First, some comments on US capital markets

Waiting for the normalization of US monetary policy is like watching a comet approach earth: we know it's coming, but the impact is uncertain. The eventual resetting of interest rates (to something greater than inflation) and the retreat of the Fed from the capital markets is a weather event to monitor. A few weeks ago, we discussed cash managers holding corporate bonds, corporate bond managers owning high yield, investment grade bond funds owning junk sovereigns, bond fund managers owning dividend-paying stocks, risk-averse central bank reserve managers owning equities, etc. The resetting of the deck chairs will usher in some volatility as these positions revert to their rightful owners. As "Fed tapering" discussions heat up, equities will probably start generating single-digit returns and double-digit volatility instead of the reverse¹. It doesn't mean that asset allocations have to radically change, and we are optimistic on a US growth recovery due to improving household fundamentals. In addition, the history of steepening yield curves has actually been well absorbed by US equities; there are 19 instances of them since 1930, and in all but 4, equities rose anyway (exceptions: 1931, 1981, 1983 and 1994). But this Fed's balance sheet experiment has no historical parallel, rendering the prior episodes somewhat less relevant. The *eventual* end of easy money means that investors probably need to reset expectations for risk and return compared to what we've had since 2009.

The Importance of Being Earnest: A preview of our retirement analyses

On a day to day basis, we work with families and with a wide range of their intermediaries: financial advisors, family offices, portfolio managers of mutual funds in their defined contribution plans, CIOs of their state or corporate defined benefit plans, insurance companies that manage their annuities, and sovereign wealth funds managing their share of national income. The reason many of them invest is to plan for the family's retirement. The questions families ask themselves often sound like this:

"Can I retire with cash flow that is in the same general vicinity of what I had been spending beforehand? And can I make sure that my assets will last through to the end of my retirement, without me becoming a ward of the state or of my children?"

It sounds like a simple question, but there's a lot to it. We recently completed detailed analyses of retirement dynamics for the following income groups:

- Families earning 12 times the median income (\$670k in 2012), and/or retiring with \$5-\$10 million in 2012 dollars
- Families earning 6 times the median income (\$330k in 2012), and/or retiring with \$3-\$5 million in 2012 dollars
- Families earning the median income, and/or retiring with less than \$500k in 2012 dollars

Many of our clients have greater amounts of wealth which will almost certainly outlive them; this retirement project was not designed specifically with them in mind. We use other sets of tools to evaluate the investment, credit, taxation and estate planning issues that such ultra-high net worth families typically confront. However, some of the concepts are the same as it relates to the relationship between spending, investing and the accumulation of wealth.

This week's *Eye on the Market* **is an excerpt of the first one above.** If you would like to receive any of the three papers, please contact your J.P. Morgan coverage team for copies which will be ready next Monday. Note: much of this is highly specific to US savings and taxation systems, but the conclusions drawn are universal in nature.

¹ Through 5/28/2013, the trailing 60-day return-to-risk ratio of the Dow Industrials Index ranks in the top 7% of all observations since 1896.

The best laid plans of the Browns: a baseline case

Retirement assets are the byproduct of factors over which families have no control (market returns, policy regarding taxation, savings and entitlements), some control (lifespan, employment) and total control (consumption vs. savings, and portfolio risk). A framework that combines all of them and which is based on history is a good place to start, as it allows us to understand the scope of what's possible. Let's examine the Browns when they retire in 2013 at age 62 (see box below for background).

How much post-retirement cash flow do the Browns need? We assume they need 80% of what they lived on before retirement. Here's how it works: in 2012, they earn \$670,000, put \$22,500 in a 401(k) plan, pay their taxes, invest \$72,000 out of after-tax income and live on what is left, which is ~\$410,000. Using the 80% target, the Browns would seek to live on ~\$330,000 beginning in 2013. We grow this target each year by inflation to maintain its purchasing power. The first chart looks at the Browns' financial assets. They accumulate over \$7 million by retirement, which they gradually deplete.



The second chart shows how they finance their annual cash flow target. They run down after-tax savings first and do not draw from their 401(k) until the minimum mandatory distributions begin (to maintain pre-tax compounding benefits). Note that in retirement, the Browns need to come up with enough cash to meet their income target, and taxes payable on 401(k) distributions.

The Browns:

- Have one working spouse that since 1975 consistently earns 12x the median income (in 2012, 12x MI = \$670,000)
- Buy a home once they save enough for a down payment and which they own free and clear by retirement
- Max out pre-tax 401(k) contributions and benefit from a 3% employer match
- Put aside another 15% of after-tax income in a savings account, for a total lifetime savings rate of 26% (4% above our rough estimate of "average" for their income demographic)
- Invest in a balanced portfolio of 65% equities at age 25, declining to 45% by age 62 (remainder invested in 5-year maturity fixed income and cash)

The Browns demonstrate the importance of being earnest about saving and investing. By making consistent pre-tax contributions to savings and by sticking to a balanced portfolio approach, the Browns are able to live out their retirement to age 90 with their cash flow target intact, and with a substantial sum left for the next generation. Life's emergencies and unexpected hardships can get in the way, but this outcome was well within the realm of the possible for the Browns retiring in 2012.

This all seems straightforward, but there are a lot of families that do not have the savings or investment discipline of the Browns. What might happen to them? And what about the Browns of the future, who save a lot but might be impacted by changes in public policy, and different equity and fixed income returns?

In our deep-dive studies, we address the following questions. What about families that...

- Want to (or have to, for health or business cycle reasons) retire early, or live much longer than expected?
- Save a lot, but not in the most efficient tax-advantaged vehicles, either by choice or due to lack of access?
- Invest too conservatively?
- Spend too much money pre-retirement?
- Want to spend more than 80% of pre-retirement income after they retire?
- Plan on achieving above-market investment returns to compensate for too much spending?
- Are exposed to future policy risks regarding entitlements, taxation and the use of tax-advantaged plans?
- Are wondering about the benefits and disadvantages of Roth 401(k) plans, annuities, non-qualified deferred compensation plans, Sep IRAs and non-deductible IRAs?

There's no room to go through the answers to all of these questions in this week's EoTM, so we will limit our discussion to [a] the risk of too much spending, and [b] how future policy risks might impact retirees of the future.

The Big Spender. What if the Browns were balanced investors, but their lifetime savings rate was lower? First we need to figure out what a wealthy big spender would look like. In the baseline case, the Browns have a lifetime savings rate of 26%. So, let's assume a Big Spender with a savings rate of 21% instead. As shown below, it makes a huge difference. The overspending Browns accumulate \$2 million less by retirement, run down savings more quickly, and have to access the value in their home, either by selling or borrowing against it.

The big spender





Can the over-spending Browns invest their way out of an under-saving hole? It would be difficult, if not impossible. They would need a real equity return (e.g., net of inflation) of 8.5% - 9.0% compounded over several decades to compensate for under-saving. That is substantially above the real returns of the S&P over almost any post-war time frame. That's why we consistently stress the importance of saving first, and get into discussions about investments later.

On retirees of the future, we need to consider both policy and market risks. On the policy front, the Federal debt appears set to stabilize at ~75% of GDP and the budget deficit is falling. However, once the benefits of a cyclical recovery fade and the deficit starts rising again (2016-2017), pressures to improve budget dynamics may rebuild. The challenge: there is little discretionary spending left to cut. In 2017, after the first phase of the Budget Control Act, non-defense discretionary spending will be well below the lowest level of the last 40 years, and if the sequester is not amended, it will decline even more. So far, the Administration has focused on families earnings more than \$250,000 in adjusted gross income as a means to raise revenue; this approach may continue. As a result, there are several policy options one can imagine that could impact wealthy families of the future. They include changes to social security, Medicare, tax policy and restrictions on the use of tax-advantaged savings plans.

J.P.Morgan

Eye on the Market | June 4, 2013

Topics: The spending, investing and policy dynamics of your retirement

Now let's consider market returns. Returns on US equities from 1977 to 2012 were quite favorable. Even after the lost decade of the 2000s, with its two 40%+ equity declines, the annualized return on the S&P 500 was ~7% above inflation. As shown in the first chart below, the channel of post-war real returns on equities over 35-year periods was pretty tight, ranging from 5% to 7%. One catalyst for the high real returns affecting the last data point was the decline in interest rates which began in 1982, a process which has obviously run its course. Bond markets also benefitted during this period; the compound annual real return on 5-year Treasuries was 3.5% from 1977 to 2012. As a result, when we think about risks to future retirees, we should consider what would happen if real equity returns were 5% rather than 7%, and if real fixed income returns were closer to 2.0% than 3.5%.

Long-term return on the S&P 500, highlighting the postwar channel of real returns



Source: Robert J. Shiller data set, JPMAM. April 2013





Source: TPC, BEA, NAR, BLS, JPMAM, Census, Bloomberg.

The second chart shows the results. **Applying** *all* **adverse policy and market changes alters the trajectory of the Browns' nest egg.** They deplete their financial assets, live on the proceeds raised from accessing their home equity, and run out of assets before the end of their retirement. Note that this is what happens in the *baseline* case, when the Browns are diligent savers and balanced investors. In other cases (e.g., too much spending), families would run out of financial and property assets well before the end of retirement. Of course, most families would not drive off a cliff and spend into oblivion; the point is that substantial post-retirement spending reductions would be needed for them to remain solvent.

All of these adverse events will probably not happen simultaneously, and some may never happen. But as wealthy Americans live longer (some will be retired for more years than they actually work), there are more and more unknowns that need to be planned for in advance. The messages in Aesop's *The Ant and the Grasshopper* still resonate even after the two and a half millennia that have passed since it was written. It's worth revisiting at a time when US consumption is glorified and abetted by public policy (i.e., lower sales, VAT, excise and import duties on a wide range of consumer goods and services compared to other countries; and the tax treatment of housing, which effectively encourages suburban sprawl and related expenditures).

Beginning next Monday, the deep-dive studies for each income demographic will be available in electronic form, focusing on the range of issues mentioned at the top of page 3. Please ask your coverage team for the ones you wish to see.

Michael Cembalest J.P. Morgan Asset Management



Aesop's Fables, Rand McNally, 1919. Illustrations by Milo Winter.

<u>Acronyms</u>

BEA = Bureau of Economic Analysis; BLS = Bureau of Labor Statistics; CBO = Congressional Budget Office; Census = United States Census Bureau; JPMAM = J.P. Morgan Asset Management; NAR = National Association of Realtors; OMB = Office of Management and Budget; TPC = Tax Policy Center; VAT = Value added tax

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