# Model Bucket Portfolios for Retirement 

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Why is bucketing necessary?


# The old "three-legged stool" for retirement is wobbly for many retirees and soon-to-be retirees. 

- Social Security
- Withdrawals from portfolio
- Pension
- Just $18 \%$ of workers currently covered by pensions.

Yet another big impetus for bucketing...guess what?


Source: Bankrate.com.

## You'd have to be very wealthy to wring out a livable yield using CDs.

- Average 6-month CD rates in 1970: 9.1\%
- Average 6 -month CD rates in 1980: $13.4 \%$
- Average 6-month CD rates in 1990: 8.2\%
- Average 6-month CD rates in 2000: 6.2\%
- Average 6-month CD rates in 2014: 0.8\%


## What if you're willing to take on some interest-rate risk?

- Yield for Barclays Aggregate Bond Index: 2.1\%
- Yield for Intermediate-Term Treasury Bonds: 1.6\%
- Yield for Intermediate-Term Municipal Bonds: $\sim 1.8 \%$
- Yield for Barclays Aggregate U.S. Long Government Bond Index: 2.6\%


## With long-term bonds, the risks might not be worth it.

- Yield for Barclays Aggregate U.S. Long Government Bond Index: 2.6\%
- Duration: 15.5 Years
- Duration stress test: Duration minus yield $=$ expected loss in 1-year period in which rates rise by 1 percentage point
- 15.5 minus $2.6=\sim 12.9 \%$ loss


## Reaching for lower-quality bonds carries its own risks.

High-Yield Bonds:<br>Current Yield: ~ 5\%-6\%<br>2008 Return: -24\%<br>Bank Loan<br>Current Yield: ~ 4.5\%<br>2008 Return: -17\%

Emerging-Markets Bond
Current Yield: ~ 6\%-7\%
2008 Return: -26\%

Multisector Bond Fund
Current Yield: ~ 4\%
2008 Return: -15\%

# We love dividend-paying stocks, too, but even solid all-equity portfolios will be volatile. 

Vanguard Equity-Income<br>Current Yield: 2.6\%<br>2008 Return: -31\%<br>Vanguard Dividend Growth<br>Current Yield: 2.0\%<br>2008 Return: -25.6\%<br>iShares Select Dividend<br>Current Yield: 3.0\%<br>2008 Return: -33\%<br>SPDR S\&P Dividend<br>Current Yield: 2.4\%<br>2008 Return: -22.9\%

## That leaves income-oriented investors with 2 choices:

Choice 1: Stick with safe securities and make due on a lower and lower yield; risk having inflation eat you alive.

Choice 2: Gravitate to higher-yielding securities and live with the extra volatility that comes along with them.

## The bucket approach is a third way to generate income cash flow in retirement.

## Principles:

- Build the portfolio with the best anticipated risk/reward profile given time horizon
- Pursue twin goals of income and appreciation
- Alongside the portfolio, hold a cash bucket ("bucket 1") to meet nearterm living expenses
- Refill bucket 1 with income and rebalancing proceeds


## A Basic Bucket Setup



## Bucket 1

For: Years 1-2
Holds: Cash


Bucket 2
For: Years 3-10
Holds: Bonds,
Allocation Funds


## Bucket 3

For: Years 11+ Holds: Stocks, HigherRisk Bonds

## Bucket 1

- Goal: Stability of principal
- How much: Enough to cover income for years 1-2 of retirement plus emergency expenses
- Invested in: Cash (online savings account, etc.)


## Bucket 2

- Goal: Income, principal stability, modest growth
- How much: Enough to tide you through a sustained downturn in your stock portfolio ( $\sim 8$ years in my model portfolios)
- Invested in:
- Short-term and intermediate-term bond funds
- TIPS, I-bonds
- Conservative-, moderate-allocation funds


## Bucket 3

- Goal: Growth, inflation protection
- How much: Enough for years 10 and beyond of your retirement
- Invested in:
- Stocks and stock funds (U.S. and foreign)
- Higher-risk bond types (high-yield, multisector, etc.)
- Commodities, real estate, precious metals


## Bucket Portfolio Maintenance

- What it entails
- Spending down bucket 1
- Refilling bucket 1 with income distributions and annual rebalancing from buckets 2 and 3
- What it doesn't entail
- Moving money from bucket 3 to 2 and 2 to 1 every year (too much maintenance!)
- Spending buckets 1 and 2 until you're left only with stocks and stock funds (too imbalanced!)


## Bucket Portfolio Maintenance Example

- Retiree needs \$40,000 in cash flow from $\$ 1$ million portfolio to refill bucket 1 in 2014
-60\% S\&P 500/40\% bond portfolio yields \$21,820
- Portfolio also has capital return of $\$ 82,280$ in 2014
- Retiree's $\$ 40,000$ cash flow distribution comes from:
- $\$ 21,820$ in income
- $\$ 18,180$ from capital return
- Retiree reinvests remaining \$64,100 of capital return


## Three Series of Model Bucket Portfolios

- Traditional Mutual Fund (launched September 2012)
- Aggressive, Moderate, Conservative
- Exchange-Traded Fund (launched November 2012)
- Aggressive, Moderate, Conservative
- Tax-Efficient (launched February 2015)
- Aggressive, Moderate, Conservative


## Goals of Model Bucket Portfolios

- To demonstrate how diversified, well-balanced portfolios can deliver a retiree's cash-flow needs
- To show how retiree portfolios can and should include a healthy component of stocks, provided the retiree has a sufficiently long time horizon
- To depict the logistics of cash-flow generation on an ongoing basis
- To show how the favorite funds of Morningstar's analysts can be used in a portfolio context


## Our Model Bucket Portfolios Are Not Designed to...

- Blow the doors off of any other retirement strategy ever designed
- Supplant holdings and strategies you already know and are using to good effect
- Necessitate frequent trading/changes; we'll make changes on a fundamental, as-needed basis
- Reflect top-down views of the market


## Aggressive Bucket Portfolio Assumptions

- 65 year-old-couple with $\$ 1.5$ million portfolio
- 4\% withdrawal rate with annual $3 \%$ inflation adjustment (\$60,000 first-year withdrawal)
- Anticipated time horizon: 25 years
- Fairly aggressive/high risk tolerance (total portfolio is ~50\% stock/50\% bonds and cash)


## Aggressive Bucket Portfolio (Mutual Funds)

## Bucket 1: Liquidity Portfolio for Years 1 and 2: \$120,000

$\$ 120,000$ in CDs, money market accounts/funds, other cash

Bucket 2: Intermediate Portfolio for Years 3-10: \$480,000
\$130,000 in Fidelity Short-Term Bond FSHBX
\$150,000 in Harbor Bond HABDX
$\$ 100,000$ in Vanguard Short-Term Inflation-Protected Securities VTIPX
$\$ 100,000$ in Vanguard Wellesley Income VWELX

## Aggressive Bucket Portfolio (Mutual Funds)

## Bucket 3: Growth Portfolio for Years 11 and Beyond: \$900,000

$\$ 400,000$ in Vanguard Dividend Growth VDIGX
$\$ 200,000$ in Harbor International HAINX
$\$ 100,000$ in Vanguard Total Stock Market Index VTSMX
$\$ 125,000$ in Loomis Sayles Bond LSBRX
$\$ 75,000$ in Harbor Commodity Real Return HACMX

## Aggressive Bucket Portfolio (ETFs)

## Bucket 1: Liquidity Portfolio for Years 1 and 2: \$120,000

$\$ 120,000$ in CDs, money market accounts/funds, other cash

Bucket 2: Intermediate Portfolio for Years 3-10: \$480,000
\$100,000 in Vanguard Short-Term Bond ETF BSV
$\$ 200,000$ in PIMCO Total Return ETF BOND
\$100,000 in Vanguard Short-Term Inflation-Protected Securities VTIP
\$80,000 in Vanguard Dividend Appreciation VIG

## Aggressive Bucket Portfolio (ETFs)

## Bucket 3: Growth Portfolio for Years 11 and Beyond: \$900,000

$\$ 350,000$ in Vanguard Dividend Appreciation VIG
$\$ 200,000$ in Vanguard Total Stock Market Index VTI
$\$ 200,000$ in Vanguard FTSE All-World ex-US ETF VEU
$\$ 50,000$ in SPDR Barclays Capital High Yield Bond JNK
\$25,000 in WisdomTree Emerging Markets Local Debt ELD
$\$ 75,000$ in Powershares DB Commodity Index Tracking DBC

## Aggressive Bucket Portfolio (Tax-Efficient)

Bucket 1: Liquidity Portfolio for Years 1 and 2
\$150,000: Cash (online savings account)

Bucket 2: Intermediate Portfolio for Years 3-10: \$450,000
\$150,000: Fidelity Limited Term Municipal Income FSTFX \$300,000: Fidelity Intermediate Municipal Income FLTMX

## Aggressive Bucket Portfolio (Tax-Efficient)

Bucket 3: Growth Portfolio for Years 11 and Beyond: \$900,000
\$150,000: Vanguard FTSE All-World ex-US VFWAX
\$600,000: Vanguard Tax-Managed Capital Appreciation VTCLX
\$150,000: Vanguard Tax-Managed Small Cap VTMSX

## Basic Bucket Stress Test: 2000-2014

## Assumptions

- 4\% withdrawal rate with $3 \%$ annual inflation adjustment
- Reinvest all dividends and capital gains from buckets 2 and 3
- Rebalance positions when they exceed $110 \%$ of original size; use rebalancing proceeds to meet living expenses but tap bucket 1 if more needed
- If rebalancing proceeds exceed living expenses, refill bucket 1
- If bucket 1 is full, redeploy into positions below starting values


## The Results, Please

## Assumptions

- Starting value (January 2000): $\$ 1.5$ million
- Ending value (December 2014): \$2,082,880
- Distributions from 2000-2014: \$1,098,969 (\$60,000 initial withdrawal with inflation adjustment)
- Caveats:
- Time period was very favorable for stocks and bonds
- A fully invested portfolio (no cash bucket) would have performed better


## Conclusions

- Main advantage of bucket 1 is as a psychological buffer; makes it easier to withstand volatility in buckets 2 and 3
- The reality of managing an actual portfolio is likely to be more complicated due to managing multiple silos (tax-deferred, Roth, taxable)
- Some components of the portfolio have dragged on returns, especially inflation protectors, BUT we expect them to help at some point
- Every retiree should document his/her drawdown strategy: If income needs are \$X, where will it come from?

Questions?

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