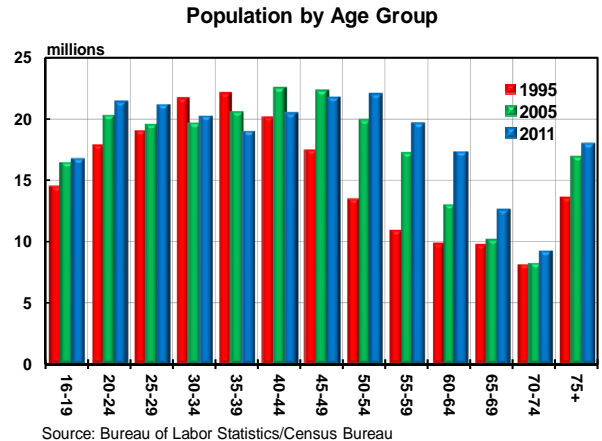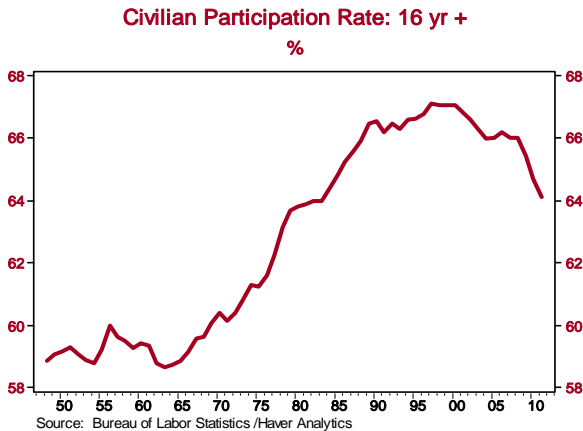# Explaining the Drop in Labor Force Participation

In his response to the State of the Union Address last week, Indiana Governor Mitch Daniels said that the "percentage of Americans with a job is the lowest in decades." This echoes the focus of many bearish analysts on the labor force participation rate, which is the share of the population that is either working or looking for work. Participation was only 64.1% in 2011, the lowest since 1983.

Civilian Participation Rate: 16 yr +
%

Source: Bureau of Labor Statistics /Haver Analytics

The bears don't care that in 2011 private payrolls increased 160,000 per month and the unemployment rate fell almost a full percentage point. They don't even care that the labor force actually grew. They argue that the labor force isn't growing fast enough and if it had grown as fast as population growth, the unemployment rate would be significantly higher.

But, even though the labor force participation rate is the lowest in a generation, it is not the negative silver bullet that bearish analysts think. Data from 1995 and 2005 suggest the participation rate is right about where it should be.

The chart below shows the participation rates in 1995, 2005, and 2011, both overall and broken down into thirteen different age groups. Notice how participation tends to rise rapidly until people hit their late 20s, plateaus until around age 50, and then starts to decline into older age groups.

Labor Force Participation Rates by Age Group
percent

Source: Bureau of Labor Statistics/Haver Analytics

As our society ages, these demographic and behavioral shifts become more important. For example, the population of older Americans has increased significantly between 1995 and 2011 (see chart below). What's really interesting is that the increase in population is occurring in age groups that typically experience reduced labor force participation.

Population by Age Group
millions

Source: Bureau of Labor Statistics/Census Bureau

Back in 1995, the overall participation rate was 66.6%. However, using participation rates by age group and the number of people in each age group, we can calculate what the overall participation rate would have been in 2011 if people in each age group in 2011 participated just as they had back in 1995. The answer is 64.7%. *(See the addendum on the next page for a more detailed description of the calculation.)*

But the participation rate is also influenced by the business cycle. In general, when the unemployment rate is higher, participation rates tend to be lower, and vice-versa. In the past 20 years, a one percentage point change in the jobless rate is, on average, associated with a 0.133 change in the participation rate *in the opposite direction*. Back in 1995, the unemployment rate averaged 5.6%, compared to 9% in 2011. So the higher unemployment rate of 2011 should have pushed down the participation rate by an additional 0.5 percentage points.

In other words, if we had been asked back in 1995 what the participation rate would be in 2011 if the jobless rate were 9% and if every age group maintained the same participation rate as in 1995, we would have said 64.2%, almost exactly the 64.1% that actually prevailed in 2011.
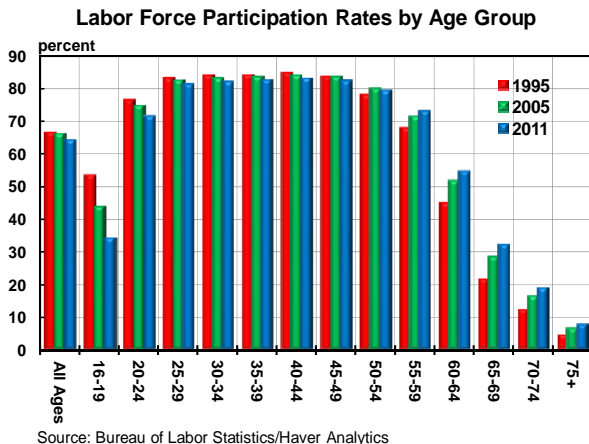
Using numbers for 2005 generates similar results. If every age group had the same participation rates in 2011 that they had back in 2005, the participation rate would be 64.9%. Applying the increase in the unemployment rate between 2005 and 2011 suggests a further reduction in the participation rate to 64.4%, again very close to the 64.1% we actually experienced.

The US labor market is far from perfect. Better public policies during the past several years would have generated a much lower unemployment rate. These include less government spending, less political direction of capital investment, and less regulation. But there's nothing about the participation rate that says the labor market is operating worse than the official statistics show.

Addendum on Calculating the Participation Rate

We use the adjacent table to calculate what the labor force participation rate would be in 2011 if each age group had the same participation rate as 1995.

The first column shows the age groups. The second column shows the labor force participation rate in 1995 of each of these age groups. These data come from the Bureau of Labor Statistics.

The third column shows the civilian non-institutional population for each age group in 2011. These data also come from the BLS. "All Ages" refers to everyone 16 and older, not those 15 years or younger.

For the last column, the number for each age group is what the labor force would have been in 2011 if each age group still had the participation rate it had in 1995. We calculate this by taking the participation rate in column 2 and multiplying it by the population in column 3. For example, in 1995 the participation rate for 16-19 years olds was 53.5%. Multiplying this by the 2011 population for the age group (16,744,000) generates a labor force of 8,958,000.

We then add up all the figures in column 4 for all the age groups to find what the total labor force would be in 2011, if each age group still had their 1995 participation rates. That sum is 154,996,000. In turn, this amount is 64.7% of the 239,667,000 population (age 16+) in 2011.

Age Groups	LFPR-95 Percent	Pop-11 Thousands	LF-11 w/ 95 LFPRs Thousands
16-19	53.5	16,744	8,958
20-24	76.6	21,423	16,410
25-29	83.4	21,199	17,680
30-34	84.2	20,245	17,046
35-39	84.3	19,022	16,036
40-44	85.0	20,476	17,405
45-49	83.8	21,788	18,258
50-54	78.3	22,054	17,268
55-59	68.1	19,670	13,395
60-64	45.1	17,317	7,810
65-69	21.8	12,547	2,735
70-74	12.5	9,187	1,148
75+	4.7	17,995	846
All Ages	66.6	239,667	154,996