SPECIAL REPORT

TD Economics

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U.S. LONG-TERM FINANCIAL ASSET RETURNS: AN ECONOMIC PERSPECTIVE

Highlights

- The impact of Fed tightening on asset returns is likely to be meaningful but not dramatic. The ECB and the BoJ are likely to continue swelling their balance sheets, helping maintain accommodative conditions globally.
- Cash returns in the U.S. over the next four years are projected to rise, but only moderately, and remain lower on average compared to levels prior to the recession.
- The gradually increasing rate environment will trigger some capital losses and lead to negligible returns on fixed income assets more broadly.
- U.S. equities will deliver positive returns on average but underperform international benchmarks over the 2016-19 period. While the U.S. economy will remain robust, equity investors will be attracted to other markets which face greater upside potential from current depressed levels. In the near term, a continued strong U.S. dollar will remain a headwind for U.S. equities.
- All told, a theoretical portfolio should between 2016 and 2019 return between 4% (income-focused) and 6% (growth-focused), with a balanced portfolio expected to return about 5% per year.
- Given our projections of long-term fundamental factors, returns on cash of 3%, fixed income of 3.5-5% and equities of 7% are viewed as sustainable in the period equilibrium economic growth.

In this report, we provide an updated perspective on the most likely path of U.S. dollar financial asset returns over the coming decade. There is no shortage of factors that will ultimately drive asset returns. Chief among them are important structural factors such as growth, inflation and demographics. However, another key influence that will substantially affect investment returns going forward will be more cyclical in nature. Currently, U.S. monetary policy is at an inflection point, with the Federal Reserve, after seven years of zero interest rate policy (ZIRP), embarking on what will likely be a very gradual tightening cycle. Once rate normalization gets well underway, the Fed will also likely begin reducing the size of its balance sheet. Removal of the proverbial “punch bowl” could put a damper on returns of assets in the coming years both in the United States and globally, just as quantitative easing and ultra-low rates helped boost asset prices since the recession.

In our assessment, the impact of Fed tightening on cash, fixed income and equity returns is likely to be meaningful but not dramatic. The Federal Reserve is expected to be slow to take rates higher. Other major central banks will lag the Fed in rate hikes. The Bank of England (BoE) and the Bank of Canada (BoC) are not expected to begin raising their policy rates until mid-2016 and late-2017, respectively. Others still are expected to ease further, with both the European Central Bank (ECB) and the Bank of Japan (BoJ) continuing to swell their balance sheets. All these actions will help offset some of the impact of any Fed tightening and maintain accommodative conditions globally.

In this environment, cash returns in the U.S. over the next four years are projected to rise, but only

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TABLE 1: LONG TERM FINANCIAL ASSET RETURNS (USD)				
Returns for specific assets	History	Forecast	Forecast details	
	2005-2015 (past 10 years)	2015-2025 (next 10 years)	2015-2019 (next 4 years)	2019-2025 (6 years thereafter)
Cash	1.2%	2.5%	1.5%	3.0%
Treasuries	5.0%	3.0%	1.5%	3.5%
Munis	5.5%	4.0%	3.0%	4.5%
Corporates	6.2%	4.5%	3.5%	5.0%
S&P500	7.2%	6.0%	5.0%	7.0%
MSCI EAFE + Canada	3.4%	8.0%	9.0%	7.0%
Income	**5.1%**	**4.5%**	**4.0%**	**5.0%**
Balanced	**5.2%**	**5.5%**	**5.0%**	**5.5%**
Growth	**5.1%**	**6.5%**	**6.0%**	**6.5%**

Note: Figures are total annual returns rounded to the nearest half of a percentage point. Returns on international indices are converted to USD.
Source: Federal Reserve Board, Bloomberg, TD Economics

moderately. They will remain significantly lower than those prevailing in the years prior to the recession, but will actually be higher than those over the past decade which included seven years of ZIRP. The gradually increasing rate environment will trigger some capital losses on fixed income assets, particularly longer-maturity products, with returns on Treasuries only matching those of cash. Municipal and corporate bonds will also suffer capital losses in the coming years, but should nonetheless yield more than Treasuries, given the typically lower duration and higher coupons which should help insulate returns from capital losses.

Within the equities space, we expect that the S&P500 index will continue to deliver positive returns over the next four years, but considerably more moderate than those recorded since 2009. Furthermore, international equities, including those from Europe, Australasia, the Far East and Canada, are projected to outperform U.S. stock returns. Part of the story of outperformance for these markets relates to the different stage of the economic cycle, low currency values, and expectations of a gradual rise in world commodity prices which are likely to deliver relative benefits. Summing it up, a set of theoretical portfolios should between 2016 and 2019 return between 4.0% (income-focused) and 6.0% (growth-focused), with a balanced portfolio expected to return about 5.0% per year during that period.

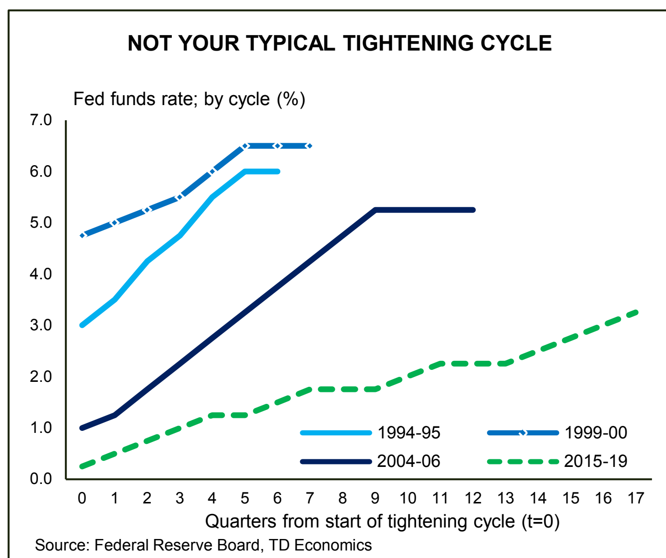
Looking further out, once U.S. and global central bank policies stabilize around their respective terminal rates, which we expect will happen towards the end of this decade, longer-term structural factors will move into the driver's seat. Given our projections of long-term fundamental factors, returns on cash of 3%, fixed income of 3.5-5% and equities of 7% are viewed as sustainable.

For the entire ten year period, a balanced portfolio made up of 5% cash, 45% fixed income and 50% equities should yield an average of about 5.5% per year. This is slightly above the 5.2% average total return such a portfolio generated over the past decade. However, it is important to remember that these are average projections and returns will likely vary substantially from year to year within the forecast horizon.

Medium-term: 2016 through 2019

Fed to begin gradual normalization

The overarching investment theme heading into 2016 is the divergence of global monetary policies among major central banks. Ultra-low interest rates alongside substantial amounts of quantitative easing by the Fed, BoE, BoJ, and ECB have driven strong and broad based returns in financial markets since the recovery, particularly for risk assets. This was the precise aim of stimulative conventional and unconventional monetary policies, designed to push investors further out the risk frontier. As such, the safest investments returned little, with cash in the U.S. yielding a mere 0.07% annually during the seven years since 2009. Returns on Treasury notes and bonds were higher, ranging from between 0.5% for 2-year notes to 2.5% for 30-year bonds with the latter getting a boost from capital gains related to falling interest rates. The more risky corporate and municipal bonds fared better yet, yielding between 5% and 7% per year, as spread compression vis-à-vis government bonds provided an added boost to returns. Lastly, U.S. equities returned an average of 13.5% in the 2009-15 period, while both Canadian and EAFE equities yielded an annual return of 9-10% in local currency terms, though factoring



in the greenback's ascent would lower those gains by about 2 percentage points per year.

At this point, the Federal Reserve is no longer adding to its balance sheet, and only maintaining its enlarged size for the time being. Still, with nearly $3 trillion in excess liquidity, the Fed is expected to begin normalizing its balance sheet over the medium-term. This will be a passive process, at least at first, with the Fed unlikely to sell securities outright, instead letting them run-off as they mature. Moreover, balance sheet normalization won't begin until "normalization of the level of the federal funds rate is well under way." As such, we don't expect the Fed to begin shrinking its balance sheet until at least late-2016, with the current tightening cycle likely to be very gradual. Still, these moves will mark the first time the Fed tightens monetary policy in more than a decade. Tightening monetary policy typically benefits cash returns, but could saddle fixed income investors with capital losses. At the same time, it could create a headwind for equity prices in the form of higher discount rates on future earnings.

This tightening cycle is different

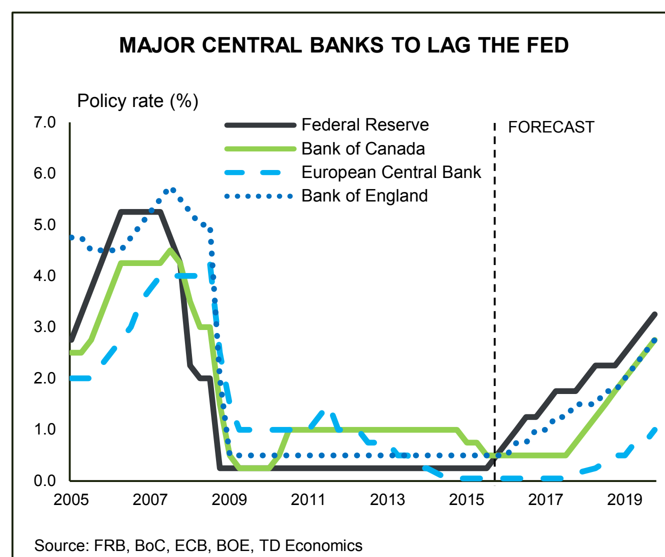
Still, there are a number of features of this tightening cycle that will make it different from those of one and two decades ago. For one, the Fed is expected to move slowly given the long-lasting legacies of the Great Recession. We expect only three 25 basis point hikes during 2016 and just eight more over the subsequent three years. This equates to about 68 basis points of hikes per year between 2016 and 2019, or about one-third the pace of the most recent tightening cycles which saw at least eight quarter-point increases per year. The idea of a very gradual, or even glacial, pace of hikes is also supported by the notion that the terminal, or long-term policy rate, is now lower than it has been traditionally. In light of demographic factors and trend productivity growth, the U.S. economy is projected to grow by only 2% in real terms once the cyclical boost runs its course in the coming years. Given this slower cruising speed of the economy, a real policy rate of 1.25% (or 3.25% in nominal terms) should be enough to keep it from overheating. A comparable nominal neutral rate in the past has been estimated closer to a range between 4.0% and 4.5%.

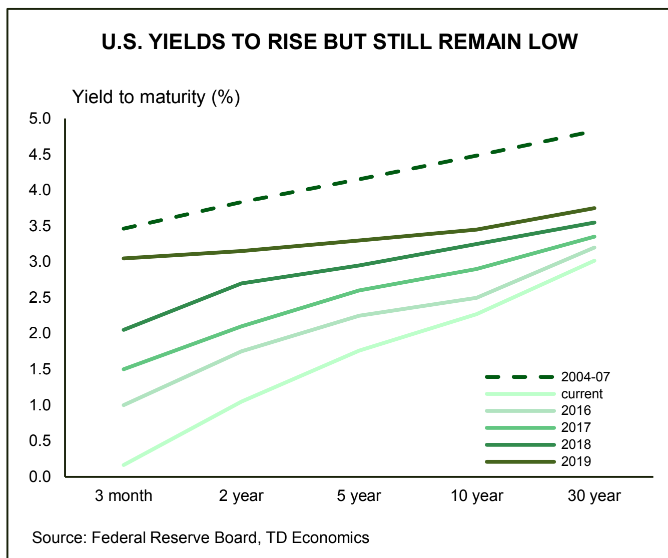
Cash to yield more than zero

The end of ZIRP will be beneficial to cash investments. The yield on three month T-bills, which we use as the proxy for cash, will rise directly in line with the policy rate. But, the muted tightening cycle will only slowly improve the yield on cash-type products. Moreover, given the significant demand for highly-liquid and safe collateral, these T-bills will yield comparably less than fed funds or the interest on reserves that the Fed pays to depository institutions. In fact, three month Treasury bills will likely yield 10 to 15 basis points below the midpoint for the fed funds target rate, effectively a rate that is closer to the lower bound for the policy target. In light of this, cash returns will rise but average about 1.5% over the next four years – a rate only marginally better than their average over the past decade.

Global monetary policies to diverge

A rising policy rate in the U.S. should correspond with a one-to-one increase in USD denominated short-term bor-





rowing costs. But, increases in the mid- and long-end segments of the fixed-income yield curve should be relatively less pronounced for two reasons. Firstly, since the Fed wants to keep long-term borrowing costs relatively low, so as to shield the housing market and the consumption-led recovery, it will delay normalization of its balance sheet. Moreover, when balance sheet normalization does begin, it will most likely remain passive, with the Fed holding on to the Treasury- and agency-securities until they mature, instead of selling outright some of its $4.5 trillion bond holdings. A passive runoff will necessarily result in a protracted balance sheet normalization process, which Fed Treasury holdings unlikely to return to "conventional" levels until around 2022. Secondly, Fed hikes will be taking place as both the European Central Bank and the Bank of Japan continue to buy assets to stimulate their economies and support inflation expectations. The ECB is currently buying about €60 billion per month (about $65 billion at current exchange rates), while the BoJ continues to purchase at a pace of ¥6.7 trillion per month (about $56 billion). Both of these programs are expected to last for some time still, with the $120 billion per month more than offsetting any Fed balance sheet run-off. Thus, on net, central banks will still be increasing liquidity in the global financial system. This should help support values of longer-term government fixed-income securities and risk assets, keeping bond yields across the globe relatively subdued.

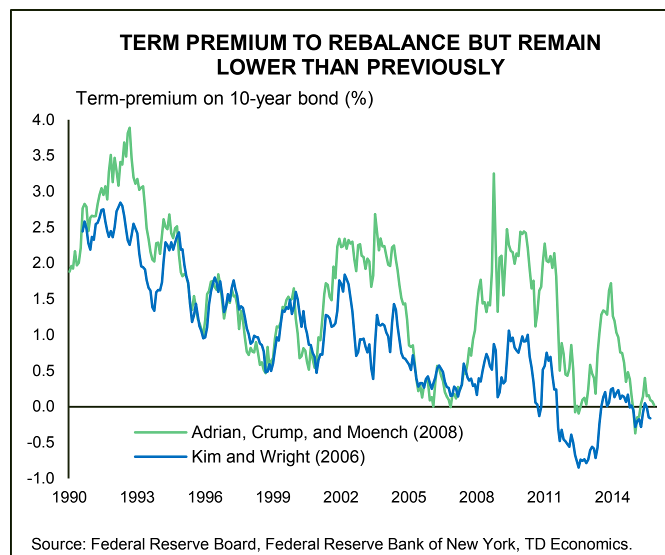
Treasuries to suffer from capital losses

Strong demand from global investors for U.S. debt securities alongside purchases by the Federal Reserve have pressured down U.S. yields for years. This dynamic was apparent in the very low term premium on U.S. debt. The term premium compensates investors for the risks associated with holding long-term debt instead of rolling over their investments in cash-like products, such as T-bills, over the investment horizon. This premium is typically positive and increases with the term to maturity. But, it has declined to a sharply negative value in recent years in part due to global quantitative easing programs that attempted to push investors further out the risk frontier.

Strong demand from international investors should remain in force in the coming years, but the term premium should begin to rebalance to a more sustainable value as the Fed begins to shrink its balance sheet. This dynamic, alongside expectations for higher short-term rates in the future, should put upward pressure on Treasury note and bond yields. However, the higher coupon return will likely be partly offset by capital losses as rates continue to move up. Returns on notes with maturities shorter than ten years should manage to beat cash, but relatively larger capital losses further out on the yield curve will lead bonds to perform only in line with cash over the next four years. All in all, the return on a portfolio made up of various maturity bonds, reflecting the makeup of outstanding marketable Treasury debt, will return just 1.5% over the next four years, with losses concentrated over the near-term horizon.

Munis and corporates will also face capital losses

Since municipal and corporate bonds tend to trade off of their sovereign cousins of corresponding maturity, these bonds too will also see their yields rise over the coming

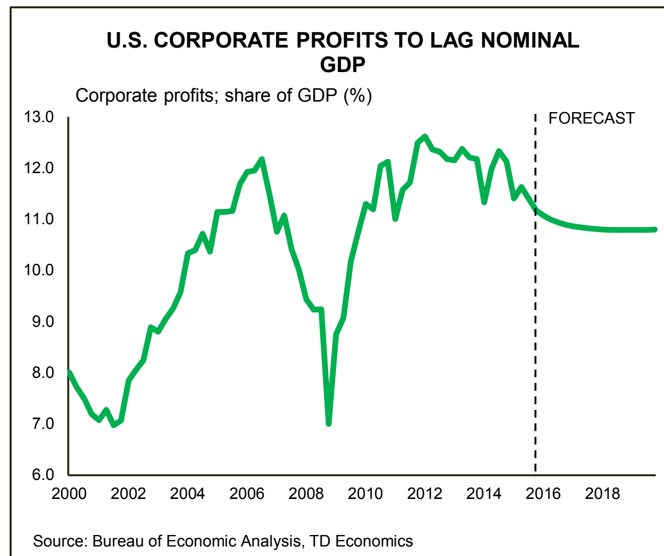


years. Still, the degree to which muni and corporate yields rise will depend on how spreads evolve going forward. Typically, stimulative monetary policy causes these spreads to narrow, while the opposite is true when financial conditions begin to tighten. However, at this point in the cycle we believe that much of the widening of spreads has already occurred. Long-term AA corporate spreads fell below 175 basis points in recent years, but have recently rebalanced to about 214 basis points – in line with the 200 basis points that they averaged since 1997. Ditto for muni spreads, which are now above their long-term average levels. Lower rated corporate spreads have actually risen well above their average levels as a result of additional risk related to the energy sector. But, these spreads should normalize over the medium-term. All in all, we expect municipal and investment grade corporate bonds to return between 3% and 3.5% over the coming four years, with weakness again, concentrated in the near-term.

Equities to return less than in previous years

Still, the most encouraging medium-term prospects for investors remain in the equity space. U.S. equities, as proxied by the S&P500 index, returned next to nothing last year after years of double digit gains. Much of the weakness was related to the commodity rout as well as the strong U.S. dollar which battered profits of U.S. multinationals given that one-third of S&P500 firm profits are generated outside the United States. And while some limited near-term weakness is still conceivable on account of these two factors, the 2016-19 prospects remain reasonably solid. The economic outlook is robust and should provide a sturdy backdrop for corporate profits.

Source: Bloomberg, TD Economics



Source: Bureau of Economic Analysis, TD Economics

Still, the returns are unlikely to match those of the previous several years. They will be restrained by several factors. For one, the tightening cycle, while gradual, will raise borrowing costs for firms and likely weigh on stock prices which are, by some metrics, already overvalued. Moreover, despite the robust economic backdrop, U.S. corporate profits will likely trail nominal GDP over the coming years. At 11.4% of GDP as of 2015Q3 profits are near a record share and will likely decline as the tightening labor market necessitates faster wage growth. All in all, U.S. equities, as proxied by the S&P500, should return an average of 5% over the 2016-19 timeframe.

International equities should fare even better. The MSCI EAFE Index – consisting of developed market stocks from Europe, Australasia, and the Far East – is still some 10 percent off last year's peak despite some recent gains, implying some scope for a rebound. Equities across much of these developed markets will be supported by ultra-stimulative policies of the ECB and BoJ, low currencies vis-à-vis the U.S. dollar, and corporate profits that should benefit from cyclical recoveries. Moreover, Canadian, Australian and Norwegian equities should be especially supported by firming commodity prices. On the whole, we expect the MSCI EAFE + Canada Index to return between 6.5% and 7% over the next four years, with additional 2.5% return per annum related to favorable foreign exchange dynamics – with the greenback expected to slip slightly vis-à-vis the EAFE currency basket by the end of the decade.

All told, after adjusting for currency conversions, investing in a mix of domestic and international equities should return about 7% when weighted equally. While this return

is above those of fixed income and cash, it is important to remember that it is associated with a significantly more elevated risk profile given the inherently higher volatility of equity prices and exchange rates.

Long-term: 2020 through 2025

We expect the Federal Reserve to reach equilibrium levels in its fed funds policy rate by the end of the decade. This level is assumed to be maintained for the remainder of the holding period horizon which runs through the end of 2025. This is done as a matter of simplicity, as forecasting macroeconomic and financial variables that far in advance with any certainty is challenging at best. However, investors need to be cognizant of the fact that a chance of a recession during that period is not insignificant. Still, the simplification offers a view into what returns would look like during a period where growth is at potential, resources are fully utilized, and price pressures are just as intended.

Our assumption on the Federal Reserve equilibrium rate is predicated on expectations for potential growth of the U.S. economy during the coming decade. Lower growth relative to history should require lower interest rates to keep the economy in balance, all things considered. As such, we expect the equilibrium fed funds target rate to equal about 3.25%. Given this policy rate and continued strong demand for T-bills, cash should yield just over 3% – more than double the return over the past decade. Government bonds of varying maturities should yield a slightly higher 3.5%, with long-bonds expected to yield just under 4.0% – both well below their returns over the past ten years. This relatively modest return assumes no capital gains or losses. Still, long-term bond yields are likely to remain below nominal GDP growth – a golden rule of sorts – due to a depressed term-premium. Term-premia on high-quality sovereign bonds have been falling for decades and are unlikely to rise much, with the success of central banks in anchoring inflation as well as rising demand for long-term assets by global investors key contributing factors. To achieve additional yield, investors may need to move further out the fixed income risk frontier. Assuming spreads over government debt consistent with periods of stability, municipal and corporate bonds should return between 4.5% and 5% during the next decade. This is about a percentage point below the gain during the past decade but still a significant premium over Treasury bonds. Lastly, to estimate long-term returns on equities, we utilize Gordon's dividend growth model. Assuming a constant regionally-specific dividend yield and profits growing in line with potential output across the U.S. and international economies, equities across these regions should return approximately 7% over the long haul – largely in line with returns over the past decade.

Bottom line

In the above paragraphs we outlined our expectations for financial asset returns from a perspective of a U.S. investor. Investment returns will be impacted by macroeconomic factors, monetary policy, and exchange rates both home and abroad. We expect the impact of Fed tightening on financial asset returns to be significant but more muted than during past tightening cycles. Accordingly, over the next four years cash returns in the U.S. are projected to rise, but only moderately, and remain lower on average compared to returns prevailing over the past decade. Moreover, the gradually increasing rate environment will trigger some capital losses amid relatively negligible coupon returns on U.S. fixed income assets. We expect returns on U.S. equities will underperform in the medium-term relative to the past several years, but will nonetheless remain respectable. On the other hand, there is a good chance that international equities will outperform other the U.S. benchmarks over the next four years. This outperformance will be driven by a gradual rise in world commodity prices, weaker currencies, and still stimulative monetary policies. Looking further out, once U.S. and other central bank policy stabilizes around their terminal rates, which we expect will happen towards the end of this decade, longer-term structural factors will instead drive returns. In light of our long-term fundamental factor assumptions, returns on cash of 3%, fixed income of

TABLE 2: PORTFOLIO WEIGHTS

	Cash	Fixed income			Equities	
		Treasuries	Munis	Corporates	S&P500	MSCI EAFE + Canada
Income	10.00%	20.00%	20.00%	20.00%	15.00%	15.00%
Balanced	5.00%	15.00%	15.00%	15.00%	25.00%	25.00%
Growth	5.00%	5.00%	5.00%	5.00%	40.00%	40.00%

Source: TD Economics

3.5-5% and equities of 7% are viewed as sustainable. As such, on the whole over the coming decade, a set of portfolios are expected to return between 4.5% (income-focused) and 6.5% (growth-focused), with a balanced portfolio expected to return 5.5% – slightly above the 5.2% generated over the past decade. However, we would like to stress that these figures are averages only, and actual returns should be expected to vary substantially from one year to the next.

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