

# LABOUR MARKET INSTITUTIONS AND UNEMPLOYMENT

## INTERACTIONS BETWEEN INSTITUTIONS MATTER

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One of the most striking labour market developments over the past decade is the huge decline in unemployment in the Netherlands. Whereas in the early 1980s the Dutch unemployment rate was as high as 12% and in the early 1990s it was still as high as 8%, it fell to 2% in the early 21st century. There are several explanations for this development. According to Van Ours (2003), the decline in unemployment has to do with wage moderation, restructuring of the social security and part-time labour. So changes in labour market institutions are responsible for the improvement in the functioning of the Dutch labour market. In other OECD countries unemployment has gone down substantially as well. As Table 1 shows, since the early 1980s also in Denmark, Ireland, the UK and the US unemployment has fallen considerably. Table 1 also shows that in Finland, France, Sweden and Switzerland unemployment has gone up substantially over the period 1983 to 2000.

One of the issues in the policy debate is whether and, if so, to what extent changes in labour market

institutions are responsible for these differences in the fluctuation of the unemployment rate across OECD countries. As we will discuss in more detail below, research indicates that changes in labour market institutions can bring unemployment down.

A further issue in the policy debate is whether countries can design a reform for these institutions. Here, the answer is less clear. Even in a successful country like the Netherlands it is not clear that the policy instruments that brought the success were based on a clever design (Visser and Hemerijck 1997). Only with hindsight was there a Dutch model. So, countries can learn from each other, but as Freeman (1998) stresses, countries cannot just borrow some features from successful countries and expect the unemployment rate to decline since a particular institutional feature may perform differently depending on the overall institutional framework. In other words, the effect of a system of institutions is different from the sum of the effects of the individual institutions. This is indeed what our contribution is to the literature on unemployment and labour market institutions (Belot and Van Ours 1999; 2001). Instead of investigating the effects of institutions individually we investigated the effects of interactions between labour market institutions.

### Overview of the literature

Over the past decades there has been a growing interest in the role of institutional labour market rigidities, which were more prevalent in Europe than in the US. The labour market institutions that are usually considered in the literature are regulations that influence more or less directly the functioning of the labour market. Hence, there has been interest in taxes levied on labour, in labour standards and employment protection legislation, in trade unions, in wage bargaining systems, in minimum wage(s), in benefit systems,



**Table 1**  
Changes in unemployment rates, 1983–2000

Group	Unemployment	Countries
1	Rise of 4% or more	Finland, France, Sweden, Switzerland
2	Rise of 0-4%	Austria, Germany, Italy, Japan, Norway, New Zealand
3	Fall of 0-4%	Australia, Belgium, Canada
4	Fall of 4% or more	Denmark, Ireland, Netherlands, UK, US

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in active labour market policies, in education policies and in barriers to geographical mobility. The choice is of course to some extent arbitrary as some of these institutions (such as the tax system) concern also people who are not in the labour force and the list can be extended to include, for example, product market regulations.

The literature draws important lessons concerning the role of institutional rigidities on economic performance but some puzzles persist. There are many studies concentrating on some particular institutions but only a few studies look at a more complete picture of the institutional framework. A first series of studies analyse the direct effects of institutions on indicators such as the unemployment rate, the employment rate and the growth rate of the national product. (For an overview see Nickell and Layard 1999.)

At the start the analyses were based on cross-sectional information showing that tax rates, replacement rates, benefit duration, union density and union coverage had a positive effect on unemployment (Layard et al. 1991). After that a number of studies were published that extended the analysis in various directions. Scarpetta (1996) uses yearly data covering the period 1983 to 93. The explanatory variable is the structural unemployment rate<sup>1</sup> as computed by the OECD. Scarpetta first looks at structural determinants of the unemployment rate and then, at the role that labour market policies and institutional factors play in determining the persistence of unemployment. The conclusion is that institutions matter both for the determination of the structural unemployment rate and for the speed of labour market adjustments. Scarpetta finds different results than previous ones for labour taxes (no significant effect) and employment protection legislation (significant positive effect).

Daveri and Tabellini (1997) look at complementarities between labour taxes and the structure of collective bargaining systems. Their analysis is based on data for fourteen OECD countries over the period 1965 to 91. They find that labour taxes have a larger negative effect on unemployment in countries with strong unions. They also show that decentralised and centralised countries are performing better, irrespective of the level of labour taxes.

<sup>1</sup> Defined as the non-accelerating inflation rate of unemployment.

Elmeskov, Martin and Scarpetta (1998) extend the previous analysis by considering a large number of countries, taking the recent institutional developments into account (in particular, the development of collective bargaining structures and of employment protection legislation) and testing for the existence of interactions between policies and/or institutional factors. They conclude that the tightening of eligibility conditions and the cut in unemployment benefits, as well as the relaxation of the regulation on fixed term contracts may have played a major role in the success of some OECD countries in reducing their unemployment rate. Furthermore, assuming that in countries with a medium degree of centralisation (negotiations mainly taking place at the industry level) coordination among actors might be particularly crucial, they upgrade countries with a medium level of centralisation but a high degree of coordination. They show that the tax wedge and employment protection have a stronger effect in countries with an intermediary level of centralization. Also, unemployment benefits have a larger effect in countries with relatively high levels of expenditures on active labour market policies.

Blanchard and Wolfers (2000) use data based on twenty OECD countries and eight five-year periods, from 1960–64 to 1995. They test for the effects of institutions, shocks (in total factor productivity, real interest rate and labour demand shifts) and interactions between institutions and shocks on the unemployment rate. They find that indeed the economic shocks<sup>2</sup> have a larger positive effect on unemployment when the replacement rate is high, the benefit duration is long, the employment protection is strict, the union density is high and the coordination is low.

Nickell, Nunziata and Ochel (2002) show that most of the unemployment histories can be explained by institutional changes. Their study is based on annual data for twenty OECD countries over the period 1961 to 95. Besides estimating the direct effects of labour market institutions, they introduce interaction terms between institutions and economic shocks, defined in a similar way as in Blanchard and Wolfers. They conclude that interactions between shocks and institutions do not add very much to the explanation of unemployment rates.

<sup>2</sup> The economic shocks enter the regression in such a way that their expected theoretical sign on the unemployment rate is positive. Hence, they examine a fall in the total factor productivity, a rise in the real interest rate and a decline in the labour share.

Recent literature suggests that institutional rigidities may even interact with the characteristics of the population (Bertola, Blau and Kahn 2003). Some institutions may have a larger negative effect on some individuals than others.

### Our study

Table 2 gives an overview of changes in labour market institutions averaged over countries that have shown a similar development of unemployment. As in Table 1 four groups of countries are distinguished. From Table 2 it appears that the group of countries with the largest decline in unemployment had on average a decline in tax rates, whereas in the countries of the other groups tax rates increased. In the two groups with a declining unemployment rate, benefit replacement rates did not go up or remained stable whereas in the other countries replacement rates increased. In the groups of countries with a major increase in the unemployment rate, union density hardly declined while it did decline substantially in the other countries. There does not seem to be a big difference between the groups of countries in terms of changes in employment protection and level of bargaining (centralisation).

Thus, based on Table 2 it appears as if changes in taxes, benefits and union bargaining power are the most relevant institutional changes. However, it may be that some combinations of institutional changes are more relevant than others. That is where our studies (Belot and Van Ours 1999; 2001) come in. In stead of investigating the effects of institutions individually we investigated interactions between labour market institutions. In our analysis we use data on seven five-year periods (1960 to 95) and eighteen OECD countries. We find support for the interaction hypothesis. We find

that labour market institutions have a significant effect on unemployment rates only if interaction variables are included. Without the presence of interaction variables, we find that the direct effects of labour market institutions disappear as soon as time and country effects are included in the regression. We investigated three specific interactions: Tax rates and replacement rates, employment protection and bargaining level, union density and bargaining level. We find that in a lot of countries the interaction between tax rates and replacement rates drove the development of their unemployment rates. For other countries changes in the bargaining structure have been more relevant. Hence, employment protection has a significant negative effect on the unemployment rate only in countries where wage bargaining takes place at the level of the firm. The reverse is true for union density. Union density has a positive effect on unemployment rates only when the bargaining system is decentralised. One explanation could be that these institutions have a larger impact on wages in countries where bargaining is decentralised. This means that employment protection would lead to stronger wage moderation in decentralised countries and unions would play a more important role in this type of countries. Given our conclusion that interactions matter, we investigated whether there was an optimal combination of institutional reforms. We calculated for each country what would have happened if they had implemented the institutional reforms of other countries. We find that most of the OECD countries would have had a better labour market performance if they had implemented the reforms made in the Netherlands or in the UK. (See also Nickell and Van Ours 2000.) These successful countries were therefore not only successful because of a favourable combination of institutions and reforms, but also because they implemented institutional changes that were better, irrespective of the initial institutional framework.

**Table 2**

**Changes in labour market institutions, 1980s–1990s<sup>a)</sup>**

Group	Taxes (%)	Replacement rate (%)	Employment protection (%)	Union density (%)	Centralisation index (1–3)
1	4.5	5.0	-3.8	-0.3	-0.4
2	2.2	2.5	-6.3	-6.7	0.1
3	3	0	1	-4	-0.3
4	-0.6	0.2	-5.4	-6.6	-0.2

<sup>a)</sup> Changes from early 1980s to early 1990s; unweighted averages.

### Conclusions

Cross-country studies that relate unemployment rates to labour market institutions have limitations in the sense that institutions do not change frequently, and cross-sectional variation only is insufficient to catch the true effect of institutions. Also, there are many

country specific events that may affect unemployment but which cannot all be taken into account. Part of this criticism also applies to our study. For example, our study neglects the effects of German unification, the large growth of part-time labour in the Netherlands, the big EU subsidies for Ireland and the loss of Eastern Europe exports for Finland. Our main conclusion is that institutions matter and that interactions between institutions are important. In this respect, countries with high unemployment rates could learn from successful countries by imitation. However, there is not just one recipe for a successful performance of the labour markets. Further research is needed to investigate the complexity of the effects of institutional rigidities on economic performance in more detail.

## References

- Belot, M.V.K. and J.C. Van Ours (1999), "Does the Recent Success of Some OECD Countries in Lowering Their Unemployment Rates Lie in the Clever Design of Their Labour Market Reforms?", *CentER Discussion Paper*, Tilburg University.
- Belot, M.V.K. and J.C. Van Ours (2001), "Unemployment and Labour Market Institutions: An Empirical Analysis", *Journal of Japanese and International Economics* 15(4), 403-18.
- Bertola, G., D. Blau and L.M. Kahn (2003), "Labour Market Institutions and Demographic Employment Patterns", *mimeo*.
- Blanchard, O. and J. Wolfers (2000), "The Role of Shocks and Institutions in the Rise of European Unemployment: The Aggregate Evidence", *Economic Journal* 110, 1-33.
- Daveri, F. and G. Tabellini (2000), "Unemployment, Growth and Taxation in Industrial Countries", *Economic Policy: A European Forum* 0(30), 47-88.
- Elmeskov, J., J. Martin and S. Scarpetta (1998), *Key Lessons for Labour Market Reforms: Evidence from OECD Countries' Experiences*, Economic Council of Sweden, IVA, Stockholm.
- Freeman, R.N. (1998), "War of Models: Which Labour Market Institutions for the 21st Century?", *Labor Economics* 5, 1-24.
- Layard, R., S.J. Nickell, and R. Jackman (1991), *Unemployment: Macroeconomic Performance and the Labour Market*, Oxford: Oxford University Press.
- Nickell, S.J. and R. Layard (1999), "Labour Market Institutions and Economic Performance", in: O. Ashenfelter and D. Card (eds), *Handbook of Labour Economics*, Amsterdam: North-Holland, Vol. 3E, 3029-3084.
- Nickell, S.J., L. Nunziata and W. Ochel (2003), *Unemployment in the OECD Since the 1960s: What Do we Know?*, London: Bank of England.
- Nickell, S.J. and J.C. Van Ours (2000), "Falling Unemployment: The Dutch and British Cases", *Economic Policy* 30, 137-80.
- Scarpetta, S. (1996), "Assessing the Role of Labour Market Policies and Institutional Settings on Unemployment: A Cross-Country Study", *OECD Economic Studies* 2(26), 43-82.
- Van Ours, J.C. (2003), "Rising Unemployment at the Start of the 21st Century: Has the Dutch Miracle Come to an End?", *CESifo Discussion Paper* No. 917.
- Visser, J. and A. Hemerijck (1997), *A Dutch Miracle, Job Growth, Welfare Reform and Corporatism in the Netherlands*, Amsterdam: Amsterdam University Press.