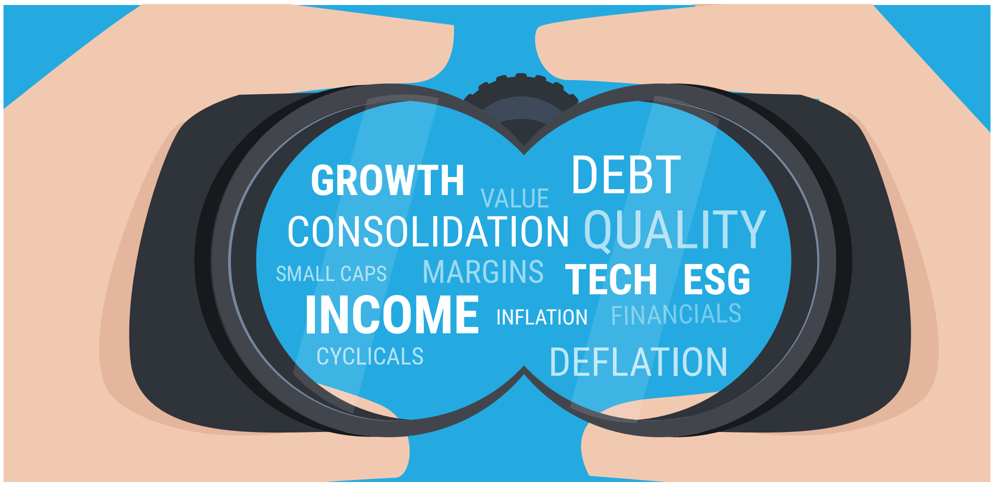
GLOBAL STRATEGY PAPER NO. 37

Investing in 2020 & Beyond

7 Themes & 3 Styles



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The next cycle, whether it becomes a strong bull market or not, is less likely to be driven by valuation expansion as interest rates are at their lower bound. But some key drivers are likely to shape the difference between relative leaders and laggards:

- High debt levels, and low nominal growth.
- Low levels of inflation (at least in the near term).
- Continued digital revolution.
- More diversification of supply chains.
- Downward pressure on margins.
- Greater consolidation.
- Greater focus on the 'social contract' and ESG.

To this end, there are likely to be three investment conclusions:

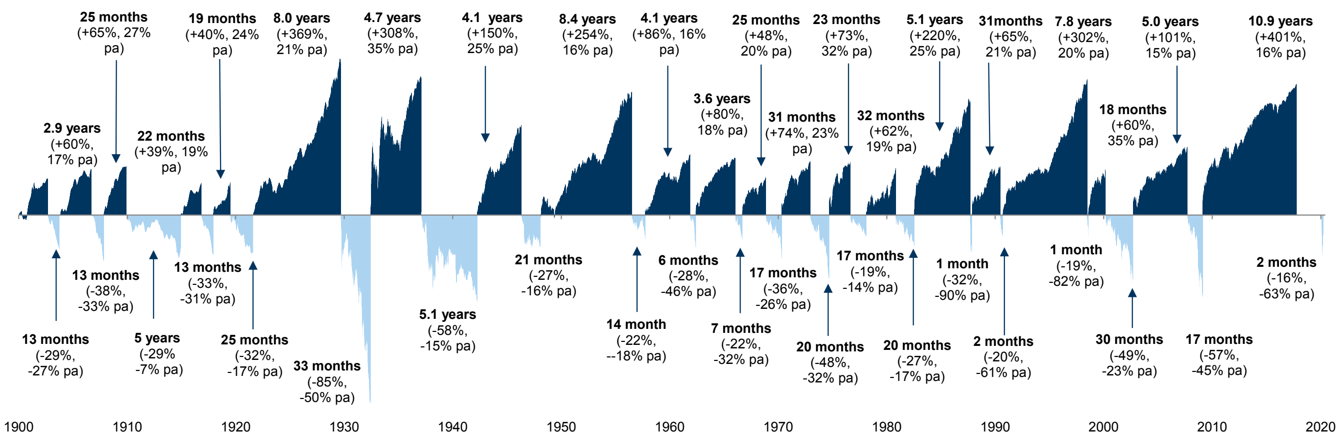
- Growth will remain scarce: growth companies will continue to prosper.
- Income will remain scarce: sustainable dividend payers will prosper.
- Debt levels will be higher: strong balance sheet companies will prosper

In the US, tech is still likely to remain the long-term winner. In Europe it's more likely to be a combination of structurally strong and/or stable sectors: Healthcare, Consumer staples and Tech. The largest stocks in these spaces we've dubbed the 'GRANOLAS': Glaxosmithkline, Roche, ASML, Nestle, Novartis, Novo Nordisk, L'Oreal, LVMH, Astrazeneca, SAP, Sanofi. They might not ALL do well but they generally have some growth and/or stability in earnings and DYs in the 2-2.5% range (attractive vs. other asset classes).

Has a new bull market started?

The longest equity bull market in history (at least for the US) came to an end on February 19, just a few weeks short of its 11th birthday.

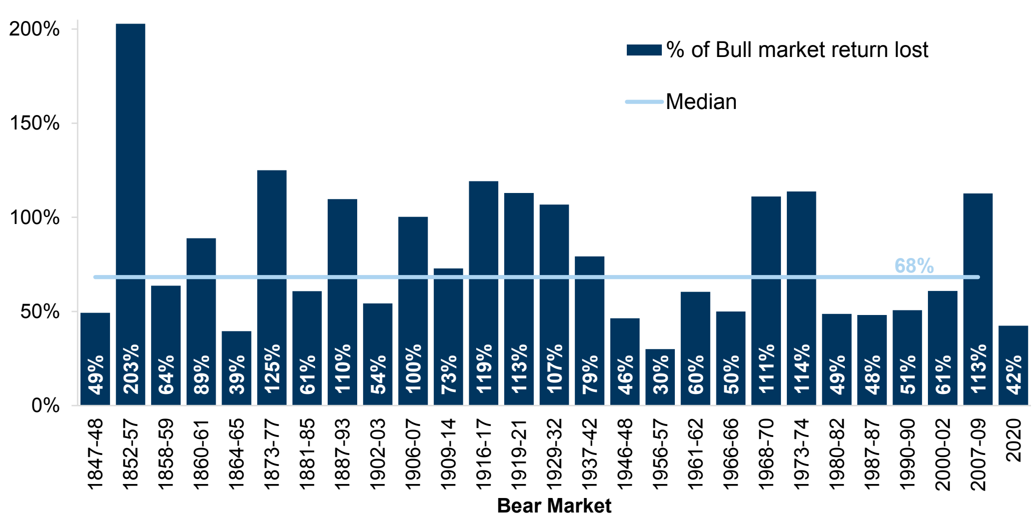
Exhibit 1: Has a new bull market started?
S&P 500



Source: GFD, Datastream, Goldman Sachs Global Investment Research

Whether we are in a new bull market or not is as yet unclear. But if this is the case, it would have been a short and mild downturn, particularly relative to the severity of the economic collapse. So far, a relatively small proportion of the previous bull market has been unwound; 42% in this cycle compared with an average of 68% in previous cycles.

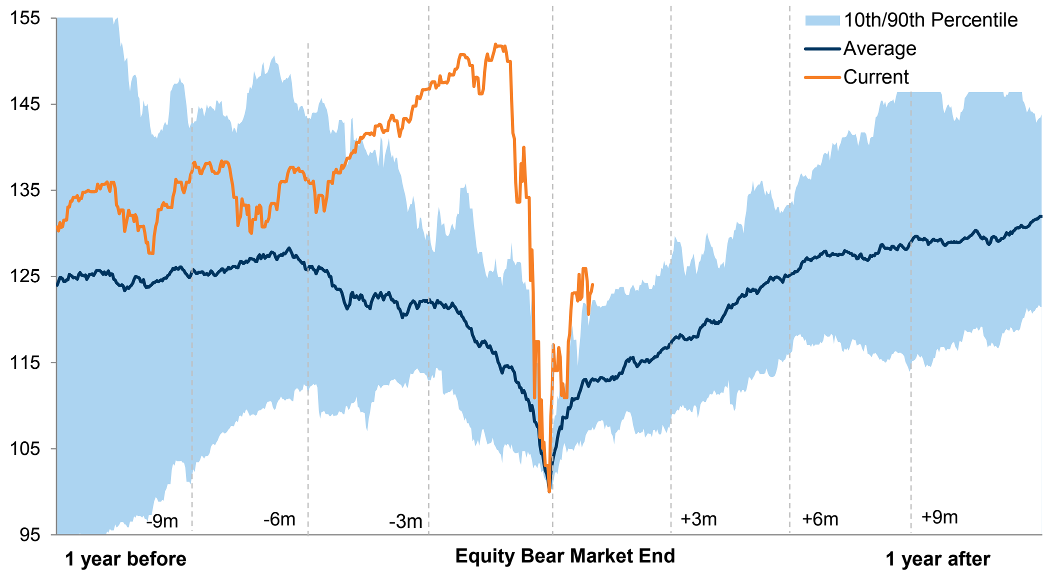
Exhibit 2: Proportion of the bull market return lost in the subsequent bear market
Last bear market from 19/02/20 to 23/03/20.Computed as 100% - return at the end of the bear market since the previous trough / return of the bull market



Source: GFD, Datastream, Goldman Sachs Global Investment Research

And it would have been one of the shortest bear markets in history.

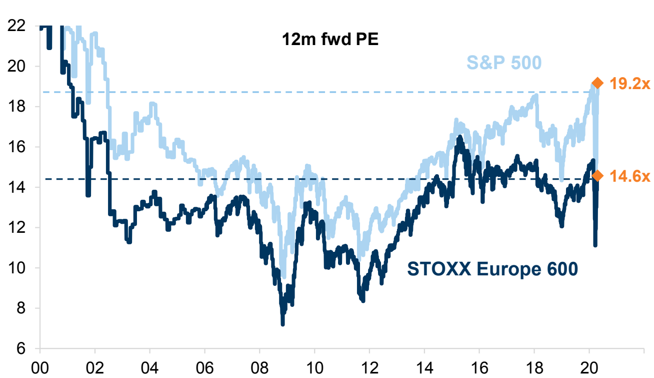
Exhibit 3: The current recovery has been the sharpest among historical bear markets
MSCI World recoveries out of bear markets since 1970



Source: Datastream, Goldman Sachs Global Investment Research

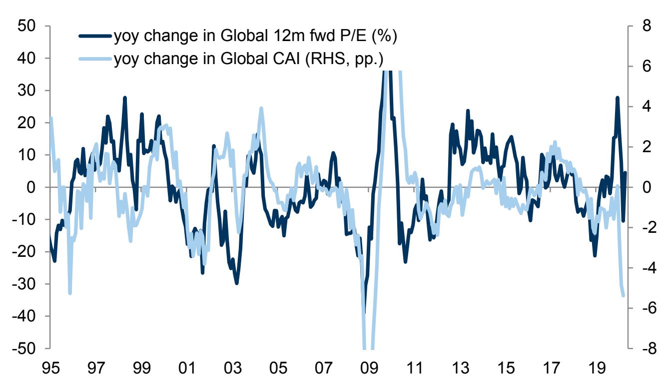
The rally has come just as earnings estimates have fallen so the rise in valuations has been especially marked (Exhibit 4). And the change in P/E valuations has moved well ahead of our measures of growth momentum, also pointing to quite a sharp 'V'-shaped recovery.

Exhibit 4: Valuations have risen sharply as prices have bounced just as EPS estimates are falling



Source: Datastream, I/B/E/S, Goldman Sachs Global Investment Research

Exhibit 5: Valuations are consistent with an increase in Global growth
Current Activity Indicator (CAI)

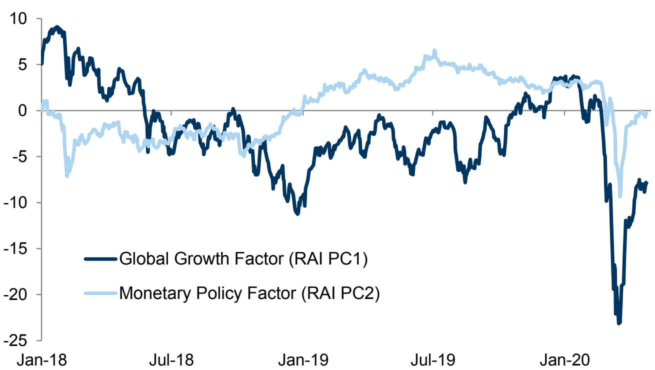


Source: Datastream, I/B/E/S, Goldman Sachs Global Investment Research

Much of the explanation for this could come from the news that the rates of COVID-19 infection are slowing, and from the speed and scale of the recent policy support, both monetary and fiscal. Nevertheless, the scale of the economic hit is likely to be significant. Our economists' current forecast for the advanced economies is a Q2 real GDP decline of 11% year-on-year and roughly 35% quarter-on-quarter annualised, which equates to four times the previous record set in 2008 (with data going back nearly six decades). Unemployment is also likely to rise sharply, reaching a postwar record of 15% in the US and as high as 23% in the case of Spain.

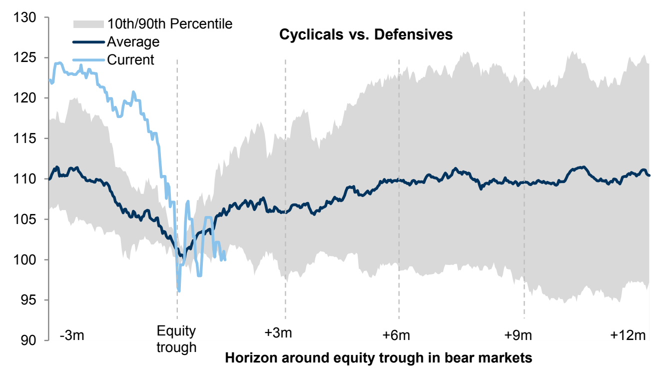
The leadership of the market in recent weeks supports the view that it is the policy support from governments and central banks — which has helped to reduce tail risks — that has driven the recent rally, rather than a strong increase in growth expectations. Rather unusually, the recent rally in the equity market has been led by quality and growth areas of the market. Equally, more defensive markets like S&P and SMI have outperformed.

Exhibit 6: The market recovery comes from the speed and scale of the recent policy support
Principal Components of our Global Risk Appetite Indicator



Source: Goldman Sachs Global Investment Research

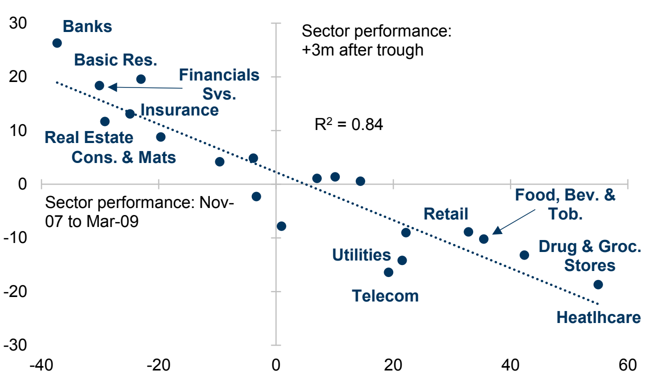
Exhibit 7: The outperformance of Cyclicals has not been marked in this rally
Europe: Performance around bear markets since 1987



Source: Datastream, Goldman Sachs Global Investment Research

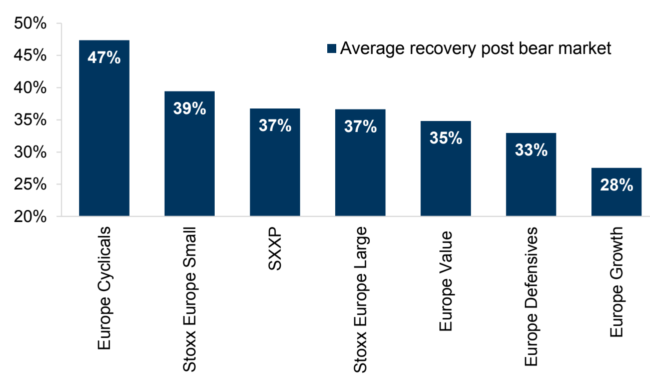
In a bear market recovery, history shows that the laggards in the bear market tend to be the stocks that rally the most in the eventual economic recovery, especially in the early stages. The R^2 of the relationship between bear market performers and recovery performers over 3 months is particularly high, at 0.84.

Exhibit 8: The most affected sectors during the bear market tend to be the best performers during the first 3 months of the recovery
Relative price performance vs. the market



Source: Datastream, Worldscope, Goldman Sachs Global Investment Research

Exhibit 9: Cyclicals tend to do best in bear market recoveries
Performance 12 months after the trough in European bear markets since 1987



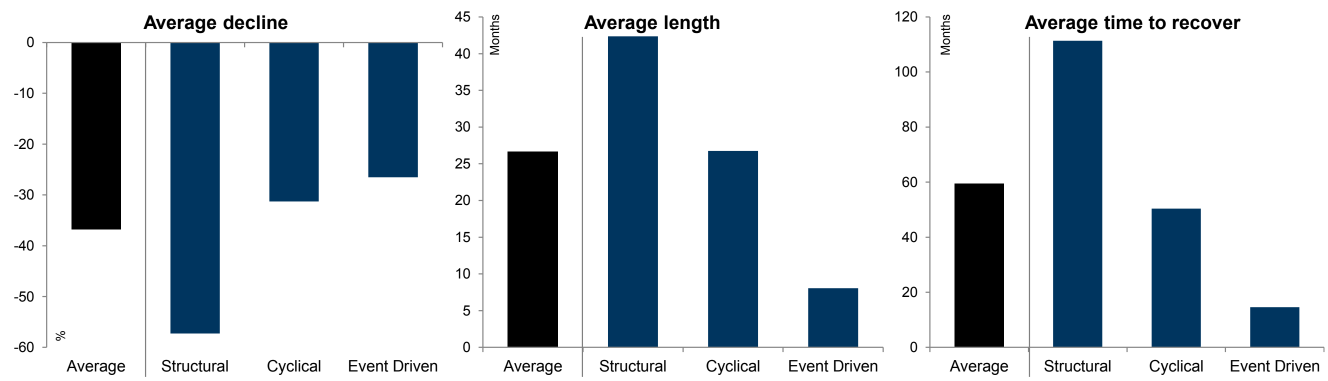
Source: Datastream, Goldman Sachs Global Investment Research

Over a longer horizon than three months into the recovery, the relationship between bear market laggards and recovery winners becomes less clear. This is most likely because outperformers tend to become the idiosyncratic winners of the new business cycle.

Event-driven bear market, with policy support

Despite the market rebound from the March trough, the scale of the economic hit is likely to be significant. Our economists' current forecast for the advanced economies is a Q2 real GDP decline of 11% year-on-year and roughly 35% quarter-on-quarter annualised, which equates to four times the previous record set in 2008 (with data going back nearly six decades). Unemployment is also likely to rise sharply, reaching a postwar record of 15% in the US and as high as 23% in the case of Spain. **Our central view is that the policy support has reduced the likelihood of markets falling below their previous trough. In this sense, it would have made this bear market very similar to previous 'event-driven' bear markets in history.**

Exhibit 10: Event-driven bear markets have recovered after 15 months on average



Source: GFD, Datastream, Goldman Sachs Global Investment Research

The peak to trough decline of 30-35% in the recent bear market was almost exactly in line with 'event-driven' bear markets in the past. The speed of the falls, like most event-driven bear markets, was also very fast — although in this case much faster than average.

We still see this as an 'event-driven' bear market. It was unlikely that there would have been a global recession and falling earnings this year had the virus not have happened; interest rates were low and private-sector savings were strong.

What we expect from here

Despite the historic scale of the recession that is now unfolding, the scale and size of policy support is likely to prevent this downturn from morphing into something more structural with systemic failures in the financial system. But the markets are likely to have paid too much for the prospect of a return to normal. Investors are usually very sensitive to inflection points and rates of change. If, as we expect, lockdowns are partially eased over the next month, the sequential growth will likely look strong (which is what the equity market is reflecting). But, the pace of growth is still likely to be weak. As our economists have explained, on a sequential quarter-on-quarter annualised basis their US forecast shows -34% in Q2, +19% in Q3 and +12% in Q4, which looks rather V-shaped. But, on a year-on-year basis, their forecast for US growth shows -11% in Q2, -8% in Q3, and -5% in Q4, which clearly qualifies as U-shaped.

Overall, therefore, their expectation is one in which the economy recovers only gradually from the virus outbreak but, nevertheless, shows sequential growth rates in H2 that are unprecedented in postwar history.

We see two likely scenarios from here:

- The first scenario is that the slow progression of the return post lockdown, and the higher level of unemployment, mean that investors become disappointed relative to current expectations and **markets fall back towards, although likely not through, previous lows.**
- The second scenario is that, having paid up for the recovery, equities get stuck in a trading range, **perhaps 'Fat & Flat' with quite a lot of volatility but little aggregate return for a while.**

Of the two, we would assign a slightly higher probability to a further pullback. We think that the genuine bull market has not started.

Nevertheless, we are getting lots of questions about the likely leadership in the next years. It is to this topic that we turn next.

2009-2020: Themes of the last bull market

Before looking forward, it is worthwhile thinking about how we got to where we are now, and how the previous bull market shaped the current environment. The 2009-2020 bull market was unusual in so many ways. Aside from being very long, it was characterised by several other (often related) defining features:

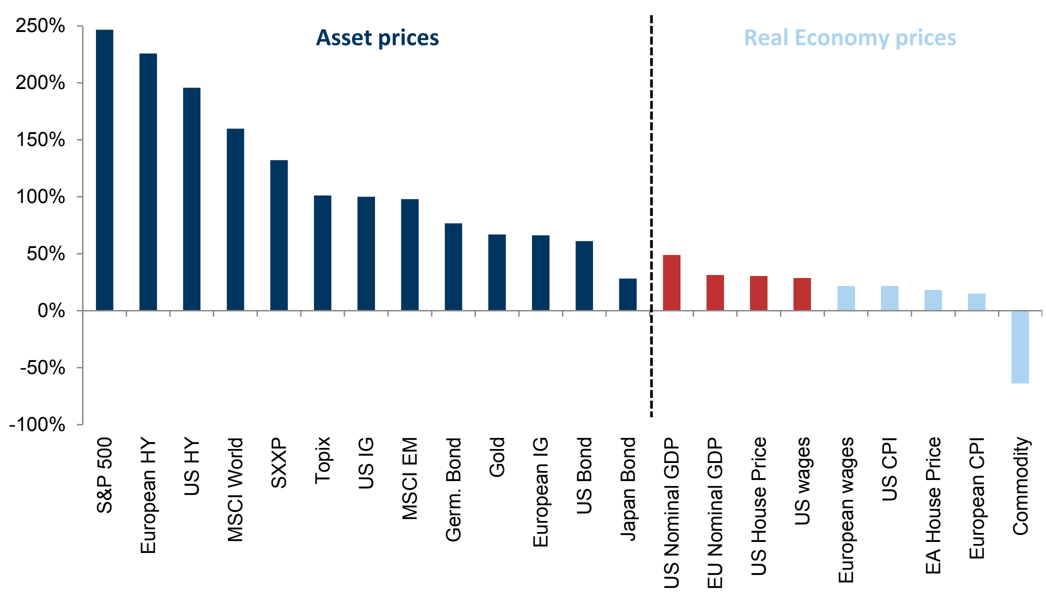
1. **The extent to which equities outperformed earnings, and valuations increased.**
2. **The outperformance of growth versus value.**
3. **The leadership of the technology sector.**
4. **The outperformance of the US equity market relative to the rest of the world.**

1. 2009-2020 - Equities outperform profits

The past decade or so, in the aftermath of the financial crisis, was characterised by an environment of very low inflation (or disinflation) in the real economy as slow growth and capex were met with rising savings around the world (and, with this, a rising share of spending on technology). Coupled with historically low interest rates and bond yields, in part a reflection of low inflation and QE, financial assets thrived in return terms even as profit growth was generally underwhelming.

We have often demonstrated this strange coexistence of low inflationary pressures in the real economy and higher inflation of financial assets in Exhibit 11.

Exhibit 11: Wide dispersion between asset price inflation and 'real economy' inflation
Total return performance in local currency since January 2009



Source: Datastream, Haver Analytics, FRED, Goldman Sachs Global Investment Research

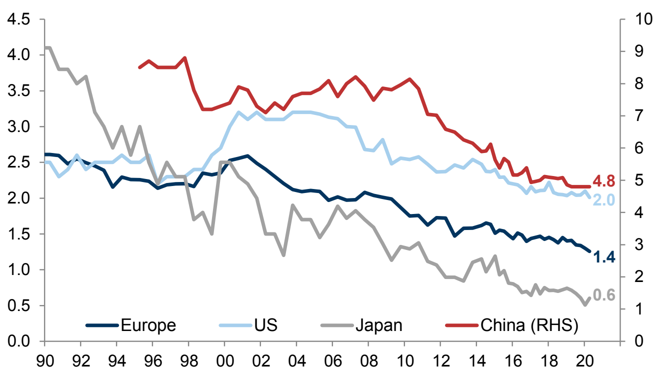
This shows that, from the start of the era of QE up until the market peak in February of this year, financial assets (on the left-hand side of the chart) enjoyed unusually strong returns, while prices in the real economy (on the right) increased only modestly.

There may be many explanations for this phenomenon but collapsing interest rates in the wake of the financial crisis, coupled with huge credit creation, are likely to have been a critical component.

In fact, alongside relatively modest nominal GDP growth and sales growth (see Exhibit 12 and Exhibit 13), earnings growth has generally been quite weak. The strong rise in equities over the past decade or so has been largely a reflection of rising valuations. As Exhibit 14 shows, a large proportion of the returns in global equities since the 2009 low has come from valuation expansion.

Exhibit 12: Long-term real global GDP growth forecast is at a historical low

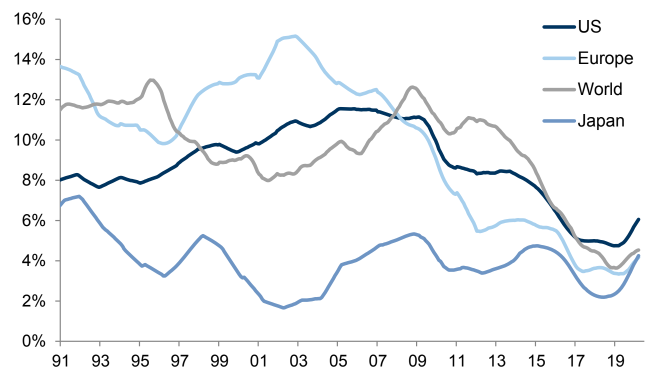
Long-term (6-10y) GDP growth from Consensus Economics



Source: Consensus Economics, Goldman Sachs Global Investment Research

Exhibit 13: Top-line growth has been falling along with declining nominal GDP

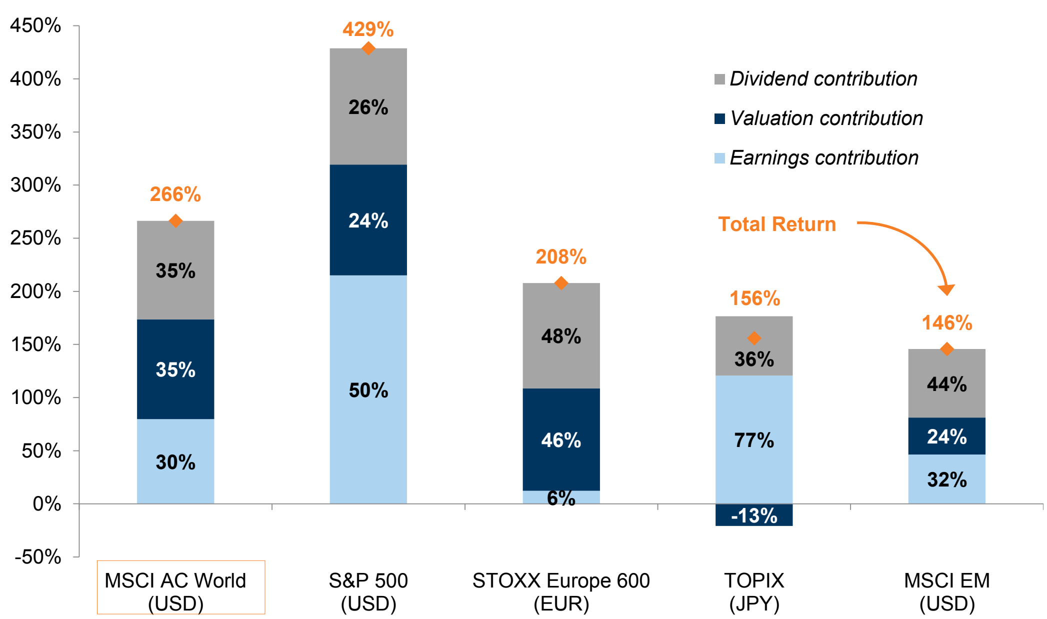
yoy sales growth (10y rolling average), Market ex Financials



Source: Datastream, Worldscope, Goldman Sachs Global Investment Research

Exhibit 14: Contribution of dividends, valuations and earnings to total returns

Since March 9, 2009



Source: Datastream, FactSet, Goldman Sachs Global Investment Research

2. 2009-2020: Concentrated leadership

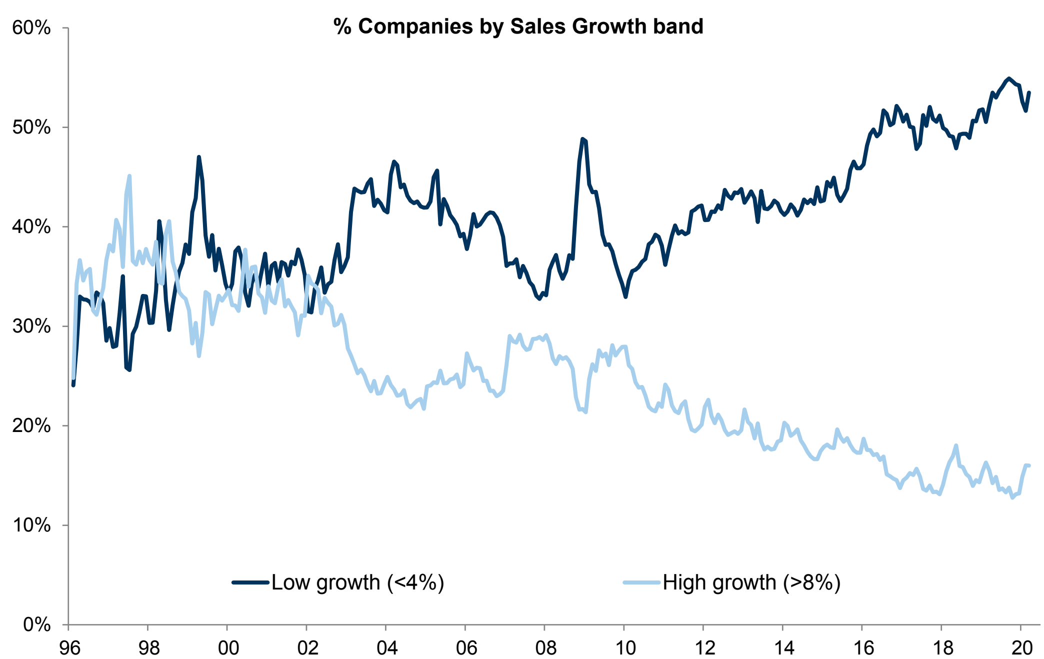
The other major feature of the cycle from 2009 to 2020 was the leadership, which had two main characteristics:

1. The outperformance of *Growth* versus *Value*.
2. The outperformance of *Defensives* versus *Cyclicals*.

Generally, over the post-2008 period, there has been a strong pattern globally of 'growth' outperforming 'value' (and also of defensive growth companies outperforming cyclical companies). These trends have made sense in an environment where slow top-line growth and relatively weak profit growth have pushed up valuations for growth companies.

There has also been a falling proportion of high-growing companies in most markets. As Exhibit 15 shows, a split between companies achieving top-line growth above 8% and below 4% (a simple definition of high versus low growth) shows that global markets have become increasingly dominated by slow-growing companies in recent years, and that there is a smaller proportion of fast-growing companies.

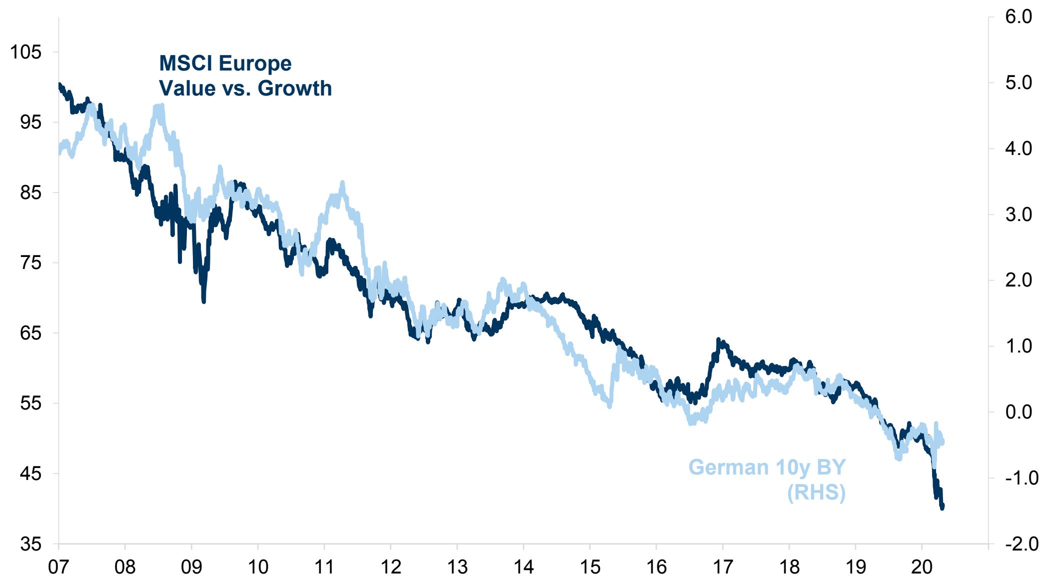
Exhibit 15: High growth companies are scarce
MSCI World. Consensus FY3 Sales growth



Source: Datastream, I/B/E/S, Goldman Sachs Global Investment Research

At the same time, the relentless falls in global bond yields have boosted the value of long-duration assets and increased the risk premium of those that are cyclically exposed to downside economic risks and/or have weak balance sheets.

Exhibit 16: Lower bond yields weigh on European Value stocks



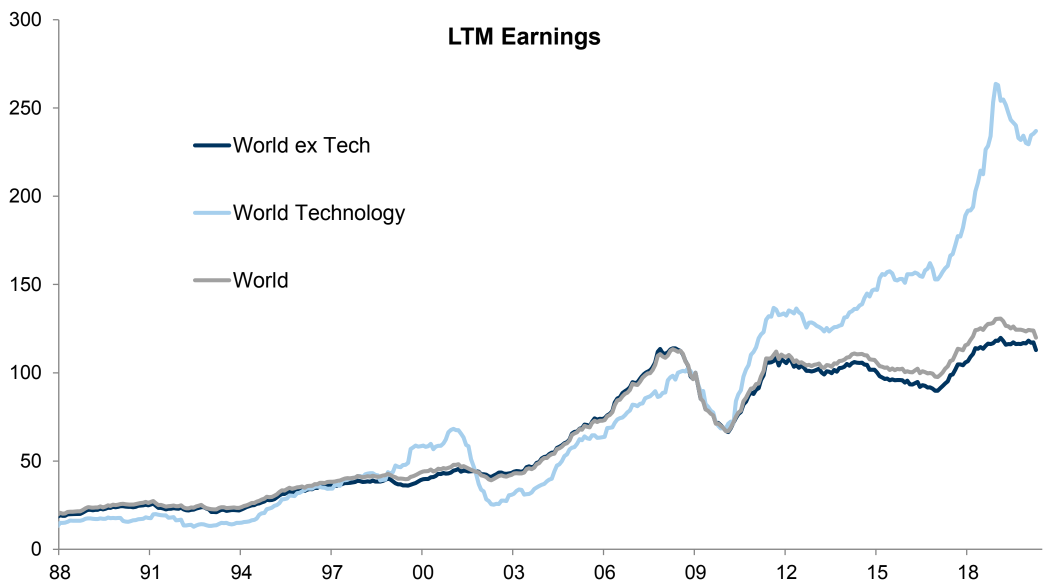
Source: Datastream, Goldman Sachs Global Investment Research

3. 2009-2020 – The success of technology

One of the clearest and most unusual characteristics of the last bear market was the success of technology. This was true in terms of both EPS and performance.

Exhibit 17 shows the difference between EPS of the global technology sector relative to the World ex technology. While technology earnings (and margins) reached ever newer highs, the rest of the world's profits, at least in aggregate, were rather pedestrian.

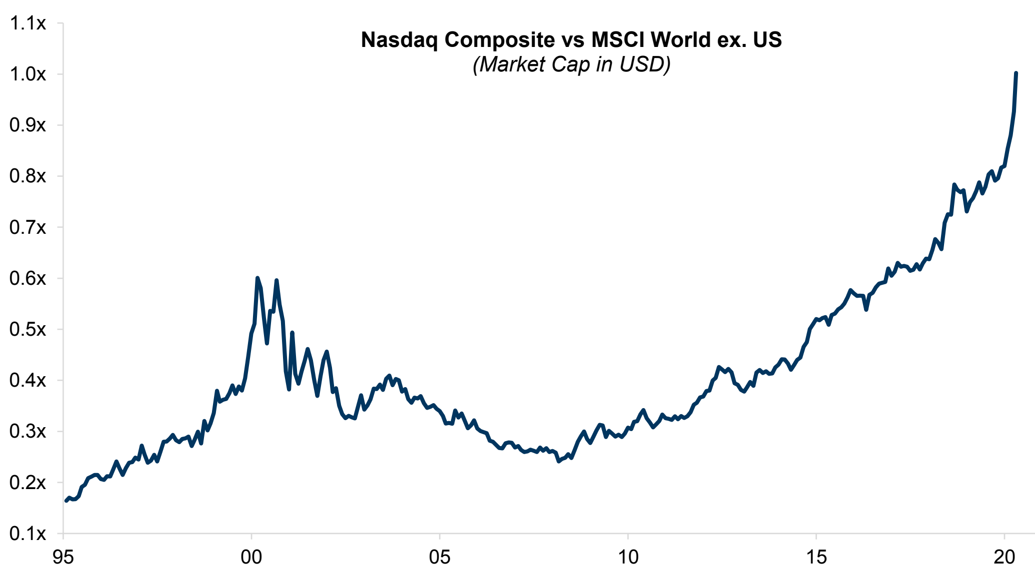
Exhibit 17: Tech earnings have outstripped those of the global market
12m trailing EPS (USD) – Indexed to 100 on Jan-2009



Source: Datastream, Worldscope, Goldman Sachs Global Investment Research

As a result, the technology sector became more important. This was clearest in the US. The Nasdaq index has grown bigger than the rest of the world's stock market.

Exhibit 18: US tech is an increasing share of global markets
Ratio between the market cap. of NASDAQ Composite and MSCI World ex. US

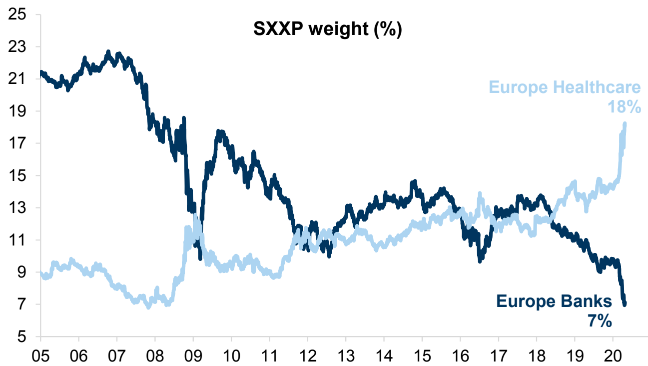


Source: Bloomberg, Haver Analytics, Goldman Sachs Global Investment Research

The concentration of the index has also increased, with 40% of the Nasdaq market capitalisation in just four companies. **Even in Europe, which has a very low proportion of companies in this sector, the Technology industry has grown bigger than the Oil sector and is close in size to the Banks sector (see Exhibit 19 and**

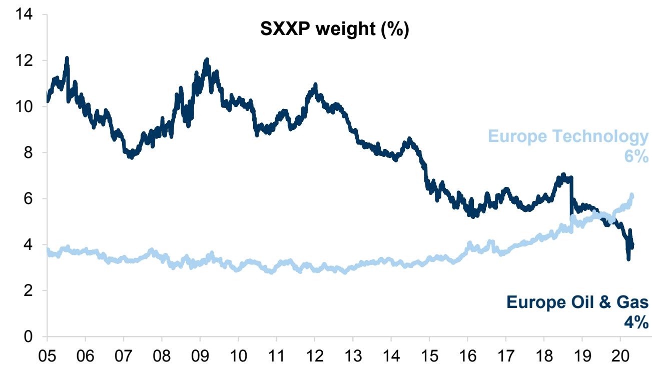
Exhibit 20).

Exhibit 19: Healthcare (SXDP) is now roughly twice as big as Banks (SX7P) in the SXXP



Source: Datastream, Goldman Sachs Global Investment Research

Exhibit 20: The share of Technology (SX8P) has now overtaken that of Oil & Gas (SXEP) in the SXXP

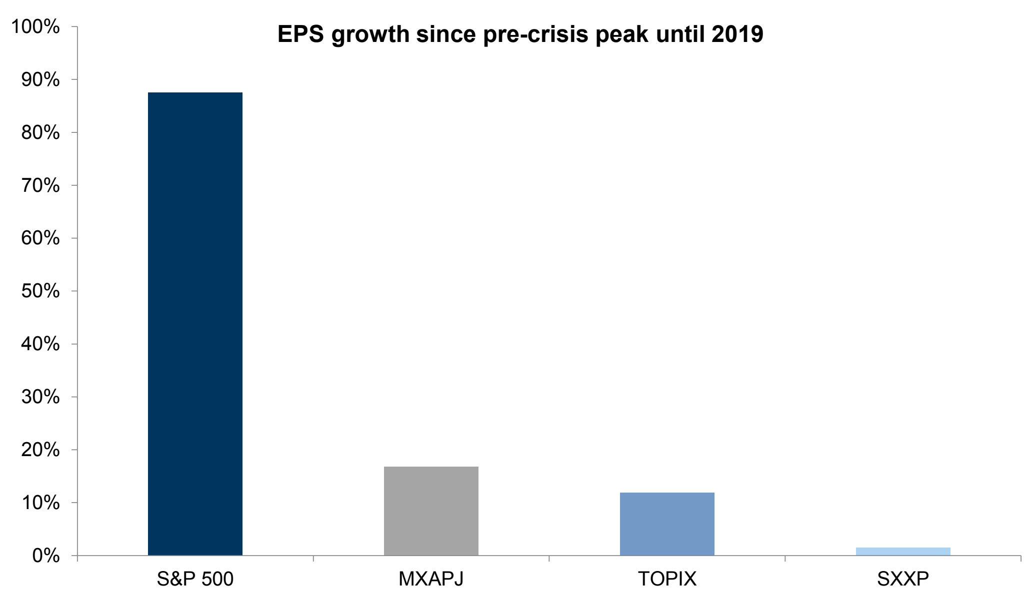


Source: Datastream, Goldman Sachs Global Investment Research

4. 2009-2020: The outperformance of the US

The staggering outperformance of the US equity market was, of course, a function of the other factors described above. The US has experienced stronger growth, has more of a growth bias in its index composition, and has more technology. This is why the growth in EPS in the US since the previous peak (in 2007) has been so much stronger than elsewhere. Prior to the current crisis, and since the 2007 EPS peak, S&P earnings have grown about 90%, compared with roughly 15% in Asia and less than 2% in Europe.

Exhibit 21: The growth in EPS in the US has been so much stronger than elsewhere
EPS peaked in 2006 for the S&P 500 and Topix and 2007 for SXXP and MXAPJ



Source: FactSet, Standard and Poor's, I/B/E/S, Goldman Sachs Global Investment Research

Themes for 2020 and Beyond

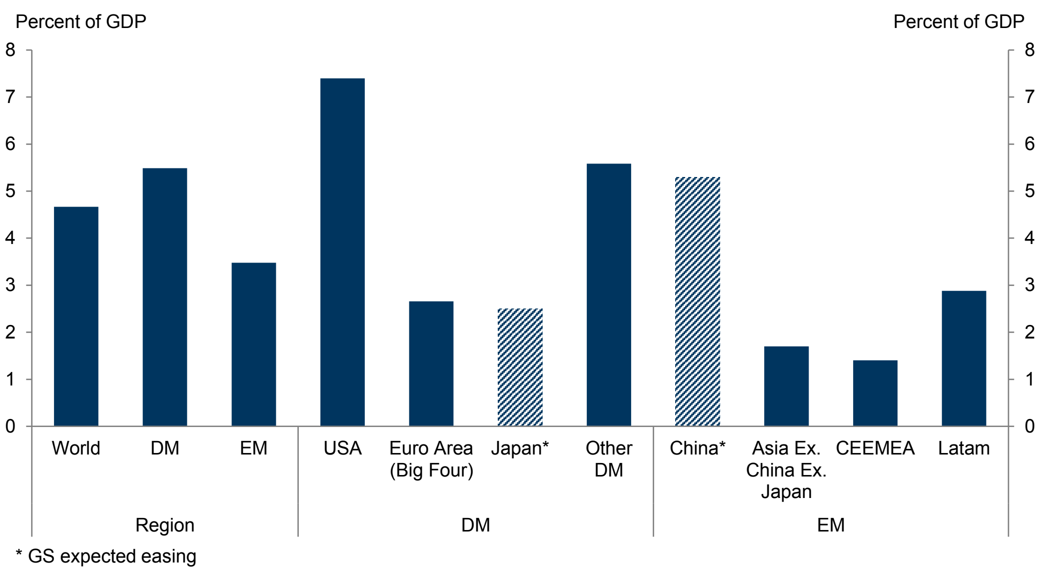
To help think about what leadership may look like on a longer-term basis, it is worth summarising some key factors that are likely to emerge from this crisis.

Perhaps most important among them is an increase in debt, particularly among governments but also in the corporate sector.

1. High levels of debt – slow nominal growth

One of the most notable implications of this crisis has been the size and scale of government debt programmes. According to the CRFB (The Center for Budgetary Responsibility in the US), the US fiscal deficit will exceed $3.8trn (18.7% of GDP) this year and $2.1trn (9.7% of GDP) in 2021. This is a staggering increase when one considers that US deficits never exceeded 10% of GDP during the financial crisis. Meanwhile, they argue, cumulative debt as a percentage of GDP will exceed the record set right after WWII by 2023.

Exhibit 22: Discretionary fiscal easing in response to coronacrisis
Discretionary policy actions taken since the outbreak that lead to higher government expenditures or lower tax receipts



Source: Goldman Sachs Global Investment Research

In Europe, too, increased government debt has become an important issue. Our economists expect the debt-to-GDP ratio to be pushed above 160% in Italy and to around 120% in France and Spain. For Italy in particular, they show that under their baseline assumptions the Italian government would need to run a primary (ex-interest) surplus of 1.3% of GDP in the years to come to maintain a constant debt-to-GDP ratio at the new higher level, similar to what has been delivered over the past five years. But the required primary surplus rises sharply with higher interest rates and lower nominal growth.

There are many potential implications of higher government deficits. An analysis by the ECB, which looks at the average impact of government debt on per-capita GDP growth in 12 Euro area countries over a period of about 40 years starting in 1970, suggests an inverse relationship between initial debt and subsequent growth, controlling for other determinants of growth.[1] It finds a non-linear impact of debt on growth. The critical impact seems to be above about 90-100% of GDP. At the same time, there is evidence that the annual change of the public debt ratio and the budget deficit-to-GDP ratio is negatively (and linearly) associated with per-capita GDP growth.

Another study by the IMF, based on a panel of advanced and emerging economies over almost four decades, suggests an inverse relationship between initial debt and subsequent growth, controlling for other determinants of growth.[2] On average, a 10 percentage point increase in the initial debt-to-GDP ratio is associated with a slowdown in annual real per capita GDP growth of around 0.2 percentage points per year, with the impact being somewhat smaller in advanced economies. They also find some evidence of non-linearity, with higher levels of initial debt having a proportionately larger negative effect on subsequent growth. Their analysis suggests that the adverse effect largely reflects a slowdown in labour productivity growth, mainly due to reduced investment and slower growth of capital stock.

Large debt burdens can slow down economic growth and lead to interest payments consuming an ever larger proportion of the government budget each year, potentially crowding out private-sector spending. This may be much less relevant today given interest rates at the lower bound, but there still may be evidence of the so-called Ricardian Equivalence Theory — that consumers and companies end up saving more in periods of very high government debt as precautionary savings rise to reflect what they expect to be higher future taxes, or lower benefits.

Indeed, our Japanese economics team found that an increase in the government debt ratio reduces consumer spending and increases saving by the generation in the prime of their working lives. This result is consistent with the results of a Japan Cabinet Office survey (see *Japan Economics Analyst: Japan's public debt overhang: What could be the issue?*, June 22, 2018).

Lower growth and lower bond yields may not necessarily mean lower valuations for equities overall – partly, the higher involvement of government may mean lower volatility of returns and therefore a lower risk premium. **But it does suggest that companies that can generate growth, particularly growth that is predictable and of lower volatility, will likely outperform and may trade at even higher valuations.**

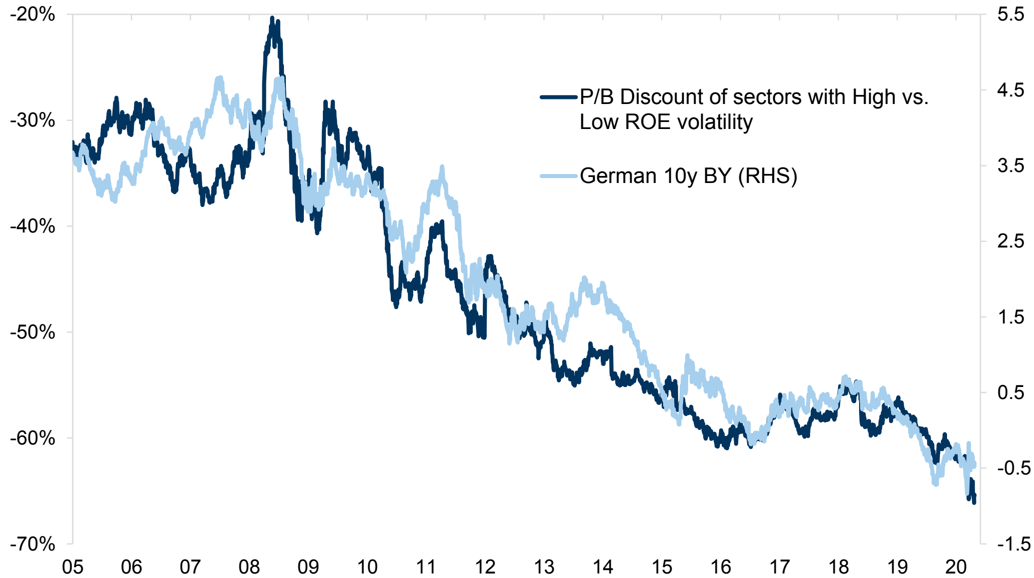
Interestingly, there has already been a tendency for the valuations of companies with a lower volatility of returns (measured as return on equity) to trade at a higher premium valuation as bond yields have fallen (Exhibit 23). We would expect this to continue, particularly because many of the previous trends related to the digital revolution are

1 See Checherita, C. and Rother, P. (2010). The impact of high and growing government debt on economic growth. An empirical investigation for the Euro Area. ECB Working Paper Series, n. 1237

2 See Kumar, M. S, and Woo, J. (2010). Public Debt and Growth. IMF Working Paper 10/174.

likely to have been strengthened as a result of the lockdowns.

Exhibit 23: Europe: quality companies with a stable ROE have seen their premium increase as bond yields fell



Low ROE volatility: Healthcare, Industrials, Food & Bev, Retail, Consumer products & Svcs., Drug & Groc. Stores / High ROE volatility: Basic Resources, Energy, Telecoms, Insurance, Financial Svs, Real Estate

Source: Datastream, Worldscope, Goldman Sachs Global Investment Research

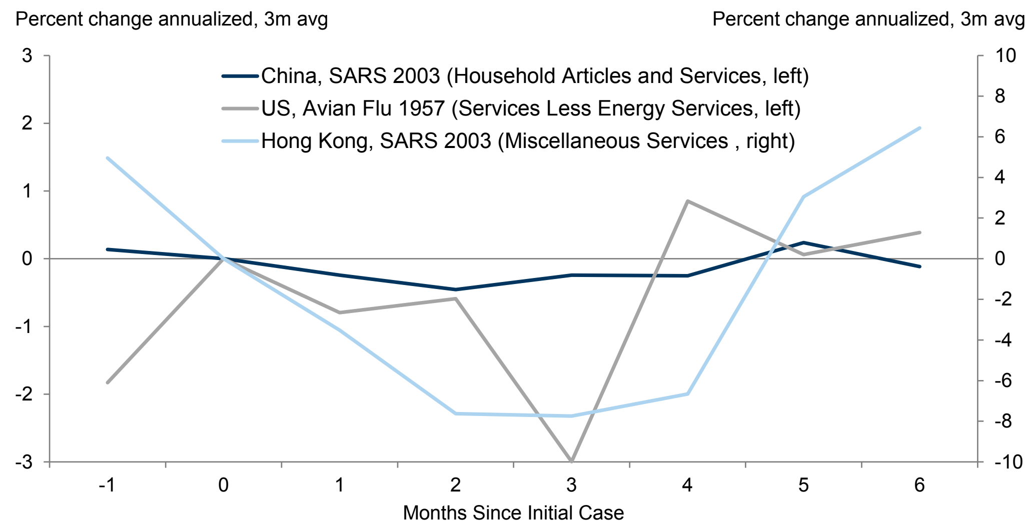
2. Lower inflation and interest rates

Higher debt levels probably mean lower growth, at least after the initial recovery period. Our economists argue that in most recessions in recent memory, weak demand and high unemployment have been a reliable recipe for lower inflation. But the inflation implications of the current recession are a bit more complicated, because the virus shock will deliver large hits to both demand and supply.

At least in the near term, the impact of the virus is likely to be deflationary. A collapse in demand and sharp falls in travel and leisure related areas is likely to mean falls in prices, particularly in the services sectors. Falling rents may contribute to this. Data from countries in Asia that were affected by coronavirus before Europe and the US also point to likely lower inflation in the near term; year-over-year core inflation fell in China, Japan and South Korea in February, driven by declines in services categories (Exhibit 24). On top of this, the collapse in oil prices is likely to have a disinflationary impact.

Our economists argue that past recent virus situations were consistent with lower inflation, particularly in Asia.

Exhibit 24: Inflation Declined in Past Virus Slowdowns

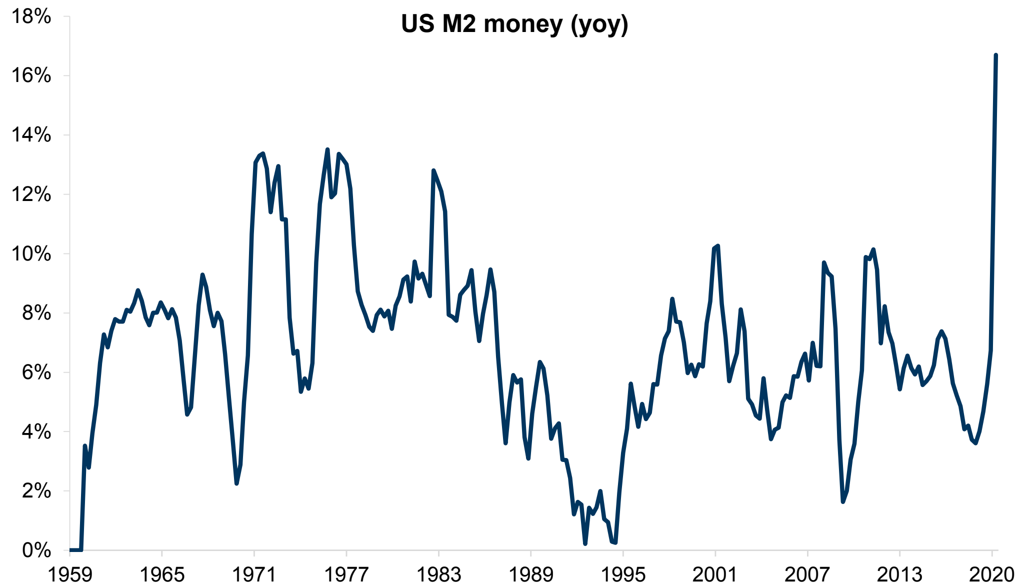


Source: Goldman Sachs Global Investment Research

In the longer run, much will depend on how much capacity destruction occurs as a result of the crisis and, therefore, how significant are the bottlenecks in supply chains. This may be very different from the post financial crisis era, where a collapse in the cost of capital and booming credit markets allowed many weaker companies to remain in business – a form of zombification (see here and here). But with more businesses collapsing during the periods of lockdown, and perhaps more consolidation coming out of this recession, there could be at least selected areas where pricing power increases.

Furthermore, there has been a huge increase in money supply in many countries. While some would argue that rises in money supply did not cause inflation after the financial crisis, because the velocity of money fell and savings increased, this time it might be more so. After all, the general pattern of fiscal tightening after the financial crisis is now being met with significant fiscal loosening, which could be more inflationary.

Exhibit 25: In the US, the growth in M2 money has spiked



Source: St. Louis FED, Goldman Sachs Global Investment Research

But there is much disagreement and controversy over the issue of money supply growth and its impact on inflation. It depends also on how much action there is by central banks to control inflation (even if it did start to rise), and also questions over the velocity of money and the extent to which cash is hoarded as a result of greater uncertainty.

Another factor at play will be what happens to wages. Of course, sharp rises in unemployment are likely to put downward pressure on wages in general. But with more people used to working from home, those who need to travel to work may demand higher wages to reflect risks if there remains no vaccine for some time. Also, the existence of more generous unemployment benefits may mean that fewer people are seeking work for a while.

On balance, however, higher unemployment, and with it higher precautionary savings by both households and corporates, would tend to keep inflation, growth and interest rates low. This was very much the experience of Japan. After the bubble burst in the late 1980s, there was a massive de-leveraging of private-sector debt which was offset by a large fiscal deficit. But subsequent long periods of weak growth and crises (the Asian crisis in 1998 and the global financial crisis in 2008) resulted in continued excess savings. These savings resulted in very low inflation, and interest rates, despite the large levels of debt. Such 'Japanification' is one possible consequence of this crisis, particularly in Europe where demographic trends are quite similar and where many of the same dynamics were evolving even before this crisis (see *Global Strategy Paper - European equities and 'Japanification'*, 1 July 2019).

Some academic studies have used even longer-run data to assess the likely impact on inflation and interest rates. In particular, a recent study by the Federal Reserve Bank of San Francisco is based on data going back to the 14th century focusing on 15 pandemics.[3] This study argues that the macroeconomic effects of pandemics can last for 'about 40 years', with real rates of return being substantially depressed. They also argue that there is typically less destruction of capital during pandemics than, say, during wars, and hence that real interest rates tend to be higher after wars than after pandemics.

Nevertheless, they also argue that real wages may rise following pandemics, reflecting labour scarcity. That said, the long dataset includes periods with very high fatality rates and when output was almost entirely dependent on labour, so is not so relevant today.

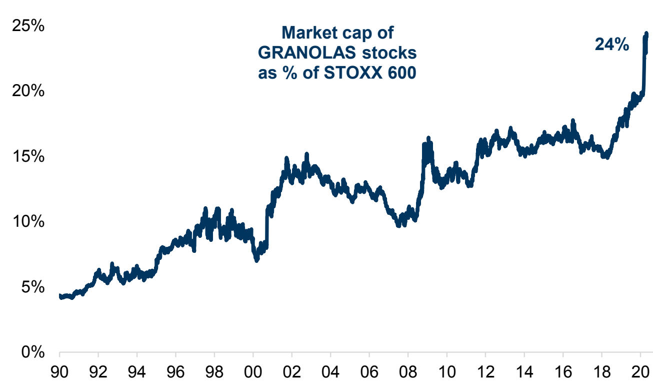
So, while the longer-term implications for inflation may be unclear (and if there are higher prices, it may well be a relative story rather than rises more generally), **at least in the nearer term the size of the demand shock is likely to be more deflationary. This should support the trend of low interest rates and low nominal growth — again factors that tend to reinforce the existing trend of relative winners: growth, defensive growth and strong balance sheet companies.**

In the case of the US equity market this has been reflected in the ongoing strength and concentration of technology companies in the index (more below). In places like Europe, which has a small proportion of large companies in the digital economy, the market is increasingly concentrated in a small number of stable growth compaines that we dub the GRANOLAS. The Top European companies: Glaxosmithkline, Roche, ASML, Nestle, Novartis, Novo Nordisk, L'Oreal, LVMH, Astrazeneca, SAP, Sanofi. These have relatively strong balance sheets, low volatility growth and good dividend yields, around 2%-2.5% (much higher than other asset classes).

Exhibit 26: FAAMG leadership
FAAMG: Facebook, Amazon, Apple, Microsoft, and Alphabet's Google

Source: Datastream, Goldman Sachs Global Investment Research

Exhibit 27: GRANOLAS leadership
GRANOLAS: Glaxosmithkline, Roche, ASML, Nestle, Novartis, Novo Nordisk, L'Oreal, LVMH, Astrazeneca, SAP, Sanofi



Source: Datastream, Goldman Sachs Global Investment Research

3. The continuation of the digital revolution

Technology was the main sectoral winner in the last cycle. It is likely to be so for some time to come. True, the FAANG stocks are bigger than the annual GDP of Japan, and the

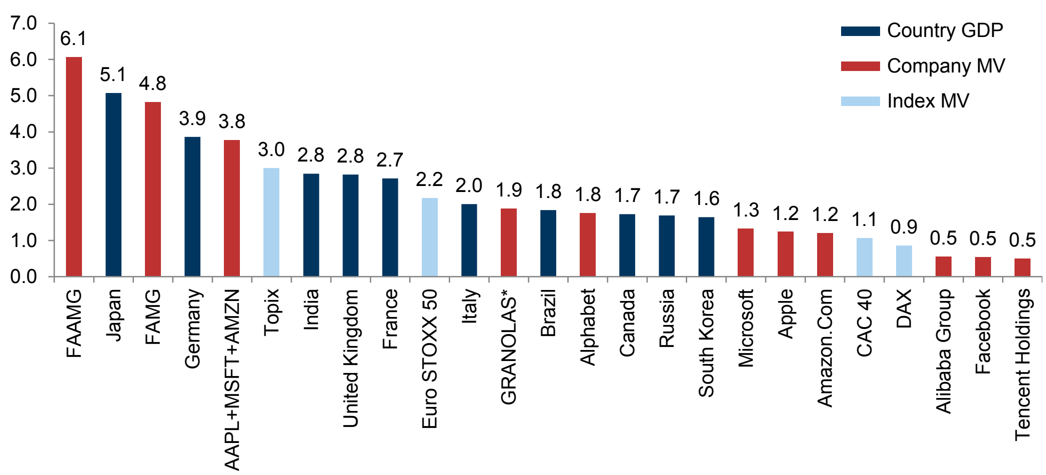
[3] See Faria e Castro, M. (2020) Fiscal Policy during a Pandemic. St. Louis FED Working Paper 2020-006D.

Tech giants are bigger than the annual GDP of Germany. But these companies, or at least the areas and businesses that they represent, are transforming the way that business is done and how consumers consume.

As we pointed out in *Why Technology is not a bubble; lessons from history*, the leadership of this sector is likely to continue, and these stocks are not as expensive as we have seen in previous periods of 'growth leadership' (see Exhibit 29). If anything, the nature of the current crisis has only accelerated these existing trends: companies are more likely to move onto the cloud, consumers are more likely to shop on line. The backdrop of likely low bond yields and growth continues to make companies that do have growth more attractive. We do not think this has changed.

Yes, there are likely to be challenges and risks to particular companies. The boom in technology 'concept stocks' that were largely funded out of private equity may have peaked as the cost of capital rises. Also, there are risks, depending on political developments, of higher taxation and regulation for some companies in the technology world. But **the digital and data revolution that is changing our world, its economy, the health care system and how we consume is still underway. Companies that can grow as a result are likely to be attractive to growth-starved investors, just as companies that have sustainable balance sheets and an ability to pay steady and predictable dividends are likely to be in great demand in a yield-starved world**.

Exhibit 28: Comparison of GDP and market value of various countries, indices and Technology companies
2019 Nominal GDP. USD trn



GRANOLAS: Europe Top 10 (Glaxosmithkline, Roche, ASML, Nestle, Novartis, Novo Nordisk, l'Oreal, LVMH, Astrazeneca, SAP, Sanofi)

Source: Datastream, FactSet, Goldman Sachs Global Investment Research

Exhibit 29: Largest companies in tech today, tech 1990s and Nifty Fifty

	Size		Valuation
	Market weight	Market Cap ($ Bn)	P/E (FY2)
FAAMG			
Apple	4.9%	1164	19.1
Amazon	4.3%	1021	60.6
Microsoft	5.6%	1328	28.4
Alphabet	3.4%	793	23.0
Facebook	1.8%	434	19.6
FAAMG Aggregate	**20.2%**	**4740**	**23.0**
Tech Bubble			
Microsoft	4.5%	581	55.1
Cisco Systems	4.2%	543	116.8
Intel	3.6%	465	39.3
Oracle	1.9%	245	103.6
Lucent	1.6%	206	35.9
Tech Bubble Aggregate	**15.8%**	**2040**	**55.1**
Nifty 50			
IBM	7.1%	48	35.5
Eastman Kodak	3.6%	24	43.5
Sears Roebuck	2.7%	18	29.2
General Electric	2.0%	13	23.4
Xerox	1.8%	12	45.8
Nifty 50 Aggregated	**17.1%**	**116**	**35.5**

Tech Bubble data as of 24/03/2000, Nifty 50 data as of 02/01/1973, except 1972 actual for P/E

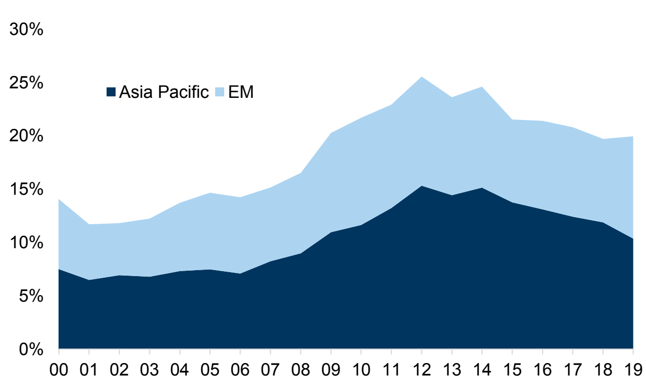
Source: Datastream, Worldscope, Goldman Sachs Global Investment Research

4. Diversification of supply chains

There has been a growing discussion about the impact of the coronavirus on globalisation in general, and supply chains in particular. In some ways, the pushback on the years of globalisation had already begun with a shift in the political climate. The trade war had fractured the belief that globalisation was without limit. Technology companies, once seen as benign liberators of our time and leisure, were being questioned for their tax policies and use of data.

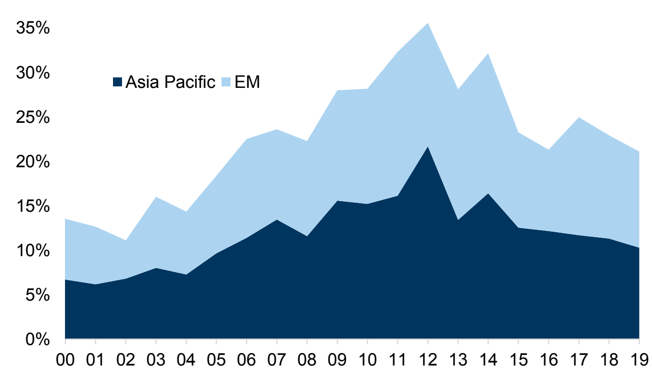
As we show below, the peak in investments in Asia and China by European companies happened almost a decade ago.

Exhibit 30: Geographical asset exposure of European companies
STOXX 600 ex Financials



Source: Datastream, Goldman Sachs Global Investment Research

Exhibit 31: Geographical capex exposure of European companies
STOXX 600 ex Financials



Source: Datastream, Goldman Sachs Global Investment Research

But the coronoavirus has also gone some way further, at least in the corporate sector, to raise questions about the reliability and dependence on supply chains. This pandemic is unusual because it has combined a demand shock with a supply shock in many industries. Sectors as varied as car manufacturers, pharmaceutical companies and industrial electronics manufacturers have all been affected by disrupted shipments from China. Many companies are now questioning the complexity of their supply chains and the extent to which they rely on China. Although many companies have diversified production away from China towards cheaper locations in South East Asia in recent years, many of these manufacturing plants are also dependent on China for components and other inputs.

This pattern is likely to be increasingly supported by governments. The new EU trade commissioner, Phil Cogan, in his recent statement to the EU argued:

"We need an evidence-based discussion on what it means to be strategically autonomous. For example, we need to look at how to build resilient supply chains, based on diversification, acknowledging the simple fact that we will not be able to manufacture everything locally".[4]

Of course, any localisation and diversification of supply chains would have differential effects across the corporate sector. Some local manufacturers of components would benefit, while the users might suffer from higher costs. In general, any reversal of globalisation, particularly if it takes the form of higher tariffs or costs, is likely to be a negative for corporate margins and growth.

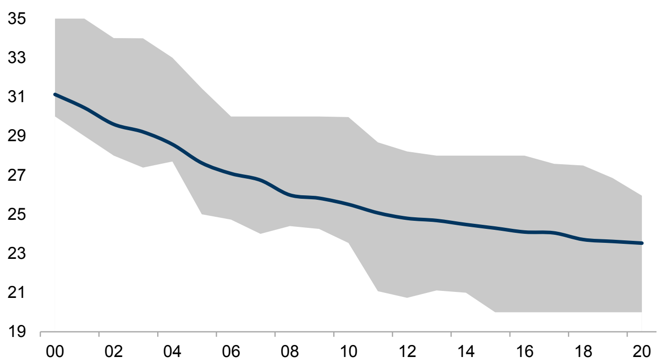
5. Lower profit margins

One of the consequences of the rising debt levels that came about as a result of the financial crisis was the adoption of tighter budget deficits or programmes of austerity. But is it realistic for governments to impose new programmes of severe austerity on their populations? This seems much less likely now, particularly because many people see that public services have been a critical part of the solution and therefore cannot be cut back, and perhaps should even be expanded.

An alternative from a budgetary control standpoint may be higher taxation, particularly on the corporate sector which has, in many countries, enjoyed sharp falls in tax burdens in recent years (Exhibit 32). This, coupled with selectively higher wages (perhaps), is likely to be negative for profit margins.

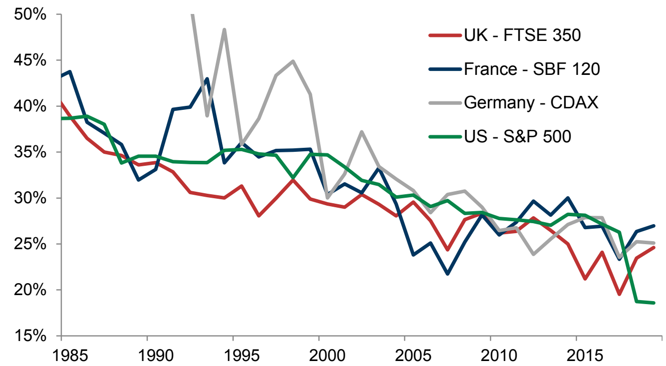
[4] See Introductory statement by Commissioner Phil Hogan at Informal meeting of EU Trade Ministers, April 16, 2020.

Exhibit 32: Average global statutory corporate income tax rate (94 jurisdictions; excluding zero-rate jurisdictions)
Shaded area: Top/Bottom tercile



Source: Haver Analytics, Goldman Sachs Global Investment Research

Exhibit 33: Effective corporate tax rate ex Oil & Gas

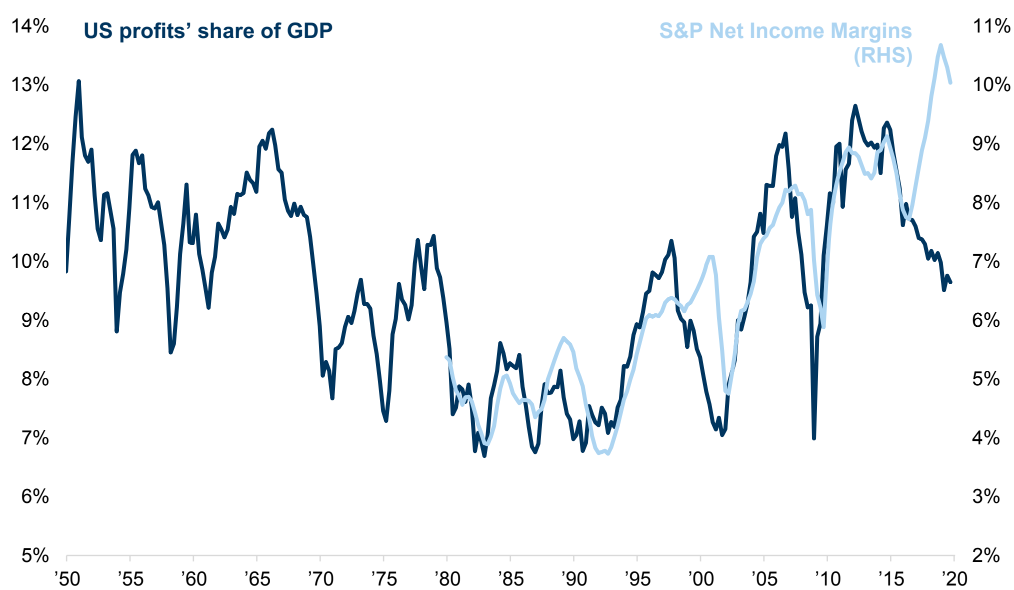


Based on the current index constituents

Source: Datastream, Goldman Sachs Global Investment Research

Over recent years, companies have enjoyed record rises in profit margins. In the US, there have already been signs in the broader national income data that profit shares of GDP were coming down. This might accelerate in the light of a change in the fiscal focus.

Exhibit 34: The US profit share of GDP has been falling, but this has not been reflected in S&P 500 net margins

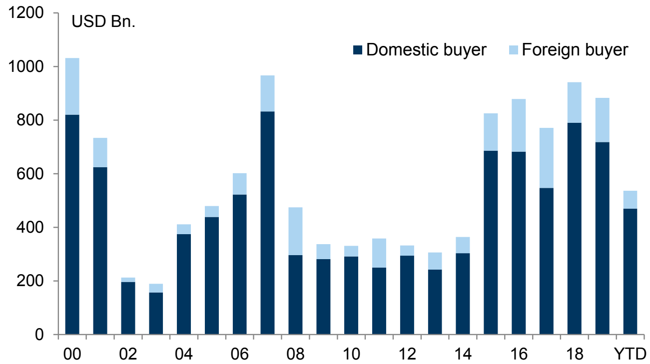


Source: Haver Analytics, Compustat, Goldman Sachs Global Investment Research

6. Competition and consolidation

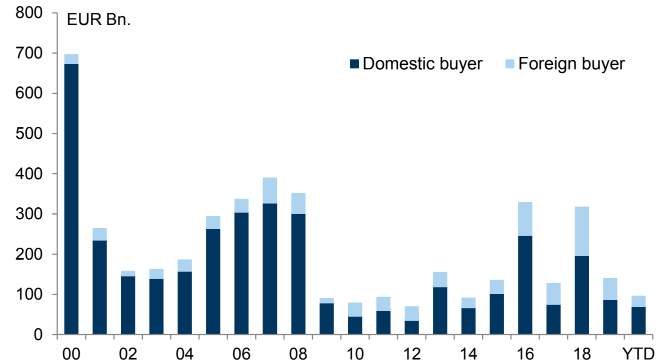
In the aftermath of the financial crisis, interest rates collapsed and credit markets grew sharply. A search for yield resulted in a boom in financing and, as a consequence, there was little capacity destruction. M&A activity remained very subdued in the years following the crisis.

Exhibit 35: US M&A activity
Target: US listed companies. M&A volumes aggregated by completion date



Source: Bloomberg, Goldman Sachs Global Investment Research

Exhibit 36: In Europe, M&A did not pick up in front of this crisis
Target: European listed companies. M&A volumes aggregated by completion date

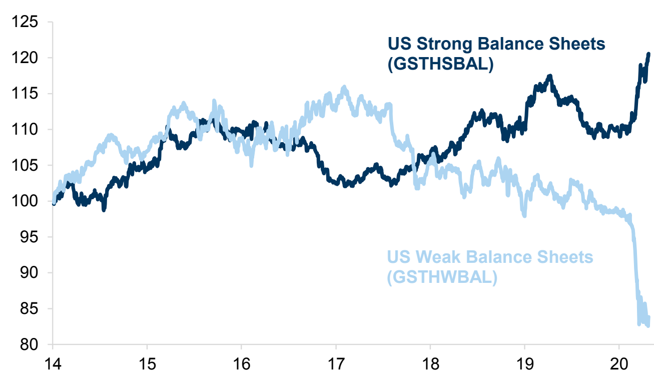


Source: Bloomberg, Goldman Sachs Global Investment Research

In the US, in particular, funds were increasingly used to buy back shares via equity for debt swaps.

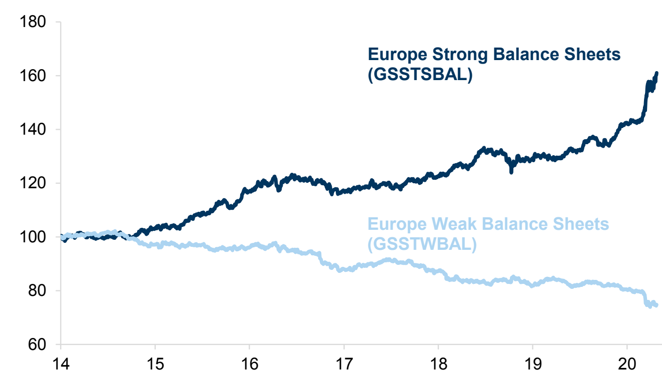
The aftermath of this crisis is likely to be different. There is likely to be more capital destruction: we see this clearly, for example, in the oil industry. But it is also likely in many industries given the cash flow impact of lockdowns. We have also seen a record higher premium for companies with strong balance sheets. This means that stronger companies are likely to be in a better position to acquire competitors and strengthen market.

Exhibit 37: US Strong and Weak Balance Sheet baskets
Relative price performance vs. S&P 500. Indexed in 2014



Source: Bloomberg, Goldman Sachs Global Investment Research

Exhibit 38: Europe Strong and Weak Balance Sheets baskets
Relative price performance vs. STOXX Europe 600. Indexed in 2014



Source: Bloomberg, Goldman Sachs Global Investment Research

7. The 'Social Contract'

The current crisis is very different from the financial crisis in many respects. But one of the 'positive' factors is that no particular sector of society or industry is responsible. Societies have pulled together in many respects to focus on the problem. But the extraordinary support given by governments is likely to mean more focus on companies being part of the solution.

Our Utitlities analysts investigated the EU Green Deal in a post-Covid world and the logic that underpins the ongoing support for "net zero" climate policies, as already widely stated by several governments and politicians. Net zero investments in renewables and power grids could amount to €2.6 trillion, they estimate, by 2050 or >€80bn pa. For their main Climate Champions, this could drive average double-digit EPS CAGRs to 2030E.

Encouragingly, there have been many examples of companies helping with innovation, drug development, healthcare systems, ensuring access to telephone capacity, and many more. Prior to this crisis there was a meaningful and increasing focus on ESG investing and it is likely that this focus will only increase following the coronavirus. In addition to the environmental focus, the emphasis on corporate responsibilities towards stakeholders, including employees and suppliers, is likely to grow. As a function of government intervention, or just moral persuasion, shareholder value in the form of share buybacks, and dividend payments may be less prioritised. This suggests that strong balance sheet 'quality' companies that have high ESG standards are likely to be increasingly valued.

Conclusions

The last bull market was characterised by four main trends:

- Rising valuations as price performance outstripped earning performance.
- The outperformance of 'growth' versus 'value'.
- The leadership of the technology sector.
- The outperformance of the US equity market relative to the rest of the world.

The next cycle, whether it becomes a strong bull market or not, is less likely to be driven by valuation expansion as interest rates are at their lower bound. But some key drivers are likely to shape the difference between relative leaders and laggards:

1. High debt levels, and low nominal growth.

2. Low levels of inflation and (at least in the near term) inflation.

3. Continued digital revolution.

4. More diversification of supply chains.

5. Downward pressure on margins.

6. Greater consolidation.

7. Greater focus on the'social contract' and ESG.

To this end, there are likely to be three investment conclusions:

1) Growth will remain scarce: growth companies will continue to prosper.

2) Income will remain scarce: sustainable dividend payers will prosper.

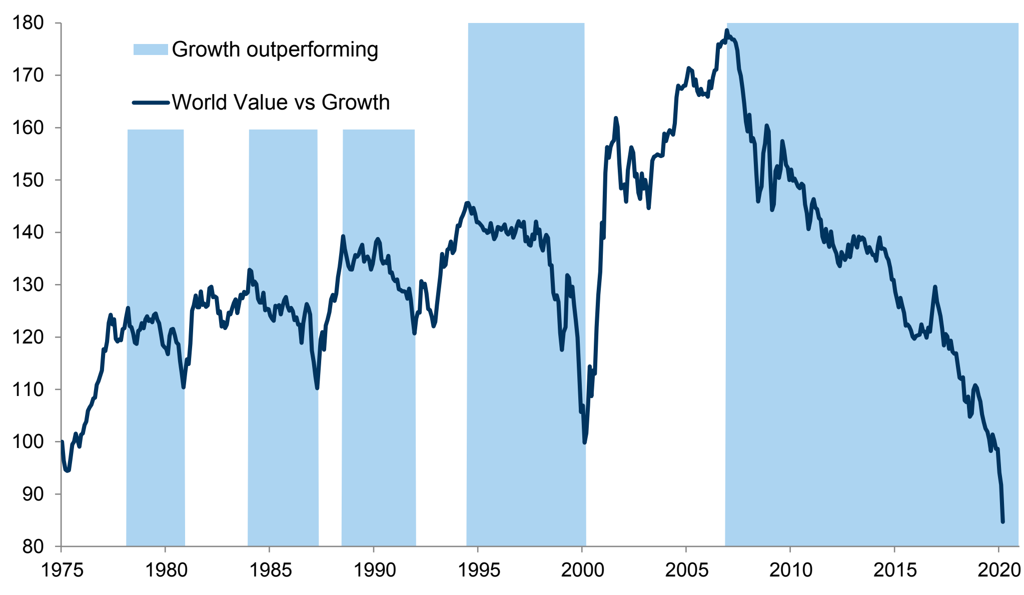
3) Debt levels will be higher: strong balance sheet companies will prosper.

In the US, this is still likely to be concentrated in the Technology space. In Europe, we think it is reflected in what we dub the GRANOLAS. The Top European companies: Glaxosmithkline, Roche, ASML, Nestle, Novartis, Novo Nordisk, L'Oreal, LVMH, Astrazeneca, SAP, Sanofi. These have relatively strong balance sheets, low volatility growth and good dividend yields, around 2%-2.5% (much higher than other asset classes).

Certainly, at a genuine inflection point in the economy we are likely to see a powerful rotation towards cyclical, high beta and weaker balance sheet companies. But, unless the underlying fundamentals of low nominal growth, bond yields and earnings change, or there is a significant challenge to the digital revolution, we would see such rotations as tactical not secular.

To this end, the continued outperformance of 'growth' versus 'value' does look set to continue. Certainly, at a genuine inflection point in the economy we are likely to see a powerful rotation towards cyclical, high beta and weaker balance sheet companies. But, unless the underlying fundamentals of low nominal growth, bond yields and earnings changes, or there is a significant challenge to the digital revolution, we would see such rotations as tactical not secular.

Exhibit 39: The continued outperformance of 'growth' versus 'value' does look set to continue
Relative price performance in local currency



Source: Datastream, Goldman Sachs Global Investment Research

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We, Peter Oppenheimer, Sharon Bell, CFA, Guillaume Jaisson and Lilia Peytavin, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

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