Market Focus

Global Strategy

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Possible Futures

Today we are publishing the Credit Suisse Global Investment Returns Yearbook 2009, covering more than 100 years of data on financial market returns.

We are proud to be associated with the work of Elroy Dimson, Paul Marsh and Mike Staunton of London Business School, whose book "Triumph of the Optimists" (Princeton University Press, 2002) has had a major influence on investment analysis, and whose work is now updated in this Yearbook for the tenth year. With the unrivalled quality and breadth of their database, the authors are widely viewed as the global authorities on long-run asset returns.

The authors make a strong case that investors should keep faith with equities – while recognizing that extended holding periods are required to give a reasonable chance of capturing the high return historically given by stocks.

They also derive long-run expectations for the returns on different asset classes, and estimate how long it may take for equity markets to recover to previous highs. This is a global analysis, covering long-term returns and risks in 17 markets, from Australia, through Switzerland, to the United States.

The scale of analysis extends far beyond what can be contained in this Yearbook, so an accompanying volume called the Global Investment Returns Sourcebook contains detailed tables, charts, listings, background, sources and references for every country.

The Yearbook is the second major project to be presented by the Credit Suisse Research Institute, which links the internal resources of our extensive research teams with world-class external research.

For institutional clients copies can be obtained from your Credit Suisse representative or here.

The following is a slightly amended version of Chapter 3 of the Yearbook.

Not So Distant Cousins

> "*That the free enterprise economy is given to recurrent episodes of speculation will be agreed. These- great events and small, involving bank notes, securities, real estate, art and other assets or objects – are, over the years and centuries, part of history…*"
>
> J.K.Galbraith – A Short History of Financial Euphoria

Looking at very long-run data on economic and investment performance puts the present in perspective and helps us form views on possible futures. At Credit Suisse, the Global Strategy department in London started to gather information stretching back to the 19th century and beyond – principally for the USA and the UK – in the early 1990s. Since then, public interest in longer-term trends has progressively escalated and no one has done more than Professors Dimson and Marsh to extend and publicize our knowledge of financial history. In the current crisis, that is more valuable than ever.

The value and fascination, of course, is not that history repeats itself exactly. It is far too complex and non-linear a process for that. But human nature is another matter: it is seemingly inevitable that we oscillate – on a smaller or larger scale – from excessive optimism to excessive pessimism in response to periods of unusually good or bad economic performance. And back again.

Which is what imparts a shared DNA to otherwise different economic cycles and financial crises: they are like siblings or cousins, where a largely common pool of genes is mixed differently, sometimes producing an easily recognizable family resemblance, sometimes not.

We have argued for many years that deregulation, technology and globalization have made the world economy more structurally similar to the late 19th century and early 20th century than the more familiar period between World War II and 1982. It's as if some long dormant genes had suddenly found the conditions to become active again.

In our view, between the revolutions of 1848 and World War II – and indeed even before that - the basic process was one of investment-led growth responding to some fundamental new opportunity, in many cases related to the spread of railroads and the opening of new markets or sources of supply.

Each boom was accompanied, sooner or later, by a bubble of some sort (land, equities, emerging bonds) and a speculative phase of excess leverage and credit availability. Huge international capital flows – most obviously from lower interest rate countries with excess savings – would flow towards these new investment opportunities and contribute to the easy credit conditions and asset price overshooting.

Inevitably, some seemingly minor event would prick the bubble, leading to a financial crisis that saw demand contract abruptly, usually leaving an excess of new capacity and a shortage of business and financial confidence in its wake. During these episodes, internationally mobile savings would flow back to the safety of the home market, putting strain on the gold standard system of fixed exchange rates, and adding to the deflationary pressure on asset prices. In nearly each case, the crisis was or became global, rather than largely confined to one country.

In fact, major crises of international capitalism occurred in 1825, 1837, 1847, 1857, 1866, 1873, 1878, 1890, 1893, 1907, and, of course, 1929. Yet despite the periodic upheavals, the late 19th century saw the greatest leap forward in global prosperity the world had experienced up until then: the underlying deflationary bias and propensity for financial crisis were not incompatible with sustained growth and development. On the contrary, these upheavals were the means of "correcting market imperfections" and "eliminating speculative and inefficient projects," eventually clearing the way for new savings and capital to be directed towards the next fundamental opportunity. Periodic instability was the price of dynamic progress.

That was even true for what was known for a long time as the Great Depression of 1892–96. But especially in the United States, the "Roaring 20s" and the subsequent crash and depression of the 1930s represented a break with the past in terms of the scale, depth and length of wealth destruction, underemployment, economic volatility and human misery. This is one of the things that stands out most clearly from the historic record: there has never been anything like it before or since. And it changed the whole political and social landscape too, arguably contributing to the rise in both communism and fascism, and the instability in Europe that led to World War II. In time, it also led to a new system of regulated corporatism, government intervention, limited capital flows and Keynesian demand management.

And so that Great Depression is now the one we remember, and that we are now desperate to avoid. Indeed, we can be almost certain that a 21st century version of the 1930s would lead to a revolt against the current system of global capitalism and relatively free markets, spark social unrest on a wide scale, and frustrate the ambitions of billions of citizens in the emerging world. Ultimately, peace as well as prosperity would be at risk.

A tale of two depressions

According to the Columbia Electronic Encyclopedia, 6th ed., a depression in economic terms is a "*period of economic crisis in commerce, finance, and industry, characterized by falling prices, restriction of credit, low output and investment, numerous bankruptcies, and a high level of unemployment. …Recovery is generally slow, the return of business confidence being dependent on the development of new markets, exhaustion of the existing stock of goods, or, in some cases, remedial action by governments.*"

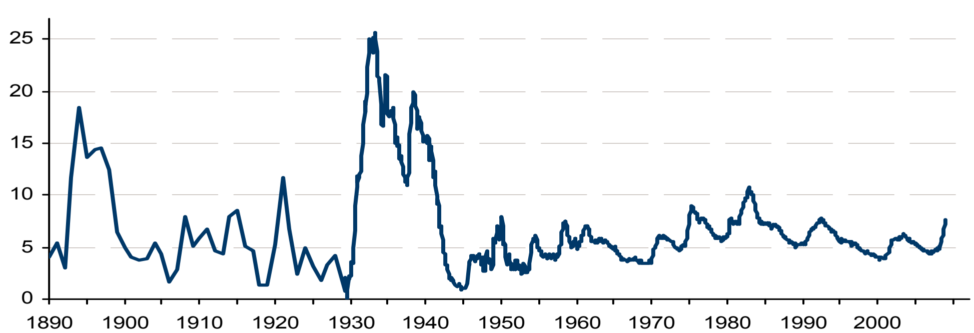
After the failure of Lehman Brothers in September 2008, global equity markets and economic activity dropped almost vertically, an experience without real precedent since World War II, but typical of 19th century panics.

At their November 2008 low, all major equity markets, developed and emerging, had fallen 45% to 75% from their peaks with roughly two thirds of the damage done in just two months – from mid-September to mid-November. This was a crash added on top of a standard bear market.

The real economy crashed too. In the last quarter of 2008, developed market GDP fell at a 6% annualized rate, the worst performance since the first oil shock. And after a five-year boom unmatched since the 1960s, global industrial production fell by nearly 10% in the six months to January 2009, again with most of the damage done in October and November.

Spare production capacity soared in this period to a level nearly twice as high as in 1982 and 2001. Behaviorally and psychologically, therefore, the current crisis already felt like a depression by early 2009, with "falling prices, restriction of credit, low output and investment, numerous bankruptcies" and sharply rising unemployment.

Exhibit 1: US unemployment rate from 1890 to 2009



Source: Credit Suisse

Exhibit 1 suggests a less emotional interpretation, however. In the early 1890s, unemployment reached 17%, and took roughly eight years to return to a “normal” level. In the 1930s, it peaked at 25% and did not return to “normal” until World War II. Unemployment in some of the biggest US cities was also said to have reached 25%–30% during the long slump of the 1870s. By contrast, in the “great recessions” just after World War I and the second oil shock, unemployment peaked at around 10%–12%. Persistent unemployment above 10%–12% might therefore count as the real mark of a depression.

So talk of another “Great Depression” looks premature, to say the least, even if most economists expect unemployment to rise well above 8% in the USA and 10% in the Eurozone in this downturn.

More accurate to say perhaps, that the panic of 2008 marks the end of the so-called “Great Moderation,” the term that had come to be used for the last 20 years or so, when shallow recessions and smoother growth became the expected norm. And that the unprecedented policy measures taken after the Lehman crash reflect a common perception that this is the first time in 80 years that a genuine threat of pernicious debt deflation has been present.

Time will tell whether the policy response has been too much, too little or about right, but it is driven in large part by the desire to avoid a repeat of Japan’s “lost decade” and informed by the US experience of the 1930s.

Just how destructive – and how exceptional – that experience was is clear from several other metrics. Industrial output fell by 54% from peak to trough between August 1929 and January 1933 compared to “just” 16% in around 18 months in the early 1890s. One point easily forgotten is that there were three distinct phases of declining output in the 1930s. The first phase lasted about six months, during which industrial production fell about 12%, only slightly worse than in the current episode. After a brief stabilization, output dropped a further 20% between mid-1930 and the spring of 1931. This was the period when banks started to fail in large numbers, the money supply started shrinking and protectionism spread like wildfire around the globe after the passage of the Smoot/Hawley Tariff Act. Even at this point – when output was around 30% below its peak – the 1930s were not unique. For example, industrial output fell as much after both World War I and World War II, and in 1937–38.

There was a small rebound in output in the summer of 1931, but, in the autumn, the UK left the gold standard and raised interest rates, attracting large gold inflows from other countries. The Federal Reserve responded by raising interest rates themselves, and the final dreadful decline in output and stock prices began. In the following 12–15 months, US production plunged over 35%, and stock prices fell by 72% as still more severe bank runs occurred and confidence evaporated almost completely. It is this third and final phase of the depression that truly marks it as different from any episode before or since.

It is of some interest to note which components of real GDP fell the most. The estimates are only annual averages, but point to an 18% decline in personal consumption between the peak in 1929 and the trough in 1933, with a recovery to some 4½% above the 1929 level by 1937. Both gross business investment and total construction spending were at peak levels for the cycle in 1926, declining slightly thereafter, but by 1933 they had fallen to negligible levels, down 98% and 82%, respectively, from their peaks. Even in 1937, business investment was still 15% lower than it had been in 1926, with construction expenditure over 50% below peak. Overall, real GDP is estimated to have fallen by just under 30% between 1929 and 1933, and was just over 4% above peak by 1937.

Deflation in the 1930s was also severe. The consumer price level dropped by just over 25% in 3½ years, compared to around 5% over five years in the 1890s. Wholesale prices plunged by around a third between 1929 and 1932. Nominal GDP fell by 47% over the course of the depression and, even by the time war broke out in Europe, was still 10% below its 1929 level.

On sudden changes in the channels of trade

> *"The commencement of war after a long peace, or of peace after a long war, generally produces considerable distress in trade. It changes in a great degree the nature of the employments to which the respective capitals of countries were before devoted; and during the interval while they are settling in the situations which new circumstances have made the most beneficial, much fixed capital is unemployed, perhaps wholly lost, and labourers are without full employment."*
>
> Ricardo – On the Principles of Political Economy and Taxation – Chapter 19 (1821).

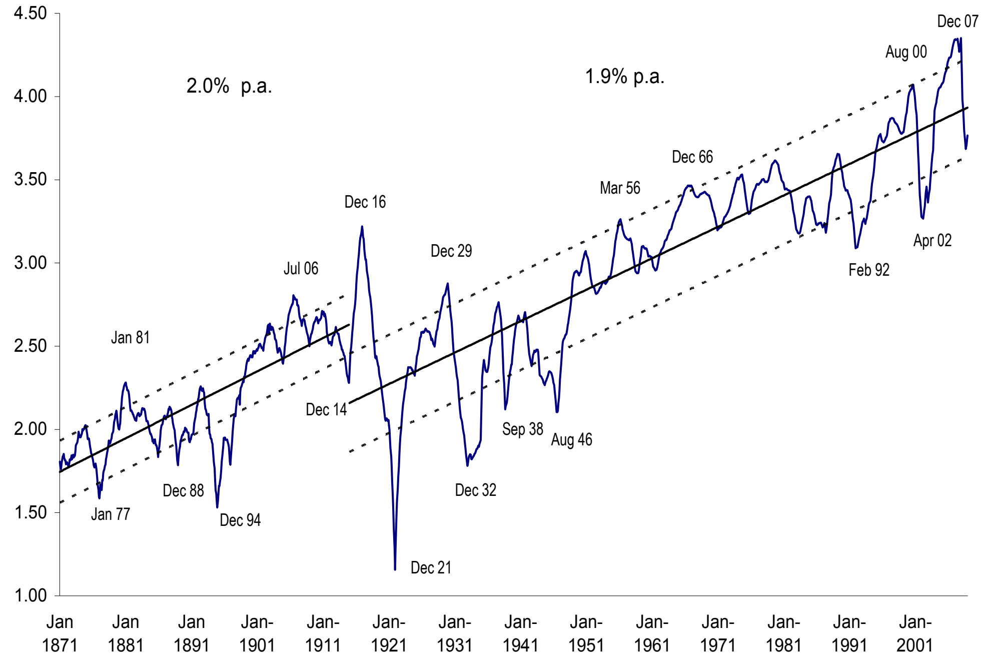
Looking at real earnings per share (using the Shiller data) provides a different and perhaps surprising perspective. Here it is not the 1930s that are the standout exception, but rather World War I, so much so that earnings never recovered back to their late 19th century trend, but simply resumed an almost identical growth rate (of about 2% p.a.) from a lower level.

On our interpretation of the data, therefore, World War I is remarkable in two entirely opposite respects: it recorded the largest overshoot of real earnings per share relative to trend (in 1916), a level not subsequently exceeded until the 1960s! Meanwhile, in the deflationary aftermath, the largest undershoot occurred (1920–21), when real EPS fell below the level of 50 years earlier and the original trend was never restored. And it seems as though the trend growth rate in real EPS has been roughly in line with the very long-run growth rate of productivity, which has been around 2% per year.

As to oscillations around the trend, it seems that the biggest declines in both real output and profits come after major wars or in depressions "during the interval while (capital is) settling in the situations which new circumstances have made the most beneficial" and the excessive enthusiasms of the last boom are being worked off.

The other striking feature of Exhibit 2 is that the "Great Moderation" in nominal and real GDP growth of the past 25 years or so is not at all visible in the data. In fact, even in the early 1990s and early 2000s, real EPS troughed about 40% below trend, and exhibited cyclical volatility rather similar to the 19th century and the inter-war period. In the 1930s, real EPS fell 65% and troughed about 50% below trend, while real EPS declined by 51% in the 1890s episode, (and also troughed about 50% below trend). We estimate that real earnings were nearly 48% below peak, and 38% below trend by the end of 2008, with by far the biggest decline coming in financial sector profits. Thus, in terms of aggregate earnings volatility, it is actually the 1950s and 1960s that qualify as the "Great Moderation" and which stand out as the exception to the rule.

Exhibit 2: US real EPS (log levels)



Source: Credit Suisse

There would seem to be only two possible explanations. Either firms today have far more operational gearing to the real economy, so that smaller changes in capacity utilization have a larger impact on profits. Or the corporate sector – financial and non-financial – uses less share capital per unit of earnings, i.e., firms have taken advantage of a more stable economy to increase leverage, substituting debt for equity in the capital structure, and preserving, as it were, the level of risk in the system as a whole.

That increased leverage is a likely and perhaps inevitable response to lower volatility – that stability breeds instability – is amply demonstrated by the behavior of financial firms in the build-up to the current crisis. Equally, the scale of this crisis and the sudden shift in the perceived stability of the economy it has already brought about will almost certainly change household, corporate and financial sector attitudes to leverage even without regulatory intervention.

In the short to medium run, this cannot be achieved without a corresponding increase in public sector debt, and greatly increased risks to economic stability. But it would not be surprising if the most enduring legacy of the current crisis was a change in the balance between debt and equity on private sector balance sheets, a long-term trend towards lower leverage and perhaps eventually rather lower volatility of earnings around trend.

In the meantime, we can expect two already emerging trends to go a lot further. First, in both the financial and non-financial sectors, increased issuance of new equity capital when market conditions permit is likely, while stock buybacks are likely to diminish and debt buybacks are likely to become more common. At the same time, increased consolidation and industry concentration have in the past always been features of depressions or periods with a substantial overhang of excess capacity. Large firms with strong balance sheets, resilient cash flows, the ability to finance growth internally and/or continued access to credit markets are the potential winners in this process. As long ago as the 1870s, the depressed state of the economy and credit markets allowed people like Carnegie and Rockefeller to buy many smaller firms and competitors at fire sale prices, and build vast new business empires.

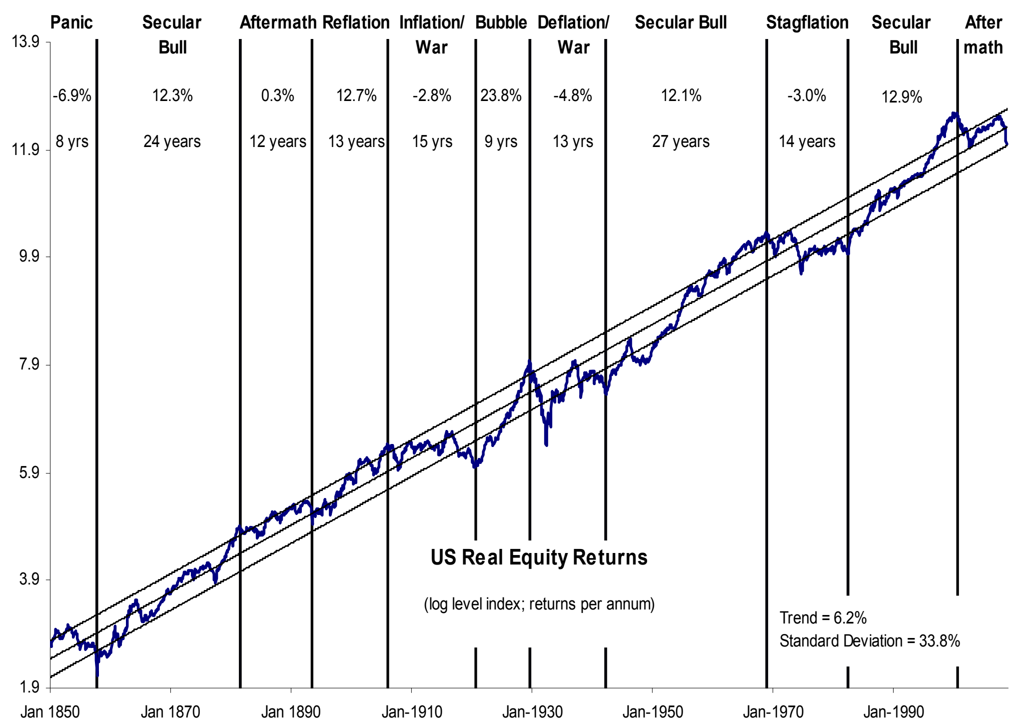
Credit and capital

> "*Nor is the question before us whether the market is a force for good or ill. Its power to generate wealth and expand freedom is unmatched, but this crisis has reminded us that without a watchful eye, the market can spin out of control – and that a nation cannot prosper long when it favors only the prosperous.*"
>
> President Barack Obama: Inaugural Address

Depressions – and especially their cost in terms of unemployment and human misery – are probably the single most objectionable aspect of capitalism, as Keynes and many others recognized even before the 1930s disaster. Our social and political fabric will not easily withstand the wrenching adjustments that so often punctuated the dynamic progress of laissez-faire capitalism in the 19th century. (Financial) regulation, the lender of last resort function of modern central banks, unemployment insurance, income redistribution and activist fiscal policy are some of the ways in which we have tried to limit the human cost of the best system for sustained wealth creation yet devised.

Yet it is also impressive to note how resilient capitalism has been over at least 150 years of periodic upheaval. The best data series we have for very long equity market performance is, not surprisingly, for the USA. And looking at inflation-adjusted total returns (dividends plus capital gains) since the mid-19th century shows something quite remarkable: namely that the very long-run trend of real equity returns is apparently around 6% to 6½ % per year, and that this tendency has so far survived the most terrible of historic events, including world wars, depressions and social upheaval.

Exhibit 3: US Real equity returns



Source: Credit Suisse

It is equally clear, however, that the scale of overshooting either side of this remarkably consistent trend is very large. One standard deviation in this chart is 34% in logs, meaning that when the market is two standard deviations above trend – as it was at the height of the tech bubble – it is some ten years ahead of itself. At the beginning of 2009, the US market was around one standard deviation below trend, and in that sense, moderately rather than outstandingly cheap.

That is in particularly sharp contrast to June 1932, when the market troughed some 3.4 standard deviations below trend, cheaper by a large margin than any other period. The other major overshoots to the downside (more than two standard deviations below trend) occurred in 1857, when the banking system all but completely collapsed in the aftermath of World War I, shortly after Pearl Harbor, and following the two oil shocks of the 1970s. Thus one can say that war and/or inflation have been associated with three of the worst equity market overshoots, while a broken credit system following the collapse of a particularly extended or frenetic boom has accounted for the other two.

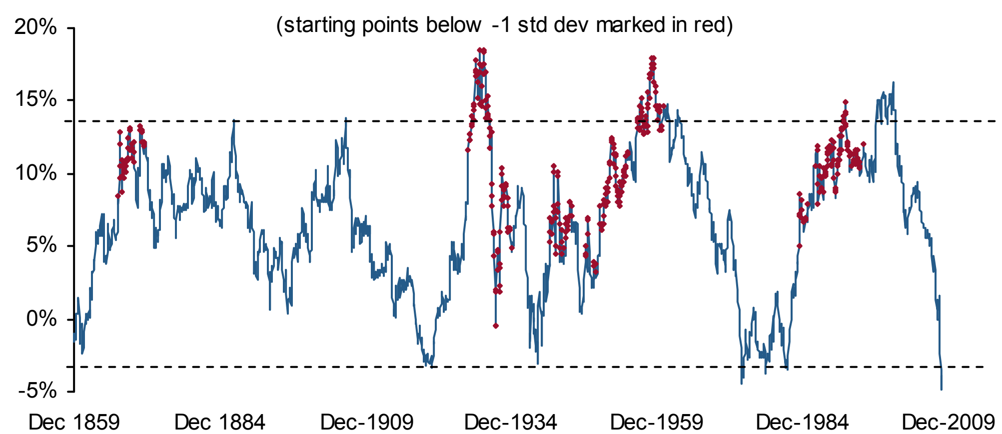
Conspicuously absent from this list are the great depression of the 1890s, or indeed the 1870s' slump. During both of these episodes, the market bottomed around one standard deviation below trend, and in both cases a year or more ahead of the low point in output. Equally relevant perhaps is the observation that, in both 1857 and in the summer of 1931, real equity returns were also around one standard deviation below trend. In both those episodes, it was the final implosion of the banking and credit system that led to the final dramatic overshoot in the equity market itself.

To put it even more simply: the US equity market has only traded at much cheaper levels than it was in late 2008/early 2009 when either the survival of the nation itself, or of its banking system, was under the most serious threat.

This strongly suggests that the key question for investors in 2009 is not "will the recession be long and deep?" (it almost certainly will be), nor whether the relationship between governments and markets is changing (it already is), nor even whether private sector attitudes towards leverage will be profoundly altered by recent events (they surely will be), but rather whether the extraordinary policy measures now underway can gradually stabilize the (global) banking and credit markets, which are themselves arguably already discounting depression.

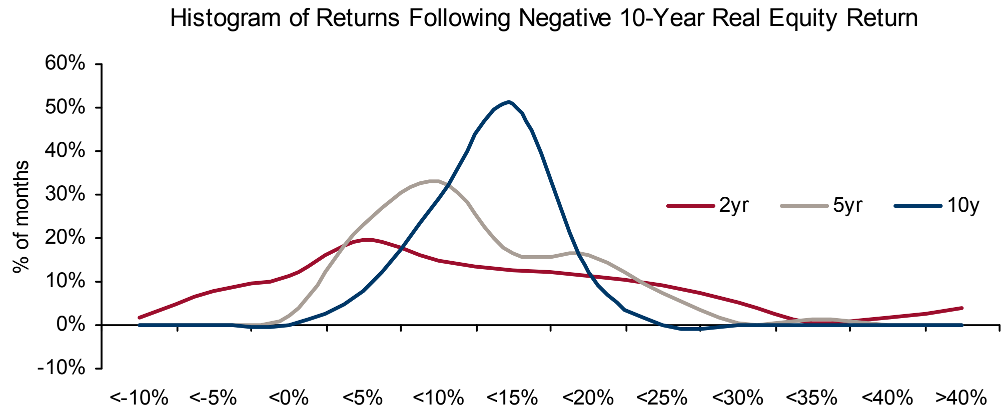
And yet, for that to happen, governments themselves must remain creditworthy. If they do, the current crisis – severe as it is – should in the end lay the foundation for a greener global economy and a more sustainable prosperity.

Exhibit 4: US 10-Year Rolling Real Equity Returns



Source: Credit Suisse

Exhibit 5: Conditional Returns



Source: Credit Suisse

It is hardly a surprise that there remains so much doubt that policymakers have the tools and the will to help stabilize the global system: equity market performance over the last ten years has been close to the worst ever experienced, and real returns from investing in (American) equities have actually been negative.

But if there is one message that longer-term investors – sovereign wealth funds, those saving for retirement or for their children - should take away from the historical record, it is probably this: that starting to invest in equities after such a dismal period, and from a level of cheapness close to the depression troughs of the 1870s and 1890s, is far more likely to produce above average long-term returns than when most investors are full of confidence and dreams of a more prosperous future.

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