

Labor Market Protections and Unemployment: Does the IMF Have a Case?

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Executive Summary

In a chapter in its April, 2003 *World Economic Outlook* (WEO), the International Monetary Fund (IMF) argued that labor-market protections are responsible for the high unemployment rates in many European economies. The IMF chapter follows a substantial body of literature in the same vein. This paper briefly assesses the IMF's case. We conclude that:

- Like most other studies in this framework, the WEO chapter fails to recognize that labor-market protections, such as unemployment insurance or unions, actually provide benefits to workers and the economy. Any serious policy analysis must take these benefits into account, since governments must balance any potential gains in the form of lower unemployment with the real losses that workers would incur as a result of scaling back labor-market protections. Demonstrating that a weakening of labor-market protections would lead to lower unemployment does not provide sufficient justification for policy reforms. A persuasive case for reducing labor-market protections requires demonstrating that resulting reductions in unemployment are large enough to offset the welfare and efficiency losses that result from weaker labor-market protections.
- Since weaker labor market protections imply costs to workers, it is essential that research produce well-defined estimates of the reductions in unemployment associated with specific reforms.
- Simple bivariate regressions show almost no evidence to support the view that labor-market protections are associated with higher levels of unemployment in the OECD economies. By far, the most statistically relationship is the negative relationship between bargaining coordination and unemployment – higher levels of bargaining coordination are associated with lower levels of unemployment.
- The multivariate regressions in the WEO chapter include several unusual features (e.g. country-specific time trends and country-specific inflation terms), which are both hard to justify on theoretical grounds and are not common in this literature. These unusual features provide grounds for questioning their findings.
- The regression results published in the chapter are not consistent with each other, or with prior research. They provide widely varying estimates of the impact of changes in the labor-market protections included in the regressions. Governments should not frame policy based on such weak and inconclusive results.

Recent history shows examples of countries, such as New Zealand, that have sought to drastically reduce their labor-market protections, with relatively little benefit in the form of reduced unemployment. Many OECD countries, such as Austria, Denmark, Ireland, Norway, and Sweden, enjoy lower than average unemployment rates, while maintaining strong labor-market protections, at least relative to the standard set by the United States.

Introduction

In its April 2003 *World Economic Outlook* (WEO), the IMF devoted a chapter to arguing that high unemployment rates in some European countries are attributable to labor-market protections, such as generous unemployment benefits, powerful unions, and employment protection legislation.^{2,3} According to the findings reported in this chapter, the euro-zone nations could reduce their unemployment rate by more than 3.0 percentage points, if European labor markets more closely resembled that of the United States.

While the chapter in the WEO presents its results as being solidly supported by evidence, a fair reading of the evidence suggests that US-style labor-market institutions are neither a necessary nor a sufficient condition for lowering the unemployment rate in Europe. The regression results shown in the IMF chapter, as well as results of other research, present a far more ambiguous picture than the discussion in the WEO implies. The mixed evidence on this issue would not usually be seen as sufficient to justify major changes in policy.

Furthermore, the discussion in the WEO never addresses the fact that the weakening of labor market protections—even if it does lead to lower unemployment—involves trade-offs. Labor-market protections provide real benefits to workers, in the forms of insurance against job loss, increased job stability, better wages and working conditions, greater voice at work, and improved distributional outcomes for workers in the middle and bottom of the wage distribution. In this context, advocates of dismantling labor-market protections must demonstrate not simply that such institutions raise unemployment, but rather that these institutions raise unemployment to such an extent that the costs of this higher unemployment exceed the benefits provided by these systems of labor-market protection. Therefore, any serious policy discussion must proceed with a clear sense of the size of the trade-offs involved. The WEO discussion never considers this basic policy question in a straightforward way, thereby limiting its value to the governments that would actually implement the IMF's recommendations.

This brief paper first lays out more explicitly the nature of the trade-offs involved in this debate and the proper framing of this issue from the standpoint of policymakers and governments. The second section examines the evidence produced in both the IMF study and in earlier work by other researchers. The third section assesses the implications of this evidence for labor market restructuring.

² International Monetary Fund, *World Economic Outlook*, April 2003. Washington, D.C.: International Monetary Fund.

³ This paper draws heavily from an earlier paper, Baker, D., A. Glyn, D. Howell, and J. Schmitt, 2003 “Labor Market Institutions and Unemployment: A Critical Assessment of the Case for Deregulation,” New York: Center for Economic Policy Analysis, [<http://www.newschool.edu/cepa/papers/archive/cepa200217.pdf>]. We also draw from ongoing work with Andrew Glyn and David Howell, which is supported by the International Labor Organization. However, the authors are solely responsible for the views expressed in this paper.

Labor Market Restructuring – What is the Policy Question?

The discussion of labor-market reform in the April 2003 WEO works from the assumption that if labor-market protections, such as unemployment benefits or employment protection legislation, can be shown to increase unemployment, then these institutions should be cut back or eliminated. Effectively, the IMF is conducting a cost-benefit analysis of labor-market institutions, in which the benefits of labor-market protections are implicitly assumed to be zero.

For example, unemployment insurance, which is blamed by the IMF for contributing to higher unemployment, raises workers' welfare by providing insurance against job loss that the private market does not offer because of problems with moral hazard. Citizens of each country, well aware of the potential problems posed by moral hazard, but also aware of the severe economic and social consequences of involuntary job loss, have decided that insurance against unemployment is a valuable use of societal resources. Unemployment insurance can also lead to more efficient economic outcomes because such insurance allows skilled workers the time they need to search for a new job that fully utilizes their skills. Unemployment insurance, for example, may buy an unemployed engineer the time needed to find another job as an engineer, instead of being forced to accept the first job offered. As a result, the engineer's training is less likely to be wasted, yielding gains for the engineer, and for the economy as a whole.

All of the labor-market protections criticized by the IMF offer distributional or efficiency gains that would offset at least some portion of any adverse impact on unemployment. High levels of union representation, especially in the context of coordinated collective bargaining, can raise workers' welfare and potentially improve economic efficiency. Unions not only act to represent their workers' interests on the job, providing clear benefits for which workers pay dues, but unions can also lead to higher productivity, for example, by fostering a work environment that facilitates recruitment and lowers labor turnover or by increasing workers' sense of job security and, therefore, their willingness to invest in job-specific skills.

In a context where labor-market institutions provide clear, direct, welfare benefits to workers and may also provide efficiency gains for society as a whole, the key policy question is not simply *if* these protections lead to unemployment. The appropriate question is *how much* unemployment these institutions might cause relative to the distributional and efficiency gains for workers and the rest of society.

Unfortunately, the focus of the vast majority of the research on this topic has been to establish that greater levels of labor-market protection lead to higher levels of unemployment, rather than to develop more precise measures of what the trade-offs might be. For example, at one point, the WEO chapter uses its research to predict that if the euro-zone nations adopted US levels of taxation, the unemployment rate in the euro zone would fall by an average of 0.4 percentage points (Table 4.1). Since lower levels of taxation also imply lower levels of service (for example, cuts to public health care and

free college tuition), the euro-zone nations may view an additional 0.4 percentage points of unemployment as an acceptable price for a much higher level of public services.

In practice, this 0.4 percentage-point estimate is not even well defined. The estimates of the unemployment reduction associated with a major tax cut vary widely, even within the IMF's chapter, depending on the exact specification of the relationship, or the years and countries included in the analysis. That the IMF's analysis and the broader literature have not produced a set of widely accepted estimates of the trade-offs associated with specific levels of specific institutions suggests that this kind of analysis has not yet developed to the point where it can provide a serious basis for policy.

The Nature of the Evidence

Bivariate regressions

The evidence that strong labor-market protections are associated with high levels of unemployment is far weaker – both in prior research and in the WEO study – than the discussion in the WEO chapter implies. Based on this evidence, and the track record of the countries that have actually carried through the recommended reforms, there is little reason to believe that adopting the policies advocated in the WEO will lead to the predicted reductions in unemployment rates.

The simplest way to evaluate the relationship between labor-market protections and unemployment is through a set of bivariate regressions, which examines the extent to which higher levels of specific protections (unemployment benefits, employment protection, union representation, etc.) are associated with higher unemployment rates. Such bivariate regressions provide almost no support for the view that labor-market protections lead to higher unemployment.

The charts below show the relationship between the unemployment rate and the five types of labor-market protection that are most frequently used in this literature (employment protection, union density, bargaining coordination, benefit replacement rates, and the size of the tax wedge). To simplify the presentation, the charts use five-year averages of these measures in each of 20 OECD countries for the period from 1980 to 1998.

Figure 1

Employment protection and unemployment, OECD, 1980-98
t-statistic of fitted line = -0.04

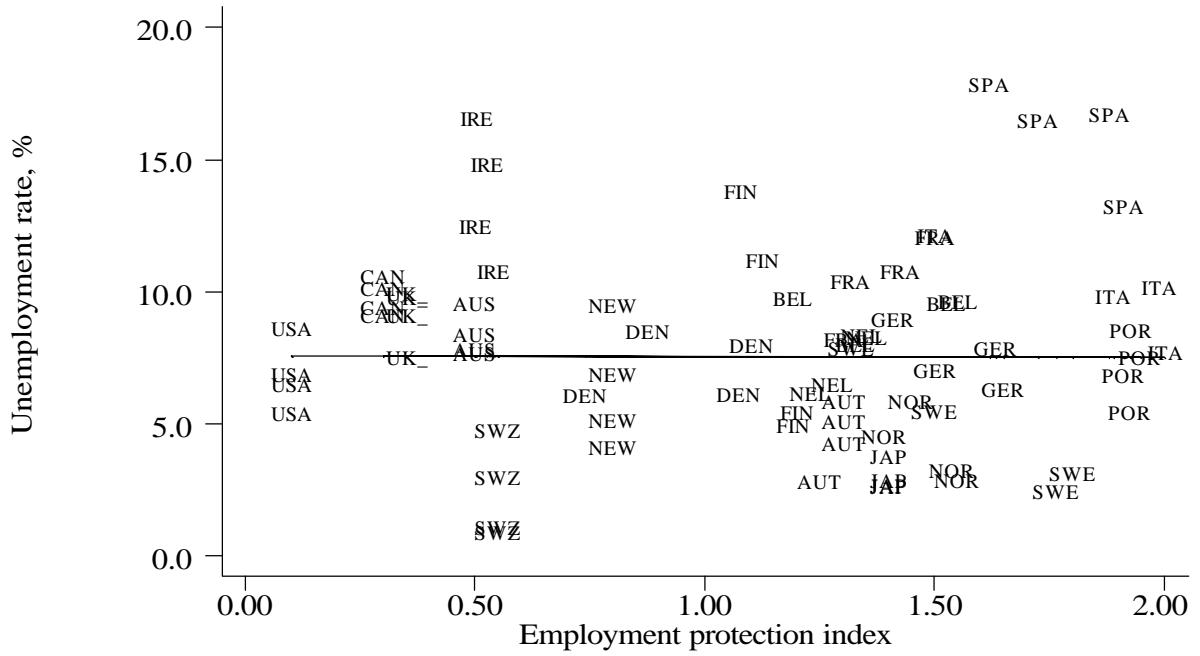


Figure 2

Union density and unemployment, OECD, 1980-98
t-statistic of fitted line = -1.10

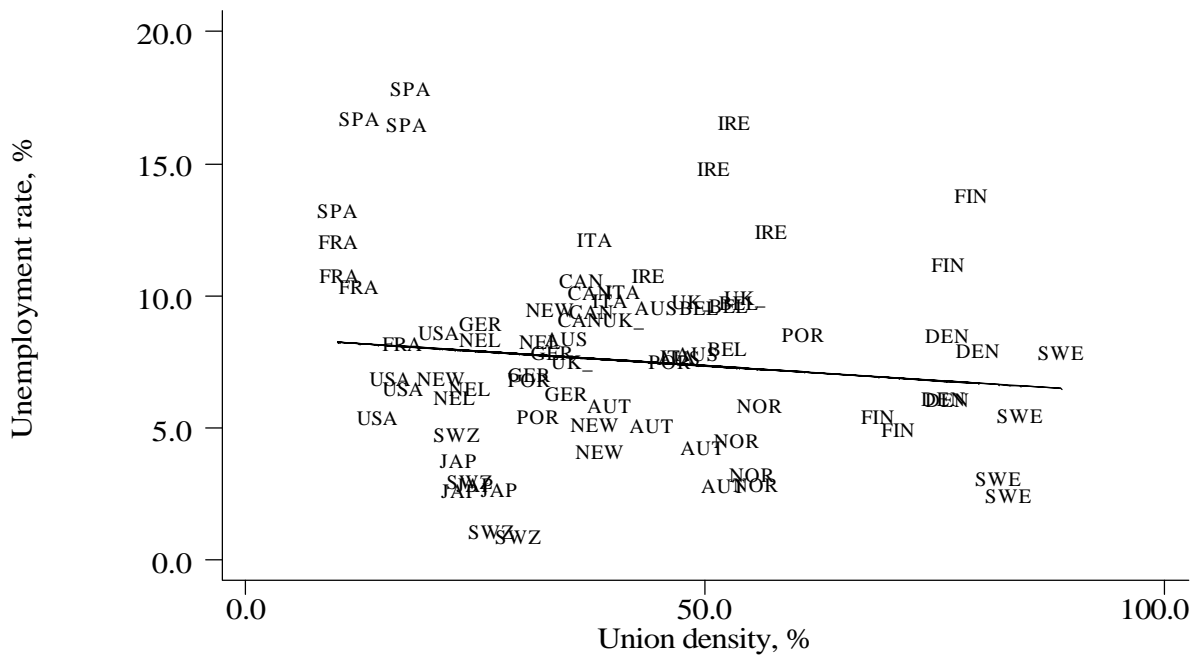


Figure 3

Bargaining coordination and unemployment, OECD, 1980-98
t-statistic of fitted line = -1.18

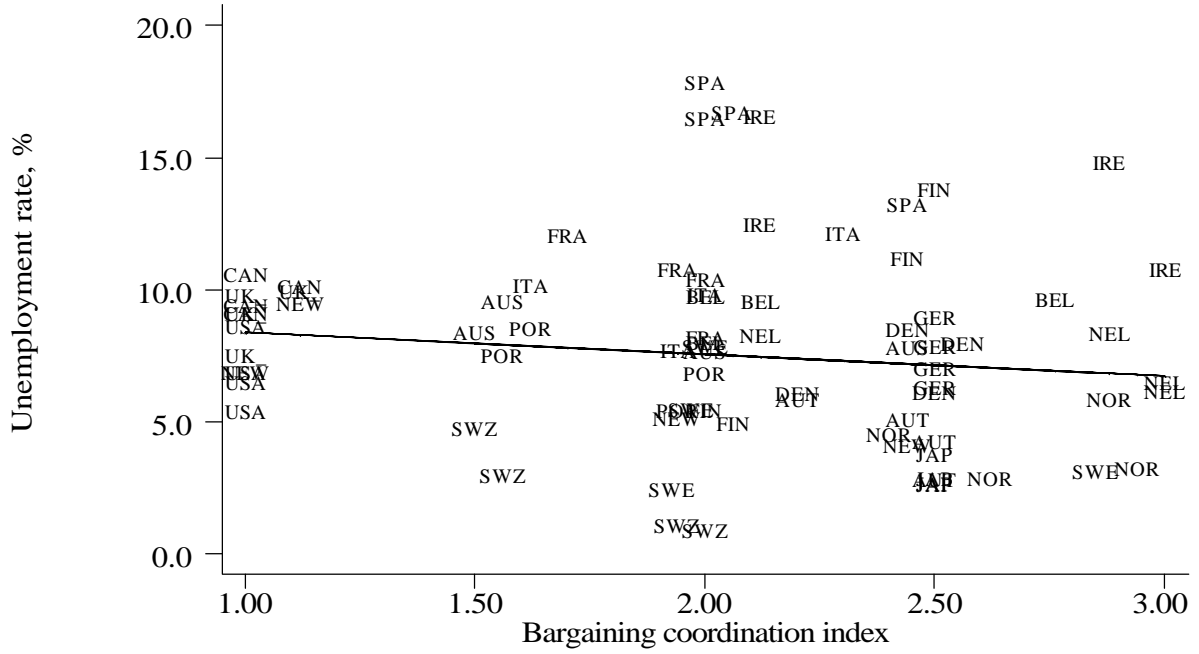


Figure 4

Benefit replacement rate and unemployment, OECD, 1980-98
t-statistic of fitted line = 0.46

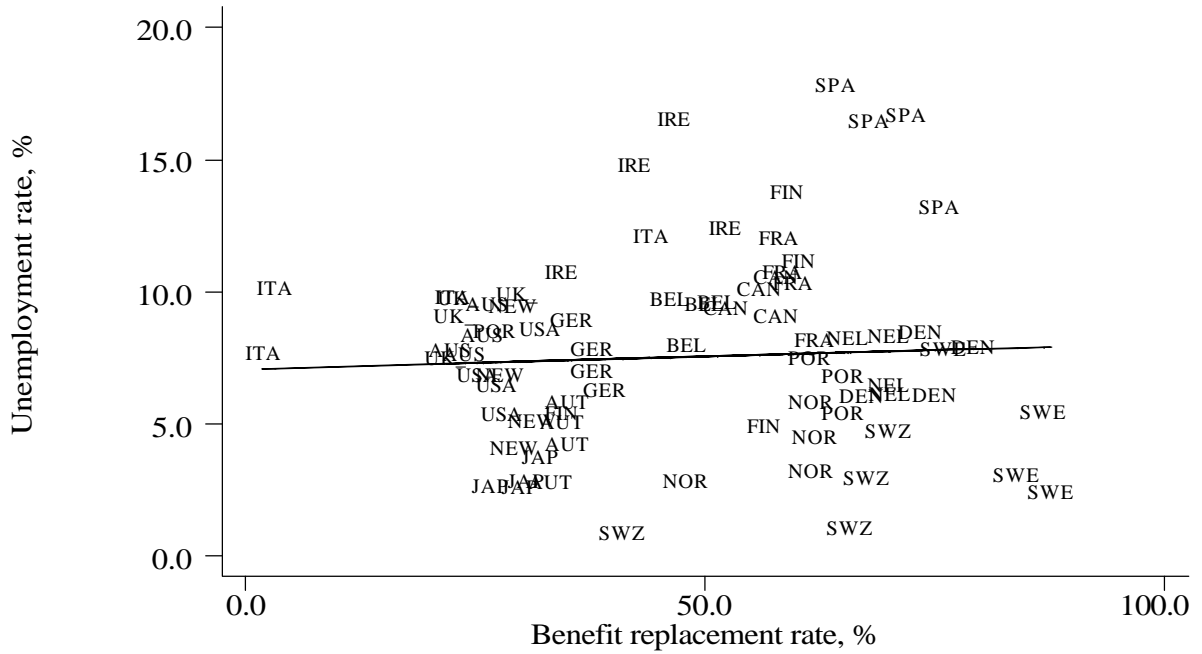
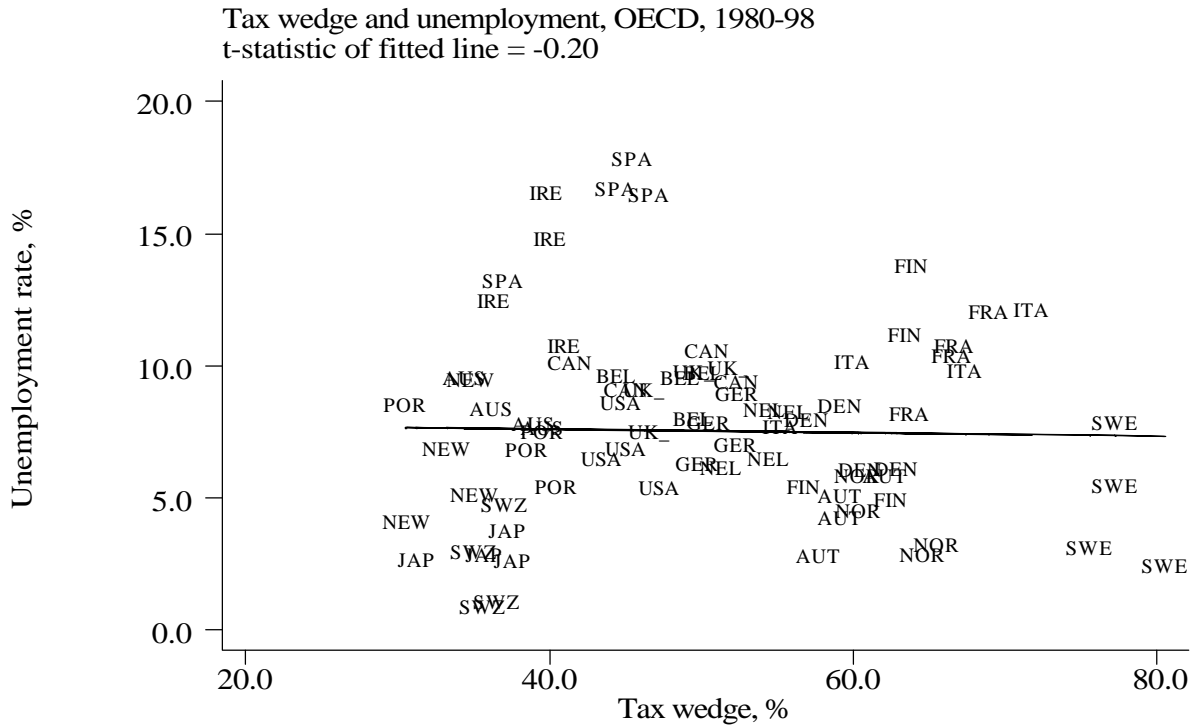


Figure 5



None of the five relationships in the charts are statistically significant. The strongest relationship, though far from significant, is the negative relationship between bargaining coordination and the unemployment rate, implying that higher levels of bargaining coordination are associated with lower levels of unemployment. This relationship is consistent with much of the other research on this topic, suggesting that increased levels of bargaining coordination are an effective way to reduce unemployment.

In these bivariate regressions, only higher levels of unemployment benefit are associated with higher levels of unemployment, but the relationship appears to be very weak (the t-statistic is 0.46). The graph (Figure 4), however, hardly constitutes a solid base for enacting significant cuts in the generosity of unemployment benefits. Such cuts would have a substantial direct impact on the well-being of currently unemployed workers and an indirect negative impact on all existing workers (by lowering the value of the insurance they receive through the unemployment-insurance system). Moreover, the direction of causality in the relationship is not clear. Governments may respond to the social and political pressures generated by rising unemployment by increasing the generosity of benefits paid to the unemployed, as suggested in prior research findings.⁴ If this is the case, high unemployment would be "causing" high benefit replacement rates and not the other way around.

⁴ Elmeskov, J., J. Martin, and S. Scarpetta, 1998. "Key Lessons for Labor Market Reforms: Evidence from OECD Countries." *Swedish Economic Policy Review* 5(2) 205-252, table A.3.

The relationships between the other institutional variables and the unemployment rate are not close to being statistically significant. In the case of union density, the correlation actually goes in the wrong direction, with higher levels of unionization associated with lower levels of unemployment, although this relationship is not statistically significant.

Multi-variate regressions

The bivariate plots may miss important relationships between institutions and unemployment because they fail to control for other factors (including the level of other institutions). With this in mind, the WEO chapter and earlier researchers use multivariate regressions to explain national unemployment rates. A serious problem with multivariate regressions, however, is that both theory and standard econometric practice give researchers wide latitude as to exactly how to construct these tests. Regressions can use annual data or five-year averages. They can use different time periods and different samples of countries. They can use different measures for variables such as replacement rates or benefit duration (or exclude benefit duration altogether, as the WEO chapter does). Regressions can also combine variables in different ways, for example, interacting the replacement rate variable with employment protection to test for a joint effect, or combining employment protection with the tax wedge for the same purpose. In addition, regressions can include, exclude, or interact a large number of possibly relevant macroeconomic control variables, such as productivity growth, the terms-of-trade, the real interest rate, inflation, and many others.

Inevitably, the selections of variables and their units of measure, the countries, and the exact time period are somewhat arbitrary. In principle, the final list of variables used in a particular analysis should be defensible – meaning that it should be possible to tell a plausible story as to how these variables could affect the unemployment rate, but it is always possible to tell a plausible story that implies structuring the final regression differently.

This is why economists always test for their robustness of their results. If a relationship is real –for example, if higher union density does in fact lead to a higher unemployment rate– then regressions should generally find this result even if the exact time period, sample of countries, econometric specification, or some other aspect of the regression is changed in reasonable ways. Furthermore, the quantitative significance of this relationship should be roughly comparable across regressions. The latter point is important, not only in order to establish that a relationship is real, but also because policy makers must have some idea of the size of the trade-offs involved in order to structure policy. It is not sufficient for governments to believe that generous unemployment benefits or employment protections contribute to higher unemployment. Governments considering reforming these institutions must also know the approximate magnitude of the predicted effects in order to strike the correct balance.

The regressions published in the WEO do not provide such a basis for policy. First, the WEO regressions include some important peculiarities that depart from most of the prior literature. For example, the regressions in the WEO use country-specific time trends, unlike most of the other research in this framework. The estimated value for these time trends imply that many of these countries would have experienced enormous increases in unemployment (more than 10 percentage points) over the period examined, for reasons that have nothing to do with the factors cited in the analysis.⁵ If these time trends represent real phenomena –not spurious artifacts of the regressions– then it would seem essential to determine what factors lead to such large upward trends in unemployment. For most of the countries in the analysis, the impact of the estimated value for the time trend on the unemployment rate is far larger than the impact of any plausible changes in labor-market protections.

A second odd feature of these regressions is the use of country-specific coefficients to measure the trade-off between inflation and unemployment. Earlier research has used a common coefficient, implying that the trade-offs between inflation and unemployment are similar across countries. In the WEO regressions, the estimated value of these trade-offs is very different across countries, and in most cases highly implausible. The estimated value of this coefficient, for example, was more than 10 for several countries, implying that a 1 percentage-point rise in the inflation rate would be associated with more than a 10.0 percentage-point decline in the unemployment rate. Such a trade-off implies that enormous gains in employment and output can be obtained from even modest increases in the rate of inflation. More typically, other research on the inflation-unemployment trade-off estimates this effect to be in the range of 1.0 to 3.0. WEO results that are 5 to 15 times higher for this relationship (and which are not reported or commented on in the WEO chapter) provide serious grounds for questioning the validity of their results.

Another concern is that WEO results are not consistent even across their own set of regressions.⁶ In fact, while the WEO chapter implies that the results are consistent across the four regressions whose results are published in the paper (Table 4.3), this is not the case. Table 1 shows the predicted impact on unemployment that the changes in labor protections described in the first column would cause, based on each set of regression results.

⁵ This discussion refers to our replication of the IMF regression shown in column 3 of table of 4.3. The IMF did not publish its coefficient estimates for the country specific time trends, country specific inflation terms, or country dummies.

⁶ We did several additional regressions examining slight variations of the IMF's specifications and found results that were very much at odds with those published in the WEO chapter, see Baker et al. 2003.

Table 1
The Implied Effect of Labor Market
Changes on the Unemployment Rate

	Regression Number			
	I	II	III	IV
Employment Protection index (+1 unit)	1.47	0.30	0.52	-0.44
Replacement Rate (+10 PP)	0.68	0.53	0.51	0.57
Union Density (+10 PP)	1.57	3.90	2.37	0.21
Bargaining Coordination Index (+1 unit)	-2.46	-0.48	-0.27	0.01
Tax Wedge (+10 PP)	2.66	0.67	-0.51	1.12

Source: IMF 2003 and author's calculations.⁷

The estimated impacts of policy changes vary widely across different specifications of the relationship. According to the regression results in column two, for example, an increase of one unit in the employment protection index would lead to a 0.3 percentage point increase in the unemployment rate; according to the results in column one, however, such a change would raise unemployment by 1.47 percentage points – an effect that is nearly five times as large. By contrast the regression results shown in column four imply that an increase of one unit in the employment protection index would actually lower the unemployment rate by 0.44 percentage points.

The results in column two imply that a 10 percentage-point increase in union density would lead to a 3.9 percentage-point rise in unemployment, while the results in column four imply an increase of just 0.21 percentage points. Increases in bargaining coordination and the size of the tax wedge are either positive or negative, depending on which of the IMF regression results are used.

Only the coefficients for the replacement rate variable are reasonably consistent across regressions – suggesting that a 10 percentage-point increase in the replacement rate for unemployed workers would be associated with a rise in the unemployment rate between 0.5 and 0.7 percentage points. While this degree of consistency could provide a basis for policy, it is difficult to see how governments could make policy decisions based on the conflicting evidence on the impact of the other types of labor-market protection.⁸

The lack of robustness of the relationship between labor-market institutions and unemployment is not unique to the WEO. Earlier research has produced a wide range of estimates for the impact of the various types of labor-market protections on

⁷ These calculations use the published regression results in IMF 2003, table 4-3. The estimated impact for interacted variables assumes that the interacted variable has the mean value for the OECD nations for 1998. The calculation for the impact of a 1 unit increase in bargaining coordination assumes that the index rises from 0.5 units below the mean to 0.5 units above the mean.

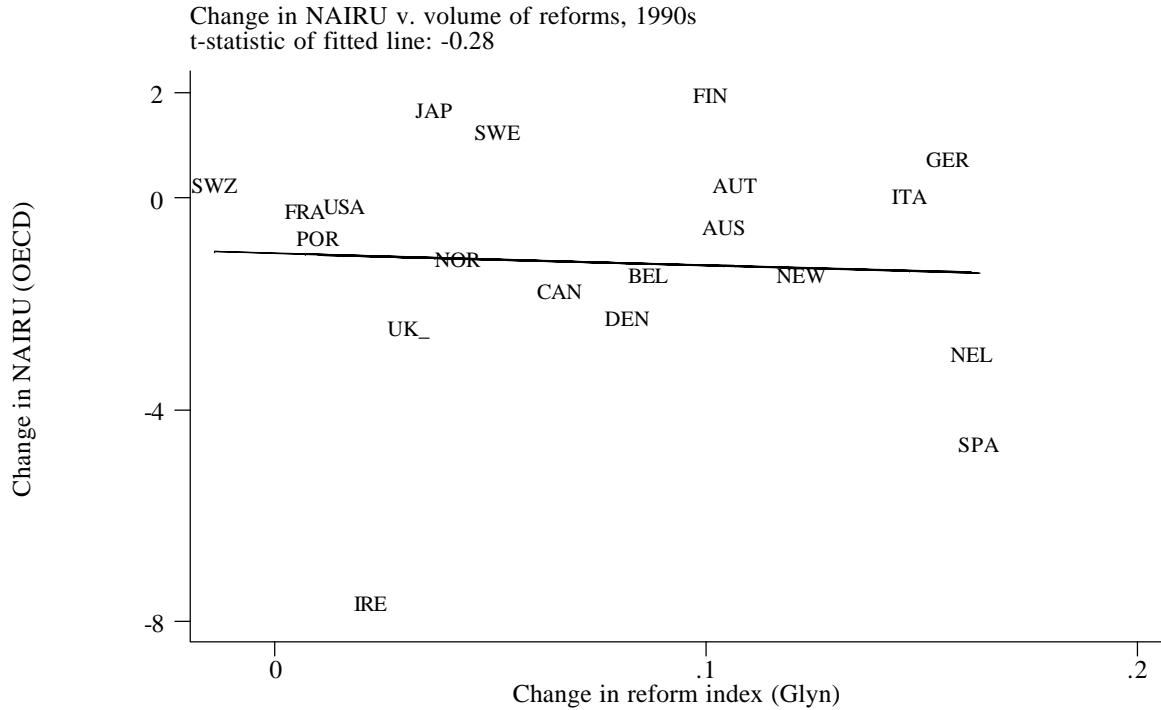
⁸ Other research, though, casts doubt on the robustness of even this finding. See, for example, Baker, Glyn, Howell, and Schmitt (2003).

unemployment. These estimates are sufficiently far apart that they can not provide a reliable basis for labor-market policy.

Recent experience with reform

Both the bivariate and multivariate regressions described above analyze the relationship between the unemployment rate and separate measures of labor-market institutions. Another way to measure the effect of labor-market reforms is to relate changes in countries' structural unemployment rate to the degree of labor-market reforms –measured as a package. Baker et al. (2003) constructed an index of labor-market reforms in the 1990s based on both the OECD's recommendations of reforms and the OECD's rating of compliance with these recommendations, most of which were oriented toward weakening labor-market protections. **Figure 6** shows the results of graphing the OECD's estimates of changes over the 1990s in the structural unemployment rate against the index of reforms for the same period. The graph suggests that there was no relationship between enacting OECD-inspired reforms and lowering structural unemployment rates. Germany and Italy, for example, were among the countries undergoing the greatest volume of reforms, but both countries saw almost no change in their (OECD-estimated) structural unemployment rates. Ireland experienced the largest decline in structural unemployment rates, but was near the bottom in terms of the volume of reforms implemented. Overall, the relationship was small and statistically insignificant. Real-world experience with reforms, therefore, appears to bear out the bivariate and multivariate findings that the relationship labor-market institutions have no simple and consistent impact on the unemployment rate.

Figure 6



Conclusion

Neither the IMF's WEO nor earlier research by other investigators provides a sufficient basis for reforming Europe's key labor-market institutions. Serious efforts to reform labor-market institutions will require research that provides both robust and fairly precise estimates of the cost of labor-market protections (measured in terms of unemployment), which can then be weighed against the large distributional and efficiency benefits that motivated the establishment of these institutions in the first place. The research to date, including the IMF's recent contribution, makes little or no attempt to measure the social benefits of labor-market protections and provides only weak and poorly-defined estimates of the efficiency costs of these institutions.

Given the ambiguous results of the research in this area, it should not be surprising that many countries in the OECD have achieved low unemployment rates while maintaining strong labor-market protections, at least relative to the US standard. These alternative success stories include Austria, Denmark, Ireland, Netherlands, Norway, and Sweden. All of these countries have high rates of unionization, and relatively generous unemployment benefits, yet enjoy unemployment rates well below the OECD average. The example of these countries should caution those who argue that weakening labor market protections is the only way to reduce unemployment.

Finally, it is worth noting that the most consistent and robust result of the full body of research on labor-market institutions and unemployment – one confirmed again by the IMF's WEO findings – is that bargaining coordination is associated with lower unemployment. The IMF (along with others active in this debate, most notably, the

OECD) has consistently chosen to downplay this finding. This is decision is striking since increasing bargaining coordination poses no obvious trade-off on distributional or efficiency grounds. A government that was attempting to act based on the evidence presented in the WEO chapter may find the promotion of greater bargaining coordination a compelling route to explore.