

## **Notes on the Wealth Transfer Estimates Originally Presented in “Millionaires and the Millennium”**

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In 1998 the Center on Wealth and Philanthropy released estimates of the amount of household wealth to be transferred in the 55-year period from 1998 through 2052 in the report, “Millionaires and the Millennium”. The report was based on estimates from our Wealth Transfer Microsimulation Model (WTMM) which, in turn, was based on data on the amount and distribution of wealth from the Survey of Consumer Finances, sponsored by the Board of Governors of the Federal Reserve System, mortality rates based on data from the Center on Disease Control and the Center on Vital Statistics, life cycle savings rates estimated from the Survey of Consumer Finances, and historical patterns of the distributions of estates based on IRS estate tax data.

A major purpose of our analysis was to estimate the total amount of wealth that would be transferred in the 55-year period from 1998 through 2052. At the time most planners and developers were using a figure of \$10 trillion to \$12 trillion developed for another purpose by Robert Avery and Michael Rendell. Our estimate was \$41 trillion (1998 dollars) during the 55-year period if household wealth grew at a secular rate of 2% in real terms. The model that produced this estimate incorporated life cycle savings rates, the 1998 distribution of wealth, and age and race specific mortality rates, and of course the assumed 2% rate of growth in household wealth.

In addition to the amount of household wealth to be transferred we also estimated how the amount (\$41 trillion) would be distributed to heirs, to estate taxes, to charity (i.e. charitable bequests), and to estate fees (burial costs, probate fees, etc.). The distribution estimates were based primarily on data from the IRS data from estate filings. The distribution assumed:

1. Other than consumption expenditures (which includes inter vivos giving and interpersonal transfers as well as the purchase of goods and services, estimated at the time the model was developed), household wealth would be held intact by the wealth holder(s) and only distributed at the death of the wealth holder(s).
2. In a two spouse household, all wealth would be transferred to the surviving spouse at the death of the first spouse.
3. When the surviving spouse died, the wealth would be distributed according to historical patterns based on the IRS estate data and varying by the asset value of the estate.

Under these assumptions the \$41 trillion would be distributed as \$25 trillion to heirs, \$8 trillion to taxes, \$6 trillion to charity, and \$2 trillion to estate fees (all figures rounded to nearest trillion).

We also produced estimates for the 20-year period from 1998 through 2017. These estimates were \$11.6 trillion of total wealth transfer if household wealth grew at a secular rate of 2%. This \$11.6 trillion would be distributed, under the assumptions listed above, as \$7.1 trillion to heirs, \$2.4 trillion to taxes, \$1.7 trillion to charity, and \$0.5 trillion to estate fees.

According to data from the 2001 Survey of Consumer Finances, in 2001 about 42% of the household wealth was owned by 43% of all households that were headed by a baby boomer (born 1946 through 1965); another 42% was owned by 24% of households headed by a member of the prior generation (born 1926 through 1945). Households headed by a member of another generation owned the remaining 16% of household wealth.

In the first 20 years, the bulk of wealth transfer would come from generations prior to the baby boomers. In the subsequent 35 years the bulk of the wealth transfer would come from the baby boomers, themselves.

#### Lack of Wealth Transfer Data

There is no good source of information concerning the amount and mechanisms of total wealth transfer. We cannot therefore monitor the estimated wealth transfer directly. The estate tax data give us part of the picture for the wealthiest estates that have to file federal estate tax forms. Some of our estimated wealth transfer, however, could occur prior to the death of the wealth holder(s) through transfers to persons and or/nonprofit organizations, including family foundations. For estates of households not required to file an estate tax form, there is little information available concerning aggregate values of estates. There are probate court records, but there is no central clearinghouse for probate statistics regarding the value of estates probated.

#### Giving USA Wealth Estimates

There are, however, estimates of annual charitable bequests, published in *Giving USA* (GUSA). In terms of 2004 dollars, these estimates rose from \$15.04 billion in 1998 to \$19.70 billion in 1999 (31% annual increase) to \$21.8 billion in 2000 (11% annual increase). Averaging the two rates, we obtain an annual rate of change in charitable bequests of 21%. If this rate of increase in charitable bequests held throughout the 20 year period from 1998 to 2015 the total charitable bequests would have totaled \$3.2 trillion beginning from the \$15.04 billion in 1998 which would reach \$562.6 billion in 2017. At the lower rate of 11% annual increase in charitable bequests the total charitable bequests from 1998 through 2017 would have been \$1.0 trillion in total beginning from the \$15.04 billion in 1998 and reaching \$109 billion in 2017. The GUSA data confirm

that there were high rates of increase in estimated annual charitable bequests between 1998 and 2000.

Beginning in 2001, however, the GUSA estimated increase in charitable bequests of the prior two years did not continue. From 2000 to 2004 the GUSA estimates stagnate around \$20 billion and even decline somewhat. To be sure GUSA has introduced new methodology and tested other alternative methodologies for estimating charitable bequests during this period – mainly in anticipation that the IRS estate tax data could disappear if the repeal of estate taxes is made permanent. At least one of these methodologies produces an estimate somewhat more than \$30 billion in 2004, rather than the \$20 billion estimate published by GUSA. The GUSA published estimate is thus one (judged best) in the range of estimates made by the GUSA research staff using alternative methodologies in recent years.

### A Simple Projection Model

If we start with the 1998 GUSA estimate of charitable bequests we could develop a simple constant rate of growth model in charitable bequests that would total \$2 trillion (the \$1.7 trillion charitable bequest estimate of the wealth transfer model adjusted to 2004 dollars) in the 1998 to 2017 period. The rate of growth would have to be 17% per year in order to achieve this total.

The results of this simple model and the GUSA estimates are presented in Table 1. In this simple model projection the charitable bequests rise from \$15 billion in 1998 to \$297 billion in 2017 along an exponential curve that corresponds to a 17% annual rate of growth. In Table 1 the GUSA estimates begin at \$15 billion and increase to \$22 billion in 2002. During these five years the simple projection model estimates total charitable bequests to be \$105.5 billion. The GUSA estimates amount to \$95.5 billion. In the past two years, however, the GUSA estimates have fallen below \$20 trillion while the simple projection has continued to increase.

There are three points that can be made concerning the simple model:

1. The growth in charitable bequests begins with a relatively small value and increases substantially over the years – the WTMM follows the same general pattern – although we cannot provide specific annual estimates at this time.
2. The charitable bequest estimates of the simple model are relatively close to the GUSA estimates in 1998 through 2000 and start to have increased deviations after that time.
3. The 17% annual rate of increase in charitable bequests is quite high and not likely sustainable over a 20 year period; in real terms from 1984 through 2004 the GUSA estimates of charitable bequests grew at just over 5% per year on average.

**Table 1: Simple Projection of Charitable Bequests at Annual Rate of 17%  
and GUSA Estimates for 1998 to 2017**

Year	Simple Projection at 17% (Billions of 2004 Dollars)	GUSA Estimate (Billions of 2004 Dollars)
1998	\$15.0	\$15.0
1999	\$17.6	\$19.7
2000	\$20.6	\$21.8
2001	\$24.1	\$21.1
2002	\$28.2	\$21.9
2003	\$33.0	\$18.6
2004	\$38.6	\$19.9
2005	\$45.1	No Estimate
2006	\$52.3	No Estimate
2007	\$61.8	No Estimate
2008	\$72.3	No Estimate
2009	\$84.6	No Estimate
2010	\$99.0	No Estimate
2011	\$115.8	No Estimate
2012	\$135.5	No Estimate
2013	\$158.5	No Estimate
2014	\$185.4	No Estimate
2015	\$217.0	No Estimate
2016	\$253.9	No Estimate
2017	\$297.0	No Estimate
Total	\$1,956	No Estimate

#### WTMM 20-Year Estimates Unlikely

Even though the WTMM estimates are based on more complex calculations than the simple projection model estimates in Table 1, I conclude that the 20-year wealth transfer estimates of the WTMM are not likely to be fulfilled in reality. There are several reasons why this is the case:

1. Household wealth did not grow at 2% throughout the period, but in fact fell by approximately 5% per year in real terms from 2000 through 2002. According to the Federal Flow of Funds Accounts, published by the Federal Reserve System, household wealth was about \$44.0 billion (2004 dollars) in 1999, \$42.1 billion in 2000, \$39.9 billion in 2001, \$37.7 billion in 2002, \$41.6 billion in 2003, and \$44.5 billion in 2004. From 1999 through 2004 the rate of growth in household wealth has been 0.2% rather than 2.0% in real terms. The basic assumption of the model of 2% real growth in household wealth was not fulfilled. This was the first

- time in 20 years that household wealth declined for more than a single year, and it declined for 3 successive years and has only regained its 1999 level in 2004.
2. The amount of charitable bequests may be more responsive to household wealth and the value of the estate since (according to a conversation with Robert Sharpe) charitable bequests are often contingent on other bequests (e.g., to heirs) being fulfilled prior to the charitable bequest being implemented. When household wealth grows rapidly, the value of estates also grows and the to the extent charitable bequests are contingent on other provisions of the will, they will also grow more rapidly. When household wealth declines, charitable bequests will decline even more rapidly, again to the extent they are contingent on other provisions of the will.
  3. As the value of a final estate (estate with no surviving spouse) increases from \$1 million to more than \$20 million, the proportion of the estate (net of debt and estate fees) bequeathed to charity increases from single 2% to 5% up to more than 30%. The more estates in the \$20 million or more category, the greater the charitable bequests not just because there is more wealth in the pot but because a greater fraction of that wealth is bequeathed to charity. When wealth grows more estates are generated in the \$20 million category and the value of charitable bequests increases. When wealth declines the number of estates generated in the \$20 million category is also less and charitable bequest do not grow as fast from the estates of these decedents.
  4. Mortality rates have been declining since the rates we used in 1998. This reflects the fact that people are living longer. At the very least this implies that some wealth transfer will take place later rather than sooner. Our 20-year estimate will tend to be high because we projected some final estates to occur in the first 20 years that will actually occur in the second 35 years.
  5. The WTMM indicates that wealth is transferred and bequests made in the year of death of the decedents. Often, however, estates are not adjudicated and/or probated, nor are estate tax forms filed until one to two years after the death of the decedent. The GUSA estimates are based in large part on estate tax data and thus lagged a year or two from the death of the decedent. This means that the GUSA estimates will lag behind deaths and behind current household wealth. We would therefore, expect the rebounding household wealth to show up as increased charitable bequest estimates in GUSA estimates in the next year or two.
  6. Even with a rebound in household wealth, the WTMM estimates are likely to remain unfulfilled in the 20-year period because there is insufficient time in the next 14 years for wealth and charitable bequests to continue to increase sufficiently to offset the early lack of growth over a three-year period and a 5-year trough in household wealth. There is sufficient time in the 55-year period for household wealth and charitable bequests to recover.
  7. There are signs that the assumption that, except for consumption, wealth would be held intact with no accelerated giving to charity or interpersonal transfers until the death of wealth holders is being abrogated:
    - a. There is an increase in the number and new funds in family foundations, charitable gift funds, like the Fidelity charitable gift fund, and other gifts to non-profits. This represents some drawdown on the wealth of

households prior to the death of the householder and an increase in giving to the nonprofit sector during life rather than through charitable bequests. Over the 20-year period the model is likely, therefore, to overestimate both wealth transfer (at death) and charitable bequests because of this shift in giving.

- b. In addition to transfers from wealth holders to nonprofit entities during life there may well be a parallel increase in transfers from wealth holders to persons (children and other persons who would otherwise be heirs) during life. We are trying to find data to help us estimate the magnitude of such transfers and modify the WTMM accordingly.

Both these factors would have less affect on a broad-based definition of wealth transfer (i.e., transfer of wealth from wealth holders to children, other persons, and non-profits) near the end of their lives than on the value of final estates and the value of charitable bequests. We have not yet completed enough research to indicate the magnitude of these effects.

### The 20-Year and 55-Year Estimates

The WTMM considers that business and market cycles cancel out over the period of the simulation, as they did over the 55-years period from 1950 through 2005. From 1950 through 2005 growth in household wealth exceeded 3% per year on average (adjusted for inflation) in spite of 9 recessions during this period. This is because short term slowdown in the growth of household wealth recoup their losses and rebound from the slowdown over a 55-year period. The same cannot be said of a 20-year period unless there is a period of very rapid growth reminiscent of the period from 1992 through 1999. When we developed our estimates in 1998, we did not sufficiently consider the possibility that there would be the longest period of decline in wealth in the early years of our 20-year period. Subsequently we did not revisit the 20-year estimate when we reevaluated and confirmed our \$41 trillion 55-year estimate in light of a decline in market conditions. As we indicated above the 20-year estimates are likely to prove too high in large part due to a drop in household wealth of longer duration of any prior downturn since 1985 and perhaps unprecedented since the great depression. In the 55-year period, however, we would expect there to be other downturns and other periods of rapid growth. Unless there is a major depression, we expect the \$41 trillion 55-year estimate in wealth transfer to come to fruition.

### Future Revisions

Within the next two months, the Federal Reserve will be releasing data from the 2004 Survey of Consumer Finances. This will give us information on the 2004 distribution of household wealth with a sufficient sample of very wealthy households to provide a good high-end estimate. When this data is released we have planned to undertake a thorough analysis of wealth and wealth transfer to be published and released in late spring. Before we do the work we can reach no conclusions, but we would be surprised if total wealth transfer for 55 years (once again assuming 2% secular growth) were to fall much below \$41 trillion and if the 20-year estimate were not reduced. In other words, we expect that

our estimates of the timing of the wealth transfer will be shifted somewhat from the first 20 years to the last 35 years. How much is yet to be determined.

Before closing this note, I would like to indicate that our estimates of wealth transfer were based on our model, federal data, and a series of assumptions. No model is going to predict behavior 55 years into the future (or 20 years into the future) with close accuracy. If the model did, my colleagues at the Center for Wealth and Philanthropy and I should get the Nobel Prize. The model gives us ballpark estimates. What we and other researchers are beginning to discover is that our short term estimates were affected by low growth in household wealth and shifting giving patterns from bequests to donations during life. As we learn more about the patterns and dynamics of both charitable giving and transfers of wealth to children and other persons during life, we will release these findings and incorporate them into new projections. However, none of these projections should be taken as anything more than ballpark estimates, based on the data and knowledge at the time the projections were made.

### Conclusion

Measuring charitable bequests is an imprecise science and projecting charitable bequests is a risky business. The estimates published in *Giving USA* could be low, maybe by as much as 50%. Given the recession and decline in household wealth, our 20-year estimate of charitable bequests appears high at this point and will not come to fruition unless there is a period of very high rates of growth in household wealth. If wealth and charitable bequests grow from here on out as they did from 1998 through 2000, even our 20-year estimates will be met if not exceeded.

The real question is why did charitable bequests fail to grow rapidly after 2000. We think it has to do with at least three factors:

1. the slowdown in the growth of wealth during this period,
2. the acceleration of inter vivos charitable giving and interpersonal transfers, and
3. the possibility that charitable bequests actually grew a bit more than the GUSA estimates (on which we also worked) indicate.

In the coming months and years we plan to continue researching these issues, and will improve our estimates based on the results of this research.