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Portfolio Strategy

S&P 4000 or S&P 8000? Our Strategists Disagree

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18 September 2019

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Portfolio Strategy: S&P 4000 or S&P 8000? Our strategists disagree

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This note takes the form of a debate between Alla and Inigo on the question of whether it is right to assume a strategic low return outlook for equities. Inigo thinks that the S&P will likely only get to a range around 4000 in 10 year's time, but Alla thinks it is likely to be in a range around 8000. This is quite a difference of view within AB's strategy team! We thought it would be useful to make the debate public.

In support of a low return outlook Inigo points to high Shiller PE's, low yields and just the unusual nature of the move up in equities over the last 30 years which can be ascribed to a number of "one-off" factors such as the deflationary shock of globalisation, baby boomers investing their pension savings in capital markets and (possibly) the emergence of central bank independence.

Alla points out that this would have led to a low return outlook being forecasted for most of the past 10 years which would have been a spectacularly bad forecast. The S&P has returned 250% (including dividends) over this time. If a framework is so wrong for so long it needs to be rejected!

We discuss the constraints on further equity purchases given household equity allocation that is already close to a record vs whether such allocation matters in an environment when corporate purchases of equities are ten-fold larger than investor flows.

Inigo also makes the case for a low return outlook given the likely demographic and real growth outlook. Admittedly if one adds buybacks to this the return expectation rises to medium rather than low return. However, this also implies that the availability of public equities is materially reduced over time. Moreover, the change in the geopolitical reality in recent years suggests both equity risk premia and sovereign risk premia should be higher.

But, says Alla, equities have smashed inflation for 150 years, what else is anyone going to buy? There is no other major asset class that can make such a claim.

We conclude that there are potentially strategic constraints on returns, but some of these have been in place for years so their impact on forecasts is moot. Even if returns end up being low, investors will struggle to find another asset class that has a chance of beating inflation. If we think about "risk", then over the horizons that we address in this note, failing to beat inflation is a key risk, more so perhaps than risk simply defined as volatility. After all, most people invest in order to fund liabilities set in the real economy. For those who are able to buy infrastructure and real assets these offer alternatives, but basically there are not enough bridges (or other real assets) to go and buy. The bottom line is that investors need a long-exposure to equities as the best inflation hedge in town.

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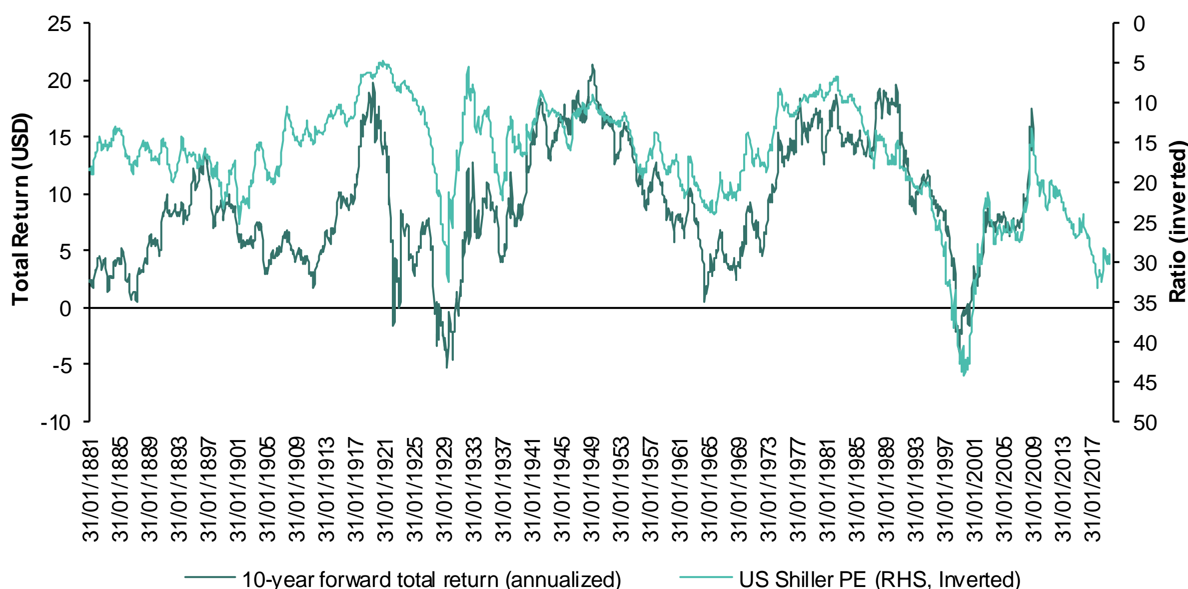
DETAILS

Inigo: Equities (and indeed many other asset classes) look expensive. Or put another way, yields have declined for 35 years, this cannot continue indefinitely.

The starting point for making the case of a low return future is valuations being high. In Exhibit 1 we show the Shiller PE (price divided by 10 year inflation-adjusted earnings) for the US market, inverted on the right hand axis. On the left hand axis we show 10 year forward rolling returns for US equities. Based on the relationship that has held since 1880, from a current Shiller PE of 29x, reading across to the left hand axis we would conclude that US equities are expected to return 3.4% per annum for the next decade. Note that this includes dividends. This might sound horrible compared to what investors have become used to in the last 30 years, but we would argue that this is not at all bearish. After all, it likely translates to a positive return in real terms, which is likely higher than nearly another asset class that can be bought in scale.

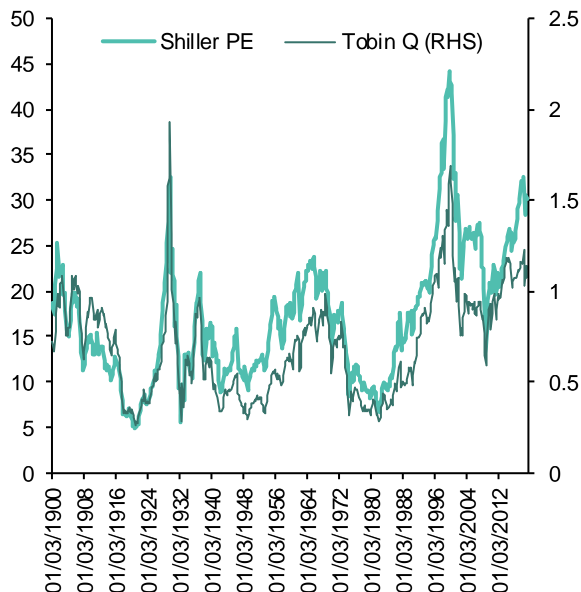
EXHIBIT 1: **Shiller PE and 10 year forward returns**



Shiller PE defined as price divided by 10 year average inflation-adjusted earnings.
Source: Robert Shiller's database, Global Financial Data, Bernstein analysis

Why the obsession with the Shiller PE? In short, because although it is useless at making forecasts on 1 or 2 year horizons, at a 10 year horizon it is the best thing we've got. Exhibit 2 shows the historical efficacy of valuation metrics in predicting future returns. Tobin's Q (price divided by the replacement cost of assets) has also been effective. However, this is harder to apply to international markets or subsets of the US market, it also leads to endless debates about the treatment of intangible assets. However, conveniently the metrics both agree that US equities are "fully valued" and hence due a period of low return. Indeed, historically the two have moved together. This is important as the metrics are so different in nature, one being based on a flow, the other on a stock of assets, so if they move together it perhaps gives us some encouragement in their efficacy.

EXHIBIT 2: **Shiller PE and Tobin's Q**



Source: Robert Shiller's database, Datastream, Bernstein analysis

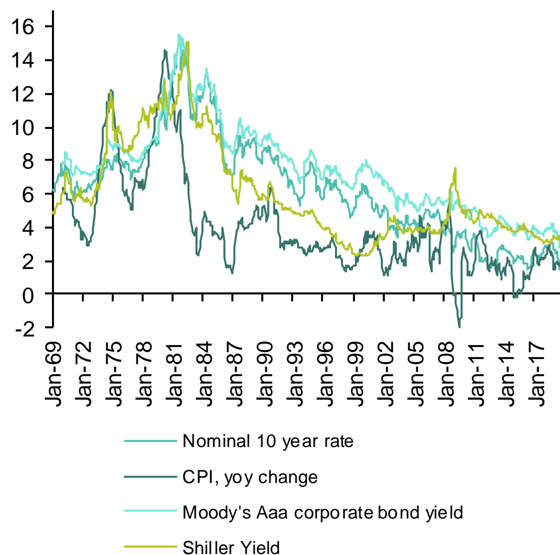
EXHIBIT 3: **Historical efficacy of Shiller PE vs other valuation measures**

Quarterly since 1952	**Adjusted R^2**			
	1yr forward	**3yr forward**	**5yr forward**	**10yr forward**
Price to book (National Accounts)	11%	23%	34%	72%
Market cap to GDP	4%	15%	22%	49%
Tobin Q	5%	9%	15%	47%
Shiller CAPE	4%	12%	19%	41%
CAPE5	3%	9%	18%	36%
Dividend yield	6%	12%	17%	33%
Trailing PE	0%	1%	0%	32%
ERP	0%	0%	0%	8%
Profits to GDP	0%	1%	5%	5%
ERP10	0%	0%	0%	3%

Footnote: The table shows the adjusted R2 statistic from the regression of forward price returns vs respective valuation metrics
Source: Robert Shiller's database, Datastream, Federal Reserve Financial Accounts of United States, FRED database

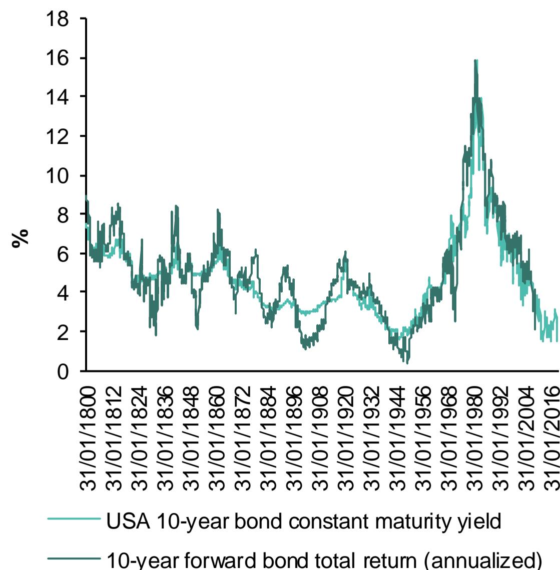
This run-up in valuation is part of the cross-asset move down in yields that has been the dominant force in capital markets for the last 35 years, Exhibit 4. This implies that many asset classes are destined for a low or negative return future. In Exhibit 5 we show US 10 year yields since 1800 plotted against 10 year forward returns from US bonds. This shows that the current 10 year yield is indeed a good forecast for what one expects to receive on holding bonds.

EXHIBIT 4: **US Nominal bond yield, credit yield, Equity yield and CPI**



Shiller yield is defined as 1/Shiller PE.
Source: Datastream, FRED, Bernstein analysis

EXHIBIT 5: **Bond yields and 10 year forward bond returns**



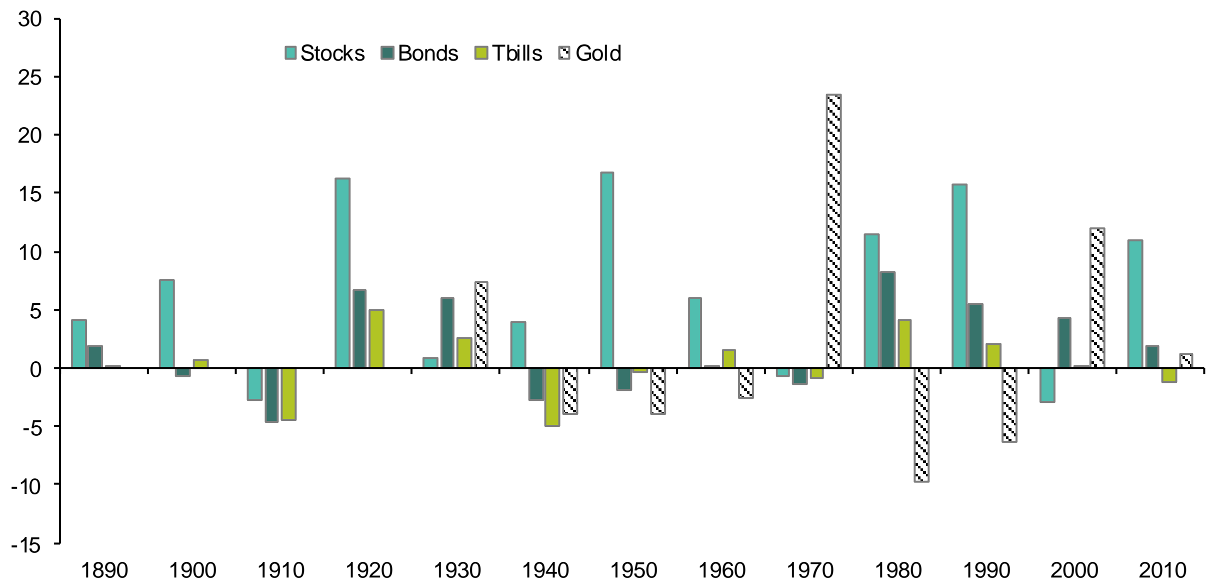
Source: Global Financial Data, Bernstein analysis

The Shiller PE argument for low returns ultimately assumes that mean-reversion will kick-in. Finding series that mean-revert in finance is like a Holy Grail, as without that, one is left making forecasts, and humans don't seem to be terribly good at that. Having said that, it is evident from the first chart that the Shiller PE can spend a long time (decades) far away from equilibrium. The move down in yields over the last 30 years has been driven by a number of huge macro forces that might be hard to be repeated again. Possible candidates for the driving force downward in yields and rise in prices across asset classes could be:

1. The deflationary impact of globalisation (to some extent a one-off event, but also one that is partly undone by demographic change).
2. Baby boomers dumping their retirement savings into capital markets (they are the richest cohort for their ages that we have seen, so it might be hard to replicate their per capita buying power).
3. The emergence of independent central banks with a clear inflation-focussed mandate (a force that is potentially ebbing).

This has contributed to the relatively strong returns of recent decades. The 80's, 90's and the current decade have seen an unusual number of the main asset classes delivering significantly positive real returns, at least compared to the post-war era.

EXHIBIT 6: **Equity and bond real returns by decade since 1880**

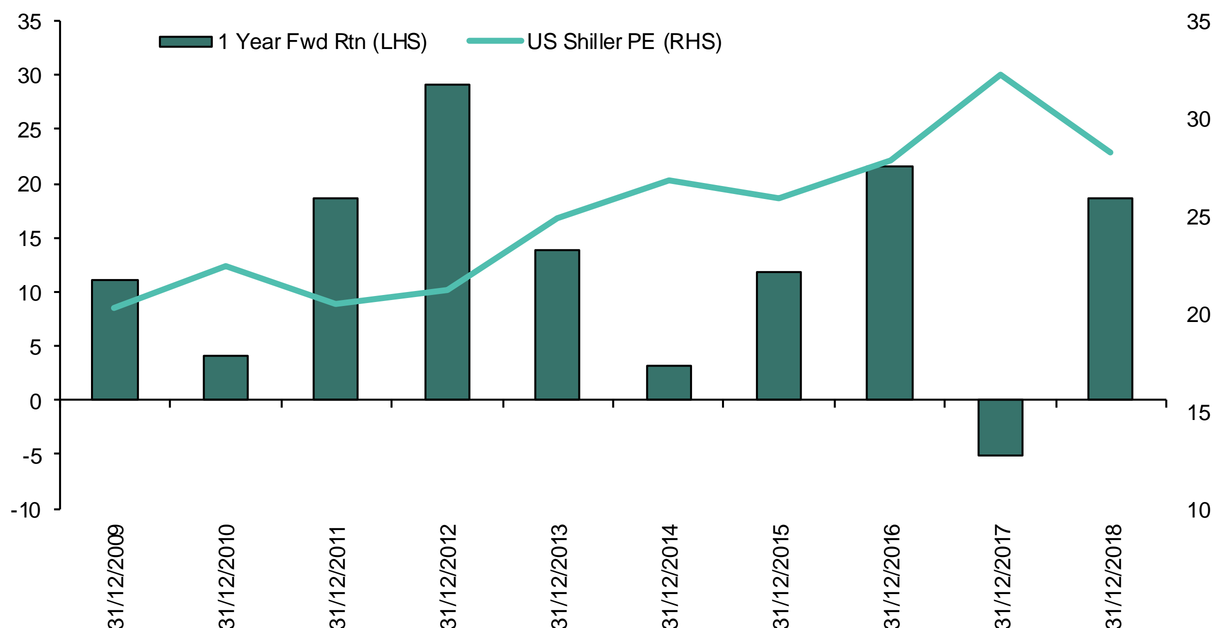


Returns deflated by US CPI. Source: Datastream, Global Financial data, Bernstein analysis

Alla: But this has been wrong for nearly a decade!

The low return forecast has just been so wrong for so long, it's just not plausible! If something is wrong for nearly a decade it needs to be rejected. If we zoom in on the latest part of the Shiller PE series then it would have been forecasting sub 10% returns for most of the last 10 years. This would have been a truly horrible forecast. It would have implied progressively taking down equity exposure though one of the most significant bull markets in history and over a 10 year period when the S&P returned 250% (including dividends).

EXHIBIT 7: **The Shiller PE has forecasted low returns for most of the last decade, which has been badly wrong!**



Source: Robert Shiller's database, Datastream, Bernstein analysis

One of the things which can over-ride signals from the Shiller PE is developments in either monetary or fiscal policy. We have been through a decade of unprecedented monetary policy which few people would have predicted.

Ultimately, the outlook for the market comes down to politics. Indeed, with the renewed questioning of whether central banks are independent or not, there is the potential for a change in central bank response functions that would be capable of keeping returns from mean-reverting.

In addition to this, our recent work on the implications of the strategic equity outlook, pension outcomes and inequality[1] underline that there are reasons why politicians may need to backstop a return to asset markets as otherwise there is a threat to the ability to offload pension risk to individuals.

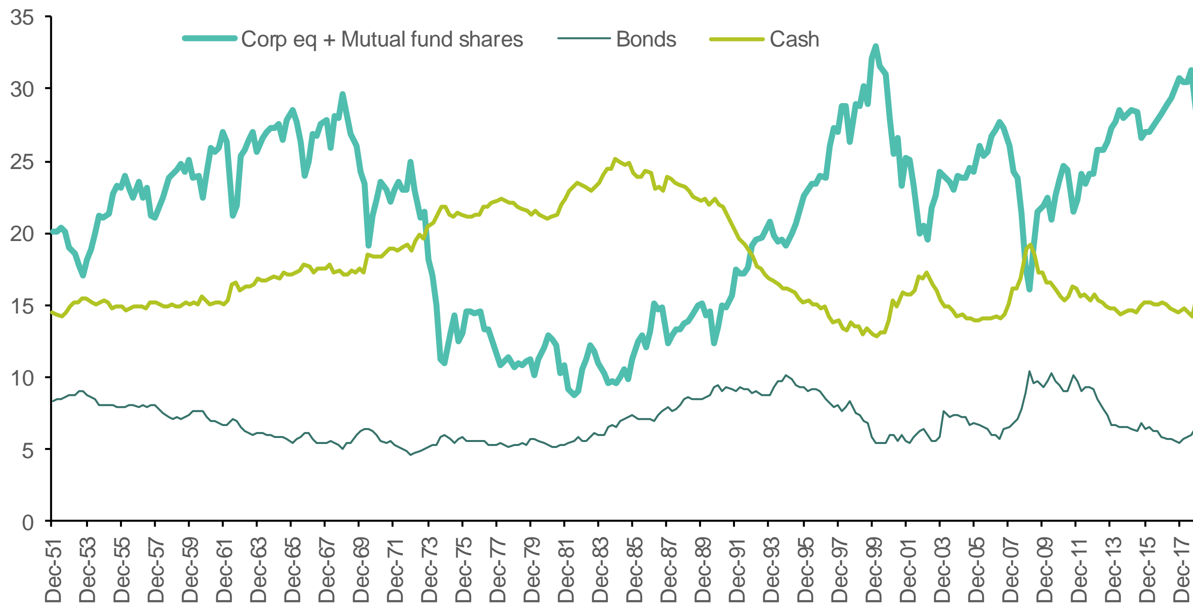
So the bottom line is that while the Shiller PE has been a guide over 10 year holding periods historically, that might just not be very useful today if we consider the length of time that valuations can stay away from equilibrium and weigh up the potential for political influence on the economy and the market.

Inigo: Household equity allocation is already close to an all-time high

OK yes, it is true that the low return forecast would have been wrong for a long time. But if we look at the allocation of households to equities it is close to an all-time high. Household allocation to equities has risen through the long bull market since the early 80's. Recently this has come about not because investors have been buying equities, far from it, but because of the bull market of recent years. But this leaves equity allocation at the top of the range. It would be hard to make the case that there should be a strategic increase in equity allocation above these levels (NB this is distinct from the possibility of a tactical reallocation into equities in the wake of recent selling, which is eminently possible).

[1] Portfolio Strategy: Inequality, Independence and Illiquidity - a future for public markets

EXHIBIT 8: **US Household and Non Profit Organisations: Share of Total Financial Assets (%)**

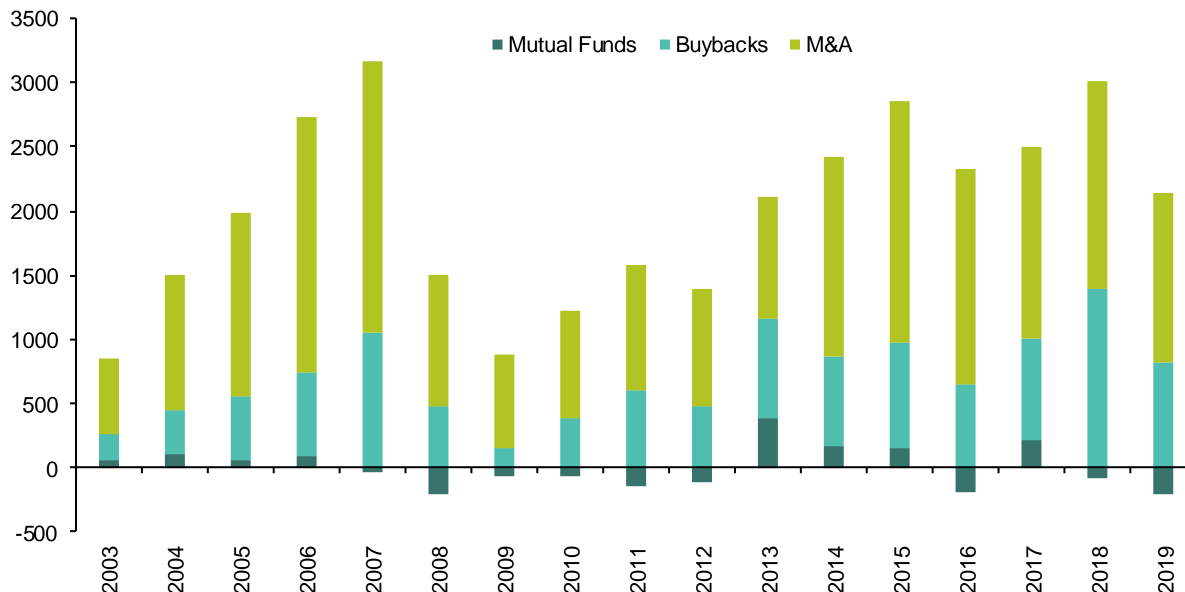


Source: US Federal Reserve, Bernstein analysis

Alla: That might not matter as corporate buying of equities swamps investor flows

Even if there might be strategic limits to how much traditional investors can increase their equity allocation, there are other buyers of equities who can continue to buy in size. In fact, the buying of equities by corporates themselves has far exceeded the buying of equities by traditional investors. For example, so far this year traditional buyers of funds have sold $200bn of global equities while corporates have announced $820bn of buybacks (or $650bn if we net off equity issuance) and $1300bn of total M&A. So, the buying of equities by corporates has exceeded the selling of equities by investors 10-fold. As we show in Exhibit 9 the buying pressure from corporates can be very significant for extended periods.

EXHIBIT 9: **Corporates buy more equities than traditional investors: Annual buying of global equities by source (USD bn)**



Source: US Federal Reserve, Datastream, Bernstein analysis

We sometimes hear the view expressed that buybacks are set to slow. True, they may slow but it would take a very significant shift for them to slow to the point where they are unable to balance investor outflows. For example, given that a portion of buybacks are debt-funded we calculate that a 50bp increase in credit spreads would slow the growth of buybacks to zero. Given the deterioration in the quality of corporate credit such an increase in spreads seems likely at some point, but a quiescent Fed has pushed this day of reckoning further into the future. However, even if over a two year horizon credit spreads do rise, it would require an increase of the order of 80bp to see a meaningful fall in buybacks. But even then a significant portion of buybacks are cash funded and it would take a ¾ fall in the rate of buybacks before they were unable to offset an average year of outflows from equity funds. So buybacks can remain a significant support for equities for the foreseeable future.

Moreover, we would point out that company management are often heavily incentivised to continue buyback programmes as a way to meet KPIs that determine their pay.

Inigo: There is also a fundamental or demographic case for lower growth

OK, we don't need to rely on mean-reversion, we can try to make some forecasts. We can do a "back of the envelope" calculation for long run equity returns that links them to the real economy. We stress "long run" here, as this is not an approach that can forecast equity returns over 1-2 year horizons when newsflow and sentiment can dominate.

In its simplest form, we can write the long run return from equities as:

Real Equity return = dividend yield + real growth per capita + population growth + change in profit share of GDP + multiple expansion

Over long horizons we can simplify this further. We assume that over the business cycle (or several business cycles) that the share of GDP attributable to profits and to wages returns to equilibrium. Now, this has not been true over the last 10 years as profit share of GDP has significantly expanded, however we think that this process cannot continue indefinitely or else "the revolution comes". Without any expansion of profit share then the growth rate of corporate profits equals the growth rate of the economy and the profit share term falls out.

Likewise, over long horizons we find it hard to make the case that there should be a near-permanent shift up in the market multiple (in fact we consider why the multiple might be heading lower for geopolitical reasons below). Thus we can simplify the above equation to:

Real Equity return = dividend yield + real growth per capita + population growth

The UN population growth projection for the US is 0.6% per year; The IMF Real GDP per capita average growth is 1% over the next 5 years. The US Dividend yield is 1.8%.

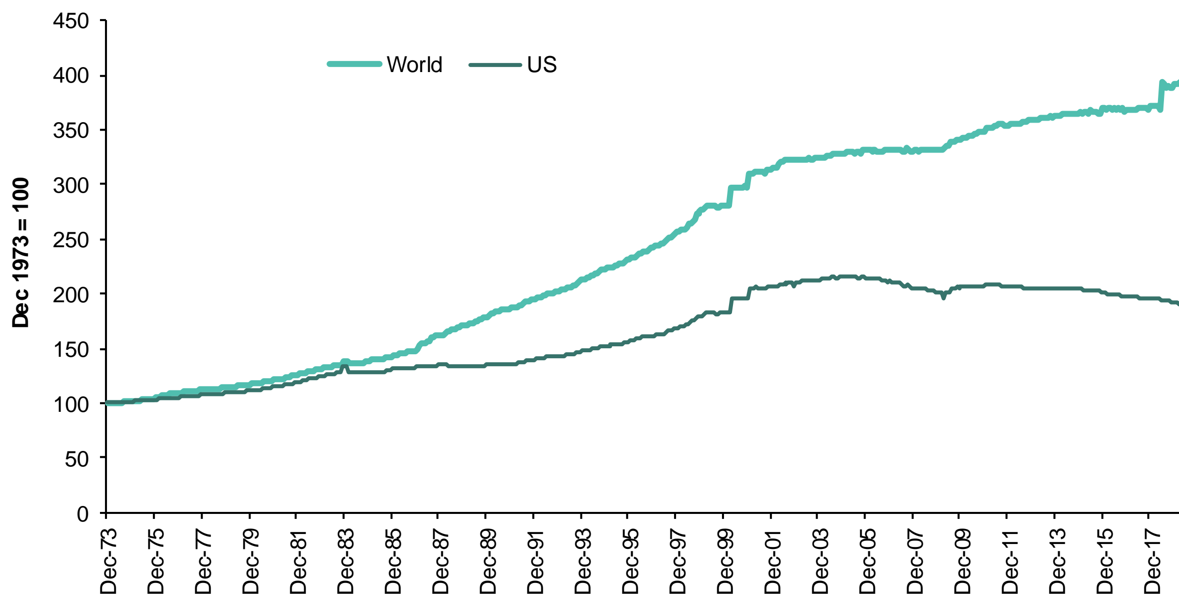
Thus the real equity return would be expected to be *0.6%+1.0%+1.8 = 3.4%*[2].

One could argue that this traditional formulation is wrong in an age when buybacks routinely swamp dividends as a source of return to shareholders. The "buyback yield" for the US is 2.2%. So on this basis:

Real equity return with buybacks is *0.6%+1.0%+1.8% + 2.2% = 5.6%*

We stress that these are in real terms, so with inflation added on top, the return including buybacks while not high is indicative of a mid-return prognosis rather than a low return prognosis. However, buybacks contribute to the process of de-equitisation (along with the reduced appetite for IPOs and secondary issuance). The stock of US equities has reduced by -11% since the end of 2004 (Exhibit 10). The only reason that the stock of global equities has been growing is because of EM, especially China. We can see this as the recent blip in the "World" line in the below chart corresponds to MSCIs decision to simply dial up the coefficient it applies to Chinese equities. So yes with buybacks we could get to a "medium return" outlook, but only at the expense of the availability of the equity market shrinking.

EXHIBIT 10: **The shrinking US equity market**



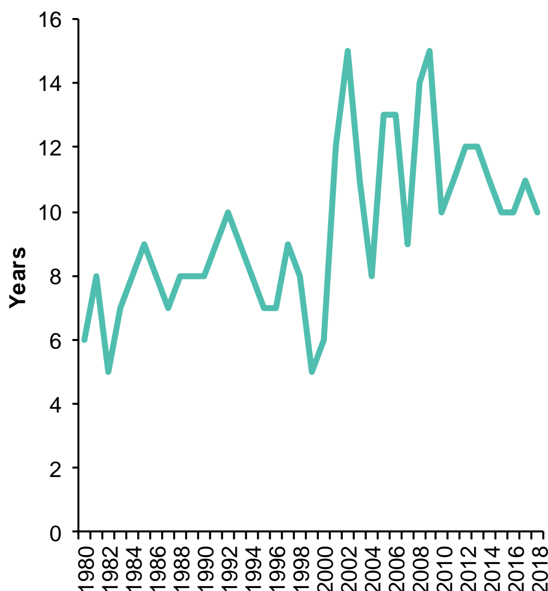
Note: Chart shows an index of the number of listed shares in the world defined as total market cap of the index/index price. For the World market we have used the datastream World index prior to January 2015 and the MSCI AC World index after January 2015.
Source: Datastream and Bernstein analysis

The other reason that the stock of US equities is shrinking is the disinclination of new companies to launch IPOs. We wrote about this in detail in Fund Management Strategy: What is the point of the stock market (in a capital-light world)?. But it contributes directly to the low return thesis. Before 2000, the median age of a firm at the point of IPO was 8 years, recently it

[2] Note as an alternative the CBO forecasts average real GDP growth 2019-2029 as 1.9%. So that would give a real equity return of 1.9% + 1.8% = 3.7%

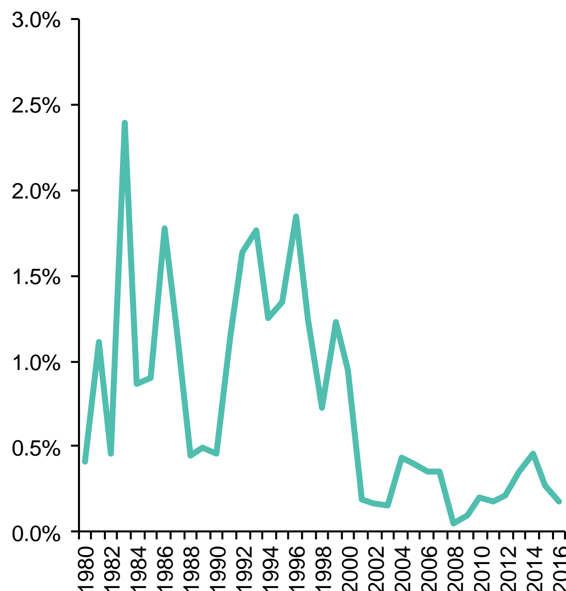
has been 11 years, (Exhibit 11). In the 80s and 90s new IPOs each year accounted for around 1% of listed US firms, recently this has fallen to 0.25%, Exhibit 12. As new companies wait longer to list, or choose not to at all, this means that the public equity market has fewer early stage higher growth companies.

EXHIBIT 11: **Median age of firms at IPO**



Source: Initial Public Offerings: Updated Statistics, Jay R. Ritter, Cordell Professor of Finance, University of Florida, December 31, 2018

EXHIBIT 12: **Number of IPOs as percentage of listed firms**



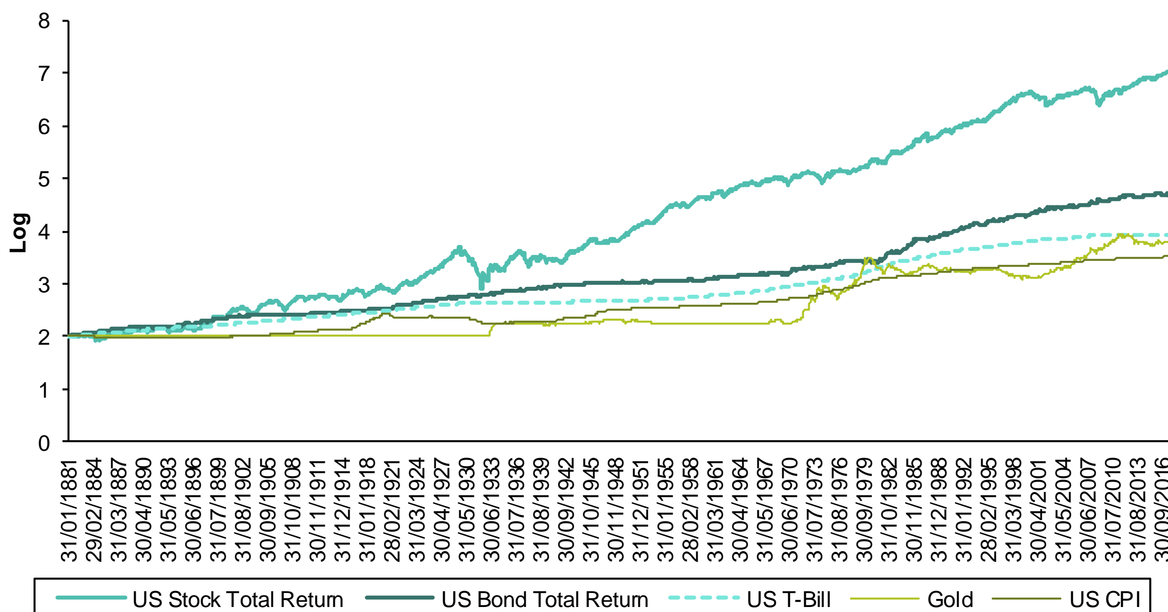
Source: Initial Public Offerings: Updated Statistics, Jay R. Ritter, Cordell Professor of Finance, University of Florida, December 31, 2018

We think that a further macro constraint comes from geopolitics. We worry about three forms of recency bias that affects any forecasts of equity markets. First there is the recency bias of the last 10 years of QE-backed markets; second there is the bias of the last 35 years of baby-boomer-retirement funds being allocated into the market. But beyond these there is the last 70 years of the background of the post-war US-led multilateral order. We wrote about this in more detail in Global Quantitative Strategy: The end of Pax Americana and what it means for the market. If this is under threat it has several practical implications for long run return forecasts. It implies that there should be a higher equity risk premium and it also implies that sovereign risk needs to attract a higher risk premium (which is further magnified by the observation that sovereign debt/GDP for developed nations is at its highest levels since WWII). We also note that this implies that there is no such thing as a risk free rate. But the key point for our note is that higher equity and sovereign risk premia imply lower future returns.

Alla: Equities are the best inflation hedge

The bottom line is that equities provide the best long-term hedge against inflation. In Exhibit 13 we show the returns since the 1880's of US equities, bonds and gold vs inflation. Gold is often thought of as an inflation hedge, this is only true to the extent that it can outperform other assets in periods of inflation. In the long run it has a real return that is close to zero. Equities have been a far better inflation hedge over a long time. Moreover, this is not just a historical empirical observation, there are reasons why equities should be an inflation hedge in the sense that they are assets that can pay a return from positive real growth.

EXHIBIT 13: **Long Run performance of US Stocks, Bonds, Gold and CPI**



Source: Global Financial Data, Datastream, Bernstein research

Conclusion

How can we conclude this debate to provide a view for investors (and also restore unity within our strategy team)? We conclude that there are potentially strategic constraints on returns, but some of these have been in place for years so their impact on forecasts is moot. Even if returns end up being low, investors will struggle to find another asset class that has a chance of beating inflation. Why does this matter? We would argue that inflation is probably one of the most important benchmarks for investment. Why do people invest? Why do they buy funds from asset management companies? Presumably that is to offset liabilities such as retirement costs, education and healthcare costs. These are all things in the real economy and with costs that scale with inflation (or as a spread over it). That is why over the strategic horizons that are the subject of this note, we think that inflation is the most important benchmark.

For those who are able to buy infrastructure and real assets these offer alternatives. But basically there are not enough bridges (or other real assets) to go and buy. Or at least they are not available in a format that allows for democratised investment, ie with a relatively low fee and offering some level of liquidity. The global equity market has a value of approximately $70Tn, compared to all of private equity of only $5.8Tn. Thus, even if returns might not be quite as high over the next 10 years as they have been over the last 40, we need a long exposure to equities as the best inflation hedge in town.

We reflect this in our portfolio of strategic and tactical trades with the addition of a long exposure to equities as one of the strategic trades, expressed as a simple long position in the MSCI ACWI index.

EXHIBIT 14: **A portfolio of strategic and tactical trades**

Strategic Trades
Equity FCF yield
Equity Residual value
Bond value
Bond momentum
Infrastructure (German renewable power delivery)
Bernstein global alpha model
MSCI ACWI

Tactical Trades
US Composite Growth
FCF yield
US value cash-funded buybacks
US LBO candidates
Short US Momentum-non-Growth
Gold
Global Low Vol (Sector Neutral)
High balance sheet quality

Source: Bernstein analysis

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