UNC Chapel Hill Investment Fund
Fiscal Year 2012 Review

Presentation To:
The Board of Trustees of
The University of North Carolina at Chapel Hill
January 24, 2013
Investment Entity Structure

Manager

UNC Management Company, Inc.

Controlling Member

UNC Investment Fund, LLC (UNCIF)

Other Members

UNC Chapel Hill Foundation Investment Fund, Inc. (CHIF)

Other Members

Other UNC Campuses and Affiliates

Other UNC Chapel Hill Affiliated Funds

Statutory Endowment of UNC Chapel Hill

UNC Chapel Hill Foundation, Inc.
University of North Carolina at Chapel Hill
Foundation Investment Fund, Inc. – 06/30/12

UNC CH Foundation Investment Fund
$2.14 Billion
Invested in UNC Investment Fund ($3.18 billion)

UNC Chapel Hill
Affiliated Foundations (23)
$905.8 Million
Arts & Sciences  Business
Educational  Law
Public Health  Medical
Others...

Foundation Unitholders
Scholarships, Professorships etc.

UNC Chapel Hill
Statutory Endowment
$1.02 Billion

Endowment Unitholders
Scholarships, Professorships etc.

UNC Chapel Hill
Foundation
$217.4 Million

Foundation Unitholders
Scholarships, Professorships etc.
The market value of the fund has grown steadily to more than $3B through additional ‘outside member’ contributions and investment appreciation.
UNC Investment Fund
Investment Objectives

- Preserve the Real (inflation-adjusted) purchasing power of the Fund while providing a predictable and growing stream of spending distributions to Fund participants.

- Earn an annualized “real” total rate of return of at least 5.5% (CPI +5.5%) over 5 – 10 year time horizons.

- Earn an annual rate of return that exceeds the Strategic Investment Policy Portfolio (SIPP) benchmark.

- Perform in the top quartile of University Endowment Funds.
UNC Investment Fund
Investment Implementation

- Asset Allocation:
  - **LONG-TERM** time horizon
  - Focus on assets that provide equity-like returns
  - Mitigate risk through *diversification*
  - Opportunistically over- and under-weight asset classes within the target ranges
  - Add value through manager selection
FY 2012 Economic Backdrop

The U.S. economy continues to grow at a sub par rate of growth.

High unemployment continues to be a significant issue, although employment is growing modestly.

Post “fiscal cliff”, Washington needs to address long-term fiscal issues.

The U.S. housing market is finally showing signs of improvement.

The sovereign debt crisis in Europe is no longer in the daily headlines, but long-term solutions are still elusive.
FY 2012 Economic Backdrop (cont’d)

‘Big Corporate America’ and global multi-national companies continued to be a source of strength in the financial markets:

- Large corporations have been able to grow their earnings in recent years
- Corporate balance sheets are generally in very good shape

But, corporations still have headwinds

- Large corporations - earnings growth has slowed in recent months
- Small businesses - continue to struggle

Central Banks continue to supply liquidity to offset underlying economic weakness:

- U.S. Federal Reserve - implemented QE3
- European Central Bank - Mario Draghi has pledged to do whatever it takes to keep the European Monetary Union intact
- China - the Chinese central bank is also easing monetary policy
UNC Investment Fund Returns

Financial market volatility during the past decade is on display in the return profile shown below.

Returns for the periods ended June 30, 2012

FY 2012 (12 months) 2.1%

3-Years 7.9%
5-Years 1.8%
10-Years 8.3%

- UNCIF’s positive 2.1% return was OK on a relative basis, but did not meet the Fund’s FY 2012 distribution rate
- 3- and 10-year returns exceed the Fund’s long-term return objective (5.5% + CPI)
FY 2012 - - Challenging Year for Endowment Portfolios

<table>
<thead>
<tr>
<th>FY 2012 Returns</th>
<th>FY ‘12 Median</th>
<th>FY ‘12 Top Quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Endowments:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cambridge Associates College &amp; University Endowments (All) (n = 162)</td>
<td>(0.9)%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Large Endowments:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cambridge Associates College &amp; University Endowments &gt; $2 Billion (n = 31)</td>
<td>1.5%</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

- Most College and University endowments had negative returns in FY ’12
- Large endowments outperformed smaller endowments in FY ’12
- UNCIF’s return:
  - Ranked in the top quartile of the broad endowment universe
  - Ranked in the second quartile among >$2 Billion endowment funds
FY 2012 Financial Market Review

Most asset classes generated losses during FY 2012

- **U.S. Equity returns were mixed**: domestic large cap stocks recorded modest gains, small cap stocks were down
- **International equity markets** recorded significant negative returns in FY 2012
- **Hedge Fund indices and Commodities produced losses** during the year
- Bonds (particularly long-duration U.S. bonds), Private Equity and Real Estate were **positive performers** in FY 2012

FY 2012 had mixed results - diversification into non-US equity markets significantly hurt performance.
Risk was not rewarded in FY 2012

- Investors preferred “safe assets” -- fixed income, gold, and defensive sectors outperformed
- Hedge funds were unable to generate positive returns in FY ’12
UNC Investment Fund
FY 2012 Performance Summary

What Went Right
- The Fund’s L/S managers had an outstanding year
- Int’l equity managers had strong relative performance
- Private equity had a very strong year
- Energy & NR held value in a difficult year for commodities
- We reduced the public equity manager headcount and terminated weak managers

What Went Wrong
- Significant underweight to domestic fixed income which posted very strong returns in FY ‘12
- The Fund’s bond portfolio duration was much shorter than benchmark
- Added to commodities throughout the year which hurt performance
- Overweight to emerging markets equity
- Real Estate continues to underperform (restructuring)

In FY 2012, there were a number of positive and detracting factors that affected UNC Investment Fund’s return during the year.
UNC Investment Fund Performance Relative to Benchmarks (as of 6/30/12)

UNC Investment Fund’s achieved it’s primary return objective (5.5% + CPI) for the 3- and 10-year periods, and remains in the top quartile for the 10-year period

* Global 70/30 = 70% MSCI ACWI / 30% Barclays Aggregate
In FY 2012, the University of North Carolina at Chapel Hill Foundation Investment Fund (CHIF) decreased in value by $80 million, from $2.22 billion at June 30, 2011 to $2.14 billion at June 30, 2012.


- In addition to the annual spending distribution, there were net withdrawals of $6 million from CHIF participants in FY 2012.
### UNC Chapel Hill Entity Changes in Market Value ($ in millions)

<table>
<thead>
<tr>
<th>Entity</th>
<th>6/30/2011</th>
<th>6/30/2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statutory Endowment</td>
<td>$1,013.6</td>
<td>$1,015.8</td>
</tr>
<tr>
<td>Affiliated Foundations</td>
<td>$985.4</td>
<td>$905.8</td>
</tr>
<tr>
<td>UNC Chapel Hill Foundation</td>
<td>$219.7</td>
<td>$217.4</td>
</tr>
<tr>
<td>Total Chapel Hill Inv Fund</td>
<td>$2,218.7</td>
<td>$2,139.0</td>
</tr>
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At its May 2012 meeting, the Investment Fund Board:

- Approved the Fiscal Year 2013 Annual Distribution Rate of $413 per unit for the University of North Carolina at Chapel Hill Foundation Investment Fund, Inc., increasing the per unit distribution rate by 1% over the FY2012 per unit rate.

- The $413 per unit rate will be distributed to CHIF Fund participants on June 30, 2013 based on units held in the Fund during the course of FY 2013.
UNC Chapel Hill Investment Fund
Per Share Distribution Rate

Per Share Distribution Rate

Fiscal Year

$319
$329
$333
$333
$339
$350
$362
$380
$418
$387
$397
$409
$413

UNC Chapel Hill Investment Fund
Distribution as a % of Beginning Mkt Value

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Distribution as a % of Beginning Mkt Value</th>
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<tbody>
<tr>
<td>2001</td>
<td>4.8%</td>
</tr>
<tr>
<td>2002</td>
<td>5.4%</td>
</tr>
<tr>
<td>2003</td>
<td>5.8%</td>
</tr>
<tr>
<td>2004</td>
<td>6.1%</td>
</tr>
<tr>
<td>2005</td>
<td>5.7%</td>
</tr>
<tr>
<td>2006</td>
<td>5.4%</td>
</tr>
<tr>
<td>2007</td>
<td>4.9%</td>
</tr>
<tr>
<td>2008</td>
<td>4.4%</td>
</tr>
<tr>
<td>2009</td>
<td>4.6%</td>
</tr>
<tr>
<td>2010</td>
<td>5.7%</td>
</tr>
<tr>
<td>2011</td>
<td>5.8%</td>
</tr>
<tr>
<td>2012</td>
<td>5.4%</td>
</tr>
<tr>
<td>2013</td>
<td>5.7%</td>
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SIPP Changes Approved By Board

On October 19, 2012, the Chapel Hill Investment Fund Board approved changes to UNC Investment Fund’s Strategic Investment Policy Portfolio (SIPP).

SIPP consists of two primary components:

**Asset Allocation**
- Asset allocation targets for primary asset classes

**Return Benchmarks**
- Corresponding return benchmarks for each asset class

The specific SIPP changes are outlined on the following pages and will become effective January 1, 2013.
Create a Long/Short Equity asset class

- Give L/S Equity a specific SIPP allocation target

Break current 45% “public equity” allocation into two separate asset classes

- Long Biased equity (27% allocation target)
- Long/Short Equity (18% allocation target)

Modestly increase the Investment Fund’s Private Equity allocation (from 15% to 18%)

- From 15% → 18%

Combine the two existing fixed income asset classes

- modestly reduce the combined allocation target
- From 12.5% → 10%

Four significant changes to the SIPP Allocation Targets were approved, affecting public equities, private equities and fixed income.
Summary of Significant SIPP Changes

The most important change to the SIPP return benchmarks was matching hedge fund asset classes to hedge fund benchmarks.

SIPP Asset Class Return Benchmarks

Benchmark hedge fund asset classes against hedge fund benchmarks:
- L/S Equity → HFRI Equity Hedge (EH) index
- Diversifying Strategies HFRI Conservative Fund of Funds index +1%

Benchmark Long Biased equities against a global equity benchmark
- MSCI All Country World Index (ACWI)

Create a blended fixed income benchmark for the new Fixed Income asset class
- Shortening the duration of the SIPP benchmark

Change the buyout / venture capital ratio within the blended Private Equity benchmark
- From 50 PE/50 VC to 70 PE/30 VC
- More reflective of the UNCIF Private Equity portfolio composition
UNC Investment Fund Asset Allocation
Old SIPP Targets vs. New SIPP Targets

Old SIPP
Allocation Targets

- Domestic Equity: 20.0%
- International Equity: 15.0%
- Global Equity: 10.0%
- Diversifying Strategies: 10.0%
- Domestic FI: 7.5%
- Enhanced FI: 5.0%
- Private Equity: 15.0%
- Real Estate: 10.0%
- Energy & NR: 7.5%

New SIPP
Allocation Targets

- Long Biased Equities: 27.0%
- Long / Short Equities: 18.0%
- Diversifying Strategies: 12.0%
- Fixed Income: 10.0%
- Private Equity: 18.0%
- Real Estate: 8.0%
- Energy & NR: 7.0%
- Global Equity: 10.0%
- International Equity: 15.0%
- Domestic FI: 7.5%
- Enhanced FI: 5.0%
- Private Equity: 15.0%
- Real Estate: 10.0%
- Energy & NR: 7.5%
UNC Investment Fund Asset Allocation
SIPP Targets vs. Actual at 6/30/2012

The portfolio’s allocation at 6/30/12 is reflective of the new SIPP allocation targets.
Performance Update through 12/31/12

Attractive returns for all periods except 5-Years.

Periods ended December 31, 2012:

<table>
<thead>
<tr>
<th>Period</th>
<th>Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>FYTD period</td>
<td>5.5%</td>
</tr>
<tr>
<td>1-Year</td>
<td>11.3%</td>
</tr>
<tr>
<td>3-Years</td>
<td>7.2%</td>
</tr>
<tr>
<td>5-Years</td>
<td>1.3%</td>
</tr>
<tr>
<td>10-Years</td>
<td>9.2%</td>
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</tbody>
</table>

Attractive returns for all periods except 5-Years.
Summary

- FY 2012 was a difficult period for institutional portfolios - most college and university endowments suffered negative returns during the year.
- Although UNCIF was able to generate a modest 2.1% return in FY 2012, this return was not sufficient to meet the spending distribution for the year.
- The Fund’s longer-term returns remain attractive, particularly on a risk adjusted basis.
- The Fund’s 5.5% return for the first six months of FY 2013 and 11.3% return for Calendar Year 2012 represent solid investment performance on both a relative and absolute basis.
- We are confident that the UNC Investment Fund will continue to produce attractive long-term returns with a relatively low level of volatility.