DRAFT: June 23, 2004

Beyond Unemployment:
Measuring Labor Market Performance
Across Countries*

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* The author thanks Carolyn Zhu for research assistance. For data and advice, thanks to Connie Sorrentino, Sharon Cohany, and Maury Gittleman of the BLS and Paul Swaim of the OECD. I also thank Andrew Sharpe, Richard Freeman and Gary Burtless for helpful suggestions and comments. Very special thanks go to Barry Bluestone and other colleagues on the New Cross-National Architecture for Labor Market Statistics project, for which this paper was originally written.

In the early 1960s, with full employment prevailing in much of Europe and high unemployment at home, President Kennedy established a commission to improve the quality of labor market statistics. As Kennedy put it, "These statistics are of vital importance as measures of the economic health and well-being of our country" (Levitan and Taggart, 1973: 2). To better learn lessons from abroad, one of the commission's objectives was to improve the international comparability of indicators, and two papers by Bureau of Labor Statistics (BLS) researchers published in 1962 addressed measurement issues raised by the need for standardized unemployment rates (Myers and Chandler, 1962a; 1962b). Over the next three decades, the BLS and several Europe-based international organizations[1] succeeded in producing a standardized unemployment rate, at least in the statistical sense. That is, while what it means to be "employed" and therefore "unemployed" continues to vary across countries, reflecting social norms and levels of economic development, by the 1990s it was at least possible to compare unemployment rates across countries with confidence that they were similarly defined and constructed and relied upon similar kinds of survey data (Sorrentino, 2000).

But by this time the international pattern of unemployment had been reversed. Europe now faced a joblessness crisis and the U.S. was experiencing an employment boom, and based mainly on differential unemployment rates it became the conventional wisdom that successful employment performance required the adoption of the "American Model" – the "European " welfare state should be dismantled and its labor markets deregulated. In short, European postwar economic models were challenged on the grounds that labor market performance was poor, and the evidence of poor performance was the unemployment gap with the United States. Standardization had helped consolidate the unemployment rate as the key indicator of labor market performance, and partly as a result the 1990s saw the development of a highly influential literature in which statistical analysis of standardized unemployment rates to explain differences in labor market performance across countries.[2] This literature has focused on the "employment unfriendly" effects of protective labor market institutions, like unemployment benefits, employment protection laws, and labor unions (e.g., see Layard, Nickell and Jackman, 1991; OECD, 1994; Blanchard and Wolfers, 2000; IMF, 2003).

But the unemployment rate, no matter how well and consistently measured, is inherently limited as a measure of *labor market performance.* A well-functioning labor market must be

both *efficient*, in the sense that it makes full and effective use of available labor resources, and provide socially acceptable levels of *worker well-being.* If these two criteria capture what we mean by labor market performance, the unemployment rate is clearly an inadequate indicator – it was not designed to directly measure either efficiency or well-being. For instance, a highly developed market economy such as the U.S. could be operating at nearly "full employment" (say, 4% unemployment) despite the presence of large numbers of adult active job seekers unable to find anything but part-time work at poverty-level wages (as in the late 1990s). This, in turn, could lead many workers to become discouraged and drop out of the labor market, and they would not, therefore, even be counted as unemployed. It seems evident that this "full employment" economy should not get the same score on *labor market performance* as a country with a similar official unemployment rate but a much lower incidence of poverty level wages, involuntary part-time work, and discouraged workers.

The unemployment rate also does a poor job as a labor market performance indicator across regions or time because its measurement is highly sensitive to social arrangements and norms outside the labor market, particularly concerning the extent to which families, institutions and governments provide a safety net against job loss. This is illustrated below by a comparison of Spain, an extremely high unemployment country, and Mexico, which had a measured unemployment rate that was nearly identical to that of the U.S. in the late 1990s. It is evidently not very meaningful to put the performance of Mexico's labor market on a par with that of the U.S. and far above that of Spain.[3]

There is a need for a better indicator of labor market performance. This paper develops alternative measures of *employment inadequacy* by adding the incidence of low pay to the conventional measures of the quantity of work available to the workforce, as measured by standard unemployment and underutilization measures (discouraged and involuntary part-time workers). Like the latter, employment inadequacy can be measured as a share of the labor force. But because official discouraged worker numbers may not fully reflect those who drop out of the labor market for economic reasons, employment inadequacy can also be calculated relative to the working age population (like the standard employment rate). [4]

This paper begins with a discussion of the limits of the unemployment rate as a measure of labor market performance, proceeds to issues surrounding the measurement of labor underutilization and low pay, and then presents estimates of alternative inadequacy measures

for selected OECD member countries. On the basis of standard unemployment and employment rates, the U.S. was among the very best performers but scored much less impressively on the employment inadequacy indicators. The last section briefly addresses the conventional wisdom that there is a necessary tradeoff between two of the components of the inadequacy measures – the unemployment rate and the incidence of low pay - or rather, between employment and equality. The data suggest that there is no clear evidence of such tradeoffs across developed countries. Reliable measures of employment inadequacy and more definitive evidence on the supposed tradeoff between employment and equality require much better cross-country earnings data, and the paper concludes with some recommendations for future efforts in this area.

1. Labor Market Performance and the Unemployment Rate

If efficiency is understood as the effective use of available resources, discouragement and involuntary part-time employment must reflect sub-optimal labor market performance. And only if wages are presumed to closely reflect marginal productivity across the occupational structure – a strong claim, to say the least – can extremely low pay be squared with good labor market performance. Writing in 1937, Joan Robinson highlighted the inefficiency of marginal, low productivity work, arguing that in the absence of reasonably generous and long-term unemployment benefits, "a decline in effective demand which reduces the amount of employment offered in the general run of industries will not lead to 'unemployment' in the sense of complete idleness, but will rather drive workers into a number of occupations – selling match-boxes in he Strand, cutting brushwood in the jungles, digging potatoes on allotments – which are still open to them. A decline in one sort of employment leads to an increase in another sort…" (quoted by Eatwell, 1995: 5). The point is that two labor markets with identical official unemployment rates should not be considered equally well-performing if, with similarly skilled workers, one offers greater opportunities for full-time "living-wage" jobs. Robinson used the term "disguised unemployment" to describe the proliferation of low productivity, low-paid jobs for a workforce fully capable of working effectively in higher productivity jobs.

Recent wage trends in the U.S. underscore the current need to take changes in the quality of jobs into account in an assessment of labor market performance. Comparing business cycle peaks, the unemployment rate showed an impressive decline over the last two decades, from 5.8% in 1979 to 5.3% in 1989 to 4.2% in 1999 (Mishel, et.al., 2001, table 3.1). Yet, over this

same period, the real earnings for less-educated workers collapsed and earnings inequality exploded, requiring more household members to hold more jobs and work more hours to maintain a constant standard of living. Real annual hourly wages for production and nonsupervisory workers fell at an average rate of .2% per year from 1979 through 1999, and weekly wages fell even faster, at .4% per year (Ibid., Table 2.4). Workers at the 10th percentile took home 9.3% less in 1999 than in 1979, and those with just a high school degree show an average wage decline of about 15% over this twenty year period, from $15.65 to $13.34 (Ibid., table 2.6; table 2.19). As a result, the share of all full-time, full-year workers with poverty-level earnings rose from 14.4% in 1979 to 17.5% in 1998 (ibid., Figure 5G). For those without jobs or threatened with job loss, declining unemployment rates are the critical dimension of labor market performance; for all less-skilled workers – those with and without jobs – stagnant or falling real wages and a rising share of jobs paying poverty-level wages also signal poor labor market performance.

Turning to cross-country comparisons, the very notion of "unemployment" that underlies the standardized measure presumes an urban, industrialized economy with income levels high enough to afford a safety net of redistribution, either through the family or via the state. Indeed, this may help explain the fact that "unemployment" is almost exclusively a 20th century problem (as opposed to the classical economists' focus on the "surplus pool" or "reserve army" of labor). In agrarian and less-developed urban economies, a larger share of the workforce is self-employed and involved in family-based production. At subsistence levels, not being "employed" in some activity to support the household is simply not an option. Employment (and therefore unemployment) may also mean something quite different in societies in which it is socially acceptable for youth to live at home. The difficulty of comparing unemployment rates across vastly different economies and social systems can be illustrated by comparing Mexico, the U.S., and Spain.

Even as the Mexican economy collapsed in the 1980s and unprecedented numbers of workers crossed the border in search of work in the U.S., the Mexican unemployment rate ranged from just 2.6 to 4.4%, far lower than the 5.3 to 7.5% range for the United States.[5] According to Fleck and Sorrentino (1994: Table 6), under U.S. concepts, the Mexican rate would have been about 50-70 percent higher, but they point out that this would still leave Mexican unemployment at a relatively low level – and *below* U.S. rates. The explanation for

such low rates goes to the heart of the inadequacy of the unemployment rate as an indicator of labor market performance: "Mexico's low unemployment rates mask a large number of persons in unstable, marginal jobs. Thus, the rates reflect the need for persons to subsist through any work at all, rather than a situation of full employment…. Part-time work, marginal self-employment, and non-remunerated work in family businesses are frequently the only options for many workers in Mexico" (1994: pp. 3-4). In a more recent paper, Martin (2000, p. 4) concurs that Mexican and U.S. unemployment rates cannot meaningfully be compared, even when measured similarly, because "many people who are counted as employed in Mexico find only unproductive and marginal employment in Mexico's large informal sector."

In more developed countries, however, both the meaning of "employment" and the sustainability of being without any paid employment can be quite different and have substantial effects on measured unemployment. First, the marginal, informal work that characterizes so many Mexican jobs may not be understood as *real* employment for workers in more advanced economies. For instance, many Spanish (and southern Italian) workers, might consider themselves "unemployed" even while working in their own family enterprises or in the "underground economy" jobs since they are actively looking for "real" above-ground jobs. Second, with much larger shares of the working age population able to get by through a combination of government and family redistribution in Spain than Mexico, unemployment, while certainly not voluntary, is a condition that can be sustained for a longer period of time. It is instructive that youth (ages 16-24) account for one-third of Spain's unemployed, and nearly all of them live at home with their parents. Fully 89% of 20-24 year olds in Spain live with their parents, compared to 55% for Germany, 52% for France, and just 47% for the Netherlands. Interestingly, the only other major country European country that comes close to Spain in this regard is Italy, another high unemployment country, with 87% of this age group living at home (Munoz de Bustillo, 2004). While far from a full account, these two factors help to account for Spain's extraordinarily high unemployment rate, which reached almost 24 percent in 1994 (it was 13% in 2001). Clearly, Spain's unemployment rate does not reflect performance that is 4-6 times worse than Mexico's. Nor can Spain's rate be meaningfully compared to the U.S., where a 24% unemployment rate, or even a 13% rate, would be catastrophic.

In sum, the Mexican and Spanish cases suggest that the official unemployment rate, even when comparably defined, may not be at all comparable on the ground. Measured the same way

using similar population surveys, unemployment rates will reflect differences in levels of economic development, industry mix, social norms, and in the safety nets provided by family structures, labor market institutions and government programs. Mexico's unemployment rate is far too low relative to the U.S., due in large part to massive disguised unemployment. On the other hand, Spain's is probably far too high, reflecting greater redistribution and the counting of workers as unemployed whose marginal jobs are less likely to be treated as "employment" than by otherwise similar survey respondents in the U.S. and Mexico. While these may be extreme examples, they underscore the difficulty of using the simple official unemployment rate as a measure of cross-country labor market performance.

The most commonly used alternative measure of labor market performance is the employment rate – the employed share of the working age population. This has two potentially great advantages over the unemployment rate. The first is simplicity - it does not require determining who is really available and seriously searching for work, which adds "statistical noise" in cross-country comparisons of unemployment. But more importantly, the employment rate automatically reflects discouraged workers. On the other hand, it is certainly not the case that a higher employment rate necessarily reflects an improvement in labor market performance. For example, the efficient use of labor resources might be greater, and the well-being from employment higher, if more low skill jobs were paid higher wages and more household members were in school, for instance, rather than at work in jobs that poverty level wages. Much of the change in both the trend over time and the variation across countries will reflect social norms about how appropriate it is to expect youth, women, and older workers to depend on their own labor market earnings. As a result, while there can be little question that a combination of lower unemployment and lower discouraged worker rates would indicate better labor market performance, this is not so clear for higher employment rates.

2. Unemployment and Under-Utilization

The official unemployment rate is designed to capture only those who 1) do not have a job (have not worked for pay for at least an hour in the previous week); 2) claim that they would like a job and would take it if offered; and 3) have looked in a fairly serious way for work in the previous four weeks. Recognizing the narrowness of the official unemployment rate, statistical agencies in many countries have developed alternative indicators, including 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). For example, until 1993 the BLS published 7 indicators, U-1 through U-7: U-5 was the unemployment rate, U-6 added involuntary part-time workers to U-5, and U-7 added discouraged workers to U-6. In this scheme, estimates for part-time workers for derived with a rather confusing formula, and the BLS shifted to a U-1 through U-6 system in 1994. As a result, the most comprehensive indicator is now the U-6, which is 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 Haugen, 1995, p. 23).[6]

Annual unemployment rates and the most comprehensive underutilization indicators (U-7 and U-6) are shown in Figure 1. The U-6 to unemployment ratio declines steadily from 1.82 in 1997 to 1.61 in 2002, a downward trend that maintains itself even as the unemployment rate rose from 4% in 2000 to 6.1% in March of 2002.

Although these and similar unemployment and underutilization indicators have been available for several decades, attention has remained focused almost exclusively on the official unemployment rate, and for good reasons. First, with the implementation of the Kennedy commission's recommendations, the unemployment rate became a relatively simple, clearly defined measure. Second, the alternative measures add little to the unemployment rate if the concern is measurement of *changes* in economic capacity, since they move almost identically over the business cycle. And third, while these underutilization measures broaden the focus, the involuntary part-time and discouraged worker indicators only indirectly capture job quality and are, therefore, still quite inadequate as measures of labor market performance.

3. Measuring Low Pay

Calculating the incidence of low pay requires a choice between using absolute and relative thresholds. The U.S. has traditionally relied upon a needs-based measure of poverty, based on a formula developed in the 1950s that was based to the cost of a minimally adequate food budget for families of different sizes. The needs-based approach has the advantage of setting a standard for the resources necessary for a family to feed, house and clothe itself that is fixed over time. But it also raises some tough questions about what exactly this level and mix of

resources ought to be. For example, how should the relative needs of food, transportation, housing, and energy be adjusted over time, for which families and in which areas? And should taxes and in-kind benefits (say, food stamps) be included in the formula?[7] The issues become even more difficult for comparisons across countries characterized by different levels of benefits tied to employment, differences in universal benefits provided by the State, and differences in social norms and family structures. With the magnitude of the variations in these dimensions of economic and social life across countries, figuring out an absolute standard of poverty-level income would evidently be a Herculean task.

A much simpler and arguably more meaningful alternative is to define inadequate income in relative terms, as a reflection of how much resource inequality is socially acceptable at a given date in a particular context. In this approach, what is fixed is not some minimal quantity of food and other necessaries, but the ability to maintain a decent life relative to some social standard, a standard that automatically expands with economic development. This is the approach of the OECD (1996), which uses two-thirds of the median weekly earnings as their threshold for "low pay." This relative approach better incorporates the social dimensions of inequality, the importance of which has been emphasized by Amartya Sen (1999, p. 4), who writes that "Economic poverty robs people of the freedom to satisfy hunger, or to achieve sufficient nutrition, or to obtain remedies for treatable illnesses, or the opportunity to be adequately clothed or sheltered, or to enjoy clean water or sanitary facilities." Critically, what qualifies as "sufficient" and "adequate" depends on the social context, and relatively low income can produce poverty – capability deprivation – in rich as well as poor regions:

> Relative deprivation in terms of incomes can yield absolute deprivation in terms of capabilities. Being relatively poor in a rich country can be a great capability handicap, even when one's absolute income is high in terms of world standards. In a generally opulent country, more income is needed to buy enough commodities to achieve the same social functioning… For example, the difficulties that some groups of people experience in 'taking part in the life of the community' can be crucial for any study of 'social exclusion' (ibid., p.89).

A relative standard avoids the difficulties of the absolute measure, although even such a seemingly simple indicator as two-thirds of the median weekly wage is difficult to construct for cross-country comparisons, and for this reason the OECD has published low pay incidence figures only for full-time workers.

Using this approach, changes in the numbers of low pay workers in the U.S. are presented in Figure 2, which highlights the sharp increases that took place for all four measures from 1979 to 1994. The most striking change was for all workers (16+) earning less than half the median hourly wage between 1979 and 1989. Given the change shown for these extreme low pay earners who were adults is smaller, it was clearly young workers who accounted for a disproportionate part of the increase in this decade: whereas extremely low paid adult workers (25+) increased by 4.5 million, extremely low paid youth workers, limited to those between 16 and 24 years of age, increased by nearly the same number, 4.4 million. While low pay workers continue to increase through 2000, the numbers of extreme low pay workers show clear declines after 1994, particularly when young workers (16-24) are included. This shift in trend is probably explained by the combined impacts of minimum wage increases and the booming economy, which appears to have had the greatest positive impact on workers at the very bottom of the wage distribution. The number of low paid workers, shown by the top two lines in the Figure, show declines only between 2000 and 2001, and this probably reflects the effects of the recession, as low wage workers, particularly the youngest, lost their jobs.

Translating these counts of low paid workers into shares (Figure 3) suggest the same story. The share of all workers paid less than half the median wage rose sharply between 1979 and 1989, a decade in which the minimum wage collapsed in real terms by about 26 percent (Bernstein and Chapman, 2002, p. 1). Between 1994 and 2000, as the economy strengthened and the minimum wage increases of the early 1990s took effect, the incidence of extreme low pay fell somewhat more rapidly than the incidence of the less stringent (2/3 median) low pay measure. With the 2001 recession, the share of low pay workers fell sharply, suggesting a strong shift into unemployment or out of the labor force entirely.

Finally, it is worth comparing these low pay measures with the OECD's low pay indicator for the U.S. (for details, see OECD, 1996). The first column Table 1 reports the OECD's incidence of low pay for selected years from 1979 to 2000. These figures are calculated only for full-time workers, and measure the share of all these workers whose weekly earnings were below two-thirds of the national median. This column shows that by this measure, low pay incidence rose from 21.9% in 1979 to 25.1% in 1994 and declined only very slightly to 24.7 percent in 2000. Based on median hourly earnings, my calculation of the incidence of low pay for full-time workers from the CPS, shown in column 2, is noticeably

smaller, but the trend is the same, rising from 17.2% to 21.2% in 1994 and dropping modestly to 19.9% in 2000. Probably due in large part to a shift from low paid employment to unemployment by some workers in the 2001 recession, the figures show a sharp drop from 2000 to 2001 (19.9 to 18.1 percent).

The remaining columns in Table 3 report alternative measures of low pay incidence, all showing the same pattern of increases through the mid 1990s and declines afterward, with a substantial drop between 2000 and 2001. Using two-thirds of median earnings (weekly in the OECD figures, hourly in the CPS-ORG data) as the criterion, these figures indicate that in the last two decades of the 20th century, *between one-sixth to one-quarter of all U.S. workers were "low paid,"* with the variations reflecting employment status (full-time vs all workers), age (with or without young workers), and labor demand (the business cycle).

4. Measures of Employment Inadequacy for OECD Countries

The employment inadequacy indicators developed here simply add low paid workers to standard counts of the underutilized - workers who cannot find jobs ("unemployed" and "discouraged" workers) or can find only part-time jobs ("involuntary part-time" workers). It should again be noted that these indicators should measure the employment and earnings adequacy of the jobs available in a given labor market irrespective of the worker's age, the household in which that worker resides, or the worker's standing in the household. Nor does it aim to take into account differences in other supply-side characteristics, like individual or household wealth, which can affect labor market participation job preferences.

While discouraged workers and involuntary part-timers increase the level of the employment inadequacy measure relative to the standard unemployment rate, it is the addition of low paid workers that makes the real difference, both in magnitude and for relative country positions. Figure 4 provides some indication of the extent of the differences in low wage incidence across the most developed countries. Unfortunately, rates of low-paid employment have only been developed by the OECD for full-time workers, and time series data for more than a few years are available only for the seven countries shown in the figure. Still, Figure 4 illustrates the main point: the larger and more interventionist welfare states of northern Europe, such as Belgium, Germany and the Netherlands, have very low shares of low-paid full-time workers compared to the more laissez-faire U.S. and U.K. While the U.S. and U.K. show rates

in the 20-25% range in the 1990s, the Netherlands, Germany and Australia range from 12-14%. By itself at the bottom, Belgium's low pay rate was just 7-8 percent. Equally striking, Figure 4 also shows that low pay rates in the U.S. and U.K. rose in the 1980s and remained stable at the higher levels in the 1990s but were stable or falling in the European welfare states (although the Netherlands shows increases in 1995-97).

Table 2 presents the labor force statistics required to calculate unemployment, underutilization, and employment inadequacy rates for 14 OECD countries in the mid-1990s (the low wage figures are centered on 1995). It should be noted that this is a favorable period for the U.S. for international comparisons - unemployment was far below its early 1990s level in the U.S. (6.8% in 1991, 5.6% in 1995), but was much higher in Europe (8.1% in 1991, 10.5% in 1995).

We begin with the labor force measures. Based on the unemployment rate, the worst performing countries were Finland (15.6%), Italy (12%), and France (11.6%), while the best were Japan (3.1%), Austria (3.7%), and the U.S. (5.6%). The pattern looks quite different for the EILF, which puts the U.S. (26.4%) amongst the poorest three performers, with Finland (32.4%) and Canada (28.2%). Countries with the best performing labor markets according to this employment inadequacy measure were Japan (11.4%), Austria (14.2%) and Sweden (16%).

Turning to the working age population measures, the U.S. had the second highest employment rate (after Japan), but it is certainly not distinctive – at 72.6%, it is one of 8 countries that have employment rates between 68 and 74 percent (see column 12). Column 13 shows the share of the working age population employed *inadequately* (EIPOP) either because they were unemployed, discouraged, working involuntarily part-time, or because they were working at very low wages. The U.S. has a 20.4% rate, surpassed only by Finland (23.9%) and Canada (21.2%). Put differently, of the 14 countries for which we have data, 11 show lower (better) employment inadequacy rates than the U.S. For example, in Sweden, with a standard employment rate nearly identical to the US, only 12.5 percent of the population was inadequately employed in 1995. In Austria, with an employment rate only slightly lower than the US, adequate employment was 6.2 percentage points higher and inadequate employment was 10.2 points lower.

The U.S. scores somewhat higher on the share of the working population with *adequate* employment. The employment adequacy rate (EAPOP) in column 14 shows that just over 52

percent were adequately employed, which was about the same as the UK (51.4%), New Zealand (53.3%), Germany (49.5%), and Australia (51.2%), but much below Sweden (58.5%), Japan (65.2%), and Austria (58.4%). Modestly lower (worse) than the U.S. were Canada (46.8%) and the Netherlands (47.1%). The only countries with particularly low employment adequacy rates were Finland and Italy (37-39%).

In sum, using the standard unemployment and employment rates, the data supports the conventional view that in the mid-1990s the U.S. was a model of good labor market performance. But the rankings look quite different when the adequacy of employment is considered – with among the highest (worst) employment inadequacy to labor force rate and a middle-ranking employment adequacy to population rate.

5. Cross-Country Equality-Employment Tradeoffs?

Underlying these employment inadequacy indicators is the view that labor market performance is better the lower the unemployment and incidence of low pay. The latter is a good proxy for wage inequality across developed countries. But in the conventional wisdom, derived directly from textbook theory, policy makers face an ineluctable tradeoff between employment and equality: countries can choose either full employment or a compressed wage structure, but not both (Siebert, 1997; Bertola, Blau and Kahn, 2002). If this tradeoff is as compelling as the orthodox view claims, country scores on our labor market performance measures would tend to gravitate to the median, and cross country comparisons might not therefore be very interesting. But does the employment-equality tradeoff actually appear in the data?

These two sides of this tradeoff appear are components of our employment inadequacy indicators - the unemployment rate and the incidence of low pay. Figures 5 and 6 show their relationship in scatterplot form (for much more on the empirical evidence for such tradeoffs, see Howell and Huebler (2004)). Figure 5 shows low pay and unemployment rates for 14 OECD countries. If the tradeoff view is correct, we should see the points ranging from the upper left (high inequality, low unemployment) to the lower right (low inequality, high unemployment). The figure shows no evidence of such a tradeoff. The U.S. appears in the top left, but three countries (the Netherlands, Sweden and Japan) show both low unemployment and low

incidence low pay. Indeed, the more laissez-faire UK and Canada had higher low pay and unemployment rates than the highly regulated Netherlands and Sweden.

Figure 6 partially updates this comparison to 2002. Low pay rates are available only for the mid-1990s, but since differences in earnings inequality across countries change quite slowly over time (see Figure 4), it is not unreasonable to compare the 1995 low pay rates with 2002 unemployment rates. Again, the data show no evidence of a tradeoff. While the U.S. has by far the highest rate of low pay, it now has, like Australia, about the median unemployment rate. But Australia's low pay incidence was only about half as high (7.8% compared to the U.S.'s 16.9% rate). This figure indicates that a wide range of low pay rates appear to be compatible with a given unemployment rate. For example, the U.K., New Zealand, Japan and Sweden all had unemployment rates around 5%, but the low pay rate ranged from 2.7% for Sweden to 11.6% for the United Kingdom. The regression line in both figures shows that, if anything, the relationship between low pay and unemployment is positive – the reverse of what is predicted by the orthodox textbook view.

6. Conclusions

Despite its ubiquitous use, the official unemployment rate is a poor measure of labor market performance. Measures of underutilization that take into account involuntary part-time and discouraged workers have been tabulated for some time. But for purposes of assessing secular trends and cross-country comparisons of the ability of the labor market to effectively utilize available labor resources and to provide socially acceptable levels of worker material well-being, a broader measure is needed that incorporates the payment of very low wages. Such an indicator would help capture what Joan Robinson referred to in the early 1930s as "disguised unemployment."

This paper develops employment inadequacy rates for a number of other developed countries. Like the BLS underutilization measures (U1 – U6), they reflect counts of workers unemployed, discouraged, or working involuntarily part-time, but they also add counts of workers paid very low wages. Judged by the standard unemployment and employment rates, the U.S. was among the best performers among developed countries in the mid 1990s (a period much more advantageous to the US than either the beginning or the end of the decade), but it

was among the worst using the employment inadequacy indicators (EILF and EIPOP), and was similar to the rates of most nations on the employment adequacy to population rate (EAPOP).

If what matters is the ability of the labor market to produce jobs with socially acceptable pay levels for all those willing and able to hold them, these results underscore the need to look beyond the unemployment rate in judging the performance of national economies. Evidence was also presented that challenges the mainstream view that there is a simple tradeoff between the incidence of low paid jobs and unemployment. Countries like Austria, the Netherlands, Denmark, Sweden and Norway have shown that it is possible for countries to have a highly egalitarian wage distribution while maintaining high employment rates and low unemployment rates.

The three employment inadequacy measures calculated in this paper are preliminary and rough estimates, intended only as illustrations of the kind of measures that might be developed and used by national statistical agencies. A first next step would be to develop much better cross-country data on low paid workers. For these purposes, it is *wage* rather than individual or household *income* that would be most appropriate. We need a consistent time series on the incidence of low pay for all workers (not just full-time) for all OECD countries. Alternative low pay indicators, reflecting different thresholds would be ideal, since what counts as "low" will vary with the purpose of the study or policy question, and may vary considerably across countries. With improved low pay data, employment inadequacy rates could become useful indicators of the ability of alternative capitalist models, from the Scandinavian to the U.S., to generate economic well-being for workers and families through work, a goal embraced across the ideological spectrum.

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Table 1: Alternative Measures of Low Pay
For the United States, 1979-2001 (%)

	OECD	CPS-ORG			
	1. F-T	2. F-T	3. F-T 25+	4. All	5. All, 25+
1979	21.9	17.2	12.7	24.1	16.8
1989	23.5	17.6	13.7	24.2	17.4
1994	25.1	21.2	17	27.4	20.2
1997	24.9	20.3	16.3	26.2	19.2
2000	24.7	19.9	16.3	25.7	19
2001		18.1	14.9	23.8	17.4

Col. 1: OECD's measure of the incidence of low pay - full-time workers only.
Low pay threshold defined as 2/3 of median weekly earnings for F-T workers
Source: personal communication from Paul Swaim, OECD-Paris.

Col. 2: the incidence of low pay for full-time workers (35+ hours).
Constructed from the EPI's CPS-ORG extracts for those 16 and over.
Low paid workers: those earning <2/3 of the median hourly wage for all full-time workers.

Col. 3: Incidence of low pay for F-T workers 25+ years of age (low paid F-T/total F-T)

Col. 4: Incidence of low pay for all workers

Col. 5: Incidence of low pay for all workers 25+ years of age

Source for columns 2-5: author's calculations from EPI data file.

Table 2: Unemployment, Employment, and Employment Adequacy Rates for Selected OECD Member Countries, 1995 (columns 1-8: thousands)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	POP (15-64)	Labor Force	Employ	Unemp	Inv. P-T	Disc'd	Low Paid	Under-util'd	U (%)	UU (%)	EILF (%)	EPOP (%)	EIPOP (%)	EAPOP (%)
Australia	12,032	9,050	8,276	774	526	112	707	1,412	***8.6***	***15.4***	***23.1***	***68.8***	***17.6***	***51.2***
Austria	5,417	3,860	3,716	144	23	14	370	181	***3.7***	***4.7***	***14.2***	***68.6***	***10.2***	***58.4***
Belgium	6,703	4,160	3,769	390	126	20	247	536	***9.4***	***12.8***	***18.7***	***56.2***	***11.7***	***44.5***
Canada	19,865	14,926	13,507	1,419	795	49	1,956	2,263	***9.5***	***15.1***	***28.2***	***68.0***	***21.2***	***46.8***
Finland	3,410	2,465	2,081	384	51	49	330	484	***15.6***	***19.3***	***32.4***	***61.0***	***23.9***	***37.2***
France	37,784	25,361	22,431	2,930	982	42	1,950	3,954	***11.6***	***15.6***	***23.2***	***59.4***	***15.6***	***43.7***
Germany	55,452	38,472	34,860	3,612	384	82	3,350	4,078	***9.4***	***10.6***	***19.3***	***62.9***	***13.4***	***49.5***
Italy	38,910	22,733	20,009	2,724	313	201	1,675	3,238	***12.0***	***14.1***	***21.4***	***51.4***	***12.6***	***38.8***
Japan	87,165	66,668	64,570	2,098	790	900	3,916	3,788	***3.1***	***5.6***	***11.4***	***74.1***	***8.8***	***65.2***
Netherlands	10,569	6,527	6,063	464	128	77	414	669	***7.1***	***10.1***	***16.4***	***57.4***	***10.2***	***47.1***
New Zealand	2,389	1,756	1,644	111	96	11	153	218	***6.3***	***12.3***	***21.0***	***68.8***	***15.5***	***53.3***
Sweden	5,621	4,323	3,991	332	167	83	121	582	***7.7***	***13.2***	***16.0***	***71.0***	***12.5***	***58.5***
UK	38,019	28,631	26,165	2,466	681	146	3,325	3,293	***8.6***	***11.4***	***23.0***	***68.8***	***17.4***	***51.4***
US	171,982	132,311	124,903	7,408	4,473	854	22,415	12,735	***5.6***	***9.6***	***26.4***	***72.6***	***20.4***	***52.2***

Dis'd: discouraged workers
Low paid: number of full-time workers earnings less than 2/3 median weekly earnings
Underutilized: (4+5+6)
U: unemployment rate (4/2)
UU: underutilization rate (4+5+6)/(2+6)
EILF: inadequate employment rate (4+5+6+7)/(2+6)
EPOP: employment rate (3/1)
EIPOP: inadequate employment to population rate (4+5+6+7)/(1)
EAPOP: adequate employment to population rate (3-(5+6+7))/(1)

Sources: columns 1, OECD Labour Force Statistics, 2002; columns 2-4, OECD Economic Outlook, no. 64, Dec. 1998
columns 5-7, personal communication from Paul Swaim, OECD-Paris

Figure 1: BLS Unemployment and Underemployment Rates for the U.S., 1983-2002

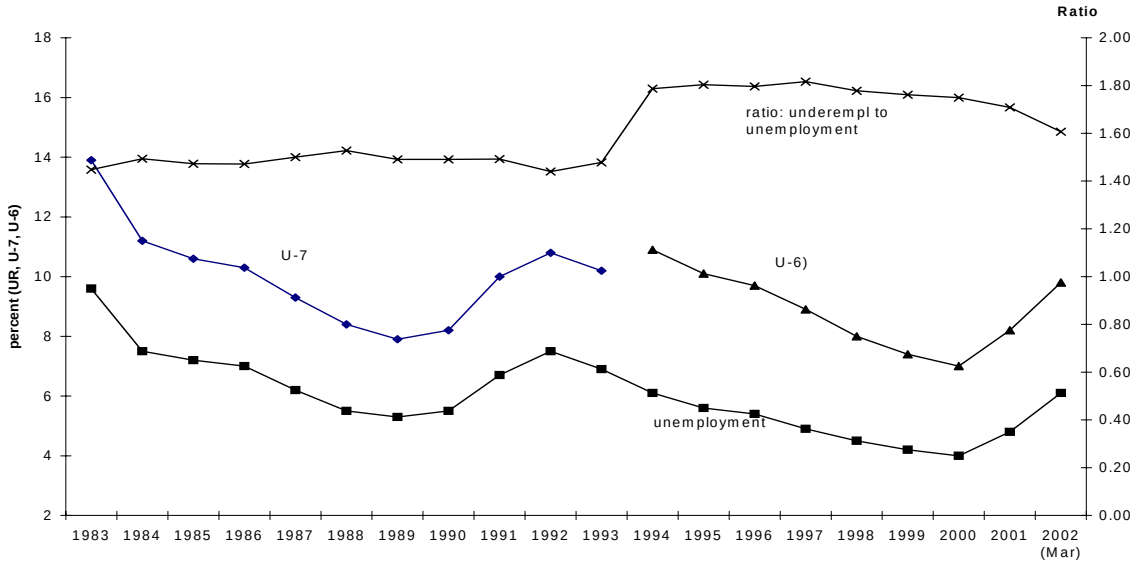


Figure 2: Numbers of Low Wage Workers in the U.S., 1979-2001

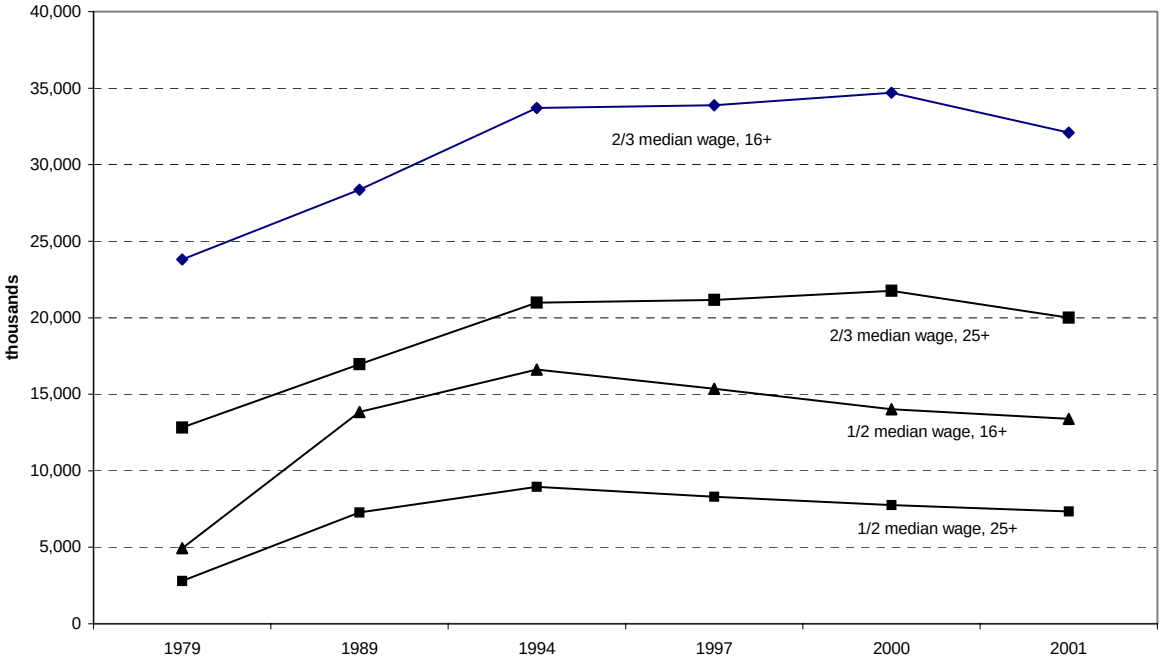


Figure 3: The Incidence of Low Wage Employment in the U.S., 1979-2001

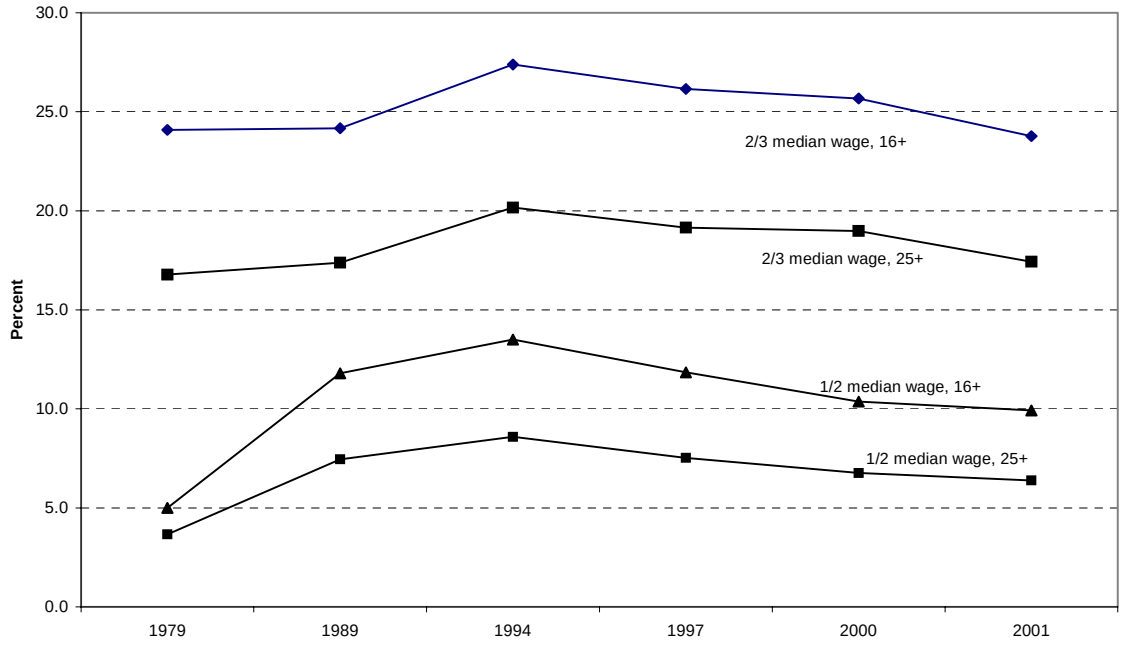


Figure 4: Low Pay Incidence for 7 OECD Member Countries, 1973-2000
(share of full-time workers paid less than 2/3 median weekly earnings)

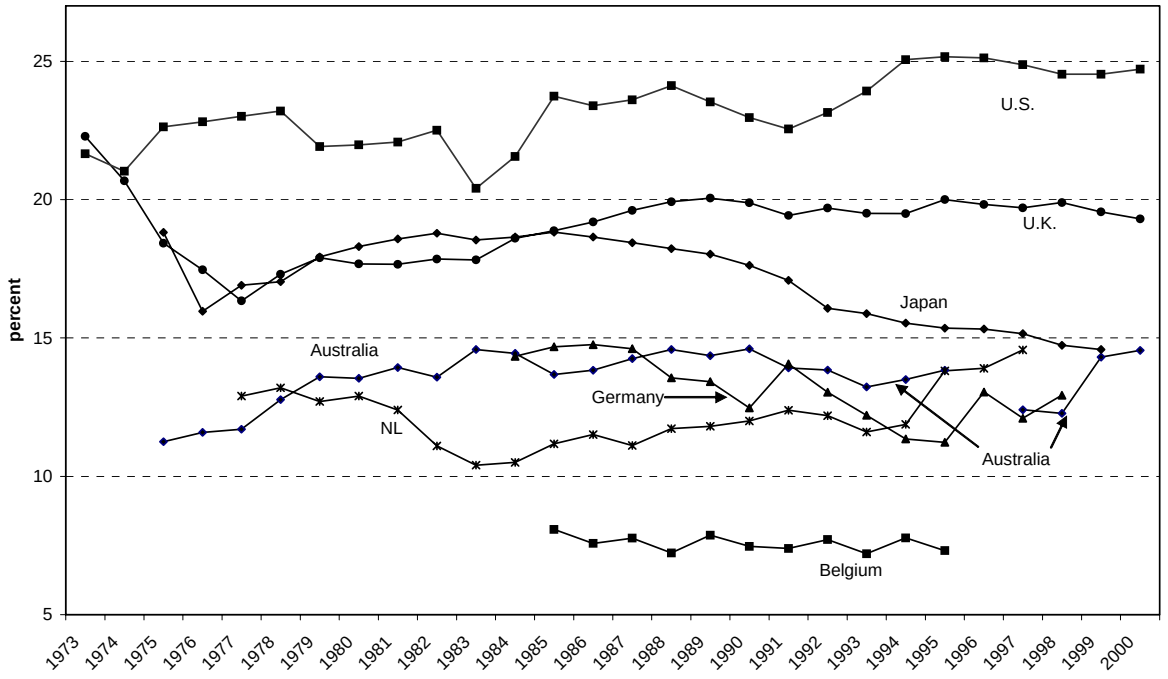


Figure 7: Unemployment and Low Pay Rates for Selected OECD Countries, 1995

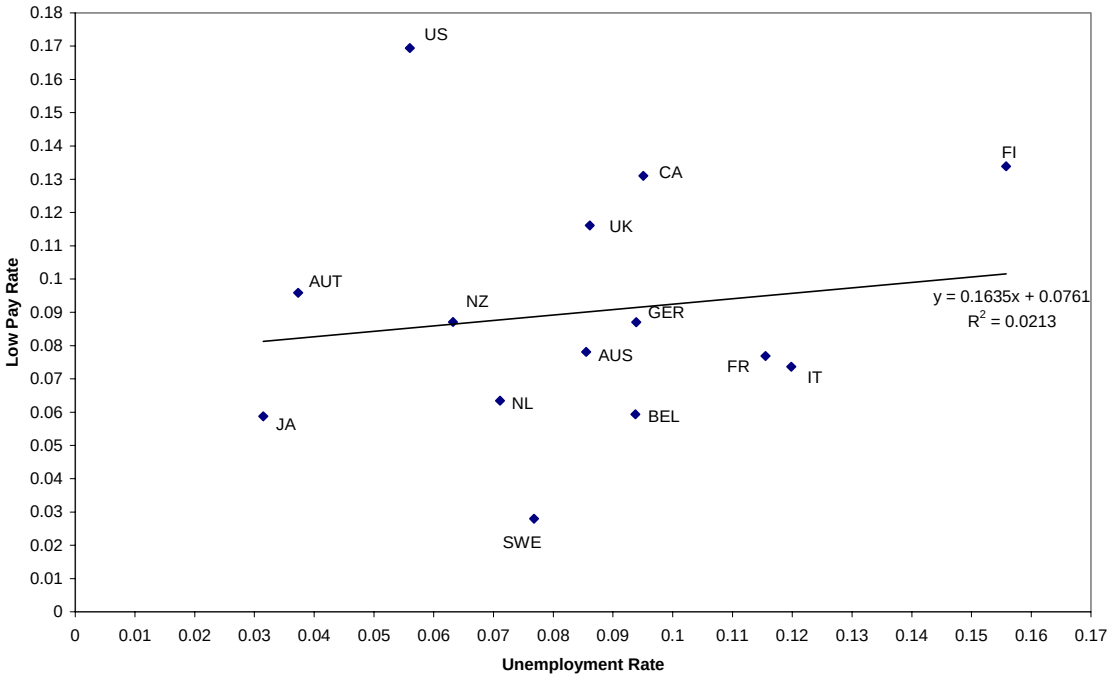
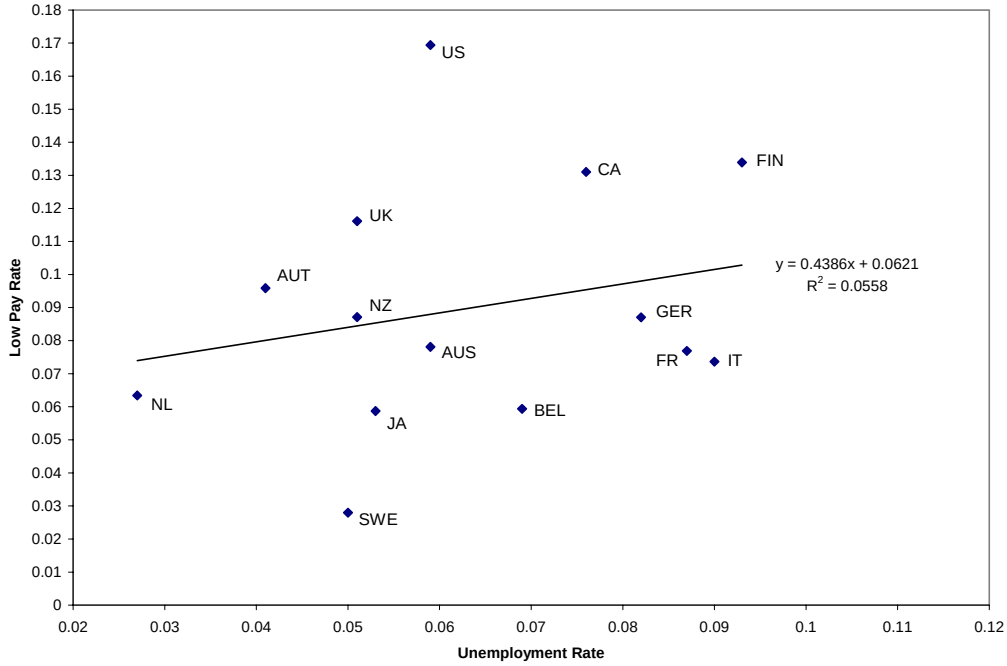


Figure 8: Unemployment Rates (2002) and Low Pay Rates (1995) for Selected OECD Countries



Endnotes

[1] The Organization for Economic Cooperation and Development (OECD), the International Labor Office (ILO), and the statistical office of the European Union (Eurostat).

[2] While the employment rate is also commonly employed, it has not played the same central role -- a low employment rate would not be considered a problem in a full employment economy a key indicator. Still, as Sorrentino (2002: 15) explains, "International analyses often focus on these two key indicators (unemployment and employment rates) as well, to compare the functioning of labor markets across countries. Researchers have attempted to explain the reasons for international differences and to glean lessons from the more "successful" countries that may be applied toward bringing down unemployment and stimulating job creation in the less successful ones.".

[3] The employment rate is also commonly used as a measure of performance, but as discussed below, neither efficiency nor worker (or household) well-being is necessarily enhanced by raising the employed share of the working age population.

[4] There have been earlier efforts to produce such an indicator, the most influential of these was Levitan and Taggart (1973), who took a "household needs" approach by counting only "family heads" in low income families. Such an approach faces significant measurement and methodological challenges. At a minimum, it would require developing both a widely accepted understanding of what a "family head" means and which workers should be relegated to "secondary" status. The challenge is not just in defining these categories, but in taking into account changes in them as social norms change. This would make meaningful international comparisons particularly difficult.

[5] The Mexican figures come from Fleck and Sorrentino (1994, Table 5); the U.S. figures are from the U.S. Bureau of Labor Statistics.

[6] Marginally attached workers are "all persons who want and are available for a job and have recently searched for work" (Bregger and Haugen, 1995, p. 24). Discouraged workers are the marginally attached who give a job-related reason for not looking for work.

[7] See the Economic Policy Institute's Poverty and Family Budgets, "Frequently Asked Questions" (www.epinet.org/issueguides/poverty/povertyfaq).