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: ~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 = ~12.9% loss
Reaching for lower-quality bonds carries its own risks.

<table>
<thead>
<tr>
<th>Bond Type</th>
<th>Current Yield</th>
<th>2008 Return</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High-Yield Bonds</strong></td>
<td>5%-6%</td>
<td>-24%</td>
</tr>
<tr>
<td><strong>Emerging-Markets Bond</strong></td>
<td>6%-7%</td>
<td>-26%</td>
</tr>
<tr>
<td><strong>Bank Loan</strong></td>
<td>4.5%</td>
<td>-17%</td>
</tr>
<tr>
<td><strong>Multisector Bond Fund</strong></td>
<td>4%</td>
<td>-15%</td>
</tr>
</tbody>
</table>
We love dividend-paying stocks, too, but even solid all-equity portfolios will be volatile.

<table>
<thead>
<tr>
<th>Fund</th>
<th>Current Yield</th>
<th>2008 Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vanguard Equity-Income</td>
<td>2.6%</td>
<td>-31%</td>
</tr>
<tr>
<td>iShares Select Dividend</td>
<td>3.0%</td>
<td>-33%</td>
</tr>
<tr>
<td>Vanguard Dividend Growth</td>
<td>2.0%</td>
<td>-25.6%</td>
</tr>
<tr>
<td>SPDR S&amp;P Dividend</td>
<td>2.4%</td>
<td>-22.9%</td>
</tr>
</tbody>
</table>
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 near-term 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, Higher-Risk 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 (~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?