

CROATIA POLICY NOTES

*Employment Protection Legislation and Labor
Market Outcomes: Theory, Evidence and Lessons for
Croatia*



The World Bank

Employment Protection Legislation and Labor Market Outcomes: Theory, Evidence and Lessons for Croatia

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Table of Contents

Executive Summary	3
A. Employment Protection and Labor Market Outcomes: What Does Theory Tell Us?	4
B. Employment Protection and Labor Market Outcomes: Evidence	8
C. Labor Market Outcomes in Croatia	14
D. Employment Protection in Croatia: A Comparative Perspective	17
E. Conclusions and Policy Implications.....	25
References.....	28

Tables

Table 1. Croatia: Main Labor Market Indicators, 2005–2010.....	15
Table 2. Labor Force Indicators by Gender, Croatia and the EU, 2009	16
Table 3. Labor Force Indicators by Age, Croatia and the EU15, 2009	16

Figures

Figure 1. Response of Employment to GDP Impulse in Flexible and Inflexible Labor Markets... 7	7
Figure 2. Strict EPL: Risk of Unemployment and Chances of Finding a New Job..... 9	9
Figure 3. Strict EPL: Duration of Unemployment and Incidence of Long-term Unemployment .. 9	9
Figure 4. Strict EPL and Employment Rates of Vulnerable Groups	10
Figure 5. Strict EPL and Employment Rates for	10
Figure 6. Strict EPL and Irregular Employment.....	11
Figure 7. Employment Protection Legislation in Croatia and the EU (2008)	17
Figure 8. Employment Protection in Croatia and Other European Countries, 2010	20
Figure 9. The Minimum Wage and Inexperienced Workers	25

Boxes

Box 1. What Is Employment Protection Legislation And How Is It Measured?.....	5
Box 2. Shaping Labor Market Outcomes	13
Box 3. How to Reduce Dismissal Costs?.....	19
Box 4. Trade Unions and Collective Bargaining in Croatia	22
Box 5. Collective Bargaining Agreements and Labor Market Rigidity in Croatia	23

Employment Protection Legislation and Labor Market Outcomes: Theory, Evidence and Lessons for Croatia

Executive Summary

In response to prolonged recession, in April 2010 the Croatian Government adopted an Economic Recovery Program to safeguard macroeconomic stability and support faster recovery of the private sector. A central element of the program is revision of labor regulations to create a more dynamic labor market by ensuring labor force flexibility and job security. The goal is to increase the labor force participation rate and ensure that it has the skills and competencies required by the evolving and dynamic private sector. The Croatian Ministries of Finance and Labor asked the World Bank for support in design of possible labor legislation reform.¹ The objective of this note is to benchmark Croatia's legislation and help identify legal constraints on achieving a more dynamic and flexible labor market.

Substantial labor market gains can be expected if Croatian labor regulations are made more flexible.² Key recommendations to accomplish this are as follows:

- To encourage job creation and hiring after the recent crisis Croatia needs to reduce the costs of hiring and firing, which are higher than in most OECD countries. Otherwise, unemployment is likely to stay at an elevated level. Current hiring and firing costs negatively affect employment chances for the unemployed and new labor market entrants, leading to lower employment and longer duration of unemployment. In countries that have successfully reformed their labor markets (e.g., Sweden, Denmark, and Belgium) labor market outcomes (notably for disadvantaged worker groups) have markedly improved.
- Dismissal costs need to be lowered in order to encourage job creation and hiring. This could be done by (i) removing the requirement that fixed-term contracts can be used only

¹ This note was prepared by World Bank staff (Jan Rutkowski, Sanja Madzarevic Sujster) based on official information and background papers prepared by Bank consultants (Joana Tyrowicz, Zeljko Potočnjak, Viktor Gotovac) in May 2011. It is intended to stimulate discussion of possible labor market reforms. The team would like to thank Satu Kahkonen, Milan Vodopivec and Arvi Kuddo for their useful comments.

² Labor market outcomes are affected not only by labor regulations but also by other elements of the investment climate, such as macroeconomic stability, infrastructure, business regulations, education of the workforce and social protection system. Accordingly, changes to labor market regulations need to be accompanied by reforms in other areas of the investment climate in order to bring about improvements in employment outcomes. The reforms needed to improve the investment climate in Croatia are discussed in World Bank (2009).

on an exceptional basis (a specific task or the occurrence of a specific event; (ii) relaxing conditions for lawful dismissal when some individuals and some categories of protected workers need to be dismissed for business reasons; (iii) relaxing the conditions for collective dismissal (consultations with the workers' council, a detailed "redundancy social security plan," and approval by the employment bureau)

- Work hours need to be more flexible so that firms can adjust labor input to seasonal fluctuations in product demand by rescheduling work hours.
- Wage rigidities need to be addressed to promote adjustment of wages rather than employment to the fall in demand for labor. Collective bargaining agreements are an important source of wage rigidities and they need to be more flexible. This can be achieved by providing for the possibility of cancellation with notice of a collective agreement concluded for a definite term, and by limiting extension of an expired agreement (the "after-effect") to a maximum of six months.

Changes to employment protection legislation (EPL) can be politically difficult. They therefore need to be preceded by a public information campaign explaining their rationale and by dialogue with social partners. The central message to be conveyed to the public is that relaxing the most rigid provisions of the labor law will eventually lead to better employment prospects, shorter spells of unemployment, less informality, and higher productivity and ultimately incomes. This involves moving from protecting jobs to protecting workers—an idea known as flexicurity.

A. Employment Protection and Labor Market Outcomes: What Does Theory Tell Us?

1. **Employment protection legislation comprises regulations that are intended to influence the behavior of employers so as to improve the welfare of employees (Box 1).**³ It is based on the assumption that there is an imbalance of power between employers and employees, with the former having more bargaining power. EPL regulations either forbid certain behavior (e.g., termination of employment without just cause) or mandate benefits (e.g., sick leave, overtime premium, severance pay, minimum wage). They also prescribe procedures to be followed in specified situations (e.g., notice of dismissal, notifying employment offices of group

³ This note uses the term "employment protection legislation" in a broad sense, which encompasses all labor regulations, rather than only those related to job security (EPL in a narrow sense).

lay-offs, readmission to jobs after unlawful dismissal). EPL encompasses both the labor law and collective agreements between trade unions and employers.

Box 1. What Is Employment Protection Legislation And How Is It Measured?

Employment protection legislation (EPL) refers to all measures to protect employees, whether grounded in legislation, court rulings, collectively bargained conditions of employment, or customary practice. Although EPL is a multidimensional concept, from the standpoint of economic theory it is reducible to two components: tax and transfer. The *transfer component* is a monetary transfer from the employer to the worker, similar to the wage. It includes severance payments, advanced notice periods, and collective dismissal costs. The *tax component* comprises costs the employer bears in relation to other parties, e.g., trial, procedural, and hiring costs (including the costs of intermediation as well as internal resources devoted to hiring). Employers take both these components into account before making an employment offer, since both entry (hiring) costs and exit (severance) costs are equally relevant

Traditionally, all EPL components refer to legal minimums: statutory payments and mandatory rules that apply to all employment relationships, regardless of any “extras” established by an employment contract. Since collective agreements may specify larger severance payments for firm-initiated separations, collective dismissals are included in EPL analyses.

The most widely used measures of the strictness of EPL are those produced by the OECD and the World Bank. The OECD developed a summary indicator of EPL strictness which intends to reflect the cost implications of various regulatory provisions to employers. For each country, EPL is described along 18 basic items, which can be classified in three main areas: (i) employment protection of regular workers against individual dismissal; (ii) specific requirements for collective dismissals; and (iii) regulation of temporary forms of employment. Starting from these information, a four-step procedure has been developed for constructing summary indicators of EPL strictness that allow meaningful comparisons to be made, both across countries and between different years. The procedure used to calculate the summary indicator is described in OECD, 2004 (Annex 2.A1).

The World Bank Doing Business project measures the regulation of employment as it affects the hiring and redundancy of workers and the rigidity of working hours. The “rigidity of employment index” is the average of three subindices: a difficulty of hiring index, a rigidity of hours index and a difficulty of redundancy index. All of the subindices have several components. The methodology used to construct the index is described at the Doing Business webpage: <http://www.doingbusiness.org/methodology/employing-workers>.

Source: OECD Employment Outlook 2004.

2. **In theory, the broader the coverage of collective agreements, the higher the employment protection.** Usually collective agreements offer more protection than labor laws. Whereas laws generally cover all workers in the formal sector, collective bargaining agreements cover only workers in certain sectors (businesses, industries, or regions, depending on the

bargaining structure). Thus the coverage (percentage of workers covered) of collective agreements is an important factor affecting the level of employment protection in any country.

3. **EPL enhances employment protection at the price of increasing the cost of labor to employers leading to a lower employment level than would otherwise have prevailed.** EPL covers three main areas: job security, wages and benefits, and working hours. By making it expensive for employers to dismiss workers, regulations on contract termination raise implicit labor costs, which limit the adjustment of labor input on the extensive margin. Regulations on wages and benefits raise labor costs directly by mandating that employers pay certain amounts. Regulations on hours worked (the intensive margin) limit the adjustment of labor input or raise the cost of adjustment by imposing an overtime premium. Unfortunately, higher costs reduce demand for labor and may lead employers to substitute capital for labor.

4. **EPL leads to the emergence of a dual labor market:** the primary market, where workers enjoy job security and the benefits of regulations, and the secondary market where these benefits are absent. The secondary market consists of the informal sector (by definition not covered by EPL), the self-employed, and contingent workers. EPL thus divides the workforce into insiders, who benefit from EPL and hold secure jobs, and outsiders, who are either unemployed or hold non-regular, temporary, precarious jobs. Therefore, EPL thus creates not only winners but also losers.

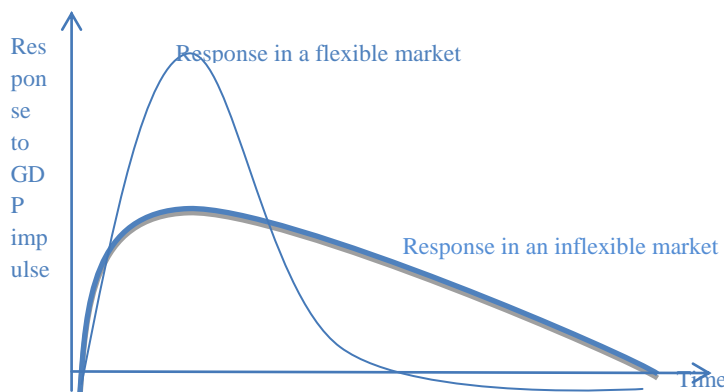
5. **The stricter the EPL, the stronger the segmentation of the labor market into good and bad jobs.** It is more difficult for outsiders, such as the unemployed, to find a good job in the primary sector. Outsiders as a rule are from disadvantaged groups: new labor market entrants, including youth, and low-skilled workers. Hence, EPL improves working conditions, but only for workers who manage to break into the primary sector—insiders. It does little to improve working conditions for outsiders, and it makes it hard for jobseekers to find jobs. Segmentation of the labor market and the insider/outsider divide are unintended effects of unduly strict EPL.

6. **The effects of EPL on labor market outcomes can be analyzed using several theoretical models, such as job search theory, efficiency wages theory, or the dual labor**

market (outsider/insider) model.⁴ Although conceptually different, these models produce similar predictions about the effects of EPL. The main predicted effects of strict EPL are

- **Positive (intended) effects:** (i) less job destruction and lower flows from employment to unemployment (a lower firing rate); (ii) greater employment stability over the business cycle because of the firing/hiring costs (Figure 1 shows time needed to record a rise in employment in response to GDP growth in flexible and inflexible labor markets).
- **Negative (unintended) effects:** (i) less job creation and lower flows from unemployment to jobs (a lower hiring rate) because of higher implicit labor costs; (ii) less job destruction and less job creation, implying a slower pace of business restructuring, slower reallocation of labor from less to more productive uses, and thus slower growth in labor productivity; (iii) longer unemployment spells and a higher incidence of long-term unemployment due to the lower hiring rate; (iv) more difficult entry into the labor market for disadvantaged workers; (v) no effect on aggregate unemployment because the lower inflows into unemployment are offset by lower outflows from unemployment to jobs; (vi) lower aggregate employment, especially among disadvantaged groups, due to higher labor costs; (vii) more use of nonstandard employment contracts (fixed-term and civil contracts and self-employment) as employers try to circumvent the rigidities imposed on permanent employment contracts; and (viii) more informal employment, to evade the costs of labor regulations and more difficult entry into the formal sector.

Figure 1. Response of Employment to GDP Impulse in Flexible and Inflexible Labor Markets



Source: World Bank staff.

⁴ Tyrowicz (2011).

7. **The strength of trade unions greatly affects the actual level of employment protection.** The impact of EPL on labor market outcomes depends on enforcement of the regulations. Strict enforcement amplifies the effect; weak enforcement means that strict EPL de iure is not necessarily strict de facto. Trade unions can effectively contribute to the enforcement of labor regulations; where unions are strong, employers are more likely to observe labor regulations.

B. Employment Protection and Labor Market Outcomes: Evidence

8. **The empirical evidence of the relationship between the strictness of EPL and labor market outcomes for OECD countries is generally in line with theoretical predictions.**⁵ Strict EPL tends to be associated with reduced chances to escape unemployment, longer spells of unemployment, and lower employment rates for disadvantaged worker groups, especially youth.⁶ Moreover, as predicted, strict EPL is associated with a larger informal sector. Finally, strict EPL slows down job reallocation, with a likely adverse impact on growth in total factor productivity.⁷

9. **As theory would predict, there is evidence that strict EPL reduces both inflows into unemployment and outflows from it** (Figure 2). In OECD countries where EPL is rigid, workers are less likely to lose jobs, but that means that the jobless have less chance of finding a job. Conversely, in countries with flexible EPL, workers lose jobs more often, but it is easier for them to find a new job. Strict EPL thus tends to be associated with a less dynamic labor market. Evidence also corroborates the hypothesis that strict EPL causes labor market duality. It strengthens the position of insiders—workers with regular jobs—who are less likely to become unemployed but it weakens the position of outsiders—the jobless and those who work in irregular or informal jobs—who have fewer chances of getting a formal job.

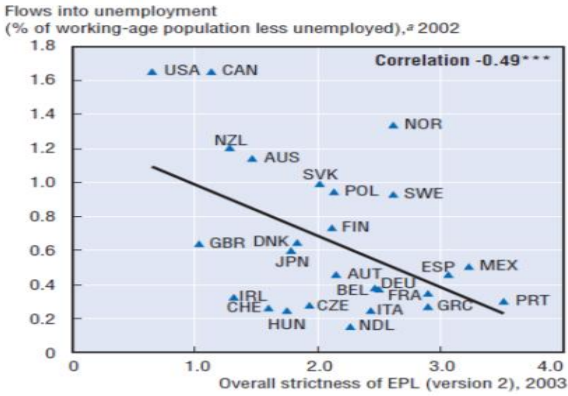
⁵ The analysis that follows is based on the *OECD Employment Outlook* (2001, 2004, 2006). The impact of EPL on labor market outcomes is an area that needs further research, and the existing evidence is still partial. As noted by Parsons (2011), the impact of EPL reforms depends on the regulatory environment in the economy as a whole.

⁶ It is difficult to disentangle the effects of individual components of EPL on labor market outcomes and the existing research is not conclusive. For this reason this issue is not dealt with in this note.

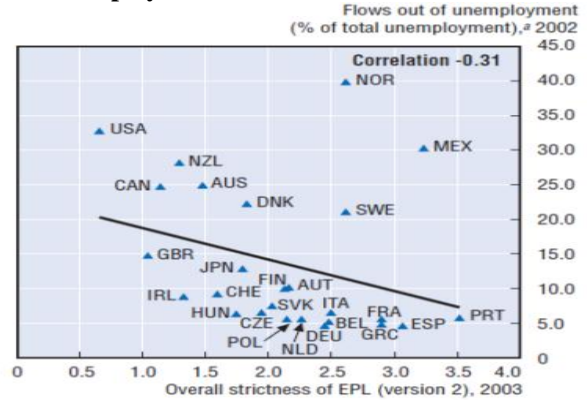
⁷ EPL may also have positive effects on productivity that may partially offset its negative effects. The benefits of long-term employee-employer contracts include greater willingness to invest in on-the-job training with positive impact on labor productivity (OECD 2004).

Figure 2. Strict EPL: Risk of Unemployment and Chances of Finding a New Job

Panel A. Stricter EPL is associated with less flow into unemployment.



Panel B. Stricter EPL is associated with less outflows from unemployment.

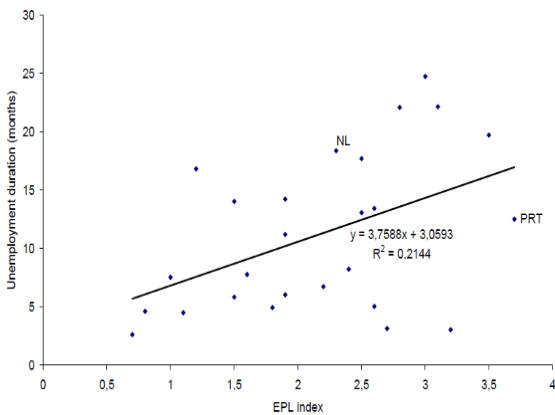


Source: OECD Employment Outlook 2004, Chapter 2.

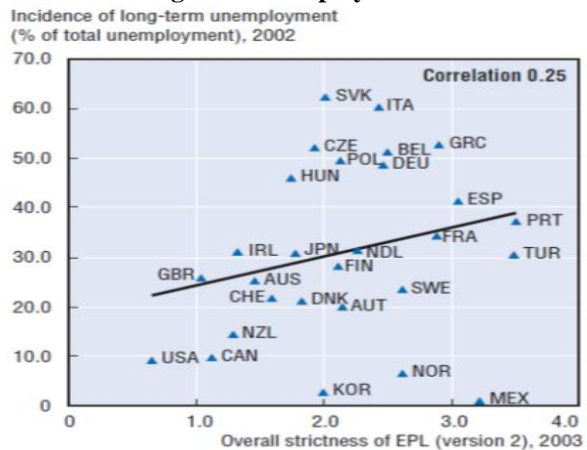
10. Evidence also confirms that strict EPL contributes to long-term unemployment (Figure 3). Strict EPL is associated with longer durations of unemployment. In OECD countries with light EPL, unemployment lasts on average about five months; where EPL is strict it lasts for 15 or more months. Similarly, strict EPL is associated with a high incidence of long-term unemployment. The share of long-term unemployed exceeds 40 percent in countries with strict EPL; it is below 20 percent in countries with light EPL. These substantial differences reinforce the point that it is relatively easy to find a new job in countries where labor markets are flexible and difficult in those where they are rigid.

Figure 3. Strict EPL: Duration of Unemployment and Incidence of Long-term Unemployment

Panel A. Stricter EPL is associated with longer duration of unemployment.



Panel B. Stricter EPL is associated with a higher incidence of long-term unemployment.

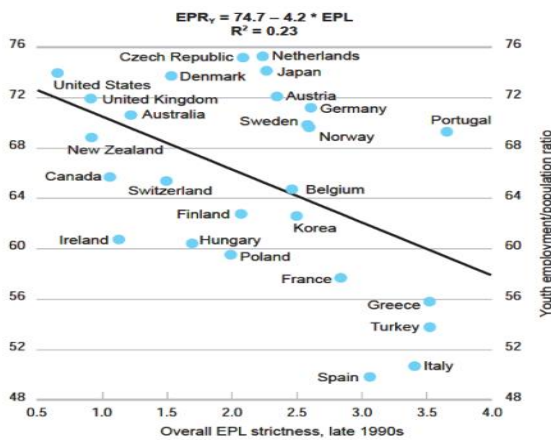


Source: OECD, Employment Outlook 2004, Chapter 2, and Employment Outlook 2006, Chapter 22.

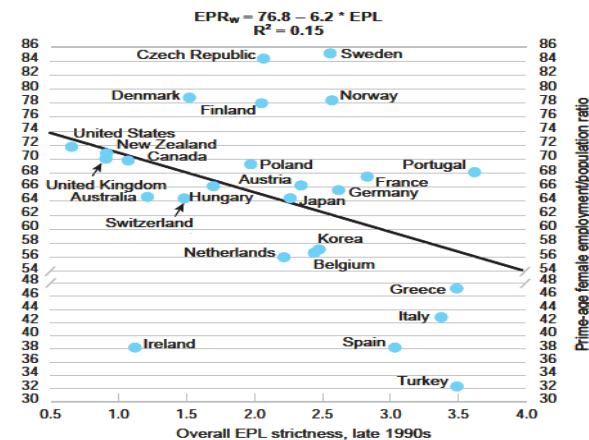
11. Further, strict EPL adversely affects the employment prospects of disadvantaged groups (Figure 4). There is a negative correlation between the strictness of EPL and youth employment rates. In countries where EPL is flexible, youth employment hovers around 70 percent; in countries where it is rigid, the rate is often below 60 percent. Similarly, there is a negative correlation between the strictness of EPL and female employment rates. Where EPL is strict, women are less likely to find employment. Where it is flexible, over 70 percent of working-age women are employed; in countries with rigid EPL, less than 60 percent are employed.

Figure 4. Strict EPL and Employment Rates of Vulnerable Groups

Panel A. Strict EPL is associated with low youth employment.



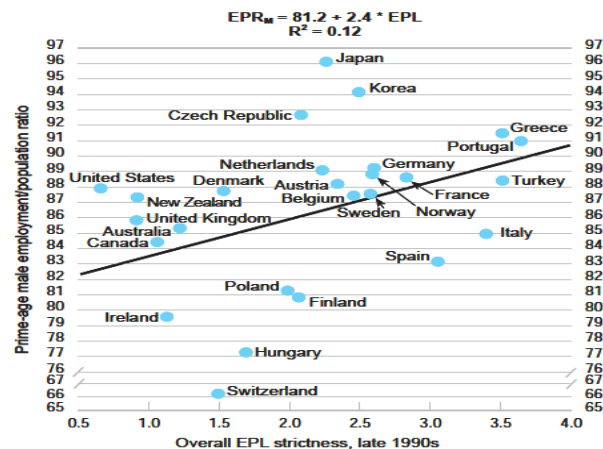
Panel B. Strict EPL is associated with low female employment.



Source: OECD, *Employment Outlook* (2001), Chapter 2.

12. As expected, strict EPL improves employment outcomes for insiders (Figure 5). Prime-age men are more likely to be employed in countries with strict EPL than in countries with more flexible EPL, because their jobs are relatively secure jobs and they are less likely to lose them. EPL has a notably differential impact on employment outcomes for prime-age men on the one hand and disadvantaged groups on the other. This substantiates the point

Figure 5. Strict EPL and Employment Rates for Prime-age Men



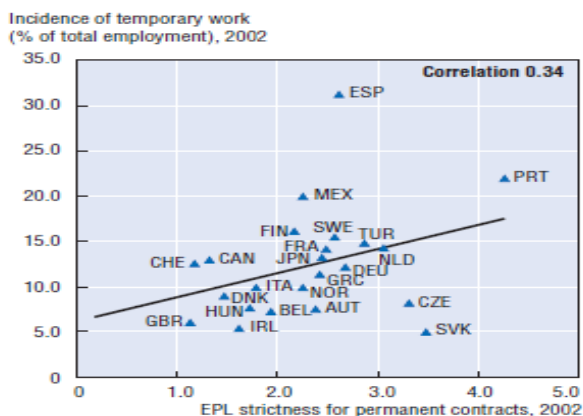
Source: OECD, *Employment Outlook* (2001), Chapter 2.

that strict EPL contributes to labor market segmentation, and the emergence of insiders, who benefit from the EPL, and outsiders, who do not.

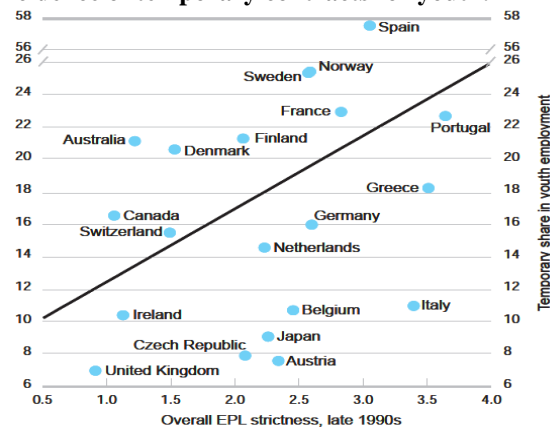
13. **Strict EPL stimulates the use of irregular employment contracts** (Figure 6), such as fixed-term, temporary, and civil contracts. Employers use such contracts to circumvent the rigidities and costs regular contracts impose. The incidence of irregular contracts is significantly higher in countries with strict EPL, particularly among young workers (Panel B). For new labor market entrants, irregular employment often is the only way to gain a foothold in the jobs market, though it has a high cost in terms of low job security, less benefits and lower wages. In the EU the wage penalty for temporary workers averages 15 percent (from 6 percent in Denmark to 24 percent in the Netherlands).⁸ Moreover, irregular workers disproportionately bear the brunt of adjustment to demand shocks; as the recent crisis demonstrated, they are first to be laid off during an economic downturn. This is yet another dimension of the labor market segmentation created by strict EPL. Workers are divided into insiders holding protected jobs and outsiders holding precarious jobs. Strict EPL thus gives rise to considerable inequities in the labor market.

Figure 6. Strict EPL and Irregular Employment

Panel A. The incidence of temporary work is higher in countries with strict EPL.



Panel B. Strict EPL is associated with a high incidence of temporary contracts for youth.



Source: OECD, *Employment Outlook* (2001, 2004).

14. **Countries with stricter EPL tend to have a larger informal sector.** The impact of strict EPL on growth of the informal sector is well-documented.⁹ Most recently Fialova and Schneider (2010) established that EPL has a statistically significant effect on the size of the

⁸ OECD (2004).

⁹ Johnson, Kaufmann, and Zoido-Lobaton (1998); Loayza, Oviedo, and Servén (2005).

informal sector in the EU, including the EU10 countries.¹⁰ The effect is stronger in the old member states (EU15) and somewhat weaker in the new ones (EU10). In the EU countries with the most rigid EPL the share of the informal sector is estimated to be about 3.5 percentage points higher than in countries with the most flexible EPL. This finding supports the view that strict EPL leads some employers to hire workers informally to avoid the costs the EPL imposes. At the same time, some jobs are pushed into the informal sector because of limited hiring in the formal sector. Unduly strict EPL thus again contributes to labor market segmentation by compounding the formal/informal divide.

15. **Strict EPL undermines productivity growth** because it reduces both job destruction and job creation rates, and thus impedes enterprise restructuring and job reallocation. Job reallocation is an important source of efficiency gains because jobs tend to move away from less productive firms and industries toward those that are more productive. Strict EPL also discourages firm entry, again with a negative effect on productivity, since new firms tend to be more dynamic than old and are thus an important source of productivity growth as well as job creation.¹¹ (A micro-level study of U.S.A. states reached a similar conclusion.¹²) A negative effect between dismissal cost and labor productivity was also found by Micco and Pages (2006), who used data for the manufacturing sector for 18 countries, and by Bassanini and Venn (2007).¹³ Scarpetta and Tressel (2004) showed that strict EPL has a significant negative effect on productivity in countries with an intermediate centralization/coordination in wage bargaining (which is the case in Croatia). Thus, strict EPL may adversely affect competitiveness. This has important implications for Croatia, where high labor costs compared to regional competitors have been identified as a major obstacle to job creation and employment growth.¹⁴ High labor costs also reflect low labor productivity in Croatia relative to wages.

16. **Evidence of the impact of union strength and bargaining on labor market outcomes is inconclusive.** Only a few studies have examined the interaction between these variables and

¹⁰ The EU10 is comprised of Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia.

¹¹ World Bank (2005).

¹² Autor, Kerr, and Kugler (2007).

¹³ Some earlier research showed a weak positive relationship between EPL and total factor productivity and labor productivity growth in OECD countries (Nickell and Layard 1999).

¹⁴ World Bank (2009).

EPL. Nonetheless, several suggest that stronger unions exacerbate unemployment.¹⁵ In those OECD countries where trade unions are stronger (as measured by the percentage of workers who are union members, known as union density), unemployment tends to be higher.

17. **Finally, there is evidence that labor market reforms designed to enhance labor market flexibility enhance the response of aggregate employment to demand shocks.** As a result of recent labor market reforms in France, Germany, Italy, and Spain, aggregate employment has responded more than previously to output shocks—similar to the effect found in the UK, which is the most flexible EU labor market.¹⁶ This suggests that employment recovers from an economic downturn faster where EPL is flexible. Low hiring costs are an incentive for employers to create new jobs once an upturn begins, leading to employment growth and a reduction in unemployment. However, this responsiveness also suggests that employment tends to fall more after a demand shock. Still, the higher elasticity of employment with respect to output growth reduces the persistence of unemployment (the so called hysteresis effect), which is a valuable social welfare outcome. Box 2 shows how labor market institutions influenced outcomes in selected countries during the recent global economic crisis.

Box 2. Shaping Labor Market Outcomes

During the recent crisis labor market outcomes in each country were determined by the interaction of country-specific shocks with labor market institutions and policies. Central to this interaction was the perceived duration of the country-specific shocks.

In *Spain*, where the labor market was segmented and rigid, the shock was domestic, sectoral, and persistent, so the market adjusted primarily by reducing temporary employment. Strict employment protection for regular employees, backward and asymmetric wage indexation, and an industry-level wage bargaining system that was not conducive to shock absorption did not allow for other adjustment channels. Labor market policies in response to the crisis proved ineffective. The drop in employment in Spain was substantially more pronounced than the OECD average, particularly in construction and manufacturing.

In *Germany*, the severe external shock associated with the collapse in world demand for manufactured goods was temporary. Policies were well-targeted and focused on avoiding job losses and unnecessary labor market volatility. A key strategy was to retain jobs by subsidizing a reduction in working hours, which seems to have shielded the labor market from the shock, particularly given the centralized wage bargaining system and the relative inflexibility of working arrangements before the crisis. Germany is the only country in the sample where construction

¹⁵ Blanchard and Wolfers (2000); Nickell (1997); OECD (2004).

¹⁶ Jimenez-Rodriguez and Russo (2009).

employment rose during the crisis, reversing the equally atypical pre-crisis decline. Germany is also the only OECD economy where unemployment declined during the crisis.

In *New Zealand*, though the shock was external and temporary, it substantially affected domestic demand. A flexible labor market and a decentralized wage determination system made it possible to activate shock-absorbing mechanisms: wage restraint, declines in hours worked, some increase in unemployment (although from a low level), and exchange rate flexibility. Given a tradition of excellent cooperation between employers and employees, active labor market policies focused on improving the flow of information and matching the unemployed with job openings; generally reductions in working hours were directly negotiated between social partners and firm-level agreements, without extensive use of government subsidies.

In *Korea*, the shock was also external and temporary, labor markets are segmented but not very rigid, and wage determination is relatively decentralized. There the market adjusted primarily through declines in real wages and hours worked and through temporary employment cuts. Working hours were reduced through both government programs and direct negotiations between employers and employees, depending on the sector. A program to reduce long-term unemployment through short-term government job opportunities also proved effective. Employment initially fell in most sectors, except for nonmanufacturing industry and the public sector, but has fully recovered recently.

Sweden was affected by external shocks primarily through both the financial and real sectors. The collapse in world demand for manufactured goods caused a contraction in export demand and a substantial drop in manufacturing employment. Increased labor market flexibility following reforms in the last decade and labor market policies in response to the crisis muted the impact of these shocks. Firms also hoarded labor because they expected the shocks to be temporary.

Mexico was hit by multiple external shocks, most of which reflected close real and financial linkages with the U.S.; these were substantial compared with most emerging market peers. Mexico's labor market adjusted through a number of channels, but rigidities pushed part of the adjustment onto the informal sector—although, according to the authorities, not as much as in previous downturns. Active labor market policies were strengthened, but not to the same extent as in some more advanced economies.

Source: Darius et al. (2010).

C. Labor Market Outcomes in Croatia

18. **The labor market situation in Croatia is unsatisfactory.** Labor force participation is low and unemployment continues to be close to 12 percent. The employment rate for the population aged 20–64 is currently only 58 percent; the EU2020 strategy target rate is 75

percent.¹⁷ This huge gap suggests considerable underutilization of labor in Croatia. Moreover, close to 60 percent of the unemployed are long-term unemployed.

19. **The poor outcomes reveal a deep structural weakness of Croatian labor market; they are not a result of the global crisis.** These outcomes are highly persistent, barely reacting to changing economic conditions (Table 1). Even during the boom period that preceded the crisis (2007–2008), the employment/working age population ratio was below 58 percent, mainly due to the very low labor force participation rate. A large proportion of the working age population was not working even though the economy was growing.

Table 1. Croatia: Main Labor Market Indicators, 2005–2010

<i>Percent</i>	2005	2006	2007	2008	2009	2010
Employment/population ratio	55.0	55.6	57.1	57.8	56.6	54.1
Labor force participation rate	63.3	62.8	63.4	63.2	62.4	61.5
Unemployment rate	12.7	11.2	9.6	8.4	9.1	11.8
Long term unemployment (share of total)	58.4	60.1	61.5	63.0	56.2	56.9

Note: Population 15–64.

Source: Labor Force Survey, Eurostat, Crostat (2010 data).

20. **The employment rate in Croatia is low for both men and women** (Table 2). In 2009, 10 percent fewer working-age men and 9 percent fewer working-age women were employed in Croatia than in EU15 countries. Croatia’s employment rates for both men and women compare unfavorably not only to those in EU15 countries but also to those in EU10 countries. Croatia has one of the lowest employment/population ratios in all Europe.

¹⁷ Before the 2009 crisis the employment rate in Croatia was 63 percent. European countries which meet the Europe 2020 target of 75 percent employment rate include Austria, Denmark, Finland, Germany, Sweden and the U.K.

Table 2. Labor Force Indicators by Gender, Croatia and the EU, 2009

<i>Percent</i>	Croatia	EU15	EU10
<i>All workers</i>			
Unemployment rate	9.3	9.1	10.1
Labor force participation rate	62.4	72.5	68.7
Employment/population ratio	56.6	65.9	61.7
<i>Men</i>			
Unemployment rate	8.2	9.2	10.9
Labor force participation rate	68.0	79.2	75.6
Employment/population ratio	62.4	71.9	67.3
<i>Women</i>			
Unemployment rate	10.6	9.1	9.4
Labor force participation rate	57.0	65.8	62.0
Employment/population ratio	51.0	59.9	56.1

Note: Population: 15–64.

Source: Eurostat, 2009.

21. **The largest differences in employment rates are among the youngest and the oldest workers.** For youth, there is a 12 percentage point difference in the employment rate between Croatia and the EU15 average. For older workers, the difference is nearly 10 percentage points. However, even for prime-age workers (25–54), the difference at 5 percentage points is substantial (Table 3). In short, there is ample room to increase employment for everyone.

Table 3. Labor Force Indicators by Age, Croatia and the EU15, 2009

<i>Percent</i>	Croatia			EU15		
	15–24	25–54	55–64	15–24	25–54	55–64
Unemployment rate	25.0	7.9	5.6	19.5	8.0	6.3
Labor force participation rate	34.3	79.9	40.7	47.4	85.4	51.2
Employment/population ratio	25.7	73.6	38.4	38.2	78.5	47.9

Source: Eurostat.

22. **Why is labor so grossly underutilized in Croatia?** Why are so many working age people inactive? Why does unemployment last so long? Why do poor labor market outcomes persist despite economic growth? There is no single answer to any of these questions. Many different factors are at work, among them the design of the social security system, labor market institutions, and the skills gap.¹⁸ In addition, some structural features of the Croatian labor market—low labor market dynamics, the high incidence of long-term unemployment, high

¹⁸ World Bank (2009, 2010).

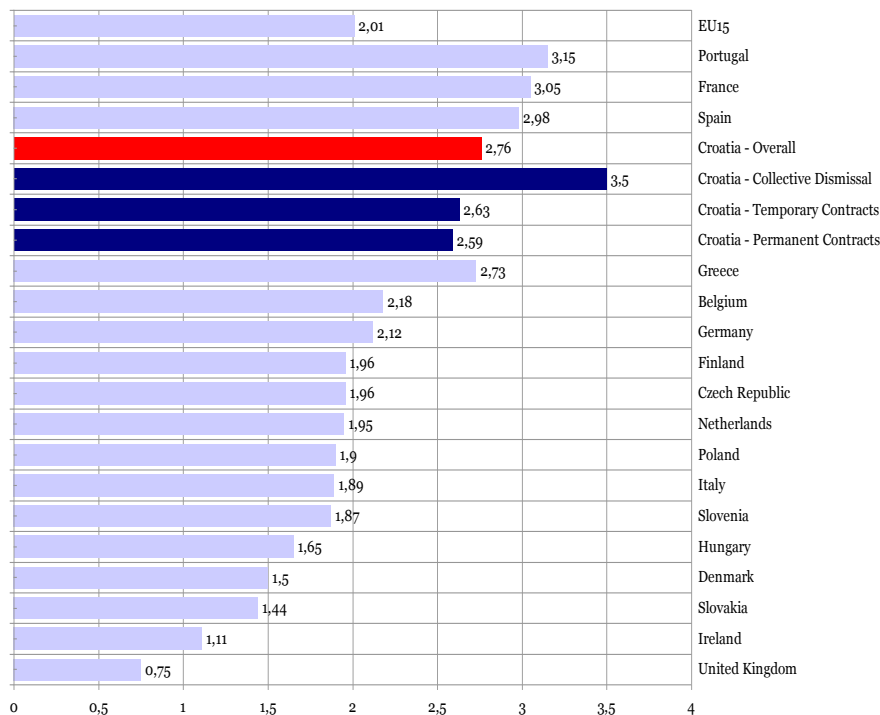
unemployment generally, and inactivity among youth—point to a rigid labor market as a major cause of the poor employment outcomes. The next section analyzes the EPL in Croatia as a critical determinant of labor market rigidity.

D. Employment Protection in Croatia: A Comparative Perspective

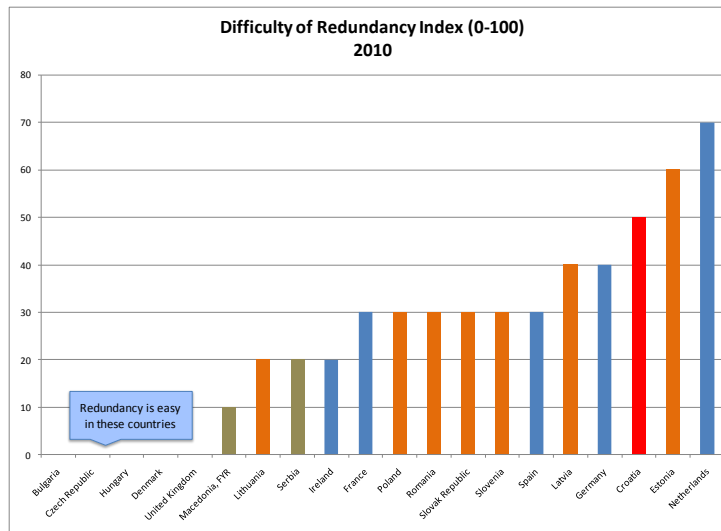
23. **By European standards Croatia’s EPL is strict** (Figure 7). This section benchmarks EPL in Croatia against EPL in other European countries using the OECD Employment Protection Legislation Index and the World Bank Employing Workers indicators from its Doing Business database. With both types of indicators, the analysis finds that EPL in Croatia is stricter than in most other European countries. The OECD EPL index for Croatia is well above the EU15 average, meaning that Croatia’s EPL is stricter. Employment protection legislation in Croatia is also stricter than in new EU member states. For example, it is substantially stricter than Hungary and Slovenia.

Figure 7. Employment Protection Legislation in Croatia and the EU (2008)

Panel A. OECD Employment Protection Legislation Index (1–6)



Panel B. World Bank Difficulty of Redundancy Index (0–100)



Note: The *difficulty of redundancy* index has eight components: (1) whether redundancy is disallowed as a basis for terminating workers; (2) whether the employer needs to notify a third party (such as a government agency) to terminate a single redundant worker; (3) whether the employer needs to notify a third party to terminate a group of nine redundant workers; (4) whether the employer needs approval from a third party to terminate a single redundant worker; (5) whether the employer needs approval from a third party to terminate a group of nine redundant workers; (6) whether the law requires the employer to reassign or retrain a worker before making the worker redundant; (7) whether priority rules apply for redundancies; and (8) whether priority rules apply for reemployment.

Source: OECD, World Bank Doing Business Indicators; World Bank staff calculations.

24. **As Panel B shows, dealing with redundancies is considerably more difficult and costly in Croatia than in most other countries,** even Slovenia, Serbia, and the Former Yugoslav Republic of Macedonia, which have the same legacy of socialist labor relations. It is also much more difficult than in regional competitors like Bulgaria, the Czech Republic, or Hungary. Croatia is clearly an outlier where dismissal costs are concerned.

25. **Croatian EPL are particularly strict compared with most European countries with respect to selected three components:** individual dismissals, collective dismissals, and temporary contracts. Collective dismissals are considerably more difficult and costly in Croatia than in other EU countries. This implies that the cost of enterprise restructuring—which is associated with collective-layoffs—is higher in Croatia than elsewhere. These high costs are likely to inhibit restructuring, with a negative impact on productivity growth. Box 3 discusses some of the options to reduce dismissal costs.

Box 3. How to Reduce Dismissal Costs?

Severance pay is high in Croatia making dismissal costly to employers and thus hampering enterprise restructuring. Some countries in the region introduced alternative options intended to reduce the costs of dismissal to the individual employer while providing dismissed workers with severance pay. Mandatory severance pay comes from a single employer and therefore has no insurance pooling. However, relevant payments can be paid out from pooled resources that are a form of social insurance, generally financed by payroll taxes to which both employers and employees contribute.

For example, in Estonia, the severance pay was reduced drastically through the 2009 Employment Contracts Act: from up to four monthly wages to only one month's wage. On the other hand, unemployment insurance fund to which both employers and employees contribute disburses an additional 1–3 months' wages depending on contribution period.

In order to ease the burden of individual employers associated with enterprise restructuring and downsizing, several ECA countries have established special funds or set aside allocations from the existing funds to finance dismissal costs in case of mass layoffs. Examples include the establishment of a guarantee fund for the payment of wage debts in Romania that was introduced into the Labor Code of 2003, or wage guarantee fund that was established in Hungary in 1994. Both reform options can be more acceptable politically – in exchange for reducing the duration of severance pay.

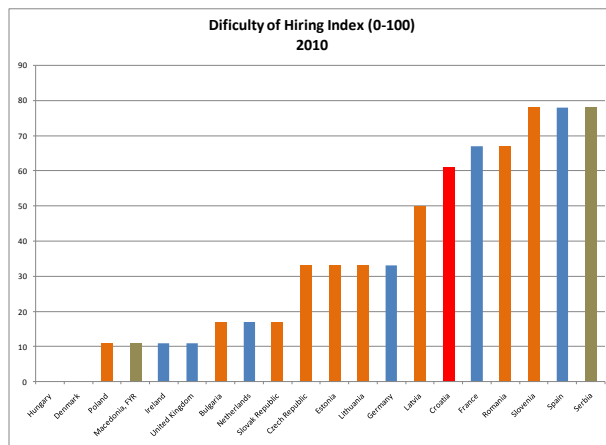
Source: Bank staff analysis.

26. **Croatian employers face high hiring as well as firing costs** (Figure 8). Hiring costs are higher in Croatia than in most European countries, including all but Romania and Slovenia among the new EU member states. These high costs explain the high steady-state unemployment rate in Croatia and the length of unemployment. Employers are reluctant to hire new workers because of both current costs and the potential future costs if the firm has to reduce employment (e.g., because of a demand shock). High costs also suggest that in the course of recovery from the recent crisis, employment will be sluggish and unemployment will likely stay elevated.

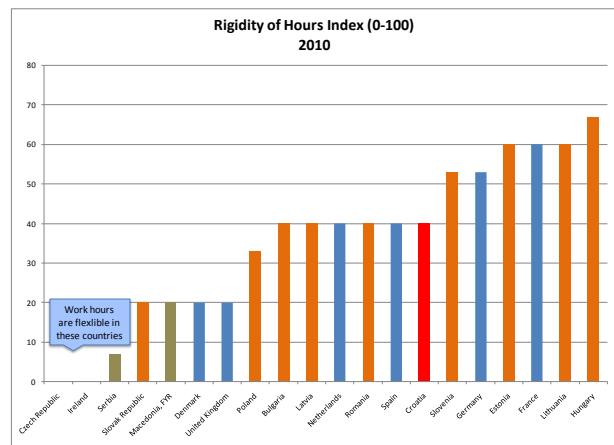
27. **Croatian employers also have little ability to adjust work hours to changes in demand** (Figure 8, Panel B). Work hours are more rigid in Croatia than in such European neighbors as the Czech Republic, Serbia, Macedonia, Slovakia, and Poland as well as in Ireland, Denmark, or the United Kingdom. Accordingly, there is room to make adjusting work hours easier, beyond the recent adjustments, though not as much as there is for reforming dismissal costs. Croatia's rigidity of hours' index is in the middle of the range for European countries. The constraints on adjusting work hours are similar to those in many other European countries.

Figure 8. Employment Protection in Croatia and Other European Countries, 2010

Panel A. Hiring workers is more difficult in Croatia than in many other European countries.



Panel B. Croatia's work hours flexibility is somewhat limited but in line with that in other European countries.



Note: The *difficulty of hiring* index measures (i) whether fixed-term contracts are prohibited for permanent tasks; (ii) the maximum cumulative duration of fixed-term contracts; and (iii) the ratio of the minimum wage for a trainee or first-time employee to the average value added per worker.

The *rigidity of hours* index has five components: (1) whether there are restrictions on night work; (2) whether there are restrictions on weekly holiday work; (3) whether the workweek can consist of 5.5 days or is more than 6 days; (4) whether the workweek can extend to 50 hours or more (including overtime) for two months a year to respond to a seasonal increase in production; and (5) whether the average paid annual leave for a worker with 1 year of tenure, a worker with 5 years, and a worker with 10 years is more than 26 working days or fewer than 15 working days.

Source: World Bank Doing Business Indicators, 2010.

28. **The combination of constraints in Croatia is what makes the difference.** It is difficult for Croatian employers to adjust labor input on both the extensive and the intensive margins. The joint effect of these two constraints is of concern. Hungary provides a useful contrast: although work hours there are more rigid than in Croatia, dismissal costs are much lower. It is therefore difficult for Hungarian employers to adjust labor input on the intensive margin (hours) but easy to adjust it on the extensive margin (employment). Croatian employers are constrained on both fronts, which limit their ability to respond to fluctuations in product demand, which is in turn a drag on their competitiveness.

29. **The poor performance of the Croatian labor market may be attributed in part to EPL rigidity.** A number of earlier analyses have demonstrated that the labor market in Croatia is rigid due to strict EPL and that this adversely affects labor market outcomes.¹⁹ Outcomes in Croatia are consistent with both the theory and international evidence. Some caveats are

¹⁹ Matkovic and Biondic (2003); Rutkowski (2003a, 2003b); Tonin (2005); World Bank (2009).

necessary: by their nature, the indicators used are imperfect. Their margin of error may in some cases be wide. Moreover, they are partial; they do not cover all dimensions of employment protection, so some important aspects of EPL may have been left out of the analysis. Nonetheless, different indicators estimated using different methodologies unambiguously point to the same conclusion: EPL severely constrains the ability of Croatian employers to adjust labor input to changing product demand. Hiring and especially firing costs are high, and flexibility in work hours is limited.

30. **An analysis of Croatia’s Labor Law supports the above conclusion.** It contains a number of provisions that make adjustment of labor input very costly for firms. For example, severance pay is extremely high by international standards, and firms that want to carry out a collective dismissal must jump through numerous administrative hoops. Thus the monetary and procedural costs of dismissals are both high. The tax wedge on labor (although reduced) is still high, substantially raising labor costs. As for work hours, the actual working time during each month cannot deviate by more than 12 hours from the standard 40 hours a week, which limits the ability of employers to increase work hours during periods of high demand and reduce them when demand is low (so that the total number of hours worked over a longer period, say 6 or 12 months as in some other countries, is fixed).²⁰

31. **There are other sources of labor market rigidity in Croatia.** Three stand out: (a) the pro-labor bias labor courts exhibit; (b) the central position of trade unions; and (c) collective bargaining agreements, especially in the public sector:

- Although further research is necessary to substantiate the pro-labor bias claim (the evidence of the pro-labor bias exhibited by courts is mainly anecdotal and based on interviews with employers and lawyers), such a bias in court rulings would considerably raise expected dismissal costs. According to the Labor Law, workers who were dismissed without just cause should be either re-employed or paid their foregone earnings (up to 18 months of salary). The latter option would make the expected cost of dismissal high (expected cost reflects the high probability that the court will rule in favor of the dismissed worker)—a powerful and effective deterrent to lay-offs. This in turn negatively affects the ability of

²⁰ The Labor Law was revised in 2003, but the changes have since been partially reversed. The main provisions of the current Labor Law are not significantly different from those that were in force in 2003, which Rutkowski (2003a, 2003b) analyzed in detail.

employers to adjust the size and composition of their workforce to changing market demands.

- Although strong trade unions increase employment protection for their members and workers covered by collective agreements, this worsens the employment chances of workers not covered by the EPL, the unemployed, and entrants into the labor market. The trade union movement is still strong in Croatia (Box 4). By European standards union membership, an indicator of union strength, is high in Croatia. Croatian unions have also demonstrated their strength by influencing EPL, blocking most attempts by the government or employers' associations to make the labor market more adaptable. Accordingly, unions have a significant impact on labor market outcomes in Croatia. They amplify both the positive and the negative effects of EPL, enhance insider job security and benefits (including wages), and lower outsider opportunities and benefits. More generally, by limiting job destruction and creation, union activity is also likely to slow down enterprise restructuring in unionized sectors, which lowers productivity and competitiveness.

Box 4. Trade Unions and Collective Bargaining in Croatia

By influencing EPL, trade unions influence labor market outcomes. Union density is high by European standards, suggesting that unions have considerable clout in Croatia. About 600 trade unions are registered, union density is about 45 percent, and the coverage of collective agreements is 50–60 percent. Elsewhere in the region union density is just 29 percent in Austria, 20 percent in the Czech Republic, 19 percent in Germany, 17 percent in Hungary and Slovakia, and 16 percent in Poland.

Bargaining takes place at different levels, with little coordination. Collective bargaining can take place at the national, industry/sector, and firm level. The tripartite Socioeconomic Council is meant to coordinate collective bargaining, but in practice the bargaining system is decentralized.

Coverage of collective bargaining is also high. Currently there are 172 collective agreements, of which 16 are at the industry level (9 of these in the public sector). Most collective agreements are signed for a definite term, which implies that they cannot be terminated with notice unless that option is part of the agreement.

Both theory and international evidence suggest that such an industrial relations structure is associated with higher unemployment.

Source: Potocnjak (2010), http://stats.oecd.org/Index.aspx?DataSetCode=UN_DEN.

- Collective agreements cause wage rigidities because under EPL after they expire they cannot be terminated or renegotiated without explicit trade union agreement (Box 5). Public sector collective agreements were negotiated during the period of economic prosperity

preceding the global economic crisis and contain generous the wage and employee benefit provisions. Regulations and the terms of collective agreements have made it virtually impossible for the government as employer to renegotiate the compensation package granted to public sector workers and adjust it to reflect the changed economic conditions. As a result the public sector wage bill has grown as a share of GDP and is one of the contributors to the budget deficit. During an economic downturn, rigid wages force firms to reduce employment in order to cut costs rather than reduce wages to align them with falling productivity; they thus exacerbate unemployment. The wage rigidities resulting from inefficient regulation of collective agreements surely contribute to the unsatisfactory labor market outcomes in Croatia.

Box 5. Collective Bargaining Agreements and Labor Market Rigidity in Croatia

Under current rules it is hard to renegotiate collective bargaining agreements if economic conditions change. First, a party cannot terminate a collective agreement without notice to other parties unless such a provision is part of the agreement itself, which is very rare. Second, all provisions of a collective agreement of definite duration continue to be valid after it expires (the so called “after-effect”) unless the agreement explicitly states otherwise—again rare. The old agreement ceases to be valid only when a new agreement is signed. However, in practice trade unions refuse to renegotiate collective agreements if that might lessen worker rights. As a result, employers cannot adjust collective agreements to changing economic conditions. This is particularly true of the public sector. Before the recent global economic crisis the government granted public employees substantial wage privileges. These proved unsustainable during the crisis, but there was no legal space to change them. The fiscal cost has been significant.

To address the inefficiency of the rules governing collective agreements, the government drafted amendments that envisaged (a) the possibility of terminating a collective agreement with one month’s notice, and (b) limiting the duration of the after-effect to six months rather than the current indefinite duration. However, trade unions effectively blocked the planned changes by collecting enough signatures to call a national referendum. As a consequence, the government withdrew the proposed changes to the Labor Law from the Parliament. At the same time the Constitutional Court ruled that pertinent provisions of Labor Law cannot be revised until the end of 2011 unless the referendum allows the change.

Options to address the inefficiencies caused by collective bargaining agreements in the short term are therefore limited. First, the government as an employer can terminate employment contracts with individual public employees where collective agreements have expired and then sign new contracts. There is no precedent for this in Croatia; the consequences are unpredictable and the political costs may be high. In particular, labor courts may question the legality of doing this. Second, all new collective agreements should explicitly state that (a) they can be terminated with notice; and (b) the after-effect is limited to six months. So far this has not been the practice,

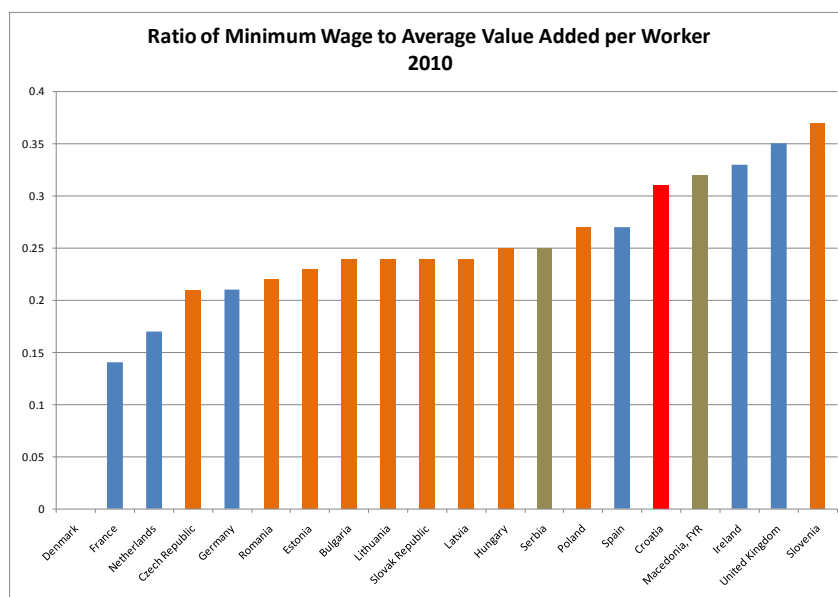
especially in the public sector, but the Labor Law does not preclude it. The second option does not address rigidities created by agreements already signed but instead would enhance flexibility in the future.

In the medium term the government may try again to amend the Labor Law but to do so it will be critical to explain the need for reforms clearly to the general public as well as the unions.

Source: Potocnjak (2010) and comments by V. Gotovac.

32. **Finally, the minimum wage may also have a negative effect on employment.** The concern is not so much the level of the minimum wage but the way it is indexed. Currently the minimum wage, which is 36 percent of the average wage, is not particularly high by European standards, although it still may be hurting some low-productivity sectors and youth (Figure 9). However, it is indexed to GDP growth, which as a rule exceeds wage growth when employment growth is positive. Consequently, the minimum wage/average wage ratio is likely to increase over time. This may have two negative consequences: First is the ripple effect, whereby the whole wage structure moves up, since wages are set in relation to the minimum wage either by explicit wage grids in the public sector or by collective agreements. In other words, the current indexation formula may contribute to wage inflation. Second, the increase in the minimum wage as a percentage of the average wage may undermine the employment chances of low-skilled workers, especially youth, by raising their cost to employers above their marginal productivity. These negative dynamic consequences would be avoided if the minimum wage were set as a fixed share of the median wage (without changing its current level), with an option of a sub-minimum wage for youth.

Figure 9. The Minimum Wage and Inexperienced Workers



Source: World Bank Doing Business database, 2011.

Note: The ratio of the minimum wage for a trainee or first-time employee to the average value added per worker.

E. Conclusions and Policy Implications

33. **Strict employment protection is likely to adversely affect labor market performance** by reducing the probability of job seekers finding a job and escaping unemployment, prolonging unemployment, and thus contributing to long-term unemployment. In particular, it lowers the employment chances of disadvantaged worker groups, such as youth, new labor market entrants, and low-skilled workers. It may also contribute to the growth of the informal sector or the use of irregular employment contracts to circumvent the stringent regulations governing regular contracts. Finally, because strict EPL impedes enterprise restructuring and the reallocation of jobs from declining to expanding industries, it is a barrier to productivity. There is ample evidence from OECD countries that strict EPL correlates with poor labor market outcomes.

34. **By European standards employment protection in Croatia is strict.** Hiring and firing costs are high and there is little flexibility to adjust hours worked. Collective agreements, especially in the public sector, contribute to wage rigidities. Accordingly, employers in Croatia find it difficult and costly to adjust labor input to changes in demand.

35. **Given the rigor of its EPL, labor market outcomes in Croatia are likely to remain unsatisfactory,** given what international evidence suggests and what has so far been observed in

Croatia, where labor market outcomes were poor even during the economic boom. The employment/population ratio, very low by European standards, indicates that labor resources are underutilized. The steady-state unemployment rate is relatively high, as is the incidence of long-term unemployment and youth unemployment. The outcomes illustrate the rigid labor market; unduly strict EPL is a major cause of the poor performance of Croatia's labor market.

36. **Substantial gains can be expected if labor regulations are made more flexible.** Aligning them with EU countries that have well-performing labor markets is likely to improve job prospects and speed productivity growth. However, to achieve the desired results labor market reforms should be accompanied by reforms in other areas, such as social security, privatization, and competition. Ultimately, however, it is improvements in the investment climate that create jobs and employment growth.

37. **What needs to be done?** Three areas deserve particular attention.²¹ First, to encourage job creation and hiring, the costs of hiring and dismissal need to be lowered. Second, work hours need to be made more flexible so that firms can adjust labor input to seasonal fluctuations in demand. Third, wage rigidities need to be addressed to promote adjustment of wages rather than employment to falls in labor demand. Specific options that might be considered include:

- Removing the provision that fixed-term contracts can be used only on an exceptional basis and when justified by certain reasons, such as performance of a specific task or occurrence of a specific event (Labor Law, Article 10).
- Reducing the maximum amount of compensation paid to a wrongfully dismissed worker from the current 18 months' salary to 6 months (Article 117).
- Relaxing the conditions for lawful dismissal of an individual due to business reasons, which are currently: lack of alternative employment, the worker's socioeconomic status, retraining for a different job, and closure of the pertinent job (Article 107).
- Relaxing the conditions for collective dismissal, which currently involve consultation with the workers' council "with the aim of removing the need for dismissal" and preparation of a detailed "redundancy social security plan" (Articles 120 and 121).

²¹ The areas were identified as a result of the discussions the Bank team had with social partners (the representatives of the government, employers and the trade unions) and labor lawyers in Croatia, and as a result of the review of the Croatian Labor Law.

- Relaxing the constraints on dismissal of some categories of protected workers in case of justified business reasons, while ensuring that these workers are adequately protected (Articles 71, 72, 73, 113).
- Increasing work-time flexibility by extending the scope for rescheduling work hours (Articles 46 and 47).²²
- Providing for the possibility of cancelling with notice a collective agreement concluded for a definite term (Article 263).
- Limiting the extension of an expired collective agreement (the after-effect) to a maximum of 6 months (Article 262).

38. **Because changes to an EPL tend to be politically difficult, it is advisable to prepare for them by carrying out a public information campaign that explains their rationale and by initiating dialogue with social partners.** The key message that needs to be conveyed is that relaxing the most rigid provisions of labor law will eventually lead to better employment prospects, shorter spells of unemployment, less informality, higher productivity, and consequently higher incomes. This involves introducing *flexicurity*: moving from protecting jobs to protecting workers.

²² This recommendation is taken into account in the Draft Act on the Amendments to the Labor Law, which was submitted to the Parliament in May 2011. Moreover, the proposed amendments to the Labor Law contain some additional measures intended to enhance working hours flexibility by relaxing the regulations of night work (Articles 3 and 48 of the Labor Law).

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