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**HEDVIG HORVÁTH-ZOLTÁN SZALAI**

**Labour market institutions in Hungary  
with a focus on wage and employment flexibility**



# **Labour market institutions in Hungary with a focus on wage and employment flexibility (ECB WDN Institutional Project)**

**November 2008**

This paper contains research conducted within the Wage Dynamics Network (WDN). The WDN is a research network consisting of economists from the European Central Bank (ECB) and the national central banks (NCBs) of the EU countries. The WDN aims at studying in depth the features and sources of wage and labour cost dynamics and their implications for monetary policy. The specific objectives of the network are: i) identifying the sources and features of wage and labour cost dynamics that are most relevant for monetary policy and ii) clarifying the relationship between wages, labour costs and prices both at the firm and macro-economic level. The Hungarian research projects conducted within the WDN are published either in the MNB Working Paper series or as MNB Occasional Paper. Some of the studies are also available as ECB Working Paper.

The views expressed here are those of the authors and do not necessarily reflect the official view of the central bank of Hungary (Magyar Nemzeti Bank).

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**Labour market institutions in Hungary with a focus on wage and employment flexibility\***  
(Munkapiaci intézmények Magyarországon a bér- és foglalkoztatás rugalmassága szempontjából)

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# Abstract

It is widely believed today, that the operation of the labour markets is influenced by institutional factors, affecting macroeconomic adjustment in response to shocks. In this way, labour market institutions affect both cyclical and long-term growth and inflation performance of an economy. The aim of our paper is to review the operation of Hungarian labour market institutions from the point of view of labour market flexibility and find its place in international comparison in the light of existing stock of knowledge on the subject. We describe the institutional setup of the labour markets through seven dimensions (unemployment generosity, tax wedge, active labour market policies, employment protection legislation, product market regulation, union density and coverage and wage bargaining institutions) for which internationally comparable data are available. We conclude that the Hungarian labour market institutions are rather flexible in EU-comparison. However, tax wedge is high and the active labour market policies still perform poorly, both contributing to weak employment.

**JEL:** J31, J51, K20, L43.

**Keywords:** wage flexibility, unemployment, labour market institutions, product market regulation, policy complementarity.

## Összefoglaló

Ma már széles körben elfogadott, hogy a munkapiacok működését olyan intézményi tényezők befolyásolják, amelyek érintik a sokkokkal szembeni makrogazdasági alkalmazkodást. Így a munkapiaci intézmények hatnak a gazdaságnak mind a ciklikus, mind pedig a hosszú távú növekedési és inflációs teljesítményére. Tanulmányunk célja az, hogy áttekintést adjon a magyar munkapiaci intézmények működéséről a munkapiaci rugalmasság szempontjából és elhelyezze azokat nemzetközi összehasonlításban a témában eddig felhalmozott ismeretek alapján. A munkapiaci intézményi keretet hét dimenzió alapján írjuk le (munkanélküli-ellátások szintje, adóék, aktív munkapiaci politikák, munkavállalókat védő szabályok, termékpiaci szabályozás, szakszervezeti tagság gyakorisága és kiterjedése, illetve a bértárgyalások intézményei), amelyekre vonatkozóan nemzetközileg összehasonlítható adatok állnak rendelkezésre. Arra a következtetésre jutunk, hogy a magyar munkapiaci intézmények európai összehasonlításban inkább a rugalmasabbak közé tartoznak. Ugyanakkor az adóék nagy és az aktív munkapiaci politikák gyengén működnek; ezzel mindkettő hozzájárul a gyenge foglalkoztatási teljesítményhez.

# 1 Introduction

Recent interest of central bankers and other policy makers in labour market institutions has arisen as a result of increased unemployment since the 70's, especially in large, continental European countries. This increase in unemployment followed the golden age of nearly full employment after World War II. Of particular interest was the reverse trend in the US, whereby after decades of higher unemployment than in Europe, US has seen an “employment miracle” with nearly full employment in late 90's. As the US and Europe – and for that matter, most other developed countries – have been subject to similar exogenous shocks, labour market institutions emerged as natural candidates responsible for cross-country and over time differences in labour market performances.<sup>1</sup>

A further impetus was given to the interest in the subject by the creation of the European Monetary Union. In this case the main interest was in the labour market's role in the adjustment to various shocks without autonomous monetary policy and with constrained flexibility of fiscal policy. Again, labour market institutions were seen as major potential determinants of adjustment capacity of a country. Furthermore, a variety of wage bargaining institutions prevailed in Europe, some of which were seen as more conducive to price stability than others, even without any macroeconomic shocks. Establishment of the EMU has changed the context of the working of the existing labour market's institutions, as one single central bank replaced the national ones facing many wage setters with limited scope to react to country-specific labour market situations or entering into “central bank game” with them.

In this paper we are interested in the main features of the labour market institutions in Hungary and their role in shaping the wage and employment flexibility of the labour market in international comparison. In the first section we give a short overview of the motivation of recent interest in labour market institutions. In the second section we survey the main labour market institutions which are commonly employed in the literature, and for which comparative data are available. Similarly to other studies, we describe labour market institutions in the following seven dimensions: unemployment generosity, tax wedge, active labour market policies, employment protection legislation, product market regulation, union density and coverage and wage bargaining institutions. We will give a short summary of theoretical predictions and empirical results of research on each institution's effects on employment, unemployment and wage developments. Then we shortly summarize interactions between labour market institutions and macroeconomic shocks. We also describe the interactions of various institutions among each other in shaping labour market outcomes, and point to the latest development in labour market analysis whereby it is now customary to use the concept of “flexicurity regimes” in assessing labour market performance.

In the next section we turn to Hungary's labour market institutions. Hungary is a transition country, a new member state in the European Union. The political and legal fundamentals of her labour market were laid down in March, 1991. We follow the changes in these relatively young institutions in a historical perspective, capturing institutions with the dimensions and indicators outlined in previous sections. By the end of this section, we obtain a combination of institutions that we conclude rather flexible but high tax wedge and poor and ineffective ALMP make it structurally unfortunate.

In the next section, we will assess the position of the combination of Hungarian institutions in international comparison in terms of viable flexicurity regimes. Finally we will conclude.

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<sup>1</sup> Blanchard et al. (2000).



## 2 A short overview of motivation behind recent interest in labour market institutions

Labour market institutions became one of the main factors in explaining unemployment following the widely differing labour market performances among the OECD countries in response to similar macroeconomic shocks. In the '70s and '80s, the unemployment trends between the US and Europe reversed. Moreover, among the European countries, different labour market outcomes prevailed in response to similar macroeconomic shocks. A closer look at those developments revealed that some facts could not easily fit into the “traditional” or “deregulationist” framework.<sup>2</sup> First, simple cross-section studies failed to give a robust explanation for the role of institutions in unemployment in the developed (OECD) countries. One of the firsts and probably the most influential papers was Nickell (1997), but many other studies have since been published, mostly using OECD and European Commission/Eurostat data (for reviews see Arpaia et al., 2005a; Baker et al., 2002; Howell et al., 2006; Bassani et al., 2006).

Second, although the reversal of unemployment trends in the US and Europe seemed intuitive for most economists, relative labour market performances over a longer period were far from that. More specifically, labour market performance in Europe worsened in the '80s and '90s, compared not only to the US but to the performance of Europe itself over time in the '60s and early '70s, while the labour market institutions were now less rigid (Blanchard et al., 2000).<sup>3</sup> Furthermore, divergence in labour market performance among European countries was so large, that speaking about European unemployment seemed misleading. Thus, the focus of empirical research shifted to the interaction of macroeconomic shocks and labour market institutions in explaining cross-country differences in variation and duration of unemployment (Blanchard et al., 2000). However, empirical research allowing for time-varying institutions resulted in much less important role for shocks (Blanchard et al., 2000; Bassani et al., 2006).

Third, recent studies focused on the interaction among different labour market – and for that matter, product market – institutions among themselves. The idea behind this shift has been that while some institutions may increase, others may decrease unemployment. For example, the positive effect of unemployment benefit duration on unemployment could be neutralised by well- designed activation policies. In other words, two or more institutions could reinforce or neutralise the positive or negative effects of each other. This move towards looking at labour market regimes instead of individual institutions was motivated not least by the experiences of some countries, which were successful in combining high level of social security, employment security (as opposed to job security) and satisfactory or even outstanding macroeconomic performance. Denmark, Sweden and Finland are examples of such a combination. The performance of those countries could not be easily explained by the traditional or deregulationist approach. In terms of political economy, these experiences were important for the longer-term viability of the ‘European social model’ as well, especially in the light of the ‘Eurosclerosis’ debate.

The experience of the Nordic countries may explain the shift by the OECD from exclusively suggesting labour and product market reforms directed towards the liberal approach like in the US.<sup>4</sup> This shift has been acknowledged by the recent reassessment of the OECD job study.<sup>5</sup> In a similar vein, the concept of flexicurity or flexibility and security was invented, especially with reference to the Danish and Dutch practices. The concept of flexicurity describing a particular choice along the two dimensions of economic flexibility and employment security later became a broader analytical framework for analysing labour market institutions. Accordingly, countries with less regulated labour markets and not-so generous social

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<sup>2</sup> By “traditional” or “deregulationist” view we mean the standard labour market model found in most macroeconomic textbooks, where institutions are either superfluous or harmful for the natural equilibrating forces of labour demand and supply. In models where market imperfections are present, like in the New Keynesian approaches, institutions could help to improve labour market performance, provided that they are not misused by economic agents. Carlin et al. (2006) provides a good textbook treatment of both approaches.

<sup>3</sup> Saint-Paul disagrees. He points out that labour market reforms resulted in less, instead of more competitive labour market institutions during the last few decades, thus standard theory applies (Saint-Paul, 2004a). Nonetheless, he still acknowledges that in some cases, where genuine labour market failure exists, more focused and purposeful remedies could be applied. See Saint-Paul (2007).

<sup>4</sup> This position has been in the centre of the first influential report on the subject in the 1994 Job Strategy, OECD (1994).

<sup>5</sup> See OECD (2006).

protection could also be analysed in the same framework parallel with other, less liberal countries. Thus, it had become important to look at not only the individual institution in a checklist fashion; instead the whole set of those institutions and their interactions should be analysed. In other words, one has to think about labour market regimes. In this sense, we can identify various regimes, which are more or less equally viable.

Having said this, it is far from being trivial to identify viable regimes. For one thing, the economic context is subject to changes. Thus, a particular regime could prove to be viable under one state of the world, while less so in another.<sup>6</sup> Second, regimes are deeply rooted in the social fabric of the particular nations. Therefore, even if the best practice could be identified with sufficient dose of confidence, it is not easy to adopt it in other countries. For example, willingness of paying taxes often differs in countries with different historical experiences. Third, empirical study of the effects of institutions poses special problems for researchers. Institutions are hard to compare internationally because of national idiosyncrasies, legal backgrounds, differences in enforcement, lack of long enough time series and, in some cases little variance in institutional variables over time. OECD, ILO and Eurostat collect and publish institutional data, which are used by most researchers. These involve some unavoidable subjectivity and are subject to periodic revisions. Moreover, available empirical studies differ in specifications of their models, use of indicators (period averages or annual data, newer or older institutional classifications, time-varying institutions or time-invariant institutions etc.) and their efforts to control for robustness in their results and explicit investigation of direction of causality. This makes extremely difficult to summarise the empirical evidence about the role of institutions in labour market performances.

One further problem for our purposes is that most empirical studies on the role of institutions in labour market performances concentrate on their effect on unemployment and/or employment. Empirical studies aimed at identifying the role of specific labour market institutions – other than wage bargaining institutions – on wage developments are much fewer and the existing ones are not easily comparable with those looking at employment/unemployment. As Nunziata (2005) noted, if labour market institutions affect employment and unemployment, they should work partly via their impact on the wage determination process. Moreover, this result should be coherent with the studies on employment/unemployment, omitting the effects via wage determinations. It is however not always easy to ensure, because the latter literature often yields differing results. Nunziata claims to find coherent effect with that of Nickell (2001). However, we could at least find two studies<sup>7</sup>, which assess the institution's effect on wages.

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<sup>6</sup> Eichengeen et al. (1999), Clar et al. (2007).

<sup>7</sup> Clar et al. (2007) and Nunziata (2004). The former is a meta-analysis of the literature on the effect of labour market conditions on wage development. The latter is a companion paper to the author's collaboration with Stephen Nickell on the labour market institutions' effect on employment and looks at the labour market institutions' effect on wage costs. See Nickell et al. (2001). It is worthwhile to remember that Clar et al. (2007) finds a significant selection bias in the literature in favour of the results predicted by received theories. On the other hand, Nunziata's empirical findings are in line with that of Nickell et al. (2001).

# 3 A brief overview of the literature on labour market institutions and labour market performance<sup>8</sup>

In this section we look at those labour market institutions (LMI), which are most frequently used in explaining labour market outcomes in OECD countries and for which internationally comparable data are available. In case of each institution, we give a short description of the indicator itself and describe the theoretical predictions and the empirical findings about its role in shaping labour market outcomes. Meanwhile, we also assess Hungary's position in international comparison and try at least qualitatively inferring the role of the particular institution in shaping labour market performance in Hungary. While looking at the institutions individually, we also describe their alleged interaction with other institutions, which may aggravate or diminish its effect taken separately. Accordingly, we assess the particular combination of the labour market institutions in Hungary as well. Finally, we also describe the role of institutions as labour market developments in response to macroeconomic shocks.

It is customary to group labour market institutions according to their intended function as follows: a) protective labour market institutions, b) taxes c) others like product market regulation or coordination of wage bargaining. As can be seen from this list, some of the institutions are designed for purposes other than directly affecting labour market outcomes, like the taxes or product market regulation. The labour market institutions themselves could be seen as passive (regulation of separation, unemployment benefits etc.) and active (ALMP, like training and retraining) instruments.

## 3.1 PROTECTIVE LABOUR MARKET INSTITUTIONS (EPL, UB, UD/UC)

Probably the most surprising result of the empirical studies on labour market institutions is that no significant and robust role of protective labour market institutions could be found on employment and unemployment. This is especially true in the light of the widespread believe in the hypothesis of "Eurosclerosis", according to which the main cause of relative economic decline of Europe *vis-à-vis* the US (or the emerging Asia) is labour market rigidity and excessively protective labour market institutions like EPL, too generous unemployment benefit system etc.

1. *Employment Protection Legislation*. Employment Protection Legislation (or EPL) is an indicator covering a set of rules regulating the hiring and firing of employees individually as well as collectively, and varies in a large extent from country to country. As such, it is a multidimensional indicator, involving severance payments, advance notification, legally accepted reasons for separation etc. These rules can be part of legislation or collective bargaining. Effective EPL depends not only on the written rules but also on enforcement and compliance.<sup>9</sup> The economic rationale of having EPL is to prevent firms to resort too frequently to layoffs as means of adjustment as it may be seen as inefficiency. That is, because firms do not internalise all the costs of excessive layoffs, this creates a distortion in firms' incentives. EPL aims to remedy this distortion by making costly layoffs in terms of time and money for firms via severance payments, advance notice regulation, requiring appropriate reason for dismissal etc.<sup>10</sup> However, these measures not only affect the adjustments in response to negative shocks. The discounted costs of layoffs are considered by firms when deciding about increasing employment as well. That is, it may not only hold back the outflows but also inflows in case of a boom.

In term of empirics, EPL seems to be significant only in studies published before 2001 except IMF (2003). Newer studies used revised, presumably better indicators of EPL, but most of these did not find it significant. It has been pointed out by Baker et al. (2004), Baccaro et al. (2005), Bassani et al. (2006), Howell et al. (2007) that earlier studies did not pay sufficient account to the robustness of their empirical results. Newer studies, using improved EPL indicators and paying sufficient attention to the robustness of their estimation results found EPL insignificant in explaining variation in aggregate unemployment. From the

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<sup>8</sup> This brief overview is not a comprehensive survey. Instead, its intended aim is to provide a concise summary of the related analysis as a background.

<sup>9</sup> OECD has been producing internationally comparable EPL indicators, the latest revision of which having been made in 2003/2004. For details see OECD (2004).

<sup>10</sup> See Blanchard (2004) for a short essay on the economic rationale behind such regulations.

point of view of *short-term adjustment*, stricter EPL tend to diminish the inflow in unemployment and re-employment of workers, especially for those groups who are on the “margins” of the labour market, i.e. women and the youth.<sup>11</sup> On the other hand, stricter EPL tend to dampen outflow to unemployment and particularly improves the employment of older workers. With this, the aggregate effect of EPL on unemployment is ambiguous. In addition, differentiated EPL for different market segments within a country is frequently seen as contributing to the segmentation of the national labour markets into a better-protected segment, and another, lightly regulated, mostly part-time and temporary job segment. Experiences with partial EPL reforms, with loosening regulations governing part time and temporary job contracts in some European countries seem to add to such segmentation.<sup>12</sup>

From the point of view of *longer term economic growth*, with limiting the flow of labour force, EPL may play a role in the structural changes and innovation activity in an economy. EPL limits the flow of workers to new firms and industries, thus limits structural change and innovation when it is based on development in new industries and firms. However, with longer employment duration in a particular firm/industry, increases the incentive on both the firm’s and worker’s side to invest in firm/job specific human capital, increasing the long term productivity and innovation, when it is based on the growth of the same firm/industry in slowly changing macroeconomic industrial structure.<sup>13</sup>

The overall ambiguity of EPL on unemployment also stems from its interaction with other labour market institutions and economic shocks. It has been found that light EPL’s potentially positive effect on unemployment could be counteracted by active labour market policies (ALMP) (see later).

As far as wages are concerned, the meta-analysis by Clar et al. (2007) finds that the presence of EPL weakens the responses of wages to labour market conditions. Similarly, Nunziata finds that EPL affects wages in the expected way: it increases the wage pressure by supporting the incumbent’s bargaining power and indirectly by negatively affecting the matching process of unemployed to job vacancies.

2. *Unemployment Benefit*. Unemployment benefits are means of treating income risks arising from unemployment for a transitory period until one finds a new job. Therefore, on the one hand, it aims to support the earlier life style of the unemployed, as it may not be easy to change life style due to a sudden jobloss. On the other hand, it serves as a device to finance the period of new job search arising from matching inefficiencies in the labour market. Different regimes locate themselves differently on this life style maintenance versus job search financing scale, however, it is generally accepted that the more a system concentrates on the first principle, the less inefficiently it performs in the field of job search. As in addition to insuring, it also creates disincentives for serious job search efforts on the part of unemployed if he/she is paid while not working. Thus, generous and durable benefits increase the risk of one’s becoming dependent on benefits. With the increase of long term unemployment, this latter aspect became more and more important for optimal labour market incentives. As a result, recently, most countries emphasize the need for a benefitting system that makes job finding as efficient as possible.

Two common measures of the generosity of the unemployment benefiting system is the replacement ratio (RR) and the duration of the benefit; both seem to bear with significantly positive effects in nearly all empirical studies wherever they are included in the specifications. However, the direction of (statistical) causality was investigated seriously only by Howell et al. (2006) and found running from unemployment to UB.<sup>14</sup> The only other study, which mentions the possibility of reverse causality is Bassani et al. (2006) but does not explicitly investigate it. Baccaro et al. (2005) do not find UB significant. It is worth mentioning in addition, that the correlation between unemployment rates and unemployment benefit reciprocity rates is relatively low in the OECD countries. It is especially true for countries with high unemployment (Spain, France) and where unemployment is concentrated in certain groups like women and the youth. Finally Howell et al. (2006) shows that the frequent observation of close relationship between declining unemployment and tightened eligibility of UB (as in Denmark and the Netherlands the two European “employment miracle” countries) does not necessarily imply, that the former is causing

<sup>11</sup> Bassani et al. (2006), OECD (2004).

<sup>12</sup> An example for this is the case of Spain. See for example Teixeira (2001), p. 19.

<sup>13</sup> See recently Eichengreen (2007) on Germany’s long-term growth prospects. This may also explain why transition countries tend to have on average lighter EPL than the old European countries.

<sup>14</sup> Interestingly, this may give some support for Saint-Paul’s argument – see footnote 3 – as at least initially after the shocks of the 70’s and 80’s, government expanded UB as unemployment became higher and more persistent, but this trend has been reversed later, at least partially.

the latter: In these cases tightening took place in the midst of dramatic improvement of job opportunities. And in any way, in these countries the replacement ratio remained the highest among the countries under examination, again weakening the UB's effect on unemployment. Finally, contrary to the standard expectations, and in line with its matching facilitating effect, some researchers found even negative effect of UB on unemployment. This latter effect can arise also from its combined effect with other institutions like effective active labour market policies.

In terms of generous UB's effect on wages, one has to note first that by increasing the reservation wage (that is, the wage level at which workers are willing to take on jobs instead relying on the UB) it increases wages. That is, generous UB makes it possible for would be workers to wait for longer period until a more rewarding employment opportunity could be found. UB's effect on labour costs has been found in line with intuition by Nunziata (2005) with positively affecting it. Clar et al. (2007), however, could not find significant effect of labour market conditions on wage development. However, even Nunziata's significant relation could be explained by the above reverse causality.

3. *Union density and union coverage (UD/UC)*. In terms of theory, there are at least two competing views. The one, which is more widespread in Anglo-Saxon textbooks, is the so-called *monopoly view* of the unions. According to this view, unions are monopoly suppliers of labour and seek to raise wages, possibly above market clearing levels. As it results in unemployment, this view also forms the basis of insider-outsider models of the labour market, in which unions represent the interests mainly of the already employed workers and tend to neglect the interests of the non-unionised and unemployed. In this view unions do not internalise the macroeconomic consequences of their behaviour and higher (wage) inflation may arise. Another theory of the unions is the so-called *corporative view*, in which unions are part of the wider and formalised social dialogue system between employers and employees (and probably the representatives of the state) and represent all the workers. As such, they usually internalise the macroeconomic consequences of their demands in wage bargaining and their behaviour may be compatible with low level of inflation and unemployment. This approach is not present in the traditional textbooks,<sup>15</sup> although gives a more accurate picture of some of the European trade unions, especially in the Nordic and Continental countries. These two theories are compatible with the hump-shaped view of the labour market, proposed by Calmfors and Driffill, representing opposite ends of the spectrum.<sup>16</sup>

In the empirical literature UD found significant in some of the studies. However, it is not clear what this actually measures. More specifically, collective bargaining and other wage coordination institutions seem to be more important for actual labour market outcomes and their effect is more robust and important in empirical studies (see the next point). As the relationship between UD/UC and wage coordination is not straightforward in most of the countries, and the latter consistently decreases unemployment, interpreting UD/UC's effect on unemployment is very complicated (see below).

Clar et al. (2007) find that UD dampens labour market conditions' effect on wages. Nunziata (2005) claims that although UD increases wage costs, this effect are counterbalanced by increased coverage of wage bargaining. Thus, these results are in line with the literature of UB's effect on employment/unemployment.

However, it must be pointed out that the actual behaviour of the unions are determined not only by their alleged underlying philosophy, but by the macroeconomic environment as well. For example, although formally German unions are formed at industry level – thus falling into the intermediate category of monopoly unions – in actual wage bargaining the leading role of the export oriented manufacturing industries are accepted by other, formally independent unions as well. The recent significant wage moderation experienced in Germany is a good illustration of this. Acceptance of the leading role of the export oriented industries are very similar to that of the underlying considerations governing the corporative Nordic unions', namely, limiting the wage demands in the "sheltered" sectors to the levels compatible with the wage developments in the (internationally) competitive or "exposed" industries. The only difference is that in the small Nordic countries this leading role of the competitive sectors is formalised.<sup>17</sup>

<sup>15</sup> An excellent recent textbook giving a more complete treatment of labour market institutions than the traditional ones including the roles of the unions is Carlin et al. (2006).

<sup>16</sup> Calmfors et al. (1988).

<sup>17</sup> Wallerstein (1998).

4. *Wage Bargaining Coordination* (WBC). Although not part of the group of protective labour market institutions, its close relation to the UD/UC compels us to treat WBC together with the latter for the purposes of this study. As mentioned above, wage coordination seems to be the most consistent predictor of low unemployment, although 3 of the 10 studies reviewed by Howell et al. (2007) did not find it significant. As its combination with union density and coverage, and large discrepancy between formal and informal coordination among trade unions, its good performance in empirical literature is surprising. In theory, wide coordination would predict either wage inflation (in the monopoly view) or wage moderation (in the corporative view) thus, its effect is ambiguous. In Europe, there are examples for both predictions. For example, UK is seen as moving from an intermediate wage coordination set-up towards a decentralised one and both unemployment and wage inflation diminished since the '80s. On the contrary, the Netherlands has moved from the intermediate position to the coordinated set-up with similarly favourable result in unemployment and wage moderation.<sup>18</sup> And finally, recent experience of Germany shows that with little formal change in wage coordination institutions and union density/coverage the behaviour of the social partners could change dramatically as a response to changing economic environment and accepted wage moderation in exchange of stabilising or increasing employment. The literature surveyed by Clar et al. (2007) and Nunziata's (2004) findings are fully in consent with the above.

In some empirical studies wage coordination results in wage compression, that is, lessening wage (income) differentials. Although it may be in line with the social preferences of some countries, insufficient wage dispersion may hinder structural change and innovation, which are crucial for long-term growth. Again, whether it promotes or hinders long-term growth depends on the pattern of growth process itself as discussed above.

### 3.2 INSTITUTIONS OF ACTIVE LABOUR MARKET POLICIES

5. *Active Labour Market Policies* (ALMP). ALMP appear only in few empirical studies. However, only in Nickel (1997) appears to be significant and with the expected sign. It is surprising, given its importance in many papers aiming to give advice for policy makers. An explanation for this is that ALMP need special treatment in empirical estimation, because of its probable endogeneity to unemployment. ALMP are usually measured as ALMP expenditure in percentage of GDP. However, as ALMP tend to increase and GDP to decrease as unemployment increases, the coefficient of the former indicator tend to be upward biased. To correct for this bias, Bassani et al. (2006) uses instead ALMP expenditure per unemployed persons in percent of GDP per capita. Bassani et al. (2006)'s results suggest that the importance of ALMP expenditure in reducing unemployment found in micro econometric studies are not replicated at macro level, thus ALMP's effects are probably more moderate.<sup>19</sup>

The reason behind this difference is likely to be the fact that micro studies cannot take into account the countervailing effects of higher taxes necessary to fund ALMP. Furthermore, it is likely that not all categories of ALMP are effective in reducing unemployment; the most effective is labour market training and the least effective is public job creation and wage subsidies. ALMP is believed to play an important role in the successful Nordic countries in maintaining low unemployment rate and high employment rate in combination with generous UB and high taxes.<sup>20</sup> Indeed, in Bassani et al. (2006) estimation for Denmark and the Netherlands, the estimated (negative) effect of ALMP on unemployment fully compensates for the (positive) effect of UB.<sup>21</sup> Clar et al. (2007) did not find significant effect of ALMP on employment's effect on wages.

### 3.3 OTHER INSTITUTIONS WITH POTENTIAL EFFECT ON THE LABOUR MARKETS

6. *Taxes*. Tax wedge – the difference between the labour cost to the employer and the take-home pay for employees – is likely to increase unemployment. However, not all empirical studies could show its significance. The unemployment increasing effect seems to be stronger and more significant where union density/coverage and/or high level of wage bargaining coordination interacts with large tax wedge.<sup>22</sup> A probable explanation for this effect is the unions/bargainers power to compensate for higher taxes by increasing wages. In the traditional theory, tax wedge decreases both labour demand (by increasing labour cost) and supply (by lessening the take home pay, thus incentive to assume a job). However, the effect of taxes on unemployment is not

<sup>18</sup> Carlin et al. (2006), pp. 757–758.

<sup>19</sup> Bassani et al. (2006), pp. 29–32.

<sup>20</sup> For a more sceptical treatment of ALMP see Cesifo-Group (2004) involving reference to downward statistical distortions in the number of unemployed caused by the treatment of unemployed participating in ALMP programs.

<sup>21</sup> Bassani et al. (2006), p. 31.

<sup>22</sup> Baker et al. (2007), Bassani et al. (2006).

so clear-cut, partly because it has unemployment reducing effect as well as it interacts with other labour market institutions. More specifically, if higher taxes are seen as compensation for public services, negative labour demand and supply effects could be alleviated. It can be the case, for example, when it is seen as necessary to finance well-targeted ALMP. In traditional theory the particular form of tax should not affect this result, be it labour tax or consumption tax. In practice, however, restrictive preconditions should prevail to this result. While Bassani et al. (2006) found that the two sorts of taxes have similarly positive impact on unemployment; others find labour taxes more significant.<sup>23</sup>

In terms of taxes' effect on wages, both Nunziata (2004) and Clar et al. (2007) results are in accord with common sense expectations. Nunziata finds that the taxes' effect on wage costs increases is moderated by higher level of coordination in wage bargaining.

### 3.4 INTERACTION OF INSTITUTIONS AND SHOCKS

Blanchard et al. (2000) argued that institutional divergence among developed countries' labour markets predates the divergence in the labour market performance since late 70's and the 80's, thus the former cannot alone explain the latter. They interacted common macroeconomic shock with time-invariant labour market institutions and found, that most of the general evolution is explained by shocks, but interactions explained the cross-country heterogeneity of unemployment. Most of the above institutions found to be significant, but when time-variant institutions were included in the estimation, their effect considerably lessened. Bassani et al. (2006) looked at the LMI's role affecting the consequences of shocks for unemployment in terms of persistence and size. They found that high UB increases unemployment effect of macroeconomic shocks, while wide coordination and – less significantly, ambitious ALMP – decreases it. EPL and product market regulation (see below) tend to dampen the initial positive effect of shocks, while they tend to increase its persistence.

### 3.5 LABOUR MARKET REGIMES

Today it is widely acknowledged that more than one set of institutions could result in similarly acceptable labour market outcomes. Both the recent revision of the 1994 pioneering “Job Study” by the OECD<sup>24</sup> and the current EU – non-compulsory – guidelines reflect this change of views over the last decade.<sup>25</sup> The successful examples of the Netherlands, Denmark, Sweden and Finland raised considerable attention in Europe as a response to the challenges posed by globalisation to the “European Social Model”.

7. These countries are told to have invented a model called “flexicurity”, meaning that they combine employment security – as opposed to the security of a particular job – with dynamic flow of labour force among firms and industries. The price of this model is that high level of spending on social security and activation policy has to be financed from high taxes. In addition, the role of product market regulation and its interaction with labour market institutions have been emphasized. Fierce product market competition allowed by PMR geared towards strong competition secured macroeconomic stability and growth dynamism. Product market competition forces firms to pursue competitiveness, and not bend to excessive wage claims. High level of wage bargaining coordination institutionalises these macroeconomic stability and competitiveness requirements. While on the other hand, strong PMR is found in some recent studies to significantly increase unemployment via its effect of making firms' labour demand less sensitive to wage adjustments. In addition, by securing larger rents, firms tend to restrict their output (and employment) and make employees less willing to moderate their wage claims in the bargaining process, as they do not have to take into account the competitive position of the firm. Accordingly, Nicoletti et al. (2004) found that PMR has negative effect on aggregate employment in countries with more restrictive labour market institutions. However, liberalising PMR would result in direct loss for firms and employees in the short-term, while the output/productivity enhancing and inflation containing effect of more vigorous product market competition would likely to be felt over longer period and would be distributed over a much larger constituency.

<sup>23</sup> Daveri et al. (2000).

<sup>24</sup> OECD (1994) and (2006).

<sup>25</sup> Ashiagbor, D. (2005), Freeman (2005) and (2006), Nickell (2003), Blanchard (2005), OECD (2006) Ch. 2, and European Commission, DG Employment, Social Affairs and Equal Opportunities.

## 4 Hungarian labour market institutions in a historical perspective

Throughout the past nearly two decades the former socialist Hungary has implemented a wide range of competition deregulating and market liberalizing reforms. After the 1990-1994 period of transition, as Kovács (2006) demonstrates, there have been four characteristic eras in Hungary even from the point of view of the labour market, which also depicts in the figure of activity (see Chart 1): between 1995 and 1998 the stabilization of the Bokros package; between 1998 and 2001 a boom; between 2001 and 2003, the period reflecting the effects of minimum wage rises and public sector wage rises; and from 2003 up till now, the era of increasing activity and unemployment. In the following, we will give an overview of the evolution of Hungarian labour market *institutions*, which also clearly outline these eras. Our aim is to place Hungarian labour market institutions in international comparison and to answer two questions: which one of the above labour market regimes do these institutions define? And what sorts of problems are hidden in this combination of institutions?

In the socialist era, Hungary experienced full employment; not working without a proper reason (a proper reason was e.g. child-rearing) was penalized. Trade union density was almost a hundred percent and unions operated only to defend all kinds of employee interests. Their influence was so strong that the employed could not be dismissed without their (and the worker's) consent. In a word, employment protection was extremely strict. Anyway, if a firm wanted to remove a worker, first, it was obligatory to see whether there was another position for him or her at the same company. If not, then a central governmental office would search for another place to work for him or her. That was, what we would call, "active labour market policy" and as a consequence, of course, there existed no unemployment and no unemployment provision system. Each element of this system implied, of course, inadequacy for any kind of labour market adjustment and hence, was overly inflexible.

Thus, there is no surprise that the transition meant a great shock to the labour market as well. However, there are several new EU member states in the region with similar histories, labour markets are considerably different in each. These may still reflect differences in the implementation of rationalization and privatization, which had therefore long lasting effects in labour market performance. In Poland the former "inside unemployed" lost their jobs and this precipitated in a sudden jump in the official unemployment rate still high above 10 percent. In the Czech Republic, the so called "coupon privatization" among the workers and the population did not result in mass job losses. In Hungary, however, the inflow of foreign capital, which was fairly intensive compared to neighbouring countries of similar size, and the newly accepted, strict bankruptcy law forced out dramatic sudden privatization and dramatic rationalization. Broadly speaking, every fourth person lost her job while the increase in economic openness and new technology required more modern knowledge, so that average human capital depreciated. People becoming unemployed turned out to be not able to return to the labour market but the state government would not leave them alone in unemployment. These considerations lead to bad and persistence incentives: thousands of these people were retired before retirement age and the conditions for disability pensions relaxed.<sup>26</sup> Meanwhile, those who found themselves unemployed even so, were left with a quite generous benefiting system at first (see below).

From other points of view as well, domestic labour market has been seriously affected by both economic and political reforms. Privatization and rationalization was accompanied by other institutional and legislative changes as well towards a less centralized and more liberal direction. These also contributed to the shocking labour market situation from the point of view of employment chances. As strict legislation about full employment was abolished, and as the huge state companies fell apart during privatization, unions disappeared. The first and suddenly appearing symptom of all these was the sharply falling employment. Unemployment rate, an unknown index in the former regime, ran up to 11.9 percent in 1993 (The Hungarian Labour Market 2006) and due to obsolete knowledge, re-employment chances fell significantly. Many people decided rather to exit from labour market and stay in inactivity. Elder people still in working age were perhaps struck the most by transformation. In order not to increase unemployment even more, these people were sent into early retirement, with rather favourable conditions: pensions at that time were fully indexed to average wages and replacement rates were exceptionally

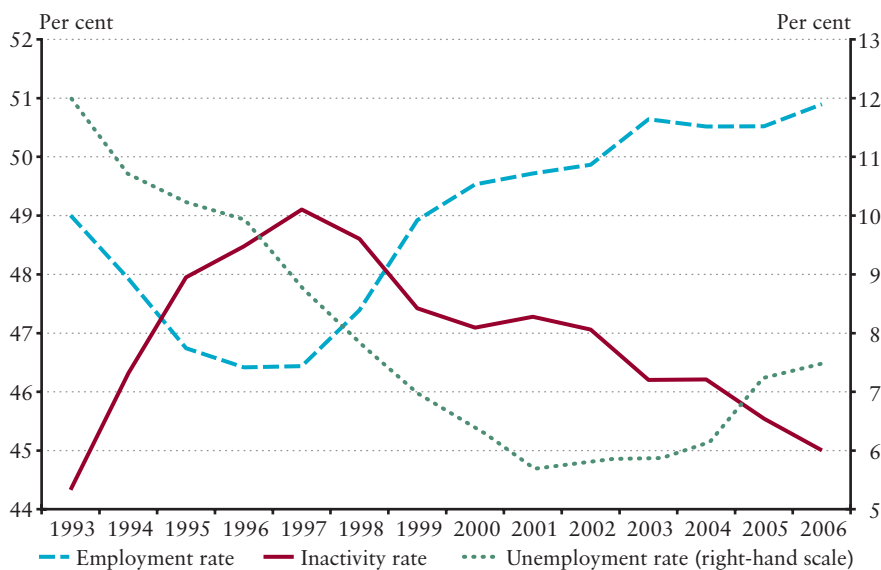
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<sup>26</sup> Another incentive in the same direction was that many day care institutions had been locked up and child care allowances might have guaranteed better earnings than working some time (Bálint-Köllő, 2006). However, part time employment is still very underdeveloped in Hungary.



## Chart 1

## Employment, unemployment and inactivity in Hungary, 1993–2006



Source: Hungarian Central Statistics Office (HCSO).

high, near 100 percent. It may have followed from this policy, the unemployment rate has never been really high in regional or broader international comparison; instead, what is still a crucial problem in Hungary is the extremely high level of inactivity.

Realizing that shocks need further regulatory reaction, in March, 1991, the political and legal fundamentals of Hungarian labour market institutions were laid down with the following main principles: it placed the provision of the unemployed on insurance bases; established the institutional system of labour market agreements; created a unified system of state service of labour affairs; and spread out the range of active labour market policies.<sup>27</sup>

However, one emphasis was placed on spreading out the range of active labour market policies, these were less important at that time; fewer people participated and only about one fifth of total labour market policy expenses were spent on active measures (see Table 4 later). It was far more urgent and at least politically reasonable to immediately ease the welfare burdens of transition by passive measures for those thousands of people who found themselves in the category of unemployed that had not existed before – even at the cost that it may act as a bad incentive from the point of view of re-employment. Therefore, it was more urgent to spend money on passive measures, than to invest in active labour market policies. As a consequence, a generous unemployment provision system was created, in which benefits and subsidies were available for broad masses with long duration and relatively high replacement. The need to register the unemployed and to help re-employment already required the establishment of a unified system of state service of labour affairs. Its foci and status have been changed several times since then but it still operates as a useful institution of the Ministry of Social Affairs and Labour under the name Public Employment Service.

While rationalization and the need for modern knowledge already made re-employment difficult, taxation was also an incentive in the same direction: although social security contribution had been existed in the socialist era as well and personal income tax had already been introduced in 1988, employers' labour tax burden augmented significantly in the transition period as well. Worsening demographic conditions and deteriorating employment rate already forced the government to increase contributions and in addition, with the 1991 law and the introduction of unemployment provision, new types appeared to widen the tax wedge (e.g. employers' and employees' contributions) to help finance passive and active measures (see Table 1).

<sup>27</sup> Frey (2006).

**Table 1**
**Compulsory social contributions, 1992–2006**

	1992	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Social security contribution (%)	44	42.5	39	39	33	33	31	29	29	29	29	29
Employer's contribution (%)	..	4.2	4.2	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Training contribution (%)	..	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Health care contribution (HUF/person/month)	..	-	1,800	2,100	3,600	3,900	4,200	4,500	3,450	3,450	2,450	1,950
Employee's health care and retirement contribution(%)	10	10	10	10	11	11	11	11	11.5	12.5	12.5	12.5*

Source: HCSO, <http://www.adoinfok.hu/onadozo/200603/tartalom.htm>.

\* From September, 2006 14.5%.

It was feared that the institutional bases of the Hungarian labour market had been formed by the predominance and generosity of passive labour market policy measures that would hamper adjustment from the supply side, and by the high level of tax wedge from the demand side. On the other hand, the rest of the institutional dimensions, i.e. employment protection, union density and the wage setting system meant a counterbalance: they happened to be rather liberal and could have enhanced labour market flexibility.

Rationalization in employment and privatization could not have been carried out with keeping employment protection so strict. To ease this adjustment process, and perhaps with the purpose to preserve this source of flexibility to adjust, a loose EPL was introduced even in Central and Eastern European comparison. This made dismissal even simpler and so promoted efficiency, it could have had a positive effect on the labour turn over and made firms' hiring decisions less costly as well. Theoretical literature emphasizes, however, that strict EPL may also have beneficial impacts: although it hampers firms' adjustment in the number of employed (by protecting "insiders", present workers and excluding "outsiders" by high hiring and firing costs), it may enhance human capital investments of insiders, which is crucial on the labour supply side in a new and continuously renewing economic and technological environment from the point of view of being able to adapt to the quick changes.<sup>28</sup> However, empirical literature is ambiguous about these relationships, and in Hungary no research has been made on the effect of EPL so far, there is a general consent that liberal EPL could be a factor for flexible labour market.<sup>29</sup> Today, as people who would need human capital development the most are outside the labour market, it might be true. But whether it was also true at the transition, when these people could have been kept employed by a stricter EPL and might have been forced to update their knowledge, it is vague.

The other dimension that is now often mentioned as useful from labour market flexibility point of view is the fall of powerful trade unions since the transition. Union density started to decline significantly and the major level of wage bargaining has been moved down to the sector and even more to the company level. However, in Hungary, at the beginning of the transition the political will was to cutback the centralized regime and then introduce more liberal labour market institutions including wage bargaining system. The aim was to sign a social pact and build up neo-corporatist institutions: a tripartite negotiation system between employers, employees and the state to be able to create consensus to provide flexibility to attain long run economic interests.<sup>30</sup> Therefore, the so called National Interest Reconciliation Council (OÉT – Országos Érdekegyeztető Tanács) was launched in 1988. At the beginning it was not surprising that because of deunionization, its wage-determining role was less significant, but this has not changed ever since; it has no real impact on individual wages except for the level of guaranteed and mandatory minimum wage (see later).

After the transition shocks and the welfare compensating measures of the transition period following them, it was time for real structural reforms in the Hungarian economy. The stabilization package of Lajos Bokros, minister of finance, aimed to restructure the economy to establish the bases of competitiveness and sustainable growth in the long run. This included

<sup>28</sup> Cazes–Nesporova (2003).

<sup>29</sup> Bassani et al. (2006).

<sup>30</sup> Tóth (2004).

**Table 2****Distribution of recipients of passive unemployment compensation by type of assistance, 1992–2005***(percentage)*

Type of compensation	1992	1993	1994	1998	2000	2001	2002	2003	2004	2005
Unemployment benefit	86.6	57.8	34.8	40.8	44.8	51.1	47.2	45.4	43.8	42.0
Unemployment allowance of young persons	5.3	6.5	7.4	-	-	-	-	-	-	-
Income replacement assistance	8.1	27.8	45.6	45.5	36.9	10.8	4.0	0.8	0.3	-
Regular social allowance	-	-	-	..	13.2	34.8	45.6	48.4	47.9	49.1
Pre-pension	0.0	7.9	12.1	13.2	2.2	0.3	-	-	-	-
Pre-retirement unemployment allowance	-	-	-	0.5	2.9	3.0	3.2	2.7	2.3	2.0
Job-search assistance	-	-	-	-	-	-	-	2.7	5.7	6.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Those not receiving any assistance, as percentage of total registered unemployed	22.6	26.4	26.2	26.1	29.5	33.5	33.3	33.6	33.5	33.8
Total registered unemployed (thousand persons)	..	672.5	568.6	423.4	390.2	363.5	344.5	356.9	375.8	409.5

Source: Frey (2006), *Public Employment Service*.

further privatization, the reform of the exchange rate regime, introducing import taxes and above all, it was indispensable to cut back social expenses, from a labour market point of view, the generous unemployment benefits and the entitlement and duration of child care allowances.<sup>31</sup> These, in the short run, again meant a huge one-off but persistent welfare shock to a wide range of people, although were expected to make it possible in longer run to decrease tax burdens and enhance labour demand and investments.

As a consequence, during the second half of the '90s, the unemployment benefit system was losing its generosity step by step in all three aspects<sup>32</sup>: the ratio of entitled decreased, which was rather due to the aggravating regulations and people's worsening employment history and not to the compositional change of the unemployed. The replacement rate decreased from 75 per cent to 50 per cent, which was mainly due to the lack of the indexation of minimal and maximal sums of benefits.<sup>33</sup> Köllő (2001) claims, that the initially generous system became strict in international comparison by the second half of the '90s. What is more, with the 2000 reform it became even more aggravated and selective; moreover, it even ignored insurance as a major principle, however, certainly spared money for the state budget.<sup>34</sup>

Table 2 shows the distribution of passive unemployment compensation by type of assistance from 1992. We can follow how unemployment benefit, allowance for young persons and pre-pension were cut back and appeared instead the income replacement, pre-retirement unemployment allowance, regular social allowance, which were available for significantly narrower range of people, with less replacement and shorter period. It was recognized that instead of decreasing unemployment, increasing activity (labour supply), a key factor in growth, had to be paid attention to. Therefore, early retirement was considerably cut back. On the whole, this was a transitory period of fiscal restrictions when passive measures had already become selective but ALMP had not been moved to the foreground.

The second period in Kovács's above chronology was a fortunate coincidence of the positive effects of the stabilisation package<sup>35</sup> and the labour market entrance of a great number of well-educated, young people with modern knowledge: the Ratkó grandchildren<sup>36</sup>. As seen from Chart 3, the tax wedge seemed to be fulfilling expectations and started to shrink on

<sup>31</sup> This latter was, however, somewhat reversed in 1998 by the next government.

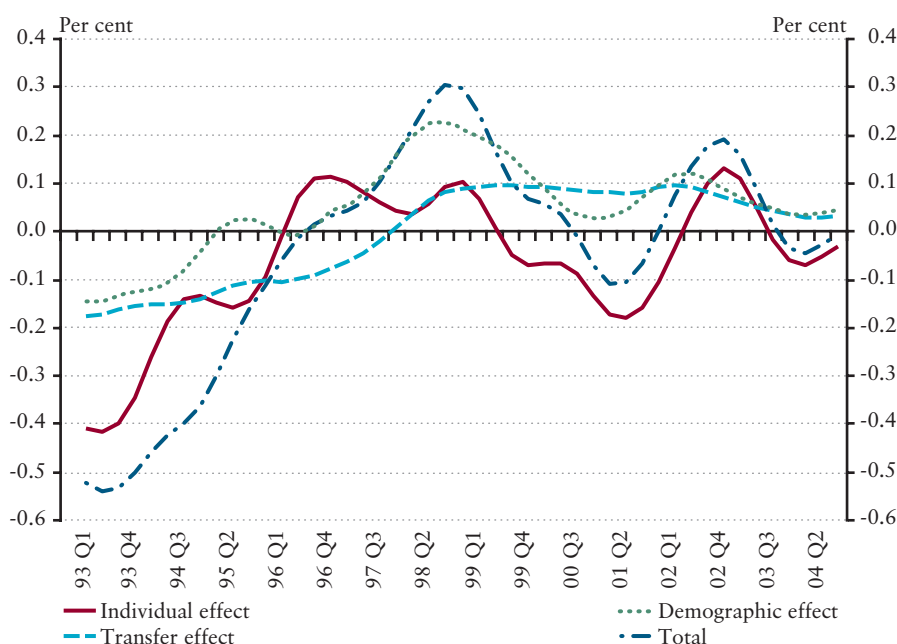
<sup>32</sup> Köllő (2001).

<sup>33</sup> Nagy (2000).

<sup>34</sup> Köllő (2001) poses two relating questions: on the one hand, whether the initial generosity of the system was necessary to compensate losers of the transition (and aggravating reforms had been planned); and on the other hand, whether the degree of aggravation by the reforms was justifiable.

<sup>35</sup> FDI-inflow has started in great volume, green field investments arrived in the country, the trade balance ameliorated and at the same time inflation started to come down.

<sup>36</sup> Ratkó grandchildren are the children of Ratkó kids, who formed an exceptionally large cohort born between 1950 and 1956. Anna Ratkó, minister of health that time introduced an aggravation of abortion legislation in 1953, as a result of which fertility and number of births significantly increased. The measure lasted until 1956, the expression Ratkó kids are often used in a broader sense: for all those who were born during the reign of the minister and the stricter legislation (1950-1956).

**Chart 2**
**Decomposition of the trend of participation growth among population aged between 15 and 64, 1993–2004**


Source: Magyar Nemzeti Bank (2006).

the employers' side and as a consequence of the positive shocks in both labour demand and supply, inactivity started to decrease.

At the same time the retirement system was reformed, once for ever since then. The conditions for early retirement became stricter and Swiss indexation<sup>37</sup> was introduced instead of pure average wage indexation. By these measures, retirement turned much less attractive. In addition, the retirement age for men was augmented to 62 years of age and it was agreed that it would also be risen gradually to 62 by 2009 for women. At the same time sanctions were introduced to discourage retirement before the legal age and to encourage employment afterwards<sup>38</sup>. The decomposition of the trend in activity depicts the effects of these reforms and shocks in Chart 2 (MNB 2006, p. 35). It suggests that, however, positive processes started then, long-term improving trend has not taken off. Especially disability retiring poses a serious and nearly out-of-control problem. The fact that there may be many disabled persons and those on child care leave who could do some kinds of work in a few hours per day calls attention to the need for a considerable increase in part-time job opportunities.

It was the second part of this period that ALMP also became more of an issue. Passive assistance, while the total labour market policy expenses significantly increased and the ratio of active measures jumped 10 percentage points from 2000 to 2001, and stayed on this level ever since. However, the number of participants in the programs did not change; and the increase in activity is still attributed to positive tendencies in labour supply and demand and not to policy success (see later).

It was an economically successful period, what is more, it is still the only period since the transition when wage dynamics were completely in line with productivity.<sup>39</sup> It might have been right time and easier than ever to sign the social pact with the employee and employer representatives in the OÉT in order to sustain these tendencies. However, the conservative government ignored tripartite negotiations and OÉT. She tried to take the remaining power from unions. In addition, she brought work councils into foreground intended to secure decentralization at the transition. Their concept, which was better served by work councils than by tripartite negotiations with unions, was to establish a set of institutions more of an Anglo-Saxon type, i.e. to keep corporate level wage determination in foreground and leave labour market adjustment on micro level – which adjustment would surely be efficient this way.<sup>40</sup>

<sup>37</sup> Swiss indexation means a mechanism in which pensions are 50 percent indexed to average wages, while 50 percent to inflation.

<sup>38</sup> For further information see Orbán et al. (2005).

<sup>39</sup> Kátay (2005).

<sup>40</sup> Tóth (2004).

In contrast with this, but still totally ignoring OÉT, the government unilaterally raised minimum wages by more than 50 per cent in 2001 and another 25 per cent in 2002. The resulting minimum wage was still below the EU-average in ratio of average wages and the first one was not even effective as it did not have an aggregate negative effect on employment.<sup>41</sup> Nevertheless, it did have a negative effect on certain, mainly light industries, such as textile leather/shoe, apparels etc.,<sup>42</sup> though this effect is not entirely separable from that of the coinciding world recession and the mass appearance of Chinese supply in these industries. Although the effects of minimum wage increases on legal, surveyed labour force are supposed to be small, it may have enhanced illegal employment and bogus contracts, and surely have had a wage compressive effect on legal wages, which, as a consequence, may have spilled over to higher wages as well.

Economic success of the years 1997–2001, the minimum wage increases and the sharp political situation might have led to the political promise fight at the 2002 and elections. As a result, the new social democratic government continued wage increases in the public sector by an average for 50 percent increase of all public servants. This measure finally derailed the Hungarian economy from the wage path compatible with productivity growth as it is supposed to have spilled significantly over to the private sector as well.<sup>43</sup> This and the external recession had an effect on private sector employment, which, however, was invisible in the aggregate employment level: the increased wages in the public sector became competitive and attractive and labour force surplus from the private sector was absorbed by the state. Hence, unemployment was unchanged, only the formerly shrunk public employment swelled back.

The new wage policy also included the restoration of OÉT. From the concept at the transition, the deliberate cutback of the centralized regime of pressure groups carried out by itself, but the reconstruction of the institution of tripartite negotiations, with constructive and cooperative unions had stuck and, as we mentioned above, was even hampered by the 1998–2002 conservative government. With the change of cabinet, the initial concept was back and OÉT was restored to its present form in 2002. It has a program in each half year, gathers in every month and negotiates on questions concerning labour market, including income distribution. Committees prepare the agenda for the sessions. Ministries are invited if the agenda requires so, otherwise the government has a stable representative with general licenses on the sessions and she also secures the framework and the roles of negotiations. Employers are present in the form of employers' organizations, while unions represent the employees.<sup>44</sup> Meanwhile, as new interest groups have hardly been formed in the new private sector, the representatives of the employees' part are rather the remainders of old unions (with significant public sector coverage, e.g. Hungarian State Railway Company) who have completely different goals: Instead of making efforts to reach consensus with the other two partners to abolish political promise-competition, to anchor expectations to produce wage agreements in line with long run economic growth and policy goals, their only objective is to catch up wages to the European Union's average regardless of sustainability.<sup>45</sup> However, they not only have low and decreasing density (16.9%<sup>46</sup>), but are also relatively weak in bargaining power.

In spite of diverging interests, however, OÉT comes up yearly with wage agreements but these are taken just as recommendations. Only the minimum wage agreements, which also fall in the competence of OÉT, have mandatory power for the whole economy guaranteed by law. Private sector wages are determined at sectoral or, more often, at the company level. The coverage of sectoral collective agreements is also low (39.1%<sup>47</sup>) and the effect of extensions is not significant either. Coverage is typically higher in the public sector, it increases with firm size and is higher among white-collar workers and in case of occupations demanding for higher education (e.g. in the education sector).<sup>48</sup>

As it can be seen, the bridge between the legal and the effective role of OÉT and wage bargaining negotiations are still unclear in Hungarian labour market policy. One major reason for this is social and political disagreement about the conceptual role of the desired wage-setting institutions, while another is that new employees' pressure groups were hardly established, while the remaining old ones have not changed their attitudes or realized that their role in market economy is completely different as before.

<sup>41</sup> Kézdi et al. (2004).

<sup>42</sup> E. g. Benedek et al. 2006; Kertesi et al. (2004).

<sup>43</sup> Kézdi et al. (2004).

<sup>44</sup> Koltay et al. (2006).

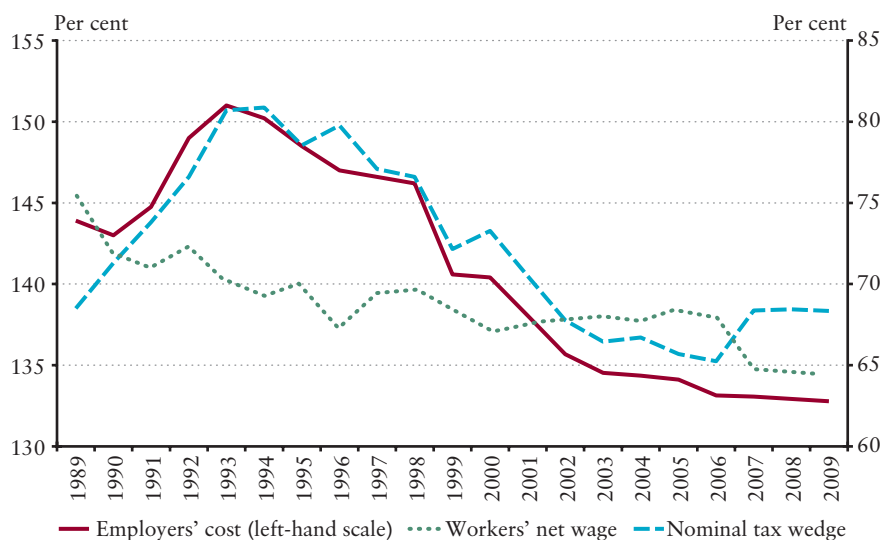
<sup>45</sup> Tóth (2004).

<sup>46</sup> Koltay–Neumann (2006).

<sup>47</sup> HMSL (2004).

<sup>48</sup> Du Caju et al. (2008), Koltay–Neumann (2006).

## Chart 3

**Employers' cost, workers' net wage and nominal tax wedge in Hungary, 1989–2009***(In percentage of gross nominal wage)*

Source: Magyar Nemzeti Bank.

Loose wage and income policy of this period resulted that the cost of labour augmented faster than the rental cost of capital. This, on the one hand, encouraged firms to substitute labour for capital in certain industries (e.g. textile) and to shift burdens on employers, as shown on Chart 3: although gross wages are rising, tax burden of employers as a percentage of gross wages continue, though more slowly, to decline, while those of the employed are stagnating, even expected to increase in the following 2 years. As a result of already regular fiscal cycles in Hungary and the following consolidations, in 2006 new or higher contributions were introduced on both the employer's and the employee's side (e.g. double social security contribution after minimum wage workers or new kinds of health care contributions). According to the calculations of the National Bank of Hungary, tax wedge will jump up by a historically large measure, by nearly 3 percentage points. The jump will precipitate in the increase of the workers' burden while that of the employers will almost remain the same, though still high in international comparison. So that the co-moving gap between employers' cost and tax wedge is expected to widen. What may be concluded from Chart 3 is that upside shocks in nominal tax wedge always reflected in the increasing burdens of the employed, while the overall decreasing tendency by 2006 favoured employers. Relying on the prognosis of MNB, however, these upside shocks in 1995 and 2000 were temporary ones, while the present one in 2006 will have longer term effects, which might even result in a fall in the propensity to work mainly among secondary earners.<sup>49</sup> The "good" news is that seemingly, 2006 restrictions will not put additional burdens on employers' at least: employers' cost will stagnate or very slightly will continue to decline; the rise in nominal tax wedge is expected to be shifted completely to employees.

The (expected) increase in tax wedge is even supposed to reflect in the rise in unemployment from 2005 and a new standstill in activity at the beginning of 2007. Whether this is caused by mainly reduced hiring propensity of firms (i.e. a fall in the labour demand) or by declining propensity to work (i.e. for example the exit of secondary earners from the labour market) is yet an unresearched (and maybe just later researchable) but important issue.

As the other burning issue is that of inactivity, the latest reform of unemployment provision was introduced in 2005, even more to the direction of encouraging work instead of security and generous benefits. It was carried out partly because the sum of benefits had depreciated and partly because in 2004 only half of those entitled for provision were looking for a job or prone to accept an opportunity. Therefore, the newly introduced benefit types were based on incentive motives: entitlement is now conditional on job search. Nevertheless, the modification has not come up to expectations: the improvement of job finding indices is not detected and the law itself raises constitutional issues.<sup>50</sup>

<sup>49</sup> MNB (2006).<sup>50</sup> Frey (2006).

**Table 3****Average number of participants in active labour market measures, 1993–2005**

Active labour market measures	1993	1994	1998	2000	2001	2002	2003	2004	2005
Labour market training		30,662	23,039	26,307	27,187	23,410	25,044	17,919	11,838
Public work*		27,021	30,877*	23,705	23,185	17,751	17,534	14,235	15,790
Wage subsidy		20,442	29,313	27,524	26,547	21,963	20,439	18,909	18,417
Job-creation investment aid**		23,051	12,291	3,192	6,943	1,708	1,270	2,717	2,742
Entrepreneurship aid		3,668	1,307	1,506	1,616	1,269	1,250	953	1,137
Part-time employment aid		1,781	-	-	-	-	-	357	586
Early retirement		6,283	1,348	45	-	-	-	-	-
Travel costs reimbursement		1,907	2,326	4,091	3,483	3,294	3,088	2,112	1,836
Measures for young persons			10,302	7,816	7,094	6,827	7,686	7,908	8,086
Self-employment support scheme			1,992	4,505	5,142	5,204	4,642	3,963	3,111
Aid for job protection			1,528	3,029	156	2,209	3,419	2,923	4,285
Reduction of contributions			556	1,255	3,399	3,116	3,887	3,324	3,821
Total	75,864	114,815	114,879	102,975	104,752	86,751	88,259	75,320	71,648

Source: Frey (2006).

\* Including all forms of community work.

\*\* The number of jobs newly created with the aid and for which workers were hired.

Even after the cutback of passive measures and the conceptual shift towards active policies, ALMP seem to have little effect on the labour market. Types of measure in a historical perspective is shown in Table 3.<sup>51</sup>

It is apparent from the above table that since the transition the number of participants in all active labour market programmes is between 70 and 115 thousand, which is approximately 2-3 per cent of the economically active. Recently, it is declining as more and more programmes turn up subsidized by the European Union, which are not included in these statistics. That's why one index of ALMP, activation rate<sup>52</sup> has also decreased some 8 per cent in the last five years, and is now at 15 per cent.<sup>53</sup> ALMP-expenses in the ratio of GDP stagnate, however, in absolute terms they are increasing as well as the share of ALMP-expenses from all (active *and* passive) labour market policy expenditures (HMSL 2005, see Table 4).

However, participation and expenses appropriated for ALMP show improvement, with other post-communist countries and the UK, it is still among the lowest in international comparison (see Chart 4). In addition, these indices do not take into account the efficiency of the system. On the one hand, O'Leary (1997), Galasi et al. (1999) and others claim that participation in the programmes is non-random and shows selection bias, which suggests that those most in need are unreached by the

**Table 4****Labour market policy related expenditure, 1992–2003**

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Billion HUF	17.8	23.4	266.8	23.7	26.1	38.4	39.9	46.3	51.6	71.0	87.3	89.7
As a percentage of GDP	0.61	0.66	0.61	0.43	0.38	0.45	0.40	0.40	0.39	0.48	0.52	0.48
Percentage ratio of active measures in all expenditure	21	24	34	32	34	42	39	42	46	56	58	57

Source: Hungarian Ministry of Social Affairs and Labour.

<sup>51</sup> Dashes indicate that those specific policies did not exist that time.

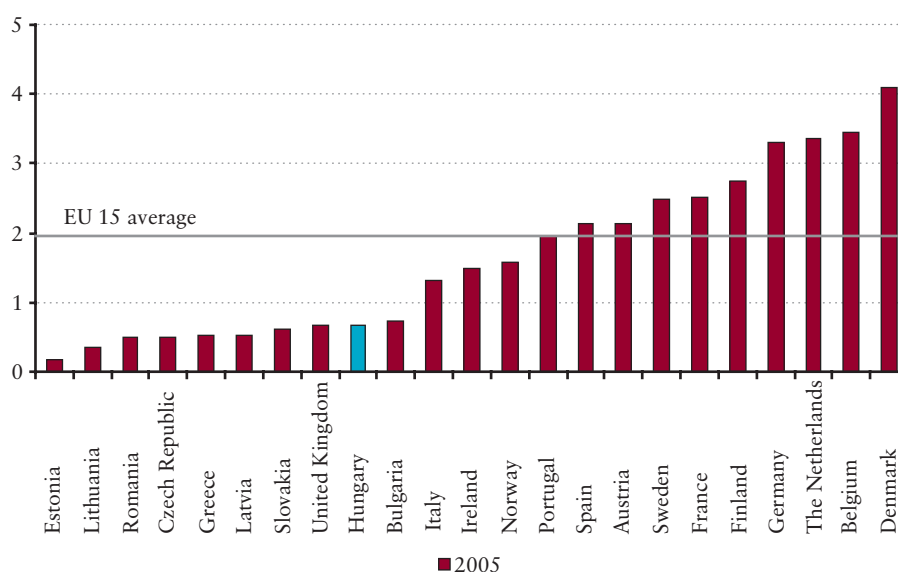
<sup>52</sup> Activation rate= (Number of participants in ALMPs)/(Number of participants in ALMPs + Number of registered unemployed).

<sup>53</sup> Frey (2006).

**Chart 4**

**Spending on labour market policy measures**

(as a percentage of GDP)



Source: Eurostat Labour Market Policy database.

programmes. On the other hand, though there may be positive net effects, those participating not necessarily succeed in finding a job. These efficiency deficiencies are the key problems with Hungarian ALMPs due to which they are not capable of significantly contributing to the flexible adjustment of the labour market.<sup>54</sup>

<sup>54</sup> The inefficiency of ALMPs is really a great problem, as it is widely held in Hungary that one of the most serious barriers to employment growth is "employability", the unsatisfactory human capital of people depreciated after the transition. This draws policy attention to education and training programs, however, this latter is not the most effective ALMP.



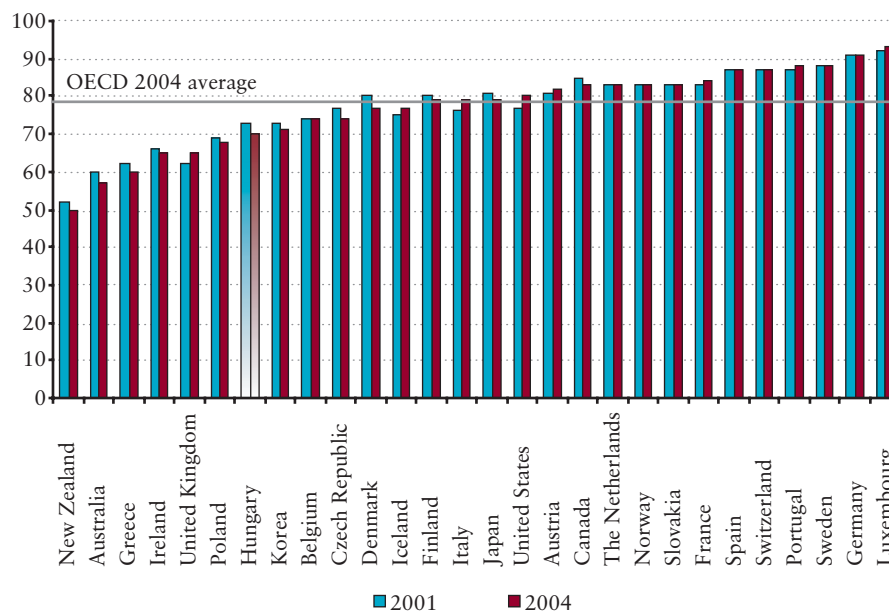
## 5 Overall flexibility and labour market regime: the position of the Hungarian institutional combination in international comparison

Overall, we find that unemployment generosity, unionization and employment protection are well below the average of the European Union and even the OECD-countries, almost similar to Anglo-Saxon countries (see Chart 5 and 6). From the point of view of flexibility, however, the effects of all three may be twofold. Ungenerous unemployment provision may, on the one hand, serve as a good incentive for quick job finding, so for a flexible labour market adjustment in the number of employed from a supply side perspective. On the other hand, it may also be a good incentive for the unemployed to exit the labour market and become inactive. In the current Hungarian labour market environment, rather the first is supported as the number of active people has been slowly increasing in the last 8-10 years (up until 2007). As far as wage adjustment ability is concerned, it is partly determined by the tightness of the labour market, which we might measure by the number of job searchers. Therefore tying benefit entitlement to job search may have increased the relatively low number of unemployed acting as a wage discipline device.<sup>55</sup> This, however, does not seem to be supported by the fact that job finding rates have not risen yet (though this latter might also be due to skill mismatch and lack of properly skilled labour force as well – a relevant problem in Hungary).

**Chart 5**

### Net income replacement rate for unemployment the first period

(as a percentage of former earnings)



Source: OECD Benefits and Wages database.

In international comparison the low union density, collective coverage and bargaining power together with the diverging interests in tripartite negotiations suggest that wage setting institutions, hence collective wage agreements (or recommendations) do not play a crucial role in individual wage settings. They let space for a flexible labour market and quick adjustment to economic shocks. On the other hand, minimum wage setting is in the competence of OÉT, and however, Hungarian minimum wage ratio of average wages is well below the EU-average, can have a significant wage increasing effect,

<sup>55</sup> However, Pula (2005) argues that macro level linkage between the number of unemployed and wages is unproved in Hungary as well. In local labour markets there exists such a relationship, though.

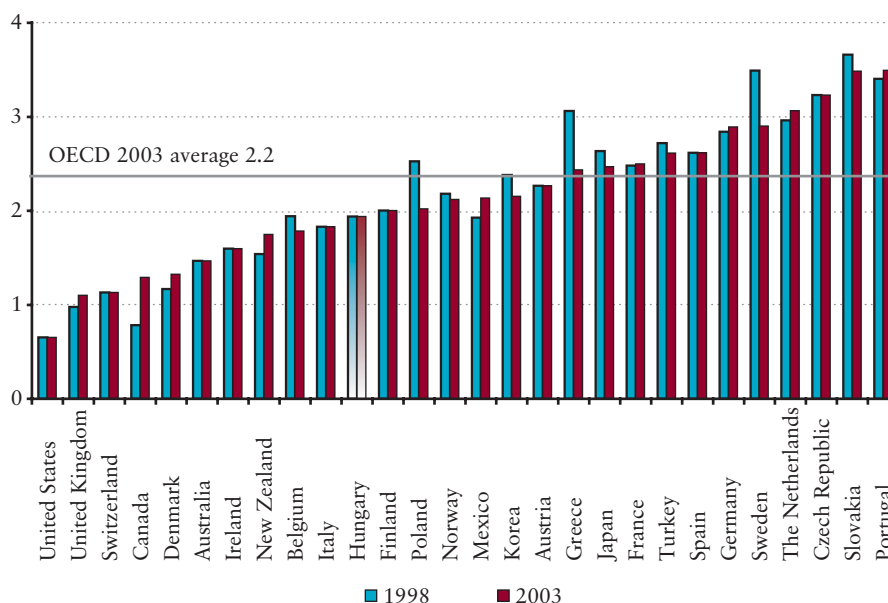
that is, on overall wage distribution as well (as it is supposed to have occurred after 2001–2002). Therefore, it is not exaggerating to say that the present operation of OÉT does not give a hand to economic policy with wage and other labour market agreements in line with a sustainable growth path, nor do they help the agents of the labour market to follow economic processes. Although if they had economically well-grounded recommendations, they could be essential to anchor expectations and to support longer term goals in the present disinflationary environment. Especially as diverging interests characterize not only tripartite negotiations but economic policy and politics in general as well. Nevertheless, the present form of OÉT might be a considerable obstacle from the point of view of wage adjustment: it may leave wages, a component of inflation, incalculable or even incalculably high compared to productivity.<sup>56</sup> In addition, by more moderate wage claims, they could even internalize employment goals as well and thus, play a role in the expansion of employment.

As can be seen from Chart 6 and as emphasised among others by Riboud et al. (2002) and Pula (2005), since the transition, EPL in Hungary has been closer to the Anglo-Saxon countries than to most of the European countries. Tonin (2005) overviewed the components – regular and temporary employment regulation and collective dismissal regulation – of EPL in Central and Eastern European (CEE) countries in 2003, and Hungary was the least strict CEE country, is especially liberal in the first two dimensions. The procedure of individual dismissal was relatively easy; by a written statement with reasons such as “unsatisfactory performance” or “job redundancy”, while in stricter countries a third party had to be involved and social considerations had to be taken into account.<sup>57</sup> However, notice and severance is quite differentiated depending on the tenure of service. The conditions of fixed term, temporary contracts, their renewal and duration are rather permissive.<sup>58</sup> On the other hand, Hungary is among the relatively stricter CEE countries in the dimension of collective dismissals, both from the point of view of the definition and the notifications required, however, no additional costs emerge for employers such as retraining employees for example.<sup>59</sup>

**Chart 6**

**Employment protection legislation**

(EPL, overall index)



Source: OECD EPL database.

<sup>56</sup> However, as we mentioned, OÉT just has the right of recommendation and that union or wage bargaining coverage is rather low in Hungary, these remarks may be important: Wage recommendations have the largest effect in sectors where PMR is strong (state-owned or -regulated companies) and therefore, competition may not have the opportunity to force down wages if needed.

<sup>57</sup> Riboud et al. (2002).

<sup>58</sup> However, in 2003 Hungarian EPL became slightly more rigorous in the aspect of the cumulative duration of temporary contracts, it is still among the least strictest systems in CEE- and in EU-comparison as well.

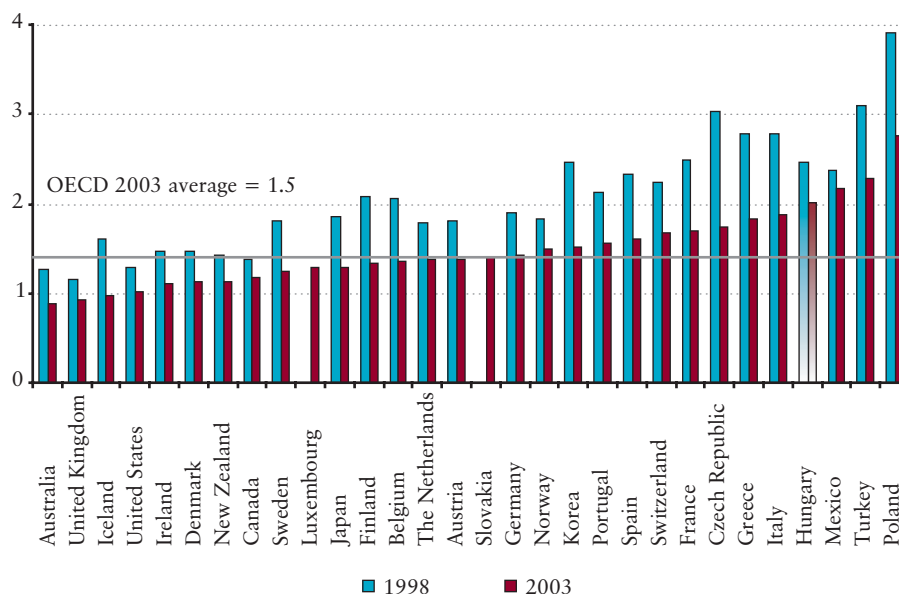
<sup>59</sup> Riboud et al. (2002), Tonin (2005).

In summary, relatively loose EPL system in Hungary suggests a labour market where hiring and firing should be easy, and one which is flexible as far as adjustment in the number of employees is concerned to respond to macroeconomic shocks.<sup>60</sup> Nor is EPL an obstacle to restructuring at micro and macro level.<sup>61</sup> This is good news also from another point of view. The European Commission (2006a) mentions that usually it is the product market that becomes liberalized earlier and forces labour market (especially EPL) to loosen. Nevertheless, the low EPL Hungary, mainly because of large companies still owned by the state (e.g. railway company) and highly regulated network industries, belongs to the group of countries with relatively tightly regulated product markets (see Chart 7), which is believed to increase unemployment at least in a longer term perspective and makes wage and price adjustment less responsive to macroeconomic shocks.<sup>62</sup> On a positive side, at least it is not coupled with other institutional features, which may aggravate these potentially adverse effects, namely strict EPL.

## Chart 7

### Product market regulation

(overall)



Source: OECD PMR database.

On the other hand, what are far more unsatisfactory and for sure have negative effects on labour market flexibility are the extremely low level of activity and – in close relation with this – ALMP, and the wide tax wedge, which is not even expected to ameliorate in the medium run.

ALMP is still in its infancy in Hungary. Participation is low, and in spite of the fact that active measures already take more than half of total policy expenses, we do not know anything about the efficiency of the programs. However, international empirical literature is also ambiguous about the effectiveness of different ALMPs, a thorough program evaluation should be carried out in today's Hungary. It should be a priority for labour market policy, as a well-targeted ALMP system may be able to develop activity from the supply side. This is not just the problem of the elderly, whose human capital had been depreciated with the transition; present education system in Hungary (hopefully under restructuring) emit thousands of young people with less adaptable knowledge, hereby reproducing low employment chances, low *employability* and inactivity.

<sup>60</sup> This points towards the direction that the masses of unemployed should act as a downward wage discipline device as well.

<sup>61</sup> On the other hand, as we mentioned before, a loose EPL, through larger labour turn over and shorter job tenure may result in lower level of human capital investment and adaptability. But, following from this, in case of Hungary, it would only worth aggravating, if employment raised to a satisfying level. Otherwise, there would be a whale of outsiders struck by strict EPL.

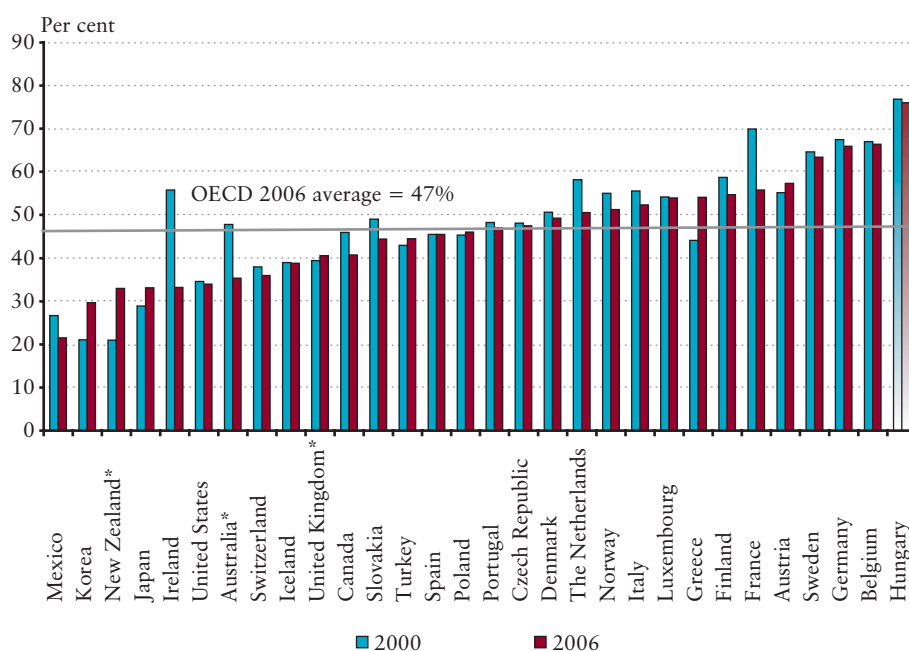
<sup>62</sup> For more about the interaction of product market regulation and labour market regulation and their role in macroeconomic performance in case of Hungary and in comparison with less developed EMU participating countries see Chapter 5 in: MNB (2008).

As mentioned before and illustrated on Chart 3 and 8, tax wedge, labour burdens both for employers and employees are salient in Hungary, it is among the highest in the EU. They are high due to high personal income tax rates but even more to extremely huge social security contributions.<sup>63</sup> Meanwhile, the European Union itself has a goal of decreasing the tax burden on labour to increase employment to attain the 70 per cent employment rate set in the Lisbon Strategy, in Hungary, for the time being, the fiscal consolidation again postpones the great step towards this most exigent problem of the labour market flexibility. This appears to be a structural problem of the Hungarian taxation and fiscal policy system, which might also hamper the labour market adjustment to shocks requiring an increase in the number of employed.

### Chart 8

#### Marginal tax wedge on labour

(at 100% of average worker's earning, per cent of total labour compensation)



\* Country in which the tax year is not the calendar year.

Source: OECD Taxing Wages database.

In light of these institutional characteristics and what was said about the interaction of shocks and institutions, because of lack of coordination and strict EPL, Hungarian labour market should suffer from macro shocks in terms of size but the impact should not be especially persistent. Tentatively, it seems from this that moving to more coordination would lessen the initial impact while not increasing persistence.

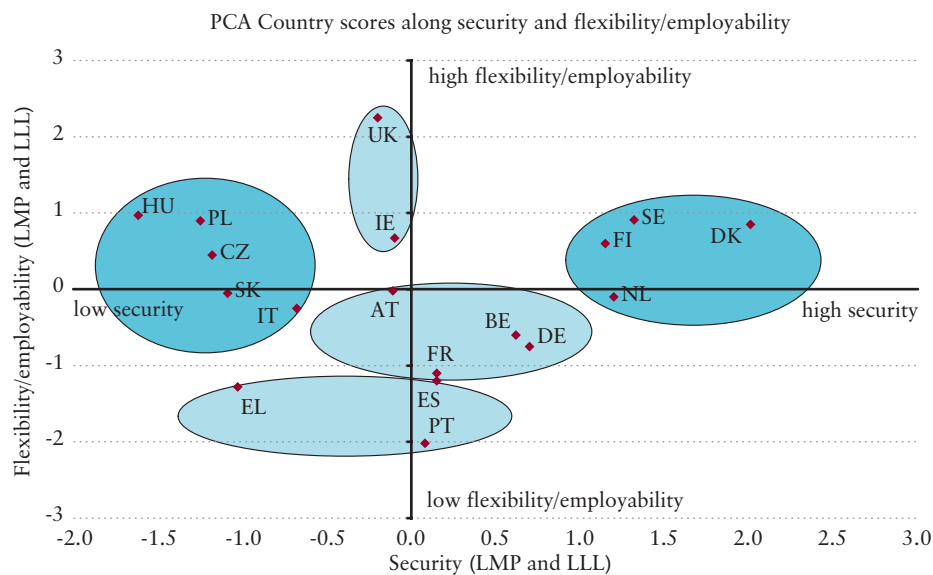
As far as the interaction of institutions is concerned, a new approach has arisen in international policy literature. More recently European Commission proposed to use the concept of flexicurity (see above) not simply describing the Nordic countries' particular choice along the two dimensions of flexibility and job security, but it also makes possible analysing all the countries' choices along the flexibility/employability and security dimensions including the Anglo-Saxon practice, which would be interpreted as a particular flexicurity model.

Hungary is in the insecure flexible quadrant along the two dimensions of flexibility and security (see Chart 9). That is, compared to the other countries considered, Hungary is among the countries with inferior combination of security and flexibility. Relatively high flexibility is due to loose EPL, which we cannot exploit because of employability constraints. In terms of the new guidelines of European employment policy, the problem is still that we are much further along the insecure dimension from the average than along the flexibility. Insecurity is the consequence of the ungenerous unemployment benefit system and low ALMP expenses. The cut back of the former was intentional to hold back adverse incentives. However, as the

<sup>63</sup> Kreko-Kiss (2007).

**Chart 9**

**Labour market regimes in EU**



Source: European Commission (2006a).

Commission (2006a) mentions, by the improvement of ALMPs, adverse effects of generous UB disappear, and security is therefore guaranteed. Of course, this would require well-targeted fiscal resources. Interestingly, Poland and the Czech Republic show similar features, but are somewhat closer to the average by both dimensions. UK shows much more flexibility with much more security, while with similar flexibility Denmark provides much larger security.

## 6 Conclusion

Hungarian labour market institutions in most dimensions are formally flexible in international comparison. It helps rapid restructuring of the firms and industries, and probably helpful to attract investors. However, unsatisfactory ALMP might seriously hamper flexibility in terms of re-employment of large sections of the potential labour force. Thus, low UB tend to diminish the number of unemployed, but as they are not assisted in their reemployment efforts, they fall back into inactivity instead of becoming employed. Moreover, a large number of inactive people probably would not be eligible under a stricter inactivity regulation. Thus, part of the large pool of inactive people consists of disguised unemployed. Large tax wedge increases non-employment, or at least diminishes labour demand and supply in the formal sectors, again, decreasing formal activity. A problem is that diminishing tax wedge to promote labour demand and supply and improve international competitiveness would require more formal activity/employment, which is prevented precisely by the tax wedge itself, thus leading to a full circle.

As far as the flexibility of wage adjustment is concerned, low union density and mostly company level wage coordination favour flexibility. However, these bargaining institutions play a more important role in industries where product market regulation is rather tight, which may hamper adjustment in these sectors. In addition, severe employability constraints keep inactivity high, therefore unemployment cannot force down wages if needed.

Therefore, in international comparison the present constellation of the labour market institutions or “flexicurity regime” in Hungary is far from being an optimal one. It combines partial flexibility with serious impediments to increasing activity. In principle the institutional set-up could move either of two directions, – namely, lightly taxed/lightly regulated regime on the one hand, and heavily taxed/strongly assisted regime on the other – both of which seem to be viable in developed countries. As central bankers, we are not supposed to be partisans of either of these directions as they involve choosing between social values and preferences. We can only point to the directions which, on the basis of the available stock of knowledge, are likely to lead to better labour market performance in the future in terms of both employment and income security and long-term economic growth.

# References

- ARPAIA, A. AND MOURRE, G. (2005a): “Labour Market Institutions and Labour Market Performance: A Survey of the Literature”, European Commission, *Economic Papers*, No. 238, December.  
[http://ec.europa.eu/economy\\_finance/publications/economic\\_papers/economicpapers238\\_en.htm](http://ec.europa.eu/economy_finance/publications/economic_papers/economicpapers238_en.htm).
- ARPAIA, A., D. COSTELLO, G. MOURRE AND F. PIERINI (2005b): “Tracking Labour Market Reforms in the EU Member States: an overview of reforms in 2004 based on the LABREF database”, *European Commission Economic Papers* No. 239, December  
[http://www.eu.nl/economy\\_finance/publications/economic\\_papers/2005/ecp239en.pdf](http://www.eu.nl/economy_finance/publications/economic_papers/2005/ecp239en.pdf)
- ASHIAGBOR, D. (2005): *The European Employment Strategy*. Labour Market Regulation and New Governance, Oxford University Press, Oxford.
- BAKER, DEAN, J. SCHMITT, A. J. GLYN (2002): *Labor Market Institutions and Unemployment: A Critical Assessment of the Cross-Country Evidence*: <http://www.newschool.edu/cepa/papers/archive/cepa200217.pdf>.
- BÁLINT MÓNICA AND JÁNOS KÖLLŐ: *Gyermeknevelési támogatások a Munkaerő-felvételben*, mimeo,  
<http://www.econ.core.hu/file/download/balintkollo.doc>.
- BASSANI, ANDREA AND ROMAN DUVAL (2006): “Employment Patterns in OECD Countries: Reassessing the Role of Policies and Institutions”, *OECD Economics Department Working Papers* 486, OECD Economics Department,  
<http://www.sourceoecd.org/10.1787/846627332717>.
- BENEDEK D., RIGÓ M., SCHARLE Á. AND SZABÓ P. (2006): Minimálbér-emelések Magyarországon 2001–2006, *Hungarian Ministry of Finance Working Papers* No. 16, January.
- BLANCHARD, OLIVIER (2004): *Designing Labour Market Institutions*, [http://econ-www.mit.edu/faculty/download\\_pdf.php?id=927](http://econ-www.mit.edu/faculty/download_pdf.php?id=927).
- BLANCHARD, OLIVIER (2005): European Unemployment: “The Evolution of Facts and Ideas”, (October 10, 2005). *MIT Department of Economics Working Paper* No. 05-24, [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=825885](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=825885).
- BLANCHARD, OLIVIER (2006): *A review of “Unemployment. Macroeconomic Performance and the Labour Market”*, by Richard Layard, Stephen Nickell, and Richard Jackman, [http://econ-www.mit.edu/faculty/index.htm?prof\\_id=blanchar&type=paper](http://econ-www.mit.edu/faculty/index.htm?prof_id=blanchar&type=paper).
- BLANCHARD, OLIVIER AND J. WOLFERS (2000): “The Role of Shocks and Institutions in the Rise of European Union: The Aggregate Evidence”, *MIT working papers*, [http://econ-www.mit.edu/faculty/download\\_pdf.php?id=803](http://econ-www.mit.edu/faculty/download_pdf.php?id=803).
- BLANCHARD, OLIVIER AND GIAVAZZI, FRANCESCO (2000): “Macroeconomic Effects of Regulation and Deregulation in Goods and Labor Markets (January)”, *MIT Dept. of Economics Working Paper* No. 01-02, <http://ssrn.com/abstract=257542>.
- BOWDLER, CHRISTOPHER AND LUCA NUNZIATA (2007): *Inflation Adjustment and Labour Market Structures: Evidence from a Multi-Country Study*, <http://www.iza.org>.
- CALMFORS, L. AND DRIFFILL, J. (1988): “Bargaining Structure, Corporatism and Macroeconomic Performance”, *Economic Policy*, 6: p. 13-61.
- CARLIN, W. AND D. SOSKICE (2006): *Macroeconomics. Imperfections, Institutions and Policies*, Oxford University Press, Oxford.

- CAZES, S. AND NESPOROVA, A. (2003): *Employment Protection Legislation (EPL) and its effects on Labour Market Performance*. Written version of the lecture on High-Level Tripartite Conference on Social Dialogue, Malta, Valetta, 28 February – 1 March 2003, International Labour Office, [www.ilo.org/public/english/region/eurpro/geneva/download/events/malta2003/emp\\_prot\\_leg.pdf](http://www.ilo.org/public/english/region/eurpro/geneva/download/events/malta2003/emp_prot_leg.pdf).
- CESIFO-GROUP (2004): “Pay-setting Systems in Europe: On-going Developments and Possible Reforms”, in: *Report on the European Economy 2004*, European Economic Advisory Group at CESifo, Munich, [http://www.cesifo-group.de/pls/guestci/download/EEAG%20Report%202004/ceag\\_report\\_chap3\\_2004.pdf](http://www.cesifo-group.de/pls/guestci/download/EEAG%20Report%202004/ceag_report_chap3_2004.pdf).
- CESIFO-GROUP (2004): “Labour Market Reform in Europe”, in: *Report on the European Economy 2004*, European Economic Advisory Group at CESifo, Munich, Chapter 2, [http://www.cesifo-group.de/pls/guestci/download/EEAG%20Report%202004/ceag\\_report\\_chap2\\_2004.pdf](http://www.cesifo-group.de/pls/guestci/download/EEAG%20Report%202004/ceag_report_chap2_2004.pdf).
- CESIFO-GROUP (2007): “Scandinavia Today: An Economic Miracle?”, in: *Report on the European Economy 2007*, European Economic Advisory Group at CESifo, Chapter 4, Munich, <http://www.cesifo-group.de/DocCIDL/EEAG-2007.pdf>.
- CLAR, M., C. DREGER AND R. RAMOS (2007): “Wage Flexibility and Labour Market Institutions: a Meta-Analysis”, *IZA Discussion Paper Series No. 2581*, <http://www.iza.org>.
- CONWAY, PAUL, VERONIQUE JANOD AND GIUSEPPE NICOLETTI (2005): “Product market regulation in OECD countries: 1998 to 2003”, *Economics Department Working Paper No. 419*, [http://www.olis.oecd.org/olis/2005doc.nsf/linkto/eco-wkp\(2005\)6](http://www.olis.oecd.org/olis/2005doc.nsf/linkto/eco-wkp(2005)6).
- CONWAY, PAUL, DONATO DE ROSA, GIUSEPPE NICOLETTI, FAYE STEINER (2006): “Regulation, Competition and Productivity Convergence”, *Economics Department Working Paper No. 509*, [http://www.olis.oecd.org/olis/2006doc.nsf/linkto/ECO-WKP\(2006\)37](http://www.olis.oecd.org/olis/2006doc.nsf/linkto/ECO-WKP(2006)37).
- DAVERI, FRANCESCO, GUIDO TABELLINI, SAMUEL BENTOLILA AND HARRY HUIZINGA (2000): “Unemployment, Growth and Taxation in Industrial Countries”, *Economic Policy*, Vol. 15, No. 30, pp. 47-104.
- DRIFFILL, JOHN (2006): “The Centralisation of Wage Bargaining Revisited: What have we learnt?”, *Journal of Common Market Studies*, vol. 44. No. 4., pp. 731-56
- DU CAJU, PHILIP, ERWAN GAUTIER, DAPHNE MOMFERATOU, MELANIE WARD-WARMEDINGER (2008): “Institutional features of wage bargaining in 22 EU countries, the US and Japan”, mimeo, [http://www.ecb.int/events/pdf/conferences/wage\\_dynamics\\_europe/du\\_caju\\_et\\_al.pdf](http://www.ecb.int/events/pdf/conferences/wage_dynamics_europe/du_caju_et_al.pdf).
- EICHENGREEN, B. (2007): *The German economy: be careful what you ask for*, <http://www.voxeu.com/index.php?q=node/420>.
- EICHENGREEN, B. AND T. IVERSEN (1999): “Institutions and economic performance: evidence from the labour market”, *Oxford Review of Economic Policy*, vol. 15: p. 121-138, <http://oxrep.oxfordjournals.org/cgi/content/abstract/15/4/121>.
- EKKEHARD, E., G. GONG, W. SEMMLER AND L. BUKEVICIUTE (2006): “Quantifying the Impact of Structural Reforms”, *European Central Bank Working Paper Series*, No. 666. August, <http://www.ecb.int/pub/scientific/wps/author/html/author821.en.html>.
- EUROPEAN COMMISSION (2006a): *Employment in Europe 2006, October*, Directorate General for Employment, Social Affairs and Equal Opportunities Unit 1, pp. 75-118. [http://ec.europa.eu/employment\\_social/employment\\_analysis/employ\\_2006\\_en.htm](http://ec.europa.eu/employment_social/employment_analysis/employ_2006_en.htm).
- EUROPEAN COMMISSION (2006b): *Labour Market and Wage Developments in 2006, with special focus on Relative Unit Labour Costs Developments in the Euro Area*, Directorate General for Economic and Financial Affairs, [http://ec.europa.eu/economy\\_finance/publications/european\\_economy/2006/eesp406en.pdf](http://ec.europa.eu/economy_finance/publications/european_economy/2006/eesp406en.pdf).



EUROPEAN COMMISSION LABREF DATABASE, Directorate General for Economic and Financial Affairs and Economic Policy Committee, [http://ec.europa.eu/economy\\_finance/indicators/labref\\_en.htm](http://ec.europa.eu/economy_finance/indicators/labref_en.htm).

EUROPEAN COMMISSION DIRECTORATE GENERAL FOR EMPLOYMENT, SOCIAL AFFAIRS AND EQUAL OPPORTUNITIES (internet): *Flexicurity: the response to globalisation and demographics by combining flexibility and security*, [http://ec.europa.eu/employment\\_social/employment\\_strategy/flex\\_meaning\\_en.htm](http://ec.europa.eu/employment_social/employment_strategy/flex_meaning_en.htm).

EUROSTAT: *Labour Market Policy database* (online):

[http://epp.eurostat.ec.europa.eu/portal/page?\\_pageid=1996,45323734&\\_dad=portal&\\_schema=PORTAL&screen=welcomeref&open=/C/C4/C46&language=en&product=Yearlies\\_new\\_population&root=Yearlies\\_new\\_population&scrollto=488](http://epp.eurostat.ec.europa.eu/portal/page?_pageid=1996,45323734&_dad=portal&_schema=PORTAL&screen=welcomeref&open=/C/C4/C46&language=en&product=Yearlies_new_population&root=Yearlies_new_population&scrollto=488).

FREEMAN, RICHARD B. (2005): "Labour Market Institutions without Blinders: The Debate over Flexibility and Labour Market Performance", April, *NBER Working Paper* No. 11286, <http://www.nber.org/papers/w11286>.

FREEMAN, RICHARD B. (2006): "Searching for the EU Social Dialogue Model", *NBER Working Paper*, No. 12306, June, <http://www.nber.org/papers/w12306>.

FREY M. (2006): "Changes in the Legal and Institutional Environment of the Labour Market", In: Fazekas K. and Koltay J. (eds): *The Hungarian Labour Market 2006*, Hungarian Academy of Science, Institute of Economics, Budapest, pp. 27-195.

GALASI P., LÁZÁR GY. AND NAGY GY. (1999): Az aktív foglalkoztatási programok eredményességét meghatározó tényezők, Budapest, *Working Paper* 1999/4.

HMSL (2004): *Collective Agreement Registration Database*, Hungarian Ministry of Social Affairs and Labour, [http://www.szmm.gov.hu/mkir/doksik/ksz/2004/hatalyos\\_04.pdf](http://www.szmm.gov.hu/mkir/doksik/ksz/2004/hatalyos_04.pdf).

HMSL (2005): *National Action Plan for Employment 2004*, Hungarian Ministry of Social Affairs and Labour, <http://www.szmm.gov.hu/main.php?folderID=13575>.

HOWELL, DAVID R. (2006a): Comments on Heckman et al.: What are the Key Employment Challenges and Policy Priorities for OECD Countries? Boosting Jobs and Incomes: Lessons from OECD Country Experiences at the OECD Forum on the New Jobs Strategy, Toronto, [www.oecd.org/dataoecd/42/12/36948859.pdf](http://www.oecd.org/dataoecd/42/12/36948859.pdf).

HOWELL, DAVID R. (2006b): The New OECD Jobs Report: More Reliable Evidence and More Balanced Assessments, Roundtable Remarks at the OECD Forum on the New Jobs Strategy, Toronto, [www.oecd.org/dataoecd/42/11/36948868.pdf](http://www.oecd.org/dataoecd/42/11/36948868.pdf).

HOWELL, D. R., D. BAKER, A. GLYN AND J. SCHMITT (2006): Are Protective Labor Market Institutions at the Root of Unemployment? A Critical Review of the Evidence, Revised in March 2007, <http://www.newschool.edu/cepa/publications/workingpapers/Howell%20et%20al%20Institutions%20and%20Unemployment%20march15.07.pdf>.

INTERNATIONAL MONETARY FUND (2003): "Unemployment and Labour Market Institutions: Why Reforms Pay Off?", in: *World Economic Outlook*, April, <http://www.imf.org/external/pubs/ft/weo/2003/01/index.htm>.

KÁTAY G. (2005): *Mit tudunk és mit nem tudunk a munkapiacról?* Lecture at the National Bank of Hungary, MNB, Budapest, December.

KERTESI G. AND KÖLLŐ J. (2004): „A 2001. évi minimálbér-emelés foglalkoztatási következményei”, *Közgazdasági Szemle*, April, pp. 293-324.

KÉZDI G., HORVÁTH H. AND HUDOMIET P: "Labour Market Processes 2000-2003", in: Kolosi T., Tóth I. Gy. and Vukovich Gy. (eds): *Social Report 2004*, TÁRKI, Budapest, pp. 209-224.

- KOLTAY, J. AND NEUMANN, L. (EDS) (2006): "In Focus – Industrial Relations in Hungary", in: Fazekas K. and Koltay J. (eds): *The Hungarian Labour Market 2006*, Hungarian Academy of Science, Institute of Economics, Budapest, pp. 199-224.
- KOVÁCS M. A. (2006): *Munkakínálat vagy munkakereslet? Rövid elemzés az elmúlt tíz év munkapiaci folyamatairól*. Magyar Nemzeti Bank, mimeo.
- KÖLLŐ J. (2001): „A munkanélküli-segély rendszer 2000. évi szigorításának politikai támogatottsága”, in: Hungarian Academy of Science, Institute of Economics: *A munkanélküli-ellátási rendszer átalakításának hatásvizsgálata keretében végzett kutatások eredményeiről*, Budapest, pp. 17-55.
- KREKÓ J. AND P. KISS G. (2007): Adóelkerülés és a magyar adórendszer, *MNB Working Paper* No. 65. [http://www.mnb.hu/Engine.aspx?page=mnbhu\\_mnbtanulmanyok&ContentID=10153](http://www.mnb.hu/Engine.aspx?page=mnbhu_mnbtanulmanyok&ContentID=10153).
- MNB (2006): *Analysis of the Convergence Process (December, 2006)*, Magyar Nemzeti Bank, Budapest, December, [http://english.mnb.hu/engine.aspx?page=mnb\\_en\\_konvergenciajelentes](http://english.mnb.hu/engine.aspx?page=mnb_en_konvergenciajelentes).
- MNB (2008): *Analys of the Convergence Process 2008*, Magyar Nemzeti Bank, Budapest, március, [http://english.mnb.hu/engine.aspx?page=mnb\\_en\\_konvergenciajelentes](http://english.mnb.hu/engine.aspx?page=mnb_en_konvergenciajelentes).
- NAGY GY. (2000): Munkanélküli-segélyezés Magyarországon a kilencvenes években, Budapest, *Working Paper* 2000/9.
- NARDO, MICHELA, MICHAELA SAISANA, ANDREA SALTELLI AND STEFANO TARANTOLA, ANDERS HOFFMAN AND ENRICO GIOVANNINI (2005): "Handbook on Constructing Composite Indicators: Methodology and User Guide", *OECD Statistics Working Paper*, STD/DOC(2005)3, August, <http://www.sourceoecd.org/10.1787/533411815016>.
- NICKELL, STEPHEN (2003): *A Picture of European Unemployment: Success and Failure*, May, <http://econpapers.repec.org/paper/ceprepdps/dp0577.htm>.
- NICKELL, STEPHEN, L. NUNZIATA, W. OCHEL AND G. QUINTINI (2001): "The Beveridge Curve, Unemployment and Wages in the OECD from the 1960s to the 1990s – Preliminary Version", *CEP Discussion Papers* 0502, Centre for Economic Performance, LSE, <http://cep.lse.ac.uk/pubs/download/dp0502.pdf>.
- NICOLETTI, G. AND SCARPETTA, S. (2005): "Product Market Reforms and Employment in OECD Countries", *OECD Economics Department Working Papers* No. 472, [http://lysander.sourceoecd.org/vl=26070630/cl=12/nw=1/rpsv/workingpapers/18151973/wp\\_5lgh2z2v2vtk.htm](http://lysander.sourceoecd.org/vl=26070630/cl=12/nw=1/rpsv/workingpapers/18151973/wp_5lgh2z2v2vtk.htm).
- NUNZIATA, LUCA (2005): "Institutions and Wage Determination: a Multi-country Approach," *Oxford Bulletin of Economics and Statistics*, Department of Economics, University of Oxford, vol. 67(4), pages 435-466, 08. (another version: Institutions and Wage Determination: A Multi-Country Approach, Working Papers 433, Dipartimento Scienze Economiche, Università di Bologna. <http://www2.dse.unibo.it/wp/433.pdf>.)
- NUNZIATA, LUCA (2006): *Employment in Europe and the Concept of 'Flexicurity': Some Notes*, October, [http://ec.europa.eu/employment\\_social/employment\\_analysis/eie/eie2006\\_conf\\_nunziata\\_en.pdf](http://ec.europa.eu/employment_social/employment_analysis/eie/eie2006_conf_nunziata_en.pdf).
- O'LEARY, C. J. (1997): "Preliminary Evidence on Impacts of Active Labor Programs in Hungary and Poland", *Upjohn Institute Staff Working Paper* 98-50, [www.upjohninstitute.org/PUBLICATIONS/wp/98-50.pdf](http://www.upjohninstitute.org/PUBLICATIONS/wp/98-50.pdf).
- OECD (1994): *The OECD Job Study. Facts, Analysis, Strategies*, <http://www.oecd.org/dataoecd/42/51/1941679.pdf>.
- OECD (2004): "Employment Protection Regulation and Labour Market Performance", in: *OECD Employment Outlook*, Chapter 2, pp. 61-125, [www.oecd.org/dataoecd/8/4/34846856.pdf](http://www.oecd.org/dataoecd/8/4/34846856.pdf).
- OECD: *Taxing Wages*, [www.oecd.org/ctp/taxingwages](http://www.oecd.org/ctp/taxingwages).

OECD: *Economic Policy Reform*,

[http://www.oecd.org/document/8/0,3343,en\\_2649\\_37443\\_37882632\\_1\\_1\\_1\\_37443,00.html](http://www.oecd.org/document/8/0,3343,en_2649_37443_37882632_1_1_1_37443,00.html).

OECD: *Labour Force Statistics – Employment Protection Legislation database*,

[http://www.oecd.org/document/4/0,3343,en\\_2649\\_33927\\_38939524\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/4/0,3343,en_2649_33927_38939524_1_1_1_1,00.html).

OECD (2006): *Boosting Jobs and Incomes. Policy Lessons from Reassessing the OECD Jobs Strategy*,

[http://www.oecd.org/document/56/0,2340,en\\_2649\\_201185\\_36998072\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/56/0,2340,en_2649_201185_36998072_1_1_1_1,00.html).

OECD: Benefits and Wages database (online),

[http://www.oecd.org/document/0/0,3343,en\\_2825\\_497118\\_34053248\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/0/0,3343,en_2825_497118_34053248_1_1_1_1,00.html).

ORBÁN G. AND D. PALOTAI (2005): The sustainability of the Hungarian pension system: a reassessment, MNB Occasional Papers 40.,

[http://english.mnb.hu/Resource.aspx?ResourceID=mnbfile&resourcename=op\\_40](http://english.mnb.hu/Resource.aspx?ResourceID=mnbfile&resourcename=op_40).

PULA G. (2005): Az euro bevezetésével járó strukturális politikai kihívások: munkapiac, MNB Working Papers No. 41.,

[www.mnb.hu/resource.aspx?ResourceID=mnbfile&resourcename=MT\\_41](http://www.mnb.hu/resource.aspx?ResourceID=mnbfile&resourcename=MT_41).

RIBOUD, M., SANCHEZ-PARAMO, C. AND SILVA-JAUREGNI, C. (2002): Institutional Reform and Labour Market Performance in CEE Countries in the 1990s: does Eurosclerosis matter?, World Bank, *Social Protection Discussion Papers* No. 0202,

[siteresources.worldbank.org/SOCIALPROTECTION/Resources/SP-Discussion-papers/Labor-Market-DP/0202.pdf](http://siteresources.worldbank.org/SOCIALPROTECTION/Resources/SP-Discussion-papers/Labor-Market-DP/0202.pdf).

SAINT-PAUL, GILLES (2004a). “Did European Labor Markets Become more Competitive in the 1990’s?”, Evidence from Estimated Worker Rents, *IDEI Working Papers* 266, Institut d’Économie Industrielle (IDEI), Toulouse,

[http://idei.fr/doc/wp/2004/labor\\_markets.pdf](http://idei.fr/doc/wp/2004/labor_markets.pdf).

SAINT-PAUL, GILLES (2004b): Why Are European Countries Diverging in Their Unemployment Experience?, *IZA Discussion Papers* 1066, Institute for the Study of Labour (IZA), [ftp://repec.iza.org/RePEc/Discussionpaper/dp1066.pdf](http://repec.iza.org/RePEc/Discussionpaper/dp1066.pdf).

SAINT-PAUL, GILLES (2007): *Employment Protection Legislation and Economic logic*, (web-essay),

<http://www.voxeu.org/index.php?q=node/368>, July.

SCHETTKAT, RONALD (2003): “Are institutional rigidities at the root of European unemployment?”, *Cambridge Journal of Economics*, 27, pp. 771-787

SEIFERT, H. AND A. TANGIAN (2007): “Flexicurity and Precariousness of Work in Europe. Empirical Findings”, *WSI Diskussionspapiere*, Nr. 154 July, [http://www.boeckler.de/pdf/v\\_2007\\_07\\_05\\_papier\\_seifert\\_tangian.pdf](http://www.boeckler.de/pdf/v_2007_07_05_papier_seifert_tangian.pdf).

TANGIAN, A (2005): “Monitoring Flexicurity Policies in EU with dedicated composite index”, *WSI-Diskussionspapier*, Nr. 137; June, [http://www.boeckler.de/cps/rde/xchg/SID-3D0AB75D-64A14202/hbs/hs.xsl/show\\_product\\_wsi.html?productfile=HBS-003322.xml](http://www.boeckler.de/cps/rde/xchg/SID-3D0AB75D-64A14202/hbs/hs.xsl/show_product_wsi.html?productfile=HBS-003322.xml).

TEIXEIRA (2001): *Labour market transition in Portugal, Spain, and Poland: A Comparative Perspective*,

[http://gemf.fe.uc.pt/workingpapers/abstracts/2001/resumo2001\\_05.htm](http://gemf.fe.uc.pt/workingpapers/abstracts/2001/resumo2001_05.htm).

TONIN, M. (2005): *Updated Employment Protection Legislation Indicators for Central and Eastern European Countries*, September, mimeo, [www.iies.su.se/~tonin/mirco\\_files/MircoToninEPLIndicatorsPaper.pdf](http://www.iies.su.se/~tonin/mirco_files/MircoToninEPLIndicatorsPaper.pdf).

TÓTH A. (2004): *Szakszervezetek az Európai Unióhoz való csatlakozás után, az eurozónába való belépés küszöbén*, mimeo.

WALLERSTEIN, M. (1998): “The Impact of Economic Integration on European Wage-Setting Institutions”, in Eichengreen, B. and Frieden, J. (1998): *Forging and Integrated Europe*, University of Michigan Press, Ann Arbor.

MNB Occasional Papers 77.

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