The roar is getting a little louder

Assessing the “Roaring ‘20s” outlook for the US economy

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Executive summary

A "Roaring '20s" macro regime for the US is very much in play. Such a regime has become more plausible with growth far exceeding expectations over the past year. When we asked whether [another Roaring '20s for the US]was possible our conclusion was that it hinged on the supply side of the economy. That is still true and the case for this outcome is at least as strong as it was in 4Q23 based on subsequent developments.

Current US economic performance is consistent with a Roaring '20s macro regime... Our criteria for this outcome is a decade with GDP growth averaging 2.5% or better; inflation of 2-3%; 10-year Treasury yield around 4%; and the Federal funds rate at 3–4%. In essence, it requires annual nominal GDP growth of 5-6%. Nearly halfway through 2024 and the 2020s US economic conditions are still in line with these criteria.

...but this economic strength mostly reflects cyclical factors, not yet structurally higher growth. An unexpected increase in immigration that significantly boosted labor supply over the past year and a half has lifted growth. The growth impulse from fiscal legislation passed two years ago was also stronger than expected in 2023. This stimulative effect is likely to fade in 2024, while the labor supply boost could also soon dissipate.

A sustained Roaring '20s regime hinges on continued positive supply side developments. Pandemic supply disruptions are largely over, but other supply issues will dominate this decade, whether labor, capital, or technological in nature. Over the long term, growth is a function of labor and capital inputs, and productivity gains. A Roaring '20s requires the capital contribution (K) and productivity gains (A) to be nearly comparable to their 1990s levels.

Two of the four supply megatrends—capex boom and AI—are most relevant for a Roaring '20s. A capex boom due to prior underinvestment and the need to substitute capital for scarce labor and AI being deployed across industries are necessary to drive productivity gains required for a Roaring '20s, but that outcome is highly uncertain. The green energy transition and security and deglobalization megatrends both require substantial investment, but they should have a neutral to mildly negative productivity impact.

Our "roar score" for capital, labor, and productivity factors is a gauge for the Roaring '20s likelihood. We map developments in the supply megatrends to these three factors and then track capital investment, labor supply, AI deployment, business dynamism, and productivity gains to determine whether they're at sufficient levels to support a Roaring '20s regime.

Assessment: A Roaring '20s regime is marginally more likely than it was in 4Q23, but it's still the bull case. The continued strength of the economy, including strong household finances in aggregate, accelerated investment in AI, surging capex in specific areas, and the availability of risk capital all fundamentally support a higher probability of this regime. Productivity growth has been elevated, though not likely because of the preceding factors. Disinflation progress gives us confidence that sticky inflation will not be an impediment to this regime. The probability of this regime is getting closer to 50% and no other scenario is clearly more likely.

The regime requires secular growth drivers to take over from cyclical drivers. Growth may slow this year due to cyclical moderation before secular factors take over, which could happen by 2025. Sustainably higher productivity growth due to a capex boom and AI is necessary, but it's more expectation than reality so far.

Policy is a wildcard, but still more likely to be a headwind than a tailwind. The fundamental case for a Roaring '20s regime is solid, but policy could go in multiple directions that make it either more or less likely. Large deficits and debt point to fiscal consolidation that is a growth headwind, but there is little political appetite. Monetary policy should become less restrictive in the next year, and may even succumb to fiscal dominance, which would be positive for growth and inflation.

Preliminary investment implications: Higher growth should be positive for equity returns, but if it appears to be due primary to AI, then the tech sector will be the real benefactor. Higher inflation usually increases the correlation between stock and bond returns, diminishing portfolio diversification, and increasing portfolio volatility. That increases the appeal of alternative asset classes.

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Section 1

Are we already living in a "Roaring '20s" regime?

Economic conditions remain consistent with a Roaring ’20s regime

US growth, inflation, and long-term interest rates are at levels consistent with our criteria for a "Roaring ’20s" economic regime, with high policy rates being the lone exception.

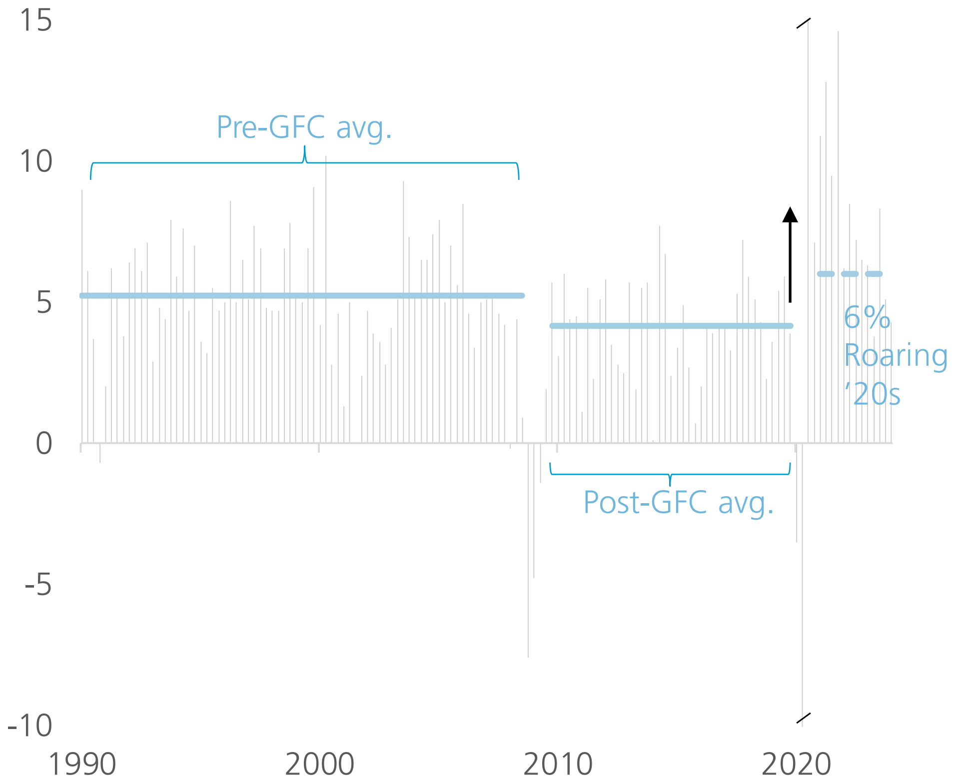
Attribute	Roaring '20s	2023	2024	Summary
Real GDP Growth (y/y)	**≥2.5%**	**2.5%**	**2.4%**	Growth has defied recession calls and has stayed very close to ‘Roaring ’20s’ target.
CPI Inflation (y/y)	**~3.0%**	**4.1%**	**2.9%**	Inflation has cooled substantially from 2023 and on track trend around ‘Roaring ’20s’ target.
Policy rates	**3-4%**	**5.3%***	**4.9%***	Policy rates still restrictive, with more easing to come next year.
Long-term rates	**~4.0%**	**3.9%***	**3.8%***	Year-end target for longer-term rates broadly similar to 2023.

Note: Real GDP growth and inflation measured year-over-year and come from consensus Bloomberg forecasts; “Policy rates” refer to the Federal Funds Target and “Long-term rates” refer to the end-of-year yield of the 10-year Treasury derived from UBS forecasts.
Source: Bloomberg, UBS, as of 17 June 2024

The economy looks a lot more like the 1990s than the 2010s

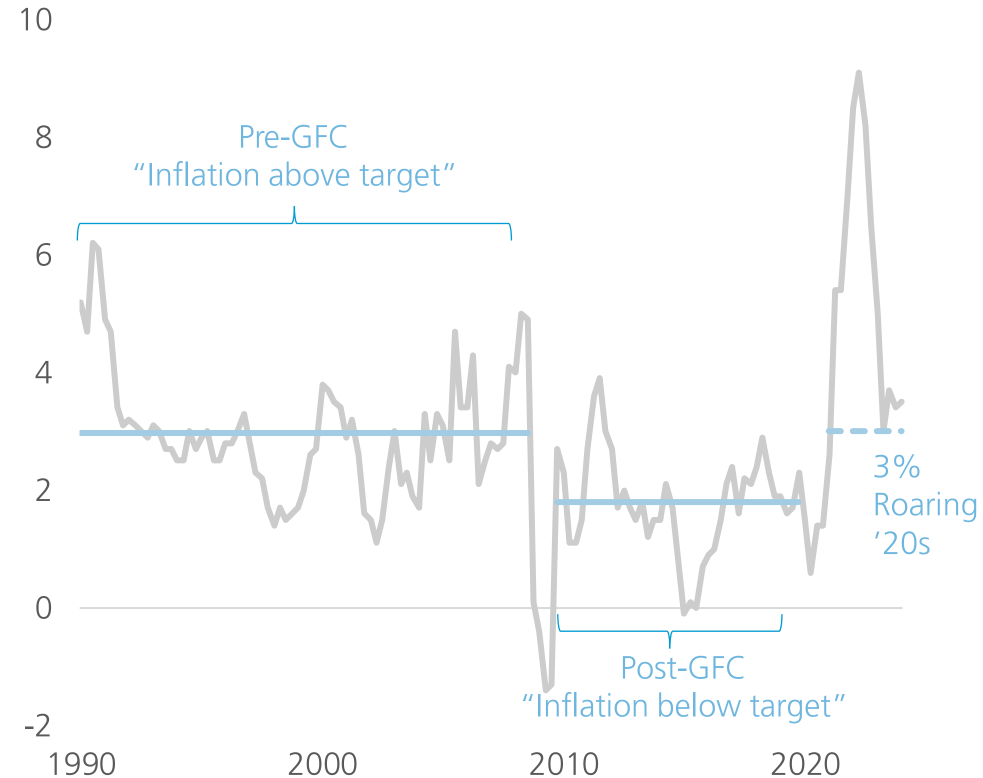
Even with the "soft landing" trajectory crystalizing, the post-pandemic economy looks more like the robust expansion seen pre-GFC compared to the post-GFC sluggishness.

~6% nominal GDP growth 1.5x fast as last cycle
Quarter-over-quarter (q/q) annualized rate, in %



Note: Axes have been truncated
Source: Bloomberg, BEA, UBS, as of 17 June 2024

Headline CPI also running hotter close to 3% Roaring '20s
Year-over-year (y/y), in %



Source: Bloomberg, BLS, UBS, as of 17 June 2024

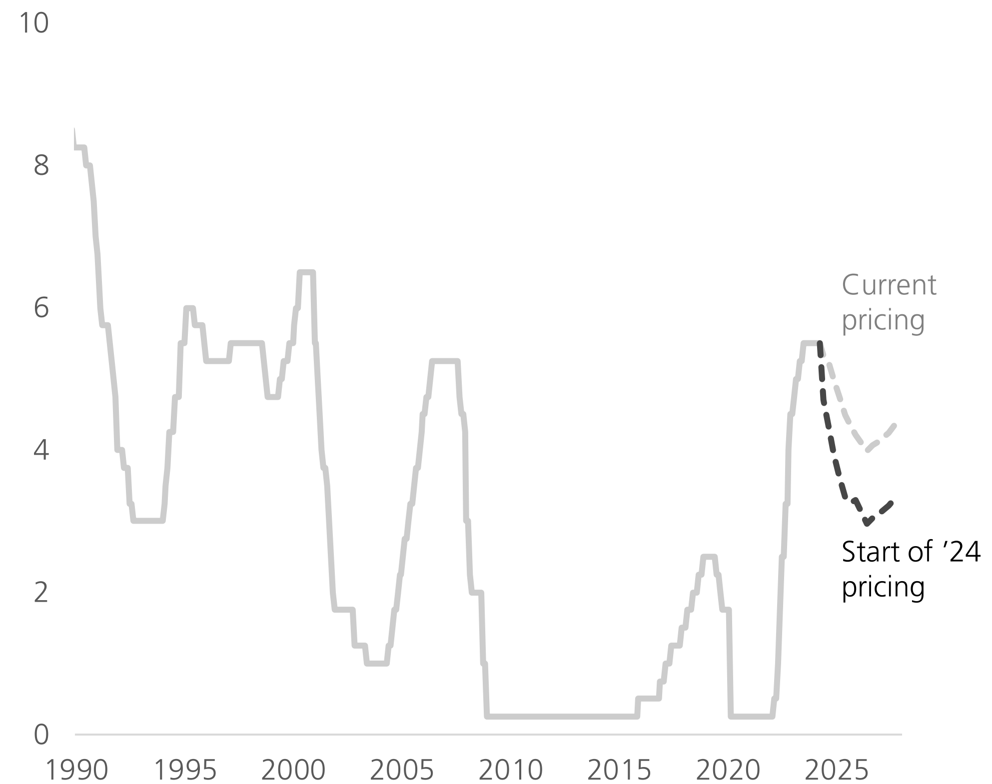
Higher short and longer-term rates are indicative of a new regime

The market pricing for the Fed funds rate to be above or near 4% through 2026 should support the 10-year Treasury in a range around 4% for the foreseeable future.

10-year Treasury yield is trading in a pre-GFC range in %

Source: Bloomberg, UBS, as of 17 June 2024

Market is pricing for a sustainably high Fed funds rate in %



Source: Bloomberg, UBS, as of 17 June 2024

Section 2

Revisiting mega trends that will affect the supply side

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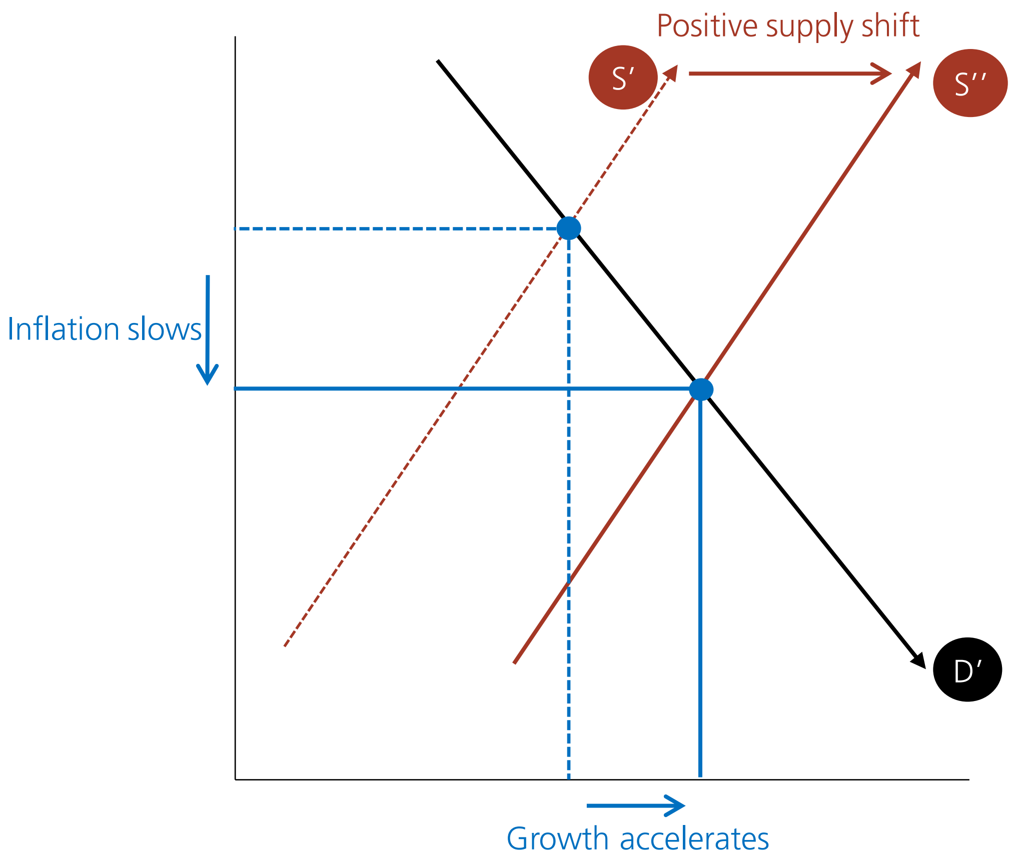
The supply side of the economy will determine the 2020s regime

Why supply matters and how to evaluate it

- A simple aggregate supply and demand framework illustrates how positive and negative supply shifts influence the growth rate and inflation.
  - Supply chain problems plagued the economy during the pandemic. Those have eased, but supply issues are expected to keep dominating, whether labor, capital, or technology.
  - Unlike the subdued recovery in the 2010s, demand should be stronger this decade since households are in much healthier financial shape.
  - In a long-term growth model supply developments are captured by changes in labor and capital inputs, and productivity gains.
- Four megatrends are expected to impact supply this decade, for good and bad: a capex boom, the green energy transition, security and deglobalization, and AI, likely shifting the supply curve to the right.
- We monitor the likelihood of a Roaring-'20s regime by analyzing how the megatrends are impacting the supply-side factors of the economy.

A positive supply shock is necessary for a Roaring '20s



Source: UBS as of 17 June 2024

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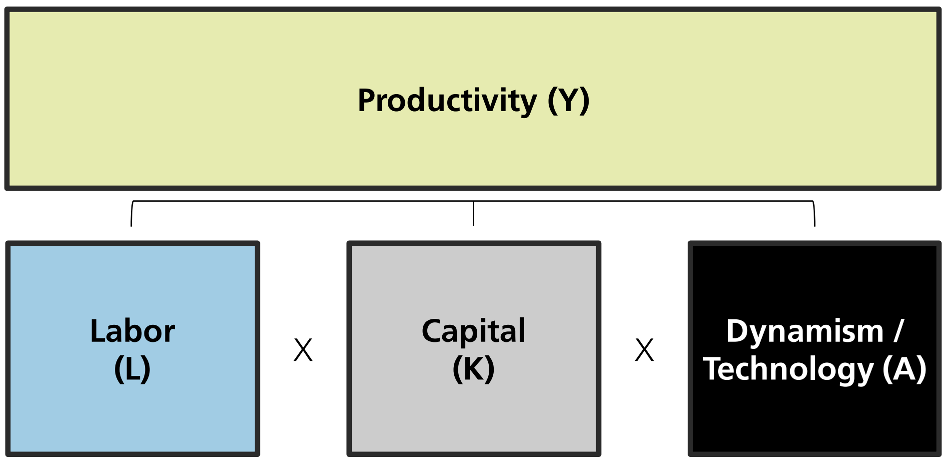
More formally, economic growth models link the supply side to output

The basic Solow-Swan growth model states that output (GDP) is a function of capital (K) and labor (L) growth multiplied by a productivity (A). While simple, it captures the essential supply elements.



All things equal, an economy with a larger **labor force** should have a higher output.

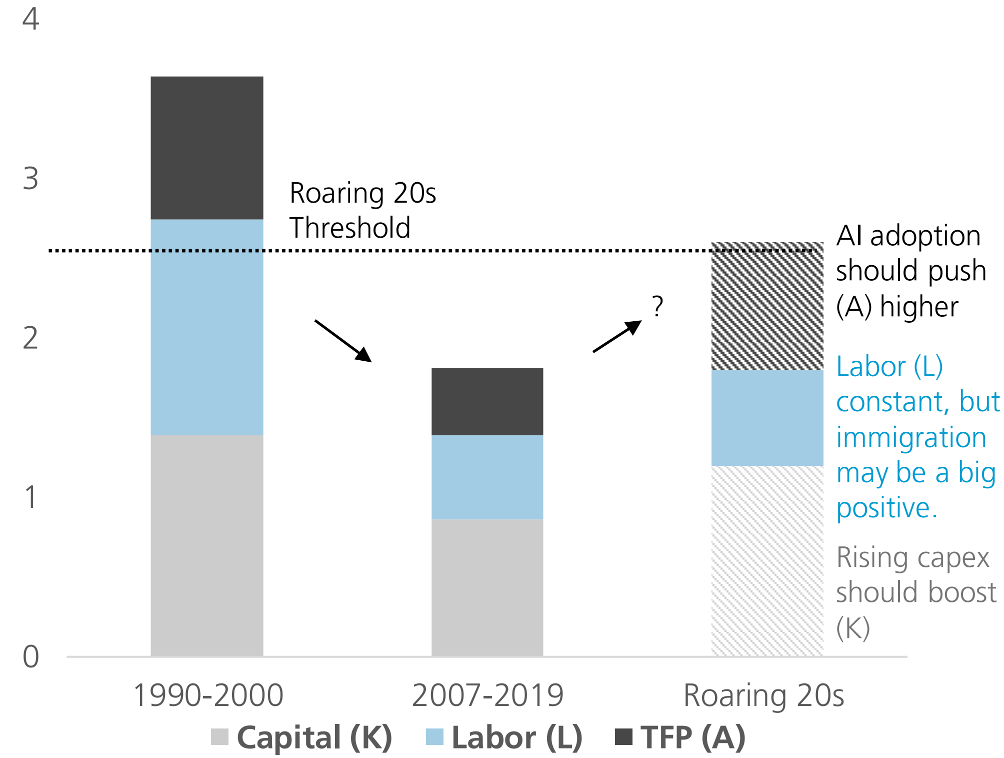
An economy where workers have **more capital** should have more output compared to one that doesn't.

Productivity (or Total Factor Productivity), captures the output created that is unexplained by capital and labor alone. Gains from technology are captured here.

Source: UBS, as of 17 June 2024

2020s output should eclipse the 2007-19 cycle because of more capital and technological progress

% contribution to GDP

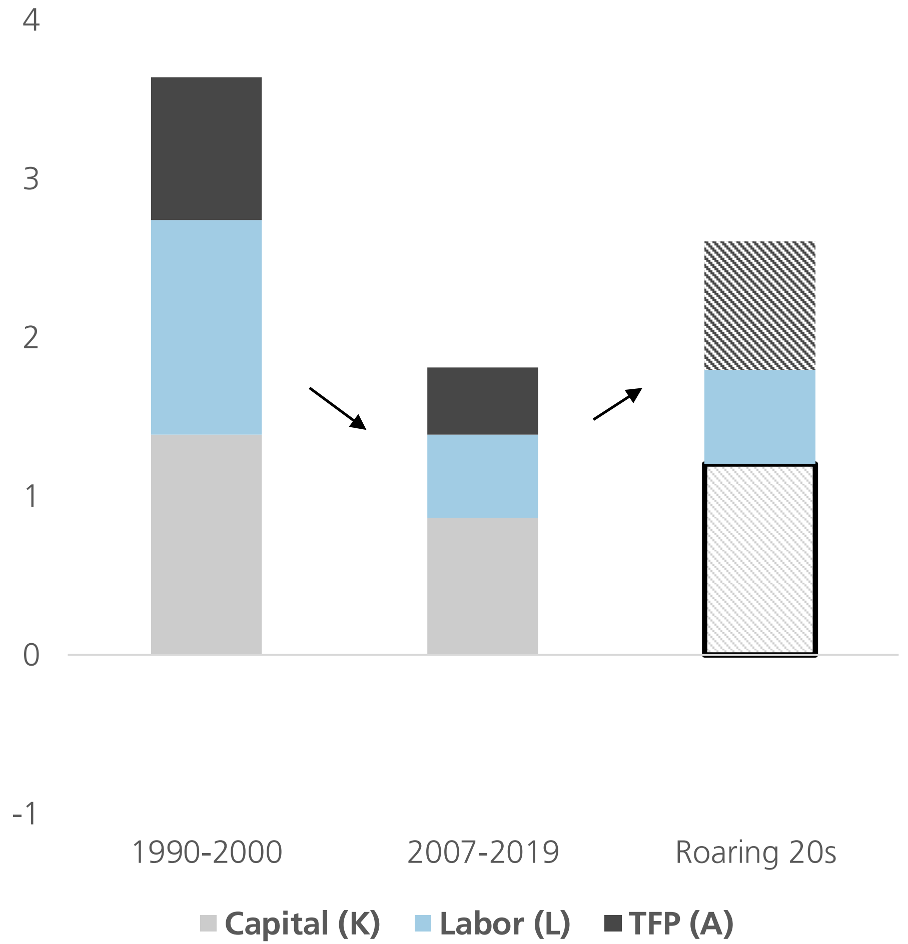


Source: BLS, UBS, as of 17 June 2024

GDP data provides a way to track growth model components

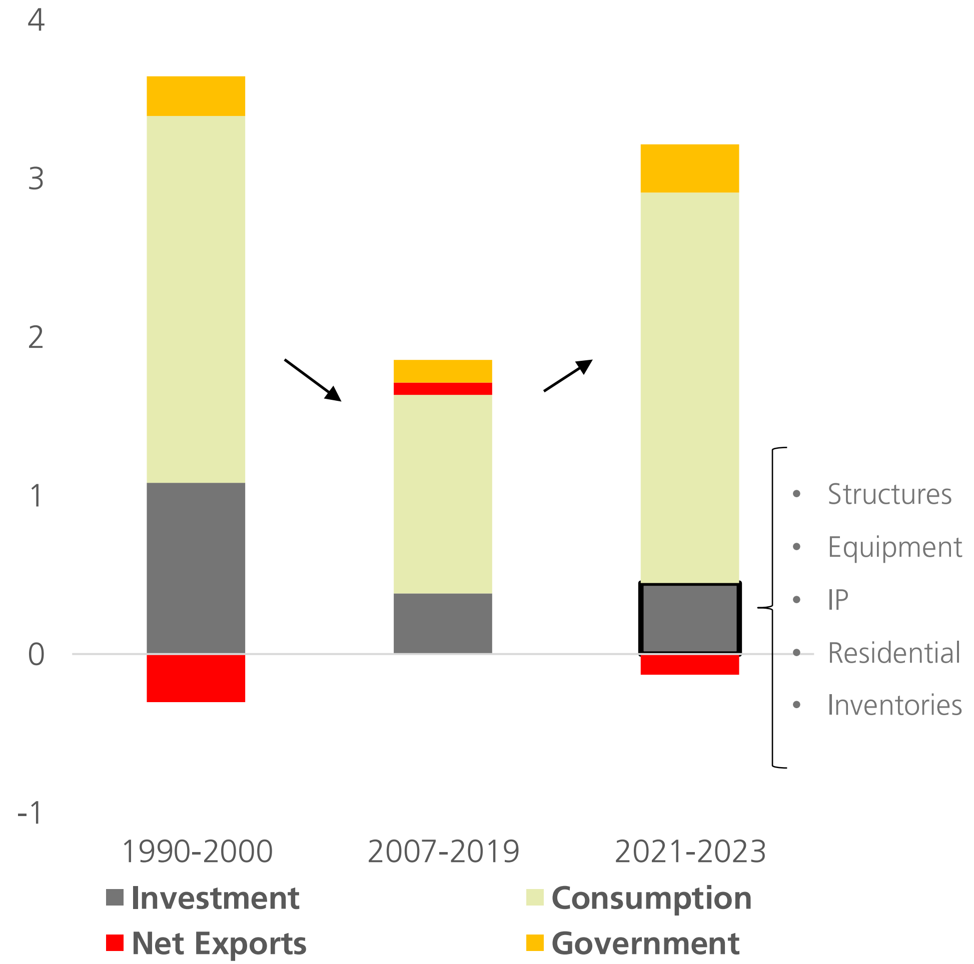
While growth models provide a theoretical framework, quarterly GDP estimates provide a way to track parts of the Roaring '20s thesis, particularly investment that should lead to more capital (K).

The Solow-Swan output decomposition can be translated…
% contribution to GDP



Source: BLS, UBS, as of 10 June 2024

…into traditional GDP accounting, focusing on investment
% contribution to GDP



Source: BEA, UBS, as of 17 June 2024

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Four megatrends will influence capital (K) and productivity (A)

A capex surge, driven by public and private investment, the green energy transition, spending on security and deglobalization, and AI are megatrends that will potentially dominate the next decade.

Capex boom: Aging capital stock and tight labor supply will encourage companies to spend more after a decade of underinvestment.

→ **Capital (K)**

Green energy transition: Meeting sustainability targets is a priority for more and more countries that requires enormous investment.

Security and deglobalization: A multi-polar world argues for spending to de-risk access to critical resources and securing supply chain.

Artificial intelligence (AI): Deploying AI capabilities across many industries is a potentially positive and large supply shock with uncertain productivity and labor market impacts.

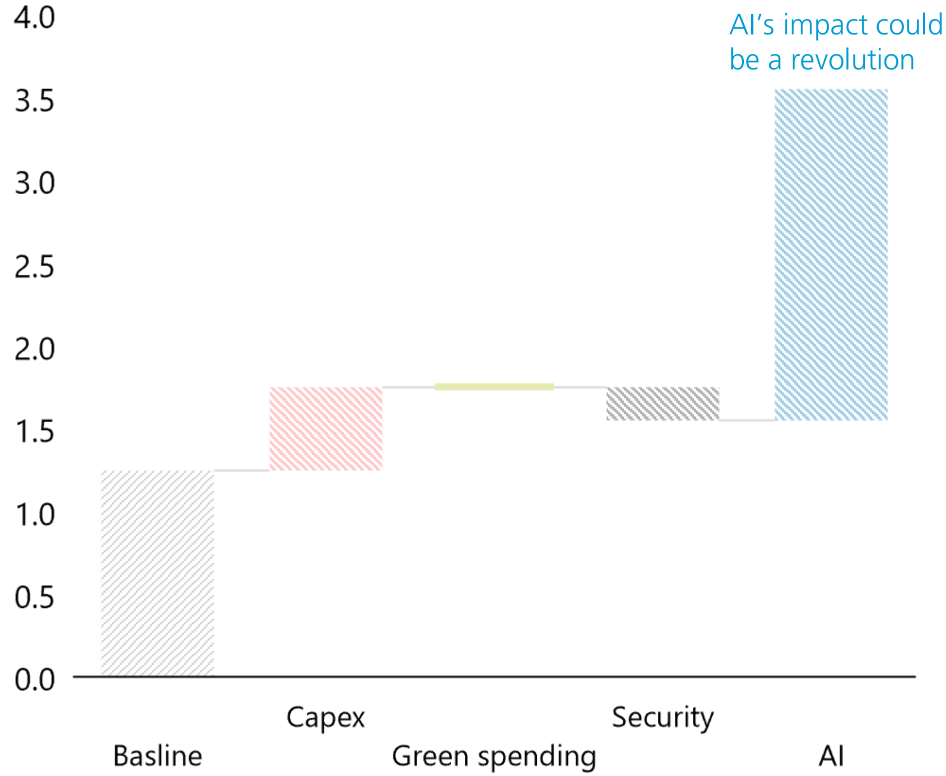
→ **Productivity / Technology (A)**

Focus

Focus on capex boom and AI since they will drive productivity

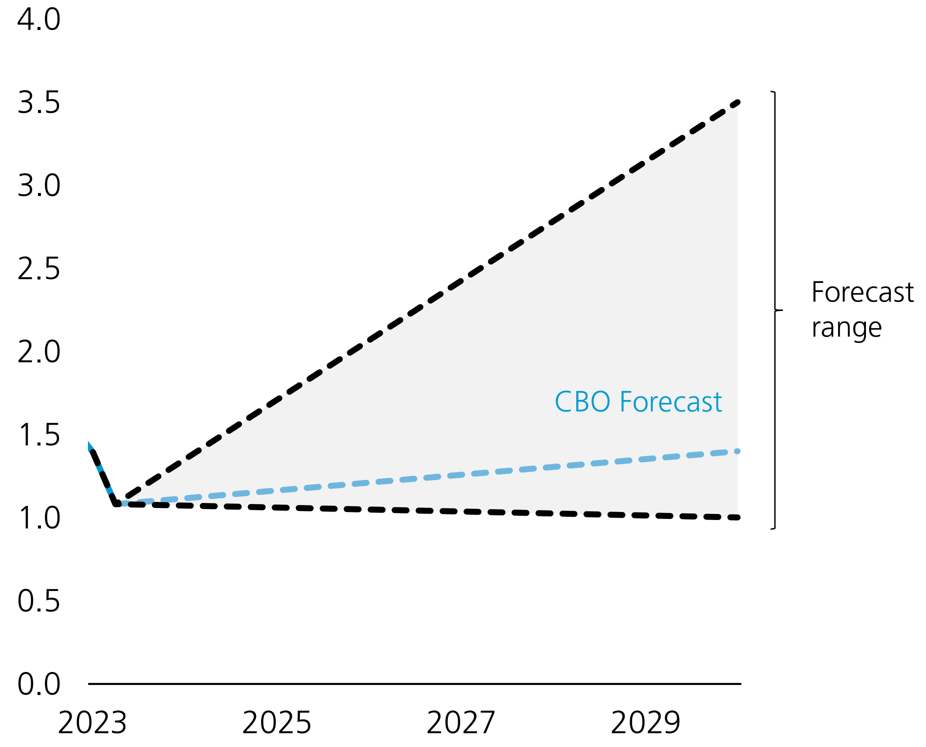
Tepid productivity growth in the 2010s sets a low baseline (~1.25%). The megatrends (capex boom and AI) are reasons for it to rise, but the range of outcomes is large and the timing highly uncertain.

The megatrends should be net positive for productivity…
Potential long-term contribution to annual productivity growth, in %



Note: Figures are meant to be illustrative only.

…but with a wide range of potential outcomes by 2030
Productivity growth, y/y in %



Source: CBO, UBS, as of 6 November 2023

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Section 3

Tracking the case for a roaring '20s regime

Our "Roar Score" maps supply megatrends to A, L, and K factors

We track capital investment, labor supply, AI deployment, business dynamism, and productivity gains.
The conviction level is the subjective likelihood of the factor supporting a Roaring '20s regime.

Roar score factors: (conviction as of Nov 2023) ←Low conviction High conviction→	Solow-Swan Factor
Large investment across the economy Investment spending is large due to the supply megatrends, lifting growth cyclically and providing the foundation for faster productivity growth.	K
Labor force growth surpasses demographic trends An aging population will lead to a structural decline of labor force growth for several decades, but higher immigration provides an offset.	L
Rapid AI adoption across the economy AI investment accelerates and AI enablement starts to transition to AI adoption across industries, with tangible productivity gains.	K A
The economy is more dynamic post-pandemic Economic behavior, such as increased entrepreneurial activity and technological adoption, remains supportive of faster productivity growth.	A
Productivity growth increases, with upside skew Investment, AI, and dynamism drive productivity growth higher from a low base for the rest of the decade, with wide range of outcomes.	Y

K

Large investment across the economy, just not yet

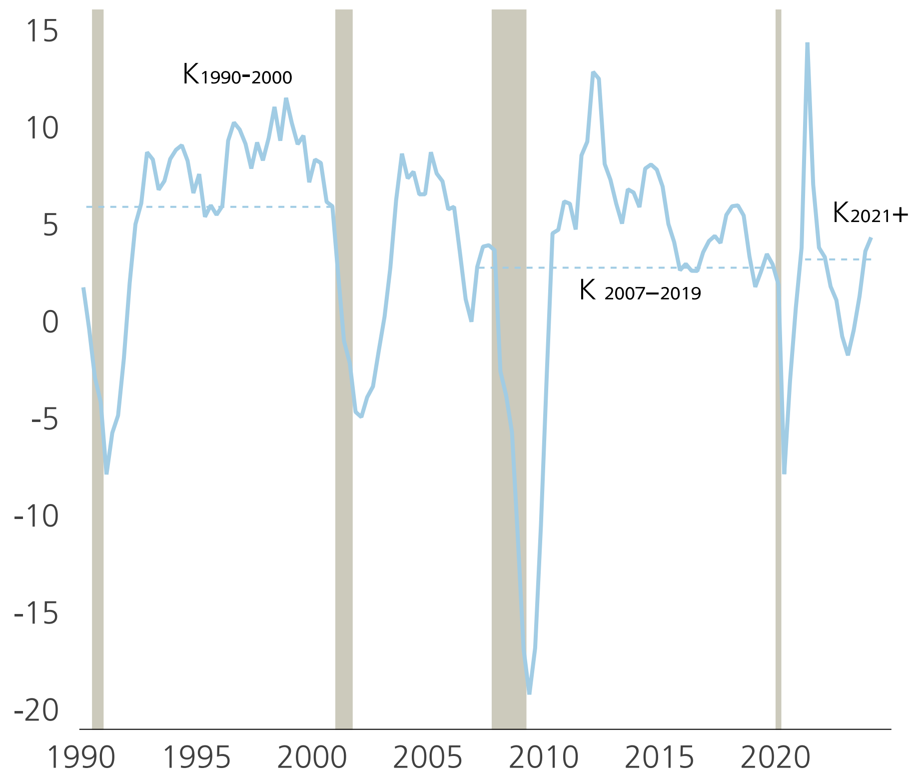
Total fixed investment has been mediocre not booming, but segments of the economy are seeing a historic investment surge due to the legislative tailwind. The factor outlook is still quite positive.

	Prior		**Current**
Conviction			

- **Assessment:** Overall private sector investment is soft, but there are pockets of strength.
  - **Positive:** Investment in manufacturing structures and AI have clearly surged. The CHIPS and IRA Acts are having a measurable effect, while the infrastructure bill impact is slower.
  - **Negative:** Fixed investment ex-structures is sluggish, especially from smaller firms, aside from policy supported areas. Capex intentions are not indicative of an imminent boom.
- **Outlook**: Investment is still likely to surge during the rest of the decade. Infrastructure spending takes a long time to ramp up. AI investment looks likely to accelerate. Rate cuts should spur further investment, and the conclusion of the election also removes uncertainty for some firms.
- **Risks**: Prolonged restrictive monetary policy or sharp economic slowdown can further postpone or cancel capex plans.

Investment growth only marginally faster than post-GFC cycle

Private fixed investment, year/year, %



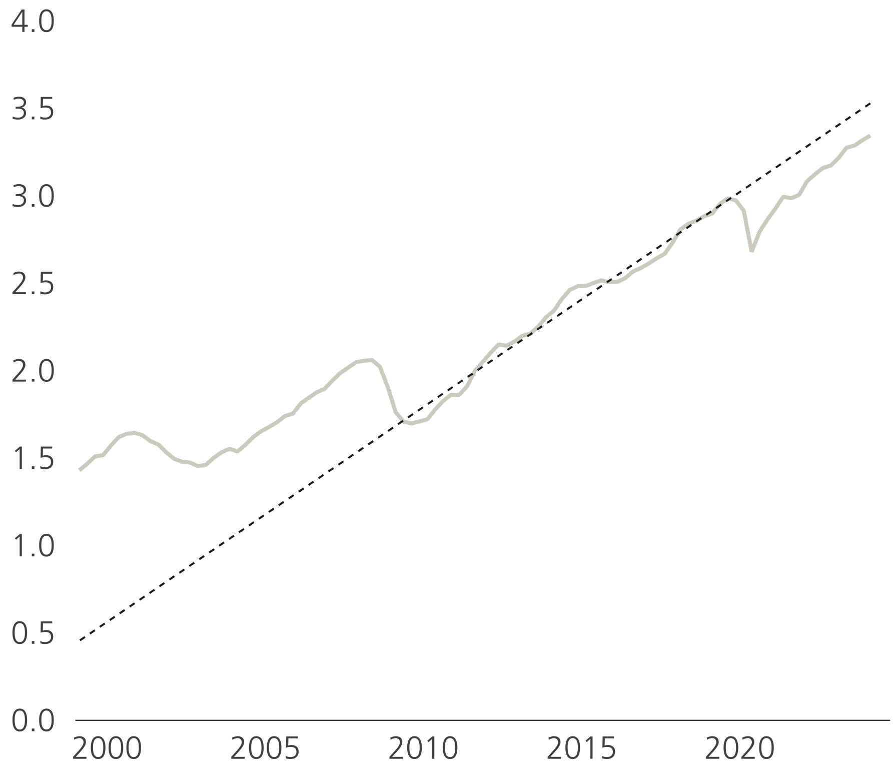
Note: The placement of "K" is illustrative only.
Source: CBO, UBS, as of 17 June 2024

K

Large variation in the performance of investment components

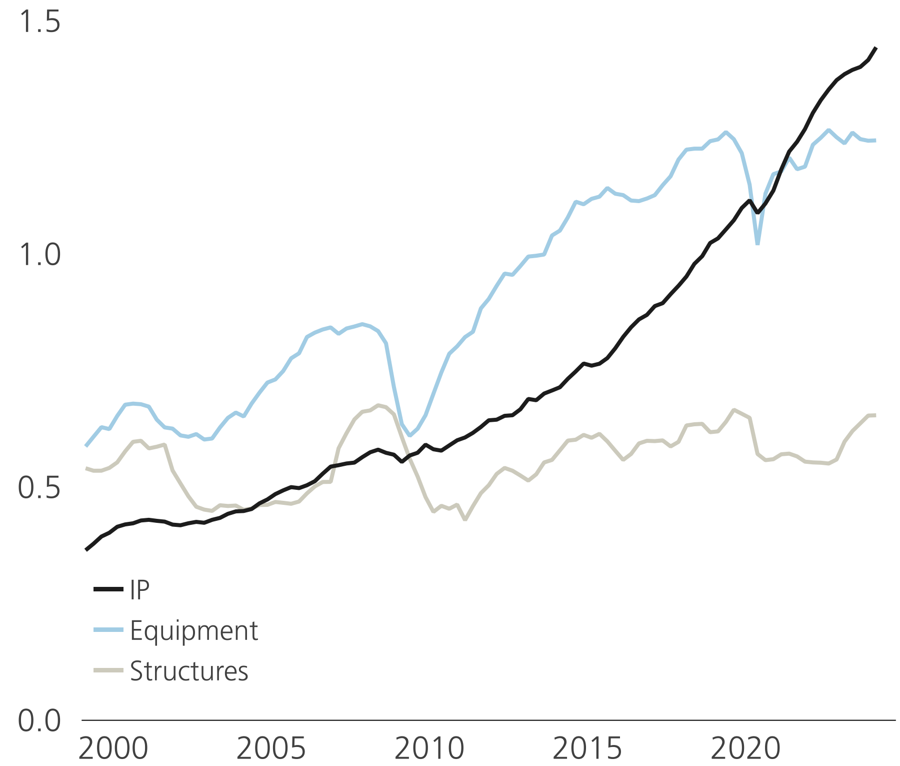
Overall investment levels are below the trend set during the prior cycle; IP and structures investment show a post-pandemic pickup, while equipment spending is flat.

Investment still below previous cycle trend
Non-residential fixed investment, in 2017 $tr



Source: BEA, UBS, as of 17 June 2024

Non-residential fixed income components are a mixed-bag
Non-residential fixed investment, in 2017 $tr



Source: BEA, UBS, as of 17 June 2024

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K

Legislation has been an unparalleled positive for investment

Three large fiscal packages—The Inflation Reduction Act (IRA), CHIPS and Science Act (CHIPS), and Bipartisan Infrastructure Legislation (BIL) —are highly impactful, but not yet transformative.

Recent Major Legislation ~$2 trillion

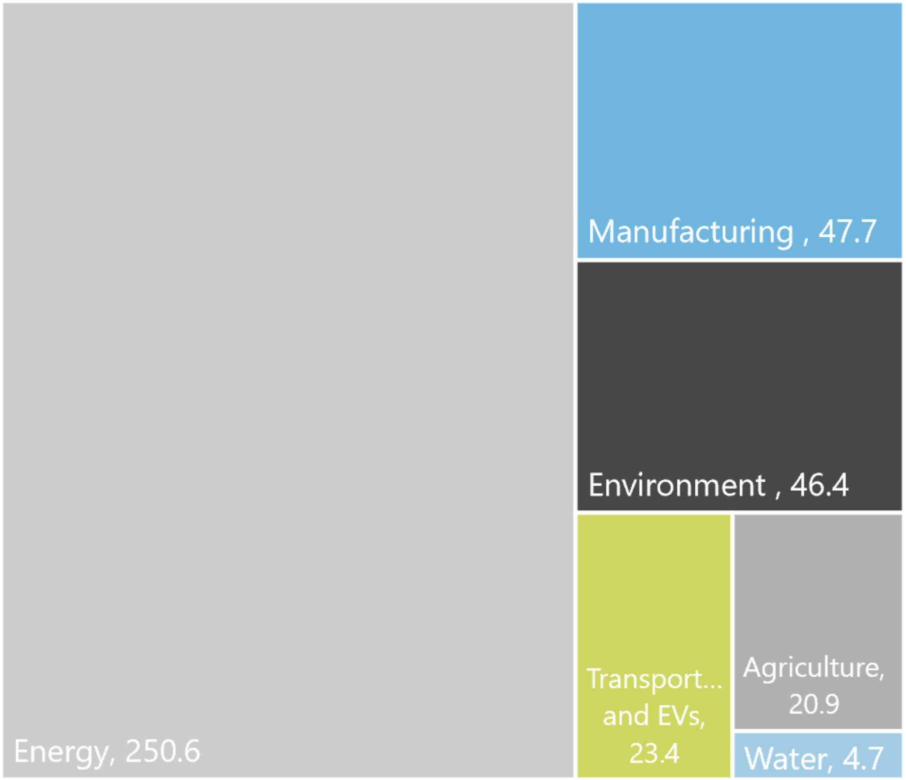
Legislation	Description	$ Amount
Inflation Reduction Act (IRA)	Clean energy investment and healthcare cost reduction	~~~$400~~ $660* billion through 2030
CHIPS and Science Act (CHIPS)	Accelerate US semiconductor production and STEM workforce	~$300 billion over 10 years
Bipartisan Infrastructure Legislation (BIL)	Provide significant public investment for US infrastructure	~$1.2 trillion ($550 bn. in new spending) over 10 years

*Revision made by CBO in 2023 update
Source: CBO, The White House, Bloomberg, UBS, as of 28 May 2024

The IRA impact on investment has already been upsized

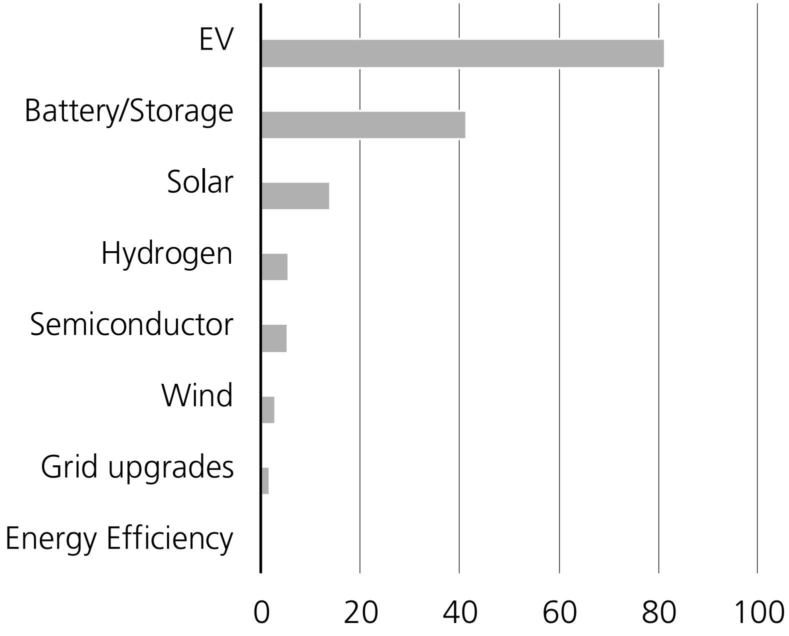
On its first anniversary, the IRA has led to nearly $132 billion in new investment and over 270 new clean energy projects nationwide.

Federal funding embedded in IRA totals ~$400 billion
$bn



Source: CBO, UBS, as of 17 June 2024

New clean energy projects announced since IRA passage
$bn



Source: E2, UBS, as of 17 June 2024

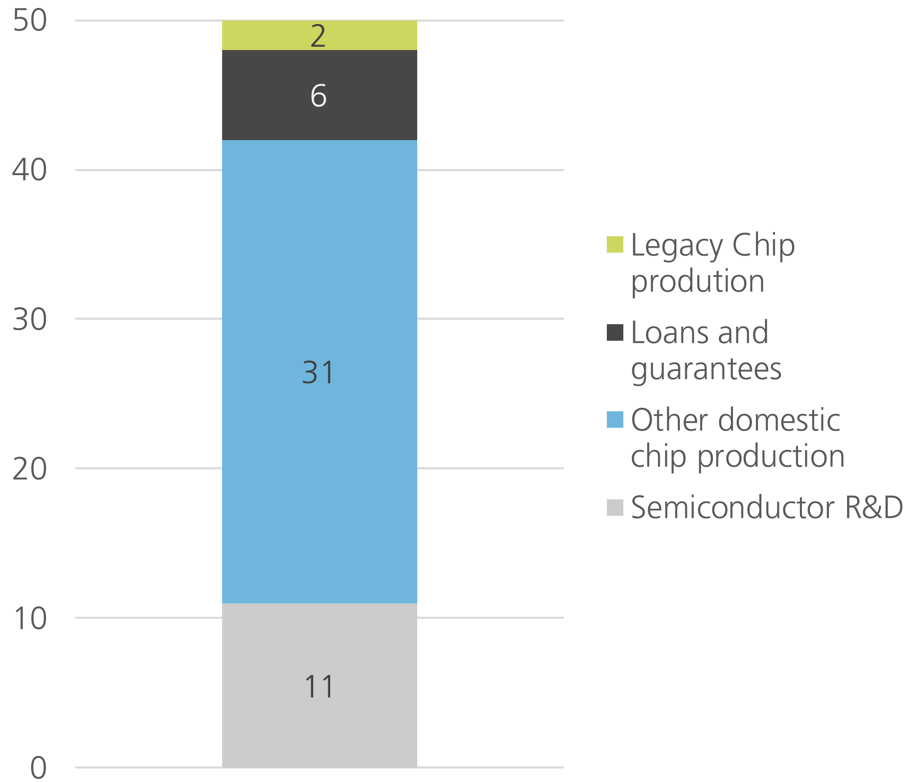
Manufacturing investment spiked because of the CHIPS Act

K

Nearly $139 billion of additional investment aimed at boosting domestic manufacturing of semiconductor chips has been announced since the passage of the CHIPS act in 2022.

CHIPS Act Breakdown

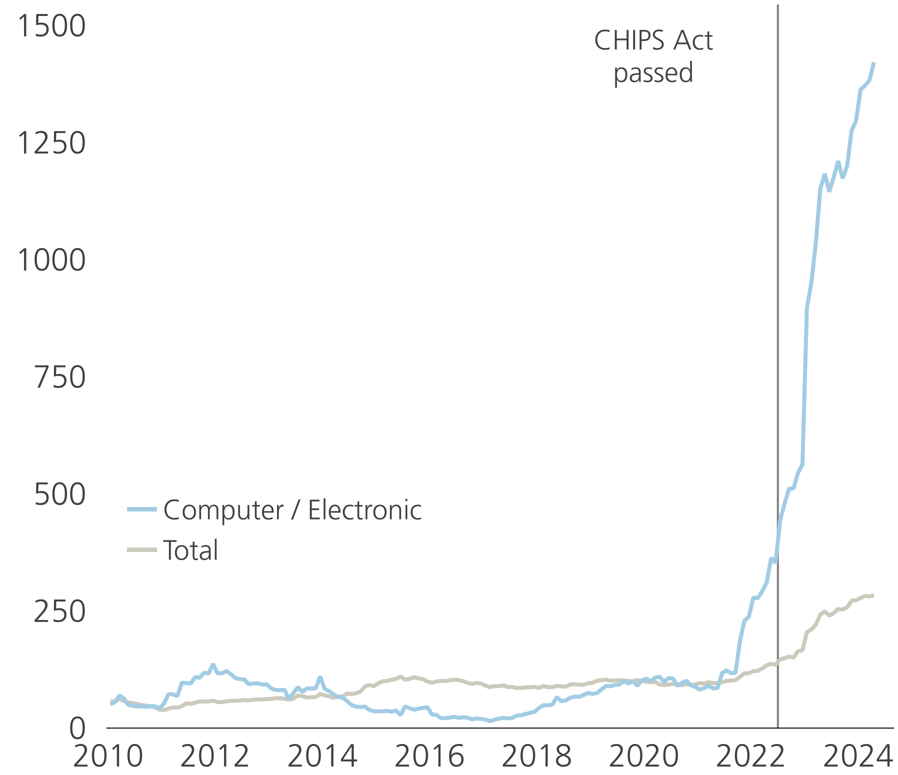
Sub-title



Source: The White House, UBS, as of 17 June 2024

Manufacturing Construction for electronics surged after IRA

Rebased 12/31/2019=100



Source: BEA, UBS, as of 17 June 2024

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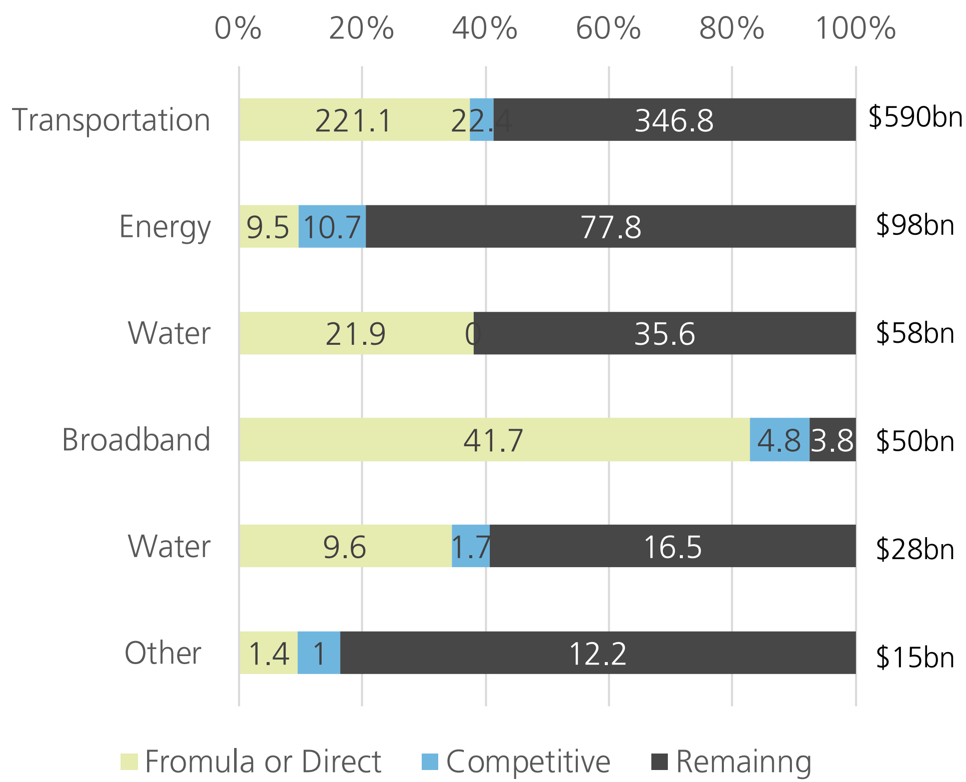
K Infrastructure has picked up, but much more to go

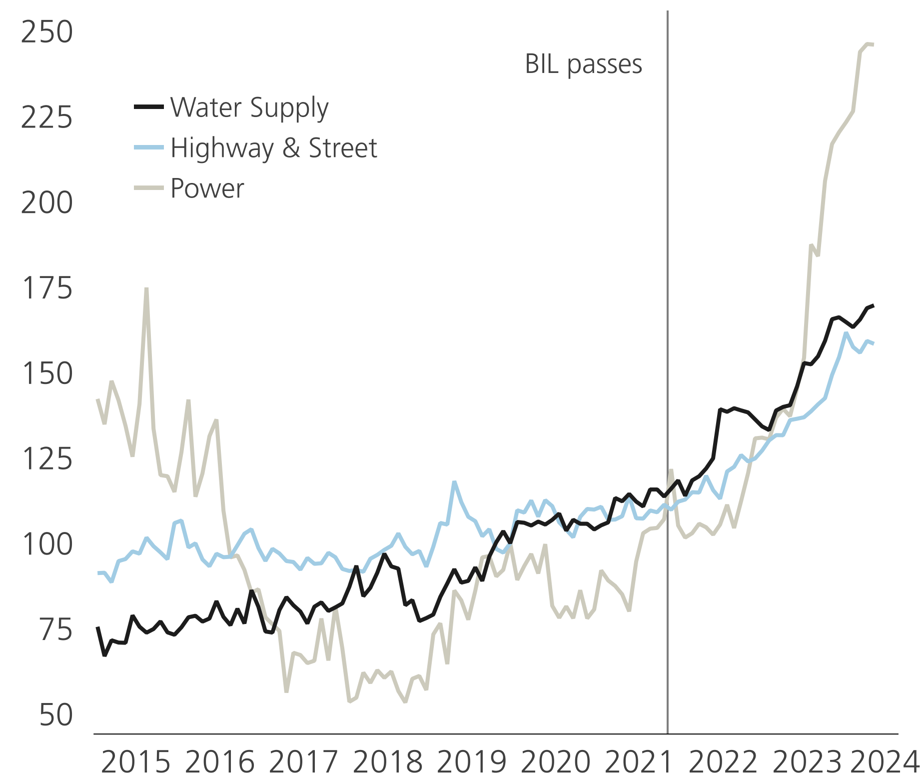
The Bipartisan Infrastructure Law (BIL) authorizes >$1 trillion in transportation and infrastructure spending with half going into “new” investment and projects. Nearly $500bn still yet to be spent.

Much of BIL still unspent and unawarded
$bn.



Source: Brookings Institute, UBS, as of 17 June 2024

Public construction on water, power, and transportation surged
Rebased 12/2019=100

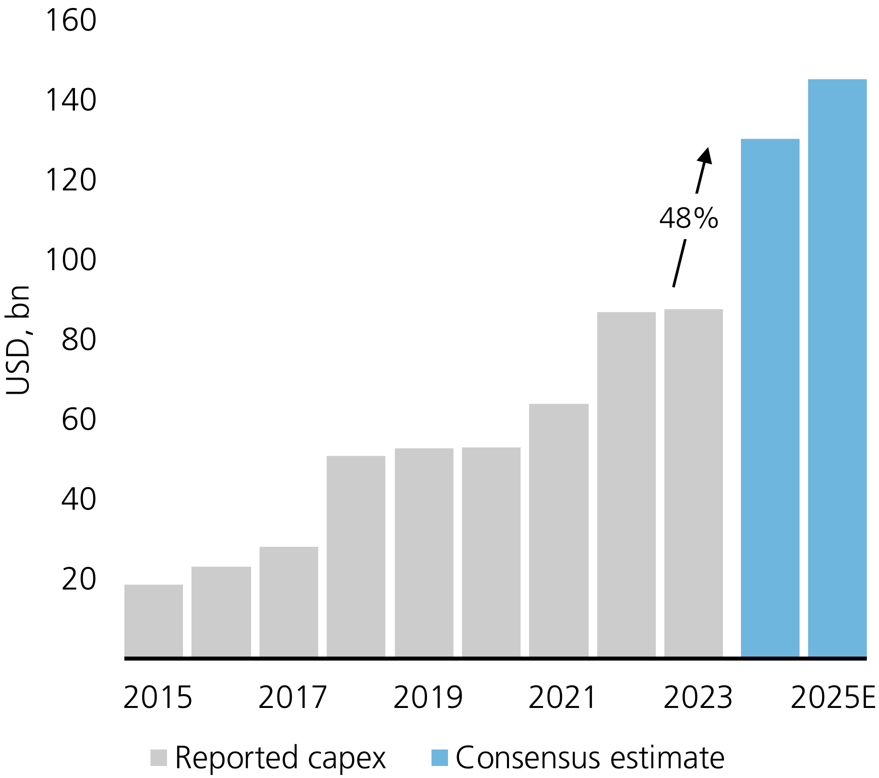


Source: BEA, UBS, as of 17 June 2024

K AI investment is already large and may be a huge tailwind

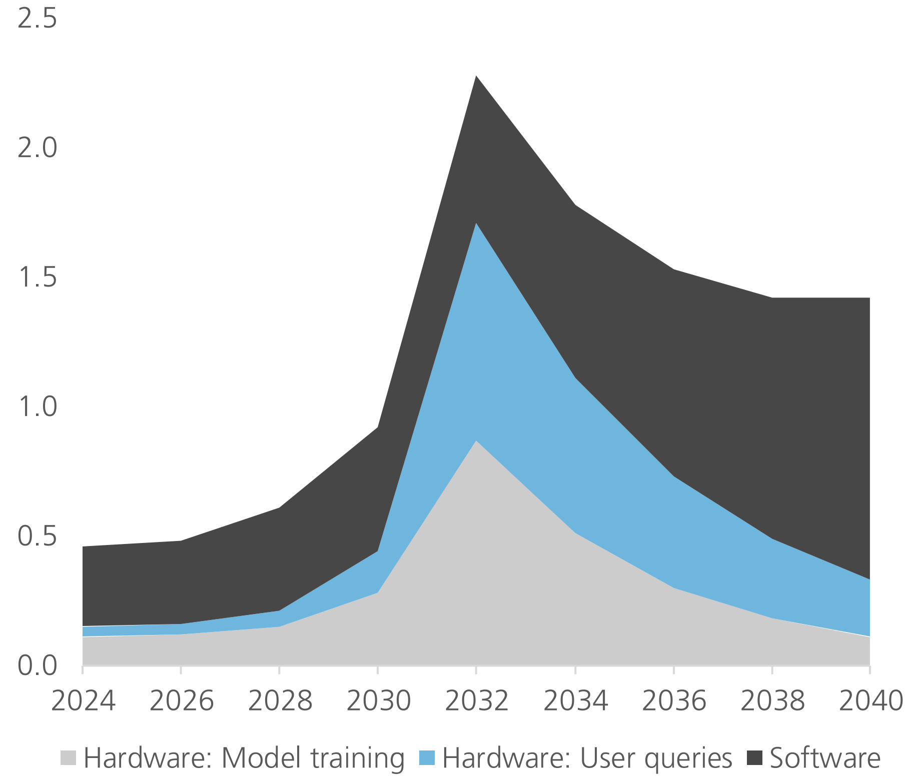
AI is one of the fastest growing segments in global tech and investment is expected to total around $200 billion by 2025 and peak at around 2% of GDP in the early 2030s.

Mega caps announce aggressive capex plans for data centers
Billions



Note: Capex data from Microsoft, Meta, and Google
Source: Bloomberg, UBS, as of 28 May 2024

AI-related investment to peak at >2% GDP
% GDP



Source: Goldman Sachs Global Investment Research, UBS, as of 28 May 2024

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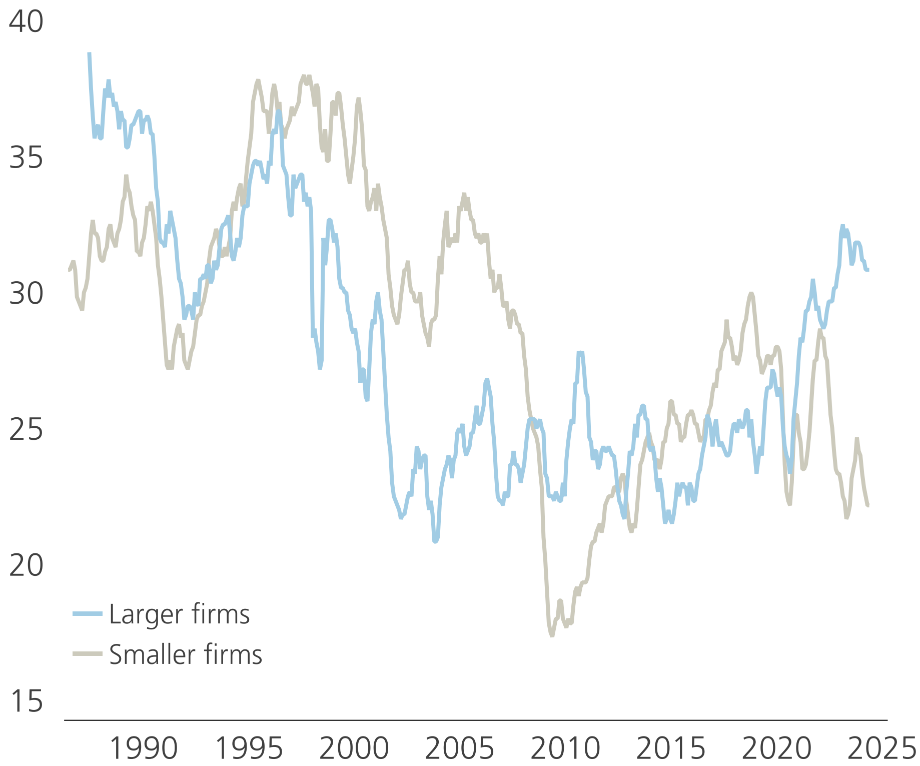
K

Large firms plan to invest, but higher rates limit small firms

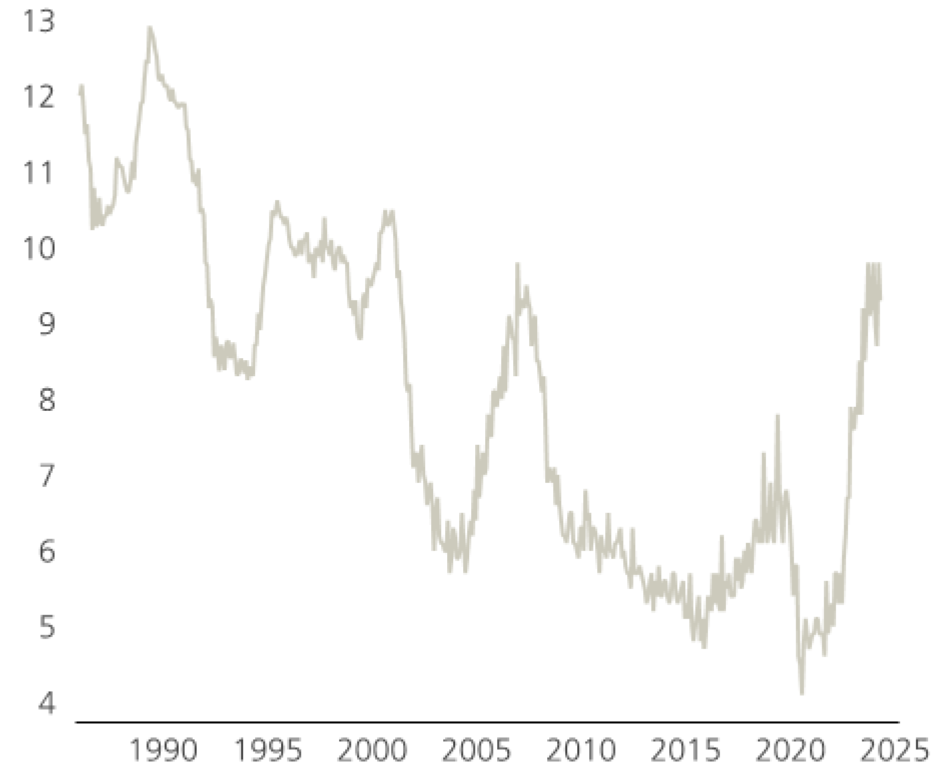
Large tech-firms are leading the capex cycle, while small firms are dealing with high borrowing costs and economic uncertainty, both deterrents to investment.

Larger firms plan for more capex, small firms not so much
Capex intentions within 6 months, %



Note: "Smaller firms" reading taken from NFIB survey; "Larger firm" reading taken from ISM Manufacturing PMI report
Source: NFIB, ISM, UBS, as of 17 June 2024

Cost of financing investment for small firms is challenging
NFIB Actual Interest rate on short-term loans, %



Source: NFIB, UBS, as of 17 June 2024

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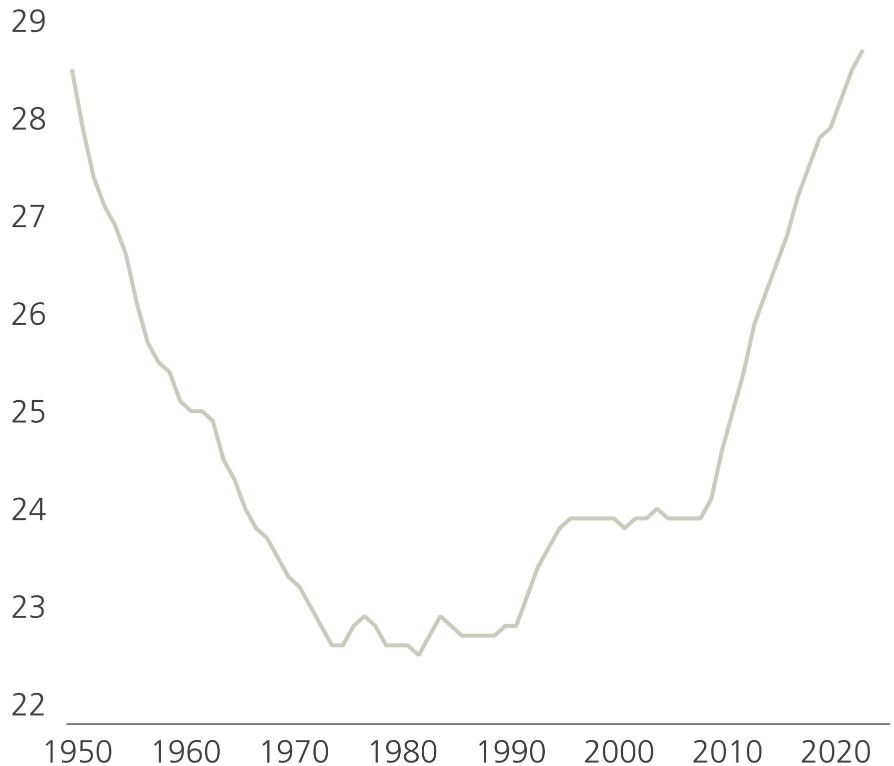
K More investment is necessary, a likely positive for productivity

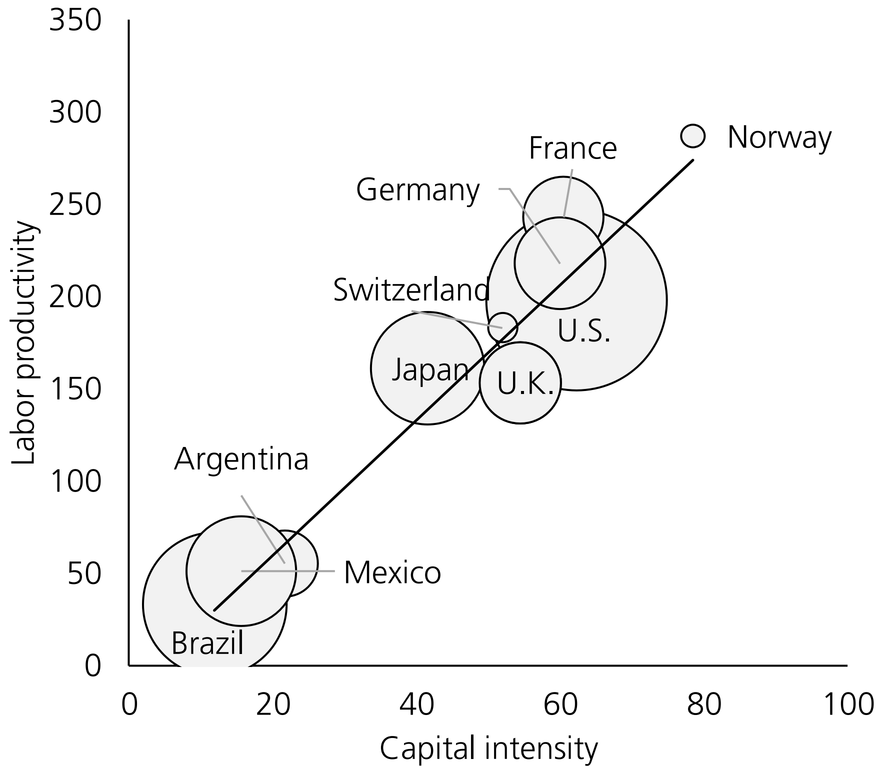
Despite academic research saying that productivity is linked to capital intensity, US workers now using the oldest capital stock on record, adding to the pressure to invest

US firms using the oldest capital stock on record
Average age of private fixed assets, years



Note: Calculation is a current-cost average age of private fixed assets
Source: BEA, UBS, as of 17 June 2024

Workers are more productive with higher capital intensity
Capital intensity & labor productivity



Note: Capital intensity is defined as the ratio of total capital stock over total hours worked. Labor productivity is defined as ratio of GDP over total hours worked. Bubble size corresponds to population.
Source: Bergeaud, A., Cette, G. and Lecat, R. (2016), UBS, as of 6 November 2016

UBS

L Labor force growth overcomes demographic trends, for now

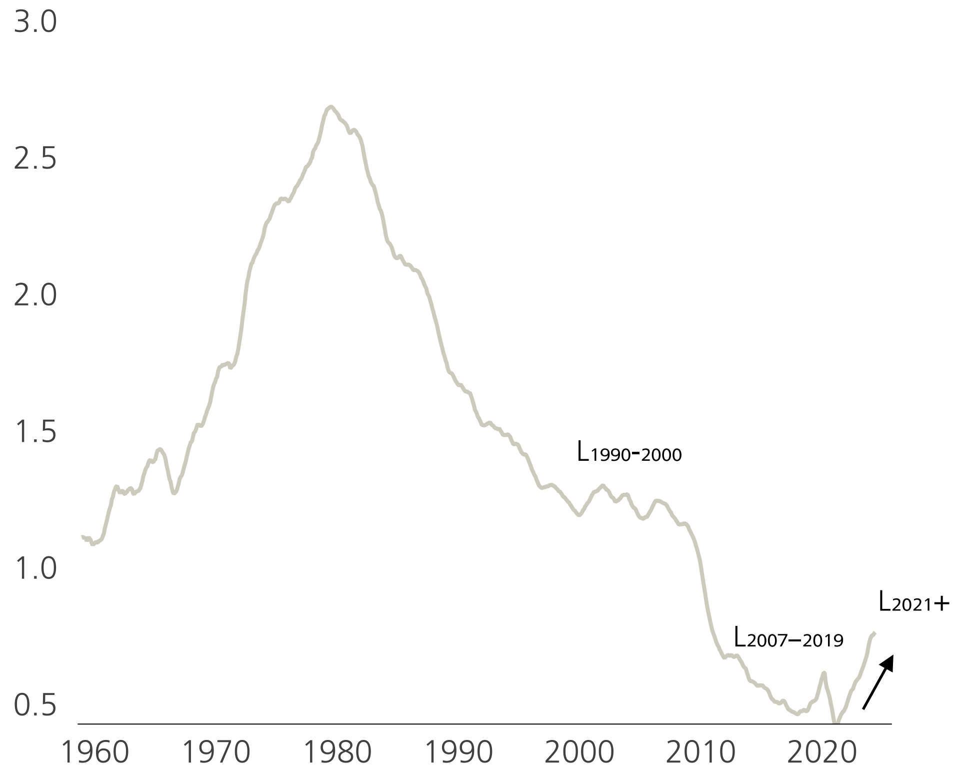
A tailwind from an unexpected immigration surge has helped rebalance the labor market and boost growth. But unless that continues, demographics imply only modest growth in the labor force.

	Prior	**Current**
Conviction		

- **Current Assessment:** An immigration surge is forecasted to add ~5 million more workers to the labor force by 2030 according to the CBO.
  - **Positive:** The historically tight labor market has been supported by a surprise influx of millions of immigrants into the labor force.
  - **Negative:** Demographics are working against the US with a historically low birth rate that continues to decline, while an increasing percentage of Americans say immigration is their top issue, limiting broader absorption in the labor market.
- **Outlook**: Labor's input to growth models should pick up slightly from 0.5% annual pace from 2007-2019, elevating total output, but the impact is modest and there's a high risk it won't happen ($L_{1990-2000}$>L_{2021+}>$L_{2007-2019}$).
- **Risks**: A new administration could bring additional regulation and restrictions for migrant workers and further restrict immigration flow.

Downward labor force growth reversing trend thanks to immigration

y/y, 10Y mov. Avg., %



Note: The placement of "L" is illustrative only.
Source: CBO, UBS, as of 17 June 2024

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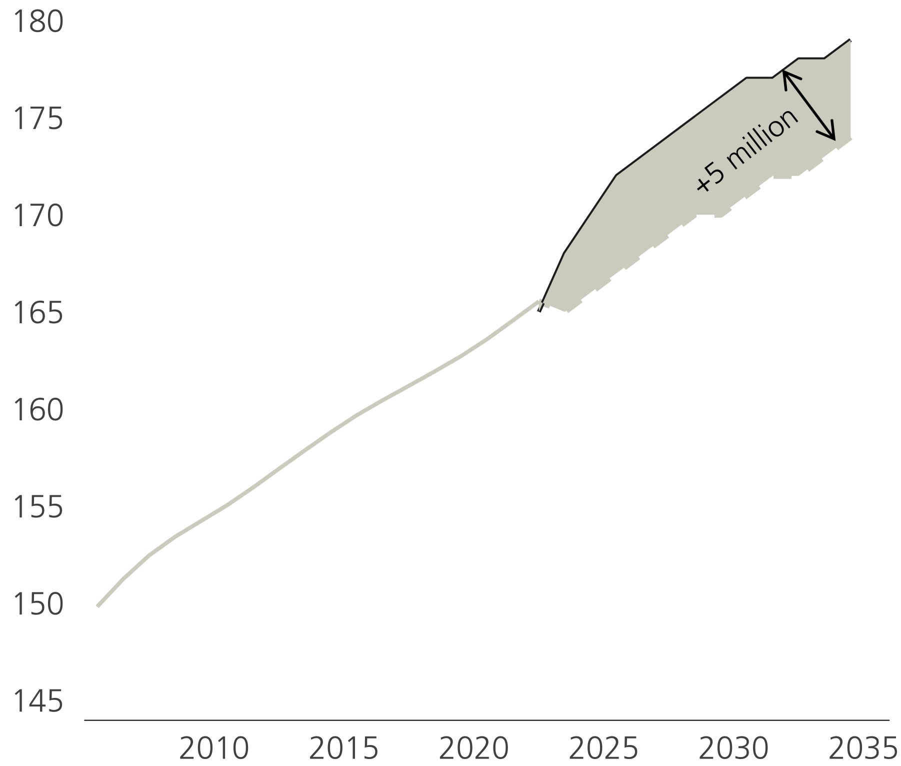
L

The immigration surge has boosted labor force prospects

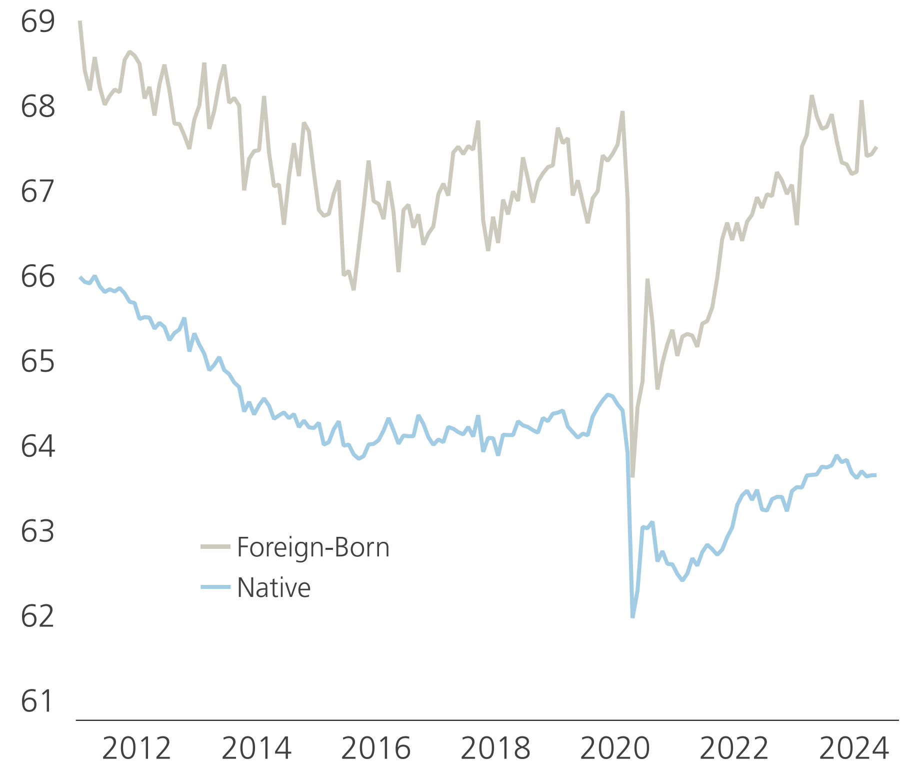
The growth benefit of an immigration surge is that it supplies more workers in a tight labor market, lifting US potential output, while also cooling wage growth.

A surge in immigration could add 5 million workers by 2030
in mil.



Source: CBO, UBS estimates, as of 17 June 2024

Labor market participation rate is higher for immigrants
%



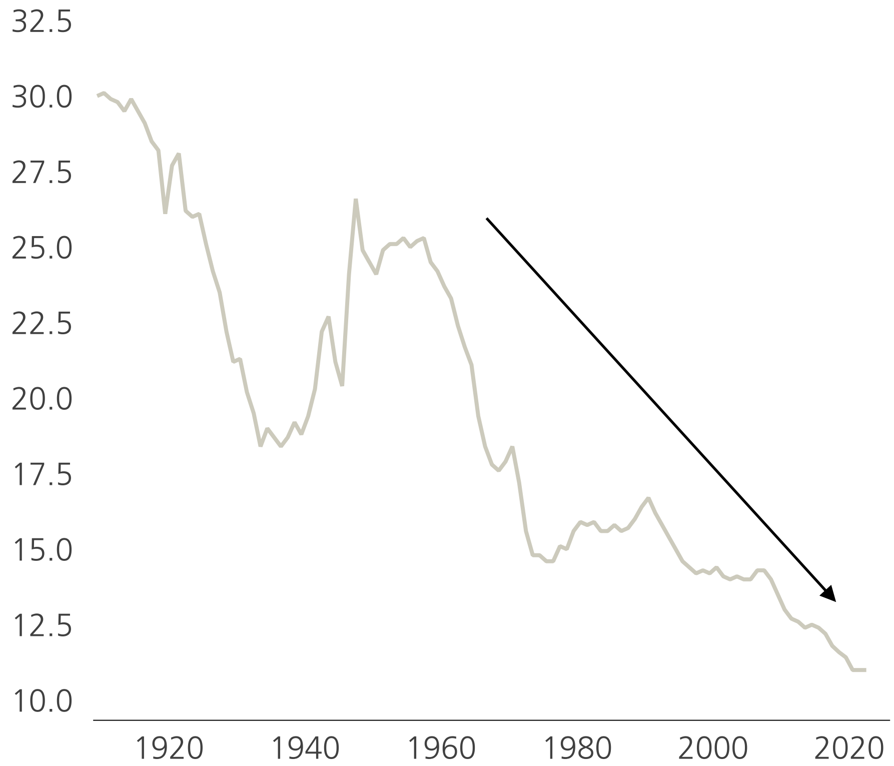
Source: BLS, UBS, as of 17 June 2024

L

Immigration is politically problematic, so the surge may stall

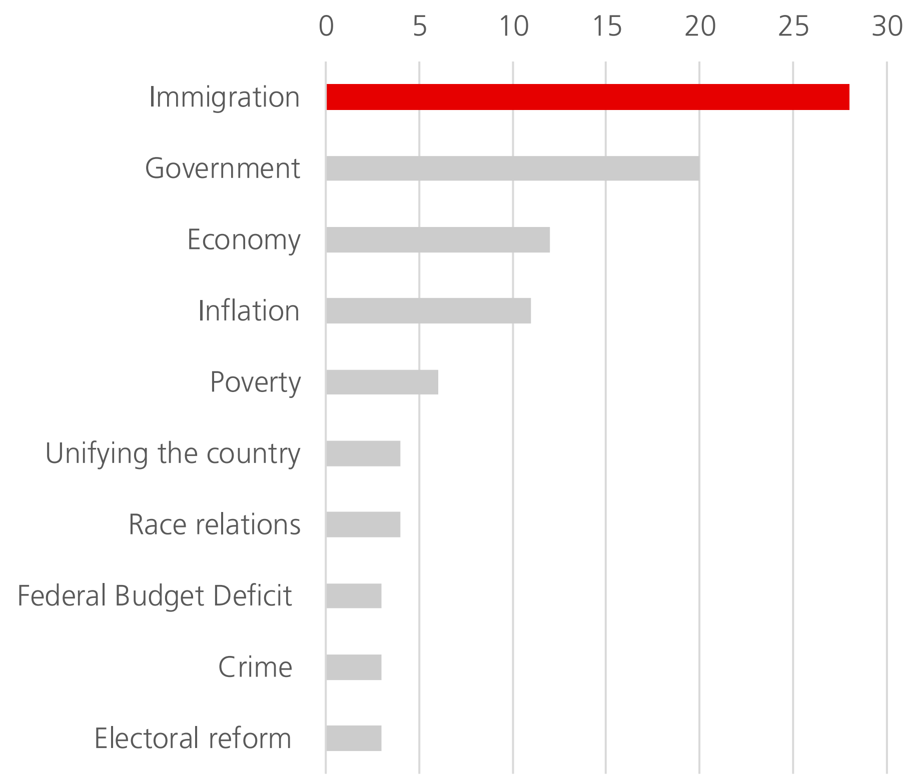
A historically low birthrate provides a case for higher immigration flows in the US to support labor force growth, but increasing hostility to immigrants may be a limiting factor.

Birth rates plumet to an all-time low
US birth rate, %



Source: CDC, UBS estimates, as of 17 June 2024

Increasing number of Americans say immigration is top issue
Most important problem in America, % respondents



Source: Gallup, UBS, as of 17 June 2024

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K A

AI investment advancing very quickly, but impact still uncertain

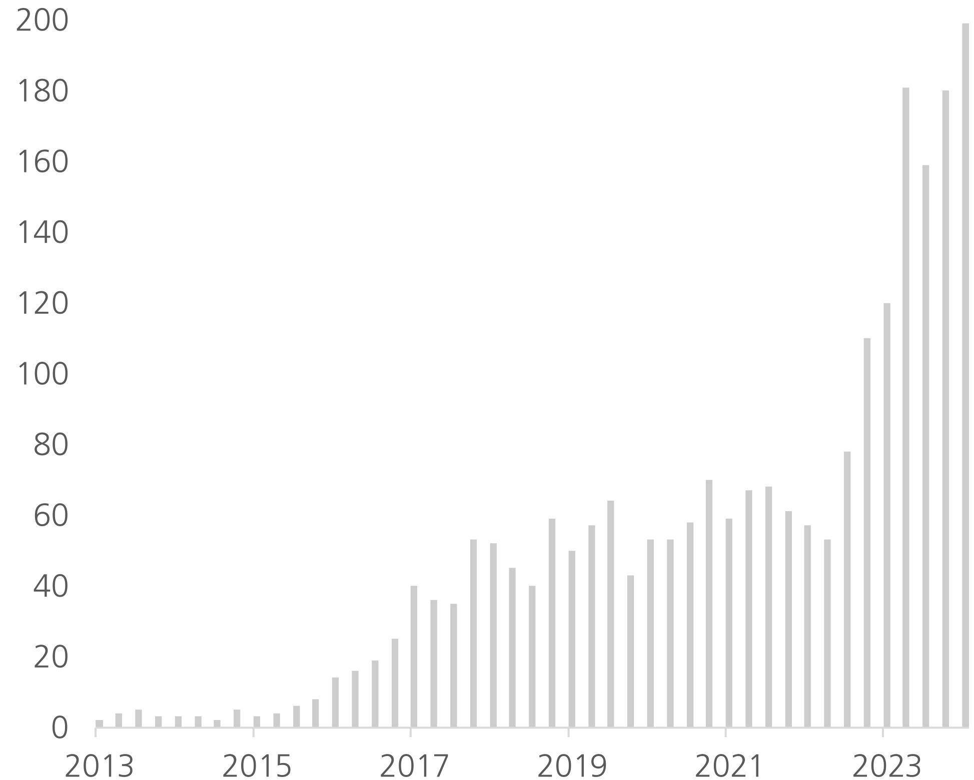
AI optimism has captured the budgets of many firms already, especially large tech companies must invest to even have a chance to compete; productivity gains from adoption still in early days.

	Prior		**Current**
Conviction		⇨	

- **Current Assessment:** Firms are embracing AI, leading to billions of deployed investment and increasing adoption plans.
  - **Positive**: Investment in AI growing at a very fast pace, aided by a public push for more high-tech manufacturing in the US.
  - **Negative**: Adoption has been unequal and still quite limited so far, with academics outlining a large range of outcomes.
- **Outlook**: AI investment and adoption should continue to accelerate. But while the productivity impact should be positive, it's also highly uncertain when the benefit will occur and by how much.
- **Risks**: Tight monetary policy or sharp equity market correction may limit investment. Implementation of AI-related regulation may be another big headwind.

Firms increasingly telling investors that AI is on their minds

AI mentions on S&P earnings calls, #



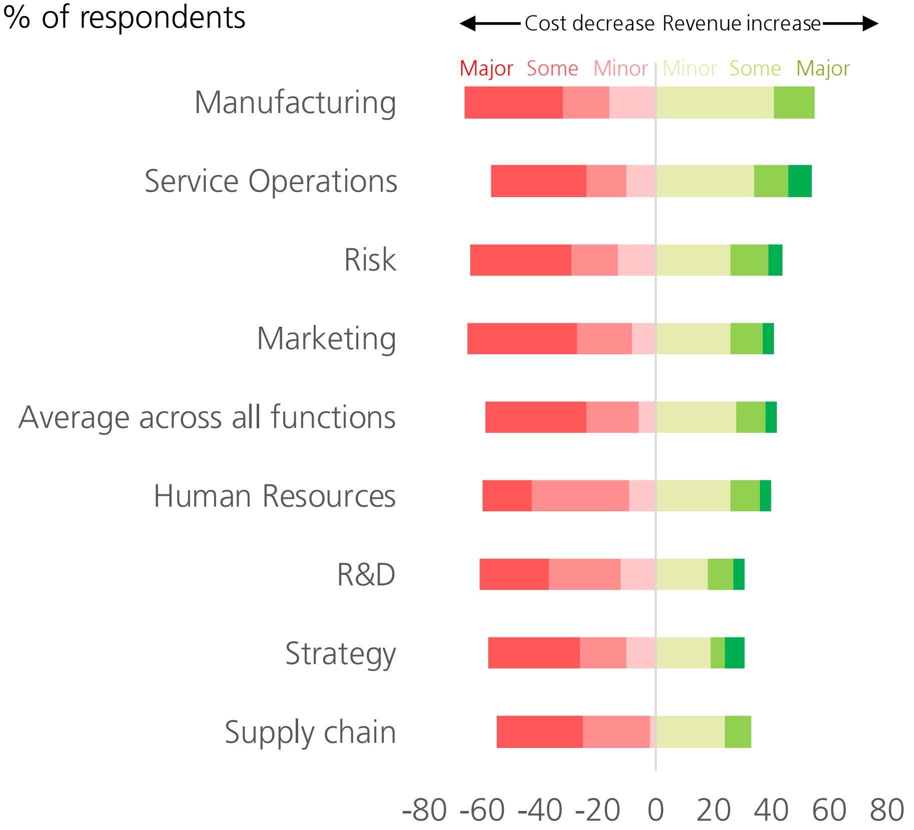
Source: Factset, UBS, as of 17 June 2024

UBS

AI adoption benefits currently limited but may accelerate

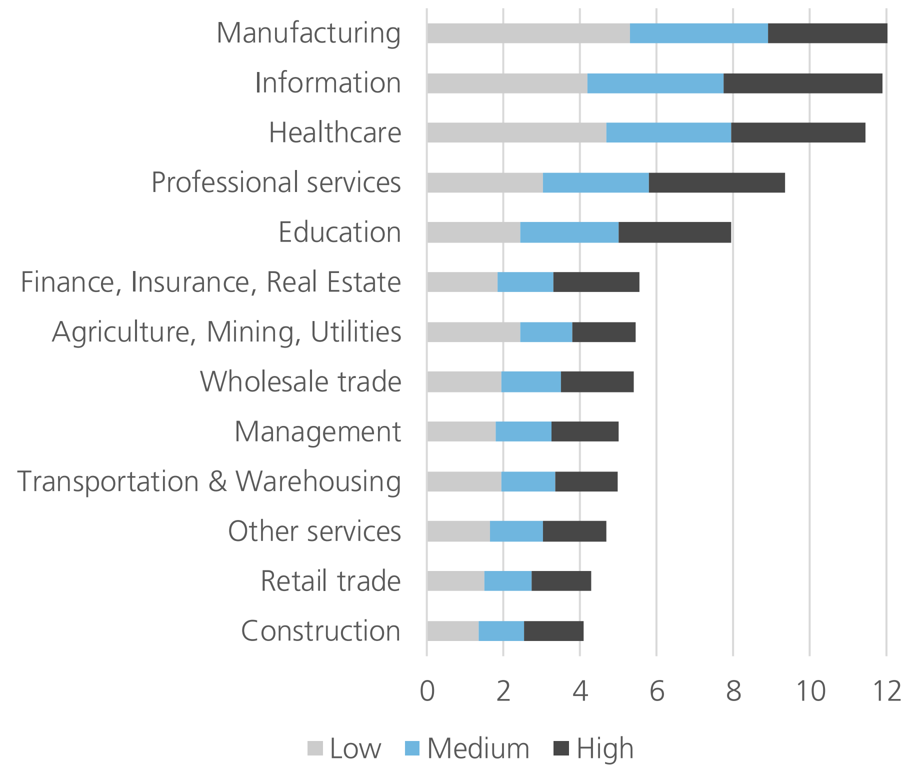
AI adoption is still slow and unequal, with manufacturing sector seeing the largest beneficial effects from AI adoption; the upside is that there is a lot of scope for gains.

Already, firms see benefits from AI Adoption
% of respondents



Note: Revenue increase measured as Minor (<=5%), Some (6-10%), and Major (>10%). Cost decreases measured as Minor (<=10%), Some (10-19%), and Major (>20%).
Source: McKinsey, UBS, as of 28 May 2024

Adoption Intensity by sector
% of workers



Note: Respondents were asked if they used the following technologies: Automated Guided Vehicles, Machine Learning, Machine Vision, Natural Language Processing, or Voice Automation. "High" refers to : more than 25% of production or service, "Medium" captures 5%-25% and "Low" refers to usage less than 5%.
Source: "AI Adoption in America: Who, What, and Where" (McElheran et al.) UBS, as of 6 November 2023

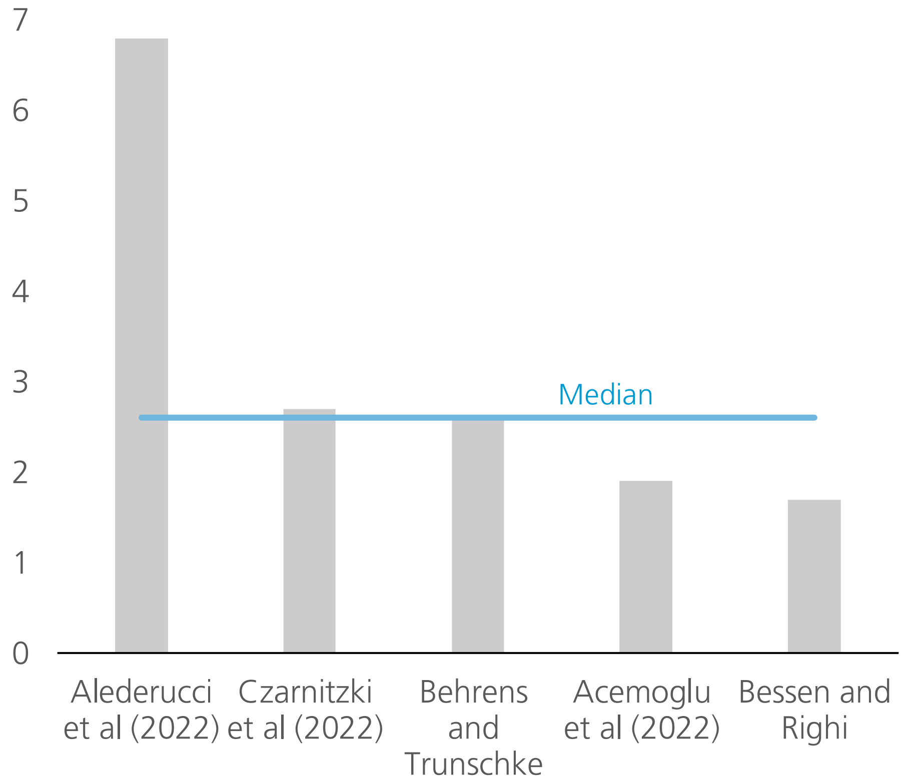
UBS

K A

AI is more likely to boost labor productivity, not displace labor

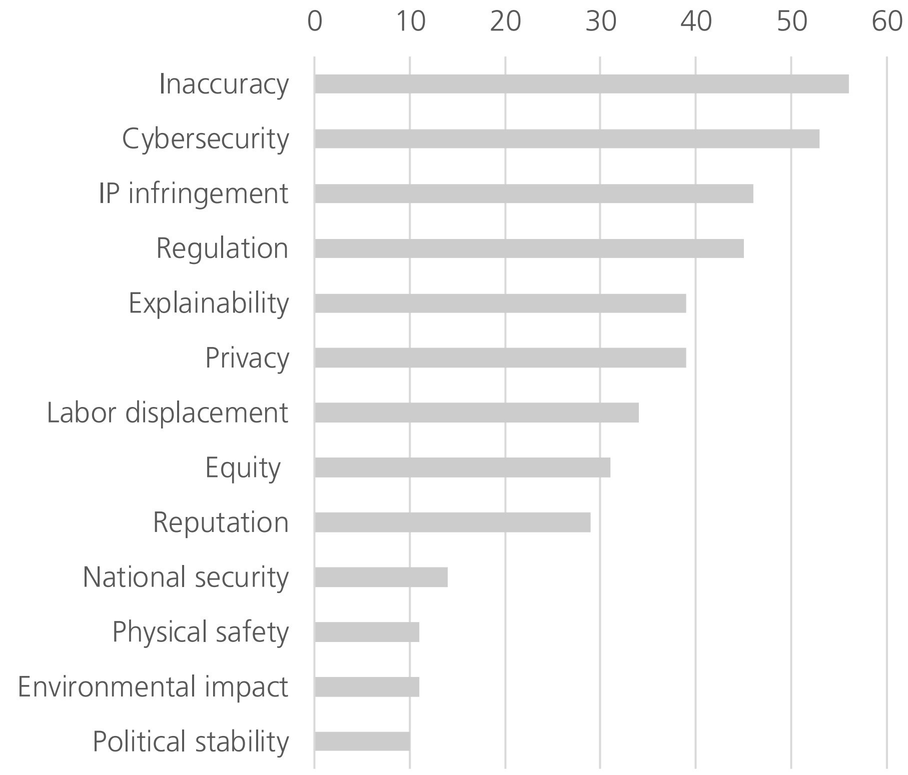
AI adoption still in the early days and the range of positive impact is still wide; more than half of early adopters say inaccuracy is the largest issue, preventing broader adoption

Range of AI adoption on growth is wide but positive
Effect of AI Adoption on annual firm productivity growth, %



Source: Goldman Sachs Investment Research, UBS, as of 13 June 2024

Inaccuracy is the biggest risk of AI according to surveyed firms
% of respondents



Source: McKinsey, UBS, as of 13 June 2024

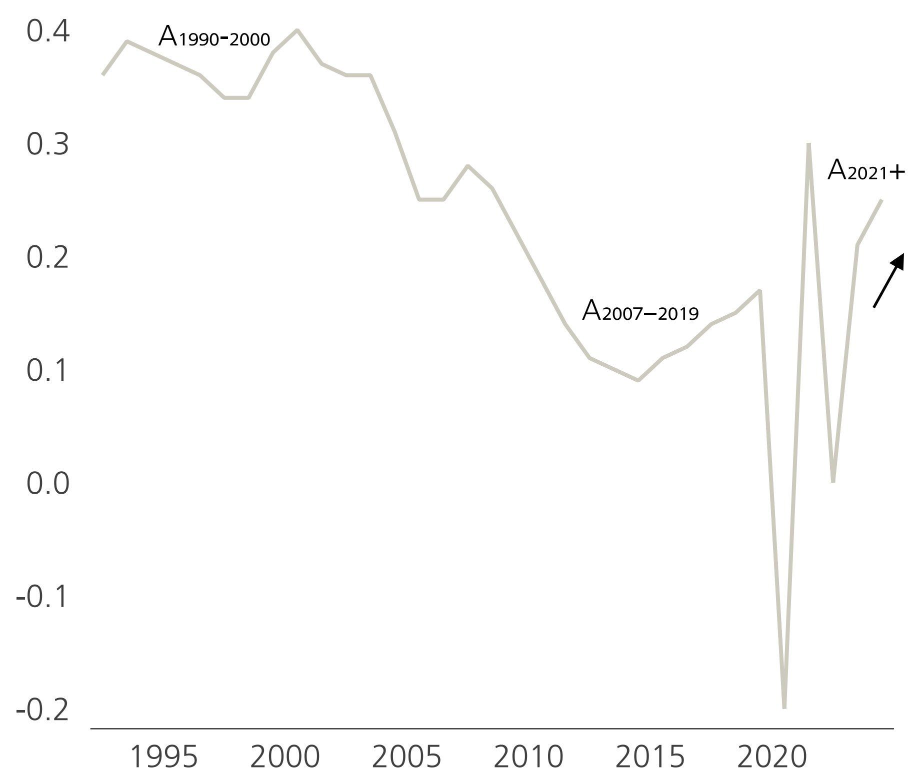
A The economy appears to be more dynamic post-pandemic

The post-pandemic entrepreneurship boom looks sticky, reversing decades of declining firm dynamism in the US.

	Prior		Current
Conviction			

- **Current Assessment:** Entrepreneurial activity is structurally higher post-pandemic, upending decades of declining firm dynamism.
  - **Positive:** New business formations are 50% higher versus pre-pandemic. More firms are entering and exiting industries, which should make them more dynamic.
  - **Negative:** High borrowing costs are a bigger drag for small firms and new businesses compared to large established companies.
- **Outlook**: Entrepreneurship should remain high, as technology has lowered the cost of starting and scaling a new business. Rate cuts will help financing costs, and risk capital is abundantly available.
- **Risks**: Prolonged high rates combined with financial stress for households in lower income/wealth quintiles is a headwind to entrepreneurial activity. AI may benefit larger firms the most, making it harder for start-ups to compete.

Rising Total Factor Productivity shows a more productive economy
contribution to GDP, %

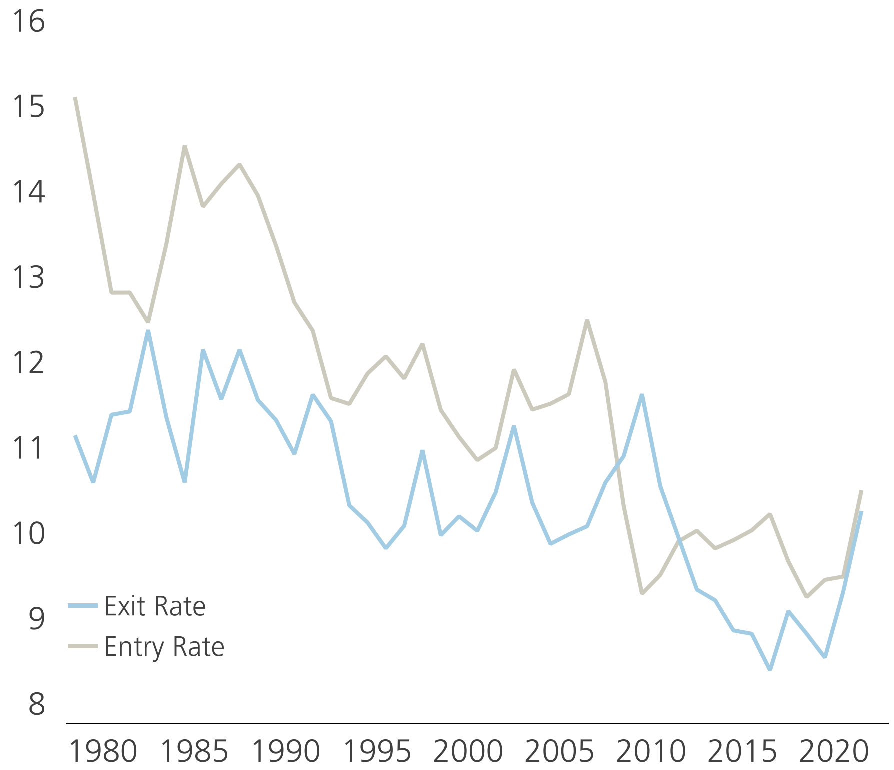


Source: Bloomberg Economics, UBS, as of 17 June 2024

A The entrepreneurial surge shows no signs of slowing

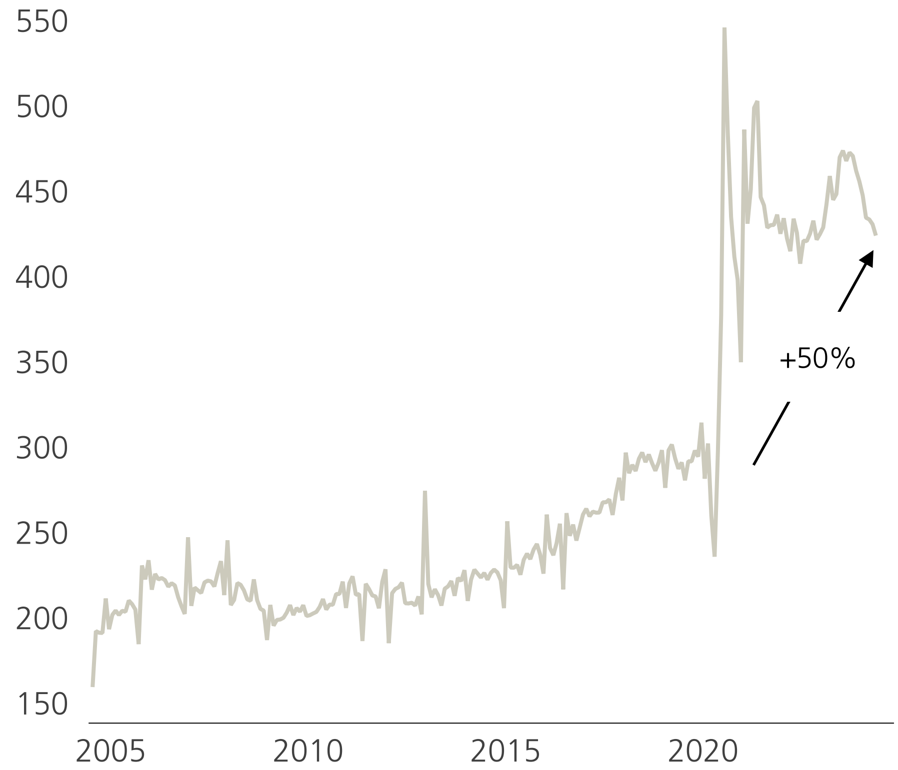
New business formation remains structurally higher than pre-pandemic, while firm dynamism has picked up - both indications of increased business dynamism.

Firm dynamism – entry/exit of the market – declining for decades
Firm entry and exit rate, %



Source: BLS, UBS, as of 13 June 2024

Entrepreneurial activity on a higher structural level
New business formation, in thousands



Source: BLS, UBS, as of 13 June 2024

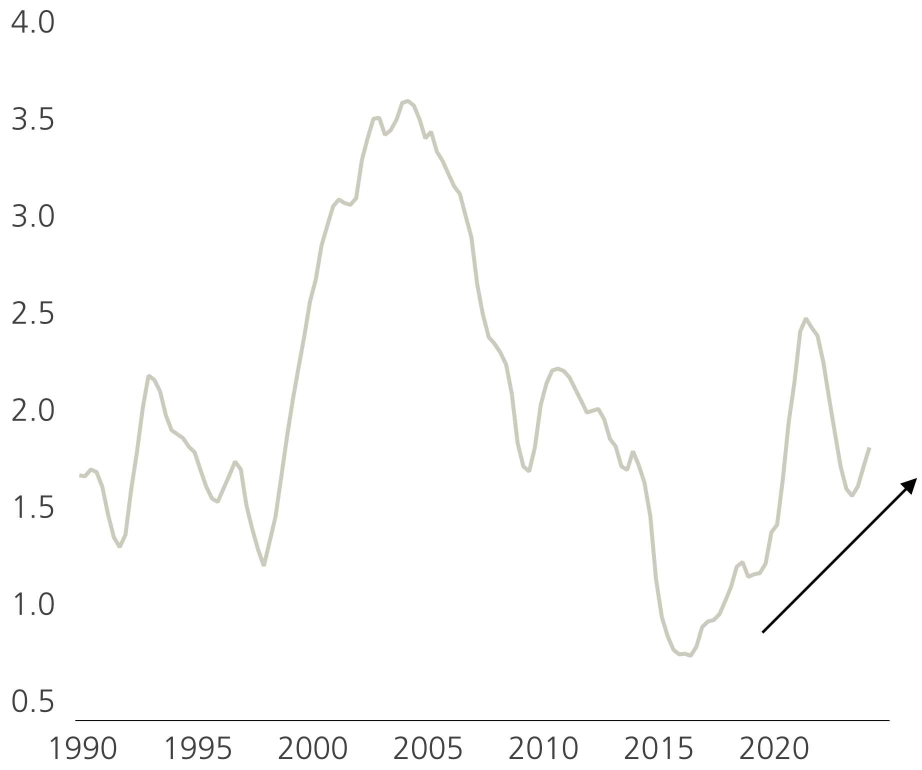
UBS

A

Productivity is rising, but likely not yet due to K or A factors

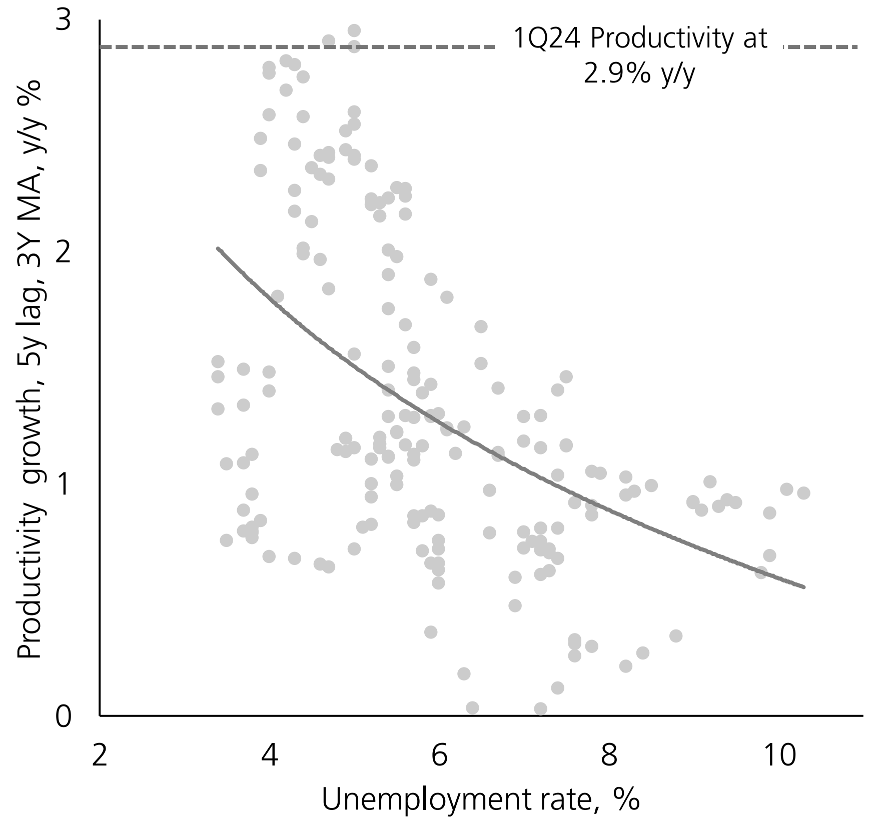
Productivity growth has been trending higher for the past decade, without the benefits yet of the capex surge or AI adoption; companies are getting more output from workers in a tight labor market.

Productivity has been trending higher since pre-pandemic
y/y, 5Y mov. avg., for labor productivity



Source: BLS, UBS, as of 13 June 2024

Productivity tends to increase when labor market tightens
Unemployment rate & productivity growth since 1950

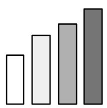
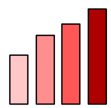
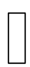
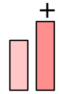
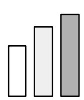
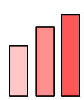
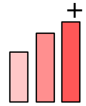


Source: BLS, UBS, as of 13 June 2024

UBS

'Roar Score' assessment: A little bit louder now

Based on our assessment of the Roar Score factors, we are marginally more confident in the 'Roaring '20s' regime occurring, but it remains more unlikely than likely and thus the bull case scenario.

Factor	Confidence then	Confidence now	Summary	Risks
Capital (K)			While aggregate investment does not show strong evidence of a pickup, pockets of the economy already benefitting from a historic surge in investment	A new administration may roll back parts of the IRA and/or BIL. Tight monetary policy may limit further capex.
Labor (L)			More evidence of labor market dynamism and a greater supply of workers than previously estimated.	Concerns on immigration from the American public may translate into restrictive legislation.
Dynamism / Technology (A)			Productivity has trended higher since the pandemic thanks to a very tight labor market. Effects of AI and capital investment yet to be fully absorbed.	Unexpected economic slowdown results in much higher labor market slack and less productivity pressure. AI regulation limits broader adoption.
Productivity / Output (Y)			Productivity modestly higher in part thanks to better firm dynamism. AI investment strong, but effects still tenuous.	Deep contraction in economic activity limits further investment. Renewed concern over government deficits leads to austerity.

Section 4

The policy impact

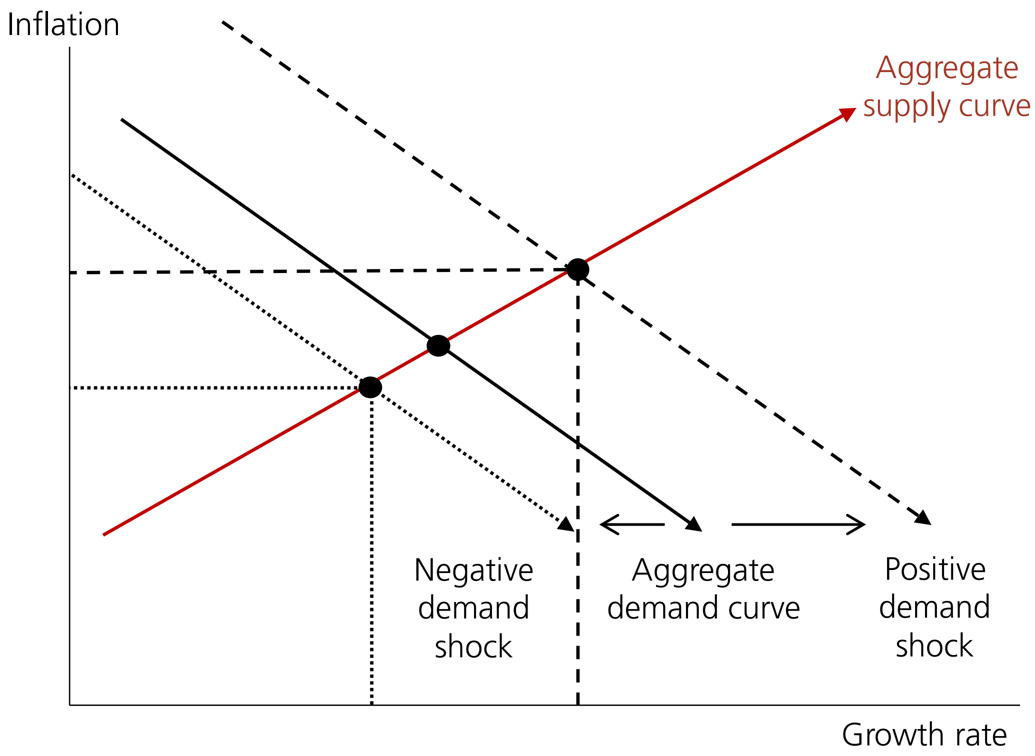
UBS

Reminder: Policy impacts demand, but could alter supply as well

Policy works primarily through aggregate demand

- **Fiscal policy** directly influences aggregate demand via spending and tax policies, and indirectly impacts supply with tax incentives, regulatory changes, and trade restrictions, among other tools.
- Over the past few years fiscal policy has been very expansionary, increasing demand through multiple legislative polices, including the CHIPS, IRA, and Infrastructure Acts. This has contributed to large deficits, though they are not the main cause of them.
- **Monetary policy** mostly impacts aggregate demand, minimally affecting supply. It has been restrictive for the past year, but it is uncertain just how tight monetary policy is because the economy has been largely impervious to Fed rate hikes thus far.
- Fiscal and monetary policy can work in conjunction to support or constrain demand, but often have opposing effects (e.g., loose fiscal policy is matched by tight monetary policy).
- Combined policy has arguably been a supportive of demand over the past nine months because the fiscal impulse is bigger than expected and the Fed pivot to a rate cutting bias greatly eased financial conditions.

Policy could shift the demand curve in or out

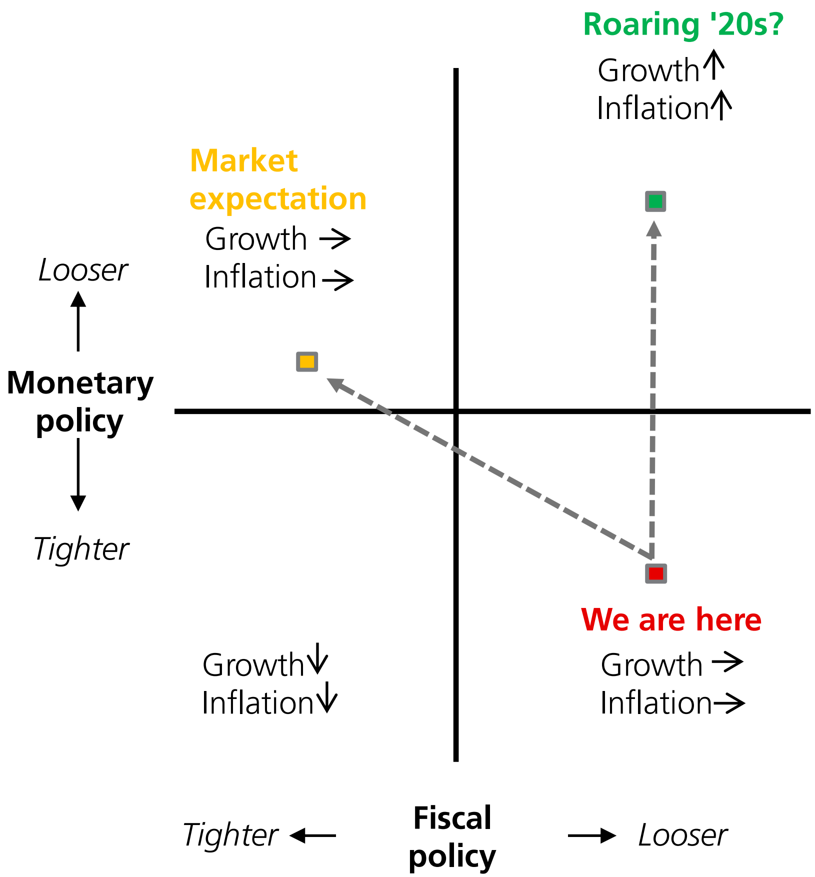


Source: UBS as of 17 June 2024

UBS

A wide range of policy scenarios, and not easy to forecast

Policy is a wildcard since it's contingent on politics and the upcoming election. Unless monetary policy is fiscally dominated, fiscal policy likely to be a headwind for a Roaring '20s due to already-high deficits.



Note: Figure is illustrative only.
Source: UBS, as of 17 June 2024

Considerations for policy direction, a political decision

Where we are:

- Fiscal policy is very loose, with an expected deficit-to-GDP of ~5.5%in 2024 and the CBO forecasts deficits over 5% for the next decade.
- Monetary policy is currently restrictive, but the Fed has an easing bias and policy should start moving toward neutral later this year; the Fed is comfortable with inflation gradually declining to 2%.
- This policy combination has resulted in growth that has remained resilient, while inflation has come down gradually.

Market expectation:

- Limited fiscal consolidation in the next two years regardless of the election outcome, given lack of political appetite.
- Early in 2025, Congress must raise the debt ceiling and before the end of next year the 2017 tax cuts that are set to expire at the start of 2026 must be addressed, otherwise the fiscal contraction is large.
- A Fed that gradually gets to a neutral policy stance; the Fed forecasts a funds rate of 3.125% by December 2026, market pricing is for ~3.65%.
- Expect lower growth and inflation; fiscal contraction should lower growth and inflation; lower rates likely not sufficient to counter the fiscal drag.

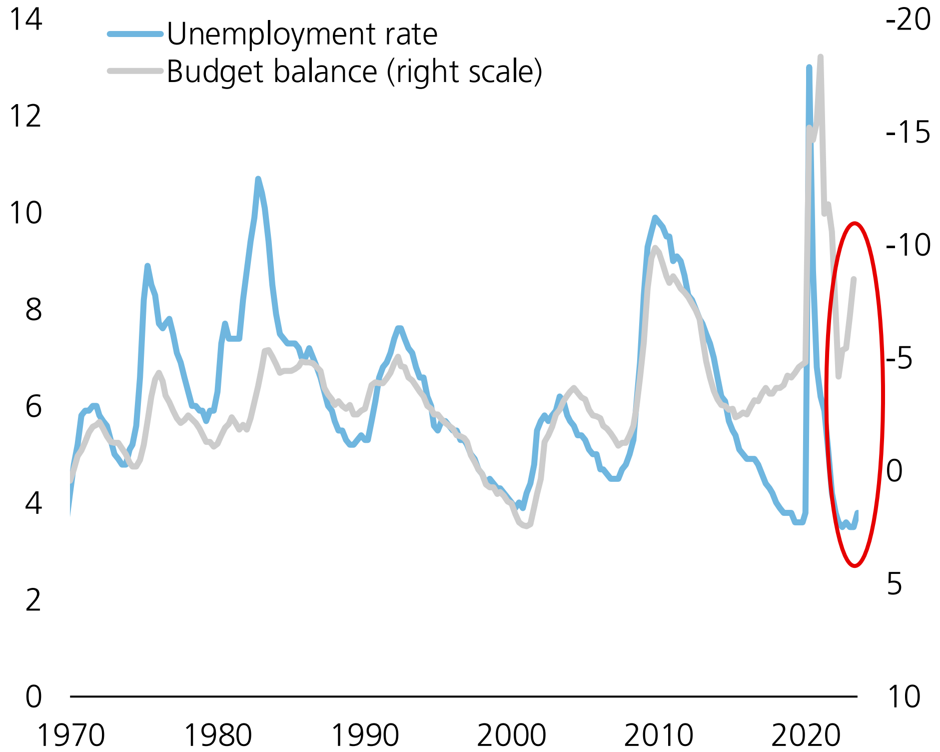
Roaring '20s:

- Little political appetite in either party for significant deficit reduction, while other considerations (security, energy transition, populism) create spending needs.
- High interest costs and lack of political will to reduce the deficit could lead to fiscal dominance of monetary policy; the latter is constrained from fighting inflation because rates need to be low (i.e., nominal interest rate < nominal GDP).
- Bias is to run a hot economy, with higher growth and inflation versus expectations.

Deficits set to remain wide for the foreseeable future…

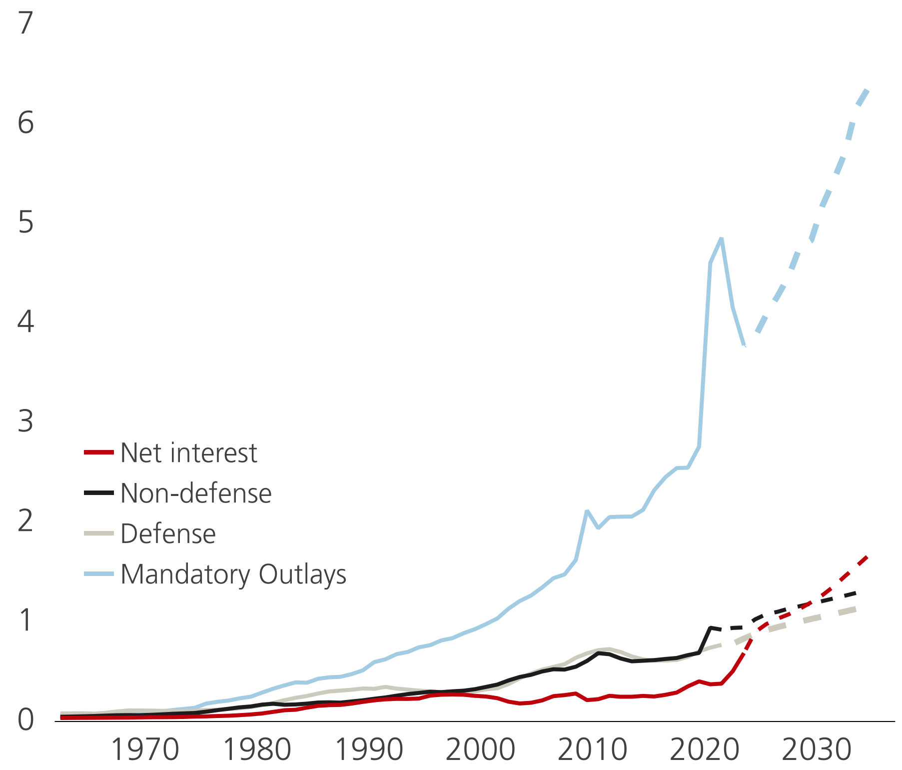
The deficit is 6% of GDP in 2023 despite near record-low unemployment, implying public finances are structurally imbalanced.

The budget deficit is disconnected from fundamentals
%



Source: BLS, CBO, Bloomberg, UBS, as of 17 June 2024

Hard-to-reform mandatory spending pushing deficits higher
CBO projections, % GDP



Source: CBO, Bloomberg, UBS, as of 17 June 2024

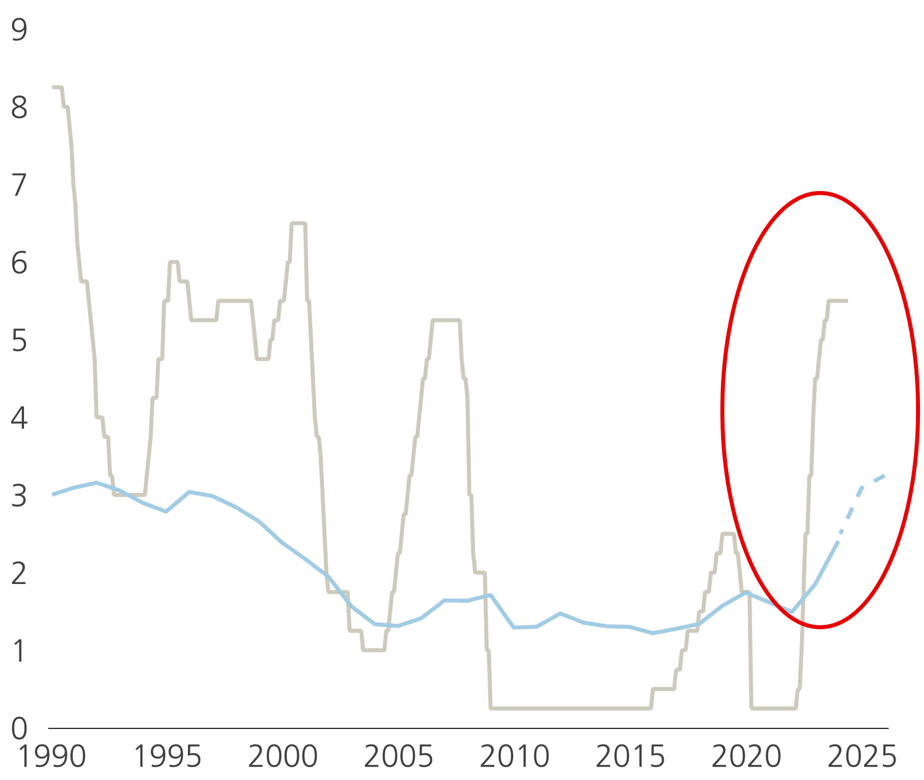
UBS

…putting pressure on the Fed to put a ceiling on rates

The rising cost of interest payments on fiscal policy and attempts to reduce spending are potential drags on the economy, which may lead the Fed to lower rates and tolerate inflation modestly above 2%

The federal interest burden will rise quickly at current rates

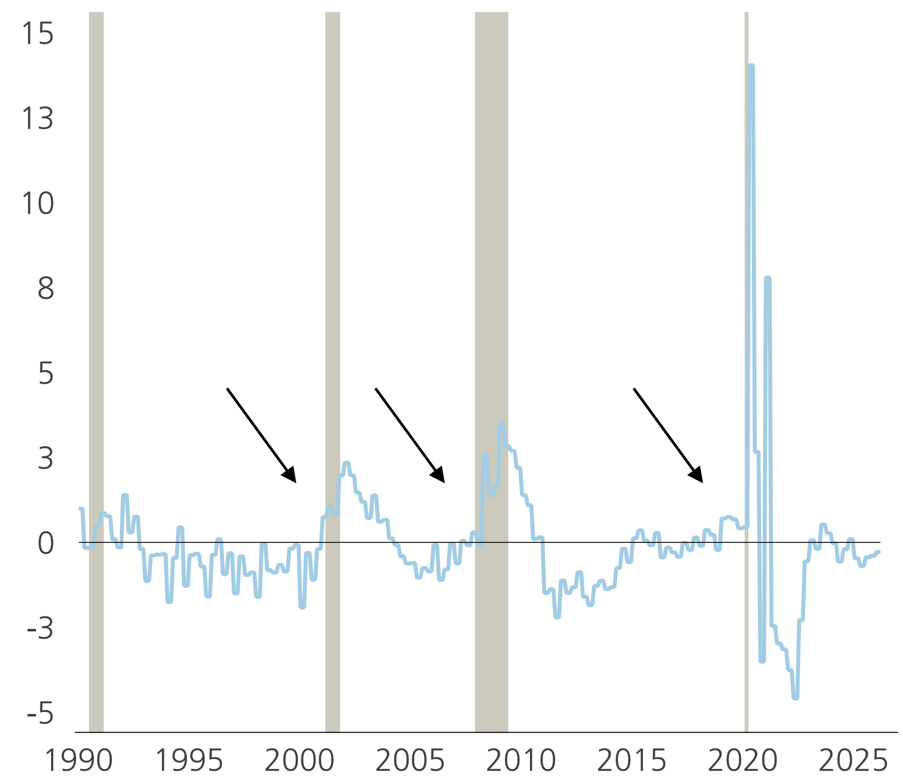
%



Source: CBO, Federal Reserve, UBS as of 17 June 2024

Fiscal steps in if recession occurs, slightly negative otherwise

Contribution of fiscal policy on real GDP growth, in %



Source: Brookings Instituter, UBS as of 17 June 2024

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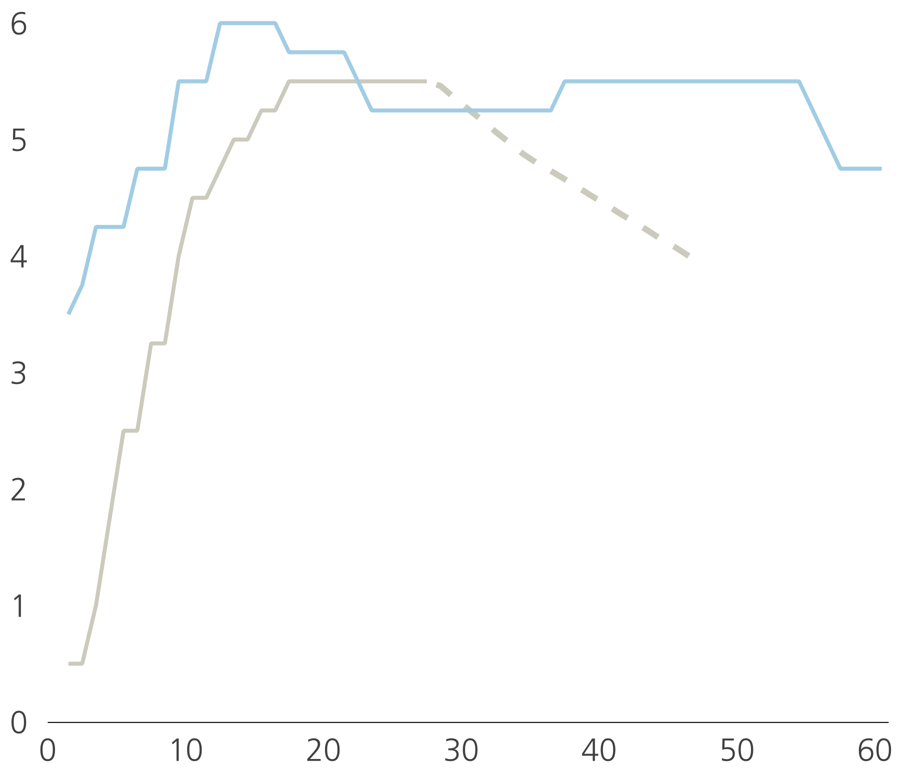
Section 5

Investment considerations: Look to the 1990s

1990s continue to be the best template for a Roaring '20s regime

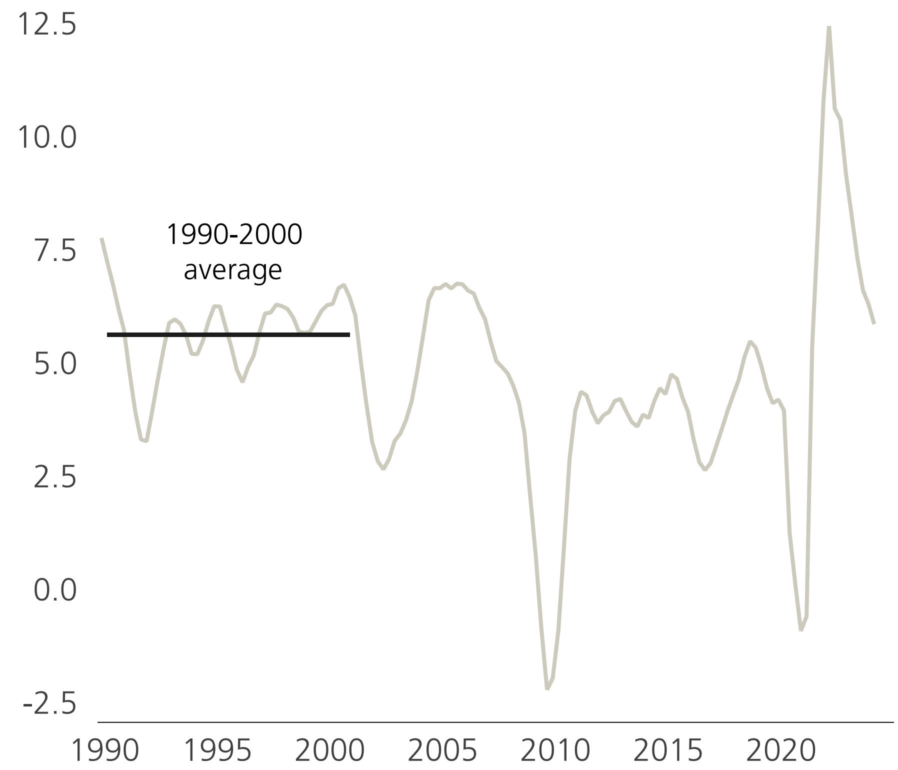
The current Fed hiking cycle is similar to the '94 cycle, which resulted in a soft landing. A technology-driven productivity boom followed that led to high growth and disinflation - it could happen again.

Current rate level looks like the 1990s…
Federal funds rate, in %



Source: Bloomberg, UBS, as of 17 June 2024

…matching a very similar nominal GDP pace
1Y mov. avg. y/y in %



Source: BEA, UBS, as of 17 June 2024

What could a Roaring '20s mean for investing? Updated thoughts

There will be specific asset class and individual security leaders in a Roaring '20s regime, but those are TBD. For overall asset allocation, some implications seem likely, or at least must be considered.

Higher rates for longer

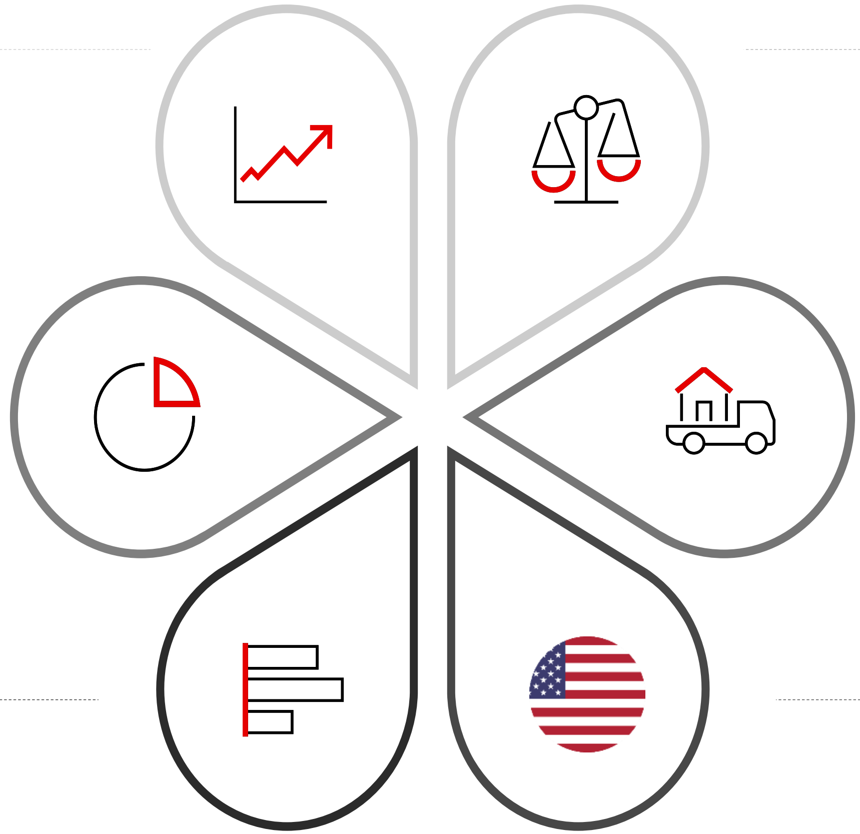
The current level of rates is likely to persist in a Roaring '20s regime, though with the fed funds rate down to levels closer to current fed funds futures pricing.

Changing stock-bond correlation

Higher inflation usually increases the correlation between stock and bond returns, diminishing portfolio diversification, and increasing portfolio volatility

Positive for equities, biased to tech

Higher nominal growth should be positive for equity returns overall. But if it appears to be due primary to AI, then the tech sector will likely be the biggest winner, as in the 1990s.



Higher portfolio volatility

A higher stock-bond correlation will make multi-asset portfolios more volatile, a consequence compounded by higher inflation volatility.

Strong case for alternatives

Given increased correlation between stocks and bonds, the case is stronger for adding alternatives to standard 60/40 portfolios, going instead with 40/30/30.

Continued US outperformance

A Roaring '20s regime is primarily a US story, with modest versions in other developed economies. While US equities are relatively expensive, this regime could support ongoing outperformance.

UBS

Section 6

Appendix

Appendix

Statement of risk

1. Equity markets are difficult to forecast because of fluctuations in the economy, investor psychology, geopolitical conditions, and other important variables.
2. Bond market returns are difficult to forecast because of fluctuations in the economy, investor psychology, geopolitical conditions and other important variables. Corporate bonds are subject to a number of risks, including credit risk, interest rate risk, liquidity risk, and event risk. Though historical default rates are low on investment grade corporate bonds, perceived adverse changes in the credit quality of an issuer may negatively affect the market value of securities. As interest rates rise, the value of a fixed coupon security will likely decline. Bonds are subject to market value fluctuations, given changes in the level of risk-free interest rates. Not all bonds can be sold quickly or easily on the open market. Prospective investors should consult their tax advisors concerning the federal, state, local, and non-U.S. tax consequences of owning any securities referenced in this report.
3. Prospective investors should consult their tax advisors concerning the federal, state, local, and non-U.S. tax consequences of owning preferred stocks. Preferred stocks are subject to market value fluctuations, given changes in the level of interest rates. For example, if interest rates rise, the value of these securities could decline. If preferred stocks are sold prior to maturity, price and yield may vary. Adverse changes in the credit quality of the issuer may negatively affect the market value of the securities. Most preferred securities may be redeemed at par after five years. If this occurs, holders of the securities may be faced with a reinvestment decision at lower future rates. Preferred stocks are also subject to other risks, including illiquidity and certain special redemption provisions.
4. Although historical default rates are very low, all municipal bonds carry credit risk, with the degree of risk largely following the particular bond's sector. Additionally, all municipal bonds feature valuation, return, and liquidity risk. Valuation tends to follow internal and external factors, including the level of interest rates, bond ratings, supply factors, and media reporting. These can be difficult or impossible to project accurately. Also, most municipal bonds are callable and/or subject to earlier than expected redemption, which can reduce an investor's total return. Because of the large number of municipal issuers and credit structures, not all bonds can be easily or quickly sold on the open market.

Appendix

Emerging Market Investments

Investors should be aware that Emerging Market assets are subject to, amongst others, potential risks linked to currency volatility, abrupt changes in the cost of capital and the economic growth outlook, as well as regulatory and socio-political risk, interest rate risk and higher credit risk. Assets can sometimes be very illiquid and liquidity conditions can abruptly worsen. WMR generally recommends only those securities it believes have been registered under Federal U.S. registration rules (Section 12 of the Securities Exchange Act of 1934) and individual State registration rules (commonly known as "Blue Sky" laws). Prospective investors should be aware that to the extent permitted under US law, WMR may from time to time recommend bonds that are not registered under US or State securities laws. These bonds may be issued in jurisdictions where the level of required disclosures to be made by issuers is not as frequent or complete as that required by US laws.

For more background on emerging markets generally, see the WMR Education Notes "Investing in Emerging Markets (Part 1): Equities", 27 August 2007, "Emerging Market Bonds: Understanding Emerging Market Bonds," 12 August 2009 and "Emerging Markets Bonds: Understanding Sovereign Risk," 17 December 2009.

Investors interested in holding bonds for a longer period are advised to select the bonds of those sovereigns with the highest credit ratings (in the investment grade band). Such an approach should decrease the risk that an investor could end up holding bonds on which the sovereign has defaulted. Sub-investment grade bonds are recommended only for clients with a higher risk tolerance and who seek to hold higher yielding bonds for shorter periods only.

Non-Traditional Assets

Non-traditional asset classes are alternative investments that include hedge funds, private equity, real estate, and managed futures (collectively, alternative investments). Interests of alternative investment funds are sold only to qualified investors, and only by means of offering documents that include information about the risks, performance and expenses of alternative investment funds, and which clients are urged to read carefully before subscribing and retain. An investment in an alternative investment fund is speculative and involves significant risks. Specifically, these investments (1) are not mutual funds and are not subject to the same regulatory requirements as mutual funds; (2) may have performance that is volatile, and investors may lose all or a substantial amount of their investment; (3) may engage in leverage and other speculative investment practices that may increase the risk of investment loss; (4) are long-term, illiquid investments, there is generally no secondary market for the interests of a fund, and none is expected to develop; (5) interests of alternative investment funds typically will be illiquid and subject to restrictions on transfer; (6) may not be required to provide periodic pricing or valuation information to investors; (7) generally involve complex tax strategies and there may be delays in distributing tax information to investors; (8) are subject to high fees, including management fees and other fees and expenses, all of which will reduce profits.

Interests in alternative investment funds are not deposits or obligations of, or guaranteed or endorsed by, any bank or other insured depository institution, and are not federally insured by the Federal Deposit Insurance Corporation, the Federal Reserve Board, or any other governmental agency. Prospective investors should understand these risks and have the financial ability and willingness to accept them for an extended period of time before making an investment in an alternative investment fund and should consider an alternative investment fund as a supplement to an overall investment program.

In addition to the risks that apply to alternative investments generally, the following are additional risks related to an investment in these strategies:

- Hedge Fund Risk: There are risks specifically associated with investing in hedge funds, which may include risks associated with investing in short sales, options, small-cap stocks, "junk bonds," derivatives, distressed securities, non-U.S. securities and illiquid investments.
- Managed Futures: There are risks specifically associated with investing in managed futures programs. For example, not all managers focus on all strategies at all times, and managed futures strategies may have material directional elements.
- Real Estate: There are risks specifically associated with investing in real estate products and real estate investment trusts. They involve risks associated with debt, adverse changes in general economic or local market conditions, changes in governmental, tax, real estate and zoning laws or regulations, risks associated with capital calls and, for some real estate products, the risks associated with the ability to qualify for favorable treatment under the federal tax laws.
- Private Equity: There are risks specifically associated with investing in private equity. Capital calls can be made on short notice, and the failure to meet capital calls can result in significant adverse consequences including, but not limited to, a total loss of investment.
- Foreign Exchange/Currency Risk: Investors in securities of issuers located outside of the United States should be aware that even for securities denominated in U.S. dollars, changes in the exchange rate between the U.S. dollar and the issuer's "home" currency can have unexpected effects on the market value and liquidity of those securities. Those securities may also be affected by other risks (such as political, economic or regulatory changes) that may not be readily known to a U.S. investor.

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