NEW LABOR MARKET INDICATORS
TAKING JOB QUALITY SERIOUSLY

ISSUE 1

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We judge the performance of our nation’s labor markets almost entirely by reference to the unemployment rate, a measure of the adequacy of the number of jobs available for American workers. But changes in the quality of these job opportunities also matter a great deal for worker and family well-being. A good illustration is provided by the recent Census Bureau’s report that the median pay of both full-time male and female workers fell significantly last year (2004) despite impressive economic growth and a relatively low and declining unemployment rate.

In this first report of the SCEPA Labor Market Indicators (LMI) project, we introduce two new indicators designed to capture both quantity and quality dimensions of labor market performance: the SCEPA Underemployment Rate measures the share of the labor force that is unemployed, paid very low wages, or works involuntarily part-time; the SCEPA Adequate Employment Rate measures the share of the working age population employed at jobs paying above the low-wage threshold and not working involuntarily part-time.

These indicators complement the official government (BLS) unemployment and employment rates, respectively. They are similar in construction except that they apply only to the wage and salary workforce (the self-employed are excluded since, without reliable earnings data, we have no simple way to determine how “good” these jobs are). But because the SCEPA indicators take into account the quality of jobs, they provide an important additional dimension for assessing the state of the labor markets. We have calculated the new indicators back to 1979.

SCEPA will produce reports on a regular basis that will update our measures, assess recent developments, and discuss special topics. For more technical detail, see the attached “An Introduction to the SCEPA Labor Market Indicators Project.”

SCEPA’s new indicators underscore the limitations of relying solely on the unemployment rate to measure labor market performance. While the unemployment rate has fallen impressively over the last two years, wages have been stagnant and the employed share of the working age population is still far below levels reached prior to the recession. Despite an impressive improvement in the 1st quarter of 2005, if the SCEPA Adequate Employment Rate had been at the same level in this most recent quarter as it was for the average of the year 2000, 3.4 million more Americans would hold adequate jobs today.

I. RECENT LABOR MARKET PERFORMANCE

1) THE SCEPA UNDEREMPLOYMENT RATE

Table 1: Unemployment and Underemployment Rates, 2002-2005

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<tr>
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<tbody>
<tr>
<td>BLS Unemployment Rate</td>
<td>5.3%</td>
<td>5.4%</td>
<td>5.8%</td>
</tr>
<tr>
<td>SCEPA Underemployment Rate</td>
<td>34.3%</td>
<td>35.3%</td>
<td>35.5%</td>
</tr>
</tbody>
</table>

As can be seen in table 1, the official unemployment rate of the Bureau of Labor Statistics fell in the first quarter of 2005 from 5.4 percent in the fourth quarter of 2004 to 5.3 percent. The SCEPA Underemployment Rate (SCEPA-UR) also fell in the first quarter of 2005, from 35.3 percent to 34.3 percent.

Chart 1 provides slightly longer quarter-by-quarter perspective. Clearly, both the standard unemployment rate and the SCEPA-UR have edged down over the last two years, but remain well above their pre-recession levels.

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Table 2 breaks out the three components of the SCEPA-UR to provide an indication of what is driving this improvement. These components are the unemployed, wage and salary workers paid low wages (less than 2/3 of the median wage of full-time wage and salary workers1), and all involuntary part-time workers. The Underemployment Rate is the ratio of these underemployed to the wage and salary labor force (the wage/salary employed and the unemployed).

This table shows that the .9 percentage point improvement in the SCEPA-UR was due to a reduction in the wage and salary unemployment rate (from 5.6% to 5.3%) and the low-wage rate (from 28.7% to 27.8%). These welcome improvements were slightly offset by a rise in the involuntary part-time rate (from 1.0% to 1.1%).

These figures suggest that, as measured by the SCEPA-UR, the substantial 1.2 percentage point improvement in labor market performance relative to the rest of the post-recession period (Table 1: 34.3% compared to 35.5%) was due about equally to the decline in unemployment (Table 2: from 6.0% to 5.3%) and the low wage share (Table 2: from 28.4% to 27.8%). But it is important to note that while the decline in unemployment reflects a steady downward trend, the improvement in the low wage share is mainly the result of a large decline in the last quarter. We will have to see whether this substantial decline is a one-quarter anomaly or is part of a longer run trend.

It is also important to recognize that while declining unemployment could be due to greater job opportunities, it could also reflect a decline in labor market participation (perhaps due to discouragement). If the improving unemployment trend indicates underlying employment strength, we should see it in an upward trend in the standard employment rate and the SCEPA Adequate Employment Rate (which will also reflect changes in the low wage share of jobs, as increasing demand strengthens wages). We address this question in the next section.

Table 2: Components of the SCEPA Underemployment Rate2

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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Unemployed share of the labor force</td>
<td>5.3%</td>
<td>5.6%</td>
<td>6.0%</td>
</tr>
<tr>
<td>Low-wage share of the labor force</td>
<td>27.8%</td>
<td>28.7%</td>
<td>28.4%</td>
</tr>
<tr>
<td>Involuntary part time share of the labor force</td>
<td>1.1%</td>
<td>1.0%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

1. The low-wage threshold was $10.67 in the first quarter of 2005. We will focus on trends in alternative low-wage indicators in a future report.
2. These figures are for the wage and salary workforce (they exclude self-employed workers). See Technical Definitions in SCEPA: “An Introduction to the SCEPA Labor Market Indicators.”
Table 3 presents the standard employment rate and the new SCEPA-AER, which measures the share of the working age population employed at wages above 2/3 of the median wage of full-time wage and salary workers and not working involuntarily part-time.

While the standard employment rate in the first quarter was actually slightly worse than both the previous quarter and the previous 3-year (post-recession) average, our new adequate jobs indicator shows a .6 percentage point improvement in the first quarter, rising from 41.7 percent to 42.3 percent. This reflects the substantial improvement (decline) in the low wage share in the first quarter noted above.

Chart 2 shows that the SCEPA-AER remains well below its high levels in the early 2000s. This reflects both a relatively low level of adequate jobs and reduced participation in the job market on the part of working age Americans.

If the Adequate Employment Rate had been at the same level as it was during the year 2000, 3.4 million more Americans would hold adequate wage and salary jobs today. If we move our reference point to exactly four years ago – the first quarter of 2001 - we would have 4.7 million more adequate wage and salary jobs.3

We can speculate about what these results imply about the impressive decline in unemployment identified in the previous section. It seems likely that this evidence of relatively low levels of employment relative to the working age population, together with wage stagnation (for which there is ample evidence), reflects discouragement over the current quality of job opportunities. This could help explain the apparently impressive decline in unemployment documented in the previous section: rather than look for jobs, some lower skill workers (e.g., those living in households with others who are employed) have dropped out of the labor market. This may help explain why the number of adequate jobs is currently 3-5 million below what they would be if the labor market was performing at its pre-recession level.

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3 The average Adequate Employment rate over the four quarters of year 2000 was 43.9 percent, 1.6 percentage points higher than the 2005 first quarter rate (42.3%). The 2001 first quarter rate was 44.5%, 2.2 percentage points above the 2005 rate. The size of the civilian working age (16+) population for the first quarter of 2005 was just over 214 million (this excludes the 11 million workers who were self-employed).
As measured by the two labor force measures – the official unemployment rate and the SCEPA Underemployment Rate – the labor market improved in the first quarter of 2005. This reflects a continuation of improving trends in both measures since early 2003. These are decidedly welcome trends. At the same time, there is little evidence of an upward trend in the quality of jobs: the low wage share of the labor force at the end of 2004 was actually slightly higher than the post-recession (2002-4) average. We will have to see whether the improvement last quarter is part of a durable trend. But our workforce measures – the official employment rate and the SCEPA Adequate Employment Rate – have shown much less impressive gains. While the Adequate Employment Rate improved last quarter, neither employment rate shows the upward trend necessary to confirm that the decline in the unemployment rate reflects labor market strength. It has been over three years since the formal end of the recession and the number and quality of jobs remain disappointing.

**II. A LONGER TERM PERSPECTIVE**

This section briefly compares the post-recession performance discussed above with the longer run trends.

**THE SCEPA UNDEREMPLOYMENT RATE**

Despite the strong general downward trend in the standard unemployment rate since the early 1980s, the level of the SCEPA-UR has remained relatively high.

The first quarter of 2005 was 13 quarters after the official end of the last recession. Chart 3 shows vertical lines demarcating the two previous 13 quarter marks. We use these 13-quarter dates and focus on the moving 3-quarter average (to smooth out “noise” in the data) to assess longer-run trends. The official unemployment rate has fallen substantially and steadily: from a 3-quarter average of 7.1 percent around 1986:1 to an average of 6.3 percent around 1994:2 to the current 3-quarter average of 5.4 percent. The comparable figures for the SCEPA-UR also show a downward trend: the 3-quarter average around 1986:1 was 37.7%; the 1994:2 average was 36.8%; and the most recent 3-quarter average was 35.0%.

More generally, as can be seen in Chart 3, the
best performance of the SCEPA-UR over the last quarter century was in late 1990s, when the official unemployment rate was approaching 4 percent. In this strong late ’90s labor market, our measure of underemployment fell below the relatively low rates of late 1970s, before income inequality widened significantly and the growth in average wages had not yet stagnated.

To focus more closely on the causes of the change in the SCEPA-UR, we present the share of low-wage jobs among those employed since 1979. We focus on the moving 3-quarter average to assess longer-run trends. Despite several years of economic expansion in the 2000s, the low wage share is still well above its best historical levels, attained in the late 1990s, early 1990s and early 1980s. But as the trend line at each of the 13-quarter marks show, the current low wage share of wage and salary jobs is below its earlier levels at the same point in the cycle: the 3-quarter average around 1986:1 was 31.1%; the 1994:2 average was 31.1%; and the most recent 3-quarter average was 30.0%. By this measure of labor market performance – the share of jobs paying low wages – the current recovery looks good compared to the two previous recoveries. If this relatively good performance reflects labor market strength, we should be able to confirm it with strong improvements in our two workforce measures – the employment rate and the SCEPA Adequate Employment Rate.

Chart 5 reports the SCEPA-AER since 1979. It shows a steady rise between the early ’80s and early 90s recessions, and another period of impressive improvement in the late 1990s. As the 13-quarter marks show, there has been steady improvement over the last three business cycles: the 3-quarter average around 1986:1 was 39.6%; the 1994:2 average was 40.9%; and the most recent 3-quarter average was 41.8%.

Again, using 3-quarter averages, over this period the standard employment rate rose from 60.5% to 62.4% in 1994:2, and remained the same for the most recent 3-quarters. Thus, the improvement since 1994 in the adequate employment rate has been due to the rising share of adequate jobs – those paying over 2/3 of the median wage of full-time wage and salary workers in which workers are not employed involuntarily part-time.

A closely related measure is the share of all employed wage and salary workers with adequate jobs, which is shown in Chart 6. The adequate jobs share of wage and salary employment in the last few years remains well below levels achieved prior to the last recession and so far show no upward trend. On the other hand, the 13-quarter marks show that
this adequate jobs measure is slightly above that of the 1986 and 1994 shares (by about 1.5 percentage points). This is certainly a positive sign, but what it really indicates requires some further investigation. This may be related to the recent rise in self-employment, which we will explore in a future report.  

CONCLUSIONS

Both the SCEPA Underemployment and Adequate Employment rates show improving trends over the last quarter century, driven by a declining unemployment rate and a rising share of jobs paying of “adequate” jobs – those paying above 2/3 of the median wage of full-time wage and salary workers in which workers are not employed part-time involuntarily. But given the rapid economic growth in recent years and the impressive long-term decline in the standard unemployment rate since the last recession, we would have expected our indicators to show improving trends more recently. The results reported for the last quarter (2005:1) are a positive sign, but we have a long way to go before we come close to the labor market performance achieved just four years ago. At the adequate employment rates achieved in prior to the last recession, American workers would face a labor market with 3-5 million more adequate jobs. The levels these indicators reached in the late 1990s are benchmarks for good performance, and suggest the need for policies that promote much more employment at higher wages.

WHY WE NEED NEW LABOR MARKET INDICATORS

With this first issue, the Schwartz Center for Economic Policy Analysis (SCEPA) introduces a new set of new labor market indicators. These indicators complement the official Bureau of Labor Statistics unemployment and employment rates, and are similar in construction. But because the SCEPA indicators take into account the quality of jobs, they provide an important additional dimension to the state of the labor markets.

The official unemployment rate is useful as one of several indicators of labor market performance, but it is too often used alone as the basis for judging changes in the state of the labor market and for comparisons with other countries. As a measure of those without a job who are actively looking for work, it does not capture those too discouraged to join the labor force in the first place. So, to measure the adequacy of the number of job opportunities, it should at a minimum be used in close conjunction with the

4. The share of the working age population with adequate jobs: workers paid above 2/3 of the median wage of full-time wage and salary workers and not working part-time involuntarily.

5. The sharp rise in self employment since the last recession may have been due mainly to those who otherwise would have been counted as unemployed, discouraged, involuntary part-time, or low wage.
official employment rate – the employed share of the working age population.

But in addition, neither the official unemployment rate nor the official employment rate distinguishes between jobs of different quality. A job paying the minimum wage counts equally in computing these rates as a job paying a six figure annual salary. Nor do the official unemployment and employment rates distinguish between those who work part time voluntarily and those who work part-time only because they cannot find full time work.6

SCEPA’s Underemployment Rate captures several of these quality dimensions. In addition to the traditionally defined unemployed and involuntary part time workers (those who want to work full time work), the SCEPA Underemployment Rate includes workers paid very low wages -- less than two thirds of the median hourly wage for full-time workers. Like the unemployment rate, it is measured as a share of the labor force.

While many “low-wage” thresholds could be argued to be equally reasonable, we ultimately preferred a relative measure (2/3 of the median wage of full-time wage and salary workers) over a quasi-absolute one (the wage that would support a particular number of household members at a particular budget level). An absolute measure depends on the economic/social context, across both regions and time. It was not obvious what that benchmark “household” ought to be, much less what would be an “adequate” level of income for it. In the end, it would have to be based on what would most likely be viewed as a socially acceptable level of material well-being – a relative measure. In the end, we preferred to define a “low wage” in explicitly relative terms, both because relative income is what ultimately defines “adequacy” (see Amartya Sen on this) and to facilitate international comparisons. The 2/3 median wage of full-time wage and salary workers measure is the standard for cross-country comparisons by international research organizations like the Organization for Economic Cooperation and Development.

Using this 2/3 of the median wage of full-time wage and salary workers measure, our low wage threshold for 2004 was $10.43 an hour. By comparison, the poverty line wage for a full-time worker in a three person family is $8.61 an hour (assuming 50 weeks of work a year and 35 hours per week, or 1750 annual hours). We assume that a “low wage” should be understood to be higher than a “poverty wage.”

The SCEPA Underemployment Rate does not include an estimate of discouraged workers.7

SCEPA’s Adequate Employment Rate measures the proportion of the working age population with

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6. The BLS does publish a rate that includes unemployed, involuntary part-time, and discouraged workers. It does not include low paid workers.

7. SCEPA’s Adequate Employment Rate measures the proportion of the working age population with
a job that pays more than two thirds of the wage of a full-time worker and is not involuntarily working part-time. This indicator provides a rough measure of the ability of the labor market to produce decent jobs for its working population. Like the official employment rate, it is measured as a share of the working age population.

SCEPA will produce reports on a regular basis that update our measures, assess recent developments, and discuss special topics.

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TECHNICAL DEFINITIONS AND SOURCES OF DATA

The underemployed (16 and over) include the unemployed, low-wage workers, and those working involuntarily part-time who are not paid low wages. Like the conventional unemployment rate, the SCEPA underemployment rate is calculated as the underemployed as a share of the labor force.

The adequately employed (16 and over) are those employed workers who are not working part time involuntarily and are not paid low wages. Like the conventional employment rate, the SCEPA adequate employment rate is calculated as the adequately employed as a share of the working age civilian population.

Wages are low if they fall below two-thirds of the median hourly wage of all full-time wage and salary workers age 16 and over with hourly wages greater than $1.

Unlike the official unemployment and employment rates, the SCEPA underemployment rate, the SCEPA adequate employment, and the components of each capture wage and salary workers only. The self-employed are excluded from the SCEPA measures because information on the hourly wages of this group are not available in the underlying data.

The data used to compute the SCEPA indicators is from the Center for Economic and Policy Research (CEPR)’s CPS ORG Uniform Data File. The underlying data for the CEPR ORG extracts is the CPS “Annual Earnings File” data from the National Bureau of Economic Research (NBER) from 1979 to 2002. From 2003 on, the underlying data for the CEPR ORG extracts is the monthly CPS Basic files, which are available in the public domain (www.bls.census.gov). CEPR provides the entire program used to produce the CEPR org extracts on the CEPR webpage (www.cepr.net).

Detailed information on the methodology used to compute the SCEPA indicators and the STATA program used to compute them is available from Melissa Mahoney (mahom009@newschool.edu).

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7. We believe that the official discouraged worker estimates are too low and too stable to be believable – as employment drops by millions of workers in slack times, we observe little or no change in the official number of discouraged workers. We think a better estimate can be derived from changes in the labor force participation rate over the business cycle, and will discuss this in a future SCEPA Labor Market Indicators Report.