# *Integrating Reverse Mortgages with Other Products to Create a Balanced Retirement Plan: Part 2 – a Model*

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2011 NRMLA Conference

# What if financial planning?

- The **process** to determine **whether** and **how** a client can meet their **lifetime goals** through **proper management** of financial resources.

# The retirement side

- Retirement planning has long been documented as the #1 reason people seek financial advisors.
- And why not, we are *always* planning for it!

# Goal with clients for retirement?

- Make the peanut butter and jelly last until the end of the sandwich.
  - In other words, make assets last for life.
- Sounds easy enough, but think of think of the variables.
  - Life expectancy, inflation, rates of return, future tax rates, etc.

# The big issue

- Companies are moving from defined benefit pension plans to defined contribution profit-sharing plans.
  - Implication: Rather than budgeting within pension benefit and saving extra, we have to save extra only and manage that investment to withdraw at a ***sustainable rate***.

# The math

- Sustainable withdrawal – what percent of a portfolio can be withdrawn in year 1 of retirement, then subsequent withdrawals adjusted for inflation in order to have a reasonable chance of the portfolio lasting?

# The answer

- GENERALLY, 4% to 5% depending on specific circumstances.

- How is this calculated?
  - Using historical average rates of return
  - Using (post-depression) recession time periods to test through actual return sequences
  - Bootstrapping
  - Monte Carlo simulations

# The facts

- Baby boomers, in particular, will be retiring with modest portfolios and much of their wealth comprised by the equity in their home.

- "Protecting home equity may be a luxury that future retirees can ill afford……. as people rely increasingly on meager 401(k) balances rather than on traditional pensions."
  - National Retirement Risk Index (2010)

# Why the new attention from financial planning?

- Generally speaking, reverse mortgages were previously thought of as a last resort.
  - Expensive
  - Not very competitive
  - (We are fiduciaries, remember)
- However, we have seen the need to utilize home equity for some clients.

# Why have we changing our thinking?

## HECM Saver

- "New" HECM Saver piqued our interest, from a professional and academic perspective.
- Can we use the HECM Saver as a cash management tool during retirement?

# Using home equity

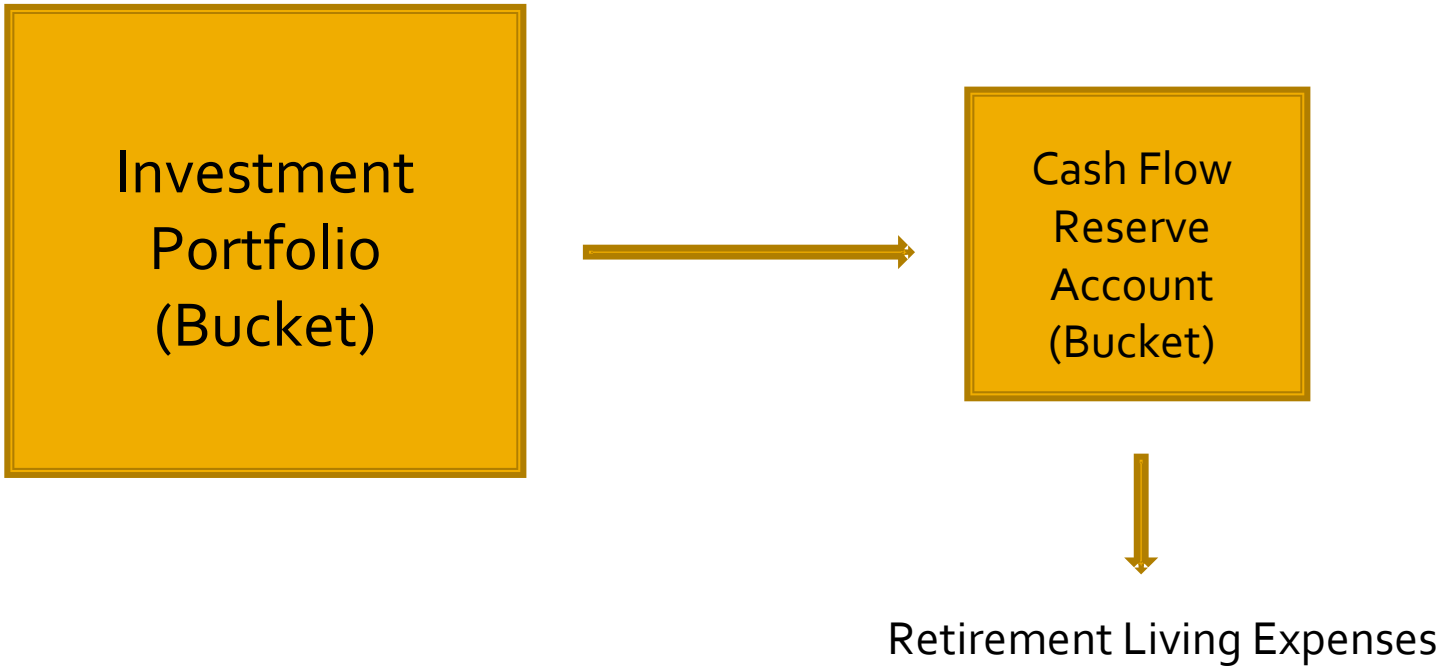
- We want our clients to have the income to meet their needs until the end of their plan.
- **Home equity is an "asset" that normally remains untapped.**
- Portfolio runs dry and live on Social Security in a half-million dollar house, really?

# Traditional Distribution Strategy

- Reverse dollar cost averaging
  - Selling at specified periods from all assets – sell high sometimes, low others, "averages" over time.
- Bucket strategies
  - Various forms, logic is short-term needs in short-term, liquid assets. Longer term needs in longer-term, growth assets.

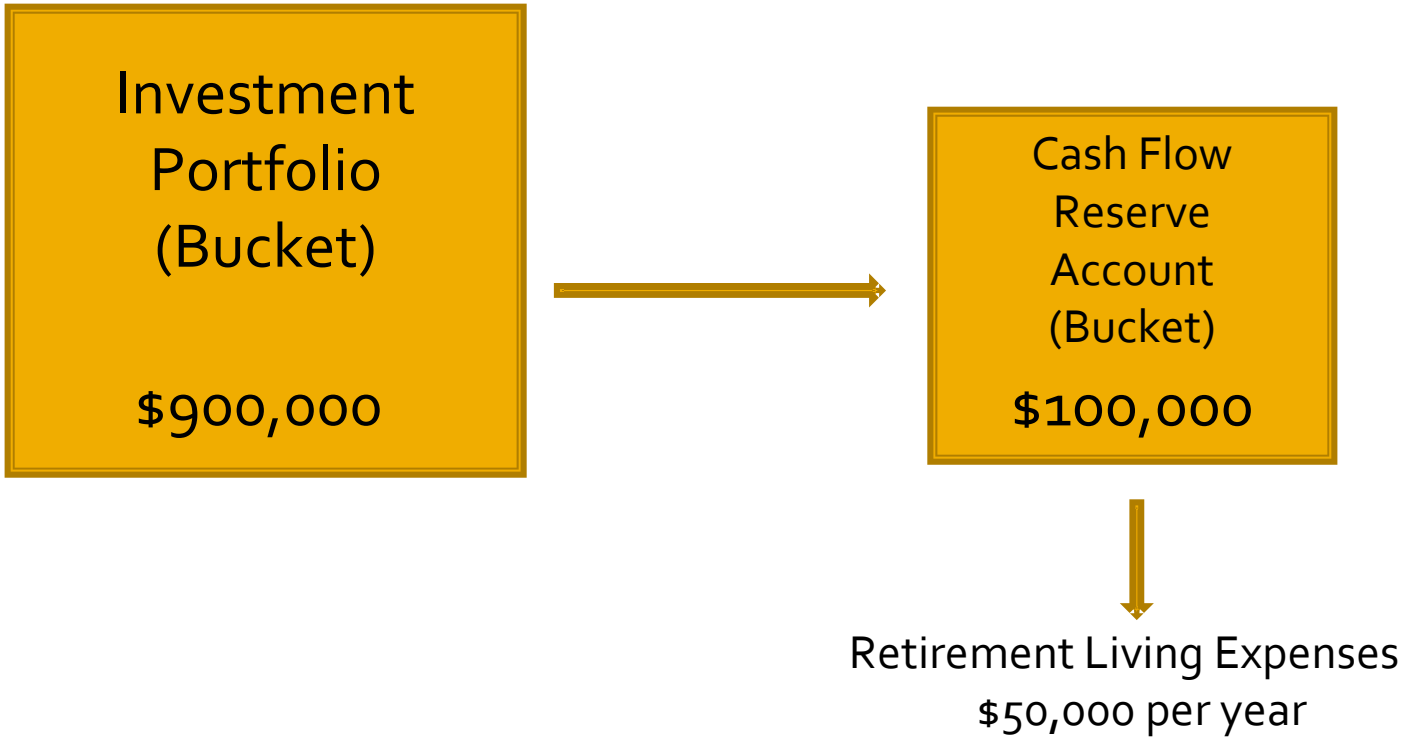
# Cash Flow Reserve Strategy

- Two Bucket Strategy
  - Cash Flow Reserve Account contains 2 years worth of living expenses.



# CFR Example

- Client has $1M portfolio and needs $50,000 per year.



# CFR

- Ongoing process
  - Refill cash bucket
    - Need to Rebalance & Stocks or Bonds > -5%
    - When Cash levels drop to Two Months
  - Rebalance at 5% deviation
    - Market crashes – sell bonds and buy stocks to bring balance back to policy.

# CFR – The good and bad

- Benefits
  - Behavioral – Client knows where income is coming from, not to worry about short-term market volatility.
  - Numbers – Allows control over selling assets to fund living.
- However
  - Opportunity cost for amount left in cash.

# How we see the fit

- Line of Credit – The Standby Reverse Mortgage
  - Lessen the opportunity cost of the Cash Flow Reserve Strategy – 2 years to 6 months
  - Another asset source to tap when market is down
- Tenure payments
  - Create an extra source of lifetime income.

# Now the fun stuff…

- The following is a sneak peek at a research study submitted to a journal to determine the fit of reverse mortgages in retirement distribution management.

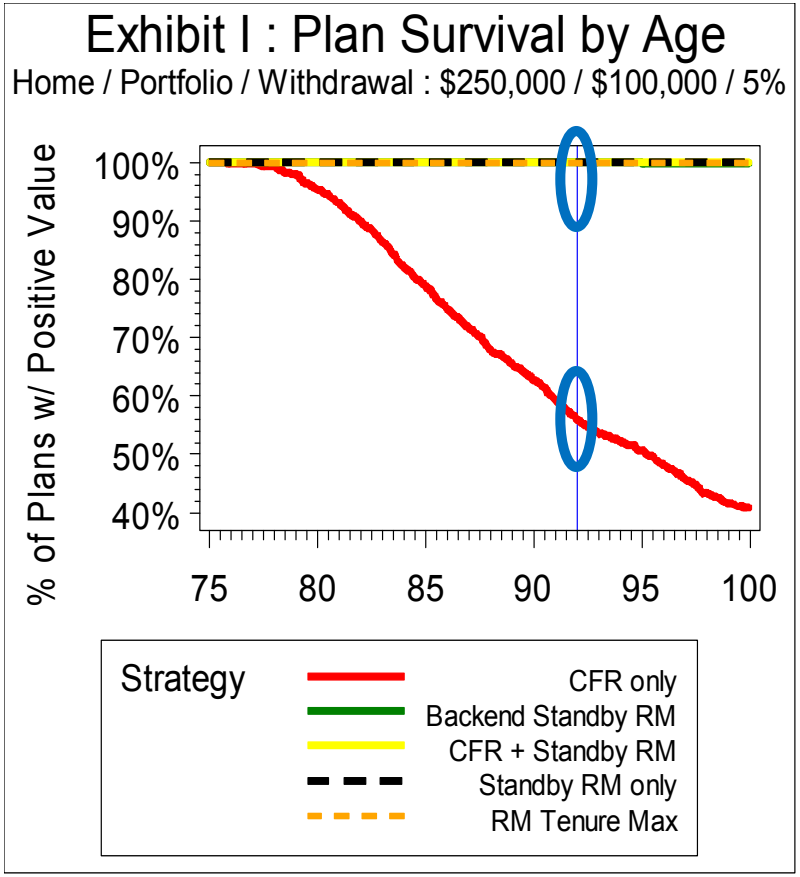
# RM Distribution Strategies

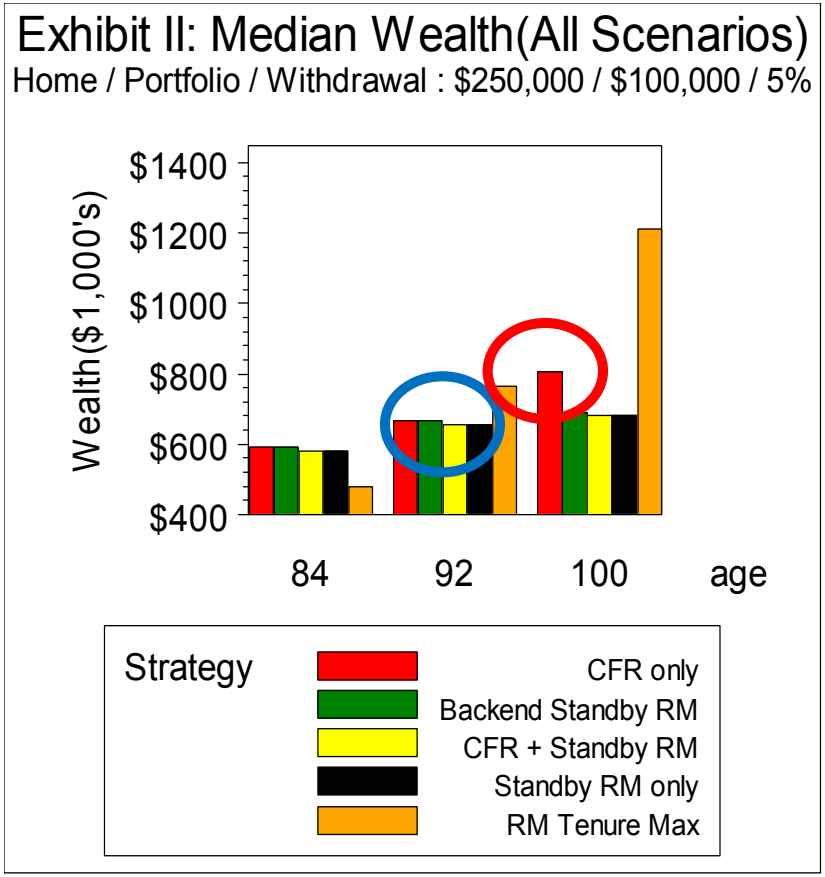
- Backend Standby RM **CFR → Line of Credit**
- CFR + Standby RM **Six Mo. Cash & Line of Credit (62)**
- Standby RM only **No Cash & Line of Credit (62)**
- RM Tenure Max Payments **CFR & Pmts. for Life**

# Scenarios

- High Home Equity and Moderate Withdrawal
  - $250k / $100k & 5%
- High Home Equity and High Withdrawal
  - $250k / $100k & 6%
- Low Home Equity and Moderate Withdrawal
  - $250k / $500k & 5%
- Low Home Equity and High Withdrawal
  - $250k / $500k & 6%

# High HE & Moderate WD



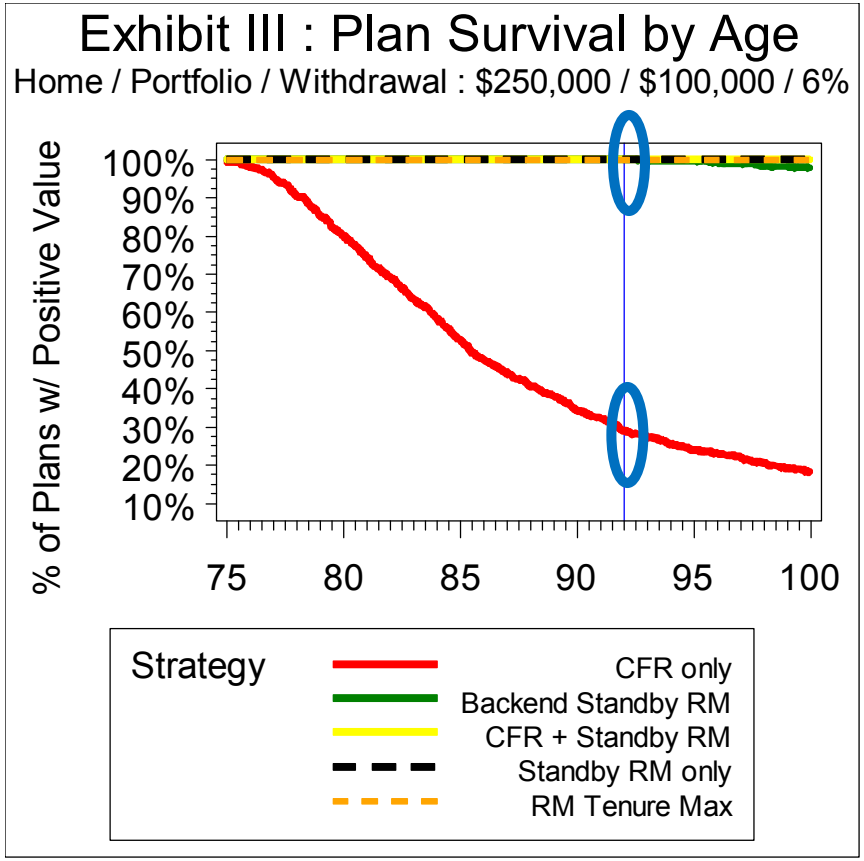
# High HE/Mod Withdrawal Example

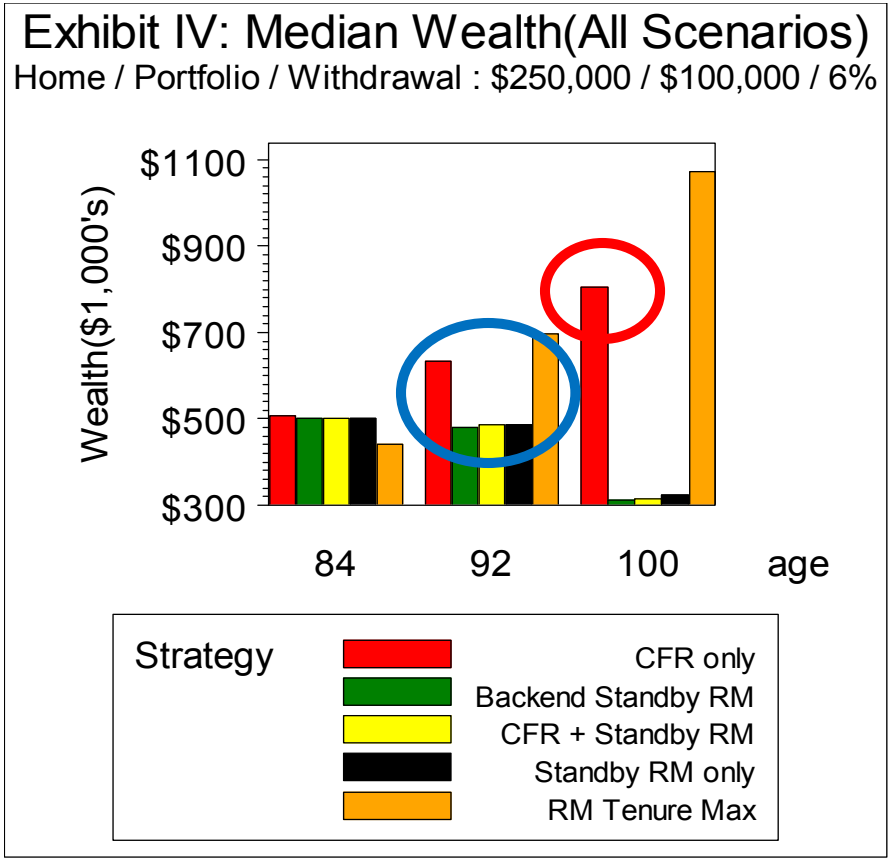
- Home Equity: $250,000
- Portfolio: $100,000
- Withdrawal Rate: 5% ($5,000)

| Age 92 | Success | Wealth |
|---|---|---|
| CFR Only | 56% | $665 |
| Standby | 100% | $650 |
| Tenure | 100% | $745 |

| Age 100 | Success | Wealth |
|---|---|---|
| CFR Only | 41% | $805 |
| Standby | 100% | $680 |
| Tenure | 100% | $1,210 |

# High HE & High WD



# High HE/High Withdrawal Example

- Home Equity: $250,000
- Portfolio: $100,000
- Withdrawal Rate: 6% ($6,000)

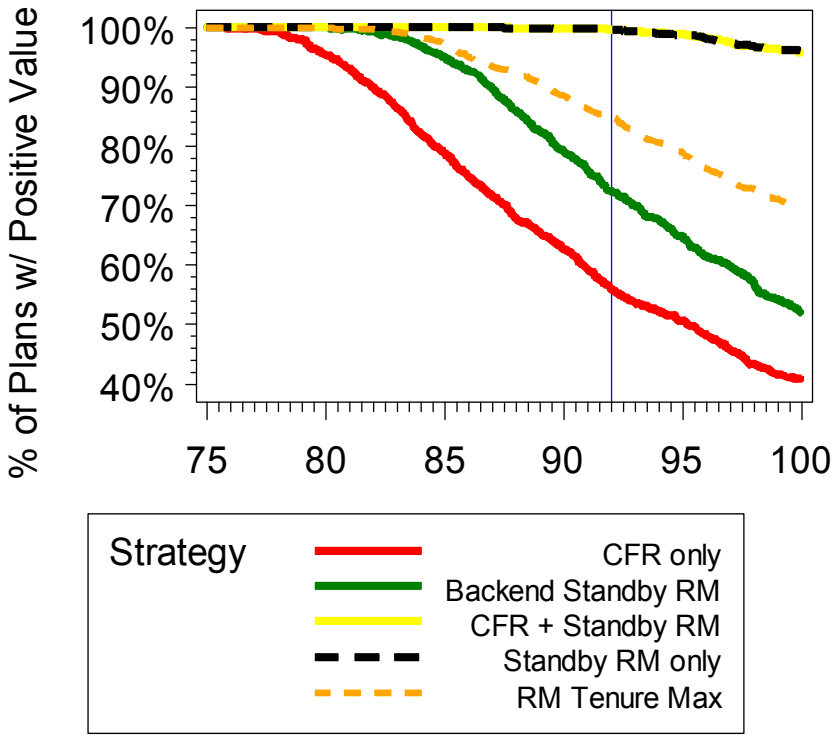
| Age 92 | Success | Wealth |
|---|---|---|
| CFR Only | 29% | $625 |
| Standby | 100% | $490 |
| Tenure | 100% | $690 |

| Age 100 | Success | Wealth |
|---|---|---|
| CFR Only | 18% | $805 |
| Standby | 100% | $315 |
| Tenure | 100% | $1,070 |

# Low HE & Moderate WD

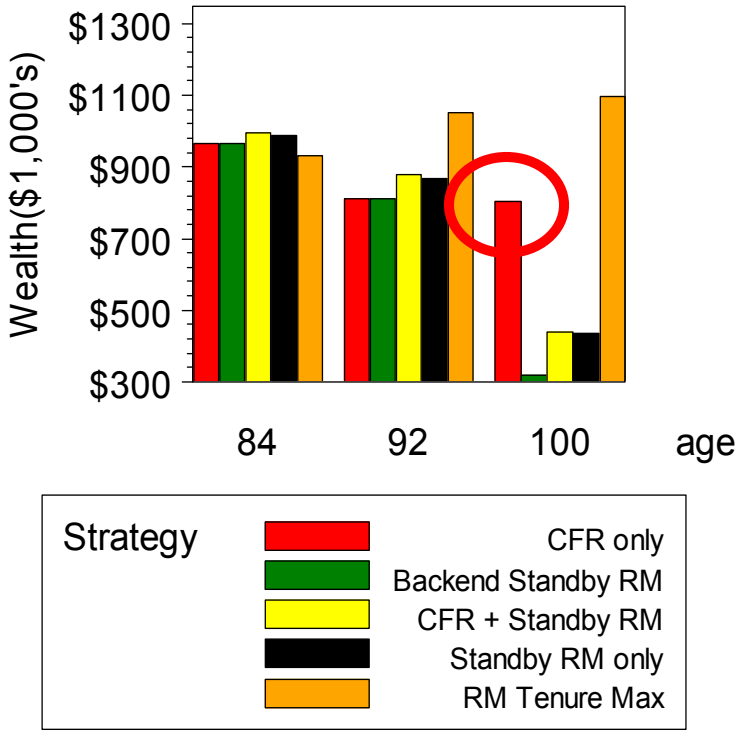
## Exhibit V : Plan Survival by Age

Home / Portfolio / Withdrawal : $250,000 / $500,000 / 5%




## Exhibit VI: Median Wealth(All Scenarios)

Home / Portfolio / Withdrawal : $250,000 / $500,000 / 5%



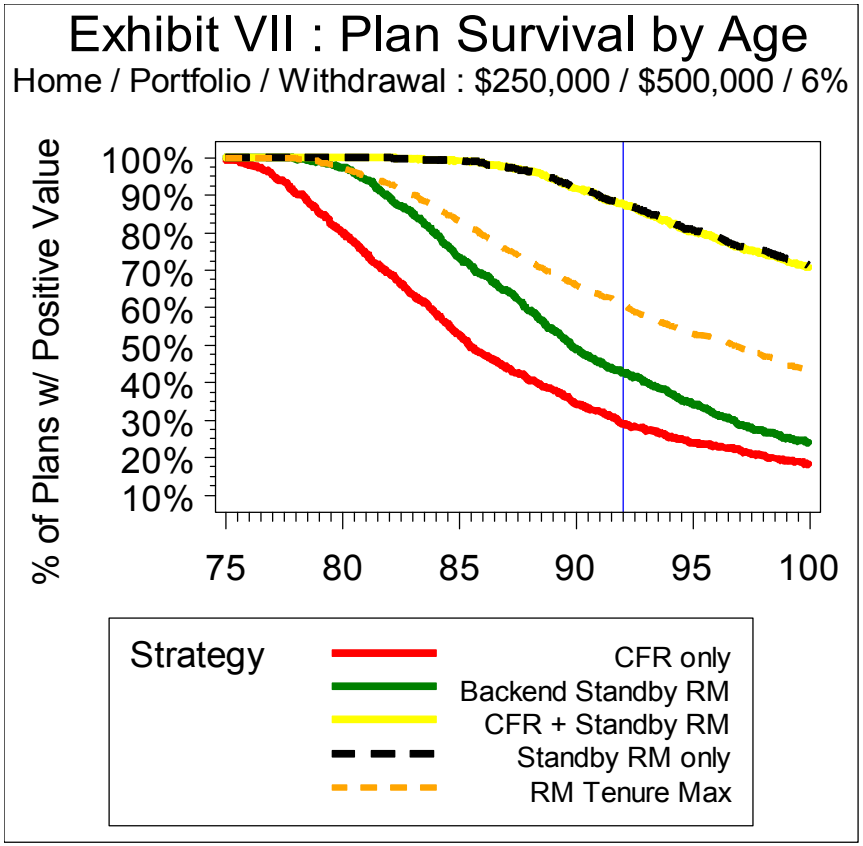
# Low HE/Mod Withdrawal Example

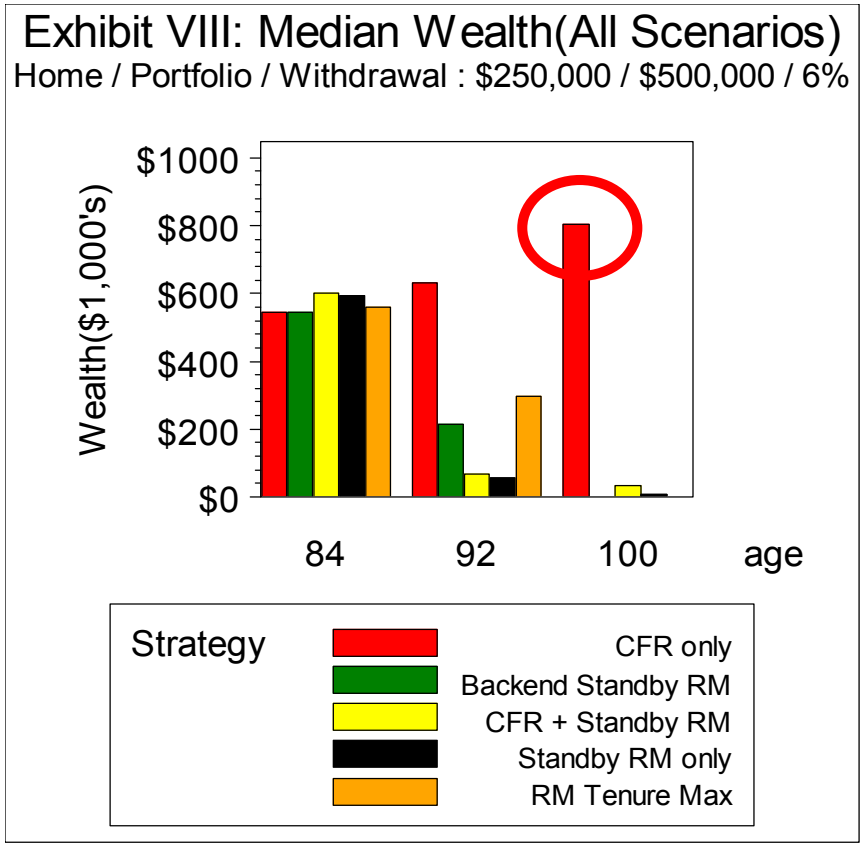
- Home Equity: $250,000
- Portfolio: $500,000
- Withdrawal Rate: 5% ($25,000)

| Age 92 | Success | Wealth |
|---|---|---|
| CFR Only | 56% | $825 |
| Standby | 99% | $900 |
| Tenure | 85% | $1,050 |

| Age 100 | Success | Wealth |
|---|---|---|
| CFR Only | 41% | $805 |
| Standby | 95% | $440 |
| Tenure | 71% | $1,100 |

# Low HE & High WD



# Low HE/High Withdrawal Example

- Home Equity: $250,000
- Portfolio: $500,000
- Withdrawal Rate: 6% ($30,000)

| Age 92 | Success | Wealth |
|---|---|---|
| CFR Only | 29% | $625 |
| Standby | 88% | $115 |
| Tenure | 60% | $320 |

| Age 100 | Success | Wealth |
|---|---|---|
| CFR Only | 18% | $805 |
| Standby | 70% | $30 |
| Tenure | 43% | $0 |

# Don't Ignore Home Equity

## Portfolio Survival and Terminal Wealth Observations

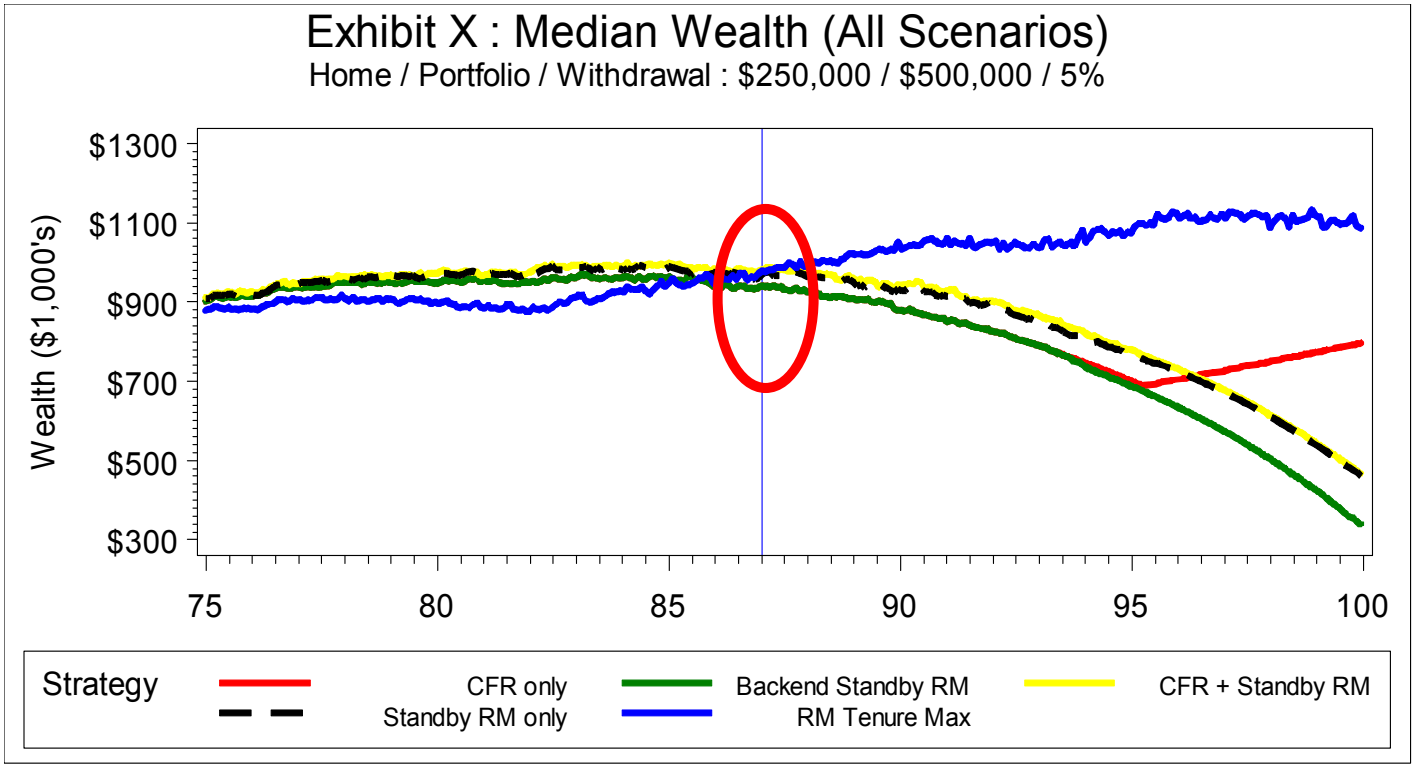
**RM Tenure Max Appeal Diminishes** ←

| Withdrawal Rate | Home Equity Relative to Portfolio: Low | Moderate | High |
|---|---|---|---|
| 4% | **Survival**: Standby RM<br>**Wealth (LE <87)**: Standby RM<br>**Wealth (LE>87):** RM Tenure Max or Standby RM | **Survival:** Standby RM<br>**Wealth (LE <87):** Standby RM<br>**Wealth (LE>87):** RM Tenure Max | **Survival:** Standby RM, RM Tenure Max<br>**Wealth (LE <87):** Standby RM<br>**Wealth (LE>87):** RM Tenure Max |
| 5% | **Survival**: Standby RM<br>**Wealth (LE <87):** Standby RM<br>**Wealth (LE>87):** RM Tenure Max or Standby RM | **Survival:** Standby RM<br>**Wealth (LE <87)**: Standby RM<br>**Wealth (LE>87):** RM Tenure Max or Standby RM | **Survival:** Standby RM , RM Tenure Max<br>**Wealth (LE <87):** Standby RM<br>**Wealth (LE>87):** RM Tenure Max |
| 6% | **Survival:** Standby RM<br>**Wealth (LE <87):** Standby RM<br>**Wealth (LE>87):** Standby RM | **Survival:** Standby RM (1 mo. / 6 mo.)<br>**Wealth (LE <87):** Standby RM<br>**Wealth (LE>87):** RM Tenure Max or Standby RM | **Survival:** Standby RM, RM Tenure Max<br>**Wealth (LE <87):** Standby RM<br>**Wealth (LE>87):** RM Tenure Max |

↓ **RM More Important /Survival Gap**

**RM More Effective / Survival Gap** →

# Standby RM or Tenure Payments?



# Main conclusion

- Financial planners cannot ignore the "value" of home equity.
- Trade-off between Standby RM and Tenure Max Payments based on life expectancy and ending wealth.

# Conclusions

- Survival
  - Standby RM Survival Rates Best
  - 20%-70% ↑ Survival vs. CFR @ 92
- Wealth
  - Little or no Wealth compromised @ 5% or less withdrawal rate
  - RM Tenure Payments with High Life Expectancy

# Assumptions

- 60% Equity (S&P 500) / 40% fixed income portfolio (intermediate bond index)
- Equity return – 9%*
- Fixed income return – 5.2%*
- Cash – 3%*
- Transaction costs - .01% portfolio value
- Lender margin 2.25% (no origination)
- 1-month LIBOR*
- Insurance 1.25%

*modeled within a distribution in Monte Carlo

# Questions?