TECHNICAL BRIEFING: GAVI INVESTMENT PORTFOLIOS

BOARD MEETING
Jeanne Shen
1 December 2015, Geneva
OBJECTIVES AND GOALS

1. Background
2. Evolution of the investment portfolio
3. Concepts: where are we now?
## PORTFOLIO OBJECTIVES

<table>
<thead>
<tr>
<th>Short-term</th>
<th>Long-term</th>
</tr>
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<tbody>
<tr>
<td>• Maintain <strong>liquidity</strong> to meet anticipated</td>
<td>• Generate a <strong>positive real (after inflation)</strong> return.</td>
</tr>
<tr>
<td>operating requirements.</td>
<td>• Generate income for current spending.</td>
</tr>
<tr>
<td>• Provide for prudent diversification of</td>
<td>• Provide a prudent degree of <strong>growth</strong> in assets to support future spending.</td>
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<tr>
<td>investments to minimize credit and market risk</td>
<td>• Provide for <strong>prudent diversification</strong> of investments to minimize correlation among investment strategies.</td>
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<td>exposure.</td>
<td>• Maintain liquidity to meet unanticipated operating requirements.</td>
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<td>• Generate income.</td>
<td>• Maintain overall portfolio volatility within acceptable risk levels.</td>
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</table>
## CHARACTERISTICS AND RANGES

<table>
<thead>
<tr>
<th>Exposure</th>
<th>Characteristics</th>
<th>Ranges</th>
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</thead>
<tbody>
<tr>
<td><strong>SHORT TERM</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fixed Income</td>
<td><em>Capital preservation, income</em></td>
<td>100%</td>
</tr>
<tr>
<td>Fixed Income</td>
<td><em>Capital preservation, income</em></td>
<td>50% - 80%</td>
</tr>
<tr>
<td><strong>LONG TERM</strong></td>
<td></td>
<td></td>
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<tr>
<td>Equity</td>
<td><em>Growth, inflation hedge (moderate)</em></td>
<td>15% - 35%</td>
</tr>
<tr>
<td>Tactical</td>
<td><em>Less correlated assets lacking the typical characteristics of fixed income or equity</em></td>
<td>5% - 15%</td>
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RISK VERSUS RETURN

- Fixed Income
- Tactical
- Equity

Return vs. Risk

Fixed Income, Tactical, and Equity categories depicted on a risk versus return graph.
WHAT ARE RETURNS?

Returns = Income + Price Changes

- More Predictable
- Less Predictable

Fixed income and equities have elements of both but the impact is different.
EQUITY: PRICE CHANGE DRIVES RETURNS

*Equity income (dividends) have been a less significant component of total return*

Source: Bloomberg, PIMCO
FIXED INCOME: INCOME DRIVES RETURNS

Source: Barclays US Aggregate, PIMCO
### DIVERSIFICATION: WHY IT MATTERS

<table>
<thead>
<tr>
<th>Key Driver</th>
<th>Equities</th>
<th>Fixed Income</th>
<th>Tactical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic growth</td>
<td>+</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>Interest rates</td>
<td>-</td>
<td>-</td>
<td>+/-</td>
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<tr>
<td>Inflation</td>
<td>-</td>
<td>-</td>
<td>+</td>
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EVOLUTION OF THE INVESTMENTS PORTFOLIO

As of 31 October 2015
INVESTMENT PORTFOLIO EVOLUTION

**Context:** Limited information on time horizon

**Action:** Invested in very conservative, short-term fixed income
INVESTMENT PORTFOLIO EVOLUTION

**Context:** Time horizon of Gavi expanded with launch of IFFIm

**Action:** Added inflation hedge assets, and later emerging markets exposure (2011)
INVESTMENT PORTFOLIO EVOLUTION

Context: Improvements in forecasting and Board approval to diversify (2011)

Action: Added growth-oriented assets such as equities

Dec 2012

- 83% Fixed Income
- 13% Equities
- 4% Tactical

Technical Briefing
1 December 2015
INVESTMENT PORTFOLIO EVOLUTION

Context: Continued improvements in forecasting and high donor confidence in GAVI

Action: Further diversification in less correlated assets.

Fixed Income: 66%
Equities: 26%
Tactical: 8%
RECAP: INVESTMENT PORTFOLIO EVOLUTION

1 December 2015

(1) Conservative, US centric, short-term fixed income

2002 - 2006

100%

(2) Launch of IFFIm extended investment horizon; added inflation hedge assets

July 2006

85%

15%

(3) Added growth-oriented assets such as equities

October 2015

66%

26%

8%

(4) Further diversification into less correlated assets

December 2012

83%

13%

4%

Fixed Income

Equities

Tactical
CONCEPTS: WHERE ARE WE NOW?
## RISK MANAGEMENT PROCESSES

<table>
<thead>
<tr>
<th>Activity</th>
<th>Ongoing</th>
<th>Monthly</th>
<th>Quarterly</th>
<th>Semi-Anually</th>
<th>Annually</th>
<th>Risk-Based</th>
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<td>Market Analysis</td>
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<td>Manager Communication</td>
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<td>Performance Review</td>
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<td>Money Mkt. Monitoring</td>
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<td>Compliance Certification</td>
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<td>Form ADV Review</td>
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<td>SRI Screening</td>
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<td>ASC-820 Valuation</td>
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<td>Due Diligence Visits</td>
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<td>Audited Statements Review</td>
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<td>Controls Review</td>
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1 Frequency of on-site visit may be annual or bi-annual depends on risks.
In assessing an appropriate mix of investments, the investment office with the guidance of the Investment Committee and a strategic consultant considers the following:

- Appetite for volatility/risk
- Balancing liquidity of investments
- Frequency and size of drawdowns (to pay liabilities)
- Diversification (adding investments that will behave differently under various economic scenarios)
LONG-TERM PORTFOLIO LIQUIDITY

- Liquid (daily & monthly): 83%
- Semi-liquid (quarterly): 13%
- Illiquid (1 year or more): 4%
ASSET ALLOCATION UPDATE

STRATEGIC ASSET ALLOCATION REVIEW: following an extensive RFP process and the hiring of a new strategic consultant, the Investment Committee discussed asset allocation at November meeting.

• Reviewed three scenarios for improving risk-reward ratio and asked for further refinement of the most conservative option.

• Agreed with recommendation to add more absolute return and market neutral strategies (e.g., less market directional style of investing) given we are in the late stage of a market cycle.

• Agreed with recommendation to add a multi-exposure category for strategies that invest across exposures; Gavi already has such investments.