# Individual Giving Model

## Charitable Giving in 2009 and the First Half of 2010

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BY JOHN J. HAVENS AND PAUL G. SCHERVISH

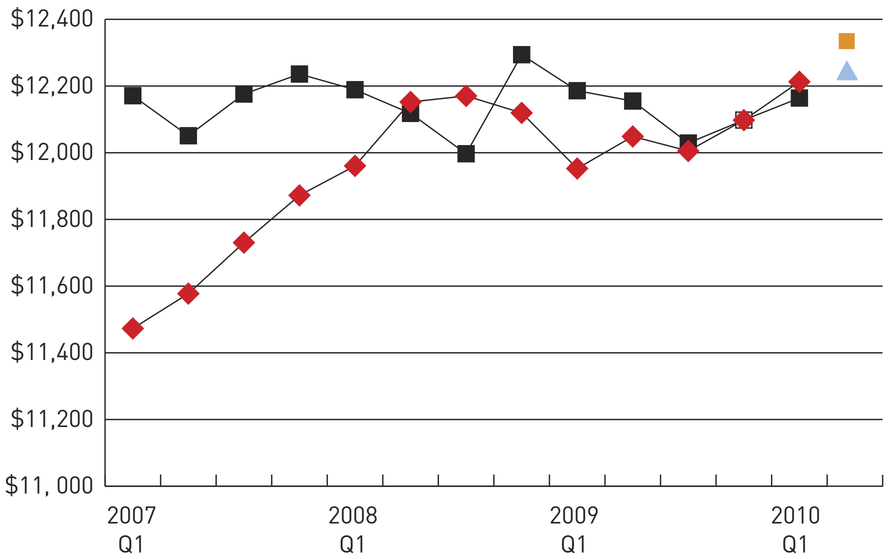
The Center on Wealth and Philanthropy at Boston College estimates that individual charitable giving in 2009 amounted to $217.3 billion, a decline of $11.2 billion (4.90 percent) from our estimate of $228.5 billion for 2008.[1] Adjusting for inflation in 2009, our estimate of $228.5 billion in 2008 dollars amounts to $227.9 billion in 2009 dollars and results in a decline of $10.6 billion, or 4.65 percent. This is in addition to the center's calculation of an inflation-adjusted decline from 2007 to 2008 of 6.1 percent. This represents a total decline in inflation-adjusted dollars of $25.3 billion between 2007 and 2009.

The $217.3 billion estimate is produced by an expanded and recalibrated individual giving model (IGM) developed and housed at the Center on Wealth and Philanthropy. The model is based on data from the Federal Reserve, the Bureau of Economic Analysis, the Bureau of Labor Statistics, the National Association of Realtors, Standard and Poors, Dow Jones and a variety of other sources of data in the public domain. The model is still in the development and testing stage, but we believe the model's estimates nevertheless provide near real-time guidance concerning the state of individual charitable giving.

The initial 2009 model (see "Center on Wealth and Philanthropy Individual Giving Model: Forecast for 2009," *Advancing Philanthropy*, January/February 2010) was based

**CHART 1**

**Personal Income by Quarter**
(Billions of Dollars per Year)

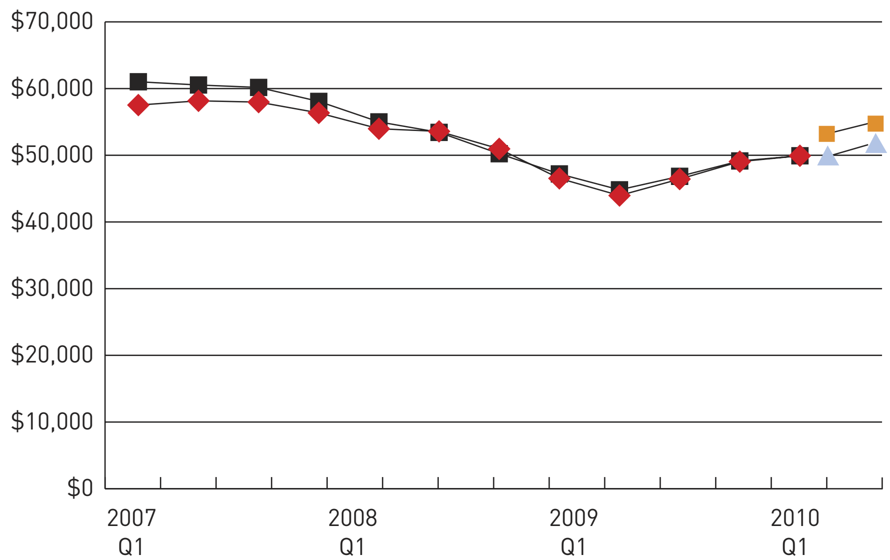



Personal Income-Current Dollars
Personal Income-2009 Dollars
Low-Growth Projection
High-growth Projection

Source: Bureau of Economic Analysis. Projections calculated at the Center on Wealth and Philanthropy at Boston College.

**CHART 2**

**Household Net Worth by Quarter**
(Billions of Dollars)

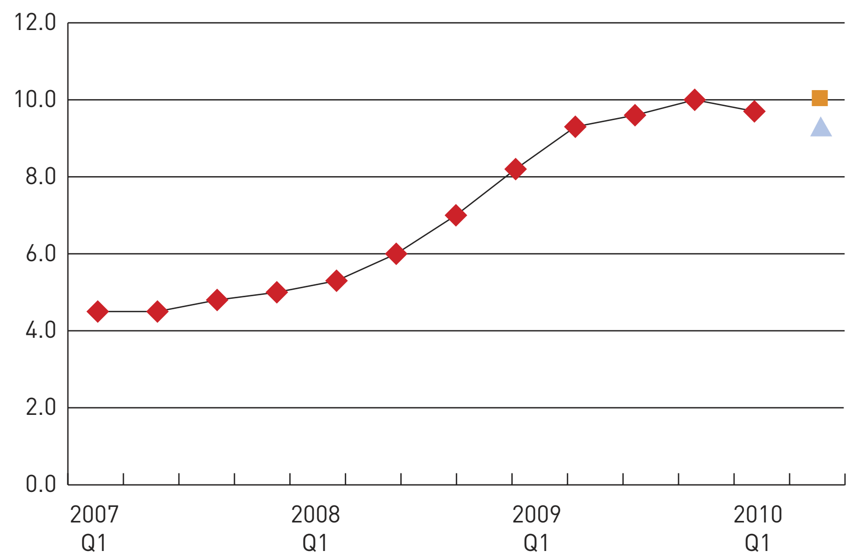



Household Net Worth-Current Dollars
Household Net Worth-2009 Dollars
Low-Growth Projection
High-growth Projection

Source: Calculated at the Center on Wealth and Philanthropy at Boston College based on data from the Federal Reserve.

**CHART 3**

**Official Unemployment Rate by Quarter**




Official Unemployment Rate (%)
Low-Growth Projection (%)
High-Growth Projection (%)

Source: Calculated at the Center on Wealth and Philanthropy at Boston College based on data from the Federal Reserve.

on changes in household net worth (11 categories of assets and six categories of debt) and three categories of household income. The 2009 model provided estimates of total giving ($229.4 billion) for 2008 and projections for 2009 ($221.1 billion for the low-growth scenario to $223.1 billion for the high-growth scenario). At the time, we noted that we were improving the accuracy of the model by incorporating the level of unemployment and additional components of income. We also speculated that, if we were able to account for these additional factors, the resulting estimates might be closer to $216.3 billion for the low-growth scenario and $218.4 billion for the high-growth scenario. The current 2010 version of the model, the results of which we now report, was recalibrated to include the level of unemployment and the three components of income. In addition, we updated all parameters in the model according to data that were available as of April 15, 2010.[2]

Between 2007 and the first quarter of 2009, household wealth declined by an average of 24.5 percent.

The quarterly pattern in household income, household net worth and unemployment rates from the first quarter of 2007 through the fourth quarter of 2009 are presented in Charts 1, 2 and 3, respectively. Chart 1 presents the trend in personal income, both in current dollars and inflation-adjusted dollars. In current dollars income increased from the first quarter of 2007 through the third quarter of 2008 to a value of $12.17 trillion and then dropped roughly 1.8 percent to a low of $11.95 trillion in the first quarter of 2009. It recovered to $12.10 trillion by the end of the year. Chart 2 shows that household wealth in current dollars started its decline from a high of $58.07 trillion in the second quarter of 2007 until it reached a low of $43.87 trillion also in the first quarter of 2009—a drop of 24.5 percent—before rebounding to $49.83 trillion by the end of 2009.

The following four points explain some of the empirical realities that produce the foregoing findings and patterns:

1. Because of the automatic stabilizers of unemployment benefits, public transfer and income maintenance programs, Social Security and Supplemental Security Insurance, aggregate personal income was more stable than household wealth throughout the recession.
2. Between 2007 and the first quarter of 2009, household wealth declined by an average of 24.5 percent. In dollar terms, households at the upper end of the wealth distribution lost more than those at lower end of the distribution. In percentage terms, however, those at the lower end of the distribution lost a considerably greater proportion of their wealth than those at the upper end. The value of most types of assets—from real estate through stocks and bonds other than federal government securities, managed assets, retirement funds and the market value of businesses—all lost substantial value. Simultaneously, debt increased or remained constant. From the viewpoint of most households, this was more a wealth recession than an income recession, but there was not much good news in either area.
3. As indicated in Charts 1 and 2, the low point of both personal income and household wealth occurred during the first quarter of 2009. Households as a group had the lowest aggregate amount of financial capacity at that time. Financial capacity is the source of charitable contributions, and average financial capacity in 2009 was below that for 2008. The reduced level of financial capacity pressured many households to trim their charitable giving.
4. Chart 3 shows the official unemployment rate[3], by quarter, during 2007 through 2009. In 2007 it remained below 5 percent, but in 2008 it began rising and continued upward until it reached more than 10 percent by the end of 2009—more than double its rate at the end of 2007. When such a large part of the labor force is out of work, when the value of homes and retirement plans have dropped precipitously and when job and income security are uncertain in the near term, it raises doubts for people about their and their family's financial security—and perception of financial security is positively related to levels of individual charitable contributions, at all levels of income and net worth.

Over and above changes in unemployment and changes in aggregate wealth and income, our model is driven by changes in various more specific measures of wealth and income. In the area of wealth, these measures include variation in components of net worth, such as changes in the value of home equity; retirement plans; stocks, bonds and mutual funds; and business equity. In the area of income measures that determine the model's findings are changes in components of income, such as variation in earned income; in unearned income (interest, dividends, rents and other income derived from assets); in unemployment income; in public program transfers; and in Social Security and retirement income.

These components of income and wealth are then applied to each individual household—depending on its financial and demographic characteristics—in order to calculate changes in charitable giving for each household. The incorporation of these components allows the model to specify how changes in income, wealth and employment status produce changes in charitable giving. This household information is then aggregated by quarter to produce an estimate of total charitable giving.

Chart 4 (current dollars) and Chart 5 (inflation-adjusted dollars) present the pattern of charitable giving by quarter, from 2007 through the second quarter of 2010. These values, produced by the 2010 version of the IGM, are slightly different from the previous estimates produced by the 2009 version of the model. The level of giving in each quarter is the annual amount that would be donated during the year if the determinants of this amount remained constant throughout the year.

It is important to understand the trends in charitable giving since 2007 in both current dollars (Chart 4) and constant dollars (Chart 5). We discuss the trends in constant dollars in order to emphasize the actual purchasing power of charitable contributions over time. In constant, inflation-adjusted 2009 dollars, aggregate charitable giving was at its lowest level in the first quarter of 2009 at an annualized amount of $215.9 billion. It reached a quarterly level of $217.7 billion in the fourth quarter of 2009. The estimate of total giving over the entire year in 2009 is $217.3 billion.

Chart 5 also sets out our new projections of giving for the first two quarters of 2010. Income and employment (but not wealth) data are already available for the first quarter of 2010, and consequently the estimate is more definite than that for the second quarter, for which less data are currently available. In the next quarterly report, we will adjust the previous quarters in light of the data that have become available during the interim.

Chart 5 contains projections for giving over the first two quarters of 2010 according to two scenarios, the first for relatively low economic growth and the second for relatively high growth. In the first quarter of 2010, we know that personal income grew at an annual rate of 3.9 percent from the previous quarter at the end of end of 2009. We also know that the unemployment rate fell to 9.7 percent of the labor force. However, no measure of changes in wealth is yet available. So for the low-growth scenario in Q1 2010, we assume that wealth grew at an annual rate of 6 percent, which is a rate lower than it actually grew quarter-to-quarter since the first quarter of 2009. For the high-growth scenario, we assume that wealth grew at an annual rate of 20 percent, which is the highest quarter-to-quarter rate since the first quarter of 2009. This means that if the high- or low-growth scenarios for the first quarter of 2010 continue for the rest of the year (which is unlikely), we would expect individual giving for 2010 to be between $219.39 billion and $220.45 billion.

Preliminary data indicate that the empirical assumptions we make for the second quarter will differ from the actual data and assumptions we used to produce our estimate of giving in the first quarter.

For the second quarter of 2010 (Chart 5), the low-growth scenario assumes income growth at an annual rate of 1 percent, wealth growth at an annual rate of 4 percent and an unemployment rate of 10 percent. It also incorporates what we know about the first quarter. The high-growth scenario also incorporates information from the first quarter and assumes second-quarter income growing at an annual rate of 4 percent, wealth growing at an annual rate of 16 percent and an unemployment rate falling to 9.2 percent. This generates a second-quarter estimate of annualized giving between $219.29 billion and $223.30 billion.

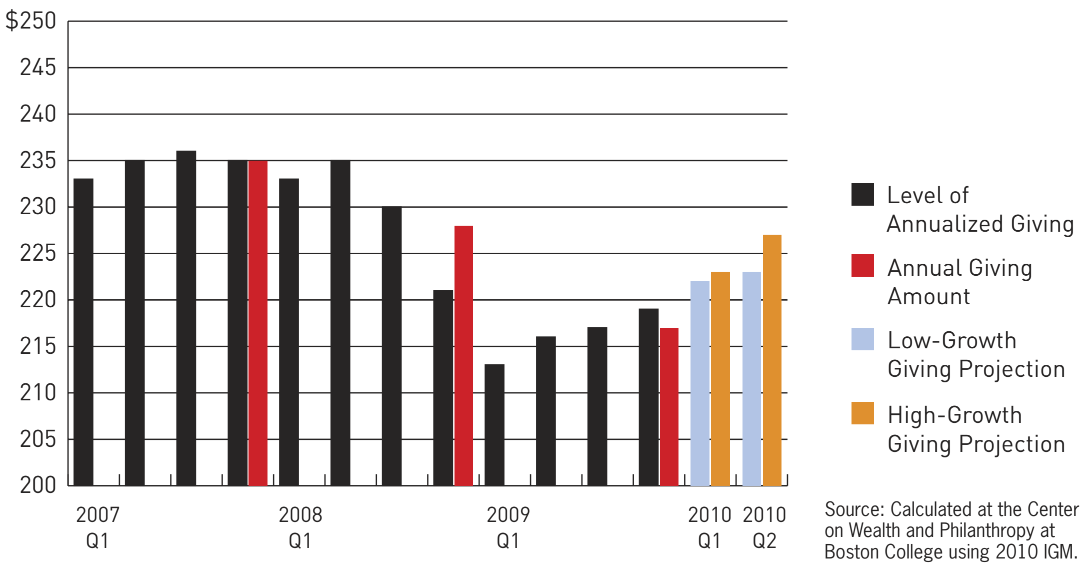
Because the IGM is developed at a household level, it is able to provide additional information on the distribution

> It is important to understand the trends in charitable giving since 2007 in both current dollars and constant dollars.

**CHART 4**

**Annualized Levels of Individual Giving by Quarter—Current Dollars**

2010 Version of Model




Source: Calculated at the Center on Wealth and Philanthropy at Boston College using 2010 IGM.

of giving over and above its aggregate findings. The all-time high in individual giving occurred in 2007 at approximately $242.62 billion in 2009 dollars. In that year, households with $1 million or more in net worth gave 52 percent, or $126.15 billion. Personal income and household net worth reached their lowest level of the recession at the end of the first quarter of 2009, at which time charitable giving was at an annualized level of $215.93 billion. At that point, households with $1 million or more in net worth gave 48 percent, or an annualized level of $103.65 billion, mainly because there were 27 percent fewer millionaire households at that time. If we include the former millionaire households together with the millionaire households in the first quarter of 2009, we find they gave 51 percent, or an annualized level of $110.12 billion of the $215.93 billion annual level of giving. As the recession was recovering in the fourth quarter of 2009, households that were or had been millionaires in 2007 again gave 52 percent of the household giving donated in that quarter.

> Personal income and household net worth reached their lowest level of the recession at the end of the first quarter of 2009.

Although the model produces estimates based on financial capacity, including employment status, it does not account directly for psychological and social factors that animate specific individuals and sometimes whole populations to give more or less than the model estimates. On the positive side, people may give more because they empathize with those with increased need in a bad economy. On the negative side, people may give less because they are anxious about their own, their families' and perhaps their workers' financial well-being. Being based solely on financial parameters, our IGM can fail to capture what happens regarding the intensity of care relative to the weight of insecurity. As a result of these and other social-psychological vectors that inspire or curtail charitable giving, IGM estimates may end up too high or too low.

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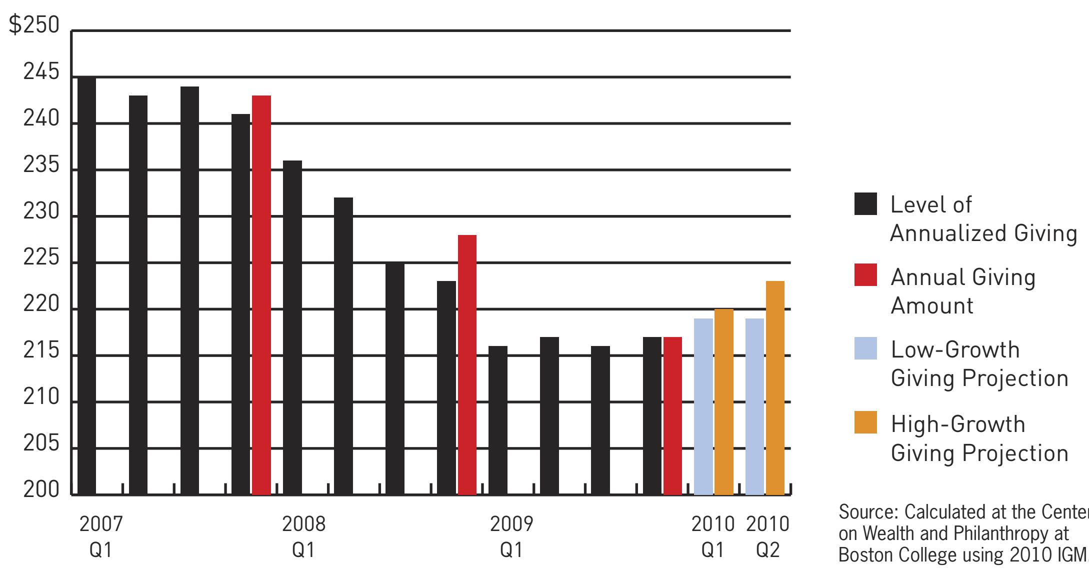
## Footnotes

1. The original estimate using the 2009 version of the model was $229.4 billion.
2. It should be noted, that verification of all estimates of individual giving for 2009, including those provided by our IGM, await the availability of additional data, especially the final IRS data on charitable contributions for 2009, which will be published in 2011.
3. Many argue that the socially consequential rate of unemployment hovers around 18 percent. They maintain that the unemployment rate should include involuntary part-time and part-year workers, as well as those who have become discouraged in their job search and are officially considered no longer in the labor market.

**CHART 5**

**Annualized Levels of Individual Giving by Quarter—Adjusted for Inflation to 2009 Dollars**

2010 Version of Model




Source: Calculated at the Center on Wealth and Philanthropy at Boston College using 2010 IGM.