

Issues in Labor Statistics

U.S. Department of Labor U.S. Bureau of Labor Statistics



Labor force flows in the most recent recession

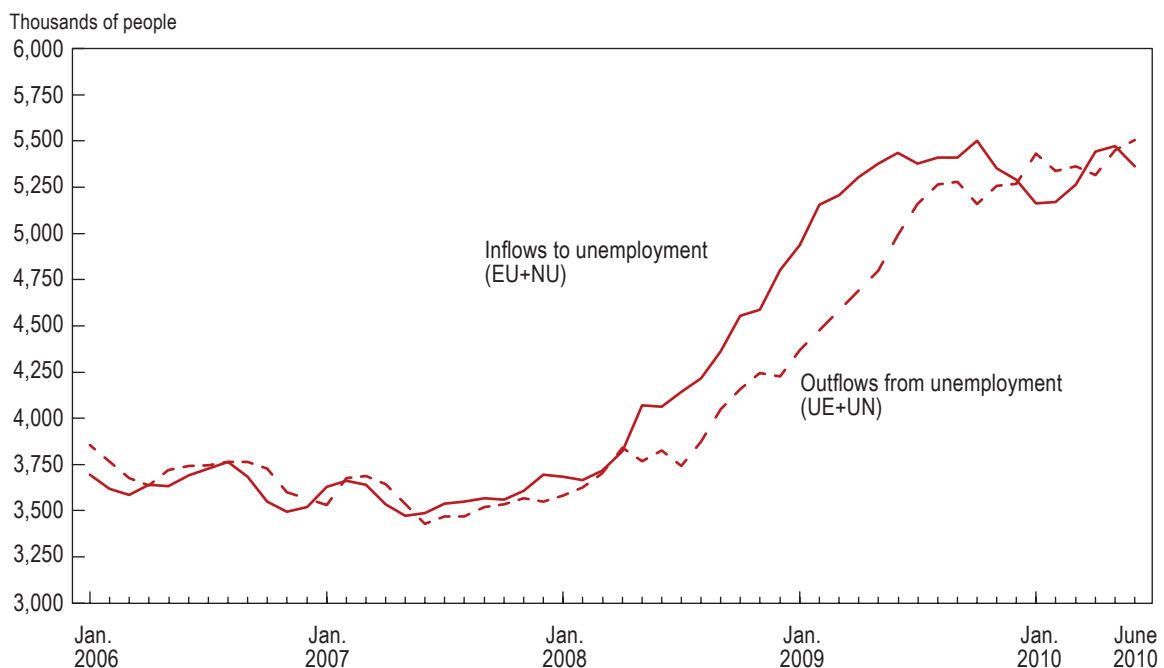
Each month, the U.S. Bureau of Labor Statistics (BLS) reports the number of people in each of three labor force categories—employed, unemployed, or not in the labor force—from data collected in the Current Population Survey (CPS). Changes in these estimates are widely used measures of the overall health of the labor market. Underlying these often relatively small net changes is a great deal more churning: millions of people change their labor force status among the three categories on a monthly basis. BLS reports estimates of the number of people changing their labor force status from one month to the next. These

labor force flow data series are available from February 1990 forward.¹

Flow statistics can help in understanding the sources of changes in unemployment and employment during the recession that began in December 2007. Unemployment increased from 7.7 million at the December 2007 business cycle peak² (on a seasonally adjusted basis) to 15.6 million in October 2009. It then decreased gradually, reaching 14.6 million by June 2010. It had increased by approximately 1 million from March 2007 to December 2007, before the official start of the recession.

Chart 1 shows inflows to and outflows from unemployment over the period from January 2006 to June 2010. Inflows are the sum of (1) the number of people who were employed in the previous month who are

Chart 1. Inflows to and outflows from unemployment, January 2006–June 2010, seasonally adjusted 3-month moving average



currently unemployed (the EU flow) and (2) the number of people who were not in the labor force the previous month who are currently unemployed (the NU flow). Outflows are the sum of unemployed-to-employed (UE) flows and unemployed-to-not-in-the-labor-force (UN) flows. (Because the flow series exhibit a great deal of volatility from month to month, all data shown in the charts are 3-month moving averages.)

The marked deterioration in the labor market in mid-2008 was associated with a substantial increase in inflows to unemployment not matched by increases in outflows. Inflows to and outflows from unemployment both averaged approximately 3.6 million per month for the relatively stable period from September 2007 to February 2008, a period in which the unemployment rate increased by only 0.2 percentage point. The number of unemployed workers went from 7.4 million to 9.5 million from February to August 2008, and the unemployment rate went from 4.8 percent to 6.1 percent. For the same period, inflows averaged 4.1 million whereas outflows averaged 3.8 million. Inflows continued to increase after that period before virtually stabilizing in mid-2009, with the 3-month moving average of inflows in the 5.4 million–5.5 million range from May through November. Outflows from unemployment increased at a somewhat slower rate than inflows through mid-2009. As inflows continued to be well above outflows, the number of unemployed workers increased to 15.3 million by November 2009, and the unemployment rate rose to 10.0 percent. Inflows decreased slightly going into 2010, with the 3-month moving average at 5.2 million in February before increasing back to the previous peak in the next few months. Outflows have continued to slowly increase through 2010. The

3-month average went from 4.8 million in May 2009 to 5.3 million in November and then to 5.5 million in June 2010. This is reflected in the recent small decline of the unemployment rate from 10.0 percent in November 2009 to 9.5 percent in June 2010.

The outflows from unemployment shown in chart 1 equal the number of unemployed people from the previous month times the proportion of unemployed people exiting unemployment. Chart 2 shows the proportion of unemployed workers remaining in unemployment (UU), becoming employed (UE), or leaving the labor force (UN). The UU percentage increased fairly continuously from mid-2007 to mid-2009, while the UE and UN percentages decreased. All three percentages have stabilized since then. It can be inferred from chart 2 that the increased outflow from unemployment shown in chart 1 is attributable to increases in the number of unemployed workers rather than increases in the proportion exiting unemployment.

Changes in employment over the past few years have mirrored changes in unemployment. The number of employed workers decreased from 145.0 million in December 2007³ to 139.1 million in June 2010 while the employment-population ratio decreased from 62.7 percent to 58.5 percent. The employment-population ratio had declined by 0.7 percent from March to December 2007, before the start of the recession.

Chart 3 shows total inflows to employment (UE plus NE) and total outflows from employment (EU plus EN). As the chart shows, outflows from employment increased greatly during the latter half of 2008 and peaked in early 2009. The 3-month average went from 5.9 million in June 2008, the same level as that in December 2007, to 6.5 million in January 2009.

Chart 2. Flows from unemployment as a percent of the previous month's employment level, January 2006–June 2010, seasonally adjusted 3-month moving average

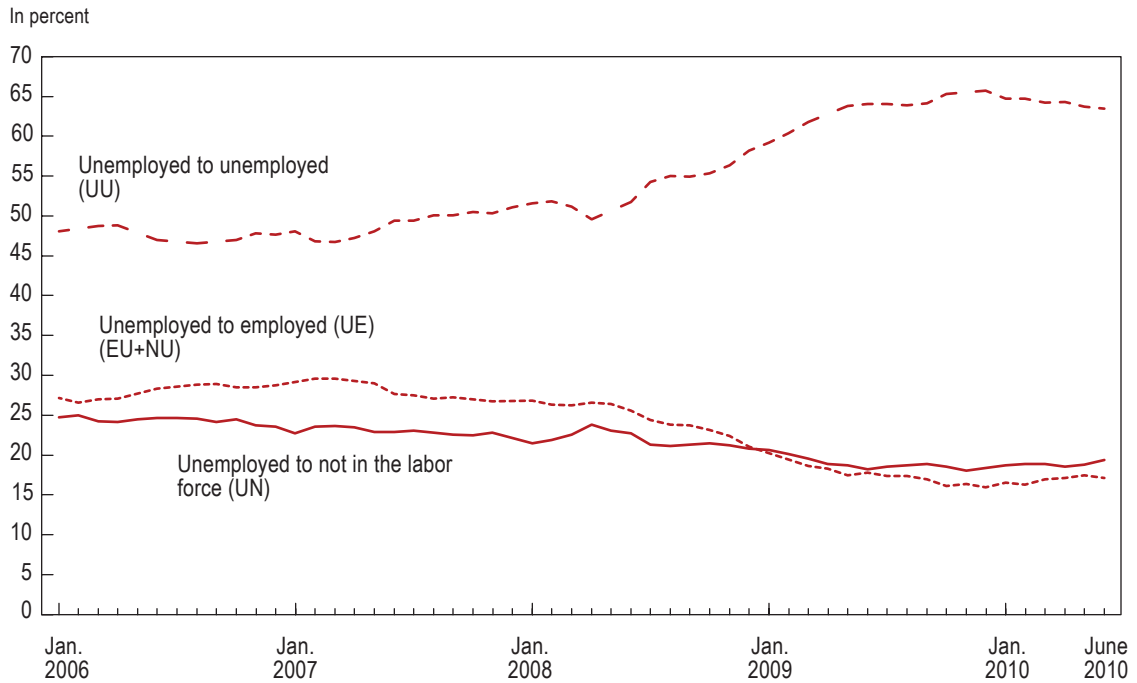


Chart 3. Inflows to and outflows from employment, January 2006–June 2010, seasonally adjusted 3-month moving average

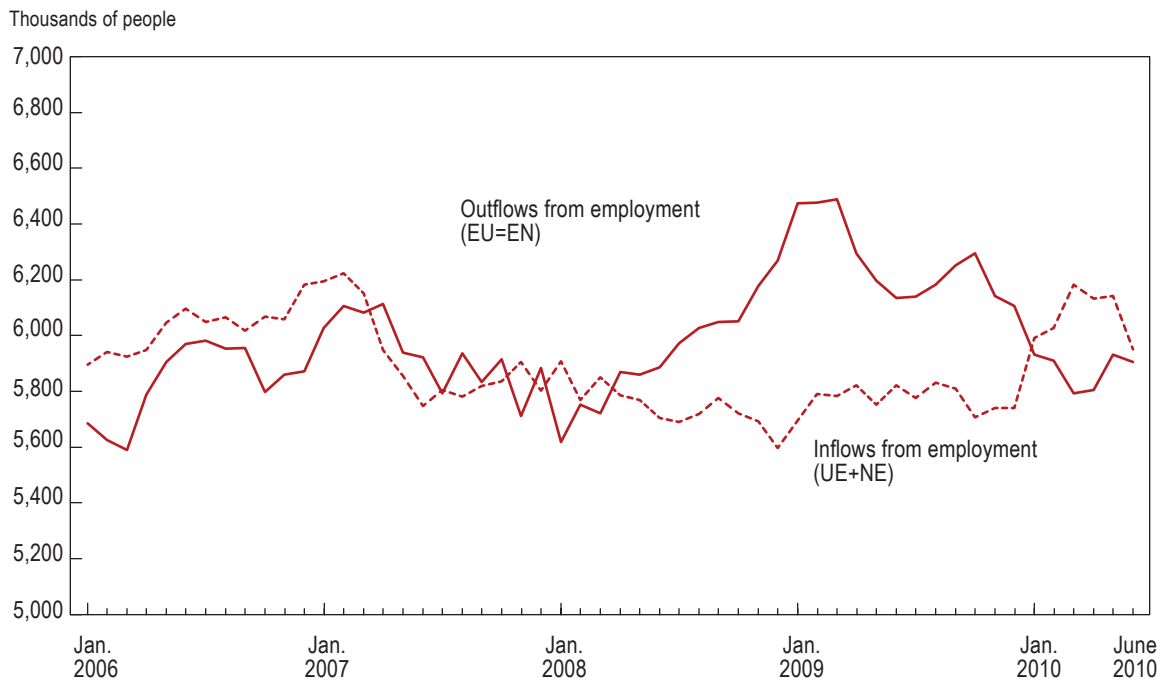
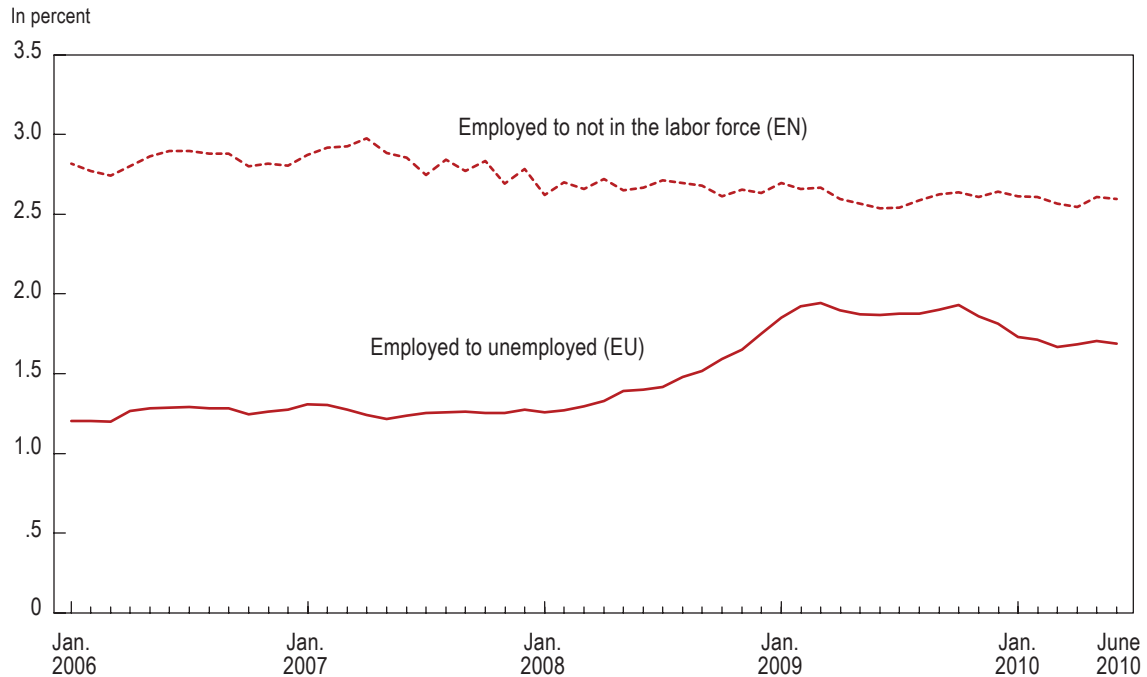


Chart 4. Flows from employment as a percent of the previous month's employment level, January 2006–June 2010, seasonally adjusted 3-month moving average



Outflows declined erratically from the peak, with the 3-month average reaching 5.9 million in June 2010. Inflows moved within a much narrower range over the 2 years from December 2007 to December 2009; the 3-month average in December 2007 of 5.8 million was fairly representative of inflows during that period. However, inflows to employment had declined significantly before the recession from a peak 3-month average of 6.2 million in February 2007. In 2010, inflows increased back to a rate of 6.2 million by March.⁴ However, they fell back to a rate of 6.0 million by June.

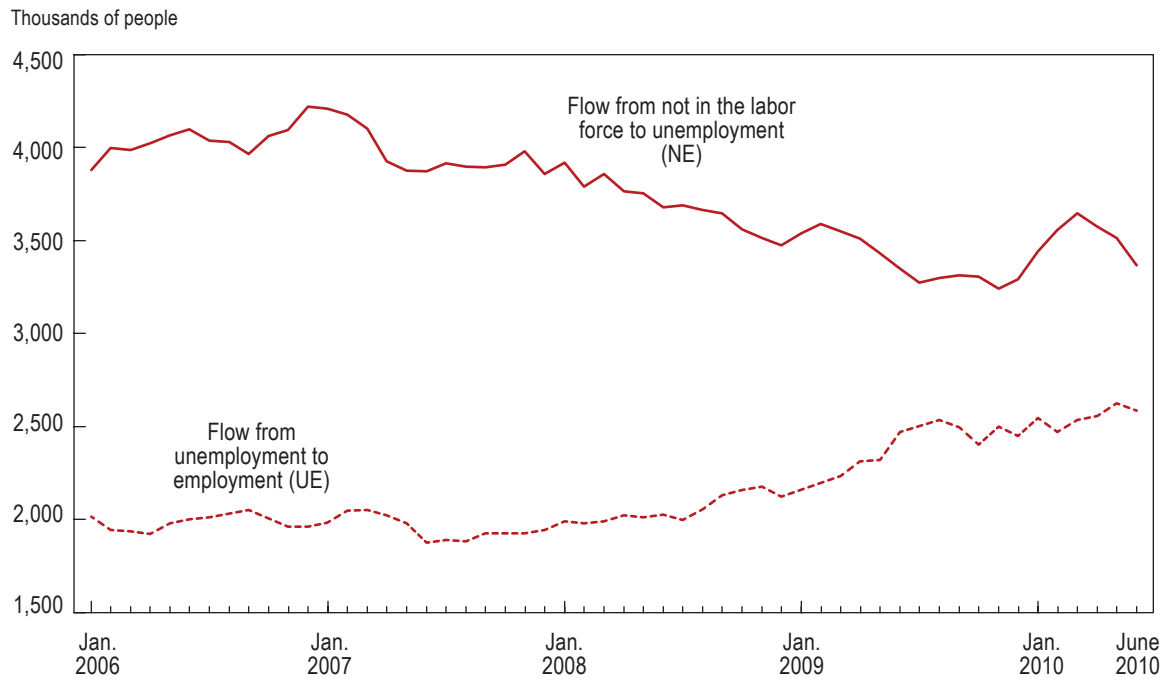
Chart 4 shows outflows from employment as a percentage of the number of employed workers from the previous month. It is clear that EU flows are responsible for most of the movement in outflows. EU flows (as a percent of the employed) increased from early 2008 until 2009. They started to decline in late 2009

and leveled off in early 2010 to a level comparable to those of late 2008. EN flows (as a percent of the employed) slightly declined from early-to-mid 2007 through early 2010.

Chart 5 breaks down total inflows to employment into its components, UE and NE. Total UE flows increased gradually from mid-2007 to mid-2009. As was stated in the discussion of chart 2, the increase is attributable to increases in the number of unemployed workers rather than to increases in the probability of getting a job if unemployed. NE flows declined over most of the period from 2007 through 2009. The pattern of increases and decreases in inflows to employment in late 2009 through June 2010, noted in the discussion of chart 3, is almost completely attributable to movements in the NE flow.

In sum, the recession that began in December

Chart 5. Inflows to employment, January 2006–June 2010, seasonally adjusted 3-month moving average



2007 has been marked by large increases in inflows to unemployment and outflows from employment. These series peaked in early-to-mid 2009 and have declined somewhat since then. The proportion of workers unemployed the previous month remaining unemployed increased through mid-to-late 2009 and

has not declined as of June 2010. Flows into employment increased substantially in early 2010 for the first time since early 2007 but decreased in the second quarter of 2010. Both of these movements were due almost entirely to flows from the not-in-the-labor-force category rather than from unemployment. ■

Notes

¹ For a more detailed explanation of labor force flow data and further references, see “Research series on labor force status flows from the Current Population Survey,” on the Internet at http://www.bls.gov/cps/cps_flows.htm (visited June 15, 2010). For an analysis of the most recent recession through 2008 relative to earlier recessions, see Harley Frazis and Randy Ilg, “Trends in labor force flows during recent recessions,” *Monthly Labor Review*, April 2009, pp. 3–18.

² The date of the business cycle peak was determined by the National Bureau of Economic Research.

³ For this comparison we use a data series that smoothes out annual revisions to the population controls. See “Employment from the BLS household and payroll surveys: summary of recent trends,” on the Internet at http://www.bls.gov/web/emp-sit/ces_cps_trends.pdf (visited Apr. 15, 2010). Adjustments to population controls are not directly reflected in the flows shown in the charts.

⁴ As a proportion of the nonemployed (the unemployed plus those not in the labor force), the March level was only as high as early 2009 levels.