Great rotations

Global Investment Outlook Q4

HSBC Asset Management

Contents

Foreword

Foreword from our Chief Investment Officer

Welcome to our Global Investment Outlook. I am pleased to share our perspective on the global economy and investment markets for the months ahead.

As we navigate the final quarter of 2024, major central banks have begun their easing cycles, increasing the likelihood of a soft landing. That is keeping investor sentiment buoyant despite escalating geopolitical tensions.

Nonetheless, the global investment landscape is evolving, marked by significant shifts in leadership between prior winners – dominant US growth and tech stocks - and segments that were disregarded by investors for much of the year – value and small cap stocks, as well as emerging market assets. Initial signs of what we expect to turn into a 'great rotation' are already visible.

We have also observed a shift in risks. Upside inflation risks in developed markets have faded while recession and geopolitical risks have clearly intensified.

The global economy is now at a critical juncture, and markets must navigate through much uncertainty. For now, lower inflation prints, and subsequent rate cuts are bolstering market sentiment, although the US yield curve struggles to steepen.

Our baseline scenario remains one of a 'soft-ish landing', where the US economy should avoid a recession but may disappoint against overly-optimistic expectations. Accordingly, we anticipate phases of elevated market volatility in the months to come, as we have recently in risky assets. From an asset allocation standpoint, it underscores the importance of defensive strategies and diversification across geographies and sectors.

Amongst the legitimate candidates for diversification, emerging markets equities, driven by their lower relative valuations and idiosyncratic source of returns, certainly have a role to play. A prime example of this is China. Despite recent policy stimulus, China's equity market still lags behind, with risk premiums 15% higher than the average for all emerging markets. Similarly, fixed income markets should not be overlooked as their correlations with equities are shifting back towards zero. This enables bonds to serve as a potential hedge against equity market weakness while still delivering relatively strong yields. This is particularly true for private credit and emerging market debt – especially if the dollar weakens against emerging market currencies as assumed in our macro scenario.

With the global corporate profits picture looking significantly less lop-sided for the end of 2024 and ahead into 2025, it underlies our expectations for a 'great rotation' to drive markets ahead. As earnings growth strengthens in inexpensive areas of global markets, it is changing the relative value dynamic and presenting new considerations for investors alongside shifting risks.

Throughout the following pages, we expand on these views and delve into a variety of hot topics, including the latest advancements in AI, the challenges facing the automotive industry, and the risks associated with escalating global debt. We also share our insights on a broad spectrum of asset classes. We trust you'll find this publication both insightful and beneficial.

"We are at a pivotal point where the changing dynamics of market leadership and risk can unlock relative-value opportunities."

Xavier Baraton
Chief Investment Officer

Source: HSBC AM, October 2024. Any views expressed were held at the time of preparation and are subject to change without notice. While any forecast, projection or target where provided is indicative only and not guaranteed in any way. HSBC Asset Management accepts no liability for any failure to meet such forecast, projection or target. Diversification does not ensure a profit or protect against loss. The level of yield is not guaranteed and may rise or fall in the future.

Macro outlook and market implications

Macro outlook and market implications

Most central banks have now delivered their first rate cut, walking the fine line between controlling inflation and preventing slowing growth from tipping into a full-blown recession.

Inflation has declined substantially across a broad range of economies, with upside inflation risks in developed markets now less concerning than earlier in the year. Accordingly, the focus has shifted to growth concerns as recession risks have intensified. There has been notable regional divergence in economic strength. Growth surprises remain negative in key economies such as China and the eurozone, whereas recent US data has beaten expectations.

A soft-landing now hinges on the ability of these economies, particularly the US, to successfully navigate a deceleration in growth. The Fed's 50 basis point rate cut signals its shift to prioritising downside growth risks as pockets of weakness in the economy have emerged.

The lagged effect of monetary policy, further labour market cooling and depleted savings may cause growth to falter and pose risks to a soft landing. Even so, we think a 'softish-landing' is within reach and maintain an expectation of profits growth broadening out, with the playbook for a 'great rotation' in markets. This means we see a shift in performance from growth-oriented, large-cap equities, particularly in the US tech sector, towards more defensive, value-driven areas such as small caps, real estate, as well as non-US markets.

We also see the USD weakening as the rate cut cycle accelerates. Emerging markets will benefit the most from a structural downturn in the dollar, as their currencies strengthen and provide a tailwind to returns for foreign investors in local currency assets. China's fragile economic recovery remains important to EM indices though, and is reliant on the latest stimulus measures to address deflation risks and elevate sentiment.

In ex-US developed markets, Japan's exit from a prolonged deflationary period will be important to monitor, with the BoJ committed to a tighter monetary stance, strengthening the yen. Improving domestic demand and rising wage growth has bolstered optimism for sustained growth, which could support Japan equities.

Figure 1: Profit growth 'broadening out' (EPS growth %)

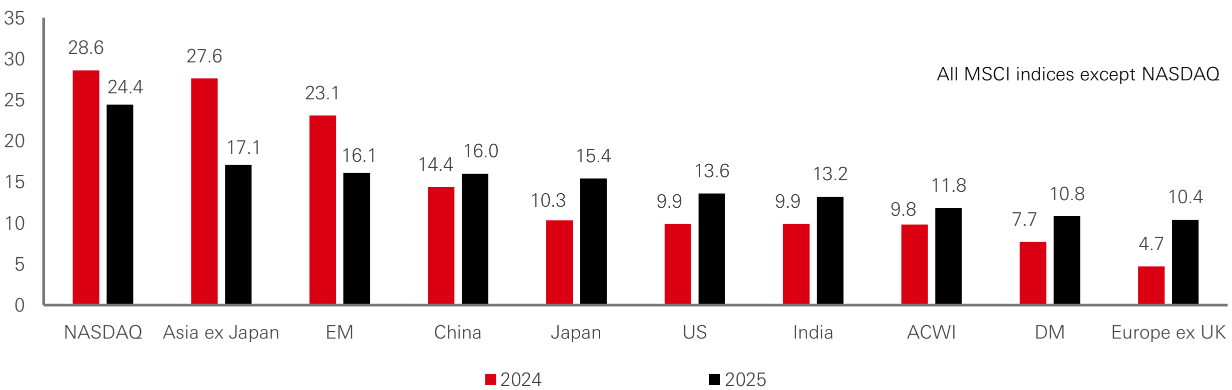
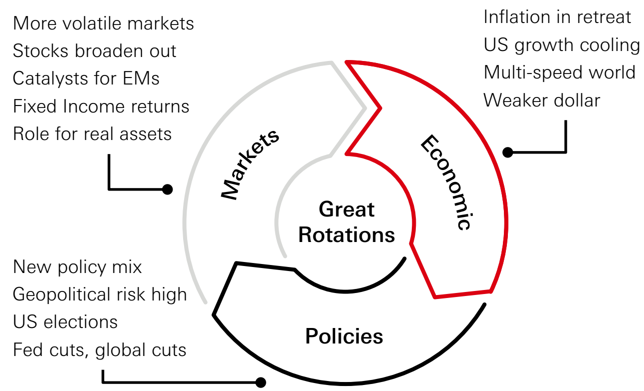


Figure 2: Great rotations



Past performance does not predict future returns.
Source: HSBC AM, Macrobond, Bloomberg, Refinitiv Datastream. Data as of September 2024. Any views expressed were held at the time of preparation and are subject to change without notice. While any forecast, projection or target where provided is indicative only and not guaranteed in any way. HSBC Asset Management accepts no liability for any failure to meet such forecast, projection or target.

Scenarios

Although inflation remains above many central bank targets, significant progress on disinflation and rate cuts by the Fed has led to increasing market confidence in a 'soft landing'.

Inflation indices are showing downside surprises across developed and emerging markets. In the US, which has been a global growth driver, inflation is in retreat but the economy is showing some signs of deceleration. With the savings rate at a 16-year low and wage growth slowing, there are concerns that consumer spending could cool, dragging down the broader economy. A softening labour market adds to this risk.

Our baseline scenario is a 'soft-ish landing', where the US economy disappoints overly-optimistic expectations. This reflects our expectation of growth dropping below trend, but amid resilient profits and falling inflation a recession is avoided. In such an environment with monetary policy being eased, this should bring rates down to a neutral range of 3-3.5% by mid-2025.

Should restrictive policy prove to be more damaging to growth, and consumer spending materially weakens, recession is possible. This leads us to our downside scenario, where inflation cools but growth contracts sharply. Yield curve indicators suggest a significant probability of US recession, but some analysts argue corporate profits, while weakening, are not collapsing, providing a buffer to growth. The path between a soft-ish and hard landing hinges on whether slowing consumer spending and rising unemployment can be managed without triggering widespread layoffs.

Conversely, the upside scenario is what we call 'the golden path' – a situation where inflation continues to decline while growth accelerates. Although factors like AI-led productivity gains or immigration-driven labour market improvements could boost growth, this scenario remains low-probability with current economic indicators.

Across these scenarios, US dollar behaviour will be noteworthy. The dollar should weaken against EM currencies in a soft-ish landing, setting the stage for a multi-year decline. However, it will strengthen if investors flock to its safe-haven status in a hard landing or be bolstered by further US economic and market leadership in a golden path.

Figure 3: Our macro scenarios

	HARD LANDING	SOFTISH LANDING	GOLDEN PATH
Stocks	SPX revisits levels last seen in early 2023 (4000-4250). But lower rates provide support	A 'great rotation' in markets – value, defensives, EM, small caps outperform. Volatility picks up	Bull market continues as EPS projections upgraded. But repricing of Fed is a headwind
Fixed income	Rates rally across the curve, curve steepens sharply. Credit spreads widen	Strong case for a 'structural steepener' of the yield curve. Private credits remain attractive	Market pricing of rates too dovish. Bonds rangebound. Credit spreads tighten
EM	EM and Asia under pressure from weaker global growth and stronger USD	EMs should benefit from a weaker USD, growth resilience and undemanding valuations	EM performance supported by strong global growth but stronger USD/more hawkish Fed limits gains
Preferences	USD, USTs, gold, CHF, macro HFs, defensive equity, momentum, highest-quality IG credits	Value/defensives > growth/cyclicals. EM/Japan > western markets. Europe > US IG > HY	Quality growth. US > EAFE. HY credits. Industrial metals. China. Crypto>gold.

Source: HSBC AM, October 2024. Any views expressed were held at the time of preparation and are subject to change without notice. While any forecast, projection or target where provided is indicative only and not guaranteed in any way. HSBC Asset Management accepts no liability for any failure to meet such forecast, projection or target.

Market implications

Until a 'soft-landing' is secured, we expect phases of elevated market volatility, a reality already reflected in the VIX. Hence, our preference is for defensive strategies and geographic and sector diversification.

Against a backdrop of uncertain global growth, several risk factors such as the upcoming US elections, increasing international tensions and high concentration in equity markets will make markets unpredictable.

We have started seeing signs in recent months of what we expect to be a 'great rotation', where previously underperforming segments will start to catch up.

This phenomenon will be primarily driven by the need to diversify beyond the dominant US growth and tech stocks, which have led the market over the past few years. We think tech valuations are starting to look stretched, particularly as interest rates remain elevated and rapid profits growth becomes more challenging.

In contrast, we see a broadening out of both earnings growth and stock market performance across laggard sectors and styles. This opens up diversification opportunities into other developed and also emerging markets equities, driven by their lower relative valuations and idiosyncratic source of returns. Furthermore, within Asia, domestically focused markets like China, India, and ASEAN – where tech has a relatively small overall sector weighting – are less reliant on external demand and also offer broad sector diversification.

Fixed income markets should be an important source of portfolio diversification, with stock-bond correlations shifting back towards zero – enabling bonds to serve as a potential hedge against equity market weakness while still delivering relatively strong yields. In a falling rate environment with much economic uncertainty, we expect government bonds may lead market gains.

We also favour private credit, with notable diversification benefits due to its floating rate nature, and emerging market local currency bonds. Several EM markets are exhibiting high real yields and inflation falling further adds to tailwinds.

Caution may be warranted in riskier credit markets, especially if the labour market cools faster than expected, impacting corporate profits and raising default risks.

Figure 4: Views per asset class (▲ Positive / ↔ Neutral / ▼ Negative bias)

Equities

Asset Class	House view
Global	↔/▼
US	↔/▼
UK	↔
Eurozone	↔
Japan	↔
Emerging markets (EM)	▲
Latam	▼
Frontier	▲

Government bonds

Asset Class	House view
Global	↔/▲
US10yr	▲
UK10yr	↔
German 10yr	▲
Japan	▼
Inflation-linked	↔
EM (local currency)	▲▲

Corporate bonds

Asset Class	House view
Global investment grade	↔/▲
USD IG	↔/▲
EUR & GBP IG	↔/▲
Asia IG	↔/▲
Global high-yield	↔/▼
US high-yield	▼
Europe high-yield	▼
Asia high-yield	↔/▲
Securitised credit	▲

Commodities, alternatives and FX

Asset Class	House view
Gold	▲
Oil	↔
Private credit	▲▲
Real assets	▲▲
Hedge funds	▲▲
Private equity	↔
US dollar	▼

Asian assets

Asset Class	House view
Pan-Asia government bonds	▲
Asia ex-Japan equities	▲
China A	▲
India	↔/▲
ASEAN	▲
Hong Kong	▲
Asia FX	▲

Source: HSBC AM, October 2024. House view represents a >12-month investment view across major asset classes in our portfolios. Views reflect our long-term expected return forecasts, our portfolio optimisation process and actual portfolio positions. These views are for general information purposes only and does not constitute advice or a recommendation to buy or sell investments. Any views expressed were held at the time of preparation and are subject to change without notice. While any forecast, projection or target where provided is indicative only and not guaranteed in any way. HSBC Asset Management accepts no liability for any failure to meet such forecast, projection or target. Diversification does not ensure a profit or protect against loss. The level of yield is not guaranteed and may rise or fall in the future.

Top of mind

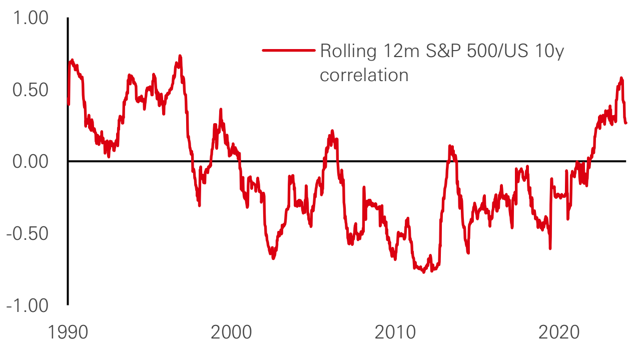
Top of mind

What are the implications of a soft landing for fixed income markets?

For fixed income, a falling rates environment means that the yield curve, which has been largely flat or inverted, would likely steepen as short-term rates decrease, while longer-term yields remain anchored by relatively higher inflation expectations. However, the 'structural steepening' of the yield curve should be modest, with lower bond yields continuing to benefit investors.

While government bonds will have lower returns compared to riskier segments, the recent market turbulence has shown that Treasuries continue to have an important role as a hedge against equity market volatility.

Figure 1: Stock-bond correlations



Source: Macrobond, Bloomberg, HSBC AM, as of August 2024.

After becoming increasingly correlated in the years since the pandemic, we see evidence of a shift in stock-bond correlations – which should benefit traditional 60/40 portfolios.

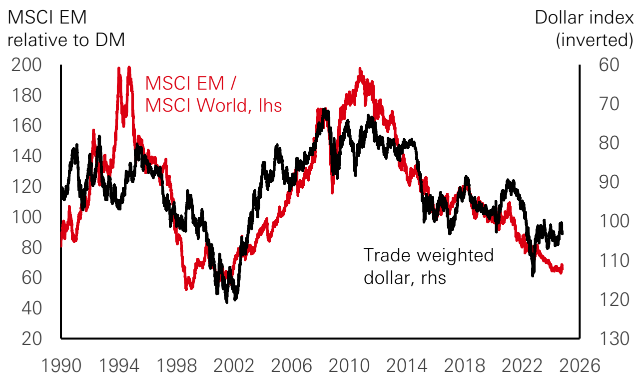
Meanwhile, investment grade and high yield credit spreads continue to trade close to historic tights despite cooling in the US economy, but high 'all in' yields means corporate credit remains potentially attractive. Overall, we think high quality fixed income, including private credits, remains an attractive asset class to own.

How does the outlook for the US dollar shape global FX dynamics?

With the Fed having begun its rate cuts, a narrowing rate differential is marking the beginning of a dollar depreciation trend. And a weaker dollar opens the door for other central banks to begin cutting rates.

We think that provides an important tailwind to emerging market economies and asset classes. Already a number of global FX markets have been performing well as conviction on Fed cuts were rising. Within the EM FX universe, Asian currencies have done particularly well, especially in ASEAN – with dollar weakness combining with local factors to boost currencies.

Figure 2: Weaker dollar can be a catalyst for emerging markets



Source: Macrobond, Bloomberg, HSBC AM, as of August 2024.

Our central scenario is for the USD to decline further as the Fed continues easing policy, benefiting EM FX which offer a yield advantage. With EM currencies looking cheap, FX appreciation would provide an important tailwind to returns for international investors in local-currency EM assets.

We note, however, that in alternative scenarios, such as a hard landing or stronger US growth, the dollar could strengthen again. This creates a 'dollar smile' outlook, with dollar weakness in our central scenario bookended by strength in a hard landing or golden path scenario (forming the smile).

How will China's latest stimulus package impact its economy and broader markets going forward?

A comprehensive set of stimulus measures were introduced, aimed at reviving economic momentum amidst a prolonged property downturn and tepid domestic growth. Although the measures are not considered a 'policy bazooka', the cumulative impact suggests a move towards more transparent and coordinated economic support. The stimulus is focused on three key areas: property market reform, monetary policy easing, and capital market liquidity boosts.

In the property market, measures such as lowering mortgage rates for existing loans and cutting the downpayment ratio for second-home purchases aim to ease financial pressure on households and stimulate housing demand. With lower mortgage interest rates, around 50 million households could benefit from savings worth CNY150 billion annually. Additionally, the People's Bank of China (PBoC) has increased funding support for property de-stocking and bolstered the capital base of state-owned banks.

Meanwhile, the PBoC cut interest rates along with the reserve requirement ratio, which will inject roughly CNY1 trillion of liquidity into the system. Capital market support measures were also announced, including a swap facility for financial firms to tap liquidity from the PBoC to buy stocks. And a new relending facility for banks is intended to support listed companies and major shareholders in carrying out stock buybacks or raising holdings.

These measures have already boosted short-term market sentiment. The immediate rally in Chinese stocks was impressive, as was the fall in bond yields — 10-year bond yields fell to 2% for the first time on record. However, fundamental changes in the economic environment will depend on further measures and coordinated stimulus.

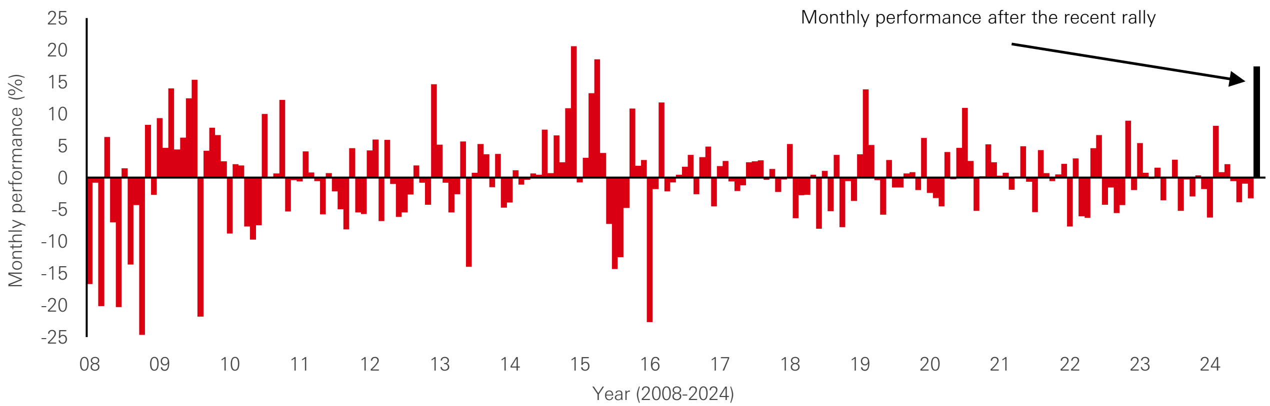
Post this rally, additional, though limited fiscal stimulus was announced, focused more on addressing risks related to local government debt, the property market and banking stability. While specifics on the size and structure of the fiscal package are still needed, the Ministry of Finance has provided clear pro-growth forward guidance. This could include a more expansionary budget for 2025, as well as a larger scale local government debt swap programme and an increase in central government bond issuance quotas.

China's stock market, which has gone through a prolonged period of underperformance relative to global peers, may now stand at an inflection point, driven by the government's renewed focus on reflating the economy. Priorities for economic transformation toward quality and innovation-led growth could create opportunities in priority areas for long-term development.

In the coming months, fiscal policy ramp-ups, particularly bond issuances to support consumption and infrastructure, are likely to play a crucial role. However, structural challenges, including digging out of the ongoing property market slump and a consumer 'confidence trap', pose important risks to the recovery.

Globally, the spillover from China's stimulus is yet to be seen. Should economic stabilisation be achieved, Asian trading partners and EM commodity exporters benefit.

Figure 3: Monthly performance of Shanghai Composite index (%)



Past performance does not predict future returns.
Source: Bloomberg, HSBC Asset Management, 1 October 2024.

Any views expressed were held at the time of preparation and are subject to change without notice. While any forecast, projection or target where provided is indicative only and not guaranteed in any way. HSBC Asset Management accepts no liability for any failure to meet such forecast, projection or target. The level of yield is not guaranteed and may rise or fall in the future.

With growth in AI adoption meaning more consumption of energy and resources, can it be sustainable?

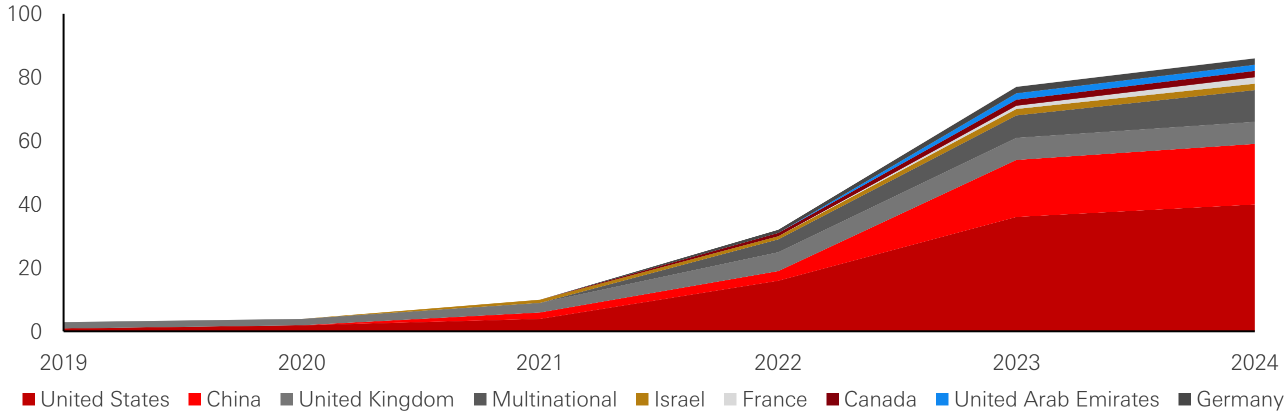
While AI has substantial promise, its evolution comes with a cost on the environment and local communities. The high energy demand of data centres supporting its development and operation contributes to more greenhouse gas emissions, while the water required to cool performance-intensive computing systems can mean less water resources for other needs.

The number of data centres has almost doubled since 2015, and by 2026, their electricity consumption could more than double to 1,000TWh - equivalent to Japan's annual electricity consumption[1]. With rapid scaling of AI, per the chart below, impacts will grow.

Accordingly, there is much debate around the long-term sustainability of resource-hungry datacentres as AI becomes a bigger part of everyday life. Conversely, the technology can also be an important enabler in the transition to net zero. Its computational power stands to play a key role in exploring new decarbonisation technologies, helping scale up existing renewable energy technologies, and facilitating environmental monitoring. This includes its ability to substantially improve predictions for energy supply and demand to optimise clean energy production and storage.

Nonetheless, AI is scaling faster than renewable energy sources, leading to potential competition for energy use between data centres, industries, and households. Balancing the water needs of data centres and other human activities is also a delicate issue.

Figure 4: Cumulative number of large-scale AI systems by country, 2019-2024



Source: Epoch (2024); Our World in Data (2023)

> "In future publications we will further explore the issue of natural resource management and the role of AI."

This is particularly the case in water-stressed areas, where droughts are being exacerbated by climate change. This year, Microsoft and Google announced investments of $4 billion to construct data centres in Malaysia. However, there and in other locations for data centre expansion, like Arizona and Jakarta, water scarcity is already an issue for their urban populations.

Innovative solutions to alleviate resource strain and support the net-zero transition are being developed. For instance, the first data centre to use hydrogen as its primary power source was announced in June. And the aforementioned progress in predicting energy supply and demand through AI-powered tools to better-manage power grids is being driven by a number of startups accessible via private markets.

From a debt perspective, investment opportunities are prevalent in infrastructure – where capital is funding not just the construction of sustainable data centres, but also infrastructure focused on supplying energy consistently to meet increasing global demand. Ultimately, a holistic approach, with capital markets support, is required to deliver the desired benefits of AI in a way that supports sustainability.

1 – Bloomberg, June 2024, International Energy Agency, 2022.Any views expressed were held at the time of preparation and are subject to change without notice. While any forecast, projection or target where provided is indicative only and not guaranteed in any way. HSBC Asset Management accepts no liability for any failure to meet such forecast, projection or target.

Navigating disruption: the automotive industry

Navigating disruption: the automotive industry

> "The automobile sector is facing up to a disruptive combination of environmental transition, cyclical headwinds, uncertain legislation and the fierce competition of Chinese manufacturers.

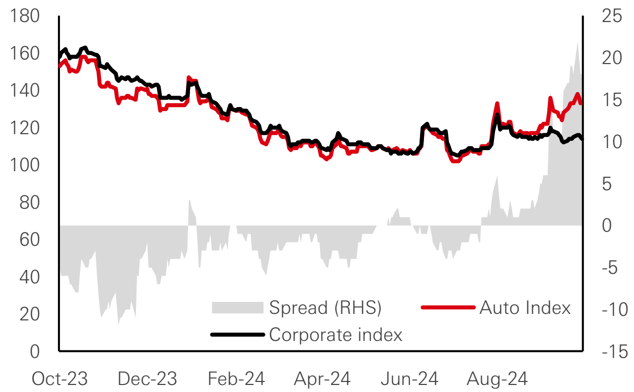
The global auto sector is entering a more difficult phase of the cycle on solid credit foundations with record operating margins and free cashflow. Nevertheless, some recent developments have been less positive than expected with most European players lowering guidance due to stretched affordability and slower economies. Spreads in the sector have widened against the market, but do not discount a recession.

The notoriously cyclical global auto sector started from a position of strong credit fundamentals as we entered a more challenging part of the cycle, which means that we are not expecting anyway near the spike in defaults we saw in the last severe recession following the Global Financial Crisis of 2008.

But there are signs that the likelihood of slower economic growth across the world is impacting affordability and demand. Lower than expected penetration of electric vehicles (EVs) in the European and US markets and higher auto loan delinquency in the US may be symptoms of a more difficult road ahead, with most European manufacturers lowering guidance, even if the US players have kept full year forecasts intact.

In terms of credit market pricing in the auto sector, a recession is certainly not discounted by current spread levels. US high yield autos trade tight as a sector to the HY market as a whole, while investment grade autos are flat to the investment grade corporate index.

Figure 1: EUR investment grade auto vs corporate spread (bps)



Source: Bloomberg, October 2024.

Euro IG autos have widened out against the market on the latest poor news, but not so much to indicate a systemic threat. We note that the sector has tended to outperform the market over history, but that drawdowns are more severe in times of stress.

Market confidence in the European auto sector has suffered in 2024 due to lower EV demand, loss of market share to China and softer guidance and profits warnings from Original Equipment Manufacturers (OEMs) and suppliers. OEMs and suppliers have also started to suffer from lower-than-expected demand of battery driven electric vehicles (BEVs), and decline in demand in Europe and China during the third quarter of 2024.

The picture was overall more positive in the US, but here too, the tone of guidance has changed with more downside risk for the rest of the year and softness in 2025. We now see the likelihood of greater stress on margins given lower volumes, with increased pricing pressure and higher incentives compared to the first half of 2024. However, given the solid credit fundamentals the US sector enjoys going into this more challenging period, we forecast a stable ratings environment.

OEMs are facing extraordinary challenges in the transition away from the internal combustion engine, with regulation incentivizing EV adoption varying across geographies and forcing manufacturers to be flexible, given the dynamic environment of fierce competition from China and shifting political agendas.

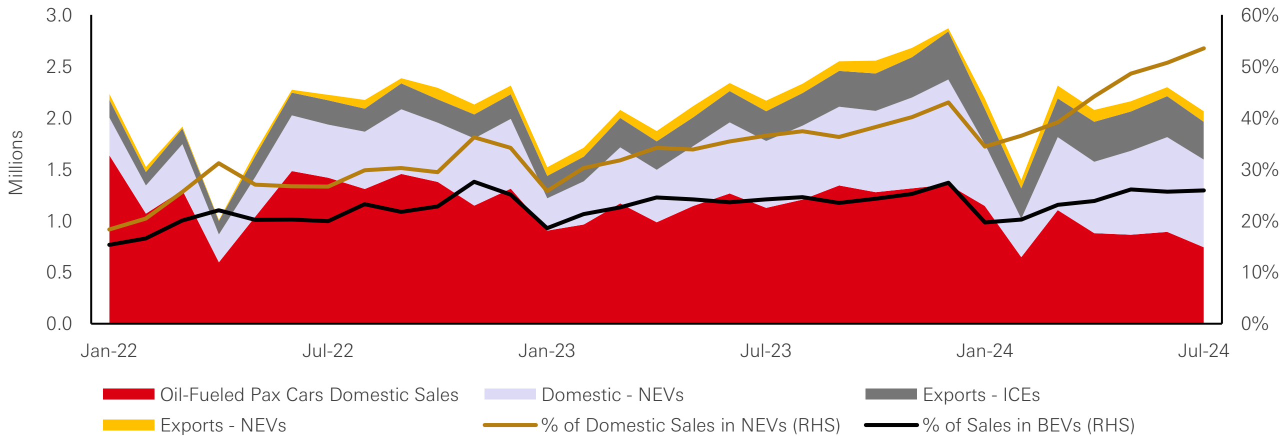
The US Inflation Reduction Act (IRA) of 2022 included measures designed to incentivize EV production in the US, through a modified set of tax credits designed to create a reliable and sustainable supply chain for cars and batteries which reduces the US auto industry's reliance on China and other countries deemed to be of concern. It essentially requires qualifying EVs to be assembled in North America with critical minerals sourced in the US or from US FTA partners. However, there have been some unintended consequences. It has significantly reduced the number of EV models eligible for tax credits (from 26 to 11 on day one), while a loophole in the legislation means that lenders who qualify for commercial EV tax credits can pass these on to end consumers through leases, even for vehicles which would not qualify via IRA. The latter favours high income households, puts further pressure on affordability, and is the kind of legislation which could be overturned by whomever wins the Presidential election.

Meanwhile, after pressure from the industry and politicians, the US CAFE (Corporate Average Fuel Economy) standards released in June 2024 were scaled back with lower fines for non-compliance than initially proposed. Indeed, the lower appetite for EV adoption, evidenced by a drop in the number of consumers considering adoption, has led to the major OEMs in the US scaling back their ambitions.

European regulators are tending to favour the 'stick' over the 'carrot' and as such are putting even more pressure on European OEMs. Regulation maintains a target of 25% Zero or Low Emission Vehicles across fleets by 2029. Failure to comply will result in hefty fines which in some cases could add up to a considerable share of free cashflow.

From the point of view of credit fundamentals, European OEMs' investment in software development will increase substantially given its pivotal role in determining the performance of BEVs. Meanwhile, BEVs tend to have low residual values due to the rapid innovation and fast obsolescence of models in the sector, which is likely to lead to increased balance sheet risks for OEMs owning captive leasing companies, given that leasing makes up an 80% share of the new BEV market in Europe.

Figure 2: China's new passenger auto sales



Source: China Association of Automotive Manufacturers, September 2024.

China is far in the lead in the race for EV domestic penetration and productivity and is posing an extreme competitive threat to western OEMs. But a fierce price war means that even in China there will be winners and losers. China has reached the milestone of over 50% of new car sales in the NEV category (New Energy Vehicle includes battery and plug-in hybrid vehicles). 2024 has seen a surge in domestic passenger NEV sales of 34% year over year, chiefly due to the popularity of plug-in hybrids with some new models now boasting ranges above 1,000 km. This has meant a cratering of ICE (internal combustion engine) domestic sales, although exports in this category have been temporarily massively boosted (+37% YoY) by the flooding of markets like Russia and South East Asia with cheap unsold inventory. NEV exports were actually flat, but steady, at around 100,000 units per month.

> "European OEMs currently face a productivity gap of around 30% compared to new Chinese entrants"

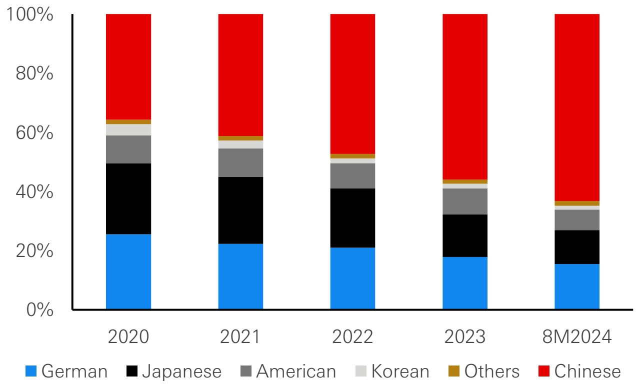
Although Chinese consumers share some of the same concerns of western car buyers, with range anxiety perhaps holding back 100% battery car sales compared to hybrids, the general attitude is quite different, with a widely held perception that NEVs are better products with more attractive features than traditional Internal Combustion Engines (ICEs). China also now has over ten million charging points, 55% of which have fast charging capability which can charge the latest batteries from 20% to 80% in 15-30 minutes, making China the most convenient large country in the world to drive a NEV.

Modular and simpler mechanical designs and an integrated battery supply chain within China allow Chinese producers to offer competitive pricing, while integration with other technologies and products appeals to a younger demographic, with domestic auto regulations allowing innovative features.

This means that foreign brands, especially German and Japanese, together with their Chinese joint venture partners, are losing out substantially to the tune of around six million units per annum. Foreign brands have taken just a 6.3% share of the NEV market so far this year.

Of the domestic players, BYD is currently in a dominant position. However, there have been around 240 auto startups in China since the beginning of the EV phenomenon, so margins are very variable and consolidation seems inevitable. Moreover, the threat of tariffs is inspiring a shift from aggressive domestic expansion to global localization (e.g. plants in Hungary, Turkey or Brazil).

Figure 3: China's new passenger car market share, by brand's country of origin



Source: China Association of Auto Manufacturers, August 2024.

There are various options open to European OEMs to counter the threat of Chinese competition, although none are straightforward, meaning that downgrade risk will be high in the coming years.

European OEMs currently face a productivity gap of around 30% compared to new Chinese entrants. Governments in the EU and US have responded with tariffs to protect their auto industries, but these measures may be circumvented as Chinese firms localise their production. Acquisition or partnership could be a potential strategy, but it brings its own challenges, particularly concerning intellectual property rights and national security, especially in the realm of software and IT infrastructure.

Inevitably, European OEMs and suppliers will have to downsize their industrial capacities. Increasing share of BEVs, which requires 30% less components than ICEs, and a partial production shift toward China, will reduce production needs in Europe. This, however, introduces execution risk. To stay competitive, there needs to be a greater emphasis on innovation and investment in improving battery technology. Moreover, a cultural shift is required. Development times must be shortened to align with those of Chinese manufacturers. Additionally, efficiency in the creation and implementation of software, a critical component of the EV offering, must be improved to ensure processes are optimised for these new technologies.

Gen AI – a look back to understand what's next

Gen AI: a look back to understand what's next

> "Generative AI is transforming how we interact with technology. For investors, longer-term implications expand far beyond today's well-known AI names."

The IT sector, perhaps more so than any other, is constantly changing. Today, the technology landscape is going through another of its reinvention phases with the rise of Generative AI.

We have witnessed many platform shifts throughout the years, with the mainframe era perhaps being the first one, starting back in the 1960s and continuing through the 80s. This was the first time that enterprise computing really came into existence, with advancements in microprocessor design and storage capacity. Rolling on through the decades and subsequent platform shifts, like the PC era, the mobile and more recently cloud era, we find ourselves in the midst of what we believe to be the next platform shift.

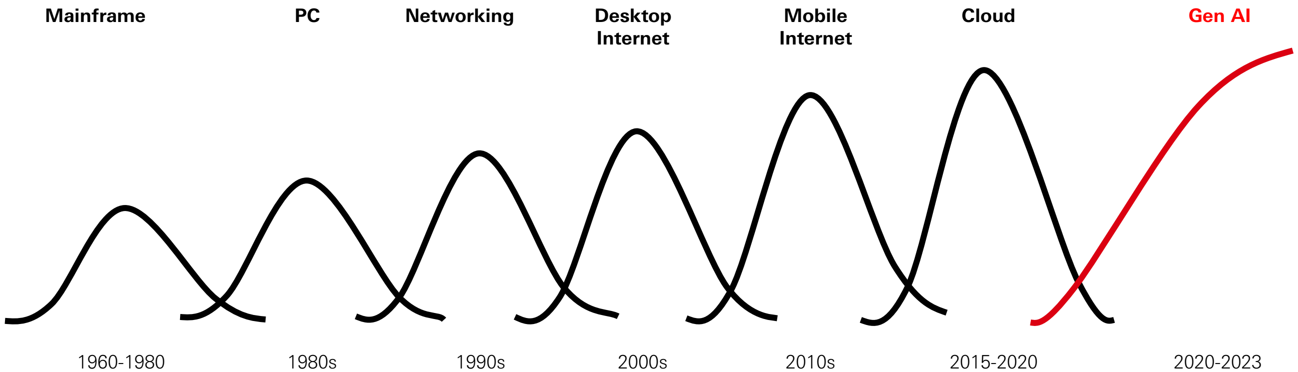
The modern understanding of AI can be traced back to Alan Turing's seminal 1950 paper, "Computing Machinery and Intelligence," which posed the question, "Can machines think?". The field of AI has since progressed significantly, primarily due to advancements in semiconductors.

In 2017, a group of researchers at Google introduced a new deep learning architecture known as the transformer model in their paper "Attention is all you need". That groundwork led to perhaps the most well-known of all these new models - the Generative Pre-Trained Transformer (GPT), of ChatGPT fame - developed by OpenAI in 2018.

This subset of AI - Generative AI - uses state of the art language models coupled with deep learning to generate natural language text. Why is this so important and why may it be a whole new technological platform shift?

In essence, this new technology is changing how we interact with technology - it has unlocked the human language. Moreover, these language models have become multi-modal and now span not just text but also video, audio, images and code. This is leading to Generative AI being applied to multiple applications and industries. Just like the other platform shifts we highlighted earlier, we think Generative AI will transform industries and create entirely new ones.

Figure 1: Platform shifts

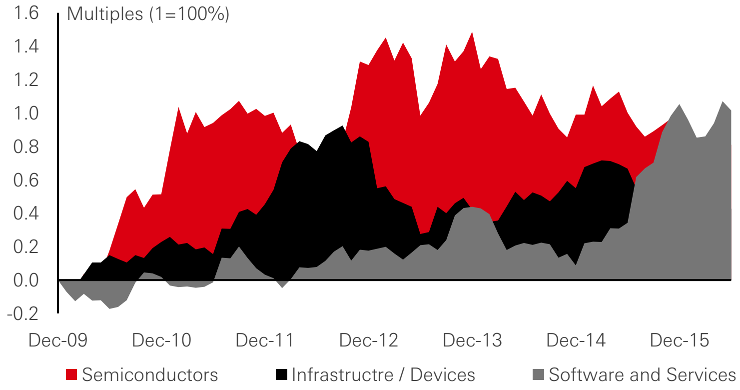


Source: HSBC Asset Management. For illustrative purposes only.

Past platform shifts tell us to expect new stock leadership ahead

Looking at historical platform shifts, such as the mobile internet cycle, can help us understand what may lie ahead. In the early days of the transition to the new mobile internet platform, there was an initial surge in the semiconductor sector. As smartphone penetration grew, infrastructure providers (i.e. handsets) like Apple and Samsung started to emerge, disrupting the market that existed at the time. Along with the growth in smartphones, we started to see the development of an app economy - the software and service element, and in particular social media and ecommerce, that we all use today. The latter two segments have created some of the largest companies in the world, namely Amazon and Google.

Figure 2: Mobile internet cycle stock performance (relative to S&P 500)



Past performance is not an indicator of future returns.
Source: HSBC AM, Morgan Stanley Research, Refinitiv. Data at 31 December 2016. Semiconductors represented by Qualcomm & ARM. Infrastructure / devices represented by Apple & Samsung. Software & Services represented by Google & Amazon.

"Higher barriers to entry mean semiconductor sector returns may not fade as easily as they did previously."

So, why did stock return leadership change between these three areas of semiconductors, infrastructure and software? For the first two areas, competition started to dilute margins and the penetration of handsets started to limit growth – there are only so many handsets a user can own. Software though was different, in that whole new monetisation opportunities were created, disrupting other industries – think ecommerce disrupting physical stores, streaming of media disrupting linear TV, etc.

The question is whether history will repeat itself and whether ultimately, software will again take the lion's share of investment returns as it did previously. While the semiconductor industry is currently benefitting from a flood of investment driven by the training needs of Generative AI models, impacts for the software sector are still in early stages.

The semiconductor sector has seen significant growth over the past 18 months, reminiscent of the mobile internet cycle. However, industry dynamics have evolved. Competition may not erode sector returns to the same extent. The increasing complexity and cost of manufacturing semiconductors at scale have raised barriers to entry, leading to industry consolidation. This has resulted in more disciplined investment across the industry and higher margins.

The DRAM market, a component of the memory semiconductor industry, illustrates this point. In 2005, the market was highly competitive, with over 15 players competing on price. Over the years, this has dwindled down to just three. As of last year, Samsung Electronics, SK Hynix, and Micron Technology have a combined market share in DRAM of ~97%. This suggests significant barriers to entry and low competition within the DRAM market.

This consolidation effect is also visible in other areas of the semiconductor market, driven in part by the constant drive to shrink - or the drive to continue pushing Moore's Law. This 'law' is a prediction made by Gordon Moore (co-founder of Fairchild Semiconductor and Intel) back in 1965. His observation was that the number of transistors on a microchip would double about every two years with a minimal cost increase. While this minimal increase might be true at the microchip level, the capex cost to leading manufacturers, such as TSMC, has significantly increased. This inevitably creates a huge barrier for any new company to enter the leading-edge area of the semiconductor market.

Using the US semiconductor sector index as a proxy, the trough of operating margin over the past 20 years is getting higher and higher. This could mean that the sector will accrue more of the benefits during this platform shift.

Still early stages for software

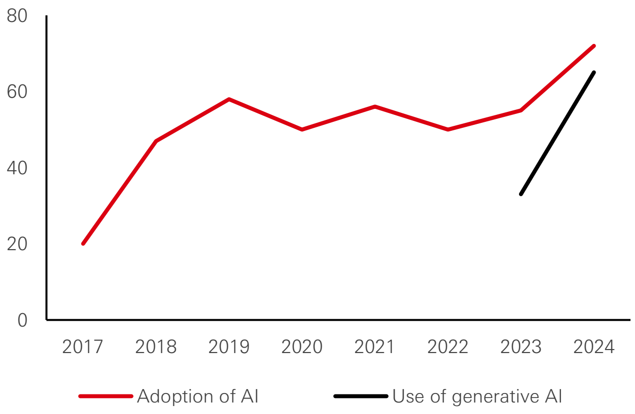
When we look at software, it's clear that nobody envisaged the changes that the mobile app economy would bring. Parallels are being drawn today regarding the build-out of AI infrastructure. But are there differences now? It is complex for an Enterprise to build a scalable and sustainable architecture for Generative AI, requiring careful planning, investment and time. The first step is to consider the problem they want Gen AI to solve. Can the problem be solved externally through 3rd party software providers, or can it be solved internally - do they buy or do they build?

Generative AI requires large amounts of data to train models effectively, so it is critical to have the right data infrastructure. Many enterprises are turning to cloud-based solutions for scalable and easy access to AI models, leading to impressive revenue growth for the main cloud providers. However, the early stages of Generative AI use in enterprises are unique, with no standard deployment or architecture, making standardized software difficult to deploy. It could be argued that much of the success of the software sector in the Cloud platform era was due to the standardized nature of the platform it was built on. This enabled its rapid expansion.

There appears to be little question that we are going through a technological platform shift with the rise of Generative AI. It has sparked a flood of investment, primarily into the semiconductor sector for the reconfiguration and build out of new data centres to handle the training and querying of these new models. The current semiconductor phase is being driven by the training aspect of these foundational AI models, where computational power is primacy – training trillions of tokens is a very intensive computational process.

This is computation at the leading edge and only a very few have the silicon necessary to do this, explaining why equity performance in the sector has been so narrow. As Generative AI matures and a greater number of use cases go into production – with rapidly growing adoption by organisations (figure 5) supporting this expectation – the inference side of the equation becomes more important.

Figure 3: Organisations that have adopted AI in at least one business function (% of respondents)



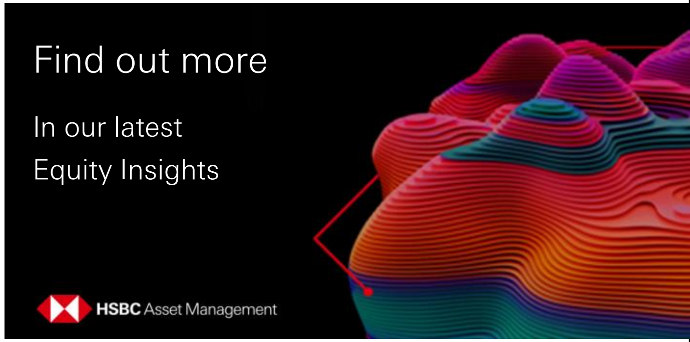
Source: Mckinsey & Company, May 2024

AI inference (conclusions or predictions based on given data sets) will certainly be at the heart of AI applications going forward. The performance requirements for inference are lower and cost efficiency becomes a key driver. When we couple this with model improvements, the cost of compute is getting lower, and thus expectations are for a rise in competition via private companies or AI service providers developing their own custom silicon - leading to a broadening out of the equity return landscape.

Enterprises need a strong digital core to really benefit from Gen AI and undergo a process of digital transformation. Companies within the IT service sector stand to benefit by helping enterprises navigate this digital transformation process. This extends beyond software behemoths such as Microsoft, to smaller players that can deliver specialised software to meet functional needs across industries.

Like many parts of the software sector, the IT Service sector has lagged the broader equity market this year, with economic concerns overriding the nascent growth we are seeing from Generative AI associated revenue. With visibility now on the horizon for the direction of US interest rates and spending indications for software and IT services looking to be improving, we view the recent lows as being the trough.

Questions remain over how this platform shift embraces the consumer, though we can see some emerging benefits of having Generative AI installed on our edge devices. What is clear is that software and IT services will ultimately have to play a leading role in delivering AI capabilities broadly to organisations and consumers, if adoption is to reach levels sufficient to support today’s infrastructure investments.



Perils of a rising global debt burden

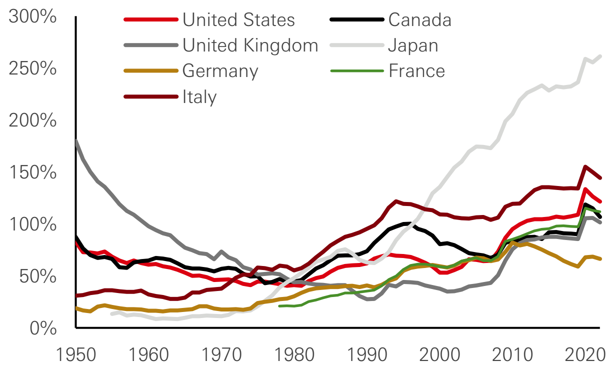
Perils of a rising global debt burden

> "Government debt has been on a steady march upwards since the 1970s."

Before the 1950s, economies were more prone to severe periods of boom and bust. Thereby, excesses built up during high growth periods were typically eliminated during downturns. Governments, especially after the Great Depression, recognized the need to mitigate these fluctuations which were unpredictable and often extreme. Measures such as deposit and unemployment insurance were introduced, with increased public spending cushioning the economy in downturns. This meant more stable growth but also allowed excesses to accumulate, leading to higher levels of public, but notably private debt.

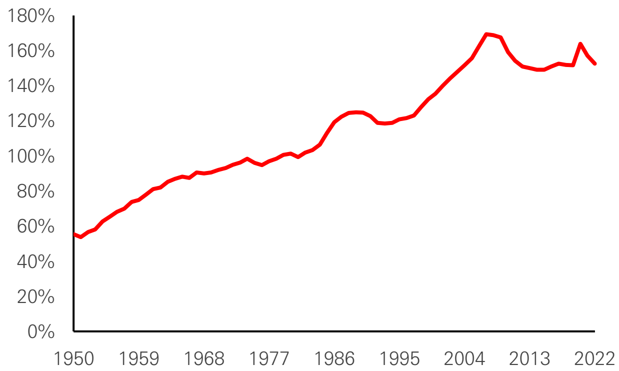
This continued over the years, with massive policy interventions in the early 2000s preventing a severe recession but also contributing to the housing bubble. When the bubble burst it marked an inflection point, leading to a major transition from private to public debt. This initiated a new phase in the global economy, with governments taking on more debt to stimulate growth and stabilize economies.

Figure 1: Government debt as a % of GDP



Source: HSBC AM, IMF, BCA, Bloomberg, August 2024.

Figure 2: Private sector debt as a % of GDP



Source: HSBC AM, IMF, BCA, Bloomberg, August 2024.

While private debt is constrained by household and business income, public debt operates under different parameters. Governments, supported by central banks, can accumulate significantly higher levels of debt for instance, with the understanding that central banks act as lenders of last resort. However, there is a limit for governments too. Investor confidence plays a critical role — when confidence in a government's ability to service its debt erodes, yields on government bonds rise, and borrowing costs soar, potentially leading to a fiscal crisis.

Two case studies provide contrasting illustration of countries managing or mismanaging high levels of debt in the face of fiscal crisis.

Case study: Canada

In the 1970s and 1980s, Canada consistently ran budget deficits, leading to high debt-to-GDP ratios by the early 1990s. A recession exacerbated the situation, with rising interest payments consuming nearly a third of government revenues. This fiscal strain led to a loss of investor confidence, forcing the Canadian government to implement drastic budget cuts alongside tax reforms to increase revenues. While austerity measures were painful, they successfully restored investor confidence and returned Canada to long-term economic stability.

Case study: Greece

In contrast, Greece's experience was far more tumultuous. The introduction of the Euro in 2001 allowed Greece to borrow at lower interest rates, leading to persistently high budget deficits. By 2009, Greece's debt-to-GDP ratio skyrocketed to over 140%, and revelations about misreported fiscal deficits further eroded investor confidence.

Greece was eventually cut off from international capital markets, prompting the European Central Bank and the International Monetary Fund to step in with bailout packages. However, the accompanying austerity measures led to a deep recession, skyrocketing unemployment, and significant social unrest.

Analysing trends in debt accumulation

Across developed economies today, rising debt levels have become the norm. In Japan, the debt-to-GDP ratio now exceeds 250%, while the US has seen its debt level rise from around 50% of GDP two decades ago to over 100% today. The EU has fared a little better, managing to keep its debt levels slightly below 100%.

Implications of today's higher debt levels can be analysed through a few metrics.

1. Net interest payments

This is defined as the interest that a government must pay to service its debt, minus what is received on its financial assets. All else equal, as debt levels increase, so too do the costs of servicing that debt.

However, over the last decade, the EU and Japan have seen decreases in their net interest payments, mainly due to the interest rate policies of their respective central banks. In the US, interest payments had remained relatively stable. However, much higher rates since the COVID-19 pandemic sent interest payments skyrocketing, leading to rating downgrades.

2. Primary balance

This is a simple measure of government revenues minus expenditures. With interest payments on debt excluded, it shows the fiscal discipline of a government—whether it is operating within its means or relying heavily on borrowing to cover spending.

Both the US and Japan have traditionally had negative primary balances, meaning that their expenditures exceeded revenues even before factoring in interest payments. This has resulted in steadily increasing debt levels, leading to concerns about long-term fiscal sustainability.

The EU has shown more mixed performance. Its primary balance oscillates between positive and negative figures, demonstrating some capacity to stabilise debt over time.

3. General government expenditures

As part of smoothing economic cycles, government expenditure as a percentage of GDP tends to fluctuate during economic crises. The real difficulty in managing debt levels arises when governments are unable to cut expenditures after the crisis. This leads to entrenched debt, making it hard for economies to bring down their debt-to-GDP ratios without enacting painful fiscal adjustments.

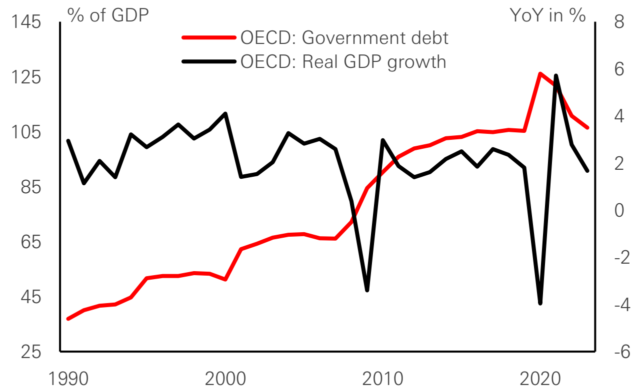
While the EU has consistently exhibited high government spending relative to GDP, often around 50%, it has managed to stabilise and even cut back its spending after downturns during which the government has stepped in to replace private demand. This more integrated state-driven approach contrasts with countries like the US, where despite lower spending relative to output, more government debt and a greater interest burden has mounted.

Potential risks from high indebtedness

1. Impact on economic growth

A critical question that arises when examining public debt is whether high debt levels impede economic growth. Some economists argue that rising public debt inevitably reduces long-term growth by increasing the burden of debt servicing, crowding out private investment, or leading to higher taxes.

Figure 3: Growth rates amid a rise in sovereign debt



Source: HSBC AM, OECD, August 2024.

Any views expressed were held at the time of preparation and are subject to change without notice. While any forecast, projection or target where provided is indicative only and not guaranteed in any way. HSBC Asset Management accepts no liability for any failure to meet such forecast, projection or target.

'Crowding out' private investment is one of the most widely discussed risks associated with rising public debt. As governments borrow more, they compete with the private sector for capital, driving up interest rates and making it more expensive for businesses to invest.

However, recent empirical studies suggest that the relationship between public debt and growth is not as straightforward as once thought. While high debt levels can reduce growth in some cases, the reverse is also true: strong economic growth can help reduce debt levels by expanding the tax base and increasing revenues.

2. The sovereign-bank nexus

Another risk associated with rising public debt is the so-called 'sovereign-bank nexus', where sovereign debt and banking risks become tightly interlinked. Banks hold significant quantities of government bonds, and in some cases, governments provide explicit or implicit guarantees to banks. This relationship can create a feedback loop, where problems in the banking sector spill over into the sovereign sector, and vice versa.

This relationship can pose problems even with non-domestic sovereign risks, as was seen during the European sovereign debt crisis. Italian banks were significantly impacted by their exposure to Greek sovereign bonds, ahead of Italian sovereign debt strains. This ultimately reduced the flow of credit to businesses and exacerbated the economic downturn.

To mitigate this risk, central banks have implemented 'asset purchasing programs' to lower the correlation between sovereign and banking risks. However, with central banks now engaging in quantitative tightening, there are concerns that this delicate balance could be disrupted, leading to renewed pressure on both sovereign debt markets and the banking sector.

Addressing rising indebtedness

Governments have two main tools to reduce their debt-to-GDP ratios: running primary surpluses' or boosting economic growth. Pivoting to a surplus means a government must increase revenues significantly. This is challenging without raising taxes, which reduces disposable income and savings.

Alternatively, governments can attempt to increase their potential economic growth rate by creating a conducive environment through sound macroeconomic policies and structural reforms. However, fostering such growth is not always easy, particularly for economies with already low potential growth rates, such as Italy, where the potential growth rate hovers around a meagre 0.5%.

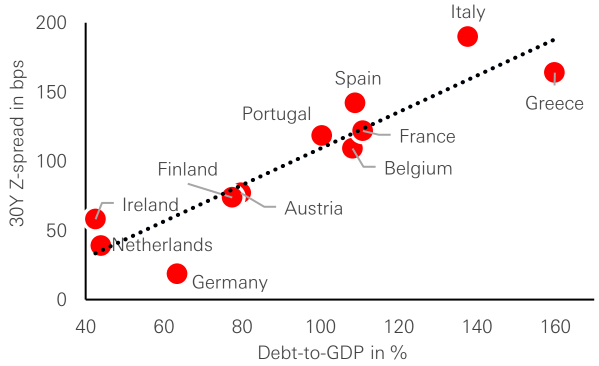
Governments have a few other options such as 'inflating away' debt by reducing the real value of government liabilities, and selling financial assets to raise cash. Both measures come with significant risks, like inflation becoming unanchored, which harms growth, and a finite pool of assets to sell.

There is no one-size-fits-all solution, but a combination of fiscal discipline, structural reforms, and sound macroeconomic policies are required for countries to reduce their debt burdens and ensure long-term economic stability.

Sovereign bond market challenges

Amid rising government debt levels, a potential demand-supply mismatch must be considered for sovereign bonds. The relative steepening in bond yield curves versus interest rate swaps, in the US and Eurozone, may indicate a growing duration aversion. Cheapening government bonds relative to swaps have coincided with ratings downgrades and notable rises in government debt, particularly in the US and France.

Figure 4: European bonds reflect sovereign indebtedness



Source: HSBC AM, Bloomberg, August 2024.

In the Eurozone, there appears to be a clear relationship between rising sovereign debt levels and widening bond spreads. Yet, lowering debt through austerity measures – like reduced public spending – especially when deficits are driving growth, could have detrimental effects, as seen in the Eurozone post-2010. If governments start running surpluses, the private sector – which has been a net lender - may not spend enough to sustain economic momentum. This not only risks undermining equity returns but also destabilising debt markets.

Important information

Important information

For Professional Clients and intermediaries within countries and territories set out below; and for Institutional Investors and Financial Advisors in the US. This document should not be distributed to or relied upon by Retail clients/investors.

The value of investments and the income from them can go down as well as up and investors may not get back the amount originally invested. The performance figures contained in this document relate to past performance, which should not be seen as an indication of future returns. Future returns will depend, inter alia, on market conditions, investment manager’s skill, risk level and fees. Where overseas investments are held the rate of currency exchange may cause the value of such investments to go down as well as up. Investments in emerging markets are by their nature higher risk and potentially more volatile than those inherent in some established markets. Economies in Emerging Markets generally are heavily dependent upon international trade and, accordingly, have been and may continue to be affected adversely by trade barriers, exchange controls, managed adjustments in relative currency values and other protectionist measures imposed or negotiated by the countries and territories with which they trade. These economies also have been and may continue to be affected adversely by economic conditions in the countries and territories in which they trade.

The contents of this document may not be reproduced or further distributed to any person or entity, whether in whole or in part, for any purpose. All non-authorised reproduction or use of this document will be the responsibility of the user and may lead to legal proceedings. The material contained in this document is for general information purposes only and does not constitute advice or a recommendation to buy or sell investments. Some of the statements contained in this document may be considered forward looking statements which provide current expectations or forecasts of future events. Such forward looking statements are not guarantees of future performance or events and involve risks and uncertainties. Actual results may differ materially from those described in such forward-looking statements as a result of various factors. We do not undertake any obligation to update the forward-looking statements contained herein, or to update the reasons why actual results could differ from those projected in the forward-looking statements. This document has no contractual value and is not by any means intended as a solicitation, nor a recommendation for the purchase or sale of any financial instrument in any jurisdiction in which such an offer is not lawful. The views and opinions expressed herein are those of HSBC Asset Management at the time of preparation, and are subject to change at any time. These views may not necessarily indicate current portfolios' composition. Individual portfolios managed by HSBC Asset Management primarily reflect individual clients' objectives, risk preferences, time horizon, and market liquidity. Foreign and emerging markets. Investments in foreign markets involve risks such as currency rate fluctuations, potential differences in accounting and taxation policies, as well as possible political, economic, and market risks. These risks are heightened for investments in emerging markets which are also subject to greater illiquidity and volatility than developed foreign markets. This commentary is for information purposes only. This document provides a high level overview of the recent economic environment. It is a marketing communication and does not constitute investment advice or a recommendation to any reader of this content to buy or sell investments nor should it be regarded as investment research. It has not been prepared in accordance with legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of its dissemination. This document is not contractually binding nor are we required to provide this to you by any legislative provision.

All data from HSBC Asset Management unless otherwise specified. Any third party information has been obtained from sources we believe to be reliable, but which we have not independently verified.

HSBC Asset Management is the brand name for the asset management business of HSBC Group, which includes the investment activities that may be provided through our local regulated entities. HSBC Asset Management is a group of companies in many countries and territories throughout the world that are engaged in investment advisory and fund management activities, which are ultimately owned by HSBC Holdings Plc. (HSBC Group). The above communication is distributed by the following entities:

- In Argentina by HSBC Global Asset Management Argentina S.A., Sociedad Gerente de Fondos Comunes de Inversión, Agente de administración de productos de inversión colectiva de FCI N° 1;
- In Australia, this document is issued by HSBC Bank Australia Limited ABN 48 006 434 162, AFSL 232595, for HSBC Global Asset Management (Hong Kong) Limited ARBN 132 834 149 and HSBC Global Asset Management (UK) Limited ARBN 633 929 718. This document is for institutional investors only, and is not available for distribution to retail clients (as defined under the Corporations Act). HSBC Global Asset Management (Hong Kong) Limited and HSBC Global Asset Management (UK) Limited are exempt from the requirement to hold an Australian financial services license under the Corporations Act in respect of the financial services they provide. HSBC Global Asset Management (Hong Kong) Limited is regulated by the Securities and Futures Commission of Hong Kong under the Hong Kong laws, which differ from Australian laws. HSBC Global Asset Management (UK) Limited is regulated by the Financial Conduct Authority of the United Kingdom and, for the avoidance of doubt, includes the Financial Services Authority of the United Kingdom as it was previously known before 1 April 2013, under the laws of the United Kingdom, which differ from Australian laws;
- in Bermuda by HSBC Global Asset Management (Bermuda) Limited, of 37 Front Street, Hamilton, Bermuda which is licensed to conduct investment business by the Bermuda Monetary Authority;
- in Chile: Operations by HSBC's headquarters or other offices of this bank located abroad are not subject to Chilean inspections or regulations and are not covered by warranty of the Chilean state. Further information may be obtained about the state guarantee to deposits at your bank or on www.sbif.cl;

- in Colombia: HSBC Bank USA NA has an authorized representative by the Superintendencia Financiera de Colombia (SFC) whereby its activities conform to the General Legal Financial System. SFC has not reviewed the information provided to the investor. This document is for the exclusive use of institutional investors in Colombia and is not for public distribution;

- in Finland, Norway, Denmark and Sweden by HSBC Global Asset Management (France), a Portfolio Management Company authorised by the French regulatory authority AMF (no. GP99026) and through the Stockholm branch of HSBC Global Asset Management (France), regulated by the Swedish Financial Supervisory Authority (Finansinspektionen);

- in France, Belgium, Netherlands, Luxembourg, Portugal, Greece by HSBC Global Asset Management (France), a Portfolio Management Company authorised by the French regulatory authority AMF (no. GP99026);

- in Germany by HSBC Global Asset Management (Deutschland) GmbH which is regulated by BaFin (German clients) respective by the Austrian Financial Market Supervision FMA (Austrian clients);

- in Hong Kong by HSBC Global Asset Management (Hong Kong) Limited, which is regulated by the Securities and Futures Commission. This video/content has not be reviewed by the Securities and Futures Commission;

- in India by HSBC Asset Management (India) Pvt Ltd. which is regulated by the Securities and Exchange Board of India;

- in Italy and Spain by HSBC Global Asset Management (France), a Portfolio Management Company authorised by the French regulatory authority AMF (no. GP99026) and through the Italian and Spanish branches of HSBC Global Asset Management (France), regulated respectively by Banca d'Italia and Commissione Nazionale per le Società e la Borsa (Consob) in Italy, and the Comisión Nacional del Mercado de Valores (CNMV) in Spain;

- in Malta by HSBC Global Asset Management (Malta) Limited which is regulated and licensed to conduct Investment Services by the Malta Financial Services Authority under the Investment Services Act;

- in Mexico by HSBC Global Asset Management (Mexico), SA de CV, Sociedad Operadora de Fondos de Inversión, Grupo Financiero HSBC which is regulated by Comisión Nacional Bancaria y de Valores;

- in the United Arab Emirates, Qatar, Bahrain & Kuwait by HSBC Global Asset Management MENA, a unit within HSBC Bank Middle East Limited, U.A.E Branch, PO Box 66 Dubai, UAE, regulated by the Central Bank of the U.A.E. and the Securities and Commodities Authority in the UAE under SCA license number 602004 for the purpose of this promotion and lead regulated by the Dubai Financial Services Authority. HSBC Bank Middle East Limited is a member of the HSBC Group and HSBC Global Asset Management MENA are marketing the relevant product only in a sub-distributing capacity on a principal-to-principal basis. HSBC Global Asset Management MENA may not be licensed under the laws of the recipient's country of residence and therefore may not be subject to supervision of the local regulator in the recipient's country of residence. One of more of the products and services of the manufacturer may not have been approved by or registered with the local regulator and the assets may be booked outside of the recipient's country of residence.

- in Peru: HSBC Bank USA NA has an authorized representative by the Superintendencia de Banca y Seguros in Perú whereby its activities conform to the General Legal Financial System - Law No. 26702. Funds have not been registered before the Superintendencia del Mercado de Valores (SMV) and are being placed by means of a private offer. SMV has not reviewed the information provided to the investor. This document is for the exclusive use of institutional investors in Perú and is not for public distribution;

- in Singapore by HSBC Global Asset Management (Singapore) Limited, which is regulated by the Monetary Authority of Singapore. The content in the document/video has not been reviewed by the Monetary Authority of Singapore;

- in Switzerland by HSBC Global Asset Management (Switzerland) AG. This document is intended for professional investor use only. For opting in and opting out according to FinSA, please refer to our website; if you wish to change your client categorization, please inform us. HSBC Global Asset Management (Switzerland) AG having its registered office at Gartenstrasse 26, PO Box, CH-8002 Zurich has a licence as an asset manager of collective investment schemes and as a representative of foreign collective investment schemes. Disputes regarding legal claims between the Client and HSBC Global Asset Management (Switzerland) AG can be settled by an ombudsman in mediation proceedings. HSBC Global Asset Management (Switzerland) AG is affiliated to the ombudsman FINOS having its registered address at Talstrasse 20, 8001 Zurich. There are general risks associated with financial instruments, please refer to the Swiss Banking Association ("SBA") Brochure "Risks Involved in Trading in Financial Instruments";

- in Taiwan by HSBC Global Asset Management (Taiwan) Limited which is regulated by the Financial Supervisory Commission R.O.C. (Taiwan);

- in the UK by HSBC Global Asset Management (UK) Limited, which is authorised and regulated by the Financial Conduct Authority;

- and in the US by HSBC Global Asset Management (USA) Inc. which is an investment adviser registered with the US Securities and Exchange Commission.

- In Uruguay, operations by HSBC's headquarters or other offices of this bank located abroad are not subject to Uruguayan inspections or regulations and are not covered by warranty of the Uruguayan state. Further information may be obtained about the state guarantee to deposits at your bank or on www.bcu.gub.uy.

NOT FDIC INSURED ◆ NO BANK GUARANTEE ◆ MAY LOSE VALUE

Content ID: D031536_V1.0 Expiry date: 30.09.2025.