GDP trough



Note: Difference between latest month available and end of quarter with GDP trough. The latest available month is March 2010 for the United States and Canada, December 2009 for the United Kingdom and Switzerland and February 2010 for all other countries.

Source: OECD Main Economic Indicator database.

3. Key risks and uncertainties during the recovery

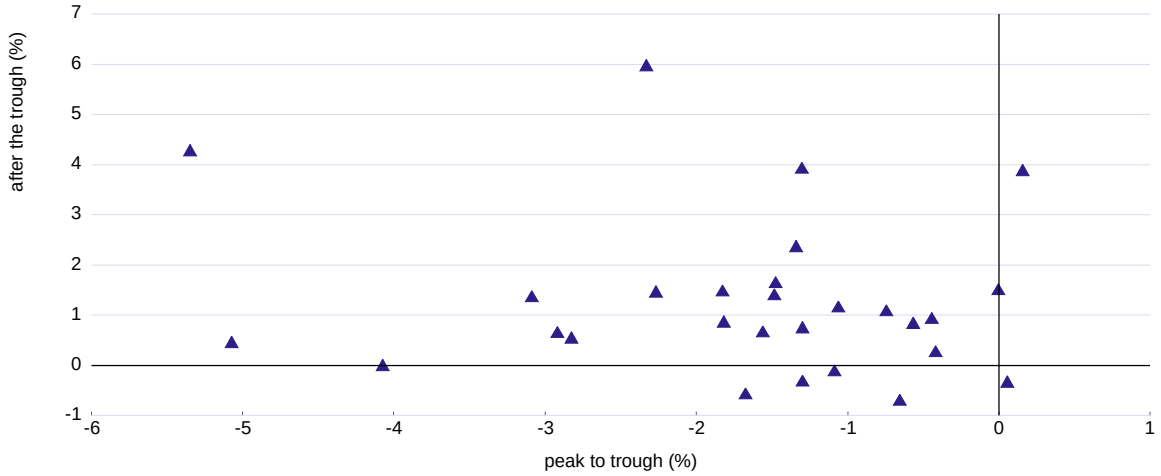
What will happen to job growth and hours worked in the recovery?

The experience of past recoveries is that it can take several years before strong job growth is achieved, raising the risk of a "jobless recovery", especially if final demand recovers only slowly. The key factors that could impede job growth in some countries are the widespread cuts in working hours and the declines in productivity per hour worked seen since the onset of recession.[9] Taken together, the likely unwinding of these factors decreases the likelihood of a "job rich" recovery in many countries, particularly in Europe and Japan.

9. Remaining real wage rigidities could also dampen job creation, as they prevent the downward adjustment of labour costs that might otherwise result from the degree of labour market slack, although it is not clear that additional disinflation is particularly desirable in the present low inflation environment.

Past experience indicates that marked declines in hourly productivity during the recession are likely to be mirrored in the early stages of a recovery, whereas declines in average hours worked are often not reversed. A sample of 27 past recessions and upturns for which comparable quarterly data are available in the countries considered,[10] illustrates that declines in productivity relative to trend during the recession are quickly, although not necessarily completely, reversed in the first few quarters of the upturn (Figure 5).[11] The experience of past adjustments in average hours worked relative to trend is much more mixed: in two-thirds of the recessions average hours declined relative to trend, but rose relative to trend in only about half of the subsequent upturns (Figure 6).

Figure 5. Changes in hourly productivity relative to trend in recessions and subsequent recoveries



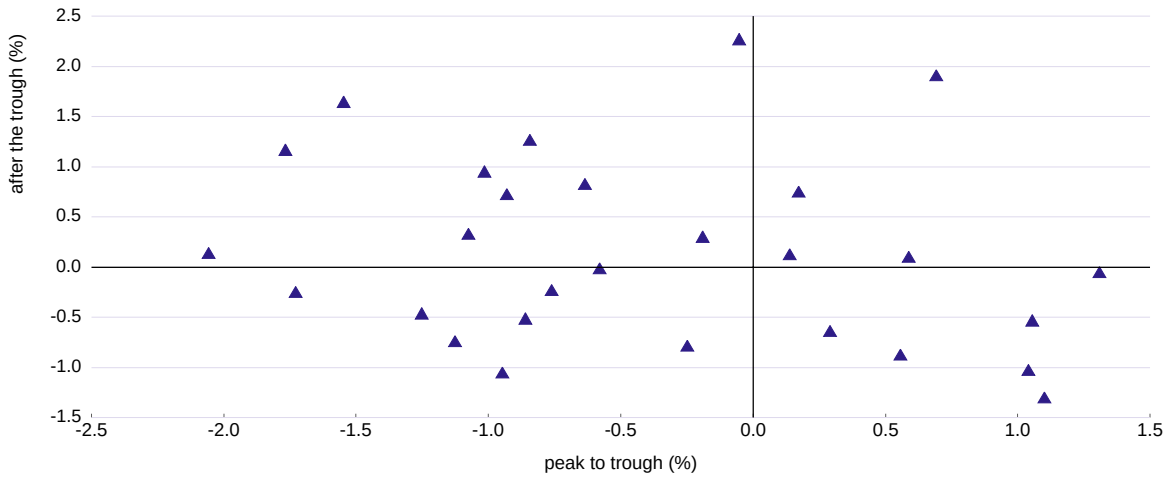
Note: Percentage change in hourly productivity relative to trend.

Source: OECD Economic Outlook 86 database; OECD, Quarterly National Accounts database; various national sources for data on hours worked; and OECD calculations.

10. The upturn covers the first N quarters subsequent to the trough in GDP, where N is the number of quarters from the previous peak to the trough in GDP.

11. In twenty-five of the historical recessions, there was a decline in productivity relative to trend. In four-fifths of the subsequent upturns, the growth in productivity relative to trend was positive.

Figure 6. Changes in hours worked per employee relative to trend in recessions and subsequent recoveries



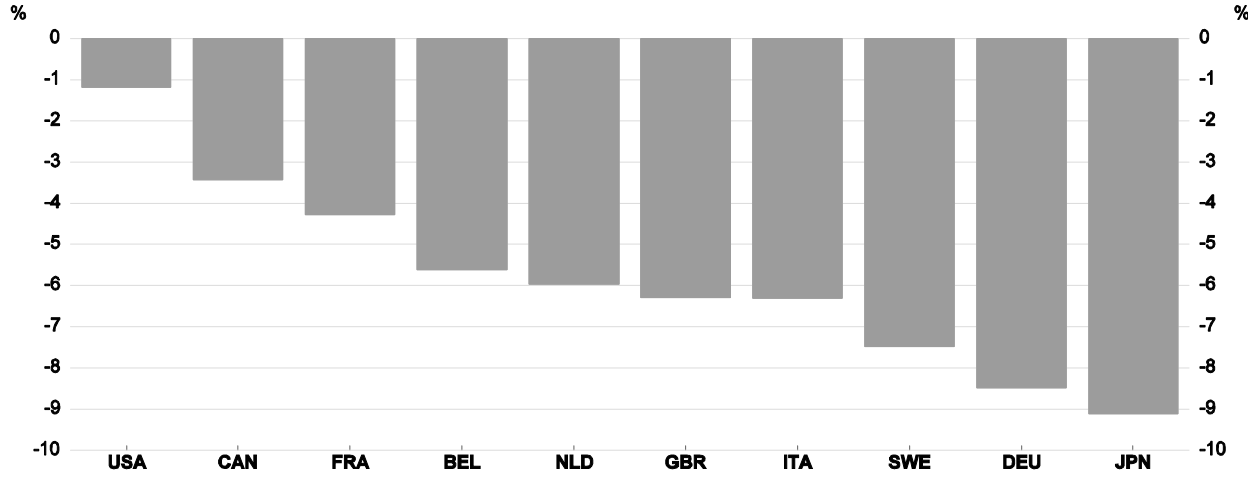
Note: Percentage change in hours worked per employee relative to trend.

Source: OECD Economic Outlook 86 database; OECD, Quarterly National Accounts database; various national sources for data on hours worked; and OECD calculations.

As a simple gauge of the risk of a jobless recovery, Figure 7 shows the contributions to the cyclical change in output over the recession arising from cyclical changes in hours worked per employed person and productivity per employed hour.[12] It suggests that, in a typical economy, there is scope to raise output by over 5½ per cent if these cyclical changes were to be reversed in the recovery from recession. And in several countries it could take a long time for job growth to resume if the recovery in output from the recession was to be only moderate and met by increases in hours worked per employed person or hourly productivity. The sole exception is the United States, where the combination of hours worked per person and productivity per hour did not change that much relative to trend through the recession. Based on this reasoning, Japan, Germany and Sweden appear most at risk of a prolonged jobless recovery.

12. GDP growth can be decomposed into the growth of employment, hours worked per employee and productivity per employee hour. Letting Y, E and H denote GDP, employment and average hours worked respectively, and Y*, E* and H* denote their trend equivalents, the deviation of GDP from its trend at any point in time can be expressed as: $\ln(Y^*/Y) = \ln(E^*/E) + \ln(H^*/H) + \ln([Y^*/E^*H^*]/[Y/EH])$. The calculations reported in figure 7 are derived using the change in this decomposition between the recent peak and trough in output. The estimates of trend productivity, hours and equilibrium employment are taken from OECD (2009d).

Figure 7. Contribution to cyclical change in output during the recession from cyclical changes in average hours and hourly productivity



Note: Combined effect of cyclical changes in hours worked per employed person and productivity per employed hour from the peak to the trough in output in the recent recession. Cyclical changes are calculated by subtracting estimated structural changes in hours worked and hourly productivity from the actual changes. The structural change uses estimates of changes in trend hours worked and trend labour productivity per hour from (OECD, 2009d). These calculations assume no further reductions to trend hourly productivity and average hours worked in the aftermath of the recession.

Source: OECD Economic Outlook 86 database; OECD, Quarterly National Accounts database; various national sources for data on hours worked; and OECD calculations.

There is considerable uncertainty attached to such calculations. In particular, the recession might have reduced trend hourly labour productivity permanently by more than allowed for in the current OECD estimates of potential output and potential trend productivity growth at the trough of the recession (OECD, 2009d). If so, with some such effects becoming apparent only as the economic recovery progresses, the estimates of the cyclical decline in hourly productivity through the recession will be overstated in Figure 7, and the scope for a jobless recovery will be correspondingly reduced. A further caveat, reflected in Figure 6, is that some employees currently working fewer hours than usual could opt to continue to do so, durably reducing trend average hours and the estimated size of the cyclical decline in hours worked during the recession. In part, such decisions will depend on the financial incentives for increasing working hours. Marginal effective tax rates remain high in some OECD countries for certain categories of low-income workers (OECD, 2007b), mostly reflecting the high rate of benefit withdrawal as income increases, and may have been compounded by transfers associated with short-time working schemes, resulting in little or no net income gain from working longer hours.

What will happen to long-term and structural unemployment?

Long-term and structural unemployment typically rise during downturns. Severe downturns can be particularly costly in this respect (Furceri and Mourougane, 2009; ECB, 2009). Typically, the peak in estimates of structural unemployment is attained five years after the beginning of a severe downturn.[13] The historical pattern has been that it returns to pre-crisis levels in the following five years only in countries

13. Furceri and Mourougane (2009). The ECB (2009, Box 2), finds that following systemic financial crises, sustained employment growth resumes only after seven to eight years.

with employment-friendly policies and institutions; in other countries it persists for protracted periods.[14] However, it can be difficult to distinguish empirically between a structural rise in unemployment and slow adjustment back to the original equilibrium.

Some of the institutions and policy settings which cushion the initial impact of economic shocks on output and unemployment, such as heavy labour and product market regulations, are also factors that may slow the adjustment back to equilibrium.[15] By contrast, moderate employment protection (especially for permanent workers), comparatively low average replacement ratios and competition-friendly product market regulations are factors that could speed up the adjustment in the wake of shocks (Furceri and Mourougane, 2009). Thus, more heavily regulated countries may see smaller initial rises in unemployment following a recession, but are more likely to see higher joblessness for longer and suffer greater unemployment hysteresis and risks of unemployment turning structural (Table 1).

Table 1. Potential vulnerability of economies to an increase in structural unemployment

		Change in harmonised unemployment rates from peak to trough		
		Small *(less than a 1 pp increase)*	**Medium-small** *(between a 1 and 3 pp increase)*	**Large** *(at least a 3 pp increase)*
Estimated relative sensitivity of structural unemployment to a cyclical increase in aggregate unemployment	**Low**		Canada Sweden	United States
	Medium	Germany Japan	France United Kingdom	
	High	Italy Netherlands	Belgium Switzerland	

Source: OECD (2010b)

There are some reasons for believing that any increase in long-term and structural unemployment following the current recession could be lower than in the past. The rise in actual unemployment has been comparatively moderate in a number of countries and reforms to enhance labour and product market flexibility in the 1990s and 2000s have also made OECD economies less vulnerable to higher long-term and structural unemployment following a severe shock. For most European countries, where such reforms have been greatest, preliminary estimates suggest that the reforms could have reduced the share of any unemployment increase transmitted into long-term unemployment by up to one-quarter (OECD, 2010a).

14. OECD research undertaken within the context of the reassessment of the Jobs Strategy found that, on average, changes in policies and institutions can explain about half of the cross-country variation in unemployment since the early 1980s (Bassanini and Duval, 2006; OECD, 2007; Gianella *et al*.,2008).

15. See, for example, Bassanini and Duval (2006), Duval *et al*., (2007), Furceri and Mourougane (2009), Machin and Manning (1999) and Blanchard and Wolfers (2000).

Current OECD medium-term projections include estimates of long-term unemployment derived from country-specific equations linking the long-term unemployment rate to movements in the aggregate unemployment rate (OECD, 2009d). On this basis, taking into account the effects of past reforms, the long-term unemployment rate is expected to rise by up to half a percentage point in the five years following the onset of the recession in the majority of economies, although in some countries the increase could be much higher. OECD calculations of potential output incorporate an assumption that two-thirds of any increase in long-term unemployment translates into structural unemployment in continental Europe, but only one-third elsewhere (OECD, 2009d).[16] Taken together, estimated increases in structural unemployment until its peak range from between ¾ to 1 percentage points in Italy and the United Kingdom, to around ½ percentage point in most continental European economies to under ¼ percentage point in the United States, Canada, Japan and Sweden. As unemployment eventually falls, leading also to lower long-term unemployment, a (partial) reversal of structural unemployment could follow.

There is considerable uncertainty about the size and cross-country dispersion of these estimates, which are based on the projections of the harmonised unemployment rate reported in OECD (2009d). Recent developments suggest that the rise in unemployment could be more muted than projected, which would reduce the estimates of long-term unemployment accordingly. In some countries, such as Sweden and Japan, where only a limited rise in structural unemployment is projected, there appear to be particular risks of a jobless recovery at present because of the scope to raise average hours worked and hourly labour productivity. In others, such as the United States, where a large increase in the structural unemployment rate would not normally be expected given policy settings, there may be bigger risks on this occasion, reflecting a trend decline in outflow rates from unemployment (Elsby *et al*., 2010).

Another possible source of increased structural unemployment is higher labour market mismatch, although this is not reflected in the calculations described above. One source of additional mismatch might arise from the concentration of job losses in specific sectors, such as construction and manufacturing, where displaced workers may either not have the relevant skills to find employment elsewhere easily, or have only weak incentives to move to another sector.[17] A second potential source of mismatch arises from the downturn in housing markets, with the increasing incidence of negative housing equity in many countries damping labour mobility in the early stages of the recovery, potentially increasing rigidities in the job-matching process and the persistence of unemployment.[18]

What will happen to participation rates?

In the past, severe downturns have had long-lasting adverse effects on trend labour force participation. The participation decision depends on many factors, but empirical evidence suggests that the discouraged-worker effect dominates the others, with the unemployed who experience difficulties finding a new job

16. This is broadly consistent with empirical evidence which suggests that the long-term unemployed have a weaker impact than the short-term unemployed on wage bargaining and that this difference is more marked in European than non-European countries, partly reflecting differences in institutional settings (Llaudes, 2005; Guichard and Rusticelli, 2010).

17. Some manufacturing sectors may pay super-normal wages due to rent-sharing arrangements arising from weak product market competition or efficiency-wage considerations. Where unemployment benefits are related to pre-displacement earnings (including the rental element), and job openings more likely to occur in sectors without such rents in wages, the benefit level can be very high relative to likely post-displacement wages, discouraging job search.

18. Past experiences of negative equity in the United Kingdom and the United States suggest that it can have a significant adverse impact on the residential mobility of those home-owners with negative equity (Henley, 1998; Ferreira *et al*., 2008). These studies find that residential mobility rates are almost halved for such homeowners.

gradually searching less actively for employment and eventually exiting the labour market, and other potential jobseekers deterred from entering the labour force at all.[19] Typically, the largest falls in participation are for the youngest and oldest age groups. For the young, continued education is one alternative to being in the labour force. Older workers often opt for early retirement, where such options are available; the resulting effects on participation can be long-lasting if social norms change during recessions to make such labour market withdrawal more acceptable even when the economy returns to normal.

Empirical evidence suggests that stricter employment protection legislation (EPL)[20] and stronger financial disincentives to return to work, arising from the interaction of tax, benefit and pension systems, have negative effects on participation rates in the medium term following an adverse shock to activity. The reduction in labour force participation following a severe downturn is typically found to be greater in countries in which unemployment benefits are significantly reduced with unemployment duration and in countries in which there is easier access to post-secondary education (as proxied by enrolment rates).[21]

Reforms over the past three decades, such as the widespread relaxation of overall EPL across all OECD countries, may serve to damp some of the adverse participation effects observed from past severe recessions (Arpaia and Mourre, 2009). And some major policy errors in dealing with severe downturns in previous decades -- for example easing access to early retirement (OECD, 2006b) or relaxing criteria to receive disability benefits (OECD, 2009b) - have so far been avoided in the current downturn. The vulnerability of the participation rate of older workers to the current downturn should be less in those countries in which reforms have increased the reward in terms of higher pension benefits from continuing work (OECD, 2010a). More generally, the increasing importance of defined-contribution private sector pension schemes in many countries might also limit the incentives of older workers to retire if, as in the current downturn so far, asset prices remain significantly below pre-crisis levels, with implications for retirement income (Whitehouse *et al*., 2009).[22] Taking these structural changes into account, some estimates suggest that, based on past correlations between output losses and participation, the current crisis could reduce trend labour force participation on average by up to a full percentage point across the OECD, with substantial cross-country variation around this. However, this depends on the size and persistence of the deterioration in labour market conditions resulting from the recession. Recent indicators suggest that, in

19. These effects may still be partially offset as a loss of family income may also induce those previously outside the labour force - including secondary earners - to seek employment, the so-called "added worker" effect.

20. Ongoing research at the OECD suggests that the adverse effect of EPL on trend labour force participation seven to eight years after a severe downturn could be about ½ percentage point more for countries with the strictest EPL (such as France) compared to those with the least strict EPL (United States, United Kingdom and Canada).

21. In principle, however, the unemployment benefit impact is not clear cut. Reduced (or eliminated) benefit eligibility weakens incentives to be in the labour force, but anticipated future reductions in benefits can enhance job-search incentives to try and avoid this outcome (Fredriksson and Holmlund, 2006). Furthermore, if unemployment benefits decline with duration, there is an incentive to move from unemployment to inactive (long-term sickness/disability) benefits.

22. There is some early evidence of a differential participation response of older workers to the current crisis. In countries in which private sector defined-contribution pension schemes are particularly important (United States, United Kingdom and Canada), the participation rate of those aged over 55 has risen relative to the aggregate participation rate over the past two years by almost 1 percentage point more than in other OECD countries. Coile and Levine (2009) find that the retirement decision of workers aged 62 to 69 in the United States is responsive both to labour market developments (which would in the current situation encourage retirement) and stock-market returns (which would discourage retirement) with less-educated workers being more sensitive to the former and more-educated workers being more sensitive to the latter.

some countries at least, the deterioration in labour markets has not been as pronounced as previously forseen.

4. Labour market policies introduced during the crisis

Alongside discretionary and automatic budget reactions that have helped to shore up aggregate demand and thereby also labour demand, governments in the countries considered have introduced a broad range of focussed labour market measures since the onset of the recession (Tables 2 and 3).

Short-time working schemes

Most notably, almost all of the eleven countries have devoted more resources to short-time working (STW) schemes, either setting up new schemes or expanding existing ones. Such schemes are designed to minimise involuntary layoffs arising from temporary cyclical fluctuations in demand or credit availability. Typically, they provide income support or partial unemployment insurance for the workers in the schemes for a limited duration.[23] Past experience has shown that STW measures can at times lead to marked deadweight and displacement effects (OECD, 2009a), even if, as in the recent recession, they appear to have helped to damp job loss and have had comparatively limited deadweight effects (Box 1).

Care will be needed to ensure that the new or expanded short-time working schemes do not adversely hamper the economic recovery by trapping labour in short working hours and delaying the necessary reallocation of resources towards new and more productive activities. Thus, it is important that clear and credible time limits be attached to STW measures, with participation in the schemes representing a cost to firms and wage-earners, giving them incentives to wind down participation as the economy recovers. In this respect, schemes that have encouraged only viable firms to self-select into them are likely to be more effective (OECD, 2009a).[24]

Active labour market policies and job subsidies

Additional resources have also been devoted to enhancing existing, and introducing new, active labour market programmes (ALMPs), although in some cases the resources committed have not kept pace fully with the increase in unemployment. Most countries have sought to expand and/or strengthen training programmes for the unemployed and have made adjustments to their job-search assistance programmes, with some also strengthening activation requirements to encourage the unemployed to find work (Table 2). Many countries have also developed special measures dedicated to youths and others at the margin of the workforce, such as training programmes, special job assistance, apprenticeships and job subsidies. To the extent that budgetary resources permit, the maintenance or strengthening of such measures could help to ensure that the jobless can be efficiently assisted and monitored in their efforts to find jobs at a time of ongoing structural reallocation at the sectoral level. It is, however, essential that such measures be evaluated rigorously in order to establish what works and for whom, and to ensure that ineffective measures are replaced by cost-effective ones.

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23. For example, the current German scheme covers around two-thirds of the foregone net wage of employees. Employers pay social security contributions for the first six months, but none thereafter, with 50% of the contributions paid being reimbursed in the first six months. These measures for employers, with an estimated cost of EUR 2.3 billion (0.1 per cent of GDP), are due to expire at the end of 2010. The maximum duration of eligibility for employees was recently extended from six months to between 18 and 24 months, depending on when eligibility started (OECD, 2010c).

24. For example, the Netherlands introduced a requirement that all (or half) of STW subsidies be repaid if the employee is sacked during (or shortly after the end of) the period of short-time work.

Table 2. Measures taken in the area of ALMPs, short-time working and job subsidies

Country	Activation requirements to help unemployed find work	Job search assistance & matching for unemployed	Training programmes to help unemployed find work	Training for existing workers	Apprenticeship schemes	Short-time work measures	Job subsidies or public sector job creation
Belgium		X	X			X	
Canada		X	X	X	X	X	X
France		X	X	X	X	X	X
Germany		X	X	X		X	
Italy	X	X	X			X	
Japan		X	X			X	X
Netherlands		X	X	X	X	X	
Sweden		X	X	X			X
Switzerland						X	
United Kingdom	X	X	X	X	X		X
United States		X	X	X		X	X

Sources: OECD (2010a), OECD (2009c).

Job subsidies to private employers have been introduced or expanded in several countries since the onset of the crisis (OECD, 2010b). Such subsidies can take many different forms, with choices having to be made about whether they apply to all jobs, to new hires or only to new hires that are associated with net employment creation (marginal employment subsidies). A related issue is whether the subsidy is limited to the employment/recruitment of particular groups of disadvantaged workers (e.g. the young or the long-term unemployed) or employers (e.g. credit-constrained SMEs). Achieving high levels of take-up and limiting deadweight costs and displacement effects should be key objectives for whatever scheme is pursued.

The most cost-effective option is likely to be marginal employment subsidies, which is an important consideration given the need for fiscal consolidation in all OECD countries as the recovery gets underway. Acting at the margin minimises the deadweight costs typically resulting from subsidies to all jobs. Such schemes can, however, be relatively complex and have sometimes proved difficult to administer effectively.[25] A key choice, given tight fiscal constraints, is whether any new schemes should be targeted at all workers or only at the unemployed. Restricting eligibility to the latter would lower costs by reducing the scope of the scheme (the number of subsidised jobs), and possibly result in some offsetting reductions in expenditure on unemployment and other income transfer benefits if displacement effects are low. However, it could also reduce the impact of the scheme if the restrictions on eligibility reduce the pool of potential candidates for employers.[26] In practice, there has not been a widespread reliance on marginal employment subsidies since the start of the crisis, although the United States has recently joined the six other OECD countries who have introduced new schemes and the two who had existing schemes prior to the crisis.

25. Improvements in information and management systems over the past two decades should help to ease such problems.

26. The *Employment Tax Credit Program* in Canada in 1978-81 was initially targeted at workers unemployed for eight weeks or more. As the initial response to the programme was not encouraging, the programme had be revised to make it more attractive for employers in order to achieve a significant scale of support (OECD, 2009a).

Benefits and taxes

Many governments have taken measures to cushion the social impact of the crisis by extending unemployment benefits, which may also have helped to sustain aggregate demand in the recession (Table 3). Particular emphasis has been placed on broadening eligibility criteria, thus expanding the share of the working-age population covered by unemployment insurance. The concern is that these measures, if maintained, and unless accompanied by strong activation policies, could damage long-run labour market performance since they reduce job-search incentives (OECD, 2006). Explicitly temporary measures, such as those taken by Canada, Japan and the United States, are more consistent with the goal of maintaining good long-run labour market performance.

Table 3. Labour market support measures taken

Country	Eligibility for unemployment benefits	Change in duration of unemployment benefits	Change in replacement rate
Belgium			permanent rise
Canada	adjusted to unemployment	adjusted to unemployment	temporary rise
France	temporary easing	proportional to affiliation period	
Germany			
Italy			
Japan	permanent easing	temporary rise	
Netherlands			
Sweden	temporary easing		
Switzerland			
United Kingdom			
United States	temporary easing	temporary rise	temporary rise

Source: OECD (2010a).

It is notable that countries have not sought so far to open new pathways to early retirement for older unemployed workers or to relax criteria for long-term sickness or disability benefits for job losers with health problems. Such policies were pursued and failed in the past, leading in many cases to permanent exclusion from the labour market for those entering such schemes, with little impact on unemployment and adverse fiscal consequences (OECD, 2006). In a handful of countries, efforts were even made during the recession to close early pathways to retirement. Even so, caution is still needed to ensure that early retirement does not rise *de facto* via any relaxation of eligibility criteria for other inactive benefits as a result of crises. Moreover, damaging early exit from the labour force can also still occur, as early retirement options existing before the crisis may have come under greater pressure in many countries.

Several governments also introduced measures to reduce the tax burden on low-income earners (OECD, 2010a). These included targeted measures for low-income earners, such as cuts in marginal income tax rates, increases in exemption levels and decreased social security contributions on low-wage workers. Provided they are adequately financed and thus sustainable, such measures should help boost employment (OECD, 2006).

5. Tackling labour market weakness through structural policies

More general structural reforms would help to improve labour market performance over the medium term. Indeed, in the past governments have often implemented ambitious reforms during crises, with public awareness of severe economic problems reducing resistance to changes to existing arrangements. However, the empirical evidence also suggests that the need for fiscal consolidation may act as an obstacle to reform, possibly because governments need to spend political capital on fiscal retrenchment or because reforms may involve up-front costs to pay-off the beneficiaries of the *status quo*. In this crisis, governments have so far not introduced major reforms in labour and product markets, preferring to concentrate their efforts on macroeconomic policy and reforms to financial regulation. However, with the risk of labour utilisation remaining weak for a protracted period, fundamental product and labour market reforms are arguably needed now more than ever before to encourage job creation.

Reforms that can help to reduce obstacles to labour demand can take many forms:[27]

- Reducing anti-competitive product market regulations, most notably barriers to entering product markets, has been found to increase employment both via its output-raising effect and by improving the functioning of labour markets. Such reductions are especially important at present, given the need to ensure that resources are efficiently reallocated towards new and more productive activities. Notwithstanding reforms since the late-1990s, the extent of such barriers differs across countries (Figure 8), with significant restraints in some European countries and Japan.[28] Moving towards best practice could yield sizable employment gains as well as spurring productivity (Table 4).[29] In particular, reforms of regulations limiting entry in retailing, a labour-intensive sector with large productivity differences among countries (Timmer and Ypma, 2006), could result in significant job creation. Increasing opportunities and lowering costs for firms to enter markets for potential high-growth areas, such as child care, health care and care of the elderly, could also lead to sizable job gains.[30]

27. The analysis behind the Restated OECD Jobs Strategy and a review of the literature is provided in the 2006 *Employment Outlook* (OECD, 2006), Bassanini and Duval (2006) and OECD (2007a).

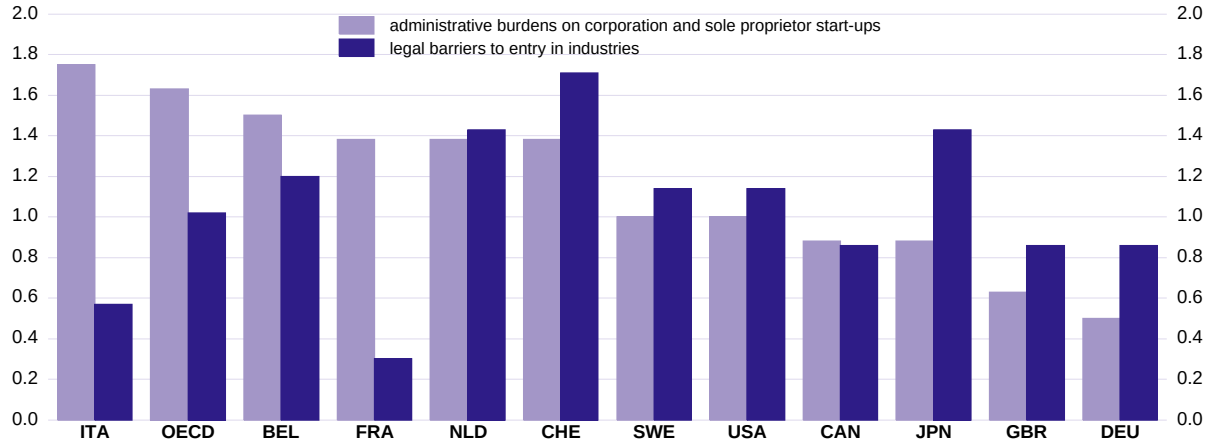
28. Factors impeding entry include: statutory entry barriers; high administrative burdens on business start-ups and corporations in general; and complex licence and permit systems.

29 . The scale of the estimates reported in this table should be taken as illustrative, as they are derived from a data set that does not reflect institutional and policy reforms put in place in recent years.

30. Relaxing state control of businesses would be good for growth and might also have beneficial labour market effects in the long run, but could initially result in labour shedding, with stronger competition prompting the affected companies to reduce any inefficiencies that may have built up in a more protected environment.

Figure 8. Barriers to entry and burdens on entrepreneurship in 2008

Index scale of 0-6 from least to most restrictive



Note: Countries are ranked according to the index for administrative burdens.

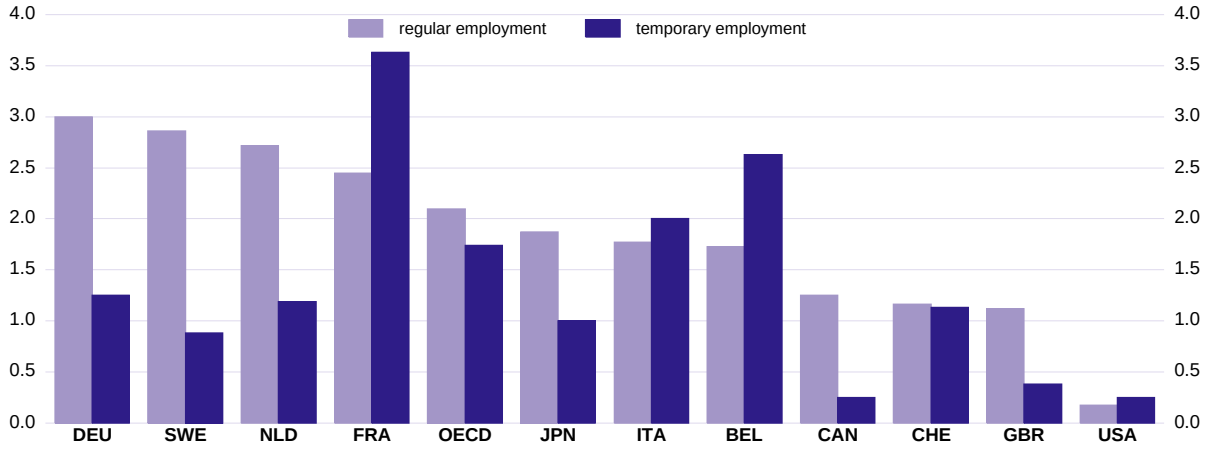
Source: OECD, Product Market Regulation database.

- A rebalancing of employment protection legislation in current circumstances would likely allow for a more rapid job recovery. Past reforms in this area have aimed to enhance flexibility by reducing constraints on temporary work without affecting protection for workers on regular contracts. The crisis has shown that such reforms not only raise segmentation and insecurity, but also imply the risk of hardship, as temporary workers have often not been covered by unemployment insurance. In addition, they could also retard human capital investment via on-the-job training.[31] Reforms should therefore be focused on lowering employment protection for regular workers in the continental European countries, where such protection is extensive, together with improving security for temporary workers in those countries in which it is weak (Figure 9). In these countries with high protection for regular workers, reducing constraints on dismissals for economic reasons, cumbersome administrative procedures, high severance payments, long advance-notice periods and judicial uncertainty would help job creation in the short term and reduce the power of labour market "insiders".

31. Job losses have also been rapid in some countries that have a high proportion of workers on temporary contracts (Bentolila *et al*, 2009).

Figure 9. Employment protection legislation in 2008

Index scale of 0-6 from least to most restrictive



- In the European countries in which sector-level wage bargaining arrangements fail to maintain wage moderation as the recovery progresses, despite large labour market slack, reforms could provide individual firms with the opportunity to opt out from such agreements or reduce the use of administrative extension of such agreements. This would allow wages to be better aligned with local conditions, and hence stimulate labour demand. The encouragement of job creation for low-productivity workers should also be given a greater weight in the setting of statutory minimum wages.

- Where payroll taxes on low-wage earners remain high despite crisis-related cuts (see above), they could be reduced through shifting of tax bases, if this can be accommodated within the needed fiscal consolidation. Empirical evidence shows that high payroll taxes have particularly deleterious effects on employment if they cannot be shifted onto wages because of binding wage floors. In those conditions, the lowering of payroll taxes can have a powerful effect on job creation.

Table 4. Policy reforms to reduce unemployment

In the average OECD country, the unemployment rate can be reduced by 1 percentage point…
- by reducing the average unemployment benefit replacement rate by 8 percentage points
or
- by reducing the overall tax wedge on labour income by 3.5 percentage points
or
- through product market liberalisation of the same order of magnitude as that which has taken place in the average OECD country
or
- by raising spending on active labour market policies per unemployed worker (as a share of GDP per capita) to the Swedish le
… or by several percentage points through a combination of the above policy reforms

Note: Based on empirical analysis carried out in the context of the Reassessment of the OECD Jobs Strategy.

Source: OECD (2007).

Reforms to further encourage the jobless to intensify their search for jobs and to increase their chances of finding a suitable job can also be initiated by taking action in the following areas, either separately or jointly, to strengthen activation:

- A reduction in unemployment benefits or a shortening of maximum duration of benefits from pre-crisis levels could reduce joblessness by making work pay more (Table 4). Although this effect is found to be robust across different studies, governments have been reluctant to change key elements of income support systems for the unemployed as this is seen to compromise their safety-net role.[32] Against this background, reforms of benefit systems have aimed at strengthening work-availability and willingness-to-work requirements, including the imposition of stricter limits on the rights of benefit recipients to reject job offers. Where such requirements still offer a large element of discretion to refuse job offers, the tightening of such rules could contribute to stronger employment growth. This option is particularly relevant in some continental European countries that provide high and long-lasting benefits.

- Reforms may also be needed to minimise permanent increases in the number of disability benefit recipients (OECD, 2009b). Examples of measures that could be undertaken include: enhanced monitoring of long-term sickness leave (often a pathway to disability benefits); moving from one-off medical assessments of benefit applicants to periodic reviews of their capacity for work; and imposing obligations on new beneficiaries, such as mandatory vocational rehabilitation

- Increased placement efforts and job-search assistance by public employment services (PES) have consistently been found to facilitate the transition from unemployment to work. Examples of measures that could be undertaken include: bringing forward the time at which job seekers are referred to suitable vacant positions or slots in ALMPs; and ensuring that individual action plans, which set out job-search requirements and needed skill developments, are established soon after benefit payments start, especially for hard-to-place applicants. Increased PES activity may be particularly effective when vacancies start rising with the economic recovery.

- Increased training for job seekers has the potential to improve employment prospects for participants. In addition, referral to training programmes has been found to be useful to test for work availability and is an integral part of individual action plans in some countries. However, evaluations of long-term training programmes have provided mixed results (Grubb and Martin, 2001). To be fully effective, programmes need to be tailored to the specific needs of participants and local labour markets and include work-place training. However, such programmes involve high costs per participant, and governments need to weigh the cost-effectiveness of such spending relative to spending on other labour market programmes to assist job placement.[33]

- The gains from returning to work could be strengthened by cutting tax rates on labour income and lowering benefit withdrawal rates. OECD (2006) estimates that a permanent one-percentage-point reduction of the average tax burden on labour could increase the employment rate by about 0.4 percentage points in the typical country over the long run. However, the weak state of public finances reduces the scope for such reforms. Indeed, there is a risk that fiscal consolidation will result in higher tax rates on labour income and greater use of means-testing of benefits with

32. An alternative is to maintain or even extend temporarily the generosity of benefits in order to fulfil their safety-net role, but to ensure that the negative impact on work incentives is offset by a tough activation stance.

33. During a deep recession the opportunity cost of investing in training may well be lower because the lock-in effect is smaller in an environment in which the average duration of unemployment spells is rising.

associated withdrawal rates. This needs to be avoided to the extent possible, and any scope for changing the tax mix to make it more employment friendly should be exploited.

There is some evidence of synergies between the different policy reforms discussed above, so that simultaneous reforms in two or more areas have stronger effects on labour market performance than the same reforms introduced in a piecemeal way (Bassanini and Duval, 2006). It might also reduce the resistance to reforms, as any perceived cost of structural reforms would be seen to be shared among a bigger group. Given the important priority of stimulating new hiring, the need for rapid results from reform is particularly acute. A reform package including both a rebalancing of EPL between regular and temporary workers and more competition-friendly product market regulation in labour-intensive industries, such as retailing and professional services, could be particularly useful for raising new vacancies, encouraging discouraged workers to return to the labour market and making recoveries more job rich. Such reforms can also have substantial effects on GDP *per capita* levels in the long run and are a comparatively low-cost way to boost potential output and labour demand.

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