THE VULNERABLE ECONOMIC MAINSTREAM

Labor Market Reforms

The Evidence Does Not Tell the Orthodox Tale

Andrew Glyn, David Howell, and John Schmitt

Inflexible labor markets are said to be the most important cause of economic stagnation and high unemployment rates. So certain are some advocates of this claim that casual observers might believe it is undisputed. These three economists show how flimsy the empirical support for such a claim truly is.

IGH UNEMPLOYMENT CONTINUES TO PLAGUE MUCH OF THE DEVEL-OPED world, and at 8.5 percent, this condition is particua larly true of Europe. It is widely accepted that the root of the problem is labor market rigidity. The principal culprits, in this view,

ANDREW GLYN is fellow and tutor in economics, Corpus Christi College, and university lecturer in economics, Oxford University. DAVID HOWELL is professor, Milano School of Management and Urban Policy, New School University, and faculty research fellow, Schwartz Center for Economic Policy Analysis. JOHN SCHMITT is an economist at the Center for Economic Policy Research, Washington, DC.

are protective labor market institutions, the most harmful of which are unemployment benefits, employment protection laws, and trade unions. There are two main variations on the rigidity story: that high levels of social protection have limited the ability of economies to adjust to shocks (e.g., Blanchard and Wolfers 2000), and that changes in protective labor market institutions explain employment performance over time and across countries, since these changes either promote or inhibit necessary wage and employment adjustments (e.g., IMF 2003; Nickell et al. 2005). Rigidity explanations for unemployment have long been a central tenet of mainstream economics, but there is also a long, if less influential, dissenting position, most famously illustrated by Keynes's attack on what he called "the orthodox reasoning" during the Great Depression.

The past decade has been distinguished by a growing number and influence of statistical studies designed to identify the effects of labor market institutions for the cross-country pattern of unemployment. Most conclude that the data confirm the orthodox rigidity view. We have addressed the robustness of these results in several papers. In Baker et al. (2005), our survey of the most immential cross-country studies to date found that they turn out to be far from unanimous in their estimates of the economic and statistical significance, and in some cases even the direction, of the effects of standard institutional variables on unemployment. Indeed, a number of the prominent papers explicitly refer to this lack of robustness of their own results across specifications and variable definitions. In our own tests using five-year periods and modeled after those published by Nickell (1997), we determined that the strong cross-sectional relation between unemployment and institutions found by Nickell (1997) for the mid-1980s to the mid-1990s disappeared entirely with the substitution of updated and extended Organization for Economic Cooperation and Development (OECD) measures of the same labor market institutions.

In another study (Baker et al. 2004), we explored the robustness of the conclusions drawn by a recent study by the International Monetary Fund (IMF). Following Nickell et al. (2003), this IMF report relies on annual data, which we argue is problematic on several counts-most importantly the dubious quality of the institutional variables, which are difficult enough to measure over five-year periods (the best sources are often periodic estimates by the OECD, which must then be annualized by interpolation). After replicating the IMF results, we found them highly sensitive to minor changes in specification—changes that are quite consistent with standard econometric approaches in this literature. Indeed, important differences appear in the IMF's estimates of effects even across its own published regressions. In sum, despite extensions and improvements in data and specification, the cross-country regression evidence remains extremely fragile and surely should not be used as a guide to dismantle particular labor market institutions in particular countries.

In recent years, proponents of the rigidity view have also appealed to simple correlations over the 1990s between summary indicators of labor market reforms and changes in unemployment rates. The motivation for these simple, two-variable correlations has been to avoid the complexities and difficulties of trying to get robust results with econometric tests of many measures of institutions and few coun-"major" OECD countries). tries (the twenty

In this paper, after presenting some simple correlations of our own (institution-unemployment scatter plots), we consider two prominent examples of this use of simple bivariate evidence to support the orthodox case for labor market deregulation. The first is the OECD's claim that there is a strong association between a composite measure of labor market reforms and structural unemployment (otherwise known as the non-accelerating inflation rate of unemployment, or NAIRU) across OECD countries. The OECD reforms-unemployment scatter plot first appeared in its "Implementing the Jobs Study" report (1999b) and then, in a different formulation, in the recent reappraisal reported in Brandt et al. (2005). We argue that a more appropriate measure of reforms—one that better reflects the core labor market deregulation agenda—produces no statistical relationship.

Our second example consists of a close look at Nickell's (2003) "ticks and crosses" analysis, which scored OECD countries on the extent to which they had changed various labor market institutions in an employment-friendly direction between the early 1980s and the late 1990s. While an admittedly casual exercise, there is good reason to take it seriously both for its prominent author and for its very strong conclusions. Indeed, Nickell's "ticks and crosses" analysis is the main empirical evidence used to support the conclusion in a recent issue of the American Economics Association's Journal of Economic Perspectives that the pattern of unemployment across Europe is explained by the pattern of labor market rigidities: "Nickell (2003) summarizes these diverging experiences by correlating the change in unemployment across countries in the 1990s with labor market reforms and finds the expected sign. Therefore, evidence supports the traditional view that rigidities that reduce competition in labor markets are typically responsible for high unemployment. Reducing these rigidities across the board seems to work" (St. Paul 2004, 53).

These two case studies illustrate our view that the strong orthodox conclusions found in the mainstream literature on European unemployment reflect more the theoretical predispositions of the authors than compelling empirical evidence. This is of some importance for at least two reasons. First, this interpretation of the evidence by prominent economists and international institutions provides cover and support for what, in our view, are unwarranted ideological attacks on the welfare state, labor unions, and other protective labor market institutions. And second, the apparent strength of these empirical results, by contributing to the overwhelming dominance of the orthodox rigidity view, can have a chilling effect on innovative empirical work designed to confront, rather than just confirm, the conventional wisdom.

Changes in Labor Market Institutions and Unemployment

It is frequently argued that employment performance will improve with the reform of each "employment-unfriendly" labor market institution. Indeed, this premise lies behind both the OECD's (1999b) reforms/unemployment scatter plot and Nickell's (2003) ticks/crosses analysis, both of which are considered in detail below. In Baker et al. (2005), we pro-

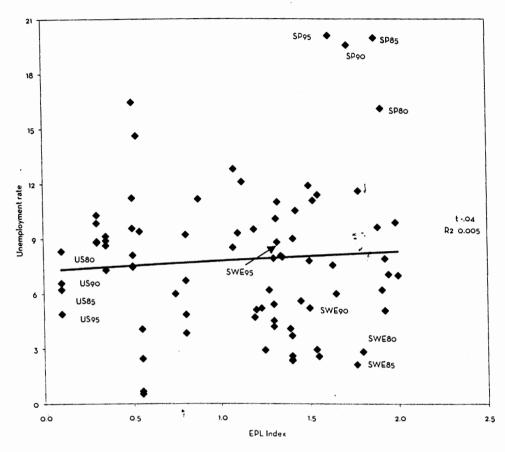


Figure 1. Employment Protection Laws and Unemployment, 1980-99 (twenty countries, four five-year periods)

duced six scatter plots of labor market institutions against unemployment for twenty countries and four periods (1980-84, 1985-99, 1990-94, 1995-99). We found little, if any, correlation between these standard institutional measures and unemployment. We reproduce three here.

Figure 1 shows the plot of country-time points for the strictness of employment protection laws and unemployment. These data show no correlation, a finding consistent with the conclusion of the OECD's study of employment protection laws (1999a): "The basic funding appears robust: overall unemployment is not significantly related to EPL strictness." This finding was reaffirmed in the OECD's recent comprehensive follow-up analysis of the effects of employment protection laws (OECD 2004).

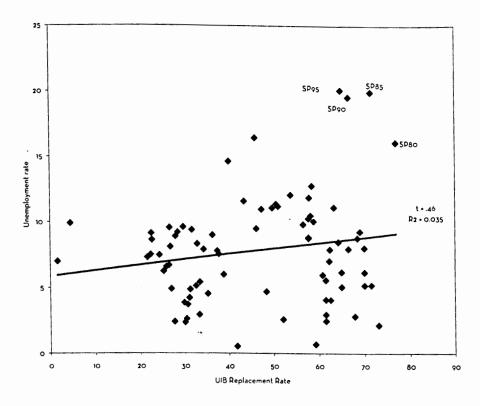


Figure 2. The Unemployment Benefit Replacement Rate and Unemployment, 1980-99 (twenty countries, four five-year periods)

Despite the widely accepted view that unemployment benefit generosity lies at the heart of the unemployment problem, there is in fact no association between the standard measures of unemployment benefit generosity and unemployment over the 1980-99 period. Figure 2 shows a slight positive (but statistically insignificant) relationship between the unemployment rate and the replacement rate (the share of an unemployed worker's income that is typically replaced by unemployment insurance benefits). One country, Spain, accounts for the slight upward slope. Directly below the four Spanish points are those for Sweden. While both countries had similar replacement rates (ranging from 65 to 76 percent), the five-year average unemployment rates in Spain ranged from 16 to 20 percent, while Swedish unemployment rates ranged from 2 to 8 percent. To take another example, while French replacement rates were about 58 percent from 1980 to 1999 and Dutch rates were much higher (70 percent), French unemployment rose from 8 to 12 percent, while Dutch unemployment fell from 8 to 5 percent.

There is, similarly, no simple association between unemploymentbenefit duration and unemployment levels across these twenty countries and four time periods (not shown). If unemployment-benefit generosity has strongly negative employment effects, it must be a more complicated story, one that takes into account controls for (and interactions with) a variety of other institutions, macroeconomic conditions, and even demographic and structural (industrial mix) effects. Even in these more sophisticated tests, it is difficult to sort out causality (increasing generosity would reasonably be expected to be legislated in response to rising unemployment). Our review of that literature showed a wide range of estimates on the effects of duration and the replacement ratio. The lesson from this cross-section evidence is that the quantitative impact of unemployment benefit cuts on unemployment is quite unclear.

But it should also be noted that a finding that reduced benefit generosity is associated with lower unemployment may not reflect a more employment-friendly labor market. Faced with less generous benefits, workers may respond with less job search or more "black market" work, or they may drop out of the labor market entirely. There is empirical support for this discouragement effect: Studies by Nickell and his coauthors found that significant effects of replacement ratios on unemployment rates were not repeated when employment rates were used instead. In short, paring back the welfare state may lead to lower unemployment rates via greater detachment from the formal labor market, not higher employment rates.

Collective bargaining is also commonly blamed for the labor market rigidities presumed to be at the root of high European unemployment. The union member share of the workforce (known as "union density") is a commonly used indicator of this labor market institution. Figure 3 shows a plot of union density against unemployment, which again shows no statistically meaningful association. This is consistent with a recent OECD survey of the literature on the effects

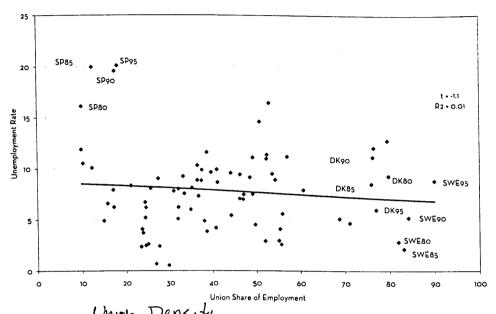


Figure 3. Union Density

Figure 4. Union Density

Figure 5. Union Density

Figure 4. Union Densi 1980-1999 (twenty countries, four five-year periods)

of collective bargaining, which concludes that, "Notably there is little evidence of an effect of union density . . . on unemployment once other features of the collective bargaining system are taken into account" (1999b, box 2.3, p. 55). Replacing the union density measure with collective bargaining coverage (the share of employees covered by union bargaining) also produces no statistical association.

In sum, despite the ubiquitous reference by economists, policymakers, and media pundits to the employment-unfriendly effects of employment protection laws, unemployment benefits, and labor unions, the fact is that the best (OECD-produced) measures of these institutions show little or no association with the cross-country pattern of unemployment.

The OECD's Policy Reforms Evidence

A central pillar of OECD labor market policy has been that reforms that reduce labor market rigidities are the answer to persistent high unemployment. An enumeration of such reforms was carried out by the OECD as part of its follow-up to The OECD Jobs Study (OECD 1994). Its 1999 survey (OECD 1999b) provides an extremely comprehensive listing of changes in the generosity of unemployment benefits, the strictness of employment protection laws, the level of minimum wages, and the like, focused on the period from 1995 but also with summary data from the early 1990s. The OECD listed all the reforms suggested for each country in its labor market reviews, developed a weighting system for assessing their significance, and then analyzed whether the recommended reform had been fully implemented, partially implemented, ignored, or even flouted (in the sense that policy had moved in the "wrong" direction).

The OECD found a significant positive relation between its measure of "follow-through" by countries in response to OECD recommendations and the extent to which unemployment (the NAIRU) fell in the 1990s (OECD 1999b, figure 2.7). But such a measure ignores the very different number of recommendations for labor market reforms that countries received from the OECD (varying from four in the case of the United States and Australia to twenty-one for Finland and twenty-three for Germany). The effect of reforms on unemployment should presumably depend on how many were implemented, not simply the *proportion* of OECD suggestions that were followed.

Accordingly, we constructed an alternative index showing the "volume" of labor market deregulation recommendations that were actually carried out, which depends on both the number of measures advocated by the OECD and its "follow-through" by the countries (for details, see Baker et al. 2005). We focused our index on reforms connected with the unemployment benefits, employment protection, and wage-bargaining systems, as these constitute the key labor market institutions typically regarded as employment-unfriendly.

Figure 4 compares this index of labor market deregulation in the 1990s with the OECD's estimate of the change in structural unemployment over the same period for twenty-one OECD member countries. The figure shows no significant relationship between this measure of deregulation and the change in unemployment across OECD countries. Ireland is an extreme case, with the most dramatic fall in unemployment accompanied by rather little labor market reform. However, even if Ireland is excluded (and this would be hard to justify), the relationship between deregulation efforts and structural unemployment across countries still appears very weak (only about one-tenth of the variance in the change in unemployment is "explained"). By this measure of labor market reforms, changes in structural unemployment across the major OECD member countries in the 1990s are not systematically associated with the extent of labor market reform.

The OECD is currently undertaking a major reassessment of its jobs strategy and has published a comprehensive survey of all the labor market reforms in the period starting in 1994, the year of its jobs study (Brandt et al. 2005). This new study also presented a preliminary analysis of the relationship between the extent of these reforms and changes in structural unemployment. It found a significant correlation between an index of the amount of labor market reform over the period 1994 to 1999 and changes in unemployment after 1998.

This latest confirmation of the payoff to reforms by the OECD depends on assuming a rather long lag and is driven by two of the "reforms"—increased spending on active labor market policies (ALMP) and reductions in the aggregate "tax wedge" between gross labor cost and the wage received by workers. The OECD's jobs strategy calls for greater public investment in ALMP (such as retraining and matching of workers with vacancies). It is viewed as a way to promote flexibility and efficiency in the labor market and is not part of the orthodox deregulation agenda. Similarly, the overall tax burden in the economy, while it may have labor market effects, reflects a myriad of influences and is certainly not adjusted primarily with labor market effects in mind. Accordingly, we developed an indicator of labor market reforms focused on the core deregulation agenda of employment protection, unemployment benefits, and wage setting. Repeating the OECD's exercise with this more targeted indicator shows no significant relationship with subsequent unemployment declines, confirming the patterns shown in Figure 4. In sum, appropriately defined measures of labor market reforms do not provide strong evidence

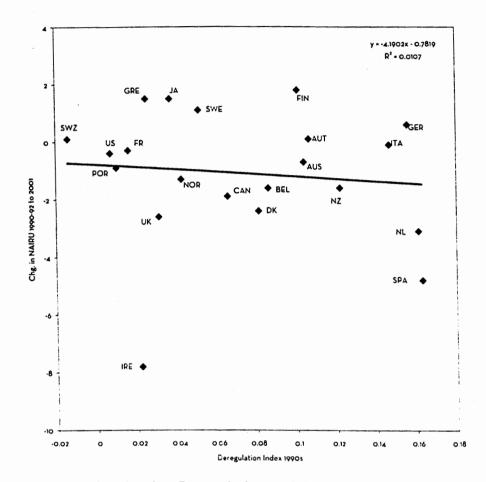


Figure 4. Labor Market Deregulation and Changes in the NAIRU for Twenty-one OECD Countries in the 1990s

that labor market deregulation has yielded significant payoffs in the form of reduced unemployment.

Nickell's Reforms Scorecard

Stephen Nickell has helped pioneer the panel data analysis of labor market institutions and employment performance across developed countries in a literature that has become increasingly sophisticated, in terms of both statistical methodology and the quality of the institutional measures. In his recent "Labour Market Institutions and Unemployment in OECD Countries" (2003), he turns back to a much simpler but potentially more compelling analysis (because of its simplicity) that develops a labor market reforms scorecard and relates it to the change in unemployment between the early 1980s and the late 1990s.

Nickell makes two empirical claims. The first is that the problem of European unemployment today is concentrated in "the big four": France, Germany, Italy, and Spain. This is an important point, since a good explanation of the "European" unemployment problem must explain the persistence of high unemployment in these four big European countries. As he pointed out some time ago (Nickell 1997), many European workers live in regions with unemployment rates lower than that of the United States. Most of those who do not are located in one of these four countries.

But nearly all of the analysis in this recent paper is dedicated to the much bolder second claim, which is that changes in unemployment can be well explained by changes in (mostly "bad") labor market institutions. Nickell assesses the impact of deregulation, or "labor market reforms," by assigning "ticks" to "good" changes (employment-friendly reforms) and "crosses" to "bad" ones. This is done for nine measures and twenty countries for some point in the 1980s to some other in the 1990s, depending on the data availability. Nickell argues that his scorecard of labor market policy reforms accounts for just 51 percent of the variation in unemployment trends across these OECD countries since the early 1980s. Remarkably, this conclusion is nearly identical to what his most recent and most sophisticated regression analyses have produced (Nickell et al. 2003, 2005). As noted above, this reforms scorecard evidence has already been judged extremely compelling (St. Paul 2004).

But how reliable is this evidence? We leave aside the difficulty of determining which institutions to include (e.g., taxes and ALMP, as mentioned above), as well as which threshold should determine a cross or a tick for each of the nine measures and the poor quality of some of the measures (e.g., there is in fact no good cross-country measure of the strictness of eligibility rules for unemployment insurance, much less how this measure may have changed over time). Still, Nickell's analysis is unconvincing on two grounds: the fragility

of the simple regression results and, critically, the failure of this second empirical claim (the key role of reforms) to support his first one, since the ticks and crosses fail to identify three of the four big highunemployment countries (Spain, Germany, and Italy).

Nickell's finding that just over half the variation in unemployment is explained by his ticks and crosses is quite fragile. Even given the distribution of ticks and crosses, the alternative base and end years and mix of countries we tried produced weaker results. For example, the second row of Table 1 shows that the explanatory power of the equation collapses without the Netherlands, the United Kingdom, and Ireland. That is, for seventeen of the twenty countries, neither ticks nor crosses are significantly related to the change in unemployment. And row 3 shows a somewhat weaker result if the base period is changed from the 1980-87 average to 1980-81, arguably a more appropriate date to measure "the early 1980s."

It is of some interest that the ticks-and-crosses explanation for the pattern of unemployment across twenty countries is driven by these three "success" stories (Ireland, the UK, and the Netherlands). A general consensus exists in the case-study literature that the key to the employment successes of the Netherlands and Ireland were nationwide wage agreements between unions and employers, which produced labor peace and wage moderation—perhaps more an example of labor market regulation than deregulation. And the substantial improvement in UK unemployment (despite all the ticks given for the collapse of the labor unions in the reforms scorecard) is attributable mainly to declining labor market participation—the ratio of employment to population of working age is actually three percentage points lower now than it was in 1990 (Schmitt and Wadsworth 2005). Moreover, it turns out that all the increase in UK employment since 2000 has occurred either within the public sector or in jobs contracted out from the public sector. These are presumably not the kinds of dynamics that advocates of labor market deregulation have had in mind.

We also explored the effects of Nickell's reforms scorecard on the employment rate. After all, the logic of the labor market reform prescription is that improved unemployment performance reflects im-

Table 1 Effects of Nickell's "Good" and "Bad" Labor Market Policy Changes Using Alternative Measures of Employment Performance, Time Periods, and Countries

	Ticks	Crosses	R²	Ν
I. Chg U rate: 1980–87: 2000–01 (Nickell's regression)	-1.25 (3.1)	1.21 (2.2)	.51	20
2. Chg U rate: 1980–87: 2000–01 (w/o NL, IRE, UK)	74 (1.4)	.9 (1.62)	.24	17
3. Chg U rate: 1980–81: 2000–01	96 (2.9)	.73 (1.6)	.44	20
4. Chg EPOP rate: 1980–81: 2000–01	1.68 (2.1)	–.86 (.76)	.25	20
5. Chg EPOP rate: 1980–81: 2000–01 (w/o NL)	1.06 (1.4)	02 (.0)	.10	19

Note: t statistics in parentheses; t > 2.0 are highlighted.

Sources: Unemployment change from 1980-87 to 2000-2001 and the numbers of ticks and crosses are taken from Nickell (2003). The other unemployment rates and the employment rates are from the OECD.

proved employment performance: Greater flexibility and lower levels of benefits will spur employer demand and provide greater incentives for workers to work, enhancing the demand for and supply of jobs. This should produce an increase in the employment rate. Results showing that deregulation reduces unemployment without increasing employment suggest that the "reforms" are really just encouraging workers to leave the labor force rather than search for work.

So if policy reforms are actually improving labor market performance, the balance of ticks and crosses should do a good job of explaining changes in the employment rate. Row 4 shows that this expectation is only weakly supported for the full two-decade period (ticks are significant, crosses are not, with an R^2 of .25). Replacing 1980-81 as the base period with 1982-84 produced nearly identical results. But these employment-change results are actually even weaker than this outcome suggests, since they reflect the influence of a single outlier country. Row 5 shows that there is no meaningful relationship without the Netherlands: For nineteen of these twenty countries, the policy reforms scorecard fails to explain changes in the employment rate. Nickell's ticks and crosses evidently do a poor job of accounting for the two-decade change in employment rates.

But perhaps most importantly, the policy reforms scorecard fails to identify the large high-unemployment countries. The objective of the scorecard exercise is, according to Nickell, to "see how these institutional variables have changed over time and what these changes can tell us about why the European Big Four countries have performed less well than most other countries on the unemployment front in the 1990s." His conclusion is unambiguous: "We may reasonably conclude that the countries which had very high unemployment in the early 1980s and still have high unemployment today simply have too few ticks and/or too many crosses." If that is so, the big four countries with high persistent unemployment should be located at the negative end of the spectrum (with many more crosses than ticks).

Figure 5 reports Nickell's net total of ticks/crosses. It turns out that, among the big four high-unemployment countries, only France fits the prediction, and there is some question about the appropriateness of its score.2 Based on the scorecard, both Austria and Switzerland should have shown about the same dismal performance as France. The three other high-unemployment countries (Germany, Spain, and Italy) get the same scores in the middle of the distribution (0 to 1) as Norway, the United States, and Belgium. It seems reasonable to question the usefulness of an indicator designed to explain the poor performance of the "big four" that puts three of them in the middle of the distribution (with the United States and Norway), while locating two of the most impressive performers (Switzerland and Austria) at the bottom. This figure shows that, despite the impressive-sounding explanatory power of his unemployment equation (51 percent), for

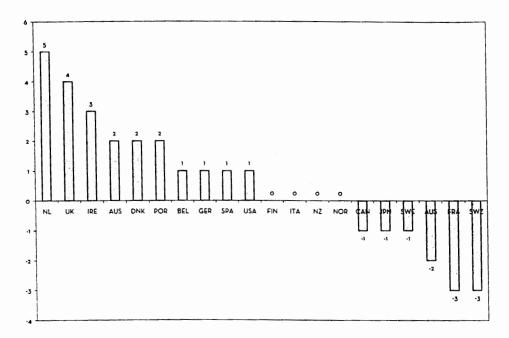


Figure 5. Nickell's Policy Reform Scorecard: Net "Good" and "Bad" Labor Market Policy Changes, Early 1980s to Late 1990s

at least three of Nickell's four persistent high-unemployment countries, it is not reasonable to conclude that the problem was simply too few ticks and too many crosses.

Conclusion

Over the past decade, a large panel-data-based literature has emerged that is often interpreted to provide strong empirical support for the orthodox position that the rigidity effects of labor market institutions explain the pattern of unemployment across developed countries. In previous papers, we have challenged the robustness of these findings (Baker et al. 2004, 2005). Some recent studies have made this same orthodox claim on the basis of simple correlations between various aggregate indicators of the implementation of labor market reforms and unemployment. In this paper we have taken a close look at this evidence and find it unconvincing. Thus far, proponents of labor market deregulation have not produced robust evidence of systematic positive effects of their proposed reforms on cross-country employment performance, though this result has evidently not dimmed the confidence with which such reforms are promoted.

The failure of the evidence to offer compelling support for the orthodox view is not just a matter of academic concern. Advocates of deregulation seek to dismantle a complex set of social institutions that provide citizens with substantial economic and social benefits. These include greater job security (which offers greater opportunities for good matches between workers and jobs) and an important degree of democratic representation at work (through labor unions). Deregulationists often argue that demonstrating any negative effect of labor market institutions on the unemployment rate is sufficient reason to pare back or eliminate those institutions. In fact, since these institutions typically provide substantial economic and social benefits, the burden of proof should be set much higher.

Notes

- 1. For example, Gilles St. Paul writes that in the later 1980s and 1990s "a rough consensus emerged that high unemployment in Europe was due to labor market rigidities" (2004, 51).
- 2. It could easily be argued that Nickell's allocation of ticks and crosses for France is among the most problematic. For example, based on Nickell's table 5, France gets a cross based on a modest increase in the 1980s, while the 1990s actually show a slight decline. Again, on union coverage, France gets a cross on the basis of changes that took place in the 1980s, not the 1990s, and gets no credit (a tick) for reducing union density from 16 percent to 10 percent, a level below that of the United States! It gets another cross for increasing strictness of employment protection, which was entirely due to changes in the regulations that apply to temporary workers, just 15 percent of the workforce. It might be noted that Nickell's criterion for a cross on EPL is a rise of more than 0.1; France's score changes from 1.3 to 1.4 (exactly 0.1), but it is given a cross. Both the rules of the game and the allocation seem not to be in France's favor!

For Further Reading

Baker, Dean, Andrew Glyn, David R. Howell, and John Schmitt. 2004. "Unemployment and Labor Market Institutions: The Failure of the Empirical Case for Deregulation." Report to the International Labour Organization and available as

- Working Paper 2004-04, Schwartz Center for Economic Policy Analysis, www.newschool.edu/cepa/.
- Baker, Dean, Andrew Glyn, David R. Howell, and John Schmitt. 2005. "Labor Market Institutions and Unemployment: A Critical Assessment of the Cross-Country Evidence." In Fighting Unemployment: The Limits of Free Market Orthodoxy, ed. David R. Howell. New York: Oxford University Press.
- Blanchard, Olivier, and Justin Wolfers. 2000. "The Role of Shocks and Institutions in the Rise of European Unemployment: The Aggregate Evidence." Economic Journal 110 (March): C1-C33.
- Brandt, Nicola, Jean-Marc Burniaux, and Romain Duval. 2005. "Assessing the OECD Jobs Strategy: Past Developments and Reforms." OECD Economics Department Working Paper no. 429, OECD, Paris.
- International Monetary Fund (IMF). 2003. "Unemployment and Labor Market Institutions: Why Reforms Pay Off." World Economic Outlook (April): 129-50.
- Nickell, Stephen. 1997. "Unemployment and Labor Market Rigidities: Europe Versus North America." Journal of Economic Perspectives 11, no. 3 (Summer): 55-74.
- -. 2003. "Labour Market Institutions and Unemployment in OECD Countries." CESifo DICE Report 2/2003.
- Nickell, Stephen, and Richard Layard. 1997. "Labour Market Institutions and Economic Performance." Discussion paper, Centre for Economic Performance, Oxford University.
- Nickell, Stephen, L. Nunziata, and W. Ochel. 2005. "Unemployment in the OECD Since the 1960s. What Do We Know?" Economic Journal 115, no. 500 (January):
- Nickell, Stephen, L. Nunziata, W. Ochel, and G. Quitini. 2003. "The Beveridge Curve: Unemployment and Wages in the OECD from the 1960s to the 1990s." In Knowledge, Information and Expectations in Modern Macroeconomics, ed. P. Aghion et al. Princeton: Princeton University Press.
- OECD. 1994. The OECD Jobs Study. Paris.
- -. 1999a. "Employment Protection and Labor Market Performance." In OECD Employment Outlook. Paris.
- -. 1999b. "Implementing the OECD Jobs Strategy: Assessing Performance and Policy." Paris.
- –. 2004. "Employment Protection Regulation and Labour Market Performance." In OECD Employment Outlook. Paris.
- St. Paul, Gilles. 2004. "Why Are European Countries Diverging in Their Unemployment Experience?" Journal of Economic Perspectives 18, no. 4 (Fall): 49-68.
- Schmitt, John, and Jonathan Wadsworth. 2005. "Is the OECD Jobs Strategy Behind U.S. and British Employment and Unemployment Success in the 1990s?" In Howell, ed., Fighting Unemployment.