MOODY'S
RATINGS

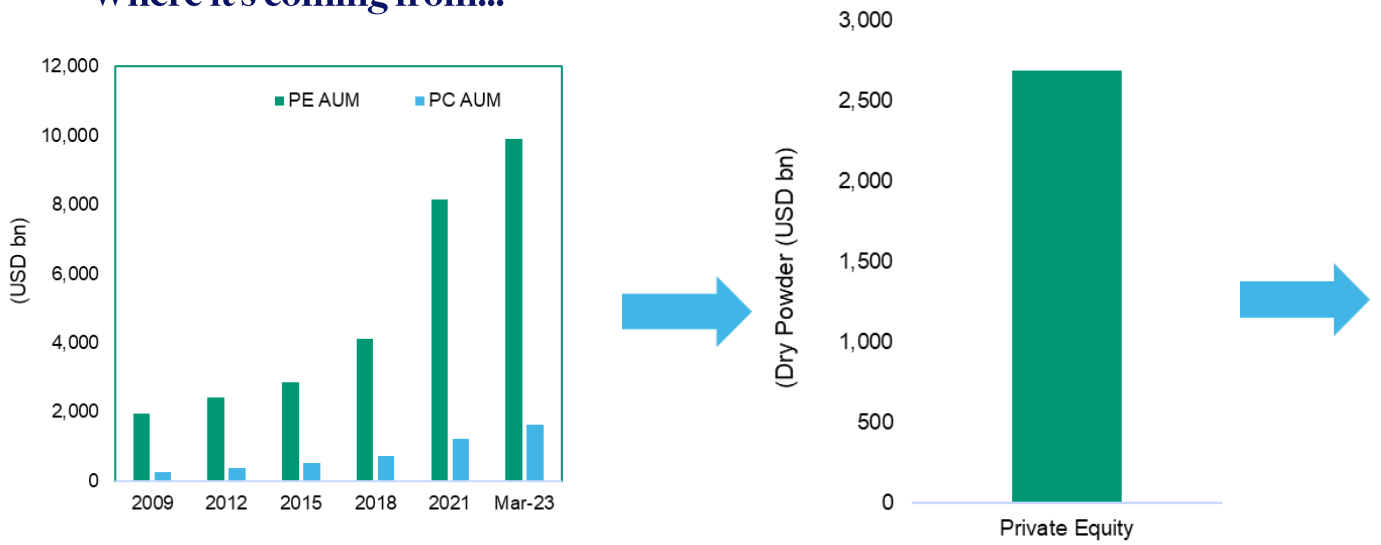
The Rise of Private Credit
April 2024

Ana Arsov

Global Co-Head Financial Institutions Group/Head of Private Credit

Private credit moves center stage in fixed income markets

Where it's coming from...



Where it's going...

- → Private credit market estimated to reach $2.7 trillion by 2027* driven principally by LBO financings
- → Changes to bank capital regs will constrain bank's ability to lend, creating more opportunities for private credit lenders
- → Asset- backed finance will drive next phase of private credit market's evolution. Apollo estimates that asset-backed finance represents a $40 trillion addressable market

Stages of private credit market evolution*

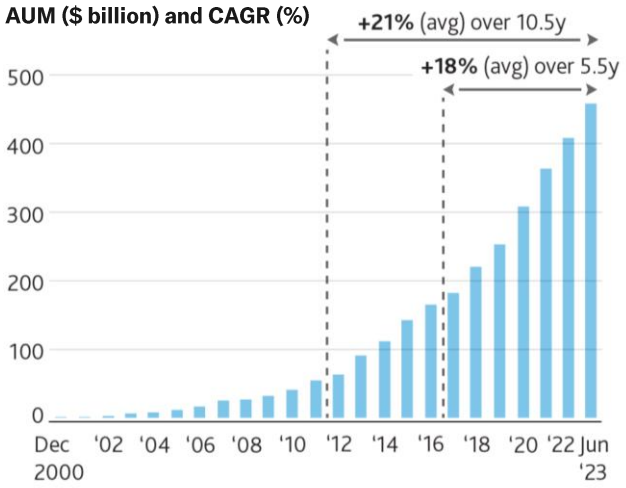
Post GFC	2012-2017	2018-2021	Today
•Bank Regulation & Shrinking Balance Sheets	•Middle Market Direct Lending •Specialty Finance Disintermediation	•Large Cap Direct Lending •Bank Syndication Disintermediation	•Asset-Backed Finance Disintermediation

Sources: *BlackRock estimate; Apollo, AUM data from Preqin;

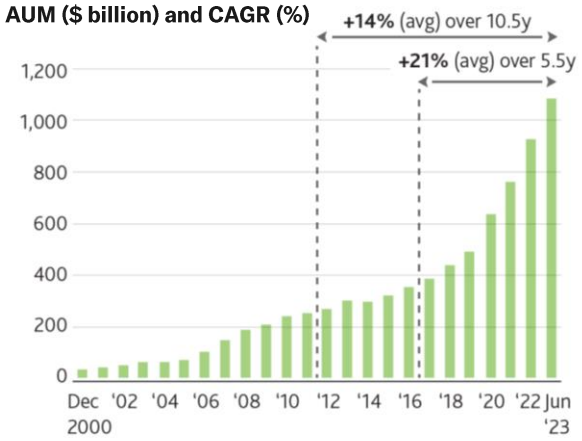
Private credit market will accelerate globally

- → US PC market dominating, but Europe will continue to forge higher, despite recent slowdown.
- → Further bank disintermediation will underpin private credit growth in the long term.
- → Direct lending credit risk faces similar challenges to broadly syndicated loans (BSLs).
- → Regulation and innovation will drive growth beyond traditional direct lending.

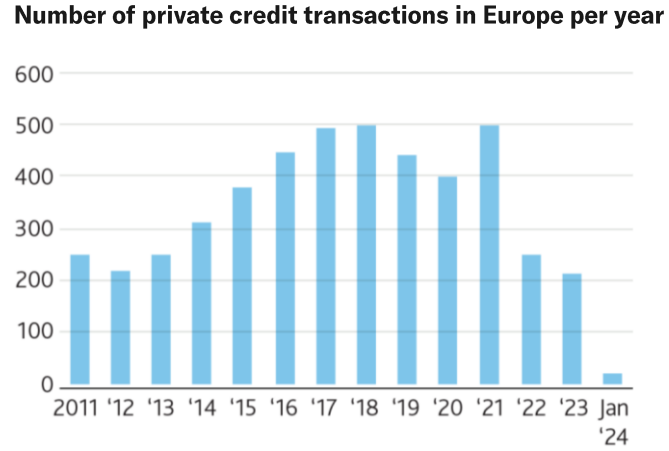
European private credit has been growing fast over the past several years



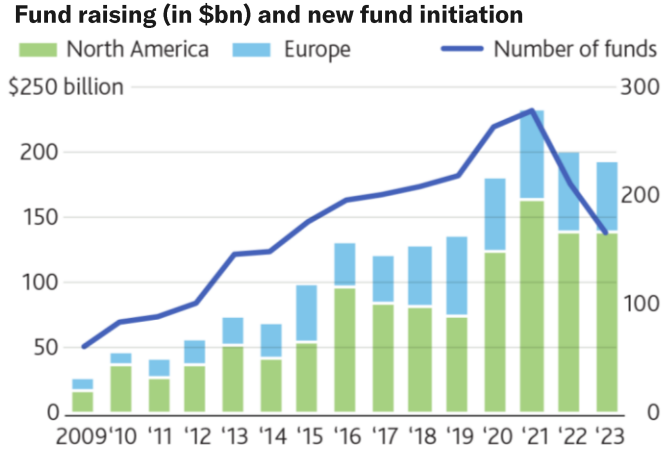
North American private credit continues to dominate



Issuance in Europe suffered in line with weaker economic outlook, higher rates and growing risk aversion



Private credit fund raising ($bn) and initiation of new funds has dropped



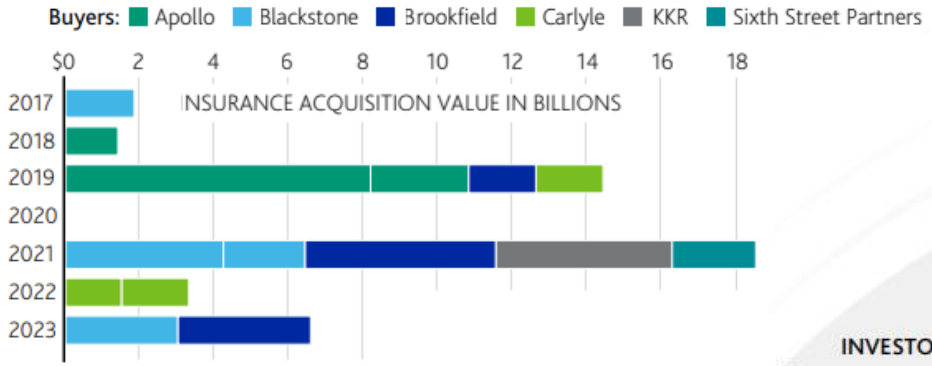
Source: Preqin and Moody's Ratings

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Alternative asset managers are rapidly growing, increasing market interlinkages and risk

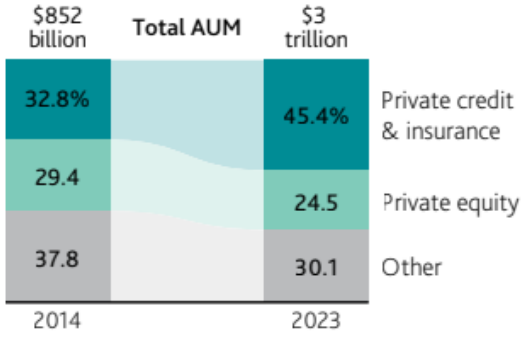
In a growing risk ecosystem, alternative asset managers (AMs) eager to increase fee-earning AUM are expanding deeper into insurance. They are also amping up private credit (PC) investing, which supports private equity (PE) deals. Meanwhile, PE sponsors are acquiring private credit managers or starting their own private credit arms.

Alternative AMs are buying or affiliating with insurance companies to access permanent capital and deploy through lending arms

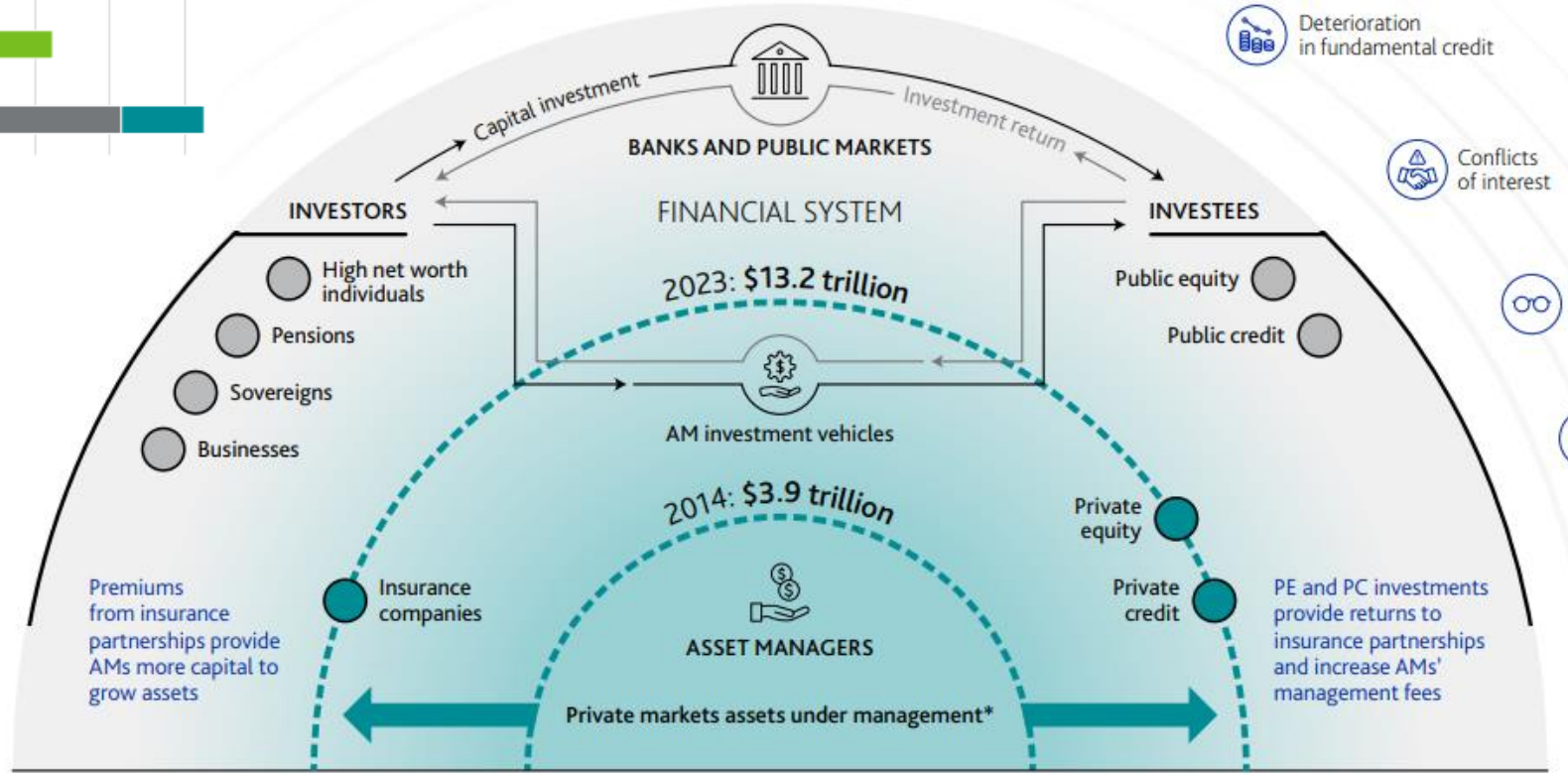


Private credit, insurance focus is growing at top managers

Blackstone, KKR, Carlyle, and Apollo
10-year percentage change in asset mix



Private capital makes up an increasing proportion of debt markets



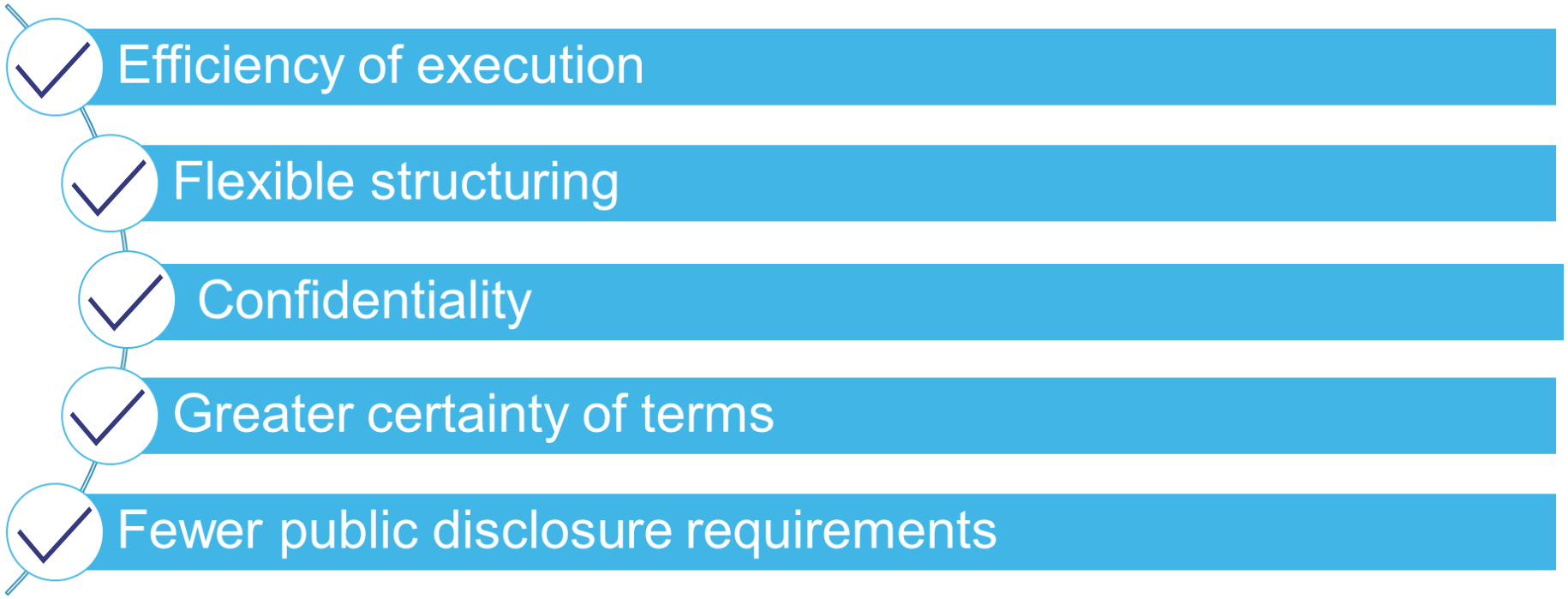
Asset managers' rapid growth, deepening interlinkages have systemic implications

- Deterioration in fundamental credit
- Conflicts of interest
- Reduced transparency
- Higher concentration risk
- Lower fiduciary oversight
- Reduced asset liquidity

*Private markets AUM includes private equity, private debt, real estate, infrastructure and natural resources. 2023 AUM figure as of March 2023 and 2014 figure as of year-end 2014.
Sources: Moody's Ratings; Preqin (AUM)

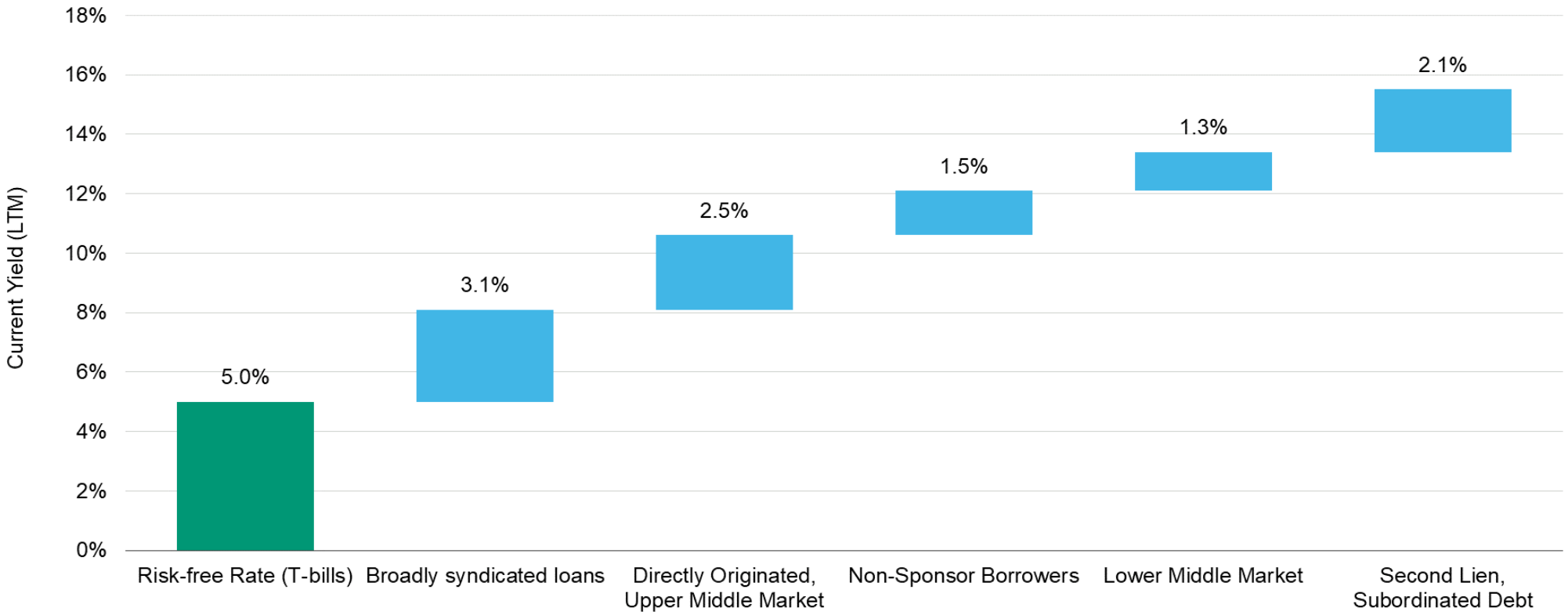
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Why do borrowers choose private credit?



Source: Blackstone

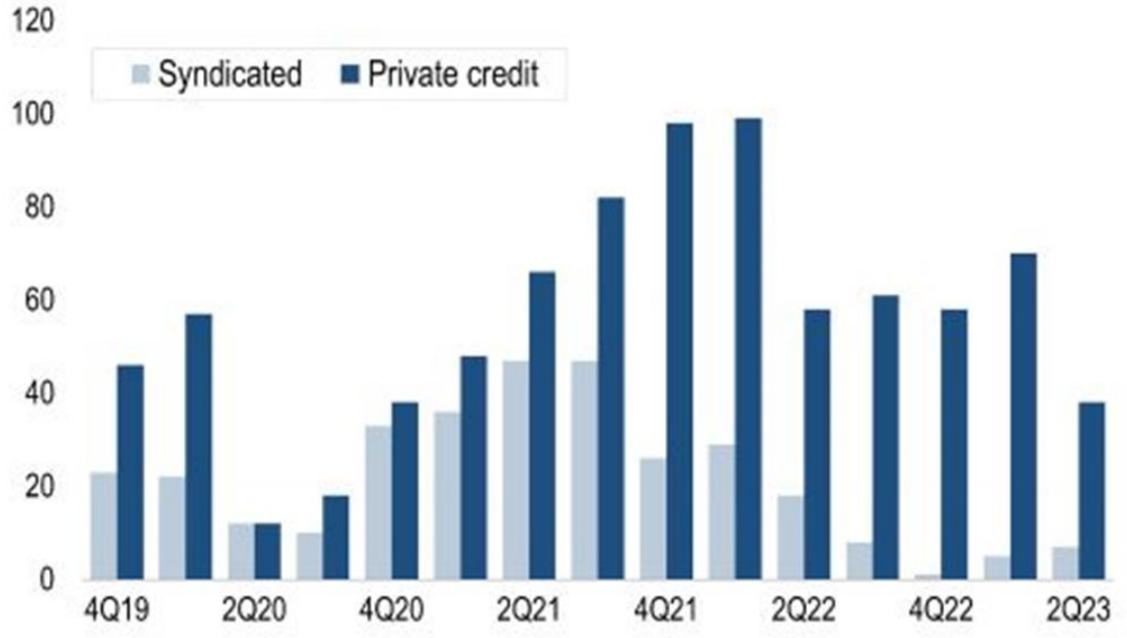
...but borrowers pay up for private financings



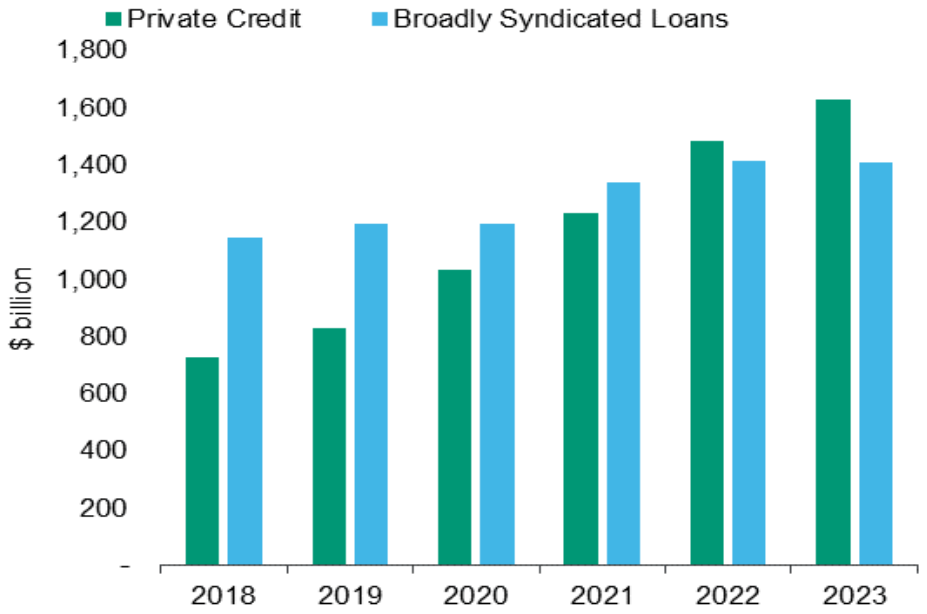
Source: Cliffwater

Direct lenders have taken market share from BSL market

Private credit is primary source of debt capital in LBO market



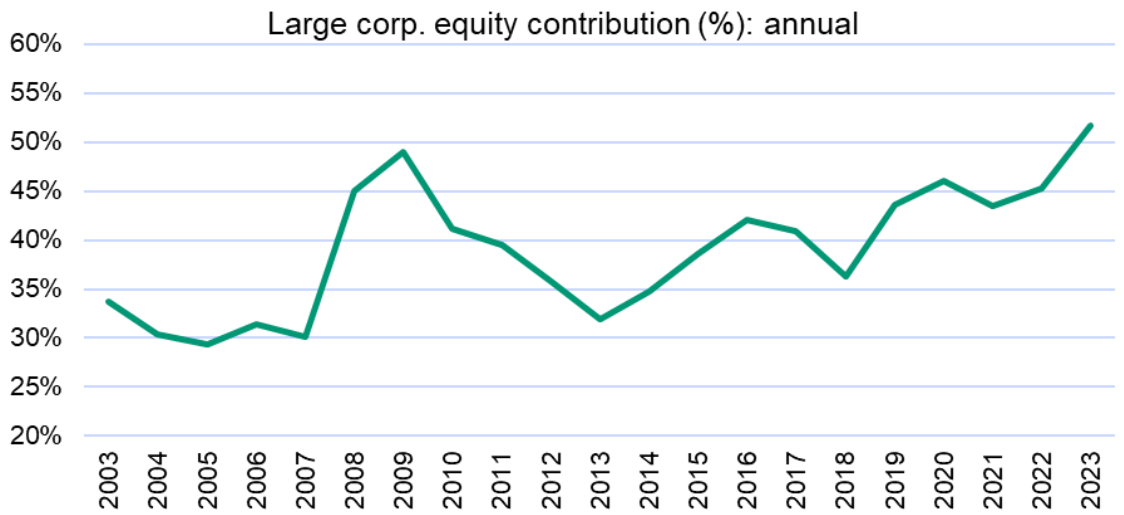
Private credit market now larger than BSL market



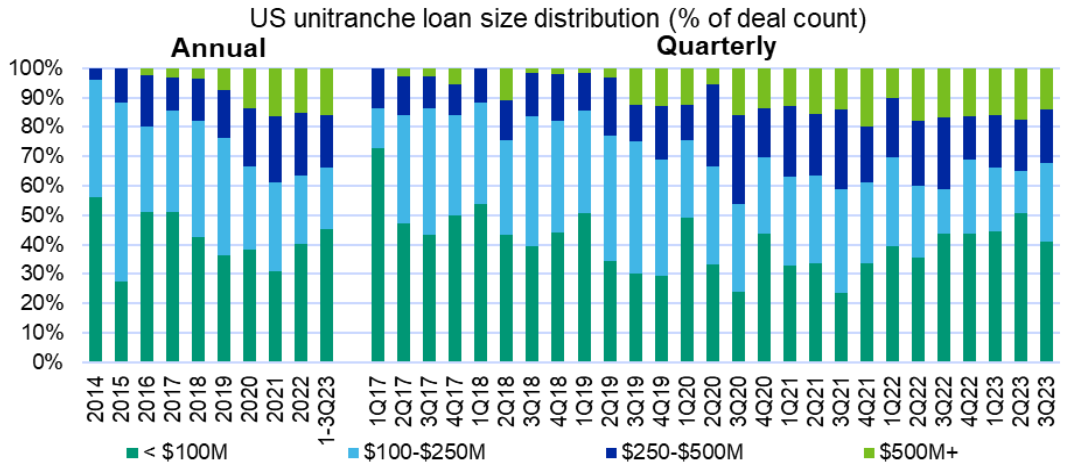
Sources: Pitchbook / LCD, Preqin

Competition between BSL & direct lending markets to intensify in 2024

Higher equity contribution will constrain PE returns

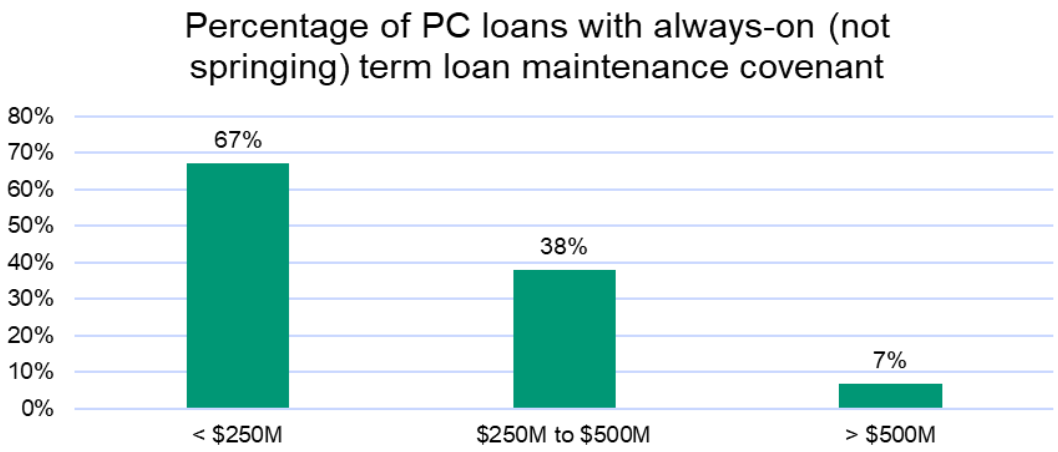


Rates and spreads are contracting – limiting returns for credit investors



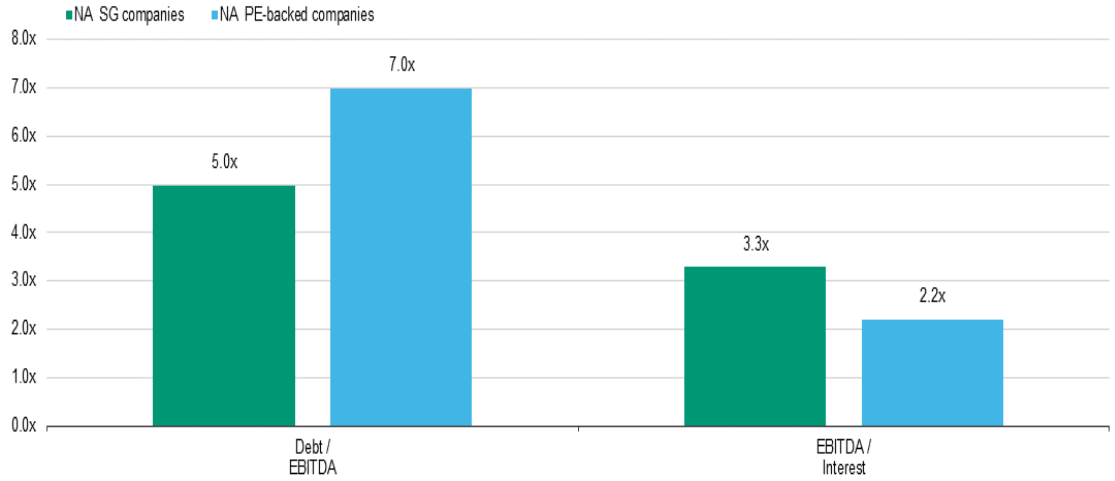
Private credit loan protections

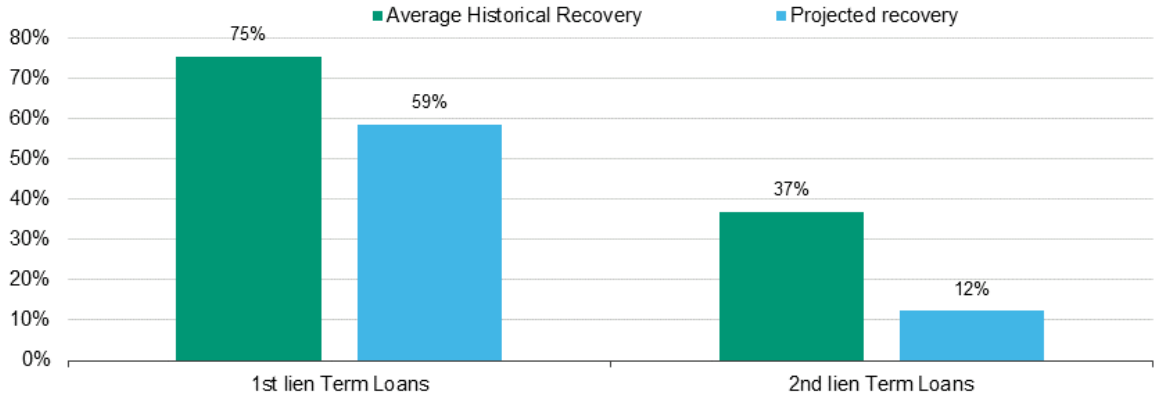
- → The smaller the deal, the greater the protection
- → Private credit loans are strikingly more protective than BSLs, differences will narrow as competition with BSL market intensifies
- → Private credit make borrowers pay for PIK, delayed draw and other flexibility with wider spreads, costlier calls, higher floors
- → Credit terms are converging between mega tranche loans in direct lending and broadly syndicated loans
- → Maintenance covenants go away as private credit deals get larger



PE-backed debt issuers have weaker credit metrics

Moody's LGD forecast predicts lower recoveries for BSL loans



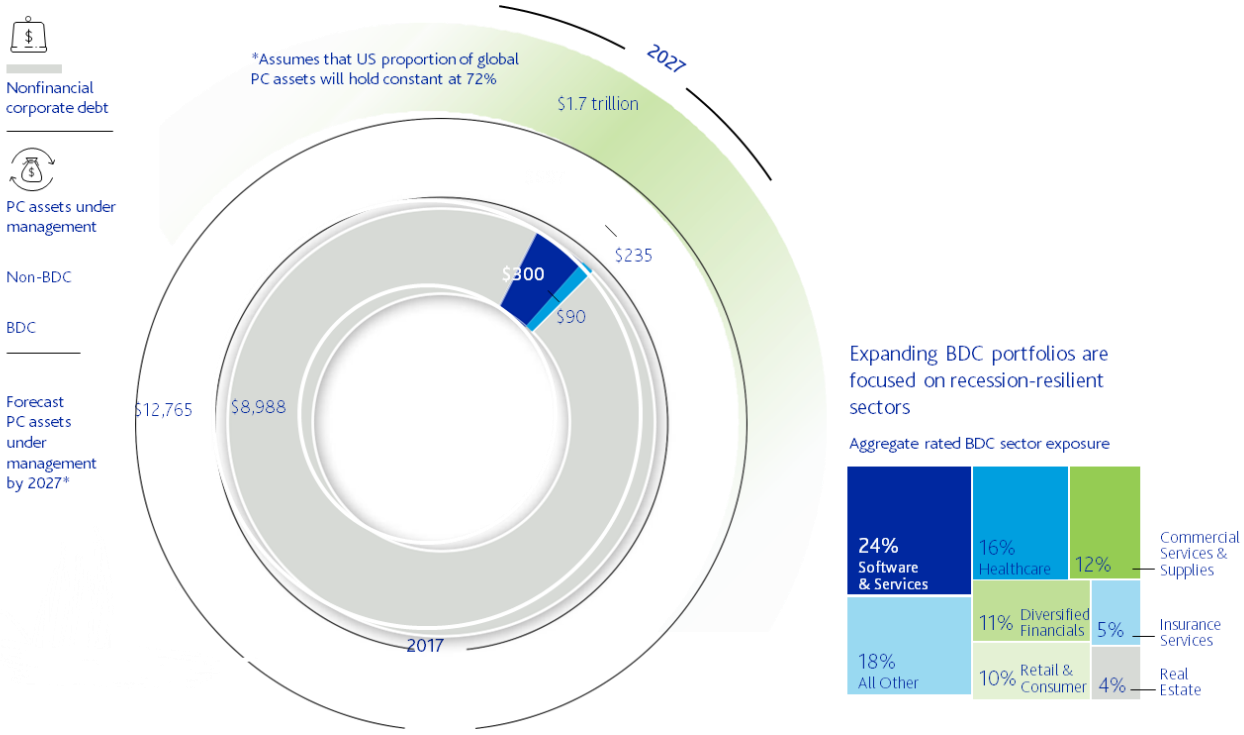


Source: Moody's Ratings; Note: North American corporates; credit metrics are summarized as medians

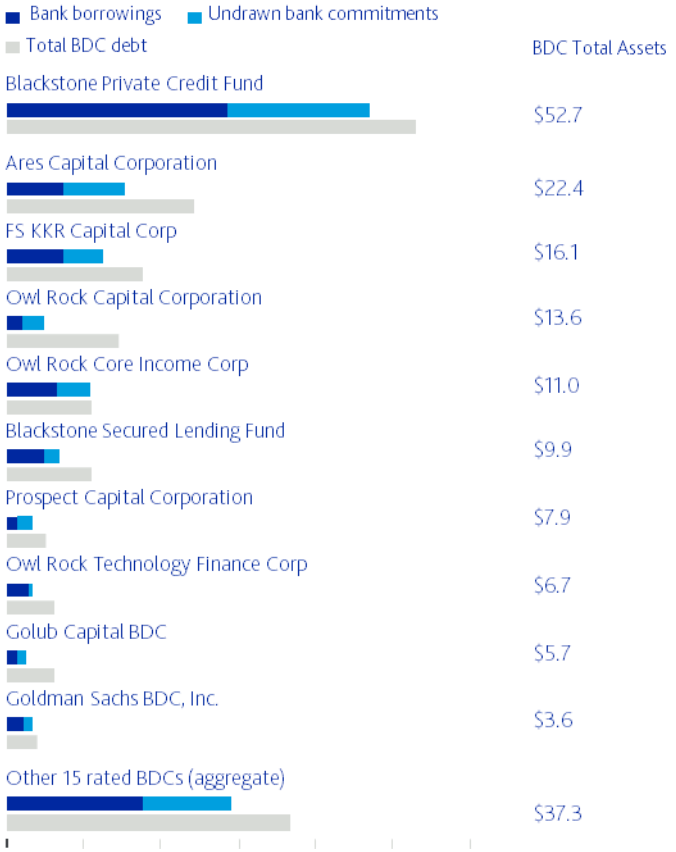
BDCs provide transparency into otherwise opaque market

BDC total assets represent 25% of total US private credit AUM

US nonfinancial corporate debt, PC and BDC assets, in billions of USD



BDCs' outstanding bank borrowings, undrawn bank revolving credit commitments and total debt, in billions at 31 December 2022



Sources: Moody's Ratings, Federal Reserve, Preqin, Leveraged Commentary & Data (LCD), Companies' financial statements.

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From laggard to leader? Closing the euro area's technology gap



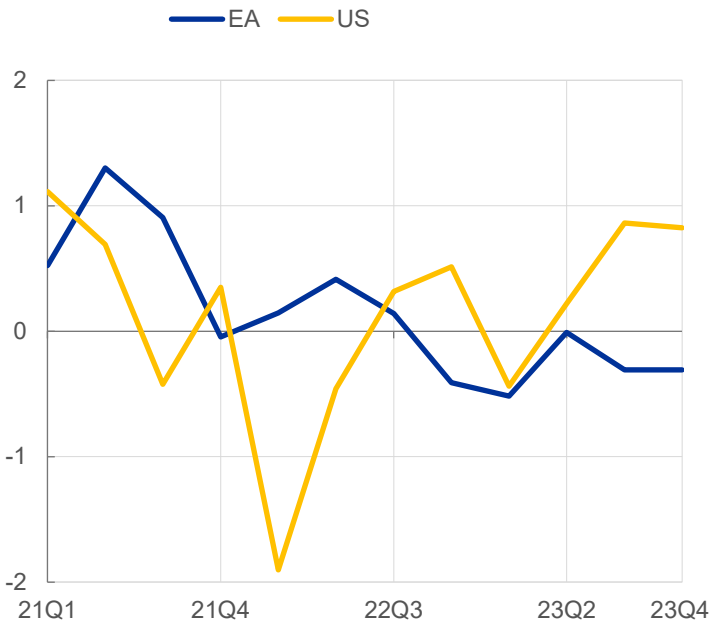
18 April 2024

Isabel Schnabel, Member of the Executive Board of the ECB

2024 Europe – US Symposium, Washington, D.C.

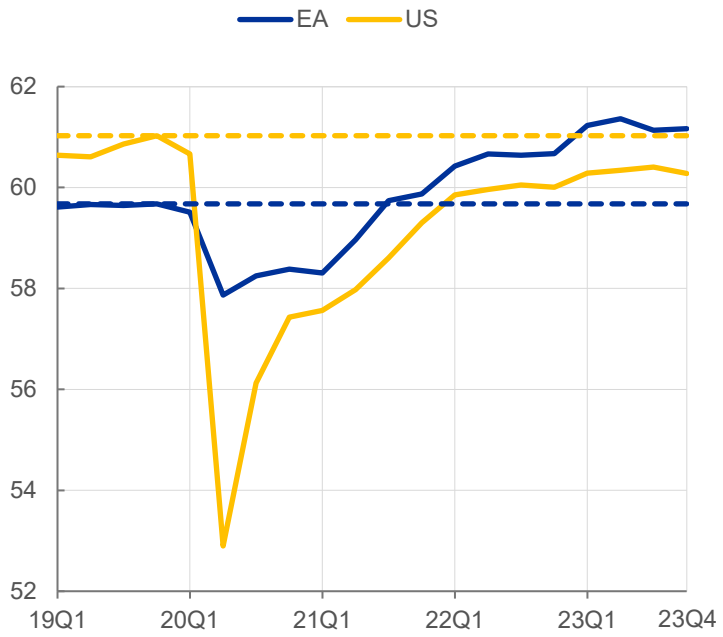
Labour hoarding may explain declining productivity growth in the euro area

Productivity growth per employee
(%)



Sources: Eurostat and Haver Analytics.
Latest observation: 2023 Q4.

Employment rate
(share of population)



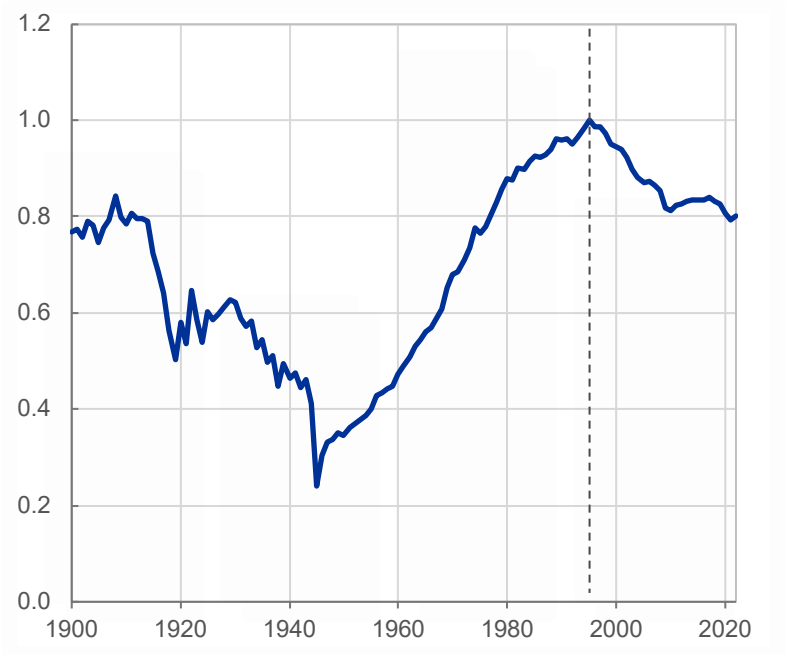
Sources: Eurostat and Haver Analytics.
Notes: The dashed lines represent the pre-pandemic employment rate, i.e. in 2019 Q4, in the corresponding colour for EA and the US.
Latest observation: 2023 Q4.

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Euro area started to lose competitiveness at the turn of the millennium

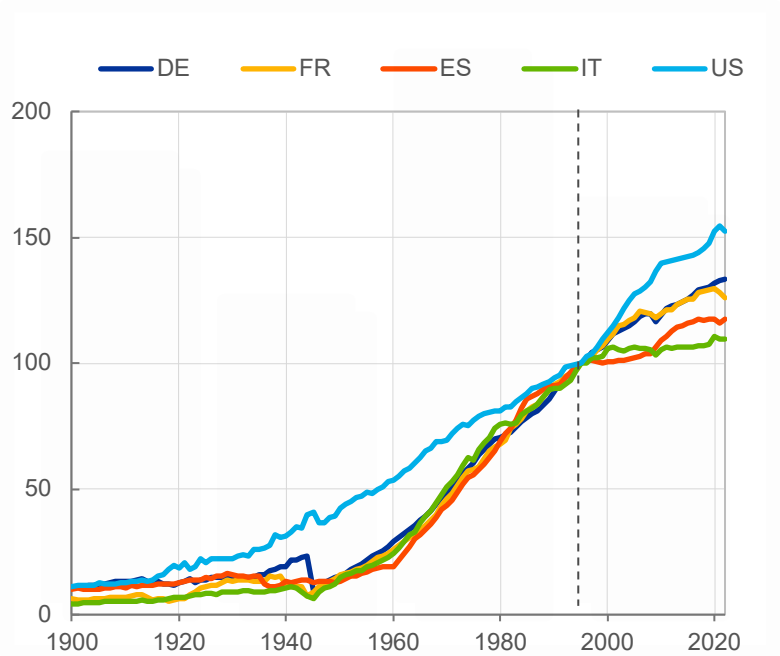
Long-term developments in productivity per hour worked

Ratio of EA-4 to US



Source: Long-Term Productivity Database and ECB calculations.
Notes: EA-4 is a weighted average of productivity developments in Germany, France, Italy and Spain.

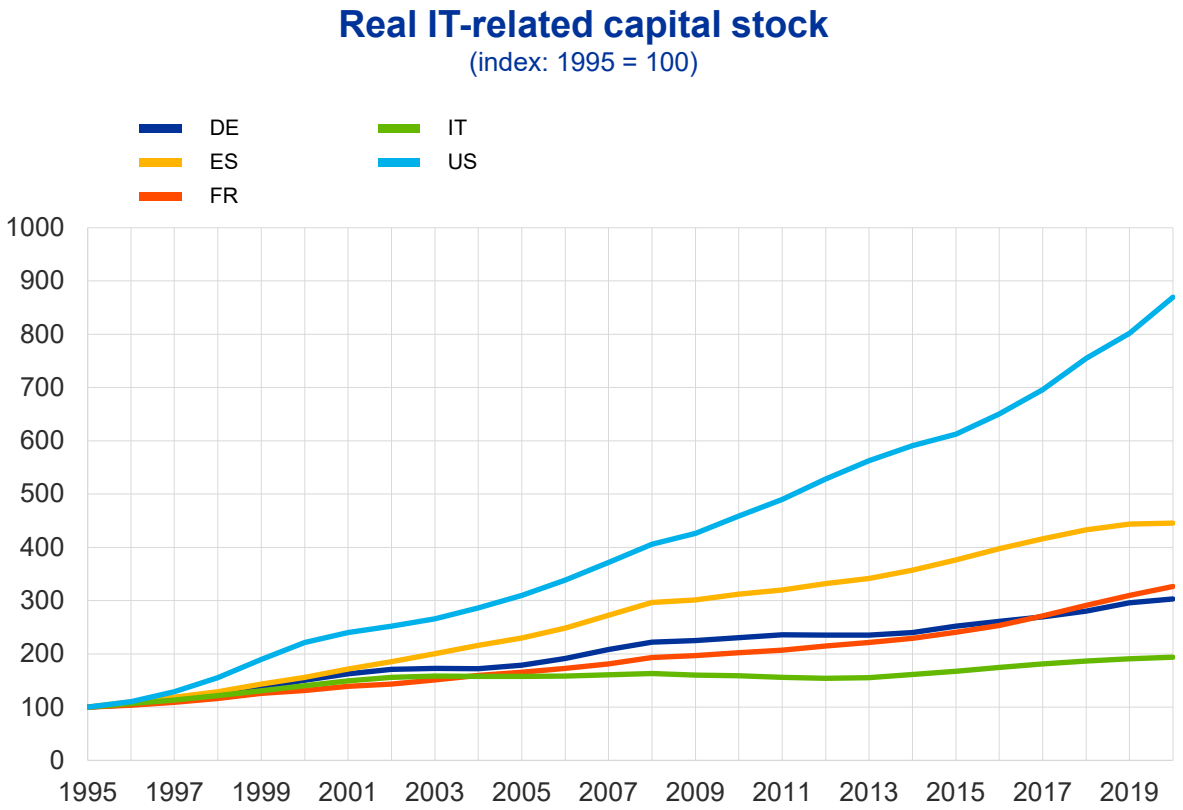
Index: 1995 = 100



Source: Long-Term Productivity Database and ECB calculations.

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Rising gap in IT-related capital stock between euro area and United States



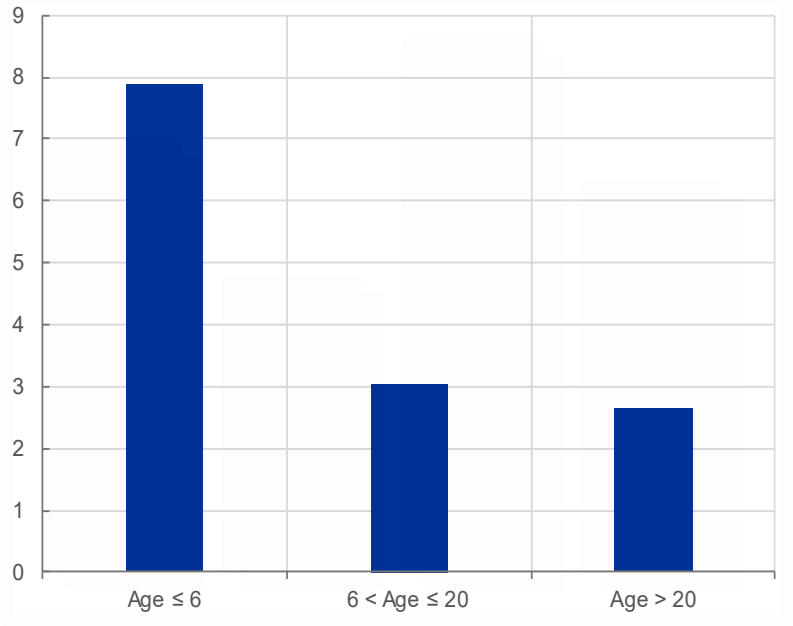
Source: EUKLEMS.
Note: IT-related capital stock is the sum of computing equipment and computer software & databases for all NACE industries. See Schivardi, F. and Schmitz, T. (2020), "The IT Revolution and Southern Europe's Two Lost Decades", Journal of the European Economic Association, Vol. 18(5), pp. 2441–2486.

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Lower barriers to entry and higher competition support rise of young superstar firms

Annual labour productivity growth of surviving firms by age group

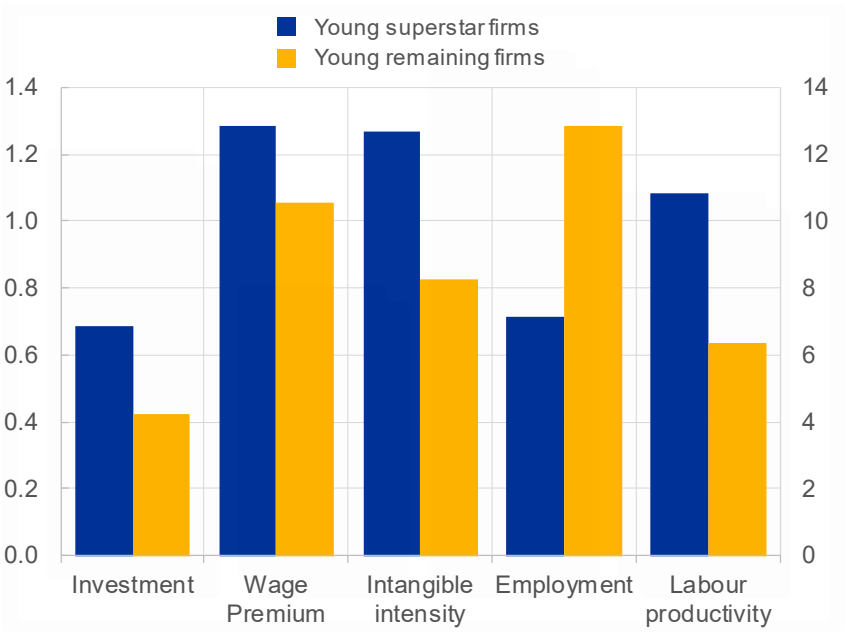
(mean, in %)



Source: ECB Economic Bulletin Issue 1(2022). Data from Bureau van Dijk Orbis, the Bank for the Accounts of Companies Harmonized (BACH) database and ECB staff calculations.

Average characteristics of young superstar firms and other young firms

(lhs: ratio; rhs: number of employees, intangible intensity in EUR thousands, labour productivity in EUR ten-thousands)



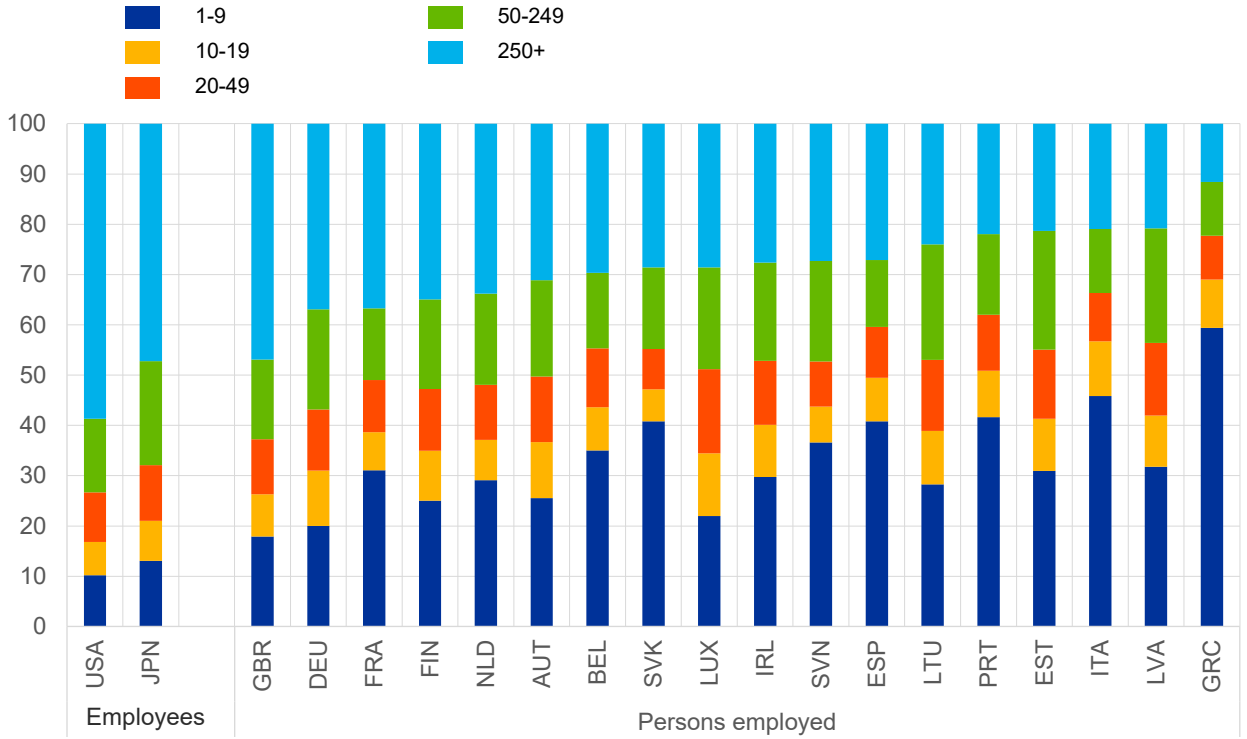
Notes: Each bar represents the coefficient from a regression of each variable listed in the x-axis on a dummy for the firm being a young superstar firm and a set of fixed effects controlling for the different countries, sectors and years. Productivity is computed as real value added per employee at the firm level. Intangible intensity is computed as the ratio of intangible capital to number of employees. Investment is computed as the change in real fixed tangible capital over the previous period's real fixed tangible capital. The period considered begins after the great financial crisis to avoid potential slumps.

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Large firms invest more in ICT, but most firms in the euro area are small

Employment by enterprise size, business economy

(percentage of total employment)



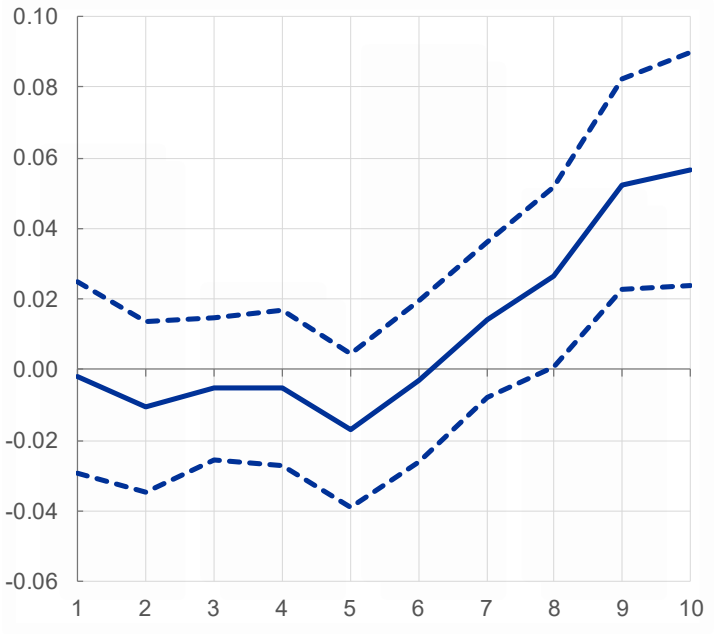
Source: OECD.
Notes: Legend refers to number of employees/ persons employed at firm level.

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Few firms reap benefits from digitalisation, also reflecting shortages of skilled workers

Estimated impact of digitalisation on TFP growth of firms with different initial TFP levels

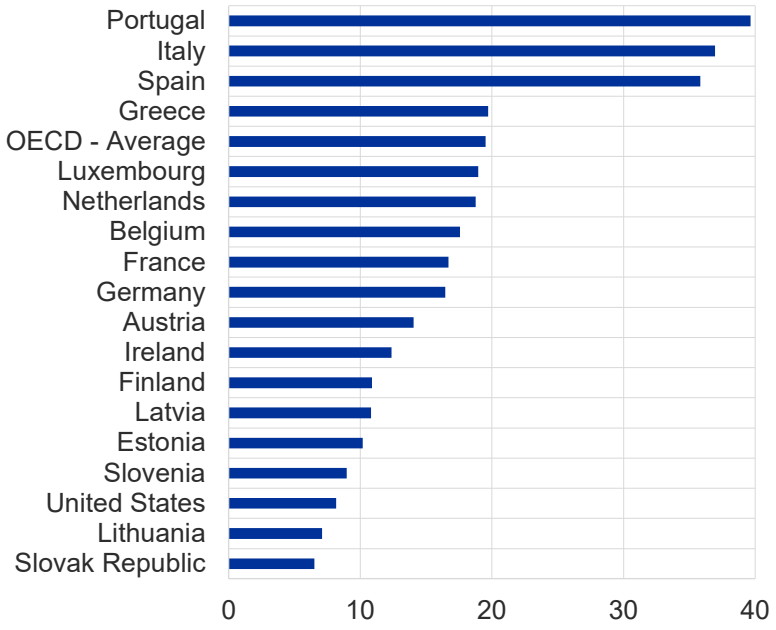
(digital investment intensity)



Source: Anderton, R., Botelho, V. and Reimers, P., "Digitalisation and productivity: gamechanger or sideshow?", Working Paper Series, No 2794, ECB, March 2023.
Note: x-axis: proximity to frontier (decile, lowest-highest). Dashed lines refer to confidence intervals.

Share of adults without upper secondary education

(% of 25-64 year-olds)

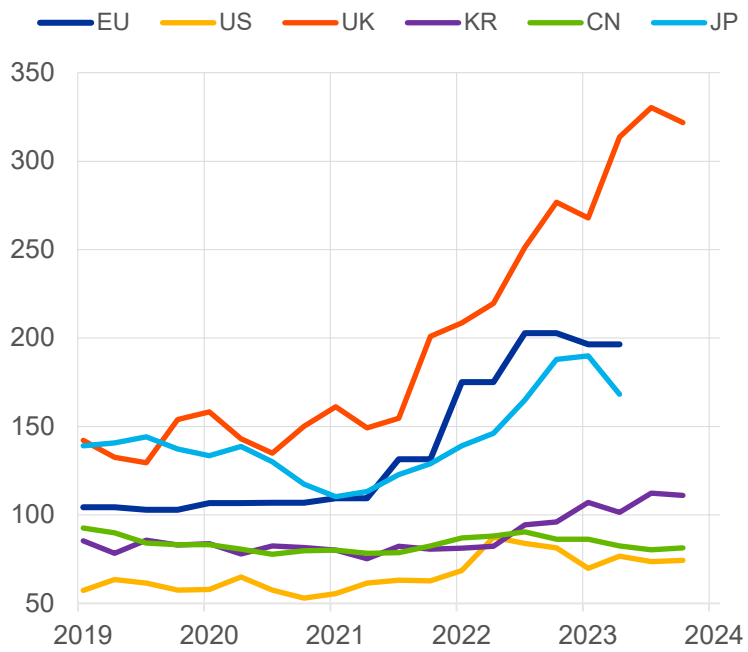


Source: OECD.
Notes: Data refer to 2022 or latest available.

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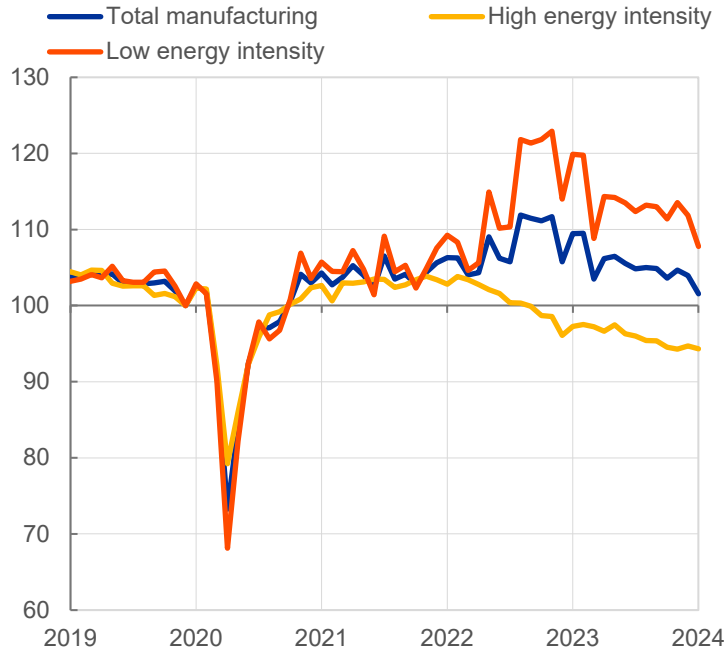
Higher electricity prices undermine price competitiveness and industrial production

Industrial retail electricity prices
(EUR/MWh)



Sources: Eurostat, EIA, DESNZ, CEIC, METI and ECB staff calculations.
Latest observation: Q2 2023 for EU and JP, Q4 2023 for US, UK, KR and CN.

Euro area industrial production
(index: December 2019 = 100)

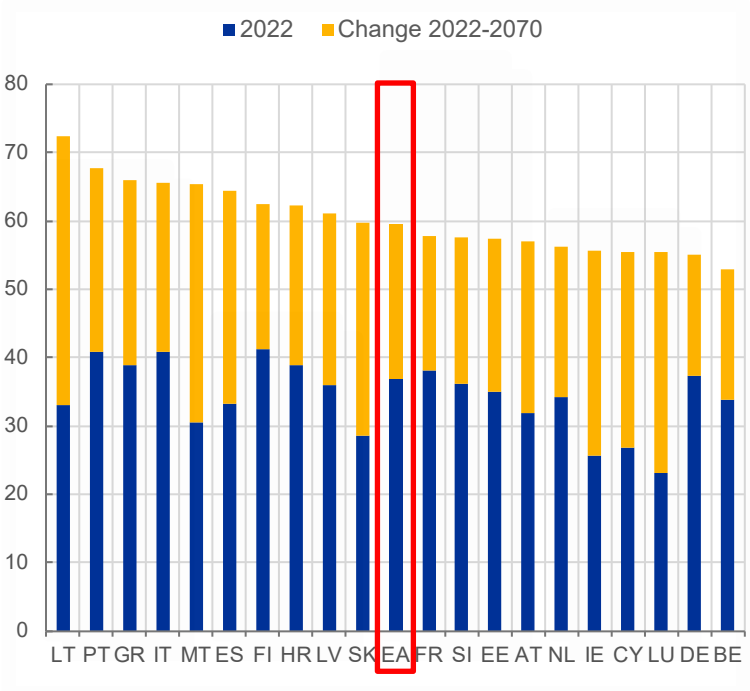


Sources: Eurostat, Trade Data Monitor and ECB staff calculations.
Notes: Data are seasonally-adjusted. Industrial production indices for individual sectors are aggregated with value-added weights. Low (high) energy-intensity sectors are defined as those with an energy intensity lower (higher) than that of the median sector. For more details, see Chiacchio, De Santis, Gunnella and Lebastard (2023).
Latest observation: January 2024.

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Ageing and preference shifts require higher productivity growth to sustain social system

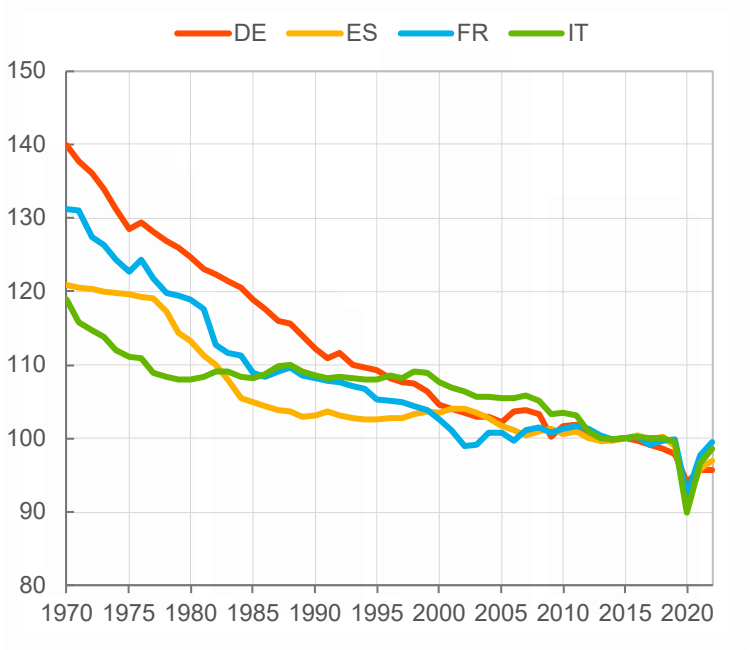
Old-age dependency ratio in 2022 and increase until 2070



Source: European Commission Europop 2023 population projections.
Note: The old-age dependency ratio is the population aged 65 and over as a % of the population aged 20-64. Data are shown as the proportion of dependents per 100 persons of working-age.

Average hours worked per person employed

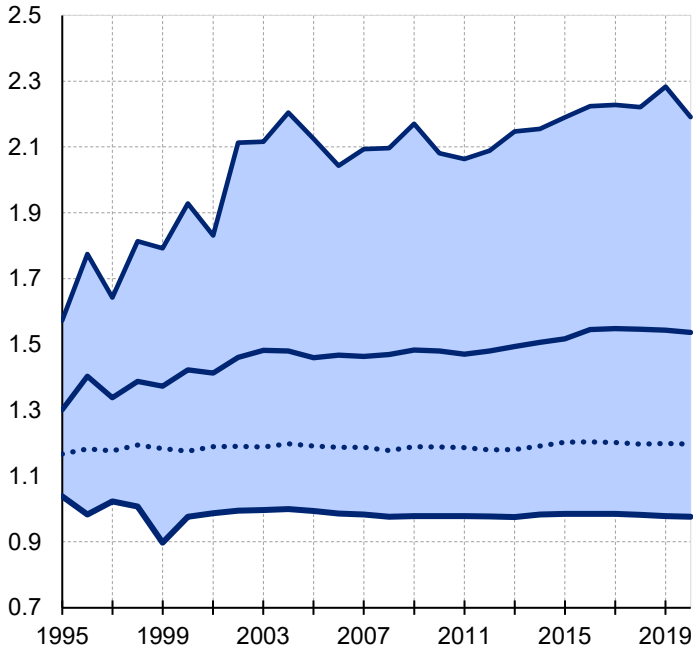
(index: 2015=100)



Source: OECD data.

Slow diffusion of technologies can give rise to “winner-takes-most” dynamics

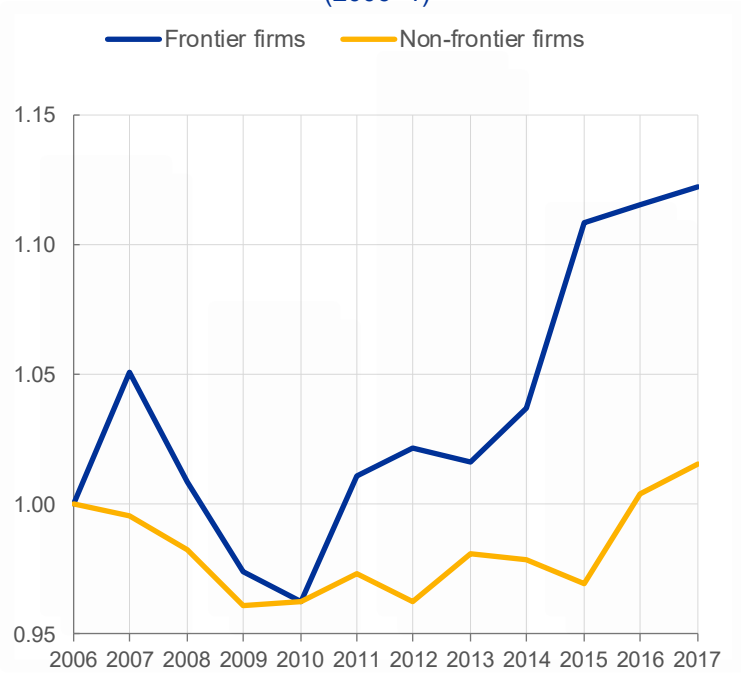
Euro area mark-up distribution



Sources: Kouvavas et al. (2021), “Markups and inflation cyclicality in the euro area”, ECB Working Paper No. 2671.
Notes: The dotted line shows the weighted median, the continuous line the weighted average, and the range is between the weighted 10th and 90th percentiles. See the paper for the calculation of markups using firm-level data.

TFP levels of frontier and non-frontier firms in the services sector

(2006=1)



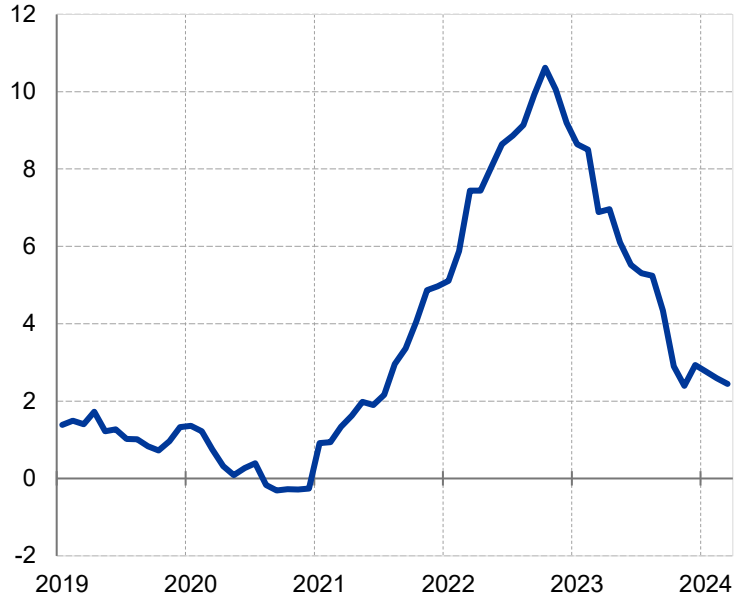
Sources: Occasional Paper Series No. 268 (ECB). Own calculations using ECB iBACH-Orbis Database.
Notes: Frontier firms are defined as those at the top 5% of the TFP distribution in a given year in a 4-digit industry. Non-frontier firms are defined as the median firm in a given year in a 4-digit industry.

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Low productivity growth puts pressure on unit labour costs and hence inflation

Headline inflation in the euro area (HICP)

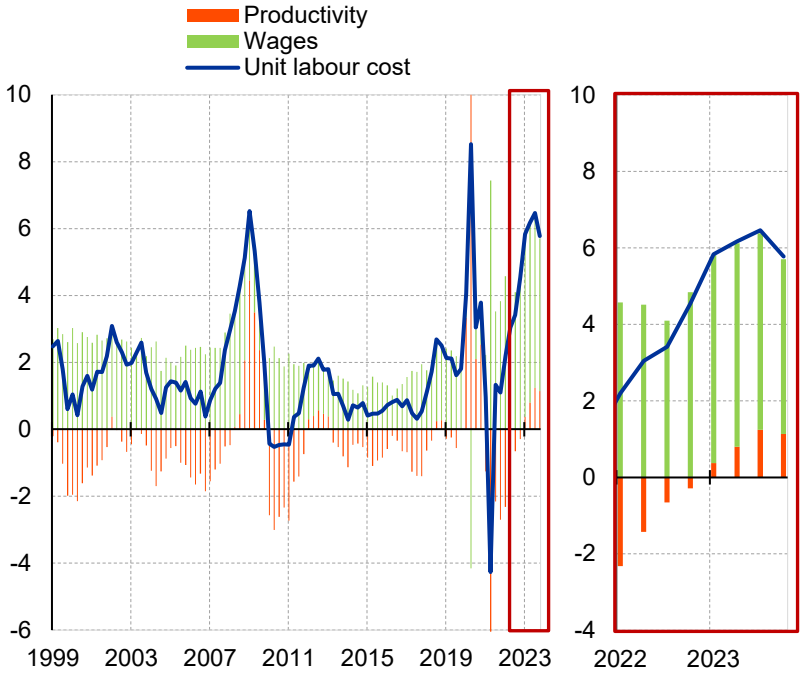
(annual percentage changes)



Source: Eurostat.
Last observation: March 2024.

Unit labour costs

(annual percentage changes)



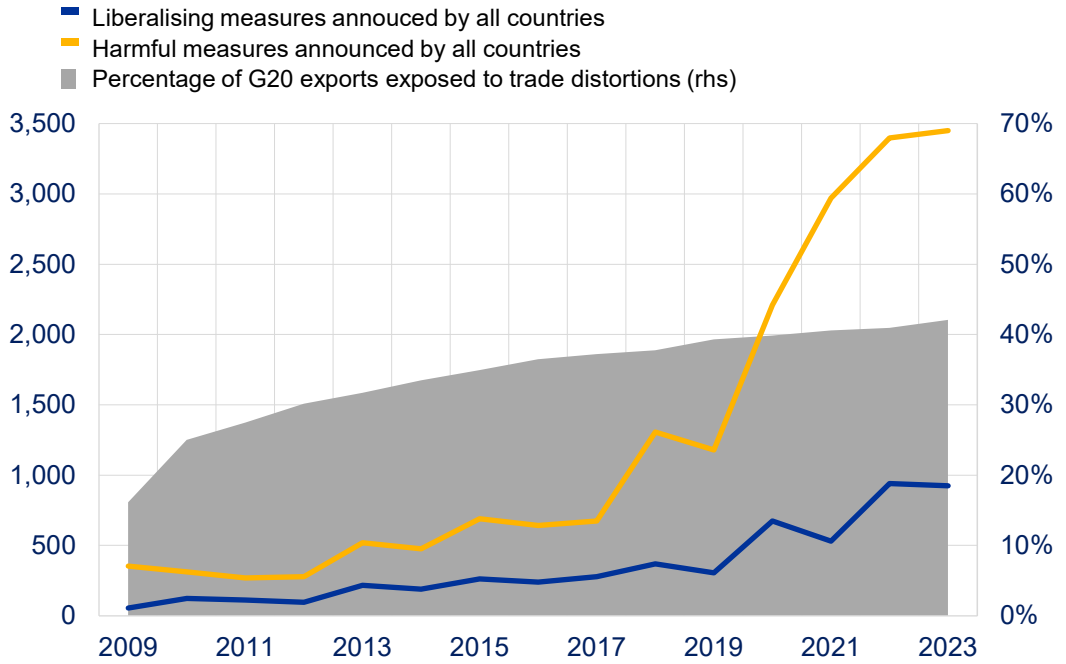
Source: Eurostat and ECB calculations.
Note: A positive contribution of productivity to unit labour costs implies negative productivity growth.
Last observation 2023 Q4.

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Harmful trade restrictions risk impeding international trade

Global trade measures

(lhs: number; rhs: percentage)



Source: Global Trade Alert (GTA) and ECB staff calculations.
Notes: Total number of liberalising and harmful measures announced globally each year (adjusted for reporter lag at 31 of December each year). For the rhs series, affected flow includes outward and outward subsidies that are evaluated as red and harmful by the GTA during the coverage period shown without an adjustment for reporting lag.
Latest observation: 2023.

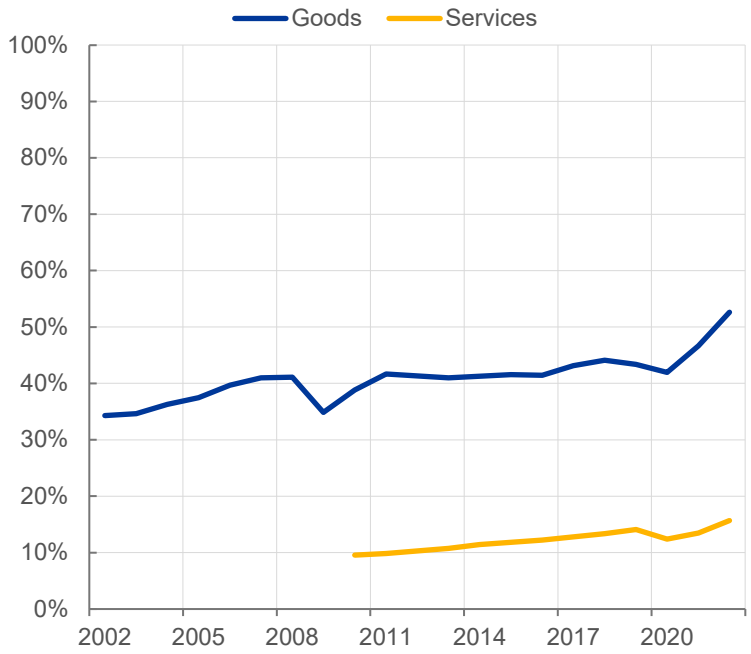
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Limited progress in cross-border trade in services and in financial market integration

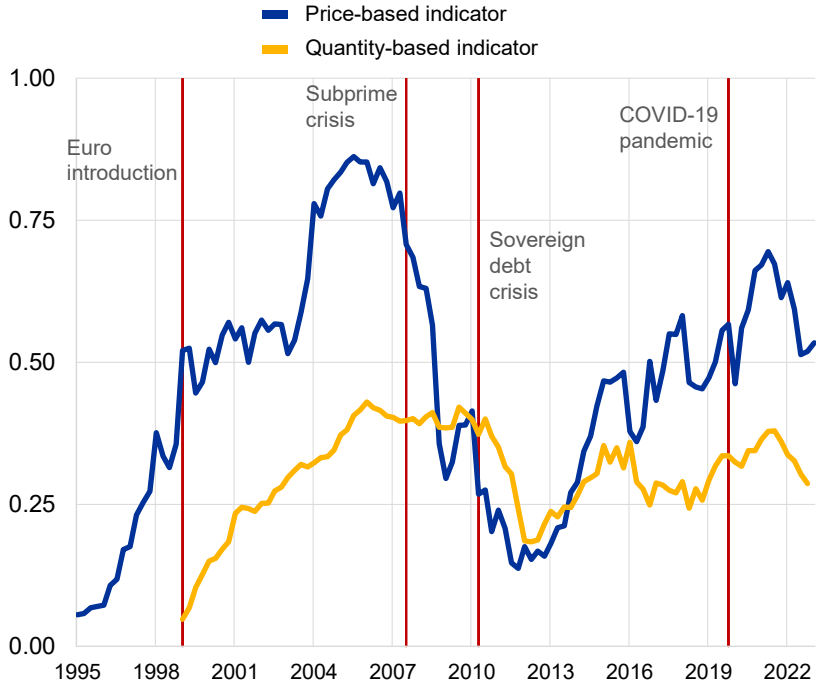
Intra-EU trade in goods and services

(annual, in percentage of GDP)



Source: Eurostat and ECB staff calculations.
Notes: Intra-EU trade is obtained by summing intra-exports and imports as a ratio of GDP, measured in euros.
Latest observation: 2022.

Price-based and quantity-based composite indicators of financial integration

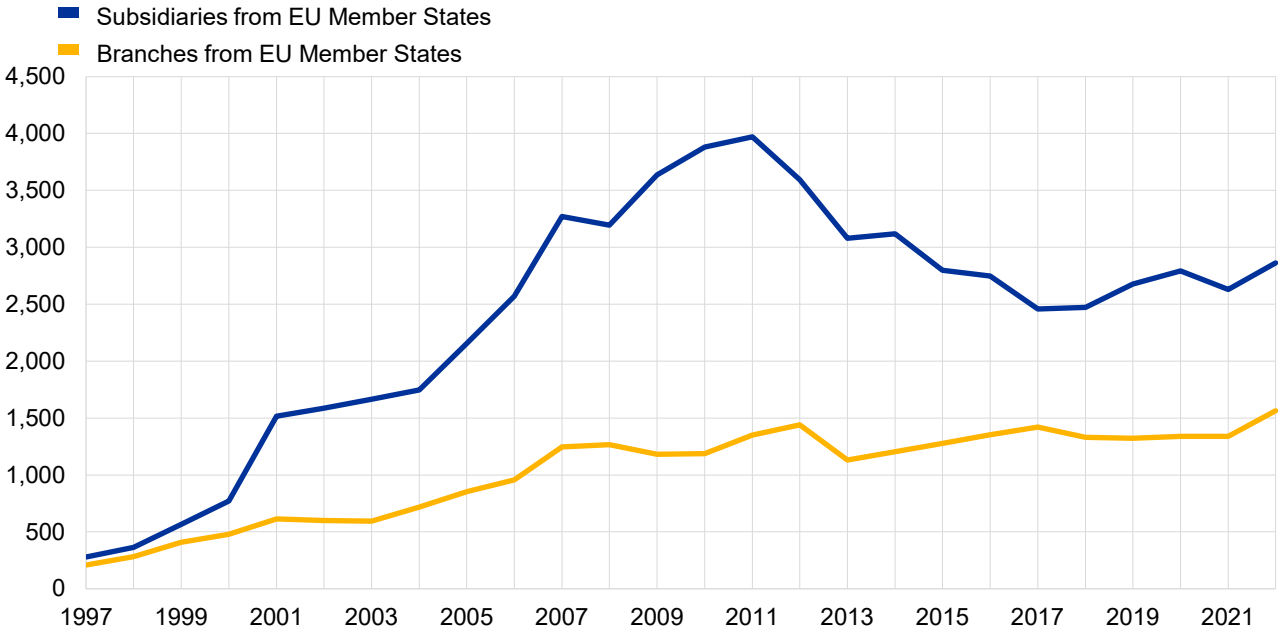


Source: ECB staff calculations.
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European banking sector remains segmented along national borders

Total EU cross-border assets in the euro area

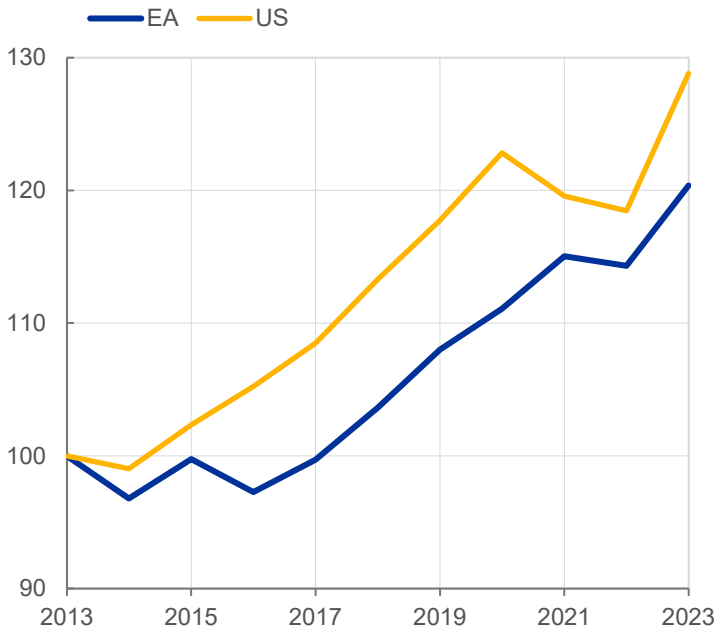
(Total assets, EUR billions)



Source: ECB Structural Financial Indicators.

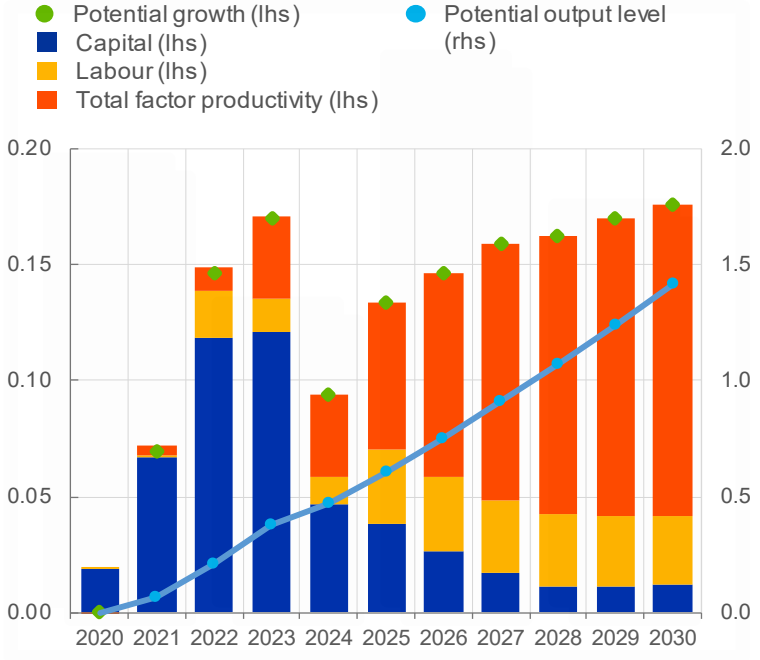
Public investment can boost productivity growth and potential output

Public investment
(index: 2013 = 100)



Sources: European Commission (AMECO), Bureau of Economic Analysis and ECB staff calculations.
Latest observation: 2023.

Impact of NGEU on potential output and growth of seven euro area countries
(impact on level in percentages, on growth and contributions in percentage points)

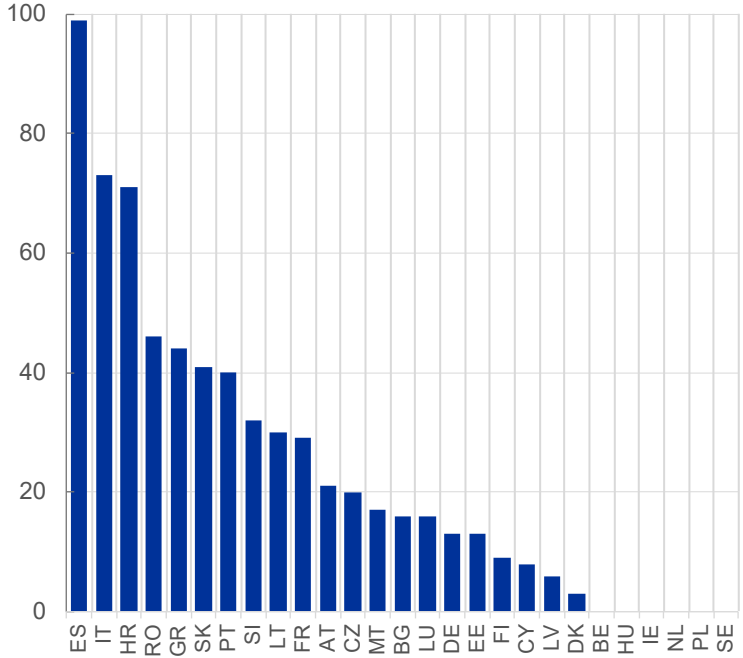


Source: ESCB staff calculations (Bańkowski et al. 2022).
Note: Countries included: DE, ES, FR, GR, IT, MT and PT.
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Significant number of fulfilled reform-related RRF milestones and targets

Fulfilled reform-related RRF milestones and targets: breakdown by country

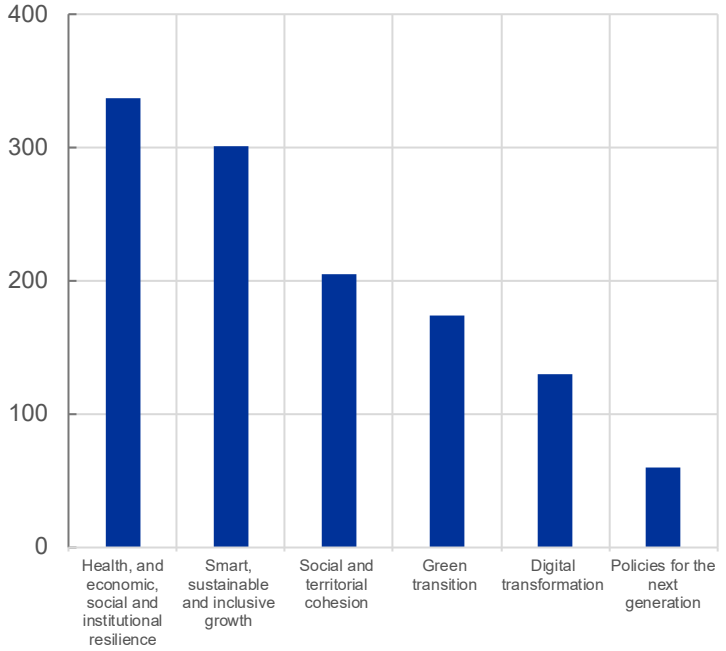
(total number)



Source: ECB illustration based on European Commission data.
Note: Database accessed on 4 April 2024. All EU Member States included.

Fulfilled reform-related RRF milestones and targets: breakdown by policy pillar

(total number)



Source: ECB illustration based on European Commission data.
Note: Database accessed on 4 April 2024. All EU Member States included. Some milestones and targets are related to more than one policy pillar.

Thank you very much for your attention!

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