Asset Allocation in a Dynamic World starting from Low Yields

Prepared for CFA Society Netherlands: Best Practices Portfolio Construction Seminar
Roy Hoevenaars, PhD

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Why rethink asset allocation and how to build a next generation?

- Low yield environment, low returns, “happy diversification” and regimes
- What have we learnt from best practices in asset allocation?
- Factor allocation
- Dynamic long-term asset allocation
"If something cannot go on forever, it will stop." (Stein’s law)

Source: Blenheim Capital Management, B.V./Bloomberg
Please see “Important Notes” at the end of this presentation
Can it continue? – Japanese returns over a decade

10y yield (GJGB10 index)

Bloomberg/EFFAS total return bond index 7-10yr (JN4GTR index)

Source: Bloomberg
Please see “Important Notes” at the end of this presentation.
### Starting From Low Yields – Forward Looking Regime Returns

<table>
<thead>
<tr>
<th>Time</th>
<th>Deflation</th>
<th>Neutral</th>
<th>Inflation</th>
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<tr>
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<td>-3.3</td>
<td>-10.2</td>
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<td>4.3</td>
<td>8.0</td>
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<td>1.3</td>
<td>4.3</td>
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<td>8.0</td>
</tr>
</tbody>
</table>

* Forward looking return analysis is based on 10y US and European government yields and a constant duration of 7.5.

Source: Blenheim Capital Management, B.V.

Please see “Important Notes” at the end of this presentation.

- Assumption of 2.5% real bond return (4.5% nominal) is not realistic.
- Start yield is too low.
- Medium term ride can be bumpy.
- Deflation or continued financial repression fit low real bond returns.
Starting From Low Yields – also, return distribution has changed

- Coupon no longer compensates for duration risk when yields rise.
- A given increase in yields now likely leads to a bigger loss for bond holders.
- When allocating risk, consider rising yields for levered duration positions.
- For ALM - consider hidden risk of liquidity shocks and balance shrinkage.

Source: Blenheim Capital Management, B.V./Bloomberg. Please see “Important Notes” at the end of this presentation.
How realistic are the return requirements for the rest of the mix?

- Hurdle for other assets increases with target returns and bond weights.
- Those effects are stronger if bonds return even less than 2.5%.
- Where do we earn those extra returns? Or just assume low returns?

**Hurdle rate for the remainder of the mix vs a 2.5% bond return**

<table>
<thead>
<tr>
<th>Bond Allocation</th>
<th>Return Target 5%</th>
<th>Return Target 7.5%</th>
<th>Return Target 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>25%</td>
<td>10%</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>50%</td>
<td>15%</td>
<td>20%</td>
<td>25%</td>
</tr>
<tr>
<td>75%</td>
<td>20%</td>
<td>25%</td>
<td>30%</td>
</tr>
</tbody>
</table>

**Extra return needed on the remainder of the mix vs a 2.5% bond return**

Source: Blenheim Capital Management, B.V. Please see “Important Notes” at the end of this presentation.
"Happy diversification" is time varying and exhibits breaks.

- Does the changing correlation threaten asset allocation and risk parity?
- "Happy diversification" also works in risk-on-risk-off environment.
- Correlation also exhibits (temporary) breaks, e.g. on tapering-like news.
- Forward looking return, risk & correlation require regime thinking.
  - Reflation would be bad for bonds, good for equities
  - Deflation would be bad for equities, good for bonds
  - Heading towards stagflation regime would fit a regime shift.

Source: Blenheim Capital Management, B.V. Please see “Important Notes” at the end of this presentation.
What have we experienced? – It is not about the “Mean”

Annual Real Returns to the 60/40 Portfolio in the US (1900 - 2010)

Cumulative Frequency (Years)

Source: Deutsche Bank, Robert Shiller database
What have we experienced? – Vulnerabilities

Asset allocation approaches have their own merits and pitfalls:
- Equity dominated downturns.
- Common and concentrated exposures during economic downturns
- Leverage shocks and corrections in valuations

Source: Blenheim Capital Management, B.V.; Bloomberg

There is no guarantee that hypothetical returns are indicative of actual future results. See “Important Notes” at the end of this presentation.

Notes: the figures show cumulative returns of portfolios of stocks, bonds and commodities. Stocks are represented by the S&P500 (SPTR Index), bonds are represented by 7-10 year US government bonds (USG4TR Index) and commodities are represented by GSCI total return (SPGSCITR Index). The 60/40 mix uses monthly rebalancing to 60% stocks and 40% bonds. The risk parity indices use monthly rebalancing to equal risk allocation set by the inverse of the 3y rolling volatility of excess returns over US cash (USGG3M Index).
• Mean variance & modern portfolio theory
• 60/40
• Global diversification
• Endowment approach & alternative assets
• ALM & LDI
• Risk allocation & risk parity
• Opportunity cost model & reference portfolio
• Factor investing
  – Smart beta
• Dynamic asset allocations
  – Valuation & capital preservation
How to Rethink Asset Allocation?

- Mean variance & modern portfolio theory
- 60/40
- Global diversification
- Endowment approach & alternative assets
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  - Smart beta
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Next Generation Alternative Asset Allocation

- Structured and disciplined
- Rebalancing premium
- Risk allocation
- Smart beta
- Valuation based
- Factor analysis
- Dynamic approach to cyclicality and regime shifts
- Capital preservation
A return driver reflects a fundamental catalyst for asset returns. Cash instruments usually contain multiple return drivers in largely fixed proportions. Use of derivatives allows for a more deliberate allocation to individual return drivers, a more efficient allocation of risk and explicit control of leverage. Return defragmentation reveals overlapping, offsetting and common exposures. Allocate risk to return drivers that are viewed as strategically attractive and having solid macro economic fundamentals.

<table>
<thead>
<tr>
<th>Asset Classes</th>
<th>Equities</th>
<th>Fixed Income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Valuation Adjustment</td>
<td>Credit Spread</td>
</tr>
<tr>
<td></td>
<td>Nominal Earnings Growth</td>
<td>Term Spread</td>
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<tr>
<td></td>
<td>Real Dividend Yield</td>
<td>Inflation Risk Premium</td>
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<tr>
<td></td>
<td>Inflation Expectation</td>
<td>Real MM Rate</td>
</tr>
<tr>
<td></td>
<td>Migration / Default</td>
<td>Inflation Expectation</td>
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<tr>
<td></td>
<td>FX Hedge</td>
<td>Migration / Default</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Portfolio</th>
<th>Return Drivers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Spot (growth/inflation)</td>
</tr>
<tr>
<td></td>
<td>Roll Return</td>
</tr>
<tr>
<td></td>
<td>Real MM Rate</td>
</tr>
<tr>
<td></td>
<td>Inflation expectation</td>
</tr>
</tbody>
</table>

Graph proportions are for illustrative purposes only.
• Duration may erode returns in ILB’s, credits, EM debt, etc.

• Reconsider yield enhancement within fixed income
  • IG credits
  • High yield
  • EM debt
  • Index – linked exposure?
  • Absolute return strategies

• Other public asset classes?
  • Equities
  • Commodities
  • Currencies

• Smart beta (including style and risk premia)?

• Alternatives?
  • Private markets - private equity, real assets, real estate, etc.
  • Hedge funds, absolute return strategies
  • Active management, TAA, GTAA, DSAA.
DSAA often sits in no man’s land, few institutions have embraced it, why?

- Governance; top-down alpha overwhelms bottom up
- Lack of commitment, resources, framework
- Association with undiversified old school TAA
- Asset class silos

How to unlock it?

- Create breadth
- Integrate risk with return focus
- Define a clear mandate
- Build disciplined process
- Dedicate resources
- Team up with best practice
- Structured governance
• Starting from this low yield environment, we need to be explicit about which return factors we like to invest.

• Asset classes are a mixture of return drivers which often load on unintended common exposures.

• Factor allocation makes (un)intended exposures transparent.

• Starting from this low yield environment, we need to be dynamic enough to navigate uncertain financial markets across macro economic regimes.

• A disciplined framework and a well-embedded governance structure unlock the full potential of dynamic asset allocation in the long haul.

• Towards Dynamic Strategic Asset Allocation, Roy Hoevenaars Gerlof de Vrij, Financial Investigator, Nr 6, (2015)
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