Segmenting the Middle Market: Retirement Risks and Solutions Phase I Report Update to 2010 Data

Sponsored By
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Segmenting the Middle Market: RETIREMENT RISKS AND SOLUTIONS PHASE I UPDATE

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Executive Summary

The *Segmenting the Middle Market: Retirement Risks and Solutions – Phase I Report,* March 2009, profiled the financial readiness of the middle market as shown in the Federal Reserve Board's Survey of Consumer Finances (SCF) as of 2004. A *Phase II Report*, September 2010, addressed issues in relating retirement savings to retirement income needs. The current report updates the Phase I analysis to reflect the 2010 SCF data.

The period from 2004 to 2010 comprised the final stage of a period of economic growth, then a severe financial crisis, and a partial recovery from the crisis. Stock market prices rose, then plunged, and rebounded to end about where they started. Housing values rose, then plunged, and ended well below their starting level.

As in the original study, middle market assets are heavily dependent on non-financial assets, such as home value. The fall in home value (the major part of non-financial assets in the study) reduced net worth among the age group from 55 to 64 and had a mixed impact among the 65 to 74 age group. Financial assets decreased for Middle Mass households (25th through 75th percentile of income), with very significant drops for households headed by a single person. Financial assets for Middle Affluent households (75th through 85th percentiles) headed by a married couple showed strong gains, but households headed by a single person showed minimal growth to negative change.

The general loss of net worth caused Middle Mass households, who already were ill-prepared for retirement, to become even less prepared. Most Middle Affluent households found their status unchanged, although the single female age 55-64 segment realized significant net worth loss and fell from moderately prepared to unprepared. The differentiated changes in financial assets and net non-financial assets caused the balance to change such that Middle Mass

households saw the portion of net worth in non-financial assets increase, while Middle Affluent households saw the portion decrease.

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INTRODUCTION

The Society of Actuaries' Committee on Post-Retirement Needs & Risks has focused much research on the development of a "retirement needs framework" and a deeper understanding of the risks faced by households approaching and in retirement. The objective of the Phase I research effort was to further the Committee's work by defining relevant and actionable consumer segments among middle-income / mid-level net worth households. The SOA requested that the research focus on households headed by 50 to 75 year olds, and with net worth between $50,000 and $1,000,000.

The specific middle market, as defined for this research, represents approximately 60% of all households either approaching or currently in retirement (it excludes 25% with less wealth and 15% with more). It specifically includes:

- 35 Million Households
- 30% of total U.S. households
- The 25th to 85th percentiles of all households (as measured by income)

PROJECT APPROACH AND ANALYSIS

The primary source for income and net worth information was the Federal Reserve Board's Survey of Consumer Finances, 2010. Other studies confirmed the effect of employment status, marital status, and other household status (e.g., existence of dependents, health status, gender and age) in determining a useful segmentation construct.

The original review of existing research, surveys, and available data required that the boundaries of the middle market be broadened slightly to include households headed by 45 to 74 year olds, and with net worth between approximately $50,000 and $1,100,000. An analysis of characteristics for all households in this middle market cohort shows marked differences in the key determinants of "retirement readiness," along the following dimensions:

- Initial wealth level, measured by
  - -- Current income
  - -- Current net worth
- Household Type
  - -- Married
  - -- Single (including Divorced and Widowed) - Female
  - -- Single (including Divorced and Widowed) - Male
- Age
  - -- Pre-retirement years (typically prior to age 65)
  - -- Retirement years (post age 65)

With this background, a segmentation scheme was developed that was designed to satisfy several key criteria; specifically, it defines segments that are: 1) identifiable, 2) reasonably distinct in risk profile, 3) "actionable", i.e., have needs that can be addressed by a specific set of solutions, and 4) are "verifiable", i.e., have distinctions that are easily observed using publicly available data.

MIDDLE INCOME RETIREMENT MARKET SEGMENTATION - SUMMARY

The segmentation defines twelve segments of the middle market population. The details and a profile of each of the twelve segments, including household characteristics and the boundaries of each segment, are defined in the summary tables that follow.

The total middle market is divided into two broad classes: 1) Six "Middle Mass" Market Segments; and 2) "Six Middle Affluent" Market Segments. The total number of households in each broad class and the defining characteristics of each are:

	(# of Households - Thousands)
Total Middle Market Households:	35,054
(Ages 45 to 74; $50k to $1,000k Net Worth; 25th to 85th percentile of all households)	
Six segments profile the "Middle Mass" households:	
Total "Middle Mass" Households:	29,212
(25th to 75th percentile of all households)	
Six segments profile the "Middle Affluent" households:	
Total "Middle Affluent" Households:	5,842
(75th to 85th percentile of all households)	

However, in order to focus on households' financial status leading up to and subsequent to this "retirement" event, the definition of our segments was narrowed to 55-64 year-olds and 65-74 year olds. And in order to avoid confusion regarding stages or phases of retirement, we define our segments using these simple age categories and household type.

The following four tables summarize the segments by age, household type, current income and net worth characteristics, and number of households for all twelve segments, broken into the two wealth classifications: Middle Mass and Middle Affluent. The segments have been numbered for ease of reference in subsequent discussions. The analyses include both the 2010 results and the 2004 results for the purpose of comparison and measurement of changes.

Summary of "Middle Mass" Segments - 55 to 64 year-olds

	Married (#1)	Single Female (#2)	Single Male (#3)
Number of Households			
2004	5.2 Million	2.5 Million	1.4 Million
2010	5.7 Million	2.7 Million	1.8 Million
Median Income			
2004	$75,000	$28,000	$41,000
2010	$82,000	$32,000	$44,000
Est. Median Net Worth			
2004	$348,000	$111,000	$125,000
2010	$277,000	$41,000	$76,000

Summary of "Middle Mass" Segments - 65 to 74 year-olds

	Married (#4)	Single Female (#5)	Single Male (#6)
Number of Households			
2004	3.0 Million	1.9 Million	0.9 Million
2010	3.4 Million	2.2 Million	1.0 Million
Median Income			
2004	$45,000	$18,000	$25,000
2010	$56,000	$21,000	$30,000
Est. Median Net Worth			
2004	$285,000	$130,000	$130,000
2010	$290,000	$106,000	$134,000

Summary of "Middle Affluent" Segments - 55 to 64 year-olds

	Married (#7)	Single Female (#8)	Single Male (#9)
Number of Households			
2004	1.0 Million	0.5 Million	0.3 Million
2010	1.1 Million	0.5 Million	0.4 Million
Median Income			
2004	$132,000	$58,000	$79,000
2010	$146,000	$64,000	$85,000
Est. Median Net Worth			
2004	$1,300,000	$415,000	$465,000
2010	$1,241,000	$185,000	$339,000

Summary of "Middle Affluent" Segments - 65 to 74 year-olds

	Married (#10)	Single Female (#11)	Single Male (#12)
Number of Households			
2004	0.6 Million	0.4 Million	0.2 Million
2010	0.7 Million	0.4 Million	0.2 Million
Median Income			
2004	$93,000	$43,000	$54,000
2010	$105,000	$45,000	$60,000
Est. Median Net Worth			
2004	$1,100,000	$480,000	$490,000
2010	$1,193,000	$437,000	$551,000

Please refer to Appendix A for a more detailed explanation of the treatment of asset and income values (as expressed in the above tables) from the Federal Reserve Board's Survey of Consumer Finances (2010).

MIDDLE MASS MARKET - SEGMENT PROFILES

The segments comprising the six Middle Mass segments are defined in the following discussion of their key differentiators and background. Please note that the discussions below that relate age 55 to 64 segments' to age 65 to 74 segments' characteristics involve different cohorts of individuals and thus some of the comparative implications drawn involve factors other than age. This is most important in terms of retirement implications as longevity increases and defined benefit pensions are replaced by defined contribution plans.

SEGMENT #1: MIDDLE MASS, 55 TO 64, MARRIED HOUSEHOLDS

The 5.7 million households in this segment, representing approximately 16% of the total middle income market, are defined by the following key differentiators:

Household Type:	Married	
Household Head Age:	55 to 64	
	2010	2004
Median Income:	$82,000	$75,000
- Income Range:	$52,000 to $130,000	$47,000 to $118,000
Est. Median Net Worth:	$277,000	$348,000
- Net Non-Financial Assets:	$181,000	$240,000
- Financial Assets:	$96,000	$108,000

Median income increased 1.5% annually over the six-year period, which is less than half the historic growth rate of 3.9%[1]. This is mitigated by the low inflation rates over the period. Median net worth decreased 20%, while net non-financial assets decreased 25% and financial assets decreased 11%. This moved these households from marginal retirement preparedness to a weaker position. While all measures of net worth decreased, it was not as severe as for non-married households, as discussed below. The changes in both net non-financial assets and financial assets generally reflected market movements. The share of net worth that is net non-financial assets fell slightly from 69% to 65%.

[1] United States Census Bureau, Table H-12AR: Household by Number of Earners by Median and Mean Income – All Races: 1980-2011.

SEGMENT #2: MIDDLE MASS, 55 TO 64, SINGLE FEMALE HOUSEHOLDS

These 2.5 million households represent approximately 8% of the total middle income market, and are defined by the following key criteria:

Household Type:	Single	
Household Head Age:	55 to 64	
	2010	2004
Median Income:	$32,000	$28,000
- Income Range:	$19,000 to $55,000	$18,000 to $52,000
Est. Median Net Worth:	$41,000	$111,000
- Net Non-Financial Assets:	$34,000	$75,000
- Financial Assets:	$7,000	$36,000

Median income increased 2.25% annually over the six-year period, which is slightly over half the historic growth rate. This is mitigated by the low inflation rates over the period. Median net worth decreased 63%, while net non-financial assets decreased 55% and financial assets decreased 81%. These households were unprepared in the 2004 study and their situation has deteriorated significantly. The changes in both net non-financial assets and financial assets were significantly worse than general market movements. The share of net worth that is net non-financial assets increased from 68% to 82%, which further compounds the low net worth by reducing liquidity.

SEGMENT #3: MIDDLE MASS, 55 TO 64, SINGLE MALE HOUSEHOLDS

These 1.8 million households represent approximately 4% of the total middle income market:

Household Type:	Single	
Household Head Age:	55 to 64	
	2010	2004
Median Income:	$44,000	$41,000
- Income Range:	$25,000 to $80,000	$25,000 to $71,000
Est. Median Net Worth:	$76,000	$125,000
- Net Non-Financial Assets:	$63,000	$89,000
- Financial Assets:	$13,000	$36,000

Median income increased 1.2% annually over the six-year period, which is less than one-third the historic growth rate. This is mitigated by the low inflation rates over the period. Median net worth decreased 39%, while net non-financial assets decreased 29% and financial assets decreased 64%. This deterioration was worse than that for similarly situated married households but better than the result for households headed by a single female. These households were unprepared in the 2004 study and their situation has deteriorated significantly. The changes in net non-financial assets was consistent with the market but the decrease in financial assets was significantly worse than general market movement. The share of net worth that is net non-financial assets increased from 71% to 83%, which further compounds the low net worth due to decreased liquidity.

SEGMENT #4: MIDDLE MASS, 65 TO 74, MARRIED HOUSEHOLDS

This segment includes 3.4 million households, representing approximately 9% of the total middle income market. The criteria defining this segment include:

Household Type:	Married	
Household Head Age:	65 to 74	
	2010	2004
Median Income:	$56,000	$45,000
- Income Range:	$34,000 to $93,000	$28,000 to $81,000
Est. Median Net Worth:	$290,000	$285,000
- Net Non-Financial Assets:	$221,000	$185,000
- Financial Assets:	$69,000	$100,000

Median income increased 3.7% annually over the six-year period, which is approximately equal to the historic growth rate. The value of this growth was strengthened by the low inflation rates over the period. Median net worth was virtually unchanged, while net non-financial assets increased 19% and financial assets decreased 31%. Both of the components of net worth moved counter to general market movements. These households were marginally prepared in the 2004 study and their situation may be slightly improved by the increase in income despite the unchanged net worth. The change in net non-financial assets was counter to the market but the decrease in financial assets was significantly worse than general market movement. The share of net worth that is net non-financial assets increased from 65% to 76%, which creates a decrease in liquidity.

SEGMENT #5: MIDDLE MASS, 65 TO 74, SINGLE FEMALE HOUSEHOLDS

These 2.2 million households represent approximately 6% of the total middle income market, and are defined as follows:

Household Type:	Single	
Household Head Age:	65 to 74	
	2010	2004
Median Income:	$21,000	$18,000
- Income Range:	$12,000 to $41,000	$11,000 to $35,000
Est. Median Net Worth:	$106,000	$130,000
- Net Non-Financial Assets:	$97,000	$85,000
- Financial Assets:	$9,000	$45,000

Median income increased 2.6% annually over the six-year period, which is approximately two thirds the historic growth rate. The low growth was mitigated by the low inflation rates over the period. Median net worth decreased 18%, while net non-financial assets increased 15% and financial assets decreased 80%. Both of the components of net worth moved counter to general market movements. These households were unprepared in the 2004 study and their situation has deteriorated. This deterioration contrasts with similarly situated married and single male households, for whom the situation was generally unchanged. The share of net worth that is net non-financial assets increased from 65% to 92%, which further magnifies the unpreparedness with a decrease in liquidity.

SEGMENT #6: MIDDLE MASS, 65 TO 74, SINGLE MALE HOUSEHOLDS

These 1,000,000 households represent approximately 3% of the total middle income market:

Household Type:	Single	
Household Head Age:	65 to 74	
	2010	2004
Median Income:	$30,000	$25,000
- Income Range:	$18,000 to $51,000	$14,000 to $51,000
Est. Median Net Worth:	$134,000	$130,000
- Net Non-Financial Assets:	$122,000	$88,000
- Financial Assets:	$12,000	$42,000

Median income increased 3.1% annually over the six-year period, which is approximately 80% of the historic growth rate. The mildly low growth was complemented by the low inflation rates over the period. Median net worth increased slightly, while net non-financial assets increased 39% and financial assets decreased 71%. Both of the components of net worth moved counter to general market movements. These households were unprepared in the 2004 study and their situation has not changed. The share of net worth that is net non-financial assets increased from 68% to 91%, which further magnifies the unpreparedness with a decrease in liquidity.

MIDDLE AFFLUENT MARKET - SEGMENT PROFILES

Our discussion now shifts to the remaining six segments, representing the "middle affluent" households. The following discussion profiles the key differentiators and background for these more affluent segments.

SEGMENT #7: MIDDLE AFFLUENT, 55 TO 64, MARRIED HOUSEHOLDS

The 1.1 million households in this segment represent approximately 3% of the total middle income market, and are defined by the following key criteria:

Household Type:	Married	
Household Head Age:	55 to 64	
	2010	2004
Median Income:	$146,000	$132,000
- Income Range:	$130,000 to $167,000	$107,000 to $151,000
Est. Median Net Worth:	$1,241,000	$1,300,000
- Net Non-Financial Assets:	$671,000	$884,000
- Financial Assets:	$570,000	$416,000

Median income increased 1.7% annually over the six-year period, which is slightly less than half of the historic growth rate. The low growth was mitigated by the low inflation rates over the period. Median net worth decreased 5%, while net non-financial assets decreased 24% and financial assets increased 37%. Net non-financial assets moved counter to general market movement, while financial assets outperformed the market. These households were prepared in the 2004 study and their situation has deteriorated but still leaves them well prepared. The share of net worth that is net non-financial assets decreased from 68% to 54%, which improves their financial options.

SEGMENT #8: MIDDLE AFFLUENT, 55 TO 64, SINGLE FEMALE HOUSEHOLDS

These 500,000 households represent approximately 1.5% of the total middle income market and are defined by the following key differentiators:

Household Type:	Single	
Household Head Age:	55 to 64	
	2010	2004
Median Income:	$64,000	$58,000
- Income Range:	$55,000 to $75,000	$52,000 to $71,000
Est. Median Net Worth:	$185,000	$415,000
- Net Non-Financial Assets:	$117,000	$299,000
- Financial Assets:	$68,000	$116,000

Median income increased 1.7% annually over the six-year period, which is slightly less than half of the historic growth rate. The low growth was mitigated by the low inflation rates over the period. Median net worth decreased 55%, while net non-financial assets decreased 61% and financial assets decreased 41%. Both components of net worth significantly underperformed relative to general market movements. These households were moderately prepared in the 2004 study, but the deterioration in net worth now leaves them unprepared. The share of net worth that is net non-financial assets decreased from 72% to 63%; however, any improvement in liquidity is overwhelmed by the decrease in net worth.

SEGMENT #9: MIDDLE AFFLUENT, 55 TO 64, SINGLE MALE HOUSEHOLDS

400,000 households, somewhat less than 1% of the total middle income market, represent this segment:

Household Type:	Single	
Household Head Age:	55 to 64	
	2010	2004
Median Income:	$85,000	$79,000
- Income Range:	$80,000 to $97,000	$71,000 to $95,000
Est. Median Net Worth:	$339,000	$465,000
- Net Non-Financial Assets:	$214,000	$349,000
- Financial Assets:	$125,000	$116,000

Median income increased 1.2% annually over the six-year period, which is slightly less than one third of the historic growth rate. The low growth was mitigated by the low inflation rates over the period. Median net worth decreased 27%, while net non-financial assets decreased 39% and financial assets increased 8%. Both components of net worth broadly reflected general market movements. These households were moderately prepared in the 2004 study, but the deterioration in net worth now narrows any margin of preparedness. The share of net worth that is net non-financial assets decreased from 75% to 63%; however, any improvement in liquidity is overshadowed by the decrease in net worth.

SEGMENT #10: MIDDLE AFFLUENT, 65 TO 74, MARRIED HOUSEHOLDS

700,000 households comprise this segment, representing roughly 2% of the total middle income market. Other criteria defining this segment include:

Household Type:	Married	
Household Head Age:	65 to 74	
	2010	2004
Median Income:	$105,000	$93,000
- Income Range:	$93,000 to $122,000	$81,000 to $110,000
Est. Median Net Worth:	$1,193,000	$1,100,000
- Net Non-Financial Assets:	$561,000	$690,000
- Financial Assets:	$632,000	$410,000

Median income increased 2.0% annually over the six-year period, which is slightly more than half of the historic growth rate. The low growth was mitigated by the low inflation rates over the period. Median net worth increased 8%, while net non-financial assets decreased 19% and financial assets increased 54%. The decrease in net non-financial assets broadly reflected relative the general market movement, while the increase in financial assets exceeded the market. These households were prepared in the 2004 study and their situation has not changed. The share of net worth that is net non-financial assets decreased from 63% to 47%, which provides additional liquidity.

SEGMENT #11: MIDDLE AFFLUENT, 65 TO 74, SINGLE FEMALE HOUSEHOLDS

400,000 households represent this small segment of the total middle income market, representing roughly 1% of the total. The other distinctions are as follows:

Household Type:	Single	
Household Head Age:	65 to 74	
	2010	2004
Median Income:	$45,000	$43,000
- Income Range:	$41,000 to $52,000	$33,000 to $48,000
Est. Median Net Worth:	$437,000	$480,000
- Net Non-Financial Assets:	$299,000	$320,000
- Financial Assets:	$138,000	$160,000

Median income increased 1.0% annually over the six-year period, which is one fourth of the historic growth rate. The low growth was mitigated by the low inflation rates over the period. Median net worth decreased 9%, while net non-financial assets decreased 7% and financial assets decreased 14%. The decrease in net non-financial assets broadly reflected the general market movement, while the decrease in financial assets slightly lagged the market. These households were moderately prepared in the 2004 study and their situation has deteriorated slightly. The share of net worth that is net non-financial assets is unchanged at 68%.

SEGMENT #12: MIDDLE AFFLUENT, 65 TO 74, SINGLE MALE HOUSEHOLDS

The smallest of all the segments, these 200,000 households represent approximately 0.5% of the total middle income market:

Household Type:	Single	
Household Head Age:	65 to 74	
	2010	2004
Median Income:	$60,000	$54,000
- Income Range:	$51,000 to $70,000	$46,000 to $65,000
Est. Median Net Worth:	$551,000	$490,000
- Net Non-Financial Assets:	$377,000	$340,000
- Financial Assets:	$173,000	$150,000

Median income increased 1.8% annually over the six-year period, which is slightly under half of the historic growth rate. The low growth was mitigated by the low inflation rates over the period. Median net worth increased 12%, while net non-financial assets increased 11% and financial assets increased 15%. The increases in both net non-financial assets and financial assets exceeded general market movements. These households were moderately prepared in the 2004 study and their situation is virtually unchanged. The share of net worth that is net non-financial assets dropped slightly from 69% to 68%.

SEGMENTATION – SUMMARY CONCLUSIONS

Comparisons between the Middle Mass and Middle Affluent segments profile the dramatic disparities in wealth accumulation and income levels that have developed over the past several decades.. During the six years between the 2004 and 2010 studies, some relationships between the comparable segments within the Middle Mass and Middle Affluent categories have changed. The ratios of Middle Affluent to Middle Mass median income levels are virtually unchanged at 1.8 to 2.0 in the age 55-64 segments, but have decreased from a range of 2.1 to 2.4 to a range of 1.9 to 2.1 in the age 65-74 segments. This decrease reflects reduced interest and dividends, which more heavily impacts retirees with greater savings. Similar ratios for net worth increased from 3.7 to 4.5 among the age 55-64 segments and from an average of 3.8 to 4.1 in the age 65-74 segment. These changes are due to the net worth of the Middle Affluent segments decreasing less than that of the Middle Mass segments.

Income levels drop for all households once they reach typical retirement ages. The reduction for Middle Mass households reduced from 38% to 33%, due to the stronger income growth among the age 65-74 segments. Still it remained higher than the 29% reduction that continued for Middle Affluent households.

CONCLUSIONS

The changes over the six years from 2004 to 2010 varied among the various market segments.

- In general, income gains lagged behind the historic average of 3.9% annual increase; but these generally were compensated for by a reduced level of inflation.
- Households in the age 55-64 segments generally showed decreases in net worth ranging from 20% to 60%, while households in the age 65-74

segments had more muted changes that generally were small gains of approximately 10%.

- Middle Mass households of all ages showed significant losses of financial assets; but the impact was heterogeneous with single female households experiencing 80% decreases, male households approximately 65%, and married households showing an average of 20%. Middle Affluent married households gained an average of 60% in financial assets, while single male households gained an average of 10% and single female households lost an average of 30%.
- Non-financial assets fell significantly among age 55-64 segments, with average losses of 25% for married households, 35% for single male households, and 55% for single female households. Among age 65-74 households, non-financial assets grew an average of 25% among Middle Mass households and ranged from a 20% decrease to an 11% increase among Middle Affluent households.
- The share of net worth in non-financial assets generally grew among Middle Mass households from an average of 68% to 83%. This is a result of the sharp drop in financial assets. Among Middle Affluent households, the ratio dropped from an average of 68% to 61%, mainly due to strong growth in financial assets in some segments.

The implications of the various changes in financial values are that most segments have lost ground in retirement preparedness over the six-year period. The following comments are updates of the retirement readiness status for each of the segments. While the various values have changed, the outlook for each segment is generally unchanged.

(Please note: Our original definition of the middle income market included 45 to 54 year-olds. These households represent 43% of the total 35.1 million households reviewed. As noted above, in order to provide better focus on households' financial status leading up to and subsequent to "retirement", we have narrowed the definition of our segments to 55-64 year-olds and 65-74 year-olds.)

The six Middle Mass segments (excluding 45 to 54 year-olds) represent 48% of the 35.1 million total Middle Income market households, and roughly 40% of the total net worth. Over half of these households are married, with the largest group (5.7 million) being married households aged 55 to 64. These households are likely to have relatively simple needs and a modest base of wealth from which to plan their retirement. They will need sound advice from either product providers or other financial sources in order to achieve their retirement aspirations. The 7.7 million single households will likely have a primary focus on generating sufficient retirement income and on providing for health care and other retirement contingencies. Optimal retirement solutions for Middle Mass households will incorporate specific household characteristics (e.g., health status, retirement literacy, specific retirement objectives) while maximizing the efficient use of assets and other income sources.

The six Middle Affluent market segments represent only 9% of the total Middle Income market households, but 28% of the total net worth. Again, over half of these households are married (1.8 million in total). These married households are likely to have relatively significant amounts of net worth ($1.2 million +) and reasonable income amounts, even in retirement. These households are likely to have the wherewithal to pursue a variety of objectives in retirement, including specifying clear objectives for bequests. The 1.0 million single Middle Affluent households, excluding single female households age 55-64, will also have an adequate base of wealth from which to plan their retirement; however, the reduced net worth for the .5 million excluded female households has reduced their assets to an inadequate level. Almost all Middle Affluent households will expect relatively sophisticated, expert advice, and will likely consider a broader variety of potential retirement solutions from product providers and financial advisors. Optimal retirement solutions for Middle Affluent households will also incorporate specific household characteristics (e.g., health status, retirement literacy, specific retirement objectives), but are also likely to include a specific focus on achievement of aspirational goals tied to discretionary spending (vacation homes, other retirement activities). As a result, the necessary decision-making processes for Middle Affluent households will likely have additional steps and iterations in order to achieve their retirement goals.

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APPENDICES

A: Treatment of Asset and Income Vaues - Survey of Consumer Finances

The income and asset values shown in this report are based on the Federal Reserve Board's Survey of Consumer Finances, 2010. The following table shows how key items are treated and value, i.e. what is included and excluded from the values:

	Treatment in income	Treatment in assets	Comments
Social Security	Included once benefits are claimed; at reported income amounts	No value is included	Note that in some other research, values of future Social Security benefits are estimated and included in retirement assets; some studies using HRS data
DB Pensions	Included once benefits are claimed if paid in the form of life or certain income	No value is included for future pension payments; If benefits are paid as lump sum, they are included in assets after payment	Note that in some other research, values of future pension benefits are estimated and included in retirement assets; e.g. some studies using HRS data
	Treatment in	Treatment in	Comments

	income	assets	
Financial investments	Dividends and interest included in income	Asset values included	Note that capital gains are not reflected in income, but instead increase asset values
Housing values	None	Current value based on net equity in primary residence and other property	Changes in values are not reflected in income, but change asset values
Tax deferred investments	Required minimum distributions are included as income	Current value	No adjustment is made for future taxes due

B: Household Distribution Tables

See Attachment

C: Methodology

Determination of Segment Population

The distribution of households by marital status and sex was drawn from Table H2. Households, by Type, Age of Members, Region of Residence, and Age of Householder: 2010. (U.S. Census Bureau, Current Population Survey, 2011 Annual Social and Economic Supplement) Segment populations are percentile subsets.

Determination of Income

The data in Appendix B is based on median and mean statistics from the Federal Reserve's Survey of Consumer Finances, 2010. The percentile distributions for income, net worth, financial assets, non-financial assets, any asset, and debt are based on a log normal distribution.

In order to determine income by category, the Census Bureau's Statistical Abstract Table 692 (Money Income of Households--Distribution by Income Level and Selected Characteristics) was used to distribute the mean and median in Appendix B based on Household Category (married, male family household, female family household, male non-family household, and female non-family household) and Age. Percentile distributions were created with a log normal distribution. From these, aggregate male household income (family and nonfamily combined) and aggregate female household income (family and non-family combined) wer developed on the basis of family and non-family distributions in Table H2. Households, by Type, Age of Members, Region of Residence, and Age of Householder: 2010. (U.S. Census Bureau, Current Population Survey, 2011 Annual Social and Economic Supplement)

Determination of Assets

Net worth, as shown in Appendix B, was distributed among married, single male, and single female households on the basis of relative asset levels in Table 1. Median Value of Assets for Households, by Type of Asset Owned and Selected

Characteristics (U.S. Census Bureau, Survey of Income and Program Participation, 2008 Panel, Wave 7) and segment distribution in Table H2. Households, by Type, Age of Members, Region of Residence, and Age of Householder: 2010. (U.S. Census Bureau, Current Population Survey, 2011 Annual Social and Economic Supplement) The split between financial and non-financial assets was drawn from the Survey of Consumer Finances, 2010, based on separate ratios for married and single households.