MOA Work Session
Endowment Type Spending Policy

Michael J. O’Leary CFA
Executive Vice President
Callan Associates Inc.
August 14, 2001
Presentation Outline

• What is an endowment?
• How do they invest?
• How do they spend?
• What is the “best” approach for MOA?
• How have accounting conventions changed?
• Is an endowment approach conceptually consistent with the voter mandate?
What is an endowment?

• An endowment, as used in this presentation, is defined as a not-for-profit entity or program designed to support the operations of a charitable or educational institution.

• The statistics, unless noted otherwise, were all obtained from the 2000 NACUBO Endowment Study. The study was prepared by TIAA-CREF for the National Association of College and University Business Officers. A total of 568 institutions responded. The survey is very comprehensive and includes data on both spending and investment policies. All data is as of 6/30/00 and is the most recent available.

• Endowments typically view themselves as perpetual entities and seek to make a consistent and, ideally growing, contribution to the support of their beneficiaries. In other words, they have a long term investment goal:
  – of preserving the purchasing power of the endowment and
  – distributing funds that at a minimum grow with inflation
# How do they invest?

## 2000 NACUBO Endowment Study

### Asset Class Composition

<table>
<thead>
<tr>
<th>Investment Pool assets</th>
<th>Equity %</th>
<th>Alternative %</th>
<th>Bonds %</th>
<th>Cash %</th>
<th>Real Estate %</th>
<th>Other %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater than $1 billion</td>
<td>43.7</td>
<td>29.6</td>
<td>15.3</td>
<td>3.3</td>
<td>5.7</td>
<td>2.1</td>
</tr>
<tr>
<td>$501 Mil. - $1 Bil.</td>
<td>61.3</td>
<td>15.7</td>
<td>17.5</td>
<td>2.7</td>
<td>2.2</td>
<td>0.6</td>
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<tr>
<td>$100 Mil. - $500 Mil.</td>
<td>62.7</td>
<td>8.7</td>
<td>21.3</td>
<td>3.1</td>
<td>2.1</td>
<td>1.9</td>
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<tr>
<td>Less than $100 Mil.</td>
<td>64.0</td>
<td>3.3</td>
<td>24.9</td>
<td>4.8</td>
<td>2.0</td>
<td>1.1</td>
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<tr>
<td>Public Private</td>
<td>59.8</td>
<td>11.6</td>
<td>22.6</td>
<td>2.4</td>
<td>2.4</td>
<td>1.3</td>
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<tr>
<td></td>
<td>49.2</td>
<td>24.9</td>
<td>15.8</td>
<td>3.5</td>
<td>4.7</td>
<td>2.0</td>
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<tr>
<td>Total</td>
<td>51.6</td>
<td>21.6</td>
<td>17.3</td>
<td>3.2</td>
<td>4.3</td>
<td>1.7</td>
</tr>
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</table>

The funds typically have significant equity exposure. Alternatives which include private equity, hedge funds and other forms of equity type investments should be combined with equity. The endowments typically have comparatively modest bond & cash commitments. This is consistent with the objective of preserving purchasing power.
Asset Mix Distribution (71 participants)
Callan Endowment & Foundation Database

Total Endowment/Foundation Database
Current Allocations
# NACUBO Survey

## Spending Policy Data

### Average Annual Spending Rate, 2000 – 1991

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
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<td>5.1</td>
<td>5.1</td>
<td>5.1</td>
<td>4.9</td>
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<td>4.7</td>
<td>4.5</td>
<td>4.2</td>
<td>4.1</td>
<td>4.1</td>
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<tr>
<td>$501 Million - $1.0 Billion</td>
<td>5.2</td>
<td>5.1</td>
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<tr>
<td>$100 Million - $500 Million</td>
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<td>5.5</td>
<td>5.3</td>
<td>5.1</td>
<td>5.2</td>
<td>5.0</td>
<td>4.9</td>
<td>4.8</td>
<td>4.7</td>
<td>4.9</td>
</tr>
<tr>
<td>Less than $100 Million</td>
<td>5.7</td>
<td>5.7</td>
<td>5.3</td>
<td>5.1</td>
<td>5.3</td>
<td>5.2</td>
<td>5.1</td>
<td>5.1</td>
<td>5.0</td>
<td>5.1</td>
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<tr>
<td>Public</td>
<td>5.7</td>
<td>5.7</td>
<td>5.2</td>
<td>5.0</td>
<td>5.0</td>
<td>4.9</td>
<td>4.8</td>
<td>4.8</td>
<td>4.7</td>
<td>4.9</td>
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<tr>
<td>Private</td>
<td>5.4</td>
<td>5.4</td>
<td>5.3</td>
<td>5.1</td>
<td>5.3</td>
<td>5.1</td>
<td>5.0</td>
<td>4.9</td>
<td>4.8</td>
<td>4.9</td>
</tr>
<tr>
<td>Total</td>
<td>5.5</td>
<td>5.5</td>
<td>5.2</td>
<td>5.1</td>
<td>5.2</td>
<td>5.0</td>
<td>4.9</td>
<td>4.9</td>
<td>4.7</td>
<td>4.9</td>
</tr>
</tbody>
</table>

- The average annual spending rate for all institutions for fiscal year 2000 is 4.9%. While this is up slightly from last year’s 4.7%, it is consistent with the average annual spending rates reported from 1996 – 1998.

- Institutions across all endowment categories were far more likely to base their spending policy on a prespecified percentage of the moving average of market values than on any other strategy. On average, 81.5% of the reporting institutions made this selection.
Spending Policy Discussion
Callan Views of Data & Trends

- While there is little uniformity in the specific policies utilized, most result in expenditures that are linked to the value of the endowment and reasonable long term return expectations.

- The apparent decline in distributions as a percent of market value evident on the preceding page reflects the extraordinary returns achieved prior to 2000 and the fact that most use some form of averaging to smooth distributions.

- Illustrative spending policies are presented on the following page.
Illustrative Spending Policies

- Florida State - Spend the same amount as in the previous distribution period (quarterly) adjusted for a 3.5% historical annual inflation rate with a minimum/maximum range of 4%-6% of market value.

- John Hopkins University - The total payout should not exceed 5% of the average market value of the EIP as measured by the three year moving average market value.

- Northwestern University - Allocate on a per-unit basis last year’s amount increased by the Consumer Price index, unless that total is more than 6% or less than 3.5% of a three-year moving average of the long-term Balanced Pool 750 market value per unit (lagged by one-year).

- University of Texas - The Board has adopted a distribution policy for the pool wherein the distribution rate is increased by the average inflation rate for the previous twelve quarters provided that the new rate does not fall below 3.5% or rise above 5.5% of the trailing 12 quarter average net asset value of the pool.

- San Jose State - Spend 5% of a twelve-quarter moving average of market values as of December 31.
Why the movement toward value linked distribution policies?

- Earnings, particularly earnings derived from investment in stocks, are much more volatile than distributions linked to value.
- Value related distributions do not discriminate between a dollar of unrealized gain or loss and a dollar of income earned or gain realized.
  - For example, a bond portfolio might generate 7% income but decline in value. The apparent income return would overstate true earnings.
Overview

- Essentially all large funds concerned with maintaining purchasing power invest a significant portion of their assets in stocks & other equity like investments.
- Despite volatility, they recognize that a long term equity orientation is necessary if they are to attain their goals of maintaining purchasing power & making meaningful distributions.
- There are absolutely no guarantees that either an income based approach or a market value based approach will preserve corpus.
- Inflation, particularly acceleration in inflation, is destructive of real value. Financial assets of all types have experienced negative real returns for protracted periods.
### Long Term Record according to Jeremy J. Siegel
Callan Investments Institute - 1/30/01

<table>
<thead>
<tr>
<th>Period</th>
<th>Total Return</th>
<th>Dividend Yield</th>
<th>Total Real Return</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Comp</td>
<td>Arith</td>
<td></td>
</tr>
<tr>
<td>1802-2000</td>
<td>8.4</td>
<td>9.8</td>
<td>5.3</td>
</tr>
<tr>
<td>1871-2000</td>
<td>9.1</td>
<td>10.8</td>
<td>4.8</td>
</tr>
<tr>
<td>1946-2000</td>
<td>12.1</td>
<td>13.3</td>
<td>4.1</td>
</tr>
<tr>
<td>1966-1981</td>
<td>6.6</td>
<td>8.3</td>
<td>4.1</td>
</tr>
<tr>
<td>1966-2000</td>
<td>11.5</td>
<td>12.8</td>
<td>3.6</td>
</tr>
<tr>
<td>1982-2000</td>
<td>15.8</td>
<td>16.5</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Comp = Compound annual return  
Arith = Arithmetic average of annual returns
Long term stocks protect against inflation much better than bonds

Continued exposure to stocks makes sense
Rolling 5 Year Real Return for 60/40 Mix Net of Spending
(1946 - Present)

Number of periods with returns < 0%: 78
Number of periods with returns > 3%: 78
Total number of 5-year periods: 201

Spending rate = 5%
What is the “best” approach for MOA?

- In our view, the best approach for MOA is to have a long term distribution policy that is capped at a reasonable level that is consistent with the Charter mandate that the long purchasing power of the Trust be preserved.
  - The cap should be expressed as some function of the market value of the Trust (e.g. 5% of 5 year average market value or a dollar amount that grows with inflation provided that it shall not exceed 5.5% of 3 year average market value)
  - The cap should be revisited on a periodic basis (every 5 to 10 years) to ensure that it is still reasonable in light of market and economic developments
  - The cap must always be consistent with the long term return believed to be achievable under the broad investment parameters permitted by the Assembly
How have accounting conventions changed?

• In the pre-1970 era, few public entities had meaningful stock exposure. Investments were primarily limited to bonds. Typically bond investments were held to maturity. Income was defined as income earned plus or minus the amortization of premium or discount.

• With the growth of equity investments, recognition of inflation as a risk and the benefits of active management of portfolios, the investment industry moved toward a “total return concept” of measuring earnings.

• The accounting industry and standards have changed to reflect this evolution. Changes in unrealized gains and losses are now routinely considered part of earnings.
Ford Foundation Report

- In the late 1960’s and early 1970’s the Ford Foundation commissioned a study that is frequently cited as the catalyst for movement away from an “income” based distribution approach to a “market value” based approach.
  - The study basically emphasized that a dollar of value change was just as valuable as a dollar of income earned whether the change in value was recognized through realization or not.
  - It further demonstrated that long run returns could be enhanced by focusing on total return.

- It also may be interesting to note that the IRS requires that private foundations distribute 5% of market value if they are to retain their tax exempt status.
Is an endowment spending approach (i.e. an approach where distributions are linked to some percent of market value) conceptually consistent with the voter mandate?

- From a professional investment advisor’s perspective, we believe that a distribution policy linked to a percent of market value is entirely reasonable and consistent with the Charter requirement that the long term purchasing power of the corpus be protected.
- Provided that the percent of market value is capped at a reasonable level that appropriately reflects the probable growth of the investments and future inflation.
- And provided that the distribution cap is periodically reviewed for reasonableness.
- Given current limits, we believe the highest reasonable cap is 5% of average rolling three-five year market value.