University of Illinois Alma Mater statue

ENDOWMENT ASSET ALLOCATION

Insights from University of Illinois Treasury

At a CFA Singapore Professional Development talk on 30 July 2015, the Associate Vice President for Treasury Operations from the University of Illinois drew from his 11 years of experience in this role to share how its endowment fund is managed.

The University of Illinois is the state's leading and most comprehensive public university with campuses in Urbana-Champaign, Chicago, and Springfield. Its total enrollment was 78,540 students with 20,522 degrees awarded in fall 2014. The university has 678,701 living alumni.

Purpose of an Endowment Fund

The University of Illinois has an active endowment of over US$2 billion, of which US$650 million is directed by Dr Peter Newman, CFA under the University of Illinois Treasury Operations.

According to Dr Newman, there are three primary reasons for donating to the endowment. Depending on the donor's wishes, the endowment income can be used to fund any of the following:

- Student scholarship (pay a portion of a student's tuition)
- Faculty position (e.g. Chair for Economics)
- Research (e.g. cancer research)

In addition, the endowment is also an investment vehicle to generate cash that meets the university's needs. Over the past year, about 4% was distributed from the US$650 million endowment fund to defray the university's operating expenditure.

Endowment distributions may complement other revenue sources. The university is currently challenged by a potentially large cut in state funding. This poses a major challenge, approximately 12% of its direct FY2015 operating budget of US$5.6 billion had come from state funding.

Evaluating an Endowment Fund

Dr Newman believes an endowment should be evaluated on whether it meets the university's spending needs, and whether it has long term capital appreciation rather than solely on current investment performance.

Dr Peter Newman, CFA
Associate Vice President
Treasury Operations
University of Illinois

Dr Newman oversees the University of Illinois Treasury, which includes: Investments, Capital Finance, Risk Management, Agricultural Property Services, Cash Management, Merchant Card Services, ID Card Programs and Tax for the University of Illinois system.

His responsibilities include asset allocation, the hiring and terminating of managers, as well as overseeing the investment team and treasury staff.

He presents to rating agencies and the university's Board of Trustees on investment performance, policy changes and liquidity issues, as well as manages relationships with the university's investment consultant, financial adviser, banks, underwriters and investment managers.

"Fund managers tend to get over focused on returns in the past one year. Don't be swayed by headline news of wild market swings. Focus on your original strategy even in times of market volatility," he said.

He evaluates whether the endowment works by looking at cumulative performance over 10 years (Table 1).

Endowment	US$ mln
Beginning Value (1 July 2005)	217
Gifts / Transfers	294
Spending	(162)
Appreciation	240
Ending Value (30 June 2014)	589

Table 1

The endowment market value tripled from US$217 million in 2005 to US$589 million in 2014. He looks at 3 major components, as follows:

1. Gifts and asset transfers
2. Capital appreciation
3. Spending on university needs

Gifts and asset transfers

The university has a staggering number (some 678,000) of living alumni. Some of them are farmers who gift land to the school. Over the 10-year period, the university moved assets totaling about US$294 million into the endowment, or an average of US$29 million a year. This includes gifts and permanent core operating cash for the institution. In 2007, the university transferred 3,600 acres of prime Midwest farmland, valued at US$19 million, into the endowment pool.

Capital Appreciation

Even though markets were quite volatile in the past 7 years, the endowment's value appreciated over the 10-year period by US$240 million. The capital appreciation was spurred by the run-up in equities and commodity prices after the global financial crisis. Farmland assets owned by the endowment are among the most productive in the world, growing corn and soybean for industrial food production. Since the global financial crisis, the market value of this farmland had doubled to almost US$12,000 an acre.

Spending for scholarships, faculty chairs and fund raising support amounted to US$162 million, or about US$16 million a year.

How the Global Financial Crisis Changed Things

During the global financial crisis, Dr Newman's team experienced a gut-wrenching 18 months when their endowment value fell 40% by US$120 million, or a 3.5 standard deviation.

The university has a Board of Trustees of 12 members, with 9 appointed by the Governor of Illinois, who approve the investment policy.

Following the crisis, its Board approved the inclusion of hedge funds and core real estate in the asset allocation policy. The university's Treasury worked with its investment consultant on an asset allocation study to identify different investment strategies and objectives, and how these may be implemented across different asset classes.

Investment Strategy	Strategy Objective	Implementation Options
Low Risk Assets	• Reduce Portfolio Volatility • Limit Downside Risk • Provide Liquidity	Fixed Income • Core • Core Plus
Growth Assets	• Growth Assets • Provide Diversification	• U.S. Equities • Non-U.S. Equities • Global Equities Value-added Strategies • Private Equity • Hedge Funds
Real Assets	• Inflation Hedge • Provide Diversificaton	• Core Real Estate • Farmland • TIPS

University of Illinois Treasury 2010 Asset Allocation Strategy

Asset Allocation Strategy and Implementation

The Treasury started with a baseline strategy of investing in low-risk assets: fixed income investments with low volatility and providing liquidity if cash is needed.

"If the equity market is down, you may consider selling some of your bonds. Hopefully, they haven't taken too much of a valuation hit.

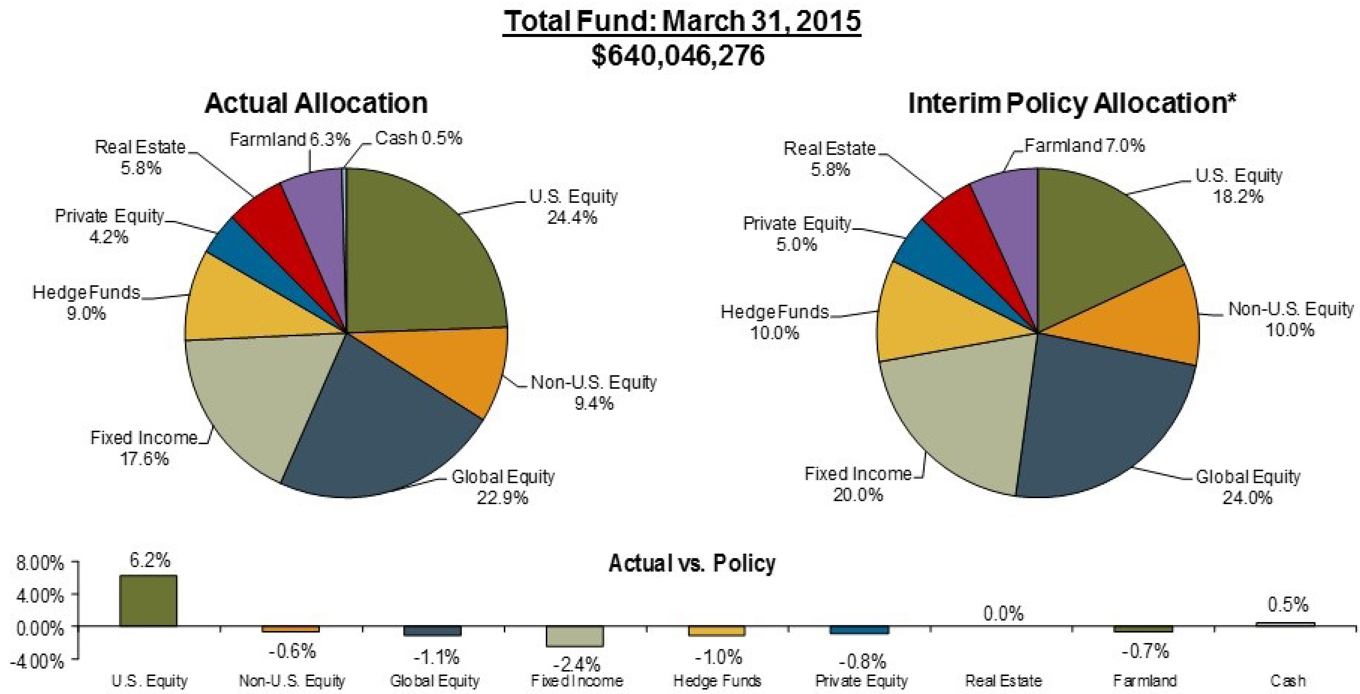
"In terms of growth assets, we had significant US equities, and a small slice of non-US equities. We expanded our global equity allocation. Then, we added the allocation to hedge funds, and that was a new asset class for us. The bottom bucket is the real estate that we have in farmland.

"The yield on farmland can be as low as 2%, much lower than other types of real estate. So, I asked our investment consultant to include other types of real estate holdings.

While asset classes such as real estate and private equity generate relatively higher long term return, such assets are illiquid.

In private equity, you make a commitment to a fund that represents your policy allocation, but the actual allocation depends on when the investment manager draws down on your capital. Generally, private equity programs have an investment horizon of 10 years, with an option for the fund manager to extend the program by one or two years.

Endowment Pool Rebalancing: Market Value and Asset Allocation



* Long Term Policy Allocations: U.S. Equity 14%, Non-U.S. Equity 10%, Global Equity 24%, Private Equity 8%, Hedge Funds 10%, Fixed Income 20%, Farmland 7%, and Core Real Estate 7%

We have 32% in what I consider to be the less liquid asset classes (hedge funds, private equity, core real estate and farmland). For example, I might need to be on a sales queue if I wanted to exit a partnership in a core real estate fund," said Dr Newman.

These can be challenging to rebalance. To improve the liquidity of its real estate bucket, the Treasury also invested in low-cost REITs, which are as liquid as US equities.

Some hedge fund managers prefer long term investment horizons from an investor, but may allow an exit in as short as 90 days.

"Compared to our 32% asset allocation in less liquid investments, some larger endowments had an asset allocation of as high as 50% in alternatives. During the financial crisis, a few of these larger endowments struggled with capital calls on their investments because they were pretty illiquid. Our comfortable level is to have at least two-thirds of the portfolio in liquid asset classes.

"Income distributions from the endowment are made each month. To meet the cash requirements, the Treasury may make a trade each month -- typically in equities or bonds. This provides an opportunity to rebalance as a result of monthly cash flows. So, there is movement in the actual asset allocation on a month-to-month basis."

The pie chart above shows that the Treasury's actual allocation as of 31 March 2015 had an under-investment of farmland by 0.7%.

"We have 3,600 acres of contiguous farmland and it is not quite feasible to sell a quarter of that one month and buy it back a year later," said Dr Newman, noting that there is no mechanism to readily move the asset allocation of farmland around. In some cases, sponsors gift farmland on the condition that it would not be sold.

"The Treasury uses an interim policy allocation with a three to five-year investment horizon while filling up its asset buckets or while identifying an external investment manager.

"We are looking at geographical diversification, [if the endowment continues its growth]" said Dr Newman, noting that all of the Treasury's farmland is currently located in the Midwest and in Illinois.

"We manage our farmland by having our people interact directly with the farmers. I've sat in meetings learning the difference between cash rent and risk sharing leases. Risk sharing is where we split the expense on diesel fuel and fertilizer, as well as sharing the revenue from what is sold on the grain markets. I've learnt more about farming in the last 7 years than I thought I ever would."

Building a Diversified Hedge Fund Program

The Treasury works with its consultant to identify qualified investment funds. This is done through a rigorous screening process.

The Treasury staff interview the fund's team members, ask them to explain their investment philosophy and review their track record: the strategies they have invested in, the number of funds managed in the past, how those funds performed, and what constraints there will be going forward.

All that information has to be evaluated by the Treasury and its investment consultant. Selection of hedge funds has been done in accordance with the Board approved investment policy.

"There is a multiple-year timeline to the avowing of the institution's asset allocation. We try to cast as wide a net as we can to ensure we are making the most reasonable investment decision to each asset class," said Dr Newman.

The Treasury ended up using three hedge fund managers.

One was a beta hedge fund that was buying a piece of every hedge fund strategy that had sufficient liquidity.

The second one was using options strategies on macro trends. These could be a carry trade, a take-over, or directional positions in selected countries' equity or currency markets.

The third one was an event-driven manager, such as purchasing the debt of a shopping mall at 60 cents to the dollar to flip at 80 cents to the dollar to a real estate developer that could repurpose the mall.

After a year of investing in hedge funds, the Treasury reaped a 7% return (31 March 2015) on this asset class. The big question is: In the next big equity downturn when the markets are down 10% to 15% over many months, how are the hedge funds going to hold up?

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