Confronting Low Pay: Minimum Wage Policy and Employment in the U.S. and France

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Nearly one-third of all American workers are paid very low wages, the highest rate among wealthy nations. An incidence of low pay at this level has obvious implications for the current standard of living for a substantial share of American families. But of particular concern are the implications for the future: the low pay rate has risen precipitously for young male workers with each economic downturn since the late 1970s. In stark contrast, over the last three decades France has adopted a minimum wage policy designed to eliminate low pay, and it has worked: the low-wage share has dropped to just 10 percent. But does the French evidence confirm the conventional prediction that a minimum wage high enough to substantially reduce the incidence of low pay will also eliminate large numbers of jobs for young, less-educated workers? We find no support for this view in the aggregate data. Despite the large and growing gap in the value of the US and French minimum wage since the mid-1990s, French unemployment and employment rates show stability or improvement as well as strong convergence to U.S. levels. Unemployment-to-population rates for US and French 15-24 year olds have closely tracked one another since the mid-1990s. At the same time, the US and French shares of the employed with a wage above the low-wage threshold and not working involuntarily part-time show a steady and substantial divergence in France's favor, and this appears most dramatically for young less educated workers. France has shown that a rising minimum wage can all but eliminate low paid work without worsening employment opportunities for vulnerable workers. Making work pay for the bottom third of the workforce should be a top priority for American social policy.

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The rapid growth of good jobs between the late 1940s and the 1970s produced an extraordinary increase in average incomes over this period. The middle class experienced an unprecedented expansion, and while household incomes improved across the distribution, the biggest gains went to those in the lowest paid jobs (Goldin and Katz, 2008). But this 'golden age' of American Capitalism was short-lived. Wage growth has been stalled since the mid-1970s, which helped fuel income inequality and shrink the middle class – a process known as “polarization” (Bluestone and Harrison, 1990; Acemoglu and Autor, 2012). Trends in compensation, which include employment-related benefits, have also been unimpressive, showing essentially no change until the late 1990s followed by just a small increase between 1999 and 2006, due mainly to rising health care costs.

It is not that the American economy has stopped growing. Although still suffering from the greatest economic collapse since the Great Depression, the real value of output per capita in 2010 was 75 percent higher than it was in 1980 (Stiglitz, 2012, p. 24). The fact is that the last three decades of American productivity growth has not been shared with wage earners. As the incidence of low pay has risen sharply for young workers and overall inequality had risen from levels already above those seen elsewhere in the developed world, efforts by low and moderate income Americans to maintain living standards through housing speculation and the accumulation of mortgage, credit card and student debt was among the root causes of the 2007-9 Great Recession.

One solution might be to accept the declining value of the wage at the bottom of the distribution and the associated wage inequality by redistributing income through the tax and spending system. But there is little political support for non-work related income transfers; even the earned income tax credit, the eligibility for which requires steady employment, has been impossible to expand much beyond female workers with young children. In any case, there are good reasons to prefer raising wages directly. As Robert Solow (2008, p.1) has argued, “...in a society that values self-reliance, and in which productive work confers identity and self-respect as well as the respect of others, income redistribution unconnected or wrongly connected with work is not the best solution except in special cases. In that kind of society, ours for instance, the persistence of low-wage work is felt as a social problem on its own.”

In stark contrast to the record of American social policy, the French have chosen to address living standards – and the broader goal of social inclusion – by directly raising wages at the bottom of the distribution. In 1970, France wrote into national law a social commitment to combat low pay and rising inequality by legislating a steadily rising minimum wage. The law states that the purpose of the “salaire minimum de croissance” (known as the “SMIC”) is to ensure 'workers with the lowest remuneration a purchasing power guarantee and a participation in the economic development of the nation.” The SMIC was designed to steadily raise the living standard of French workers at the bottom of the labor market by raising the wage. It has worked: the French minimum wage rose steadily in purchasing power and passed the low-wage threshold (2/3 of the median wage) in 2005,
and the low-pay rate for France has fallen to 10 percent. In short, the design and implementation of the SMIC has all but outlawed low-wage work for nearly all workers in the formal labor market in France.

It is widely accepted in both the popular media and mainstream economic literature that the French have paid dearly for this collective attack on wage inequality. Low-wage workers with jobs may be relatively better off, but according to this view the result has been that many of the most vulnerable French workers have been “priced” out of the job market.6

This chapter is concerned with the consequences of alternative institutional and regulatory regimes for the wage and employment outcomes of young, less-educated workers - those most vulnerable to low pay and unemployment. More specifically, it explores the implications for US labor market policy of the choice France has made to pursue policies that effectively eliminate very low paying jobs. Did France’s success at reducing the incidence of low pay come at a large cost in the form lower employment rates and higher unemployment? As the relative levels of the French and US legal minimum wage have sharply diverged, have aggregate indicators of employment performance shown the predicted increase in US advantage?

We present three sets of findings. First, the evidence is clear that the far less regulated US labor market has produced an incidence of low-wage jobs about three times larger than France (32 versus 10 percent), and the gap is even larger for young, less-educated workers. The stability of the US low-wage share at around 30 percent over the last three decades has masked enormous increases in low-pay incidence for young workers and especially for young men.

After decades of increasingly sophisticated empirical studies, the effects of the minimum wage on employment remain controversial. But with its extremely high and steadily increasing minimum wage, France offers an extreme case, so if there are negative aggregate employment effects, they should be easily visible in the standard French employment indicators. Our second main finding is that we find no clear evidence that employment performance has worsened as the SMIC has risen. Of course, these indicators might have shown more impressive performance but for the large increases in the SMIC. But there is at least no suggestion in these data that French labor market performance has worsened as the SMIC has shot upwards. French employment performance has, if anything, more than held its own relative to the US, even for young, less-educated workers: standard unemployment and employment rates have narrowed, and unemployment-to-population rates have tracked one another closely, with substantially higher rates for the US since 2007.

Third, we present results for a new indicator employment performance that accounts for the quality as well as the quantity of jobs – those employed at wages above the low-pay threshold and not working involuntarily part-time. This adequate employment rate (AER) shows a clear French superiority that has been growing over time. For example, while the share of US 20-34 year old high school graduates with “adequate employment” has fallen sharply since the late 1990s, the French AER has risen, so that by 2007 the gap in favor of France had expanded to 12 percentage points for men (60% for France, 48% for the US) and 20 points for women (44% for France, 24% for the US).
We begin with a brief overview of the incidence of low pay across countries and the importance of labor market institutions for explaining these differences. Section 2 defines what is meant by “low pay” and outlines the contours of low-paid work in the U.S. and France. Section 3 describes the evolution of the US minimum wage and the French SMIC. Section 4 begins with a brief overview of what theory has to say about predicted employment effects of minimum wage increases and then describes recent trends in a variety of aggregate employment indicators for France and the US. Section 5 presents results for our new indicator, the adequate employment rate, and Section 6 concludes.

1. Low Pay and Institutions:

The international convention for “low pay” is an hourly wage below two-thirds of the national median wage (OECD, 2006, pp. 174-78; Appelbaum et al., 2010, p. 3). Below this level, even full-time work is not considered sufficient to provide workers and their families with a socially acceptable level of resources, understood as that which is necessary for full participation in their communities.

There are vast differences among rich nations in the incidence of low-wages. Comparing 20 rich countries using a low-wage threshold of two-thirds of the overall median wage for 2009, John Schmitt (2011, figure 1) reports that the US low-wage share (24.8%) was higher than all others except Korea (25.7%). While Germany, Canada and the UK reported rates just over 20 percent, France came in at 11.1 percent, Norway at 8 percent, and Belgium at 4 percent. As we report below, using the OECD’s threshold of two-thirds of the full-time median wage, we calculate the low-pay incidence in the US and France in 2009 as 31.3 and 10.1 percent. A large share of low paid workers is a measure of inequality at the bottom of the wage distribution. Broader measures show similar cross-country patterns.  

The Russell Sage Foundation (RSF) recently completed a major study of low pay in rich countries. The results appeared in six volumes – five country case studies and a concluding volume. Their conclusion was that the incidence of low wages in rich countries is not explained by “economic structural factors”, such as production technology, skills, and trade/globalization. There is, in fact, no relationship between the gross national product and the low-wage share (Schmitt, 2011). Rather, the incidence of low pay is determined by “pay setting institutions” like collective bargaining, minimum wage legislation, and labor and product market regulations. The key is the effective presence of “inclusive systems” that “extend outcomes of bargaining by employees with strong bargaining power to those with weaker power” (Bosch, Mayhew and Gautie, 2010, p. 91-2).

2. Low Pay in the US and France

We begin with a breakdown of low-paid US workers by demographic group and then turn to a comparison with France. Figure 1 shows the low-wage share of employment from 1979 to 2010 by age group. For the entire 16-64 workforce, low pay has fluctuated around 30 percent between 1979 and 2007. This stability also characterized the teen (16-19, not shown) and 35-54 low pay rates.
But substantial long-run increases can be seen for young workers: those 20-24 (from 41 to 60 percent in 2007) and 25-34 (from 20 to 32 percent). At the same time, the incidence of low pay decreased modestly for those 55-64 between the late 1990s and 2007.

The explanation for the stability in the overall low-wage share at a time of large increases for young (20-34) workers is mainly demographic: younger workers with rising low-wage incidence have been decreasing in relative size (from 16 to 10 percent of total employment for 20-24 year olds and from 28 to 23 percent for 25-34 year olds). The increasing size of 55-64 year old group, which has experienced declining low-wage shares, has helped offset the rising incidence for much younger workers. At the same time, the largest group of workers by age group (35-54) has shown stable low-wage incidence and, by increasing substantially in size since 1979 (from 36 to 48 percent of all workers), has also helped stabilize the overall low-wage share.

Table 1 reports the distribution of low-wage workers by age, gender and educational attainment for five dates between 1979 and 2010. These include four business cycle peaks (1979, 1989, 1999 and 2007) and 2010, the most recent year for which the data were available. We report results for all workers ages 16-64; for total, male and female workers ages 20-34, as well as for all 20-34 year olds with more than a high school degree; and the same for those ages 25-54 along with these workers who have at least a high school degree.8

The first column repeats the low-wage share for the entire 16-64 age group that appears in Figure I and highlights the effects of the recent economic crisis: the low pay rate increased from 29 to 32 percent between 2007 and 2010. Column 2 shows that the incidence of low pay for young workers rose fairly steadily from 28 percent in 1979 to 43 percent in 2010. Even more striking has been the increase of 22 percentage points for young male workers (from 18 percent in 1979 to 34 percent in 2007 and 40 percent in 2010) shown in column 3. These increases nearly closed the gap with young female workers (column 4), whose low pay rate increased modestly and only in the 2000s.

Like the results for young workers, columns 6-8 show that the rise in the incidence of low pay among prime-age workers was driven by the increases for men in the 1980s (from 9 percent to 15 percent) and 2000s (from 15 percent to 21 percent). The incidence of low pay among female prime-age workers was lower in 2010 than 1979 (from 34 to 31 percent).

It is also notable that there has been a fairly steady rise in the low-wage share of workers with more than a high school degree (columns 5 and 9). For these better-educated young workers, the low pay incidence rose from 22 to 34 percent; for prime-age workers, the above high school incidence of low pay rose from 11 to 17 percent.

Whereas Table 1 reported the low-wage shares for each demographic group, Table 2 reports the distribution of low-wage workers among these groups. The low wage workforce became increasingly male over this period: young men (20-34) increased from 15 to 22 percent of all low wage workers for young men (20-34); prime-age men (25-54) and accounted for 11 percent of low paid workers in 1979, rising to 25 percent in 2010. Also of note is that there has been a substantial increase in the share of low paid workers who have more than a high school degree. By 2010,
almost one-quarter (24 percent) of low-wage workers (ages 16-64) were prime-age with more than a high school degree, an increase from just 11 percent in 1979.

Our comparison of the low-wage share of employment in France and the US makes use of comparable data (the main household survey in each country), a threshold that follows the OECD (less than 2/3 of the median full-time wage), and similar populations (wage and salary employment).9

Figure 2 reports the annual low-wage share time series for workers for the US (1979-2010) and France (1993-2010). The US trend is the same as appeared in Figure 1: a fairly stable level of around 30 percent. In contrast, the French low-wage share has clearly fallen since 1997, and quite dramatically between 2002-7. Notably, the increases since the 2007 crash have been large for the US and barely visible for France.

Figure 3 shows that behind the aggregate stability in the US low-pay share there has been a huge long-run increase in the share of young less-educated (ages 20-34, high school degree only) workers paid low wages between 1979 and 2010. The increase in low-pay incidence in the US has been much larger for young men (about 32 percentage points, from 17 to 49 percent) than women (about 20 points, from 46 to 66 percent). Interestingly, the entire increase between 1979 and 2010 for both men and women took place during and shortly after each economic downturn: 1981-83, 1992-94, 2001-03, and 2009-10.

The performance of the French labor market for young less-educated workers could not have been more different: steady declines in the share paid low-wages between 1997 and 2007 (from 25 to 18 percent for women and from 20 to 11 percent for men.

Figure 4 reports huge differences between French and US low-pay rates for young workers by gender and educational attainment for 2010, the most recent year for which we had data. For example, 86 percent for US female workers with less than a high school degree were paid low wages against just 24 percent for similar French workers; for female high school graduates, the US-France low pay gap was 47 percentage points (66 percent versus 19 percent); for female workers with some college, 57 percent were paid low wages in the US compared to only 7 percent in France. The gaps are only slightly smaller for male workers.

3. The Difference Between the US Minimum Wage and the French SMIC

Although the magnitudes of these extraordinary differences in the incidence of low pay may be surprising, there is little controversy over the cause: the failure of the US minimum wage to cover more than a very small share of US workers (some 4-5 percent), compared to the strong commitment of the French state to reduce the incidence of low pay via steady increases in the value of the SMIC.

The SMIC was established in 1970 to replace a much weaker minimum wage law, political support for which reflected the recognition that the French collective bargaining system was incapable of
protecting workers from the payment of unacceptably low wages. The 1970 law relied on three mechanisms for establishing a SMIC that have progressively eliminated the payment of low wages: automatic adjustments for changes in the cost of living; automatic increases reflecting a portion of the inflation-adjusted increase in average blue-collar pay; and the “coup de pouce” – discretionary power by the government to set the SMIC at higher levels (Gautie, 2010, pp. 150-51).

In the US, by contrast, there have been no automatic mechanisms designed to maintain, much less increase, the value of the minimum wage. Changes in the Federal minimum wage take place only by congressional vote. The consequences of these different approaches to setting minimum wage levels are reported in Figures 5a and 5b. In 2010, the French SMIC was over 40 percent higher than the US Federal minimum wage – a gap of about $3. As Figure 5a shows, adjusting the Federal minimum for the higher minimum wages legislated by individual States makes little difference for the overall trend and gap with France; the main effect was to reduce the decline in the value of the Federal minimum between 1999 and 2008. Figure 5b shows the minimum wage relative to the median wage in each country (known as the “Kaitz Index”). While the US Kaitz index fell from 50-55% in the 1960s to below 35 percent between 2000 and 2008, the French index shows a strong and steady increase, from about 34 percent in the mid-1960s to around 60 percent in the late 2000s.

This long commitment by France to an increasing absolute and relative value of the minimum wage has sharply reduced the incidence of low pay. Figure 6 plots the value of the SMIC and the French low-wage threshold (two-thirds of the median full-time wage) in inflation-adjusted Euros. The SMIC shows a substantial and fairly steady increase, from 5.4 euros in 1993 to just under 7 euros in 2010, whereas the threshold remained between 6.50 and 6.75 in the 2000s. Remarkably, this figure shows that since 2005 the SMIC would – if universally applied and enforced – effectively outlaw the payment of low wages. The 3rd trend line shown in Figure 6 presents our calculation of the average wage for those earning below the low-wage threshold.

The relationship between the low-wage threshold and the minimum wage in the US has been entirely different. As Figure 7 reports, the low-pay threshold fluctuated around $11 (2010 dollars) between 1979 and 1997, rose to $12 in 2002 and stayed at that level until the onset of the economic crisis in 2007 (the subsequent increase probably reflects the disproportionate job loss in the bottom half of the distribution). This figure shows that the Federal minimum wage has been set at a much lower level than the low-pay threshold – even after the existence of higher minimum wages in some states have been accounted for (the “effective minimum wage”). This gap has steadily widened: the federal minimum wage was 77 percent of the low wage threshold in 1979 and just 50 percent in 2007. As a result, the hourly wage of large numbers of low-wage workers in the US have remained far below the low pay threshold. Figure 7 shows that the average wage paid to low-wage workers has ranged between $8 and just over $9 since 1979.

Because the SMIC is set so high relative to the median wage (Figure 5b), it affects a large share of the French workforce. French workers with a base hourly wage set by the SMIC accounted for 13-16 percent of total employment in the mid-2000s, about three times the share of minimum wage workers in the US (Gautie, 2010, p. 152). It should also be noted that not only has this base SMIC
become far greater than the US minimum wage, but many SMIC base wage workers actually have much higher earnings due to a variety of premiums and bonuses. “As a result, the effective (total) hourly compensation of many minimum wage earners is well above the hourly SMIC. For instance, in 2002 the hourly earnings of 26 percent of minimum wage earners were at least 30 percent above the hourly minimum wage” (Gautie, 2010, p. 152).

4. A Rapidly Rising SMIC and French Employment Outcomes

The French minimum wage has compressed the bottom of the wage distribution and substantially raised the hourly pay of minimum wage workers. If these pay increases also raised labor costs per hour similarly, the conventional textbook model would predict corresponding strong declines in employer demand for labor. Under these circumstances, the consequences should be declining employment, rising unemployment, and perhaps rising nonemployment as well (as discouraged workers drop out of the labor force). These negative effects should disproportionately affect young workers entering the labor market or with little seniority.

Concerned with the possible impact of rising labor costs caused by increases in the SMIC on employment, the government has reduced social contributions (like the US social security tax) since the mid-1990s for all low-wage workers, defined as those with wages up to 1.3 times the SMIC. Still, according to the OECD (Immervoll, 2007, figure 2), the minimum labor cost for full-time minimum wage workers in 2005 was the 3rd highest among 21 OECD countries, at about $11.40 (in 2005 US dollars at market exchange rates), up from about $10.60 in 2000; the comparable figure for the US in 2005 was about $5.60, down from about $6.25 in 2000.

In this section, we review the relevant theoretical literature on minimum wage effects and then turn to recent trends in a variety of aggregate employment performance indicators for France.

4.1 Minimum Wage Employment Effects: Theory-Driven Facts?

“The French, it seems, would rather live with nearly 25 percent youth unemployment than see the minimum wage or rigid job protection for incumbent workers eroded. And many are unwilling to see any connection between the two” (Taylor, 2012).

Underlying the orthodox prediction of the necessity of negative employment effects is a vision of competitive labor markets and perfect information in which employers pay a wage equal to the value of what the worker produces. With the real world imagined in this way, interventions that impose a legal minimum above market clearing levels must decrease employment and increase unemployment.13

A good example of how deeply rooted this conventional thinking is in economic policy analysis can be found in the OECD’s bi-annual Country Survey reports for France. The 2005 report (OECD, 2005, p. 34) asserts without any supporting evidence that it “is clear that the SMIC is high relative to the potential productivity of a significant part of the workforce.” The implication is that unemployment rates for young workers can be reduced only by reducing labor costs at the level of the SMIC.
Indeed, this claim is made explicit in the next issue of the *Survey of France* (OECD, 2007, p. 117): “given the limited fiscal room for maneuver, the only way to further lower low-skilled unemployment is likely to be to reduce the SMIC relative to the average wage, e.g., by blocking any real increase in the SMIC in the coming years.” Similar assertions can be found in more recent *surveys* (OECD, 2009; OECD, 2011b) and in the OECD’s annual *Going for Growth* volumes.14

Remarkably, the OECD’s own annual *Employment Outlook*, which is aimed at a more professional audience than the country surveys, challenges this minimum wage orthodoxy. The OECD’s examination of the economic effects of the minimum wage in their 1998 chapter underscores the naïve quality of the simple textbook neoclassical model and emphasizes the potential positive employment effects that can be generated by more realistic (monopsony, efficiency wage, and endogenous growth) models.

These theoretical considerations have several implications for the empirical study of the employment effects of minimum wages. First, it is important to allow for the possibility of both positive and negative employment responses. Second, there may be a certain degree of non-linearity in employment responses, with positive effects occurring for minimum wages below a certain level, but job losses occurring thereafter. Third, disemployment effects may vary according to a worker’s age, skills, industry and region of employment. In particular, the possibilities of substitution between workers of different skill levels imply that aggregate job losses may be more muted than for specific groups of workers. Finally, it is important to distinguish between short-run and long-run employment effects (OECD, 1998, p. 44).

Similarly, an important study by Dolado et al. (1996, p. 330) comes to a similar conclusion: “The key point is that economic *theory* has no unambiguous prediction about the employment effects of minimum wages. Empirical research is required” (see also Kaufman, 2010).

### 4.2 Recent Empirical Evidence on Minimum Wage Effects

In fact, on balance the empirical evidence does not offer compelling support for strong employment effects of minimum wages. The strongest results are from early studies that found modest negative effects for less-skilled teenagers (OECD, 1998, pp. 47-8). As the OECD (2006, p. 86) put it in their 2006 *Employment Outlook* assessment, “pinning down the size of employment losses that result from minimum wages has proven to be difficult and there is considerable uncertainty concerning how many jobs might be lost due to minimum wages set at the levels actually observed in different countries.”15 In their survey of the evidence for Europe, the International Labour Organization (ILO) concluded that: “While the minimum wage – under the condition that it is adjusted in a progressive and regular manner – has not been found to adversely affect employment”, it has unquestionably reduced the incidence of low-pay and wage inequality (Vaughan-Whitehead, 2010, pp. 26-29). Leading studies on the US and UK have come to similar conclusions.16

If there are meaningful minimum wage employment effects, they should be readily apparent in post-1970 France, but even the French evidence is mixed. According to Dolado et al. (1996), “So low-wage regions did relatively well in the period 1967-85, a period when minimum wages were
raised very dramatically.... In conclusion, French evidence suggests that the substantial rise in the SMIC to the mid-1980s had no adverse effect on employment” (p.343).

At the same time, an unpublished study by Abowd, Kramarz, Margolis, and Philippon (2006) concludes that, “movements in the American real minimum wage are associated with no employment effects, whereas movements in the cost of French minimum wage workers are associated with very strong negative employment effects” (p. 19). This study asks “What is the effect of changes in the real minimum wage on an individual’s employment status?” If the Abowd et al. results stand up for France, our question is: do these immediate effects of minimum wage increases on the employment probabilities of individuals paid at the old minimum wage have consequential effects on employment and unemployment rates?

4.3 The SMIC and Aggregate French Employment Performance

Does the timing of the trends in key aggregate employment indicators for France lend support to the conventional view that a high and rising minimum wage has large, or at least observable, negative impacts? Figures 8 and 9 plot the standard unemployment rates for 15-19 and 20-24 year olds, separately for males and females, from 1990 to 2010. As these figures indicate, over this period the ratio of the SMIC to the median full-time wage rose from 51% to 60%, the highest among OECD countries. At the same time, real labor cost in both absolute terms (US dollars) and relative to the average earner, increased between 2000 and 2005, even though France was already among the highest in the OECD on both indicators (Immervoll, 2007, figure 2). Despite these high and rising labor costs, figures 8 and 9 shows that the male and female unemployment rates for these two age groups (15-19 and 20-24) were lower in 2008 (before the current global crisis hit France) than in 2000, and about the same (for males) or lower (for females) than in the early 1990s.

It is true that by the standard measure of unemployment – the unemployed share of the labor force - youth unemployment remains very high by international standards. But Figures 10 and 11 show that a very different story is told by another unemployment indicator: the unemployment-to-population rate (UPOP). Figure 10 reports that the French UPOP for teens has remained quite stable since 1989, fluctuating between 3 and 5 percent and well below the US rate. Similarly, Figure 11 reports that the UPOP rate for French 15-24 year olds has ranged between 4-10 percent since the late 1980s, closely tracking the US rate (except in the mid-1990s). In sum, the unemployed share of the labor force shows long term stability at levels much below the US for teens, and at about the same levels as the US for the larger 15-24 age group.

Why is the UPOP rate an appropriate measure of youth unemployment? The answer is that employment rates for young people enrolled in school will depend not just on job opportunities, but also on school hours and social norms regarding working while in school. In two otherwise identical locations, if location A strongly discourages employment of young people while they are enrolled in school (via school hours, homework time, jobs designed for part-time unskilled workers) while location B encourages and facilitates student employment, the denominator of the standard unemployment indicator (the labor force, equal to the employed plus the unemployed)
will be smaller in location A, automatically raising its unemployment rate compared to location B, even though the number of unemployed and number of those in the working age population are the same. In the hypothetical example below, assume a neighborhood in NYC (US) and Paris (France) have the same number of 15-24 year olds and the same number unemployed (without a job but actively looking). But in NYC, student employment is socially acceptable and facilitated by the school schedule, but in Paris it is not. The table shows how this scenario will produce a much higher French conventional unemployment rate (25% compared to 16.7%) but an identical unemployment-to-population rate (10%).

Calculating the Unemployment Rate:
A Measure of the Labor Force or the Population?
(an illustration that assumes identical unemployment levels)

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<th>US</th>
<th>France</th>
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<tr>
<td>Population (POP)</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Labor force (LF)</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Employed</td>
<td>50</td>
<td>30</td>
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<tr>
<td>Unemployed (U)</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Not in the Labor Force</td>
<td>40</td>
<td>60</td>
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<tr>
<td>U/LF</td>
<td>16.7%</td>
<td>25%</td>
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<td>U/POP</td>
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As it turns out, French teens almost never work while enrolled in high school and rarely even when enrolled in college. For example, while similar shares of 15 to 19 year olds in France and the United States were enrolled in school in 2003 (83.8 and 82.9 percent), the employment rates of enrolled teens were strikingly different. In the U.S., 23.1 percent of enrolled teens held jobs compared to only 1.8 percent of French teens (Howell and Okatenko, 2010, p. 340). It might be argued that the difference is explained mainly by the lack of jobs available to French teens, and this is true – except that the reason is mainly that there is no teen labor supply for reasons noted above. It is notable that the employed share of enrolled students in France has been remarkably stable over the last four decades, spanning periods of very low and high overall unemployment, which suggests that these low employment rates for enrolled students are not just a reflection of the lack of job opportunities. In sum, cross-country comparisons of youth unemployment should either use the unemployment-to-population rate or exclude students from the sample.
Turning to employment rates, this conventional indicator of employment performance also offers no support for the orthodox prediction that a high and rapidly rising SMIC has priced young less-educated workers out of the labor market. Figure 12 reports that the employment-to-population (EPOP) rate for young (20-34 year old) male workers with just a high school degree rose fairly steadily from about 55 percent in the mid-1990s to over 68 percent just before the 2008 global crisis. Young, less-educated female workers also show a substantial increase in employment, from about 51 to 56-58 percent over this period.

Finally, if the rising value and cost of the SMIC is pricing young, less-educated workers out of the labor force, their employment rate should not be falling just in absolute terms, but also falling relative to the employment rates of prime-age workers. But here too there is no supportive evidence for the conventional wisdom. For males, the ratio of the EPOP for young less-educated workers to all prime-age prime-age workers increased from 60.3 percent in 1994 to 78.1 percent in 2007. For women, this ratio fell slightly (from 76.6 to 75 percent), not due to a decline in the EPOP for young less-educated female workers (which increased from 51 to 57 percent), but because of the large increase in employment for prime-age females (from 66.6 to 76 percent).

In sum, we find no evidence that the rising value of the SMIC has reduced either absolute or relative employment performance of young, less-educated workers. The conventional indicators shown in figures 8-12 fail to show the predicted effects employment effects since the mid-1990s: standard unemployment rates have fallen; unemployment-to-population rates have been stable at very low levels, and are far lower for French teens and have closely tracked the US rates for 15-24 year olds; employment rates have risen; and the ratio of the employment rates of young less-educated workers to prime-age workers has increased substantially for male workers (and fallen only slightly for female workers because of a huge increase in prime-age female employment rates). Of course, these indicators of employment performance might have been even more impressive but for the large increases in the SMIC. But at a minimum, this evidence shows that the French effectively eliminated low-wage work while maintaining or improving aggregate employment performance for their most vulnerable workers.

5. Adequate Employment Rates

We now turn to a look at a more comprehensive indicator of employment performance, one designed to take some account the quality of employment, measured in terms of adequacy of pay and hours of work (Howell and Okatenko, 2010). The “adequate employment rate” (AER) measures the share of the working age population employed at jobs that pay more than the low-wage threshold and are not involuntarily working only part-time. Figure 13 shows the AER for 20-34 year old French and US workers (males and females) with only a high school degree. By this measure, the French labor market has been by far the better performer for both groups.

The AER for young US men with just a high school degree fell drastically between 1979 and 2007, from 74 percent to just 48 percent. It has since fallen further, to 34 percent in 2010. In contrast, the comparable French male AER rose from 43 percent (1994-97) to 60 percent in 2007, before falling
during the Great Recession to 55 percent. At the 2007 peak, the French labor market outperformed the US for young less-educated men by 12 percentage points (60 versus 48 percent); two years later, this gap had increased to 19 percentage points (55 versus 36 percent).

Figure 13 also shows that the AER for young high school educated US women remained nearly unchanged between 1979 and 2001 at around 30 percent but has declined steadily since to 24 percent in 2007 and 18 percent in 2010. The French female AER, on the other hand, increased from 36 percent in 1995-6 to 44 percent in 2007 before falling slightly in the recession to 41 percent. So for young women, the labor market performance gap in France's favor rose from 6 percentage points in the mid-1990s to 20 points in 2007.

6. Conclusion

Since the late 1960s, the French electorate has demanded labor market policies designed to increase earnings and reduce inequality at the bottom of the wage distribution. Chief among these policies is the national minimum wage – the “SMIC”. The value of the SMIC has risen steadily both in buying power and relative to the median wage. In stark contrast, low-wage workers in the US have had neither an effective national minimum wage nor collective bargaining mechanisms to push the wage floor anywhere close to the low-pay threshold (conventionally defined as 2/3 of the median full-time wage). Since the early 2000s minimum wage workers in France have earned over 40 percent more than their counterparts in the US. (figure 5a) and are paid about 60 percent of the median wage compared to just 33-37 percent in for US minimum wage workers.

This striking difference in minimum wage regimes has been the main reason the incidence of low pay in France has fallen to around 10 percent of wage and salary employment while the US remains locked into a low-pay rate of 30 percent (figure 2). Of perhaps greater significance is the large and still expanding gap between French and US low-pay incidence for young (20-34) less-educated (high school only) workers in the decade between 1997 and 2007: the low-pay share for young less-educated US men rose by 32 percentage points, from 17 to 49 percent, but fell for comparable French men by 9 points, from 20 to 11 percent; for young less-educated women, the US low-pay rate rose by 20 points, from 46 to 66 percent; for French women, it fell by 7 points, from 25 to 18 percent (see Figure 3).

In conventional thinking, a high minimum wage and strict employment protection regulations have been disastrous for employment performance, whether measured by unemployment or employment rates. Concerned with these potential employment effects, the French government has greatly reduced the “social contributions” (social security taxes) paid by employers for workers whose wages are below 1.3 times the SMIC. Despite the value of these low-wage subsidies to French employers, labor costs at the level of the SMIC have remained among the highest in the rich world, and more than twice that incurred by US employers for minimum wage workers (Immervoll, 2007).

Yet our results show that standard aggregate employment indicators for young, less-educated workers have been stable or improved since the mid-1990s, both absolutely and relatively to comparable US rates. For example, the employment rate for 20-34 year old French men with just a
high school degree increased fairly steadily from 54 percent in 1995 to over 68 percent in 2007 (Figure 12); there is no evidence of a long-term, secular increase in the unemployment rates for teens or 20-24 year olds (Figures 8 and 9), and unemployment-to-population rates for 15-24 year old US and French workers have tracked one another closely since the early 1990s (Figure 11).

There can be little doubt that the rising value of the SMIC has increased the overall quality of French employment. The adequate employment rate (section 5; see Howell and Okatenko, 2010) measures the share of the workforce paid adequate wages and not working involuntarily part-time. By this measure, French labor market performance is unequivocally superior to that of the US, and its superiority has been growing over time. For example, The AER for young US men with just a high school degree fell calamitously from 74 percent in 1979 to just 48 percent in 2007, while the young French male AER rose from 43 percent (1994-97) to 60 percent in 2007 (Figure 13).

Economists and policy makers have long preferred supply-side solutions to low pay, believing that it is possible to educate and train our way out of bad jobs. But the last five decades of experience shows no support for this path: as the evidence just reported demonstrates, the incidence of low-pay incidence for young workers has steadily increased despite rising educational attainment. And this will continue: according to the US Bureau of Labor Statistics, most employment growth over the coming decade will be in what are now very low skill and poorly paid jobs: four of the top six jobs with the largest projected growth between 2010 and 2020 paid a median annual wage of under $21,000 in 2010.18

A far more promising path is to take a lesson from France and directly increase the quality of jobs in the bottom half of the wage distribution, a goal that cannot realistically be achieved within the next decade without a large increase in the Federal minimum wage, preferably in conjunction with a more generous earned income tax credit (Wicks-Lim and Pollin, 2012). Indeed, a meaningful minimum wage would take pressure off redistribution via the EITC. According to the Economic Policy Institute, raising the federal minimum wage to $9.80 (which would still be far below the low-wage threshold and far below the equivalent value of the French minimum wage) would increase wages for some 28 million workers, and increase aggregate wage incomes by $40 billion (Hall and Cooper, 2012).

If the U.S. were to raise the federal minimum wage sufficiently to substantially reduce the number of low paid jobs without harming employment performance, as France appears to have done, the payoff in higher wages for the bottom one-third of the workforce could be enormous. We should take a lesson from the French and raise the standard of living of American working families by making work pay.
References


### Table 1: Incidence of Low Wages by Age-Sex-Education Group in the US, 1979-2010*

<table>
<thead>
<tr>
<th></th>
<th>16-64</th>
<th>20-34</th>
<th>25-54</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>29%</td>
<td>28%</td>
<td>18%</td>
</tr>
<tr>
<td>1989</td>
<td>31%</td>
<td>34%</td>
<td>28%</td>
</tr>
<tr>
<td>1999</td>
<td>29%</td>
<td>34%</td>
<td>29%</td>
</tr>
<tr>
<td>2007</td>
<td>29%</td>
<td>38%</td>
<td>34%</td>
</tr>
<tr>
<td>2010</td>
<td>32%</td>
<td>43%</td>
<td>40%</td>
</tr>
</tbody>
</table>

*For example, the 18% figure in column 3 for 1979 should read: “18% of all young workers were paid low wages in 1979.”

Source: Authors’ calculations using CPS Outgoing Rotation Group Uniform Extracts prepared by CEPR.

### Table 2: Distribution of Low Wage Workers by Age-Sex-Education Group in the US, 1979-2010*

<table>
<thead>
<tr>
<th></th>
<th>20-34</th>
<th>25-54</th>
</tr>
</thead>
<tbody>
<tr>
<td>1979</td>
<td>42%</td>
<td>15%</td>
</tr>
<tr>
<td>1989</td>
<td>47%</td>
<td>21%</td>
</tr>
<tr>
<td>1999</td>
<td>41%</td>
<td>18%</td>
</tr>
<tr>
<td>2007</td>
<td>44%</td>
<td>21%</td>
</tr>
<tr>
<td>2010</td>
<td>45%</td>
<td>22%</td>
</tr>
</tbody>
</table>

* For example, 27% in column 3 for 1979 should read: “27% of all low-wage workers (ages 16-64) were young females in 1979.”

Source: Authors’ calculations using CPS Outgoing Rotation Group Uniform Extracts prepared by CEPR.
Figure 1: The Low-Wage Share of U.S. Employment by Age Group, 1979-2010

Source: Authors’ calculations of CPS Outgoing Rotation Group Uniform Extracts, downloaded from the Center for Economic and Policy Research (CEPR).

Figure 2: Incidence of Low Wages for U.S. (1979-2010) and French (1993-2010) Workers

Source: Authors’ calculations for US based on CPS Outgoing Rotation Group Uniform Extracts prepared by CEPR and for France based on French Labour Force Survey [Emploi (en continu) version FPR (1990-2002, 2003-2009, and 2010), produced by INSEE, distributed by Centre Maurice Halbwachs]. Note: French LFS underwent a major re-design in 2003 when the annual survey usually conducted in March was replaced with a continuous one providing quarterly results. Caution is required when comparing trends before and after 2003.
Figure 3: Incidence of Low Wages for Male and Female U.S. (1979-2010) and French (1993-2010) Workers Ages 20-34 with only a High School Education

Source: Authors’ calculations for US based on CPS Outgoing Rotation Group Uniform Extracts prepared by CEPR and for France based on French Labour Force Survey [Emploi (en continu) version FPR (1990-2002, 2003-2009, and 2010), produced by INSEE, distributed by Centre Maurice Halbwachs]. Note: French LFS underwent a major re-design in 2003 when the annual survey usually conducted in March was replaced with a continuous one providing quarterly results. Caution is required when comparing trends before and after 2003.

Figure 4: Low Wage Shares for Educational Groups of Ages 20-34 for US and France in 2010

Figure 5a: Purchasing Power of the U.S. and French Minimum Wage, 1960-2010

Source: Authors’ calculations using nominal minimum wage data series denominated in national currency and purchasing power parity series from OECD.stat and values are deflated using the CPI-W from the BLS. State minimum wages are taken from Autor, Manning and Smith (2010) the Current Employment Statistics Survey is the source for state employment levels. The effective minimum wage is calculated using state-specific employment as weights.

Figure 5b: Relative Values of the Minimum Wage (the “Kaitz Index”) for France and U.S., 1960-2009

Source: Authors’ calculations based on data from OECD.stat
Figure 6: The French Low-Wage Threshold, Low-Wage Mean, and the Minimum Wage (SMIC), 1993-2010

Source: Authors’ calculations using French Labor Force Survey (Enquête Emploi) [Emploi (en continu) version FPR (1990-2002, 2003-2009, and 2010), produced by INSEE, distributed by Centre Maurice Halbwachs]. Note: French LFS underwent a major re-design in 2003 when the annual survey usually conducted in March was replaced with a continuous one providing quarterly results. Caution is required when comparing trends before and after 2003.

The minimum wage is provided by the National Institute of Statistics and Economic Studies (INSEE) and is deflated with the consumer price index from the International Monetary Fund (World Economic Outlook Database, September 2011).

Figure 7: The US Low-Wage Threshold, Low-Wage Mean, and Federal Minimum Wage, 1979-2010

Source: Authors’ calculations using CPS Outgoing Rotation Group Uniform Extracts prepared by CEPR. The federal minimum wage is taken from the Department of Labor (http://www.dol.gov/whd/minwage/chart.htm). State minimum wages are from Autor, Manning and Smith (2010). Minimum wages are deflated with the CPI-W from the BLS. The Current Employment Statistics Survey is the source for state employment levels. The effective minimum wage is calculated using state-specific employment as weights.
Figure 8: The French Minimum Wage (Kaitz ratio) and Unemployment Rates for Male and Female French Workers Ages 15-19, 1990-2010

Source: The Minimum Wage/ Median of full-time wages are from OECD.stat; the age-specific unemployment rates are the authors’ calculations based on data from OECD.stat.

Figure 9: The French Minimum Wage (Kaitz ratio) and Unemployment Rates for Male and Female French Workers Ages 20-24, 1990-2010

Source: The Minimum Wage/ Median of full-time wages are from OECD.stat; the age-specific unemployment rates are authors’ calculations based on data from OECD.stat.
Figure 10: Unemployment-to-Population Ratios for Male and Female Workers Ages 15-19, France and the US, 1983-2010

Source: Authors’ calculations based on data from OECD.stat.

Figure 11: Unemployment to Labor Force and Unemployment to Population Indicators for France and the U.S., Ages 15-24, 1983-2010

Source: Authors’ calculations based on OECD.stat.
Figure 12: The French Minimum Wage (Kaitz ratio) and the Employment to Population ratio for Male and Female French Workers with only a High School Education Ages 20-34, 1993-2010

Source: The Minimum Wage/ Median of full-time wages are from OECD.stat; the age, gender and education-specific employment-to-population ratios are authors' calculations based on French Labour Force Survey [Emploi (en continu) version FPR (1990-2002, 2003-2009, and 2010), produced by INSEE, distributed by Centre Maurice Halbwachs]. Note: French LFS underwent a major re-design in 2003 when the annual survey usually conducted in March was replaced with a continuous one providing quarterly results. Caution is required when comparing trends before and after 2003.

Figure 13: Adequate Employment Rates* for Male and Female, French and U.S. Workers with only a High School Education Ages 20-34, 1979-2010 (US) and 1993-2010 (France)

*Employed but not earning low wages (<2/3 of the full-time median) and not working involuntarily part-time as a share of the civilian population (ages 20-34).

Source: Authors' calculations for US based on CPS Outgoing Rotation Group Uniform Extracts prepared by CEPR and for France based on French Labour Force Survey [Emploi (en continu) version FPR (1990-2002, 2003-2009, and 2010), produced by INSEE, distributed by Centre Maurice Halbwachs]. Note: French LFS underwent a major re-design in 2003 when the annual survey usually conducted in March was replaced with a continuous one providing quarterly results. Caution is required when comparing trends before and after 2003.
The real wage increased to $18.63 in 2009, but this was largely due to composition effects—workers paid low wages were more likely to be unemployed during the Great Recession of 2007-09.


As Stiglitz (2012, p. 24) puts it: “It is not that the American economic engine has lost its ability to produce. It is that the way the American economic engine has been run has given the benefits of that growth to an increasingly small sliver at the top – and even taken away some of what had previously gone to the bottom”.

Following the Organization for Economic Cooperation and Development (OECD), we define the low-pay threshold as less than 2/3 of the median full-time wage. Comparing 20 rich countries using a low-wage threshold of two-thirds of the overall median wage for 2009, John Schmitt (2011, figure 1) reports that the US low-wage share (24.8%) was higher than all others except Korea (25.7%). While Germany, Canada and the UK reported rates just over 20 percent, France came in at 11.1 percent, Norway at 8 percent, and Belgium at 4 percent.

Indeed, even Robert Solow (2008, p. 11) in his introduction to the Russell Sage volume Low-Wage Work in France asserts that “The SMIC has been set at a fairly high level, and one consequence of this has been the disappearance of some unskilled jobs, to be replaced by unemployment (especially long-term unemployment), participation in active labor market policies, and withdrawal from the labor force.” According to The Economist (2005, Nov. 12, p. 11), “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.” More generally, on the role of labor market institutions and employment performance, see Layard, Nickell and Jackman (2005) for a mainstream text. For an alternative theoretical perspective, see Manning (2011). For a perspective on the empirical evidence, see Howell (2005) and Howell et al. (2007).

Measured by the 90/10 ratio, the OECD (2011c, Figure 1.2) reports that for 23 countries, with the exception of Poland and Hungary, US wage inequality increased the fastest from 1979 to 2007. Apart from Spain, only France showed a decline. The difference between the US and France was equally large for household income inequality. Whether measured by cash disposable income or as “extended income” (disposable income adjusted by the money value of services in education, health care, social housing, and the care of children and the elderly), household income inequality was far higher for the US than France: of the 27 countries examined, only Mexico’s was higher than the US, while France was nearly as low as Norway and Denmark and only modestly above the lowest, Sweden (OECD, 2011c, figure 11, p. 39). Between the mid-1980s and the late 2000s, household incomes in the bottom decile rose three times faster in France than the US (1.6 vs .5 percent) and grew less rapidly in the top decile (1.6 vs 1.9 percent) (Ibid, table 1, p. 23).
We use ages 25-54 because it is the convention for 'prime-age' workers. With limited space in this chapter, we chose to focus on adult workers most likely to be heads-of-households and not marginally attached to the labor force, so we excluded both teens (16-19) and older workers (65+). This also facilitates comparisons with France, whose institutions (schools, retirement policies) are designed to strongly discourage employment for workers in either of these age groups. Since the conventionally measured prime-age group does not include 20-24 year olds, and because 25-34 year olds can reasonably be considered ‘young’ workers, we created another category for those 20-34 (and thus overlapping with the conventional 25-54 category).

It should be noted that the French wage figures must be calculated by dividing reported monthly earnings by estimated hours of work, while the US Current Population Survey asks respondents directly for their hourly wage (in the 'outgoing rotation group' surveys).

"... (S)ince the beginning of the 1970s, via SMIC increases, the law and the government have become the driving forces in the growth of low wages in France, whereas the role of collective agreements has almost disappeared" (Caroli and Gautie, 2008, p. 46).

Part of the explanation for the rapid rise in the SMIC between 1997 and 2005 reflects the commitment by the government to keep the weekly earnings of minimum wage workers from falling (via the "coup de pouce" mechanism) with the reduction in work hours from 39 to 35 hours per week mandated by the Aubry laws I and II (Caroli and Gautie, 2008, p. 53).

That there remain workers tabulated as paid low wages (Figure 2) is explained in part by exemptions for teens (a lower minimum applies to 16-17 year olds) and apprentices, as well as measurement error (inaccurately reported hours and wages by survey respondents) and systematic violations of the law by employers who do not pay for overtime, a problem that appears most commonly for immigrant workers in small hotels and retail stores. "These de facto violations of minimum wage regulations are facilitated by the low number of labour inspectors in charge of monitoring compliance, and the weakness – and often absence – of trade unions in small and medium-sized firms, and therefore the absence of a countervailing power to ensure that the regulations are respected (Gautie, 2010, p. 151)."

The Institut economique Molinari puts it perfectly clearly. "Simply through its existence, the minimum wage creates unemployment. This has to do with the very nature of labour contracts. A labour contract provides for an association between two persons who each find an advantage in it. An employer can hire people only if the product of their work, in the employer's eyes, is worth more than what these people must be paid. By imposing a minimum wage, lawmakers close off access to employment for any workers if what they produce is worth less than the value of the minimum wage, payroll taxes included. This exclusion works to the detriment of the least productive workers (IEM, June 2008, p. 2)."

Again, with not so much as a single empirical reference, France is grouped with Greece, Indonesia, Slovenia and Turkey as countries that "should limit the increase in their minimum wages" to increase “the jobs available for young workers and the low-skilled (OECD, 2011a, p. 37)."
A recent highly influential cross-country study by the OECD failed to find any impact of minimum wages on the aggregate unemployment rate (Bassanini and Duval, 2006).

Examining effects using differences across US state borders, Dube et al (2010a, p. 962) conclude, “These estimates suggest no detectable employment losses from the kind of minimum wage increases we have seen in the U.S.” (p. 962). Further analysis fails to find effects even for teens: “In this paper we show that the absence of a disemployment effect generalizes beyond the restaurant sector, and holds also for teenage workers...” (Dube et al., 2010b, p. 28). Similarly, the UK’s Low Pay Commission also found no significant negative effect of the minimum wage on employment, which was introduced in 1999 (Vaughan-Whitehead, 2010, p. 26).

“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” (Howell and Okatenko, 2010, p. 340).

http://www.bls.gov/emp/ep_table_103.htm