Participation Dynamics: The More, the Merrier

The labor force participation rate (LFPR) is the ratio of the labor force, employed and unemployed, to the working-age population. Together with the unemployment rate and labor productivity, the LFPR is one of the determinants of per capita GDP. A larger labor force will produce more output. LFPRs vary by age and gender. The demographic structure of a country’s population will influence its level of output; policymakers must understand how their decisions influence labor force participation.

The table reports LFPRs for the United States, Europe, and Japan for 1994 and 2005 and breaks down those rates by age and gender groups. The differences between U.S. labor force participation and those of Europe and Japan shrank over the past decade: All three areas now display participation rates above 70 percent. The gap between male and female participation rates narrowed, especially in Europe, but at a slower rate than in previous decades. U.S. female labor participation stopped growing for the first time since the post-WWII period, but the male/female gap actually narrowed because of a slight reduction in male participation. Differences in childcare subsidies and the tax treatment of second incomes influence cross-country differences and changes in the participation rates of women.

The United States is unusual in that it has high female participation but few subsidies to support that participation.

Youth participation rates kept shrinking between 1994 and 2005, although at a slower rate than in previous decades. This reflects the tendency of young people to remain in school longer. The declining youth LFPR reduces total participation but might indirectly raise productivity if young people become better educated and trained before joining the labor force.

The increase in older workers’ participation is a new development. Increased participation rates for older women outpaced the decline in participation rates for older men, resulting in an overall increase for older workers. International differences in older male participation do not appear to be related to participation of prime-age and young men. However, countries with low overall female participation rates also have low participation rates for older women, suggesting that many of the same factors drive participation for both younger and older women.

The aging of the population in developed countries means that the participation rates of older workers will become even more important in the future. The share of the population aged 65 and over is projected to be 20 percent for the United States and more than 35 percent for Italy, Spain, and Japan by 2050. If the participation rates by age and gender groups were to remain at the 2005 values, the overall LFPR would be sharply lower, as would per capita GDP. For Japan, France, and Germany, the aging of the population could reduce the annual growth rate of per capita GDP by 0.2 to 0.3 percentage points over the next half century. The effect would be even more dramatic for countries that age faster and have lower participation rates for older workers, such as Greece, Italy, and Spain. An increase in the participation rates of older workers can mitigate this effect. Hence, designing policies that encourage older workers to remain in the labor force becomes crucial.

—Riccardo DiCicco

Labor Force Participation Rates (percent)

<table>
<thead>
<tr>
<th></th>
<th>United States</th>
<th>EU-15*</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>76.7</td>
<td>75.4</td>
<td>67.5</td>
</tr>
<tr>
<td>Ages 15-24</td>
<td>66.6</td>
<td>65.9</td>
<td>65.2</td>
</tr>
<tr>
<td>Ages 25-54</td>
<td>82.4</td>
<td>82.6</td>
<td>82.5</td>
</tr>
<tr>
<td>Ages 55-64</td>
<td>58.8</td>
<td>53.9</td>
<td>53.9</td>
</tr>
<tr>
<td>Men</td>
<td>84.3</td>
<td>81.8</td>
<td>78.4</td>
</tr>
<tr>
<td>Women</td>
<td>69.4</td>
<td>69.2</td>
<td>56.5</td>
</tr>
</tbody>
</table>

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Research Department
Federal Reserve Bank of St. Louis
411 Locust St.
St. Louis, MO 63102

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Sincerely,
Christopher J. Neely
Editor, International Economic Trends

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Notes

Euro-Area Data: On January 1, 2001, the euro area was enlarged to include Greece as its 12th member country. Historical euro area series for capacity utilization, the consumer price index, current account balances, earnings, employ- ment, government debt and budget balance, gross domestic product, industrial production, merchandise trade, the producer price index, and unemployment also include Greece. The time series and data are consistent before January 2001. Long-term rates are calculated on the basis of national government bond yields weighted by GDP. Starting in 1999, short-term rates are used for interbank offered rates. Long-term rates are calculated on the basis of national government bond yields weighted by the nominal outstanding amount of government bonds in each maturity band.

The currency exchange rate used in the chart on page 12 is in synthetic units to January 1999. This is calculated by constructing a weighted average of the exchange rates of the euro-area countries, excluding Greece and Luxembourg, against the dollar. The weights are based on GDP data of 1997. See tables for details.

German Data: As a result of reunification, data for all of Germany are now incorporated in the statistical series. The starting points for unified German data are listed below. Care should be exercised when interpreting the data around these break points.

Third quarter: 1990 current account balance, international trade.
First quarter: 1991 consumer price index, GDP, industrial production, output per worker.

Capacity Utilization covers the manufacturing sector for Canada, France, Japan, the United States; the mining sector excluding iron ore mining for Canada and mining and manufacturing for the United States; the metal mining and manufacturing industry for France; and the mining and manufacturing industry for Italy, Spain, and the United Kingdom.

Consumer Price Index is for all items. The current index is based on goods and services consumed by all individuals for Canada, all multi-person households excluding those mainly engaged in agriculture, forestry, and fishing for Japan; all households except pensioners dependent on state pension and high income households for the United Kingdom; and all urban households for the United States. Data for Germany and Italy are adjusted for common trends in all euro area countries.

Real Earnings (seasonally adjusted) are based on hourly earnings in manu- facturing for Canada, Germany, the United States, and the euro area; hourly earnings in manufacturing, mining, and quarrying; and money wages in industry for Italy; monthly earnings in manufacturing for Japan; and weekly earnings in manufacturing for the United Kingdom.

The Endorsement Rate is for all countries except the United States is expressed as units of local currency per U.S. dollar. For the United States the trade-weighted exchange rate, TMX, is used. This is a weighted average of the exchange values of the U.S. dollar relative to the major international currencies—the Canadian dollar, Japanese yen, British pound, Swiss franc, Australian dollar, and Swedish krona. Prior to 1998 it consists of the 15 euro-area countries (with the exception of Greece) are used instead of the euro.

Real Effective Exchange Rate uses normalized unit labor costs in manufactur- ing as the common proxy for the cost of competing for trade in manufactured goods, for all the euro area countries, it is based on disaggregated data for trade among 21 industrial countries in manufactured goods for 2000. For the euro area the weights relate to the trade in manufactures with the euro area countries (with the exception of Greece) are used instead of the euro.

Notes and Cores in Circulation

United Kingdom: After reforming the rules governing bank reserve, the Bank of England discontinued its M0 series in May 2006 because the data were no longer considered a useful measure of monetary conditions and its relevance to the Bank’s objectives as well as its role in the management of the exchange rate and interest rates. The Bank has published the quarterly statistics “Notes and Cores in Circulation” in place of the M0. The Bank of England directly interested parties to “Publication of narrow money stock: the study of the money market returns” in its Autumn 2005 (Quarterly Bulletin (http://www.bankofengland.co.uk/publications/quarterlybulletin/ qbulletin-200503.pdf).
International Economic Trends

**Euro Area**

Real Hourly Earnings and Output per Worker
Percent change from year ago

- Hourly Earnings
- Output per Worker*

* EUROSTAT is currently revising output data. Output per worker data are available only back to 1999.

Labor Force Indicators
Percent change from year ago

- Employment (left scale)
- Unemployment Rate (right scale)

Inflation
Percent change from year ago

- Consumer Price Index
- Producer Price Index

Government Debt and Budget Balance
Percent of GDP, annual data

- Debt (right scale)
- Budget Balance

**United Kingdom**

Notes and Coins in Circulation*
Percent change from year ago

- 2002 2003 2004 2005 2006

* Please see important announcement on the contents page.

Interest Rates
Percent

- 10-Year Government Bonds
- 3-Month Interbank Loans

Exchange Rate and Inflation Differential
Percent

- Foreign/US Inflation Differential (right scale)
- Exchange Rate (left scale)

M4
Percent change from year ago

- 2002 2003 2004 2005 2006

Real Effective Exchange Rate
Index 2000 = 100

- 2002 2003 2004 2005 2006
International Economic Trends

**United Kingdom**

**Real GDP**
Percent change from year ago

**Employment**
Percent change from year ago

**Consumer Price Index**
Percent change from year ago

**Unemployment Rate**
Percent

**Real Weekly Earnings**
Percent change from year ago

**Current Account Balance**
Percent of GDP

**Euro Area**

**International Trade - Goods**
Percent of GDP

**Real Effective Exchange Rate**
Index 2000 = 100

**Monetary Aggregates**
Percent change from year ago

**Interest Rates**
Percent
International Economic Trends

France

Real Hourly Earnings and Output per Worker
Percent change from year ago

Hourly Earnings
Output per Worker

Labor Force Indicators
Percent change from year ago

Employment (left scale)
Unemployment Rate (right scale)

Inflation
Percent change from year ago

Consumer Price Index
Producer Price Index

Government Debt and Budget Balance
Percent of GDP, annual data

Budget Balance (left scale)
Debt (right scale)

Japan

Real Monthly Earnings and Output per Worker
Percent change from year ago

Monthly Earnings
Output per Worker

Labor Force Indicators
Percent change from year ago

Employment (left scale)
Unemployment Rate (right scale)

Inflation
Percent change from year ago

Consumer Price Index
Producer Price Index

Government Debt and Budget Balance
Percent of GDP, annual data

Budget Balance (left scale)
Gross Debt (right scale)
International Economic Trends

**Italy**

**Real Hourly Earnings and Output per Worker**
Percent change from year ago

**Labor Force Indicators**
Percent change from year ago

**Inflation**
Percent change from year ago

**Government Debt and Budget Balance**
Percent of GDP, annual data

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**Germany**

**International Trade - Goods and Services**
Percent of GDP

**Current Account Balance**
Percent of GDP

**Foreign Exchange Reserves**
Billions of US$ 125

**Stock Exchange Index - DAX**
2000 = 100