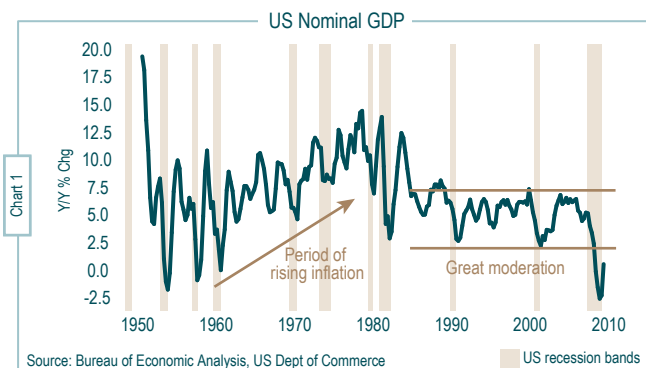


INVESTMENT INSIGHTS – WHAT HISTORY TELLS US

“History does not repeat but it does rhyme” (Mark Twain) – While we believe that one can draw important lessons from history, it is fair to say that due to the unprecedented times we have just come through, our insights are more conjecture than definitive conclusions. Nevertheless, it is important to draw on the past so as to juxtapose today’s environment against the historical record in order to help construct an investment thesis and a road map for what might lie ahead. To this end, we have taken a look at a variety of secular trends that have played out over the last century. We have focused on the US because of its pre-eminent position in the world economically. The country has also played a meaningful role in creating some of the major global structural imbalances currently being dealt with and was the epicentre of the 2007-2008 financial crisis.

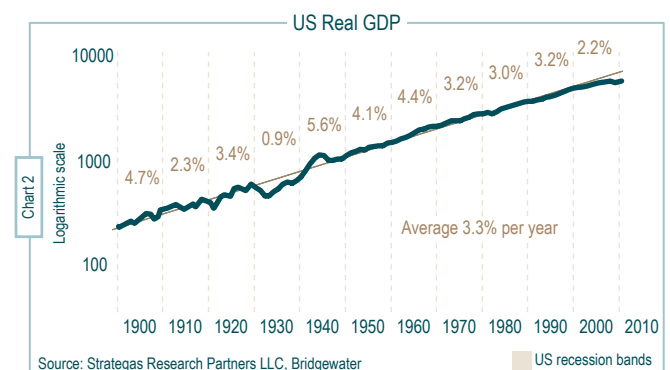


Demographic Trends and the Economy

For the past 30 years economic growth, in nominal terms, has been less volatile than it was in the prior 30 years (see Chart 1). This is because of improved implementation of fiscal and monetary policy levers and changes in demographics. In terms of demographics, two distinct population cohorts have been key – baby boomers in the developed world and the integration of the labour force within the emerging markets into the global economy. As emerging economies opened up their borders allowing capital and knowledge to flow in, the developed world gained access to abundant and cheap labour, driving down manufacturing costs and in turn inflation on a global basis. In the developed world, the maturing of the boomer generation brought about rising productivity and savings – as labour and capital formation grew. Rapid growth in the labour force helped moderate wages and foster the secular decline in interest rates supported by lower rates of inflation. Demographics helped subdue inflation risks, which helped prolong business cycles because the monetary and fiscal authorities supported pro-growth policies and aggressively dealt with recessions. This limited the extent and depth of contractions.

However, changing demographics in the developed world (aging populations) and the potential threat of higher inflation due to exorbitant government deficits may be looming on the horizon. This could lead to increased volatility and shorter economic cycles.

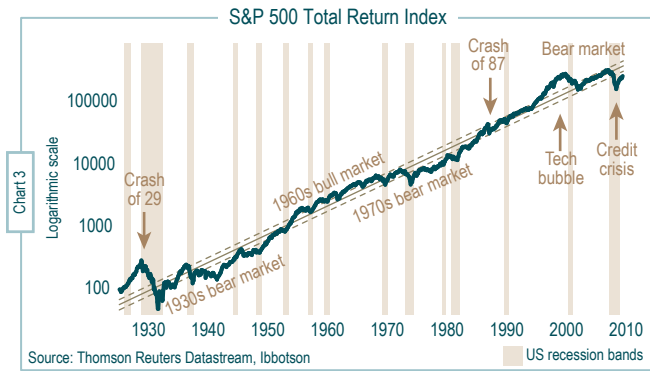
While nominal GDP has been somewhat volatile, growth in real terms over longer periods has been fairly consistent. Over the last 60 years the variation in real growth rates has been very small from one decade to another (see Chart 2). Demographics, once again, have played a role. In the 1950s and 1960s, the US population grew by 1.4% as the baby boom blossomed and productivity expanded by 2.8%, leading to real GDP growth of 4.4%. In the 1970s and 1980s, population growth started to slow as the baby boom peaked along with productivity growth, resulting in real GDP slipping into the 3% range. Over the last decade, the population grew by 1.0% while GDP growth fell to 2.2%. Going forward this downward trend will continue with the population forecast to grow by only 0.75% over the next decade. Besides a steady decline in population growth, the composition of the population is changing as the number of dependents grows relative to the working population. This will limit gains in productivity. As such, the demographic tailwind has turned into a headwind.



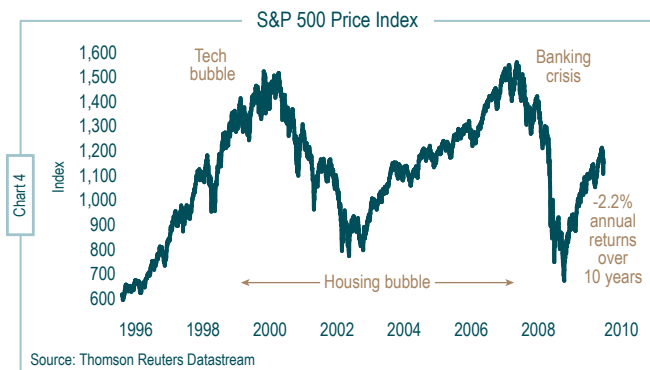
Unintended Consequences of Monetary Policy

Sustained economic growth over the long term has been accompanied by strong returns from equity markets with the S&P 500 returning just under 10% annualized including dividends (see Chart 3). These returns were achieved despite three secular bear markets in stocks over the past century. All three secular bear markets were associated with major upheavals: The first came about in 1929 (a severe bout of deflation – the Great Depression) and lasted 13 years until 1942. The second secular bear market came courtesy of inflation and lasted just under 14 years from 1968 to 1982. And the third is currently playing out and is in its tenth year after the bursting of two asset bubbles. It

is important to note that the two asset bubbles and subsequent busts (equity/tech bubble from 1997-2002 and credit/housing bubble from 2005-2009) are intertwined and come out of a single phenomenon where the Federal Reserve kept interest rates too low for too long which resulted in too much money chasing too few investments.



Because of the secular forces of globalization, central bankers ran looser monetary policies than normal as they focused on consumer price inflation and not asset price inflation. This led to an asymmetrical policy of containing downside risk for asset prices but not for upside risk in the form of bubbles. The tech bubble and banking crisis that resulted from these policies bookend the last decade (see Chart 4). It is not entirely clear that policy makers will not repeat their past mistakes by staying easy for too long, creating yet another bubble and potentially another banking crisis.



Lessons Learned from Past Banking Crises

The latest banking crisis, while appearing to be under control, still has a few innings to play out. Professors Carmen M. Reinhart and Kenneth S. Rogoff, in their ground breaking study of 18 banking crises, found that each crisis shared a number of major characteristics:

1. Asset market collapses are deep and prolonged:
 - Real housing price declines average 35% stretched out over 6 years.
 - Equity prices collapse on average 55% over 3.5 years.
2. There is a profound decline in output and employment – the unemployment rate rises an average of 7 percentage points over the down phase of the cycle, which lasts on average 4 years, and output falls (from peak to trough) on average 9% over 2 years.

3. The real value of government debt explodes, rising an average of 86%.
4. Extreme debt levels ultimately lead to a sovereign debt crisis (nominal income growth falls short of debt-service costs – i.e. governments have to issue new debt to service the old).

While two of their four observations have already come to pass, the other two appear to be in the making, and this chapter in our history is not closed.

Debt – The Elephant in the Room

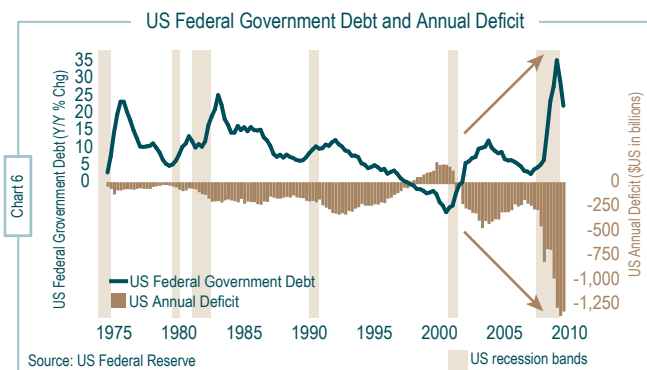
The root cause of the recent banking crisis which led to the second down leg in the latest secular bear market was the formation of a massive debt problem (see Chart 5). The explosion in debt over the last 28 years came about because of a confluence of factors including ample liquidity thanks to easy monetary policies and lenient lending practices, a secular decline in interest rates (reducing carrying costs), and the fact that the mechanisms for creating and distributing debt became much more plentiful and sophisticated. This led to a growing dependence on debt to promote growth and consumption – not to mention speculation on Wall Street and a housing bubble where mortgage debt increased at 12% (compounded annually) from 1999 to 2007, or double the rate of nominal GDP. During the period from 1982 to today, US debt as a percentage of GDP more than doubled from 140% to over 290%.



Debt Hangover: De-leveraging of the Economy

The 2007-2009 credit crisis was a tipping point, and it has swung the secular trend in debt formation from growth to liquidation. The question is what follows next? The McKinsey Global Institute found from their research that de-leveraging has followed nearly every major financial crisis with debt to GDP falling by 25% over a 6- to 7-year period accompanied by sub-par growth. Debt reduction can come in one of four ways: 1) austerity; 2) massive defaults; 3) inflation; or 4) economic growth. None of these choices are appealing except for the last option, which is the least likely because most of the developed world is over leveraged leaving no way to collectively devalue currencies and export one's way out of the problem. The first option is already surfacing in the form of a secular change in US consumer attitudes towards credit, savings, discretionary spending and home ownership. The remaining two, massive defaults and inflation, may be just over the horizon.

While the American consumer, who is over leveraged by some \$2.0 to \$2.7 trillion, has taken steps to reduce debt, US government debt is growing at double-digit rates (see Chart 6). Treasury borrowing has soared by \$2.7 trillion over the last year and is forecast to increase by another \$1.4 trillion this year. The net result is little or no improvement in the nation's balance sheet. Future prospects do not look encouraging because expanding retirement benefits and health care costs will ensure that government debt-to-GDP ratios can only rise. The IMF and OECD forecast that aging alone will raise the debt ratio by 50% of GDP over the next 20 years. Even more alarming is that the Congressional Budget Office projects that the US federal debt could reach 300% of GDP by 2050 due to rising health care, social security programs and rising debt servicing costs. While there is little political will to cut back on program spending, the current situation is not sustainable and cuts in spending accompanied by tax increases are coming.

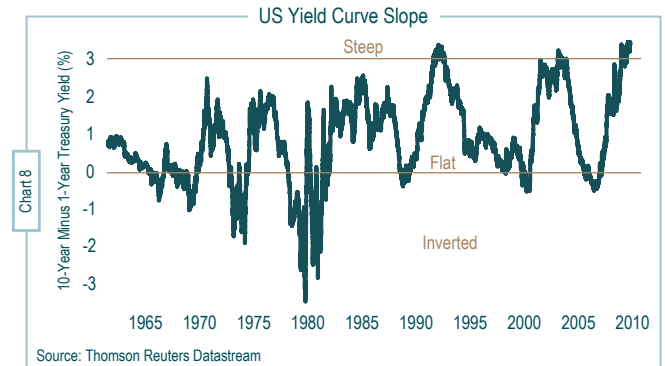


Interest Rate Environment

Besides looser lending practices, what made it so easy to pile up debt was a prolonged secular decline in interest rates (see Chart 7). Over the last decade, yields have been dropping because 1) central banks kept short-term rates artificially low, encouraging investors to move out along the yield curve; 2) regulatory issues encouraged investment flows into longer-dated maturities; 3) changing demographics placed a premium on yield versus capital gains (rising demand); 4) credit expansion resulted in the development of securitized investment vehicles which themselves used leverage; 5) developing nations have accumulated massive surpluses in the form of US government bonds in their foreign reserves; and finally, 6) inflation declined due to globalization. Unfortunately, it appears that all of these secular factors that helped push down interest rates are abating or reversing.



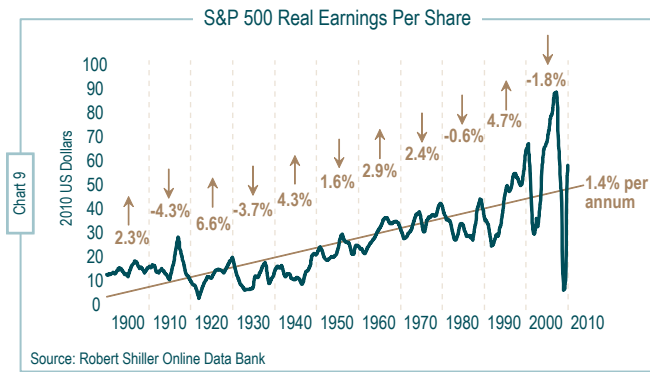
While over the last 60 years there have been two broad secular trends in interest rates (rise and fall), there have also been eleven periods in which the yield curve (long-term interest rates less short-term rates) has either steepened or flattened due to monetary easing or tightening (see Chart 8). This produced eleven business expansions and contractions. Changes in the shape of the yield curve are a cyclical phenomenon where a steep yield curve helps promote economic growth, improving profits and credit expansion, and a flat or inverted yield curve promotes the opposite. During those periods when the yield curve is steep, the economy, stocks and bonds perform well. Currently this is the situation, which is encouraging. It will give the system some time to heal but it will take a very long and protracted period to undo all the damage.



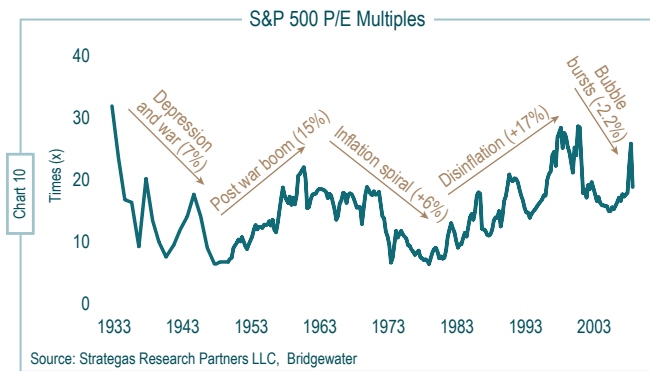
Even though the immediate future appears bright, the positive cyclical factors now at play are unfortunately not enough to reverse the secular headwinds that will buffet the economy and financial markets going forward. The secular trend is so well ingrained and the current expansion cannot be extended indefinitely. Ultimately stimulus both in the form of government deficit spending and loose monetary policy (steep yield curve) will have to be unwound because of the inherent problems they pose over the longer term.

Capital Markets

We are encouraged that the current upswing in the business cycle is leading to strong growth in corporate earnings due to the lift in GDP growth. While corporate profits are highly correlated (72%) with real GDP, it is important to note that over the long term earnings growth is much less than real GDP, much more volatile and somewhat mean reverting – i.e. strong growth in one period has been followed by weak profit growth in the next (see Chart 9). This is an important consideration going forward as we move into a slower growth era, especially in light of the fact that currently corporate profits as a percentage of GDP are historically high and have little room to grow as a share of GDP. Profit margins are also historically high thanks to falling tax rates and labour cost containment. However, things are changing as the baby boomers move towards retirement, producing a smaller labour pool while taxes are going to increase to finance deficits. Also, top-line revenue growth will be increasingly hard to come by because growth in real GDP will most likely slow to under 2%. Corporate profit growth tends to stall when real GDP falls below 2%. This will result in corporate profit growth falling below its long-run average.



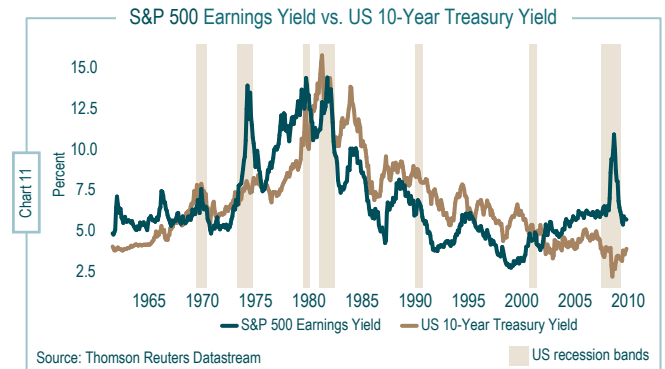
Profit growth is obviously very important in setting the price of a company's shares, but the P/E (price earnings ratio) level is equally important. A review of the last 80 years shows that there are definable waves of P/E expansion and contraction. A closer look at the last five cycles illustrates that these trends correspond with periods of above- or below-average stock market returns (see Chart 10). P/Es tend to be set by the direction of interest rates (opposite), economic growth (same direction), capital spending (same direction) and demographics. In terms of demographics, the high savings age population (35 to 55 year olds) push up valuations while rising retirees push them down. The high savings population in the US rose from 24% to 30% from 1989 to 2002 while the retired cohort slowed sharply from 1996 to 2002 (16% to 14%) – more buyers than sellers. The opposite was true in Japan. Their high savings segment of the population peaked in 1990, just as equity markets did, while the US savings segment peaked in 2001 – coincident with a topping in US stocks.



Bottom line is that an unfavourable demographic background is emerging as the boomer generation moves past its peak equity accumulation phase and moves into dissavings at the same time that the direction of interest rates (up) and economic growth (down) are going to inhibit any expansion in P/E multiples and in turn stock market returns.

Earnings yields (company earnings/stock prices) fell below bond yields from 1982 until 2002 (see Chart 11) because of falling interest rates and above average growth rates in earnings. But over the last decade earnings yields have been above bond yields because of the

perceived risk inherent in equities which, given what has transpired, turned out to be well founded. Going forward a slowing in profit formation and the increasing odds that the secular decline in interest rates is coming to an end will keep earnings yields above bond yields. In addition, all the uncertainties surrounding the debt and demographic time bombs that are ticking away will ensure that risk premiums remain elevated.



Secular Forces That Will Shape the Next Decade

In summary – our take on the next ten years is as follows:

- The structural imbalance between a savings-short, excessively leveraged American consumer and the Chinese mercantile economic model, with an emphasis on too much savings, fixed investment and exports, will be disruptive.
- Anemic sub-par economic growth because of changing demographics and debt formation will lead to shorter and more volatile business cycles.
- Bigger government, more regulation, higher taxes and some crowding out of the private sector from credit markets will occur.
- The supply/demand equation for goods and services will be altered in a negative way due to demographic trends.
- Higher risk premiums because of continuing structural imbalances and fears that governments will try to inflate themselves out of their predicament will lead to lower P/E multiples and higher real yields.

Final Thought

Investors should expect to see low single-digit stock and bond returns for the next decade. There are always one or two asset classes that investors gravitate to because they embody the most exciting economic theme of the time. The story gets over extrapolated, which propels prices up to unsustainable levels from which they ultimately collapse (the nifty-fifty [1960s], gold [1970s], Nikkei [1980s], tech [1990s] and real estate this past decade). Easy money rescues investors from the collapse, often setting the stage for the next bubble. Follow the money and one can identify where the next bubble will occur.