Household Income Trends: June 2012

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Note

This publication is a monthly household income report for June 2012 based on data derived by Sentier Research from the Current Population Survey (CPS), the source of the nation's official statistics on employment and unemployment. It does not contain any information on the characteristics of households. Within the coming weeks we will be issuing another report from the same data series that focuses on household income changes during the recession that lasted from December 2007 to June 2009, and three full years of "economic recovery" lasting from June 2009 to June 2012. The upcoming report will show household income changes during the recovery by a wide variety of demographic, social, and economic characteristics of households, similar to what appeared in our first report in this data series, titled, "Household Income Trends During the Recession and Economic Recovery." An important addition will be information on income levels and income changes for households living in "red, blue, and purple states."

Summary of Findings

According to new data derived from the monthly Current Population Survey (CPS), real median annual household income did not change significantly between May 2012 and June 2012. Although the June 2012 median annual household income of $50,964 was $265 (or 0.5 percent) higher than the May 2012 median of $50,699, the change was not statistically significant at the 90-percent confidence level. (Income amounts in this report are before-tax money income and have been adjusted for inflation; income amounts are expressed in June 2012 dollars and have been seasonally adjusted, unless otherwise noted.)

The trend in real median annual household income over the past several months has followed a noticeably uneven pattern. The latest monthly reading of no statistically significant change follows an increase of 0.7 percent that occurred between April 2012

and May 2012. During the four prior months, from January 2012 to April 2012, there was no statistically significant monthly change in real median annual household income. However, there was a decline in real median annual household income of 1.3 percent from December 2011 to January 2012. That decline followed four consecutive monthly increases in real median annual household income that occurred between August 2011 and December 2011.

The uneven trend in real median annual household income is consistent with a struggling economy. As we have noted in our previous reports, we are watching this household income series closely for signs of any sustained directional movement.

The latest monthly reading on the labor market from the U.S. Bureau of Labor Statistics illustrates only modest variation from the prior month. The unemployment rate in June 2012 was 8.2 percent, the same level that occurred in May 2012. There was some improvement in the median duration of unemployment, which declined from 20.1 weeks in May 2012 to 19.8 weeks in June 2012. The broader measure of employment hardship, which includes the unemployed, marginally attached workers (of which discouraged workers are a subset), and persons working part-time for economic reasons, inched up slightly from 14.8 percent in May 2012 to 14.9 percent in June 2012.

One factor that has helped to stabilize the level of real median annual household income has been the recent monthly declines in the Consumer Price Index (CPI). Although there are many factors affecting changes in real median annual household income over time, changes in consumer prices are a major contributor.

The monthly Consumer Price Index (CPI) has followed a downward trend from April 2012 to June 2012. The CPI fell by 0.1 percent between both May 2012 to June 2012 and April 2012 and May 2012. This is in marked contrast to the experience of the past several months. There were four straight monthly increases in the CPI dating from the end of the last year: December 2011 to January 2012 (0.4 percent), January 2012 to February 2012 (0.4 percent), February 2012 to March 2012 (0.8 percent), and March 2012 to April 2012 (0.3 percent). These four monthly increases in the CPI followed three consecutive monthly declines in the CPI that occurred between September 2011 and December 2011. As we know, recent trends in prices have been mainly influenced by the sharp rise and subsequent fall in the price of fuel at the pump.

Because all of the income amounts in this series are shown after adjustment for changes in the CPI, the decline in prices has acted as an offset to weaker labor market effects when tracking monthly household income.

The median annual household income in June 2012 can be put into broader perspective by a comparison with previous levels of household income dating back to the start of the last decade. The June 2012 median annual household income of $50,964 was 4.8 percent lower than the median of $53,508 in June 2009, the end of the recent recession and beginning of the “economic recovery.” The June 2012 median was 7.2 percent lower than the median of $54,916 in December 2007, the beginning month of the recession that occurred more than four years ago. And the June 2012 median was 8.1 percent lower than the median of $55,470 in January 2000, the beginning of this statistical series. These comparisons demonstrate how significantly real median

annual household income has fallen over the past decade, and how much ground needs to be recovered to return to income levels that existed more than 10 years ago.

The Household Income Index (HII) shows the value of real median annual household income in any given month as a percent of the base value at the beginning of the last decade (January 2000 = 100.0 percent). The HII for June 2012 stood at 91.9, up from 91.4 in May 2012, but still lower than the December 2011 reading of 92.5. Before entering a period of very little change since the beginning of this year, the HII had increased steadily from August 2011 to December 2011: 89.3 in August, 90.5 in September, 91.4 in October, 92.1 in November, and 92.5 in December.

Three employment hardship measures—the unemployment rate, the median duration of unemployment, and a broad measure of employment hardship that groups the unemployed, marginally attached workers, and part-time workers who want full-time work—are contrasted against the HII in Figures 1,2, and 3 below, respectively.

As shown in Figure 1, between May 2012 and June 2012, the unemployment rate held constant at 8.2 percent. The unemployment rate is still much lower than the August 2011 level (9.1 percent), the month when the HII was at its lowest reading (89.3).

As shown in Figure 2, between May 2012 and June 2012, the median number of weeks unemployed decreased from 20.1 weeks to 19.8 weeks. The median number of weeks unemployed is also significantly lower than the August 2011 level (21.8 weeks).

As shown in Figure 3, the broad measure of employment hardship in June 2012 (14.9 percent) was slightly higher than in May 2012 (14.8 percent). This broad measure of employment hardship is also significantly lower than the August 2011 level (16.2 percent).

Other economic factors, such as changes in average hourly earnings and average hours worked per week, have also had an effect on household income levels. At the start of the recession in December 2007, the average hourly earnings (expressed in June 2012 dollars) for all private employees were $23.22 per hour. After taking inflation into account during the recession and the economic recovery, average hourly earnings increased to $23.50 by June 2012. The average number of hours worked per week for all private employees was 34.6 hours in December 2007, falling to a low of 33.8 hours in June 2009, and then rebounding to 34.5 hours by June 2012 (all figures are seasonally adjusted from the U.S. Bureau of Labor Statistics based on the Current Employment Statistics survey).

The Nation's official estimates of household income and poverty are released once a year by the U.S. Census Bureau. Official data derived from the March 2011 Current Population Survey Annual Social and Economic Supplement (CPS ASEC) that relate to annual income received during calendar year 2010 were released on September 13, 2011. These are the most recent statistics on annual income that are currently available from the U.S Census Bureau. While the U.S. Census Bureau provides the most accurate measures of both the level and change in household income, the new series presented in this report provides an interim measure that tracks income changes on a monthly basis, an attribute that is especially important during periods of economic instability. As demonstrated in this and our previous reports, the new series has the ability to

track household income changes during the specific months of important economic events, such as the recession and the economic recovery, that do not coincide neatly with calendar year boundaries.

Data Sources and Estimation Methods

This study is based on data collected in the Current Population Survey (CPS), the same household survey used to derive the official monthly unemployment rate. Data have been compiled from each monthly survey taken since January 2000 (as of June 2012, 150 surveys in total). Each of these surveys collected data for a nationally representative sample of more than 50,000 interviewed households and their respective members (approximately 135,000 per month). The survey collects the detailed information needed to determine the employment characteristics of all civilians age 16 years old and over and to compute the official unemployment rate. It also collects key demographic and social characteristics for all household members, including children. Some of these are as follows:

- Age
- Gender
- Relationship to householder (i.e. spouse, own child, grandchild, nonrelative, etc.)
- Race and ethnicity
- Educational attainment
- Veteran's status (era of past membership in the armed forces)
- Presence of disabilities
- Citizenship
- Country of birth

Estimates of household income from the survey are based on a single question that asks respondents to report the total money income received by the household during the previous 12-month period. The definition of income used in the survey includes the following:

- Wages and salary
- Nonfarm self-employment income
- Farm self-employment income
- Social Security and Supplemental Security Income
- Interest, dividends, net rental income, and royalties
- Cash public assistance (federal and state)
- Unemployment compensation and workers' compensation
- Retirement income from pensions, annuities, other retirement plans
- Veterans' pensions and compensation
- Child support and alimony
- Other cash income **excluding** capital gains or lump sum, one-time amounts

The total amount of household income before taxes is recorded in one of 16 categories as shown below:

- Under $5,000
- $5,000 to $7,499
- $7,500 to $9,999
- $10,000 to $12,499
- $12,500 to $14,999
- $15,000 to $19,999
- $20,000 to $24,999
- $25,000 to $29,999
- $30,000 to $34,999
- $35,000 to $39,999
- $40,000 to $49,999
- $50,000 to $59,999
- $60,000 to $74,999
- $75,000 to $99,999
- $100,000 to $149,999
- $150,000 and over

The raw data collected for each household member in the survey must be aggregated and summarized at the household level in order to generate the household statistics underlying this analysis. Householders are

identified in order to compute statistics that relate to characteristics of the householder. Counts of the number of household members, number of children, and number of earners are computed by examining each household member's detailed information. Missing responses to the question on household income are imputed using statistical matching techniques in order to adjust for any nonresponse bias. Procedures for imputing missing responses are based on the same methodology used by the U.S. Census Bureau for the Annual Social and Economic Supplement (CPS ASEC), the source for official estimates of annual income, poverty, and health insurance coverage. There are some reporting differences when asking for total household income as compared to using the CPS ASEC supplemental questionnaire, which asks a detailed series of questions on the receipt of income during the previous calendar year. We have made adjustments to correct for bias caused by these differences. The U.S. Census Bureau's estimates for calendar year 2010 were released on September 13, 2011. That release does not include any monthly trend data, and does not report on income developments during 2011 and 2012.

All statistics shown in this analysis are based on weighted sample data. The survey for each month includes a sample weight for each household. The sum of these weights across all sample households provides a national estimate of the total number of households existing for that month. When summed these weights also provide estimates of the number of households by characteristics such as race, age, gender, presence of unemployed, etc.

Estimates shown in this report may differ from actual values because of both sampling variability and nonsampling error. Sampling variability occurs because responses are obtained from a sample of the population (50,000 interviewed households) rather than from a full census. Nonsampling error can occur from a variety of factors. Households may report incorrect information when answering questions about the total amount of household income received during the past 12 months prior to the interview. When a respondent forgets the exact dates for a sequence of events this can result in a known survey bias called "telescoping," in which the reporting of the events is telescoped either forward or backward.

The telescoping phenomenon may be especially relevant in situations where household members become unemployed or find a job after a significant period of unemployment. For example, a respondent who recently found a job following a long period of unemployment may erroneously include the annual salary from the new job when responding to the household income question in the CPS that should be restricted only to income received during the 12-month period prior to the survey month. Similarly, respondents with Social Security income may use their current monthly Social Security benefit to compute annual household income during the previous 12-month period even though the current monthly amount reflects the first month following a cost-of-living adjustment.

The Consumer Price Index (CPI-U) for all urban consumers has been used to make adjustment for changes in prices where noted in the tables and text of the report.

The Household Income Index (HII) has been seasonally adjusted to reduce seasonal differences in the reporting of household income. Various factors may contribute to seasonal difference in the way households

report their incomes in the CPS. Earlier studies by the U.S. Census Bureau have shown that reports of household income tend to rise as the survey month approaches the April tax-filing period. This trend, while apparent in surveys of the 1980's and early 1990's, is less pronounced in more recent years. Seasonal adjustments are made using the X-12-ARIMA software. This software was developed by the U.S. Census Bureau and is the same software used to create adjustment factors for monthly employment and unemployment series released by the U.S. Bureau of Labor Statistics.

About the Authors

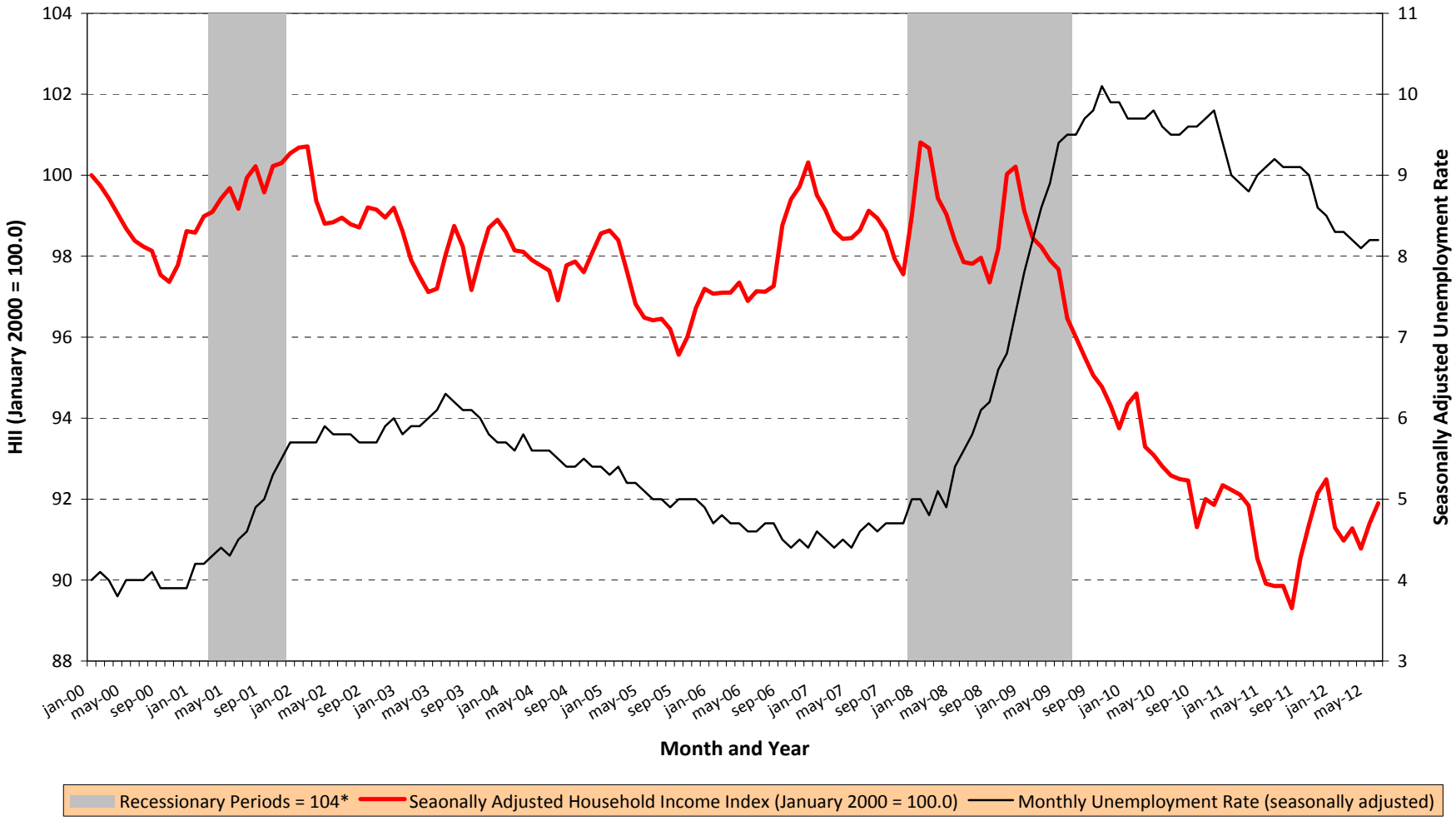
Gordon Green is a former Chief of the Governments Division at the U.S. Census Bureau and a member of the Senior Executive Service (SES). For many years at the U.S. Census Bureau, he directed work on the Nation's official income and poverty statistics program. He received a Ph.D. in economics from The George Washington University in 1984. He is author of the book, *Making Your Education Work for You* (Forge, 2010), which shows students how to make top grades in high school and college and engage in effective job planning. He is also author of the book, *How to Get Straight A's in School and Have Fun at the Same Time* (Forge, 1999), which is intended for younger students. Additional information is available at: www.gordonwgreen.com

John Coder is a former Chief of the Income Statistics Branch at the U.S. Census Bureau. While at the U.S. Census Bureau he directed collection and processing of income and related data collected in the March Current Population Survey (CPS) and was instrumental in developing new methods for imputing missing survey responses. He also was founder of the U.S. Census Bureau's Small Area Income and Poverty Estimates Program. He played a key role in developing the Luxembourg Income Study, which is a data center for making cross-national comparisons, available at the website: www.lisdatacenter.org

The authors gratefully acknowledge the valuable assistance provided by Anne Fengyan Shi in preparing this report. She received a Ph.D. in government from Georgetown University in 1999, and has been a social science researcher ever since.

Figure 1.

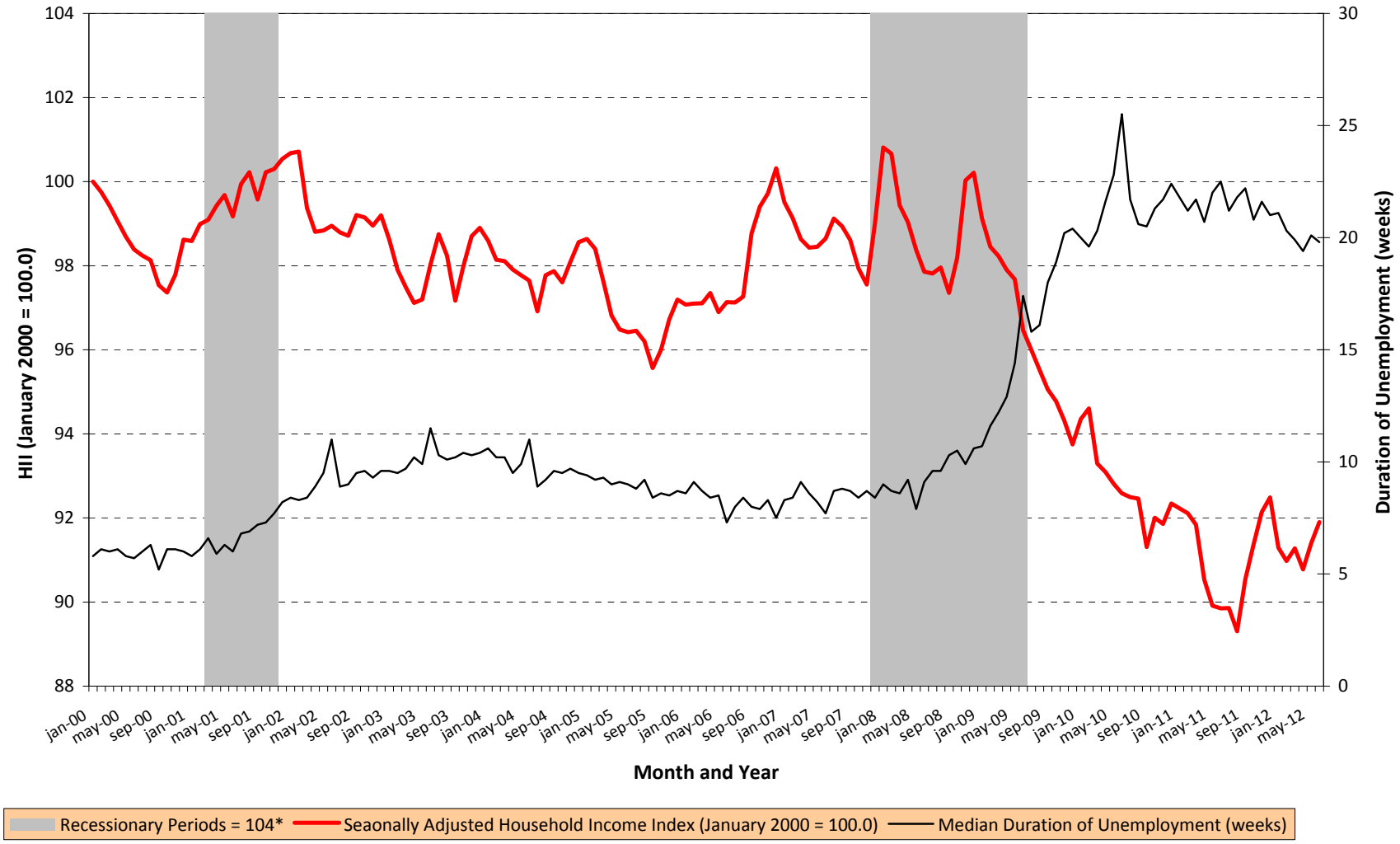
Median Household Income Index (HII) and Unemployment Rate by Month: January 2000 to June 2012



Sources: For income data: Sentier Research, LLC estimates of annual household income derived from the monthly Current Population Survey (CPS) conducted by the U.S. Census Bureau; for the unemployment rate and the CPI-U: the U.S. Bureau of Labor Statistics.

Figure 2.

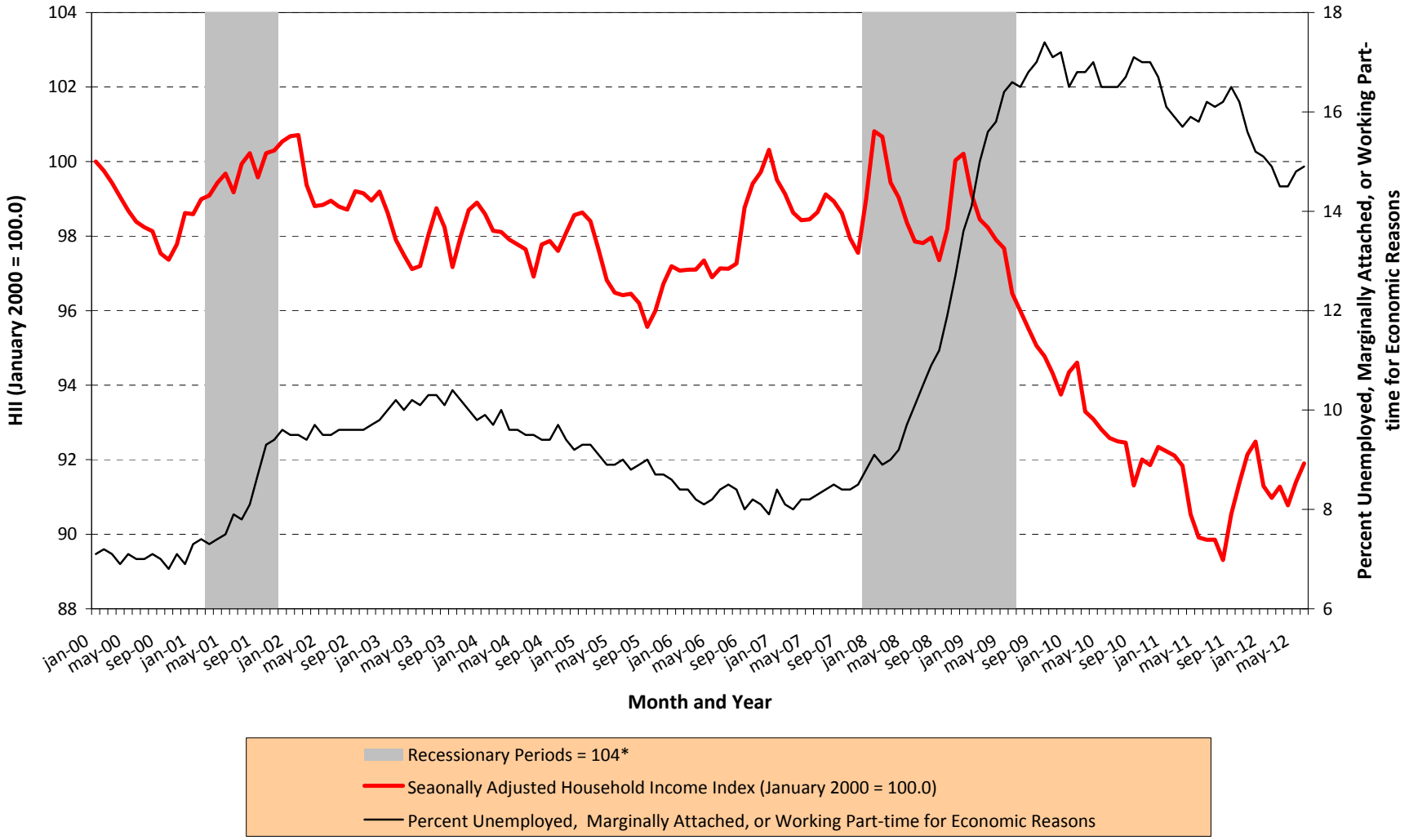
Median Household Income Index (HII) and Median Duration of Unemployment by Month, January 2000 to June 2012



Sources: For income data: Sentier Research, LLC estimates of annual household income derived from the monthly Current Population Survey (CPS) conducted by the U.S. Census Bureau; for the median duration of unemployment and the CPI-U: the U.S. Bureau of Labor Statistics.

Figure 3.

Median Household Income Index (HII) and Percent Unemployed, Marginally Attached, or Working Part-time for Economic Reasons by Month, January 2000 to June 2012



Sources: For income data: Sentier Research, LLC estimates of annual household income derived from the monthly Current Population Survey (CPS) conducted by the U.S. Census Bureau; for the percent unemployed, marginally attached, or working part-time for economic reasons and the CPI-U: the U.S. Bureau of Labor Statistics.