The NEST Approach to Risk

By Kerry Pechter *Wed, Aug 15, 2012*

"We know that there's no free lunch and that you have to take a certain amount of risk. But we don't want to do anything stupid," said the head of investment policy at the National Employment Savings Trust, the U.K.'s new "public option" DC plan.

When U.K. officials were developing NEST, the auto-enrolled, publicly sponsored, low-cost defined contribution plan that becomes fully operational in October, they spent a lot of time and effort researching the risk-tolerance of likely NEST participants.

They discovered that much of the NEST target audience—male non-savers, under age 35, and earning about £18,000 ($30,000)—were so averse to volatility that they were inclined to quit investing entirely if their NEST account values tanked and they lost principal.

That finding has had a huge bearing on the way NEST's investment team plans to risk-manage the 46 target date funds (and the eight institutional funds that the TDFs will be built from). They'll be using a variety of tools to smooth the long-range savings outcomes for the millions of U.K. subjects who are currently at risk of retiring with nothing but a feeble state pension to live on.

For this second of two articles about NEST, *RIJ* interviewed Paul Todd, the head of investment policy at the quasi-governmental organization, about his team's use of active and passive management, its response to the "to" versus "through" debate about TDF asset allocation, and its use of something called the Black-Litterman model.

A lot is riding on the success of NEST. The U.K. national pension system has been described as complex and confusing. The British are hoping that NEST will succeed where earlier attempts to reform the system and get working class people to save and invest have failed. The potential consequences of another failure—higher taxes to fund a richer state pension or the prospect of millions of destitute elderly on the street—are both considered politically unacceptable.

TDFs, NEST style

In some ways, NEST will work much like any big, up-to-date U.S. defined contribution plan. Each new participant will be auto-enrolled into the program and defaulted into an age-appropriate target date fund (TDF) whose mix of underlying stock, bond, and cash funds becomes more conservative as the participant ages.

"We spent a lot of time talking to people in the U.S. about target date funds. We came to the conclusion that the TDF is just a delivery vehicle. It's flexible and efficient, but what you choose to put in it determines the success," Todd told *RIJ*.

The designs of the TDFs in NEST differ in some important ways from U.S.-style TDFs. For instance, there's a different TDF for every retirement year, not for every decade or half-decade, so there's less chance for big disparities between long-range participant outcomes. “We wanted to reduce the dispersion of outcomes and avoid a birthday lottery effect,” he said.

“TDFs in the U.S. are five years apart and have predetermined glide paths. But the way we approach them, because we do it on a single year basis that gives us an enormous flexibility to manage the risks for that cohort. We can buy and sell different funds. We can be contrarian if we want to. We see this as a way to manage more proactively.”

Where the asset allocations of U.S. TDFs typically have continuous “glide paths,” NEST TDFs go through three distinct phases: a low-equity Foundation phase during the first five years or so when the fund seeks merely to match inflation, a long Growth phase when the fund tries to beat inflation by about 3% a year, and a Consolidation period that starts about 10 years before retirement and aims for a mix of 75% bonds and 25% cash at the retirement date.

“In the Foundation phase, which has been the victim of some misunderstanding, we still have the objective of matching inflation, and we have a sizable allocation to equities, but not as much as in the Growth phase. We have a risk target in the Foundation phase of 7% volatility, versus 11% in the Growth phase. For comparison, an all-equity allocation would have 18% volatility,” Todd said.

“At the start of the Consolidation you’ll still be in lots of equities, but by the time you get to your maturity year, you’ll be in about 75% annuity tracking assets, which includes corporate bonds and UK gilts, and 25% money market instruments. In the UK, people can take 25% of their retirement savings tax-free. There’s lots of debate about how you blur the line between working and retirement.”

The boundaries between phases may blur. NEST’s TDF managers will actively management their asset allocations during the transitions from one phase to another to avoid selling under adverse market conditions. “There’s been a debate in the U.K. about the dangers of dynamic asset allocation, about how you can make the wrong decision. But we think that whether you decide to go active or passive, you’re still making a decision,” Todd said.

NEST participants can’t inject their own behavioral risks into their accounts because they don’t have direct control over them. They can’t trade in and out of funds at the worst possible times. Like all U.K. DC participants, they generally can’t access their money until they reach retirement age: no loans, no hardship withdrawals, no rollover IRAs.

Modest growth objectives

“Our number one focus is on thinking about the amount of risk we want to take and then allocating to different assets, rather than saying here’s what we want to invest in and we’ll see what the risks are,” Todd told *RIJ*. “We work within risk budgets. Our investment committee talks about what the risk budget should be, and that usually means talking about volatility numbers.”

NEST is aiming for so-called absolute rather than open-ended returns. “We have some specific return objectives, but it’s really all about outperforming inflation. For a lot of our members, it’s the first time they'll be saving for the long term and the first time they'll be exposed to certain terms. To shoot for benchmarks doesn't feel appropriate for our membership. We're focusing on real incomes so that they can buy the things they need in retirement.

"We're very public, and quite bold, in saying that we will outperform inflation by 3% a year, and do that within a risk budget. At least, that's one of our objectives. Our aim is to achieve our objective with the least risk, and never take risks that we don't think are necessary. We're trying to prevent extreme losses. We don't care only about the end result; we want as smooth a journey as possible. We know that there's no free lunch and that you have to take a certain amount of risk, but we don't want to do anything stupid," he added.

Up to 90% of NEST participants are expected to invest in a TDF that matches the date they are eligible for the British state pension. But they have other options. Muslim participants can opt into a Sharia-compliant fund. Socially conscious participants can invest only in an Ethical fund. There's also a high-growth option, a low-growth option, and a 75% bond/25% cash fund for new NEST participants who are already near retirement.

For the eight funds that underlie its TDFs (see box), NEST decided to rely on well-known asset managers, not all of whom are from the U.K. So far, the chosen managers include BlackRock, UBS, State Street Global Advisors, HSBC, F&C, and Royal London Asset Management. Four of the funds are index funds, three are actively managed funds and one, a "diversified beta" fund, is a hybrid.

The Building Blocks of NEST Target Date Funds			
Global Equity Fund	Passive	FTSE All World Developed Index	UBS
UK Gilts Fund	Passive	FTSE Actuaries All Stocks Index	State Street (SSgA)
Index-Linked Gilt Fund	Passive	FTSE Actuaries Index Linked Gilts Over 5-Years Index	State Street (SSgA)
Low-Risk Liquidity Fund	Active	7-Day LIBID	BlackRock
Diversified Beta Fund	Mostly Passive	UK Risk Free Rate +2% to +4%	BlackRock
Global Ethical Equity Fund	Active	MSCI World	F&C
Sharia Compliant Global Equity Fund	Passive	Dow Jones Islamic Titans 100	HSBC

Sterling Bonds	Active	iBoxx Sterling Non-Gilt All Maturities Index	Royal London Asset Management
Source: "Developing and delivering NEST's investment approach," NEST Corp. 2012.			

"We're making a buy-build decision at the moment; in the future we may not always use existing pooled products. Wem ight use segregated mandates or bring them in house, but so far we've taken a position of not replicating what's already out there," Todd said.

One of the index funds that NEST chose is the BlackRock Aquila Life Market Advantage "diversified beta" fund, a concept relatively new in the U.K., The fund had lost 46% in the 2008-2009 crash, but was reengineered by BlackRock to "incorporate strategies to manage portfolio risk at market extremes," according to the magazine *Pensions Insight*. In 2011, the fund returned 2.3% from February to December while the overall market lost 3.6%. The version of the fund created for NEST has an expense ratio of 25 basis points.

So far, risk management at the NEST TDF level is being done with asset allocation, not derivatives. "In terms of fancy things, we work with BARRA to use their risk allocation tools, and we use the Black-Litterman model. We do all of that in house. We've done some back-testing on the financial crisis, and we think our strategy would have held up. We have no insurance policies," he said, meaning derivatives. "We've looked at that and our concern with those things is that when you need them most they're so expensive that you lose the value you're going for." But he doesn't rule them out for the future.

(The "Black Litterman" model is not a term you hear very often—if ever—outside of the most esoteric discussions about investment management. Developed by Fischer Black and Robert Litterman of Goldman Sachs, this type of asset allocation model combines two main theories of modern portfolio theory, the Capital Asset Pricing Model (CAPM) and Harry Markowitz's mean-variance optimization theory created by Harry Markowitz. According to a 2005 paper by Thomas Idzorek (now president of Morningstar's Global Investment Management Division, then of Ibbotson Associates), portfolio managers often avoided Markowitz' risk-and-return optimization method because it led to overly concentrated portfolios, and it was over-sensitive to assumptions about the expected returns that were plugged into it. Black and Litterman produced better performance by using a "mixed estimate of expected returns" based on a combination of historic returns and the portfolio manager's own "subjective views" expected returns.)

Fixing market failure

Another reason for keeping NEST's investment risks low is to counter-balance the volatility of the lives that many of the participants will lead. "My understanding from the U.S. experience is that people there see human capital as something that's steady and stable, like a bond. If that's your position, then the argument for putting young people in mostly equities makes a lot of sense. If you also assume that people have exposure to other assets, like home ownership and private savings, then holding a large proportion of equities in your pension pot seems reasonable.

"But if you look at the demographics of our target group, they have equity-like human capital, and they are quite linked to the U.K. economy. They're the first people to experience redundancy [layoffs]; they may not have property [real estate] or personal savings, so there's a lot more volatility to their human capital. That makes you think harder about what's suitable for them. Our research showed that for people who don't have diversification of resources, it's not helpful to expose them to high levels of volatility right off the bat."

Ultimately, NEST is intended to help traditional non-savers to save, and to help them end up with as much savings as possible so that they can rely on more on their own resources in retirement and less on public assistance.

"We identified a market failure on dealing with people with low incomes," Todd told RIJ. "Private providers couldn't serve that part of the market profitably. Charges were high. There was a need for a scheme that will take anybody, no matter what, no matter how few workers, or how small their accounts are. That's what NEST is."

To achieve the necessary economies of scale and to generate enough revenue to pay back its seed money to the U.K. Treasury, NEST is going to have to grow quickly. Todd quoted figures from the Pension Policy Institute that NEST will be managing "in the billions of pounds" by 2018 and perhaps £300 billion by 2050.

"The expectation from our modeling is that we will achieve high scale, and that small employers will get access to reasonable, decent products at reasonable costs," Todd said. "A plan like this, with these 46 TDFs, and fees of only 30 basis points, with an extremely sophisticated risk allocation, has never been available for this demographic before."