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National labor market performance is conventionally judged on the basis of unemployment and employment rates (UR and ER) and these two “quantity-of-employment” indicators have framed policy debates on the merits of reforms that would move European labor markets closer to the “American Model.” This paper compares French and U.S. performance using a variety of alternative indicators, including new measures that account for job quality. While the UR was much higher for France between 1984 and 2007, it was lower than the U.S. rate before 1984 and the rates have since converged. It is also significant but not well-known that both prime-age ERs and youth unemployment-to-population rates have been quite similar in recent decades. We calculate two new summary indicators from each country’s main household survey for 1993-2005 designed to account for the adequacy of pay and hours of work as well as the number of unemployed and employed (the underemployed share of the labor force and the adequately employed share of the working age population). France shows superior performance on both, especially for less-educated workers, and the French advantage has grown substantially since the late 1990s.
The standard yardstick for cross-country comparisons of labor market performance is the unemployment rate, measured as the unemployed share of the labor force (the employed plus the unemployed) and harmonized for international comparability. The preoccupation with unemployment reflects concerns about the consequences for worker well-being. Poorly performing labor markets generate inadequate job opportunities and the price is unemployment, which harms workers, their families and their communities. At least since the early 1990s, low unemployment rates have made the U.S. the model for labor market performance. After a decade of declining unemployment, the U.S. rate hit 4.0 percent in 2000, less than half of the rate for Europe of 8.4%. In 2006, this 4.4 point gap was nearly identical (4.6% and 8.9%, respectively), and the difference between the U.S. and France was even larger (4.6% and 9.2%) (OECD 2007a, Statistical Annex).

The conventional view is that this strong U.S. performance on the unemployment rate reflects the advantages of flexible, relatively de-regulated labor markets in which work incentives are not undermined by overly generous unemployment-related social benefits (OECD, 1999; IMF, 2003; Nickell et al., 2005). As The Economist (2005, Nov. 12, p. 11) has proclaimed, “Over the last decade the British and American economies have generated impressive growth and plenty of new jobs; the French economy has failed on both counts. Why? The main answer is that the French labour market is throttled by restrictions such as the 35-hour week, a high minimum wage, and tough hiring and firing rules.” According to the Organization for Economic Cooperation and Development (OECD, 2005, p. 30), “The negative influence of the tax and benefit system on labour market incentives and the interaction of these effects with the minimum wage and other labour market institutions are at the origin of a significant part of structural unemployment and low participation in France.”

But even by the narrow yardstick of the unemployment rate, the employment performance story is not quite so unambiguous. With much the same regulatory and welfare state apparatus, France showed far superior performance to the U.S. throughout the 1960s and 1970s (Howell, 2005, Figure 1.1, p. 10). Indeed, it was not until 1984 that the U.S. rate fell below France’s. In addition, the current economic crisis has demonstrated the benefits of the

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2 The unemployment rate is also used as an indicator of labor market efficiency (the effective use of available labor resources) and overall economic performance (capacity utilization).

3 For perspectives on the literature on institutions and the cross-country pattern of unemployment, see Howell, 2005a; Blanchard, 2006; and Howell et al., 2007.
“European Model” during economic downturns: U.S. and European unemployment rates have converged, and as of May 2009, France actually had a lower rate (9.3% compared to 9.4% for the U.S.).

But more importantly for the purposes of this paper, the unemployment rate alone is a poor indicator of national labor market performance. To the extent that labor markets are judged on their ability to provide satisfactory levels of worker well-being through employment, performance must be judged, not just on the adequacy of the number of jobs, but on wages per hour and hours of work as well. For a given unemployment rate, labor market performance should be judged superior if it generates a lower incidence of jobs paying very low wages (e.g., less than 2/3 of the median wage) and/or generates a mix of jobs that better matches workers’ desired hours of work (e.g., a lower rate of involuntary part-time employment).

We compare French and U.S. employment performance with newly developed indicators of employment adequacy (Howell, 2005b; Howell and Diallo, 2007). These are designed to reflect three dimensions of employment performance: the adequacy of the number of jobs (like the conventional unemployment and employment rates), the adequacy of work hours (measured by the rate involuntary part-time work), and the adequacy of wages (measured by the incidence of low hourly pay). Like standard government-produced indicators, our two main indicators are measured with reference to two different populations, the labor force and the working age population: the under-employment rate (UER: the unemployed, involuntarily part-time, and very low-paid share of the labor force); and the adequate employment rate (AER: the employed who are not paid low wages and who are not working involuntarily part-time as a share of the working age population). Since it is a key underlying component of the UER and AER, we also present results for the low-wage share of employment (LWS).

It might be argued that since these composite indicators measure very different dimensions of work (job availability, low wages, hours of work) and each has quite different welfare consequences for workers, they should either not be aggregated, or they should at least be weighted differently. Concerning aggregation, there is considerable interest in cross-country performance comparisons, and if the adequacy of both the quantity and quality of jobs is to be considered, it is useful to have single indicators. To date, in the absence of such measures, cross-country differences in job quality have played little if any role in discussions of labor

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market performance, and as a result there has been a growing demand for indicators that reflect multiple dimensions of employment inadequacy (for example, see the papers published in ILO, 2003).

Concerning weighting, it is true that unemployment, involuntary part-time work, and low-wage work should not be assumed to be equally “bad” outcomes. While it would be easy to provide a variety of AERs and UERs with alternative weights, we do not do so for several reasons. First, there is no obvious way to assign weights, or even to identify which condition is the worst (e.g., a continuous long-term low wage job might be viewed as worse than a short-term unemployment spell). Second, and more importantly, our goal is not to measure welfare, but to provide simple indicators of performance that provide counts of the number of workers for whom the labor market has produced inadequate outcomes. This is in fact exactly like the official unemployment rate, which does not distinguish between the seriousness of the unemployment spell (e.g., long-term vs short-term unemployment; or the unemployment of a young person versus that of a prime-age worker with children; or to be unemployed with and without unemployment benefits, etc.).

The paper is organized in five sections. Section 1 provides an overview of the conventional “quantity-of-employment” indicators and what they suggest about the relative employment performance of the U.S. and France in recent decades. Section 2 surveys recent efforts to account for labor underutilization and job quality. Section 3 outlines the construction of our employment adequacy indicators. These indicators are then used in Section 4 to compare French and U.S. employment performance for 1993-2005. Section 5 concludes the paper.

1. Comparisons Using Conventional Quantity-of-Employment Indicators

   **Quantity-of-Employment Indicators**

   Statistical agencies in all developed countries produce labor market indicators that break the working age population into three distinct, non-overlapping categories: the unemployed, the employed, and those “out-of-the-labor-force.” The unemployed are “persons over a certain specified age who are without work, available for work and actively seeking work” (Sorrentino, 2000, p. 4), and the conventionally defined rate of unemployment is the
unemployed share of the labor force (the employed plus the unemployed). The “employed” are those who work for pay for at least an hour in the reference week, and the employment rate is calculated as the employed share of the working age population. Working age individuals neither unemployed nor employed are allocated to the “out-of-the-labor-force” category.

Since the standard unemployment rate is measured against the labor force, it reflects not just the incidence of unemployment, but also the extent of paid employment. Thus, two countries with the same working age population and the same number of unemployed will have unemployment rates that vary inversely with the number of employed workers. That is, all else equal, more employment (e.g., students working part-time) means a lower unemployment rate even if the number of unemployed remains the same. As we show below, replacing this conventional unemployment rate with the unemployment-to-population rate produces a very different picture of the relative magnitudes of French and U.S. youth unemployment.

In terms of generating reliable data that can be compared across national boundaries, an advantage of the employment rate is that it does not require determining who is really available and seriously searching for work, which adds considerable “statistical noise” in cross-country comparisons of unemployment even when these rates have been “harmonized” (Sorrentino, 2000). Unlike the unemployment rate, higher employment rates are not necessarily “better”, at least if worker well-being is the criterion. For example, the shift from full-time “living wage” jobs to part-time marginal ones may require more workers per household than desired. This is particularly so for young persons, parents of school age children, and older persons, for whom full-time enrollment in school, full-time child care, and retirement while still able to work may be the socially preferred outcomes.

French and U.S. Performance Using Conventional Indicators

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5. Over the last several decades the definitions of these categories across countries have converged. Because of differences across countries in the treatment of “availability” for work, what qualifies as “active search,” and how various groups in the population are treated (students, unpaid family members, members of the armed forces, and so on), a great deal of effort has been devoted to standardizing (or “harmonizing”) the unemployment rate, principally by the BLS, the OECD, the ILO and Eurostat (see Sorrentino, 2000, appendix).

6. Jones and Riddell (1999) argue that this tripartite categorization is inadequate, because of the “heterogeneity of the nonemployed...any attempt to dichotomize the nonemployed into “unemployment” and “out-of-the-labor force” is unlikely to fully capture the complexity of labor force activity.”

7. UR=U/LF, where LF=U+E, U is the number of unemployed, and E is the number of employed workers.

8. For reasons of space and manageability, we limit our attention to youth (16-24) and prime age (25-54) workers. Differences in norms regarding the desirability of work at ages over 59 complicates comparisons of the
The poor performance of the French labor market compared to the U.S. is based on unemployment rates over the period of 1984-2007 and the conventional wisdom is that at the root of this poor performance are labor market rigidities generated by too much labor market regulation and too much unemployment-related benefit generosity. Figure 1 presents what appears to be long run divergence (using log trend lines), with the French rate rising and the U.S. rate declining. But it was not until 1984 that the U.S. reported a lower harmonized unemployment rate than France and over the course of the last two years (not shown) French and U.S. rates have converged (to 9.3-9.4% in April 2009).

Employment rates by age group further challenge the conventional account. Since the social norms governing whether students are expected to work and at what age older workers are expected to retire, there is a case to be made that a particularly heavy weight ought to be given to the experience of prime age workers when comparing employment performance across countries. Figure 2 shows that the employed share of French prime-age workers caught and passed their U.S. counterparts around 2000. The years 1994-2006 can be usefully partitioned into three sub-periods. In the first (1994-1999), the French employment rate was stable at between 76 and 77 percent while the U.S. rate rose steadily from just over 79 to 81.5 percent. In the second (1999-2002) there was a striking convergence, with the French rate rising and the U.S. rate falling. In the third (2002-2006) the two countries edged up together, with France showing a higher employment rate in each year from 2003-2006. In 2007, the French advantage grew to over 3 points (82.1 vs. 79.9%).

What is distinctive about the difference between France and the U.S. for prime-age workers is less the adequacy of employment opportunities than how those not employed are counted. Table 1 reports four quantity-of-employment indicators for male and female prime age workers in each country for 2006. Row 1 shows the standard unemployment rate (as a share of the labor force). On this indicator, the U.S. is clearly superior for both men and women. The same holds for unemployment-to-population rates (row 3). But row 4 shows that employment-to-population rates are similar, with U.S. men about a half percentage performance of the labor market per se regarding older workers (the French legal retirement age for most workers is 60).
point higher than French men but U.S. women over a full point below French women, and row 2 shows that the LFPRs are substantially higher for both French men and women.

Figure 1: Harmonized Unemployment Rates for France and the U.S., 1982-2006
(with log trend lines)


Figure 2: Employment to Population Ratios for France and the U.S.
(Both Sexes, Ages 25-54)


Thus, the difference between French and U.S. labor markets for prime age workers is not to be found in the employment rates but in the labor force status of those not employed
– a higher share of the non-employed in France report themselves as unemployed, while U.S. nonemployed prime age workers do not participate in the labor force (either more discouraged about job prospects or choose not to work). This is important because it directly challenges the conventional wisdom, at least for prime-age workers, that the source of high French unemployment is the shortage of job opportunities and work disincentives generated by over-regulation and welfare state generosity.

Table 1: Indicators of the Quantity of Employment for Prime Age Workers (25-54) in France and the U.S., 2006

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<tr>
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<th>MALE</th>
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<td></td>
<td>France</td>
<td>U.S.</td>
</tr>
<tr>
<td>1. Ulf</td>
<td>7.6</td>
<td>3.6</td>
</tr>
<tr>
<td>2. LF_pop</td>
<td>93.8</td>
<td>90.6</td>
</tr>
<tr>
<td>3. Upop</td>
<td>7.1</td>
<td>3.3</td>
</tr>
<tr>
<td>4. E_pop</td>
<td>86.7</td>
<td>87.3</td>
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Source: OECD Employment Outlook 2007, Statistical Annex, table C and authors’ calculation (for ‘upop’)

Another complication for the conventional unemployment-based account of U.S. and French performance concerns the magnitude of French youth unemployment, which is said to exemplify the failure of the French labor market to generate adequate job opportunities. The unemployment-to-population rate (Upop) is almost never published, but it can be a particularly important indicator for understanding the magnitude of the youth unemployment problem.

Table 2 reports the same quantity-of-employment indicators for young workers (15-24 for France, 16-24 for the U.S.) for 2006. Unemployment rates are twice as high for French young men and even higher for French young women. Similarly, the employment rate (row 4) is twice as high for U.S. young men and two and a half times higher for U.S. young women. But as row 3 shows, while the Upop measure shows a higher (worse) rate for French men and women, the French-U.S. difference is much smaller. Indeed, this difference in favor of the U.S. is very recent – just two years earlier (2004) the French and U.S. male rates were 8.6 and 8.3 percent, respectively.
Table 2: Alternative Measures of the Quantity of Employment for Young Workers for France (15-24) and the U.S. (16-24), 2006

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<tr>
<td></td>
<td>France</td>
<td>U.S.</td>
<td>France</td>
</tr>
<tr>
<td>1. Ulf</td>
<td>22.4</td>
<td>11.2</td>
<td>25.8</td>
</tr>
<tr>
<td>2. LFpop</td>
<td>37.0</td>
<td>63.3</td>
<td>29.2</td>
</tr>
<tr>
<td>3. Upop</td>
<td>8.3</td>
<td>7.1</td>
<td>7.5</td>
</tr>
<tr>
<td>4. Epop</td>
<td>28.7</td>
<td>56.2</td>
<td>21.6</td>
</tr>
</tbody>
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Source: OECD Employment Outlook 2007, Statistical Annex, table C and authors’ calculation (for ‘upop’)

Figure 3: France-to-U.S. Ratios of Unemployment, Unemployment-to-Population, and Employment-to-Population Rates for Youth (15-24 and 16-24), 1990-2005

Source: Various issues of the OECD’s Employment Outlook, Statistical Annex, table C.

Figure 3 presents the 1990-2006 trends in the ratio of French to U.S. unemployment, unemployment-to-population, and employment rates for young workers. This figure highlights the importance of the measure for judging relative employment performance: the conventional French youth unemployment rate has ranged from 1.7 to 2.6 times larger than the U.S. rate, but the Upop rate has been remarkably similar. Indeed, the French Upop was substantially lower than the U.S. rate in 2002 and 2003. The key to the high French/U.S. youth unemployment is the very low relative French employment rate, shown at the bottom of the figure.
Figures 4a and 4b show unemployment-to-population rates for France and the U.S. separately for female and male youth for 1970-2006. Unlike the conventional unemployment rate, these show no evidence of general U.S. superiority. Figure 4a indicates that French female youth had a lower UPOP rate from 1970-78, but U.S. women show better rates for most years from 1979 to 2006 (the exceptions are 1991, 1992, 2001, and 2002). In contrast, Figure 4b reports that the French male youth UPOP has been superior (lower) to or about the same as the U.S. male rate in nearly every one of the last 37 years (the exceptions being 1999 and 2006).

The explanation for this vast difference between these two indicators suggest about the magnitudes of French and U.S. youth unemployment can be found in long standing differences in student employment. While similar shares of 15 to 19 year olds in France (83.8 percent) and the United States (82.9 percent) were enrolled in school in 2003, their employment rates were strikingly different. In the U.S., 23.1 percent were working (generally part-time), compared to only 1.8 percent of these French teenagers. Among those enrolled in school, U.S. teenagers had a much higher unemployment-to-population rate (3.5 vs .8); for those not enrolled, the unemployment-to-population rate was about the same (2.4 for the U.S. and 2.1 for France).9

It might be argued that the extremely low employment rates (and high conventionally defined unemployment rates) for French teenagers were due to the lack of job opportunities, but the data suggest otherwise. In the early 1970s, when the French male youth unemployment rate was just 3-4 percent, about the same share of 16-19 year old students held jobs as in 2000-2 (less than 1%), when the standard unemployment rate was hovered around 22-23 percent (OECD, 2007, table C4.2a).

9 Enrollment and employment statistics are from the OECD’s Education at a Glance 2005, Table C4.2a.
Turning to 20-24 year olds, a much higher share of these young French adults were still enrolled in education than in the U.S. in 2003 (51.1 in France compared to 35.0%), and the unemployment-to-population rate for those not enrolled was substantially higher in
France (9.6 vs 5.9).\(^\text{10}\) Still, as for French teens, it does not appear that employment rates for young French adults enrolled in school was any different (3-5%) in the high unemployment years (early 2000s) than when full employment prevailed (early 1970s) (OECD, 2007, table C4.2a). The essential point is that employment rates for French enrolled students has been extremely low in both good and bad labor markets, and this tradition of nonemployment when in school can greatly exaggerate the magnitude of the French youth unemployment problem when measured by the standard unemployment rate.

It is worth noting that perhaps a better statistic for measuring poor labor market performance and social dysfunction for this population may be the share of young adults (ages 20-24) who are neither enrolled in school nor employed. On this indicator, France and the U.S. perform almost identically: in 2000, the share of all young adults not in school and not employed was 14.1% in France and 14.4% in the United States. This compares, for example, to 15.4 percent for the U.K. and just 7 percent for the Netherlands (OECD Employment Outlook 2002, Chapter 1, Table 1.6a).

2. The Measurement of Underutilization and Job Quality

Recognizing the limitations of the official unemployment and employment rates, statistical agencies and advocacy groups in many countries have developed a variety of alternative employment-related indicators. By far the most common are broader measures of underutilization, which take into account those who can only find part-time work ("involuntary part-time" workers) and those who have dropped out of the labor force because of poor job opportunities ("discouraged" workers).

The U.S. Bureau of Labor Statistics, for example, currently publishes six "alternative measures of unemployment and other forms of labor resource underutilization," ranging from the U-1, which shows "persons unemployed 15 weeks or longer" as a share of the labor force, to the U-6, the broadest published measure of underutilization, defined as "total unemployed persons, plus all ‘marginally attached’ workers, plus all persons employed part time for economic reasons” as a share of the labor force plus the marginally attached (Bregger and

\(^{10}\) Calculated by the authors from the relevant series published in the Statistical Appendix of the Employment Outlook (OECD 2007a).
While these indicators of various dimensions of underutilization offer a broader picture labor market performance than the conventional unemployment rate, they do not measure the adequacy hours or pay.

There has been a growing interest in developing aggregate measures of “decent” work. The Sixteenth International Conference of Labour Statisticians (1998) adopted a resolution “concerning the measurement of underemployment and inadequate employment situations” and called for indicators that reflect various dimensions of “time-related underemployment” (willingness and availability to work additional hours) and inadequate employment (“skill-related,” “income-related” and “excessive hours related”). These recommendations left specific definitions and the generation of these indicators to the ILO and national statistical agencies.

Reflecting a growing concern with the quality of employment, the ILO launched the “Decent Work Agenda” in 1999 and published a special issue of the International Labour Review (ILR) in 2003 on the measurement of decent work. According to the Introduction (ILR, 2003, p. 109), the goal was to “demonstrate the multi-dimensional nature of decent work (and) to appreciate the complex nature of the concept and therefore, also, the great difficulties in evolving viable and reliable statistical indicators for its measurement.” The articles in this issue describe numerous indicators that reflect many important quantity- and quality-of-employment dimensions, but they propose no single composite indicator (or small set of indicators) that would capture key quantity and quality dimensions of work, nor are they standardized in a way that would make them suitable for cross-country comparisons.

For example, Anker et al. (2003) identify thirty “existing, proposed, and readily usable indicators” that measure “employment opportunities; unacceptable work; adequate earnings and productive work; decent hours; stability and security of work; balancing work and family life; fair treatment in work; safe work environment; social protection; social dialogue and workplace relations; and the economic and social context of decent work” (Introduction, p. 110). However, no comprehensive indicator of “decent work” is presented. As the Introduction points out, problems of data availability for many of these 30 components of decent work “impose
particularly severe limitations and are an obstacle to an immediate application…” (ibid., p. 110).

Bescond et al. (2003) take a more pragmatic approach in order to produce a composite index by selecting seven easily measured indicators: “hourly pay, hours of work, unemployment, school enrolment, the youth share of unemployment, the male-female gap in labour force participation, and old age without pension.” But their approach raises some questions. What is the meaning of an average of indicators that have different denominators? Are cross-country comparisons meaningful when the composite index for the countries reflects different combinations of indicators? For example, Denmark’s decent work indicator score (6.2) is an average of three of the seven components (the school non-enrollment rate, unemployment, and the male-female LFPR gap) while the French decent work score (8.9) is generated by averaging four of the seven (non-enrollment, excessive hours, unemployment and the male-female LFPR gap). And finally, are the results intuitively plausible? The Irish might be surprised to discover that their decent work score (18.1) is far below (worse than) that of Nepal (17.6), Thailand (14.8) and Tanzania (13.7) (Table 9).

The indices developed by Ghai (2003) and Bonnet et al. (2003) are ambitious attempts to capture many dimensions of decent work, but the indices are provided for a single year and raise substantial questions about how each component should be weighted. Ghai presents results for 22 OECD countries base on equal weights are applied to four groups of indicators: gender disparities, employment, social dialogue, and social protection. Earnings from work are accounted for only by the gini coefficient in income (and in some cases, consumption), which is one of three measures that produce the “employment” component. Bonnet et al, (2003 conceptualize decent work in terms of “basic security for all”, which they organize into “seven forms”: labour market security, employment security, job security, work security, skill reproduction security, income security and representation security” (p. 214). They present results for 84 countries for a single year (early 2000s). As usual, Nordic countries do best, but there are curious results: Portugal does better than the UK, Japan and Australia; Slovakia bests the U.S.; and Barbados comes in higher than Switzerland (Figure 1).

More recently, the European Commission has defined employment quality in terms of 10 dimensions, ranging from “intrinsic job quality” to “overall economic performance and productivity”. Interestingly, relative wages are not included as a “key indicator” in any of these
groups (Davoine and Erhel (2006, p. 6). In contrast, reflecting the results of their survey of the employment quality literature, Davoine and Erhel (2006, p. 9) put wages front and center. Their four “fundamental dimensions of employment quality” are “wages, skills and training, working conditions, and gender equality.” They use indicators of these four dimensions with a principal component analysis to compare job quality across European countries. While they situate countries according to scores in this analysis with various mixes of indicators, they offer no single composite index of employment quality.

The approach that most closely resembles ours is that of the Collectif ‘Autres Chiffres du Chômage’ (ACDC, 2007) for France. In addition to the conventional measure of unemployment, they identify four categories of inadequate employment, data for which can be taken directly from the French household survey: low wages; short-term or temporary jobs; the underemployed (over-qualification); and dangerous jobs. They find that the sum of the conventionally measured unemployed and these four measures of employment inadequacy produce a total inadequacy (to labor force) rate that increased from 35 percent in 1990 to about 42 percent in 2002 (p. 10); for 2003-5 they calculate a rate of about 50 percent (a change in the household survey makes the post-2002 figures not exactly comparable) (p. 8). The problem with this approach is that there is likely to be considerable disagreement over both what is “overqualified” and “dangerous” and to what extent these characteristics make the work “inadequate” (some workers may prefer work at jobs with higher than average injury rates). In order to facilitate cross-country comparisons and make them as simple and as noncontroversial as possible, we limit our measure of employment quality to low pay and inadequate hours of work.

3. New Employment Adequacy Indicators

The alternative indicators project (Howell, 2005b; Howell and Diallo, 2007) has aimed to develop simple aggregate measures of labor market performance that are similar in construction to conventional quantity-of-employment indicators (unemployment, labor force participation, and employment rates) but incorporate relatively easily measured and uncontroversial measures of employment quality.

The most obvious measure of employment quality is the level of wages. It is widely accepted that a very low wage identifies a “low quality” job. Several alternative “low
wage” thresholds can be argued to be reasonable. We use a relative measure—two-thirds of the median hourly wage for all full-time workers—rather than a quasi-absolute one, such as the wage that would support a particular number of household members at a particular budget level. There are three main reasons for this. First, the household budget threshold is ultimately relative as well, since its determination depends on decisions about what is an “adequate” budget for a household of a particular size (say, a basic food budget multiplied by three), which in turn reflects prevailing social norms and a particular economic and social context. Second, our concern is to produce indicators for assessing labor market performance, not the adequacy of household income, so it is the social acceptability of the relative level of individual earnings that matters. And third, there are practical considerations: the adequacy of household income requires controversial adjustments for household size and composition, and a relative measure also greatly facilitates cross-country comparisons. Our low-wage threshold (two thirds of the median full-time wage) is similar to that used by international research organizations like the OECD (it is also common to identify the “poverty wage” as one-half the median wage).

In addition, it also seems uncontroversial to characterize “time-related underemployment” as an indicator of poor labor market performance. The most common measure of this is “involuntary part-time employment” – workers who would prefer to work more hours but cannot due to inadequate employment opportunities. We assume that the greater the involuntary part-time share of jobs, the worse the labor market performance.

We do not explicitly account for discouraged workers for two reasons. First, it appears to be poorly measured in the U.S. and, in any case, the official numbers are very small (see Howell, 2005b). In addition, there are concerns about comparability across countries. It is also the case that the AER indirectly captures discouraged workers. While efforts to include other dimensions of inadequate employment, like employer provided health benefits (see Schmitt, 2008) or job precariousness and physical working conditions, are important and may be adequately measured in a single country, cross-country comparisons of these kinds of job characteristics are both extremely difficult and controversial (for a new ambitious effort, see Leschke et al, 2008).

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12 Even if the definition is the same, who will be tabulated as “discouraged” will reflect the kind of safety net that is available.
The new employment adequacy indicators are defined with reference to three different populations: total wage and salary employment\(^\text{13}\), the labor force, and the working age population. The *low wage share of employment* (LWS) measures the share of wage and salary employees paid low wages. The *underemployment rate* (UER) measures the share of the labor force that is unemployed, working involuntarily part-time, or paid low wages; and the *adequate employment rate* (AER) measures the share of the working age population employed in wage and salary jobs and not working involuntarily part-time or paid low wages.

The interpretation of the LWS and UER as measures of employment performance is straightforward and just like the unemployment rate: all else equal, performance is superior if the low wage share of employment and the underemployed share of the labor force is lower. But just as a higher employment rate is not necessarily a measure of better performance (Section 1), so a higher *adequately employed share* of the population does not necessarily indicate “better” performance. To take an extreme example, even if all employed workers are “adequately” employed, differences in social norms and the burden of tuition costs may affect employment rates for students, and therefore possibly the AER. The same holds for older workers in countries with retirement set at relatively young ages, which will reduce employment rates, but reflects social choices and not necessarily the performance of the labor market. For these reasons, the AER may be most useful for assessing the experience of prime-age workers.

### 4. French and U.S. Employment Performance with the SCEPA Indicators

#### 4.1 Data

The data used to generate the labor market indicators for the U.S. and France were generated from each country’s basic household survey – the Current Population Survey for the U.S. and the Enquête Emploi for France. The U.S. indicators have been computed back to 1979 (see Howell and Diallo, 2007). Due to limitations in the French data, we were able to cover just 1993-2005 for France.

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\(^{13}\) We exclude the self-employed (see section 4.1).
The data used to compute the SCEPA indicators are from CPS ORG Uniform Data File produced by the Center for Economic and Policy Research (CEPR). The underlying data for the CEPR ORG extracts is the CPS "Annual Earnings File" from the National Bureau of Economic Research (NBER) from 1979 to 2002. From 2003 on, the underlying data for the CEPR ORG extracts comes from the monthly CPS Basic files, which are available in the public domain (www.bls.census.gov). CEPR makes available the program used to produce the CEPR org extracts on the CEPR webpage (www.cepr.net). Our key measure is low earnings and most low-wage workers are paid hourly. A major advantage of the CPS ORG data is that for nonsupervisory workers the hourly wage is generated directly by the questionnaire, not calculated from weekly or annual earnings from estimated hours and weeks worked.

The French data come from the French Labour Force survey (Enquête Emploi) implemented by the INSEE (Institut National de la Statistique et des Etudes Economiques) and disseminated by the Centre Maurice Halbwachs. The survey was annual before 2003 and was held in March, except the years of the population census when it was held in January simultaneously with the census (e.g. 1999). Unlike our wage figure for the U.S., the French hourly wage is calculated by dividing monthly wages by monthly hours and is reported net of taxes.14

The one fundamental difference between our measures and the official unemployment and employment rate measures is that we include only wage and salary workers. The self-employed are excluded for both countries since our main quality measure, the hourly wage, is not available for them.15

4.2 Low Wage Thresholds

14 The U.S. wage is pre-tax while the French wage is after-tax. Ideally, the wage measures would be identical, but this was not possible. At the same time, it is not clear what single wage measure (post-tax, post-transfer or pre-tax, pre-transfer) would be the most appropriate, given that the benefits received by French workers and their families from their taxes (health, education, retirement, unemployment benefits) tend to be provided, if at all, by employers in the U.S. and it is widely accepted that these are paid for by workers via lower wages. In any case, our objective is not to compare absolute living standards but to measure the share of jobs that pay a wage that is viewed within each country as socially acceptable. We assume that the use of these alternative wage measures do not have major effects for the relative standing of those in the bottom half of the wage distribution.

15 The self-employed shares of total employment for France and the U.S. and their trends over time are broadly similar. For France, the self-employed share fell steadily from 12.8% in 1990 to 8.9% in 2006 (INSEE). For the U.S., this rate fell from 8.5% in 1990 to 7.5% in 2003 (Hipple, 2004, Table 1).
Figure 5 shows median and mean hourly wages for full-time wage and salary workers in the U.S. from 1979 to 2006 (in 2006 dollars). The median rose slowly from $14.09 in 1979 to $15.28 in 1997, increased steadily to $16.78 over the next five years (the Clinton boom), and has fallen slightly since (to $16.48 in 2006).

The mean hourly wage appears as the trend at the top of Figure 5. It began at a little more than $2 higher than the median in 1979 (14 percent higher than the median), rose to $18.32 in 1987 (20 percent higher) and to $20.30 in 2002 (21 percent higher), before falling back to $19.25 in 2006 (17 percent higher). The line shown in bold at the bottom of Figure 2 is our low wage threshold—two-thirds of the median full-time hourly wage. This increased very gradually from $9.79 in 1979 to $10.18 in 1997, rose more rapidly to $11.19 in 2002, and then dropped back to $10.99 in 2006.

Comparable wage trends for France are shown in Figure 6 (in 2006 Euros). The most striking difference with the U.S. trends is the rapid rate of French wage growth. For example, the median real hourly wage rose 38.8 percent from 1997 to 2005, while the U.S. real median rose by less than 8 percent from 1997 to 2006. The differential is perhaps even
more striking since 2002: a gain of 11.3 percent for the French median and a decline of 1.8 percent for the U.S. median. The legal minimum wage has played a central role here: while the U.S. minimum wage fell from $6.08 in 2000 to $5.15 in 2006 (in 2006 dollars), the French minimum rose from $8.80 to $10.14.\(^\text{16}\)

![Figure 6: Median and Mean Net Real Hourly Wages for Full-time French Workers, 1993-2005 (16-64, 2006€)](image)

source: authors’ calculations

4.3 Aggregate Results

Figures 7-9 show the low-wage share of wage and salary employment (LWS), the underemployed share of the labor force (UER), and the adequately employed share of the working age population (AER) for 1993-2005 for the U.S. and France.

Figures 7a and 7b show that, for both men and women, the U.S. has experienced a substantially higher incidence of low wage employment than France, a gap that has widened considerably since 2001. The low wage share of employment for U.S. men (16-64) was stable at 23-24% between 1993 and 2005, a level twice as high as the French male LWS in 1993 (11.75%) and 2.6 times as high in 2005 (9.2%). Similarly, while the LWS for U.S. women was stable at 35-36 percent, the French female LWS fell from 22.5 percent in

\(^{16}\) These are gross statutory minimum wages (OECD 2007b, Table S.1, p 24).
1993 to around 19.5 percent in 1999-2002 and then fell again sharply to 16.2 percent in 2005.

**Figure 7: The Low Wage Share of Employment for France and the U.S., 1993-2005 (age 16-64)**

A. Men

B. Women

Figures 8a and 8b report male and female underemployment rates (UERs) since 1993 for each country. Figure 8a shows that the French male UER fluctuated between 22 and 25 percent from 1993 to 2000 and has been fairly stable at around 20 percent since. In contrast, the U.S. male UER was over 31 percent in 1993, fell to 26.6 percent in 1999, and has fluctuated around 30 percent since. This translates into a U.S. UER disadvantage that
rose from 13 percent in 1999 (26.6% compared to 23.5%) to 45.3 percent in 2005 (29.2% and 20.1%).

The underemployment story is broadly similar for women. Figure 8b reports that while U.S. female UERs have been stable around 40 percent since 1997, the French female UER fell from just under 39 percent in 1997 to 32.1 percent in 2005. This translates into a U.S. female underemployment rate gap that increased from just 5 percent (3 percentage points) in 1997 to almost 24 percent (7.6 points) in 2005.

Figure 8: The Underemployment Rate for France and the U.S., 1993-2005
(unemployed, low paid and involuntary part-time workers as a share of the labor force, age 16-64)
Figure 9: Adequate Employment Rates by Gender for France and the U.S., 1993-2005
(employed workers not paid low wages and not involuntarily part-time
as a share of the population)

A. Age 16-64

As noted above, the interpretation of the Adequate Employment Rate (AER) as a measure of labor market performance may be somewhat different for young and prime-age workers, since it is not necessarily the case that a higher employment rate for students is better, even if the jobs qualify as “adequate.” It is also the case that social choices lower substantially the employment rate for older workers (55-64) – for many French workers the
“normal” (and legal) retirement age is 60. For these reasons, Figure 9 presents the AER results for U.S. and French men and women in two panels, the working age population (16-64) and the prime-age population (25-54).

Figure 9a shows that for both men and women, French and U.S. AERs have been quite similar since 1993. Evidently, higher employment rates for U.S. youth and older workers have largely offset the much larger U.S. incidence of low wage jobs. There is a much greater gap by gender than by country: the French and U.S. male AERs range from 55 to 60 percent, while the female AERs for each country have fluctuated between 35 and 43 percent. It is also notable that the relative performance of the two countries on this indicator switched between 2001-2002 for both men and women. From 1993 to 2001, U.S. men and women show a higher (“better”) rate of adequate employment, but from 2002 to 2005 the AER for French men and women has been superior.

Panel B shows that prime-age AERs for have consistently been higher for French than U.S. men, and the gap has grown noticeably since the late 1990s, from a few percentage points in 1999 to about 8 points in 2005 (78% and 70.3%). The prime-age female AERs for France and the U.S. were nearly identical from 1993 to 2000 and have diverged steadily since, to over 6 percentage points in 2005 (56.4% and 50%).

4.4 Results by Age, Gender and Educational Attainment

We have calculated these three indicators for male and female workers by education (less than high school, high school, some college, and college or more) and age (16-64, 25-54) for 1993-2005. The next three sub-sections (one for each of the indicators) highlight some of the key findings (available on request). It should be noted that “employment” always refers to wage and salary workers (for reasons given above, the self-employed are not included).

4.4.1 The Low Wage Share of Employment (LWS)

Figure 10 shows large disparities between U.S. and French low-wage employment shares in 2005, particularly for those with less than a high school degree, shown on the left side of the figure. Starting from the left, Figure 10 shows that 10.7 percent of employed
French men (16-64) with less than a high school degree were paid low wages in 2005, compared to about 58 percent of similar U.S. men. The incidence of low-wage employment for prime-age male workers with less than a high school degree was 7.1 percent for France and 47.6 percent for the U.S. in 2005.

For less-educated female workers, the France-U.S. low-wage differential is even larger: 81 percent of U.S. women (16-64) with less than a high school degree were employed in low-wage jobs in 2005 compared to about 23 percent of French women. The France-U.S. low-wage gap for prime-age women was also huge: 21.2 percent for French women and 75 percent for U.S. women.

The right side of Figure 10 shows large French-U.S. low-wage share disparities for workers a high school degree. About 28 percent of U.S. employed men with a high school degree were paid low wages, compared to less than 11 percent for similar French men. For female workers the gap is even larger: over 46 percent for U.S. female high school level workers and less than 15 percent for similar French women.

Figure 10: The Low-Wage Share of Wage and Salary Employment for Less-Educated Male and Female Workers in France and the U.S., 2005* (less than high school and only a high school degree, ages 16-64 and 25-54)

* the low wage threshold is 2/3 of the median full-time wage; source: authors’ calculations from national household surveys; see text.
The figure also shows that having a high school degree has large effects on the incidence of low wages for all groups except French men. For the total 16-64 population, the low-wage rate drops from 57.9 percent for U.S. men without a degree to 28.1 percent with a degree, and from, 80.9 to 46.2 percent for U.S. women. Having the equivalent of a high school degree also makes a difference on average for French women: the LWS drops from 22.9 percent without to 14.5 percent with a degree. On the other hand, our results show that for French men, the rate is essentially identical for all workers (10.7 and 10.8 percent) and drops only modestly for prime-age workers (7.1 to 6.2%). The much higher French minimum wage and much greater collective bargaining coverage are the most likely reasons for the far lower incidence of low wages in France and for the much more modest differences in the low wage rate for those without and with a high school degree in France, particularly for men.

Annual series of the low wage share of employment from 1993 to 2005 by gender, age and education show particularly striking differences between French and U.S. labor market outcomes (not shown). In general, the French low wage shares have declined (improved), especially since 2002, whereas the U.S. low-wage rates have tended to remain stable or to increase (worsen). For example, the low wage share for all French men (16-64) with less than a high school degree fell from 14-16% in the 1990s to less than 11% in 2004-5, while the comparable U.S. figures fluctuated between 56 and 58%. The results for women were equally dramatic. Over the 1993-2005 period, French women with just a high school degree had low-wage rates (14-17%) that were about half that of U.S. women with some college (34-36%) and only slightly higher than U.S. women with at least a college degree (12-15%).

Unlike the U.S., low-wage rates are quite similar for French men and women, as well as for those with just some college and those with at least a college degree. For example, while low-wage rates for French prime-age men and women with some college in 2005 were 3.6 and 4.5 percent, comparable U.S. rates were 14 percent for men and 27.5 percent for women.

4.4.2 The Underemployed share of the Labor Force (UER)

17 This table is available from the authors.
Our underemployment rate results for France and the U.S. by gender and age group for 2005 are shown in Figure 11. The UER is measured as the number of workers who are unemployed, low paid, or working involuntarily part-time as a share of the labor force. Figure 8 shows that on this measure of employment performance, the French labor market is also consistently superior, reflecting the fact that higher French unemployment is offset by a much lower incidence of low-wage employment in France. The largest French advantage was for those with less than a high school education (reflecting the effects of the high French minimum wage) and the smallest for men with a high school degree (since their wages are higher and less impacted by the legal minimum).

Starting from the left, French men with less than a high school degree have a UER just under 23 percent, compared to a U.S. rate of almost 64 percent. For prime-age men without a high school degree, the difference between French and U.S. less-educated men is similarly striking: about 18 percent for French men and 53 percent for U.S. men. The right side of the figure shows that the French advantage is also substantial for men with a high school degree: a 20.7% underemployment rate, compared to 33.8% for U.S. men. Among prime-age men, the French and U.S. UERs are 15% and 26%.

French-U.S. UER differentials are extremely large for women as well. The French female underemployment rate was 41 percent in 2005, far below the 84 percent rate for U.S. women and also substantially below the 64 percent rate for U.S. men. For prime-age women, the French underemployment rate is nearly half that of the U.S.: 24.1 compared to 45.7 percent. Interestingly, prime-age French women show only slightly lower underemployment rates than the full 16-64 age group (41.3 vs 39.4%).

Like the results for the low-wage share (figure 10), Figure 11 shows that a high school degree has little impact on the underemployment rate for French men (20.7% rather than 22.6%). For U.S. men the degree makes a much bigger difference for the UER: 34 percent with the degree versus 64 percent for those without it (dropping from about 64 to 34 percent (and 53 to 27% for prime-age U.S. men). French women with a high school degree had substantially higher underemployment rates in 2005 than their male counterparts (30.1% compared to 20.7%), but this was far below the U.S. female rate (50.7%) and even slightly below the U.S. male UER (33.8%).
Figure 11: The Underemployment Rate* for Less-Educated Male and Female Workers in France and the U.S., 2005 (less than high school and just a high school degree, ages 16-64 and 25-54)

*Defined as the unemployed, low paid, and involuntary part-time workers as a share of the labor force.
Source: authors’ calculations from national household surveys; see text.

Relative changes in the French and U.S. UERs over the 1993-2005 by gender, education and age are also striking. For example, among prime-age men, the U.S. underemployment rate for those with some college ranged between 18.4 and 20.3 percent between 2002-5, slightly above the rates for French men with less than a high school degree (17.5 - 18.6%). While the UER for U.S. women with some college (16-64) fluctuated around 40 percent between 1993 and 2005, the UER for French women with less than a high school degree fell from 48-49 percent in 1994-7 to just over 41 percent in 2004-5. Among prime-age workers, only for those in the top educational group do French and U.S. workers (both men and women) show roughly similar underemployment rates (10-11% for French and U.S. men; 15-16 % for French and U.S. women).

4.4.3 The Adequately Employed Share of the Population (AER)

As the share of the working age population employed with “adequate” jobs (not paid low wages and not working involuntarily part-time), a higher AER can be viewed as an indication of a better performing labor market. This is certainly a reasonable interpretation
for prime-age workers but as noted above this is not necessarily so for youth and older workers. For this reason, we will focus on the results for prime-age workers.

Figure 12 shows that for the two least educated groups (less than a high school degree and just a high school degree), the share of the working age population with adequate jobs was far higher in France than the U.S. in 2005 for both men and women. The left side of the figure shows that over 75 percent of prime-age French men without a degree had adequate jobs in 2005, compared to less than 38 percent for similar U.S. men. For prime-age women without a degree, the French advantage was greater by a factor of four: 45.1 percent with adequate employment compared to only 11 percent for U.S. women. The right side of the figure shows that the gaps were also substantial for those with just a high school degree.

Figure 12: The Adequate Employment Rate* for Less-Educated Male and Female Workers in France and the U.S., 2005 (less than high school and only a high school degree, ages 16-64 and 25-54)

* employed workers not paid low wages and not involuntarily part-time as a share of the working age population.
Source: authors’ calculations from national household surveys; see text.

5. Conclusion

This paper was motivated by the view that cross-country comparisons of labor market performance should be concerned with the quality as well as the quantity of jobs, and that
such comparisons can be facilitated by more comprehensive indicators than are currently used. We compare French and U.S. labor market performance in recent decades with a variety of standard “quantity-of-employment” indicators (the unemployment-to-population and employment rate as well as the standard unemployment rate) as well as three alternative indicators designed to take into account the adequacy of hourly pay and hours of work: the low wage share of employment (LWS: employed at wages less than 2/3 of the full-time median), the underemployment rate (UER: unemployed, involuntary part-time, and low paid workers as a share of the labor force), and the adequate employment rate (AER: employed and not working involuntarily part-time and not paid low wages).

Even limiting the comparison of French and U.S. performance to standard quantity-of-employment indicators challenges the conventional view that U.S. labor market performance has been unambiguously superior and that this superiority reflects the excessive regulation and generosity of the French social protection programs. Thus, while French and U.S. labor market models have remained as distinctive as ever, U.S. superiority on unemployment is limited to 1984-2007: France experienced far lower unemployment in the 1960s and 1970s, and the U.S. rate has risen to French level in the current economic crisis (2008-9). Second, despite the large U.S. advantage between 1984-2007, prime-age (25-54) employment rates for French workers have been quite similar; what distinguishes France and the U.S. is not different employment rates, but the composition of those not employed (between the unemployed and those not in the labor force). And third, the magnitude of U.S. and French youth unemployment as measured by the unemployment-to-population rate has been similar since the 1970s. Among youth, the vastly higher French unemployment rate, especially for 16-19 year olds, reflects the fact that a lower share of French students are employed, not that more are unemployed. Indeed, the U.S. has a much lower teenage unemployment rate but a higher unemployment-to-population rate.

At the same time, our alternative performance indicators that reflect the adequacy of work hours and hourly pay show much superior French performance. For example, the low wage share of employment was twice as high for U.S. men (about 24% vs. 12%) in the 1990s, and increased to 2.6 times 2006 as the French rate has fallen in recent years (to 9.2% in 2006). In 2005, the incidence of low wage employment for U.S. men with some college education was more than twice the rate for French men with less than a high school
degree (22.7% and 10.7%). The U.S. UER disadvantage relative to France rose from 13 percent in 1999 (26.6% vs. 23.5%) to 45.3 percent in 2005 (29.2% vs. 20.1%). At the same time, the UER for U.S. women with some college fluctuated around 40 percent between 1993 and 2005, about the same as that for French women with less than a high school degree in 2004 and 2005 (41%). The adequate employment rate (AER) gap for prime age workers in 2005 was about 8 points in favor of France (78% vs. 70.3%). Remarkably, less than 7 percent of employed U.S. women with less than a high school degree held adequate jobs in 2005, compared to 33.7 percent of comparable French women. The gap for the least educated male workers was almost 30 percentage points: 21.7 percent for U.S. men with less than a high school degree and 50.1 percent for their French counterparts.

These results show far better labor market outcomes for less skilled French than U.S. workers and underscore the importance of judging labor market performance with a variety of quantity- and quality-of-employment indicators. National labor market models should be designed to achieve the best possible overall employment performance, which calls for regulations, policies and social programs that promote adequate pay and hours of work as well as low unemployment. To help keep job quality at the top of the policy agenda, it would be a simple matter for statistical agencies to regularly publish, along with conventional unemployment and employment rates, employment adequacy indicators such as those presented in this paper.
References


