AI and the European economy

Will Europe join the party?

Economics
Europe

- Europe is likely to experience a much smaller economic boost from the AI investment cycle than the US or Asia…
- …and if the ICT boom of the 1990s is a guide, any long-run productivity gains from AI might also prove smaller…
- …but at least Europe is less exposed to AI risks, including job losses and a potential stock market correction

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Only in America?

AI investment is now providing a meaningful boost to economic growth in the US, as well as Asian exporters of IT hardware. To what extent can Europe see a similar economic fillip?

So far, we see limited evidence that Europe is joining the party. Bar a couple of exceptions – an emerging datacentre boom in Iceland, and some Q3 strength in the UK and France – the official data generally show unremarkable developments in IT hardware and software investment in Europe in 2025.

Looking ahead, we think AI investment is likely to contribute only marginally to European growth. Without the same finance provided by big tech companies, the scale is likely to remain smaller than in the US. Data centres are a case in point, where the whole European construction pipeline is dwarfed by the US state of Virginia.

Less likely to feel the upsides from adoption…

If Europe misses out on the investment cycle, what matters more in the long run is whether it can experience the same productivity boon from the adoption of AI tools, where the full macro impact may not become clear anywhere until the 2030s. If AI proves to be a 'general purpose technology' – with US-created tools available everywhere – surely all economies can experience a similar productivity benefit?

Not necessarily. For example, the ICT boom in the 90s/00s appeared to provide a much smaller uplift to productivity in Europe than in the US. The stage could be set for a repeat performance, with surveys suggesting that European companies have so far made much less progress in embedding AI than their American counterparts.

…but less exposed to the downsides

If it's any consolation, the European economy is probably less exposed to the downside risks associated with AI. With more limited – or at least more gradual – adoption in prospect, any AI-related job losses might be less severe than in the US. And of course if AI turns out to be a bubble and the investment cycle goes sour, there's a smaller bubble to burst in Europe – our analysis of possible exposures to a potential bubble via financial markets, domestic investment, and trade with the US, suggest that the probability of a big European downturn induced by an AI crash remains low.

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Only in America?

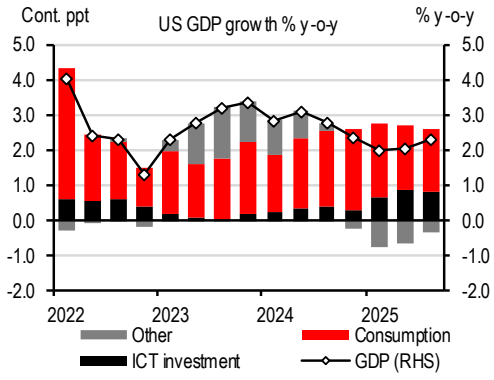
A transpacific ecosystem (for now)

The economic boost from AI so far is centred around US investment and Asian exports

The AI investment cycle is already providing a meaningful boost to economic growth in the US, as well as to IT equipment exporters in Asia. Investment in IT hardware and software accounted for 0.8ppts of the 2.3% GDP growth seen in the US in the four quarters to Q3 2025 (Chart 1); meanwhile, mostly Asian exporters of IT products have seen booming demand (Chart 2).

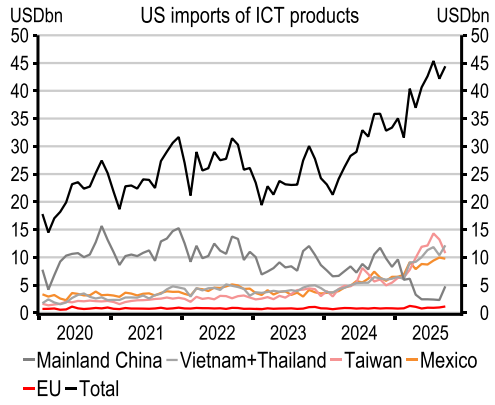
As Chart 2 also shows, Europe is certainly not playing a major role in providing the US with AI-related hardware. So if Europe is to see an economic fillip from AI, it is likely to hinge on domestic investment, whether it's in growing tech companies, the process of businesses in general investing in AI tools, and/or the growth in related infrastructure such as data centres.

1. IT investment has accounted for a hefty portion of US GDP growth this year…



Source: BEA, Macrobond, HSBC calculations

2. …and (mostly Asian) IT hardware exporters are seeing a boom in demand



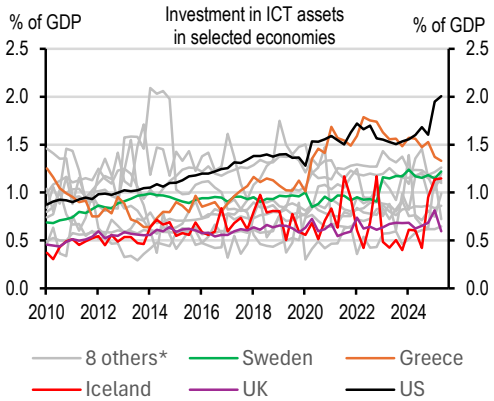
Source: BEA, Macrobond, HSBC

Limited evidence of an AI investment surge in Europe…

Data on IT investment in Europe are patchy…

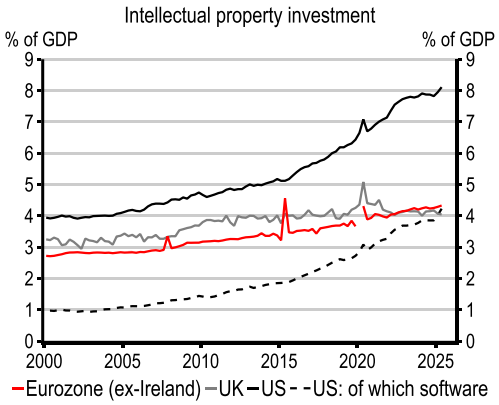
So what can we say about the size of the AI investment boost in Europe so far? Unfortunately, 'hard' data are patchier, and less timely, than in the US. The US provides timely quarterly data on 'IT investment' which combines capex on IT hardware and software. But not all European statistics offices offer the same granularity. Nevertheless, the OECD collates comparable 'hard' data on IT hardware investment, which currently run up to Q2 last year (Chart 3).

3. Besides Iceland, IT hardware capex trends in Europe are unremarkable



Source: OECD, HSBC calculations *8 other European economies: Austria, Croatia, Estonia, Ireland, Lithuania, Netherlands, Romania, Slovakia

4. It's a similar story for software (a big component of 'intellectual property' capex)



Source: OECD, HSBC calculations

Chart 3 shows those data for the US and 12 European economies (unfortunately not the eurozone Big 4, but we have marked out the UK, as well as Iceland, Greece and Sweden where recent trends have caught our attention). One thing is clear – no large European economy has seen anything like the IT investment jump seen in the US. For the most part, European IT investment trends have been totally unremarkable.

…but, bar some exceptions, investment in IT hardware has been unremarkable

There are a couple of exceptions though. A notable one is Iceland, where spending on IT products helped deliver, in Q1, an 18% investment jump and a 2.6% rise in GDP. This reflects a boom in data centre construction, spurred on by 100% renewable energy and low ambient temperatures.[1] A second point relates to Greece, where the appointment of Kyriakos Pierrakakis (current Finance Minister) as Minister for Digital Governance in 2019 and the launch of a digital transformation plan led to a big jump in IT investment from 2020 (little of it likely relates to AI). Third, there was an investment uptick in the UK in Q1, although that unwound in Q2; data suggest another jump in Q3, as we outline in the next section. And fourth, IT investment took a leg up in 2023, to among the highest levels in Europe. This chimes with Stanford's AI Index Report for 2025, which showed Sweden pulling in over USD4bn of AI funding in 2024 trailing only behind the US, China, and the UK.

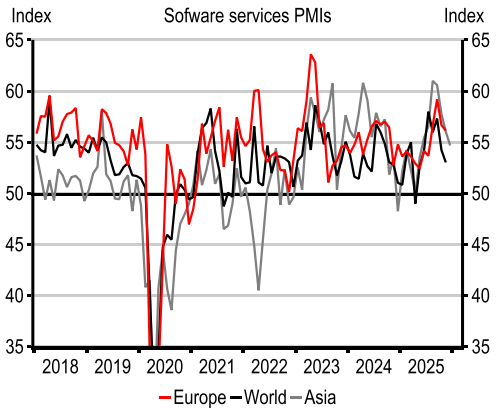
The story for software investment is similarly unexciting

OECD data also provide some sense of trends in IT *software* investment because it provides data on 'intellectual property' investment. Software capex is a large component of this category of investment. The software sub-component can be split out for the US, but not for many other economies (R&D investment is another large sub-component). Chart 4 shows that the lion's share of recent US gains in intellectual property capex have been driven by spending on software. But for Europe,[2] increases have been much more limited. Unless R&D investment has fallen sharply, we can deduce that software investment hasn't risen by much.

…but recent indications are more hopeful

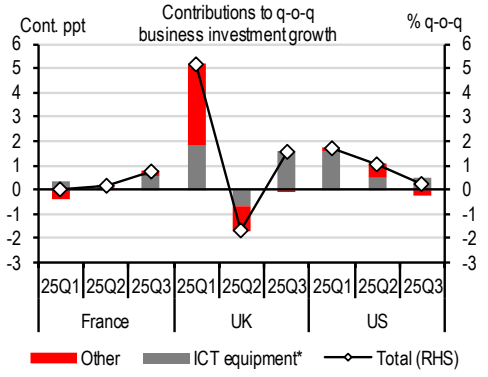
If the (admittedly patchy) data for H1 last year look unremarkable, there might be some tentative signs of stronger gains over the second half of the year. For one, the PMI survey for the software sector showed a pronounced pick-up over the summer (Chart 5), which is consistent with more recent bullish messaging from the ECB – in reference to its Corporate Telephone Survey, President Christine Lagarde has pointed to a recent stepping up in IT investment.[3]

5. The software PMIs picked up around the middle of last year…



Source: S&P Global, Macrobond

6. …and Q3 data for France and the UK suggest some IT-related pick-up



Source: INSEE, ONS, BEA, Macrobond, HSBC calculations
*The UK is 'ICT and other' investment which includes some items beyond IT, including 'other machinery', 'cultivated biological resources' and 'weapons'

1 'Verne and Nscale launch 15MW AI Data Centre in Iceland', Data Centre Magazine, 20 November 2025
2 We have stripped Ireland out of the eurozone data because US tech companies generate significant volatility in software investment (and imports) – these swings in the data are generally not meaningful from a real economy perspective.
3 Ms Lagarde referred to this in both the 30 October and the 18 December ECB press conferences and it was also reported in the account of the ECB October meeting (see *ECB Account (Oct): Shrinking window for further cuts*, 27 November).

Surveys, alongside 'hard' data for France and the UK, might suggest a stronger Q3

And there might be some corroboration of those surveys in the 'hard' data for Q3 which is now available for some countries. For example, the eurozone's 0.3% GDP growth seen in Q3 was supported, in part, by a 0.9% quarterly investment increase. Although we do not have a granular breakdown of those data at a eurozone level, data from France showed a 0.8% q-o-q rise in private investment, of which 0.5ppts was associated with IT. And having eased back in Q2, UK business investment jumped by 1.5%, entirely driven by 'IT and other' investment.[4] That added 0.16ppts to Q3 GDP.

Smaller, more localised, gains in prospect

Even if we do think those more optimistic signs in the Q3 data will continue over the coming quarters, we nevertheless think the magnitude of the investment boost to the European economy will remain only a fraction of that seen in the US. Rather than boosting GDP growth by almost 1ppt as the US has experienced over the past year, we would be surprised to see an annual growth boost even approaching 0.5ppts. There are a number of reasons for this.

Looking ahead, Europe's AI investment pipeline is dwarfed by the US…

- Europe does not have big 'hyperscaler' tech companies as in the US. Indeed, a handful of US tech companies may have invested over USD400bn in AI last year, mostly arising from retained earnings and mostly directed towards spending in the US. That sum is not too far shy of the entire market capitalisation of Europe's biggest tech company – Dutch semiconductor maker ASML.[5]
- Europe has a much more modest pipeline of AI startups. Europe is home to only six of Forbes' list of top 50 AI startups – a list based on 'business promise, technical talent and the use of AI'. And funding for the biggest of those European companies – model builder Mistral – is dwarfed by the likes of OpenAI (Chart 7).
- The pipeline of AI-related infrastructure, most notably data centres, is tiny compared to that of the US. Indeed, Chart 8 shows that planned data centre capacity for the whole of Europe is eerily outstripped by just the US state of Virginia.

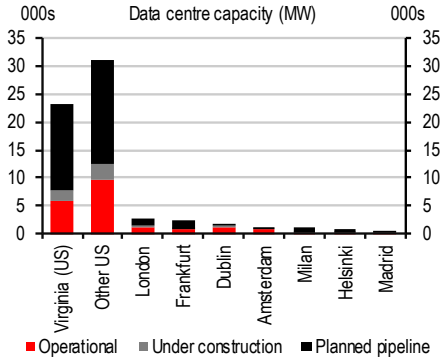
7. Europe only makes up six of Forbes' 50 AI companies

European companies in Forbes AI50*

Company	What it does	Year founded	Funding (USDbn)	City	Country
DeepL	Language translation	2017	0.24bn	Cologne	Germany
ElevenLabs	Voice generation	2022	0.28bn	London	UK
Luminance	Business contract automation	2015	0.16bn	Cambridge	UK
Mistral AI	Model developer	2023	1.1bn	Paris	France
Photoroom	Photo editing	2019	0.06bn	Paris	France
Synthesia	Avatar and video generator	2017	0.33bn	London	UK
Memo: OpenAI	Model developer	2015	63.9bn	S Fransisco	US

Source: Forbes *Top 50 AI companies based on quantitative and expert panel analysis of funding, innovation and scalability, based on 1,861 submissions

8. Europe's data centre pipeline pales in comparison to the state of Virginia



Source: ING 'The data centre divide', 25 November 2025. Data compiled by Gartner and referred to end-2024 and do not include Iceland (where the big pick-up in the investment data took place in H1 2025)

…but some local areas might experience tangible gains

If the aggregate economic boost to Europe from AI investment is likely to be much less pronounced than in the US, there are nevertheless some areas of the economy – sectorally and geographically, which might see some tangible benefits. These include:

4 We would treat this number with a pinch of salt, however. The relevant published UK series includes IT hardware (but not software) investment, but it also includes 'other machinery', 'cultivated biological resources' and weapons'.
5 EUR407bn (USD469bn) on 8 January (Bloomberg)

- **Urban areas where AI startups are emerging**. It's possible that economic gains will be concentrated in those areas where the most successful AI startups are emerging (London, Cambridge, Paris and Cologne are cited in Table 7). That could lead to economic spillovers in local areas, possibly akin to the impact of 'Silicon Roundabout' in East London, or the emergence of Lisbon as a hub for cryptocurrency trading.[6]
- **Countries/areas housing data centres**. As discussed earlier in the case of Iceland, the building of datacentres can provide a growth fillip to some economies. And they might also boost economic activity in some sub-national areas – although dwarfed by the US, the London and Frankfurt areas lead the European pack (Chart 8). This could also benefit other economic sectors, such as utilities providers.[7] That said, the economic growth impact is likely to come more clearly through the construction phase, rather than sustained growth effects once built.
- **The UK.** Of the larger European economies, the UK could be among the better placed to see the most tangible impact from AI investment. First, the data up to Q3 last year appear to show a fairly pronounced impact (at least via the broader 'ICT and other' investment component). Second, the UK is home to a number of AI startups (Chart 7). Third, the UK appears to be relatively well-placed in terms of infrastructure, namely datacentres (Chart 8). And fourth, the UK has been subject to particularly sharp increases in labour cost pressure in recent years, which is potentially providing a particularly strong incentive to investment in automation, including AI.[8]
- **Nordic economies.** As shown in Chart 3, Sweden has seen some of the highest levels of ICT investment in Europe over the past couple of years. According to Stanford's 2025 AI report, it scores highly in terms of funds invested, patents and skills. Finland also scores highly along these metrics, as does nearby Estonia. This could offer a solid springboard for further growth opportunities.

Longer-term upsides?

A rising tide to lift all boats?

If Europe misses out on the investment cycle, what matters more in the long run is whether it can experience the same productivity boon from the adoption of AI tools. Admittedly, our house view of the eventual productivity boost from AI is fairly agnostic – the literature points to an annual productivity growth uplift ranging from a modest 0.1pp, to a transformational but possibly implausible 1.0ppt. In any case, we don't think the impact will become clear until the early 2030s (*Global Economics Quarterly: Shaky Foundations*, 5 January 2026).

Europe's productivity boost from AI will depend on success (or not) of adoption

But let's assume there is a tangible long-run productivity boost from the adoption of AI. Shouldn't other economies see a similar impact eventually, essentially piggybacking off tools mostly developed in the US? After all, the steam train was invented in Britain, but any economy could benefit from rail travel eventually. And while modern PC operating systems (such as Microsoft Windows) were developed in the US, other economies benefit from using them. And in the future, why can't European businesses eventually integrate Chat GPT or other AI tools into processes just as effectively as this US counterparts?

6 'What it's like in Europe's popular crypto haven Portugal as the U.S. cracks down', CNBC, 9 September 2023
7 In fact, our credit strategists prefer to play the AI theme via Utilities over Tech (see *2026 HSBC House Views: Trends to watch and investment ideas*, 6 January 2026)
8 See the BoE's November 2025 Agents' Report: "Firms continue to leverage technology, automation, and AI to boost productivity and limit headcount growth as or when demand rises, while some are also turning to offshoring as an additional way to manage costs and maintain flexibility. Firms are now reporting more tangible cost savings from these strategies, which have helped partially offset some of their labour cost pressures."

Not necessarily

Europe experienced a smaller productivity boost from the 90s/00s ICT boom…

Unfortunately, it's not as simple as that. While, in theory, transfers of technology (enabled by capital flows) 'should' see countries catch up to the technological frontier, headwinds relating to, inter alia, infrastructure, human capital and institutions mean that is often not the case.[9]

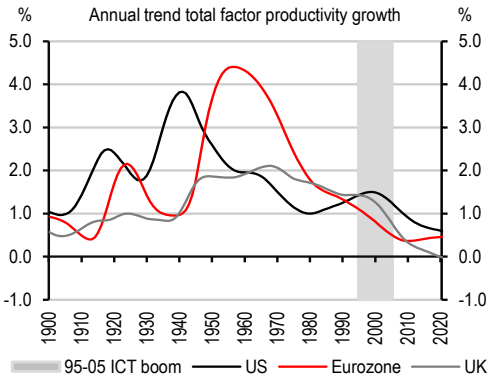
The most obvious recent example of the adoption of a productivity boosting technology – IT equipment and the internet in the 1990s and 2000s – offers a sobering example for Europe. Work by the ECB estimating trends in 'total factor productivity' showed how the IT boom of that period helped boost US trend productivity by around 0.5ppts per year. But there appeared to be hardy any uplift in the UK, while eurozone trend productivity growth slowed over that period (Chart 9). One study penned by the US economist Robert Gordon suggest that partly reflects lower overall levels of investment in IT, but more of it reflects a smaller productivity boost from a given level of investment. This could reflect a number of factors including "the flexibility of labour markets, competitive environments, and the lack of a truly integrated EU marketplace that prevented particular industries from operating at the scale obtained in the US".[10]

Europe's relative weaknesses in these areas have not gone away, and other new problems could be at play. And one year on from the publication of his report, Mario Draghi gave a speech to the European Parliament noting a number of headwinds to the potential scaling of AI, including limited funding, regulatory costs (singling out data protection requirements in particular) and high energy prices.[11]

…and surveys might point to lagging adoption of AI tools…

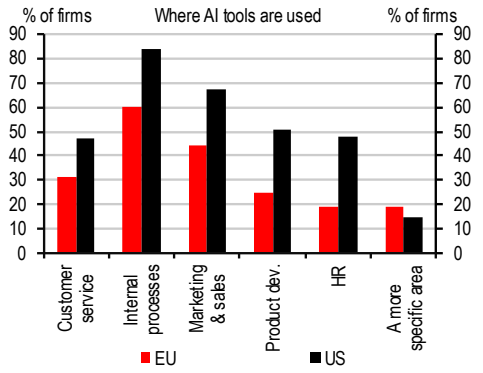
Against that backdrop, the early signs do indeed point to the more limited adoption of AI tools in Europe so far, which might imply a smaller productivity uplift in future. A survey conducted by the European Investment Bank last October showed that 37% of EU firms are using generative AI, compared with 36% of US firms. But the extent of use appears to be much deeper in the US – 81% of US firms said they used AI in at least two business processes, compared with just 55% of EU firms. And there is much more widespread use in areas including internal processes and product development (Chart 10).

9. Europe didn't get a US-style productivity uplift from the ICT boom



Source: Estimated in 'The Past, Present and Future of European Productivity', by Antonin Bergeaud, presented at ECB Forum on Central Banking in Cintra (2024). TFP estimated using a growth accounting exercise, then de-trended through an HP filter with a coefficient of 1000.

10. Europe might also be a laggard in adopting productivity-boosting AI tools



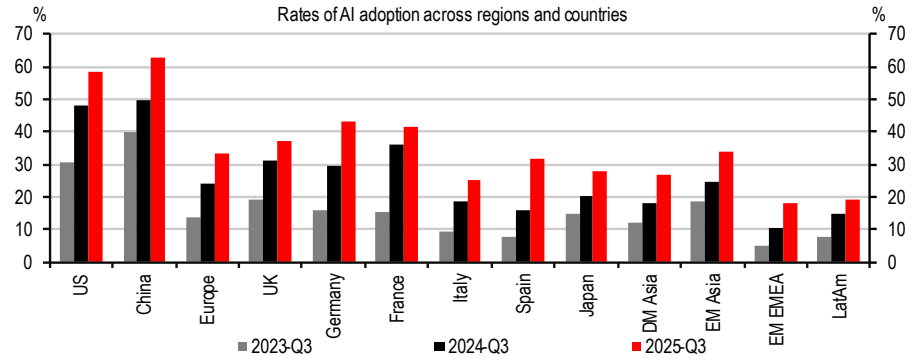
Source: EIB Investment Survey 2025
Question: "I would like to ask about your company's systematic use of generative AI tools to improve processes. These are tools like ChatGPT, Bard, or Copilot that can create new content, like text, images, or codes. Does your company invest in these kinds of tools in any of the following areas?"

9 This is a key area of the economic development literature – see, for example, Lucas, R (1990) 'Why Doesn't Capital Flow from Rich to Poor Countries?', American Economic Review Vol.80, No.2.
10 'Transatlantic technologies: Why did the ICT revolution fail to boost European productivity growth?', VoxEU blog by Hassan Sayed & Robert J. Gordon, 21 August 2020
11 Speech delivered to the European Parliament, 16 September 2025

…but our analysis of earnings calls shows tentative signs of catch-up

Our data science team's analysis of earnings call transcripts finds similar disparities in the extent of AI adoption between the US and Europe. And where adoption has been more tangible, it has focussed more on cost savings rather than growth and customer-facing opportunities. However, more recent iterations of this work suggest that the gap has become a little less stark (Chart 11), with European companies making more use of words such as 'investment' and 'strategic', suggesting a stronger grasp of the AI opportunity, even if it's not (yet) being operationalised in the same way (*Europe's AI moment*, 12 November 2025).

11. Our analysis of earnings calls does point to some European catch-up, however



Source: HSBC, LSEG, TKRD. Note: AI adoption as a % of companies mentioning tangible examples of AI initiatives in earnings calls vs total number of companies we have earnings call transcripts in that particular region

Less exposure to the downside

More limited labour market disruption?

So far, we have argued that Europe looks much less well-placed than the US to benefit from the potential upsides of AI, both in terms of the stimulus from the investment cycle, and potential productivity gains from adoption further down the line.

But, if it's any consolation, we also think that Europe is somewhat less vulnerable to the potential downside of AI, both in terms of disruption to the labour market, and also the economic impact of bursting a possible AI bubble.

There's some evidence of an AI impact on graduate hiring in the US

Regarding the labour market, we think there are tentative signs of an impact of AI adoption as a headwind to graduate and junior staff recruitment in the US. Indeed, Chart 12 shows unusually high unemployment rates among recent US graduates, versus all graduates. It's possible that a portion of that reflects reduced hiring on account of AI adoption leading to a trimming in graduate recruitment rounds (*Is AI already impacting employment*? 14 October 2025).[12]

If AI adoption in general turns out to be slower in Europe (where employment protections are also generally higher), job losses should be more limited, or at least more gradual.

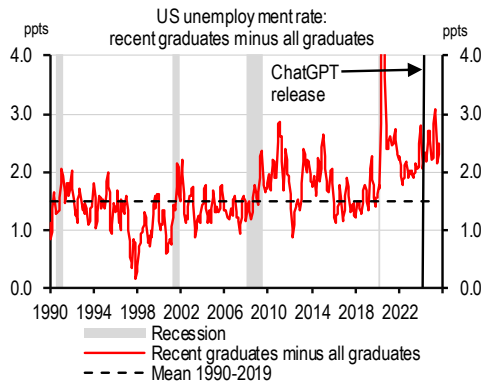
Slower AI adoption should mean slower job losses (but the UK could be an exception)

But there is a caveat, which is perhaps most relevant to the UK, where we see unemployment relative to total unemployment rates running at levels not otherwise seen outside the GFC and COVID-19 downturns (Chart 13). Job advertisers report a sharp falls in graduate vacancies (Adzuna Jobs Market Report 22 December 2025), with reports pointing to a particularly large (44%) scaling back in graduate jobs among the Big 4 accounting firms. AI could be playing a role there, although PWC has said that "other factors such as market conditions are currently having a bigger impact".[13] One risk for the UK is that, when facing high labour cost pressures, businesses might look to automate more roles, reducing hiring or laying off staff at the same time. But if AI adoption is not as efficient as in the US, the productivity gains will not be as big – the worst of both worlds.

12 There is an ongoing debate on the role of AI in this story. The increase might instead be a simpler result of a slowdown in the US labour market (with recent graduates generally more vulnerable to such slowdowns). See 'What the graduate unemployment story gets wrong', John Burn-Murdoch, FT, 10 October 2025
13 ' It's been a terrible year to graduate and find a job', FT, 30 August 2025

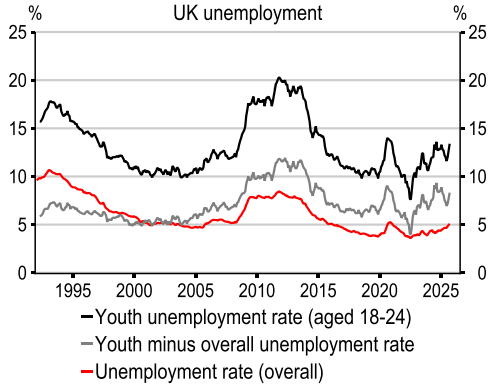
Another caveat is that if European businesses become more uncompetitive as a result of lagging behind their international peers on AI adoption, that might act as a broader headwind to economic and job creation.

12. AI adoption could be weighing on graduate jobs in the US…



Source: Federal Reserve Bank of New York, Macrobond, HSBC calculations

13. …and possibly in the UK, where youth unemployment is running relatively high



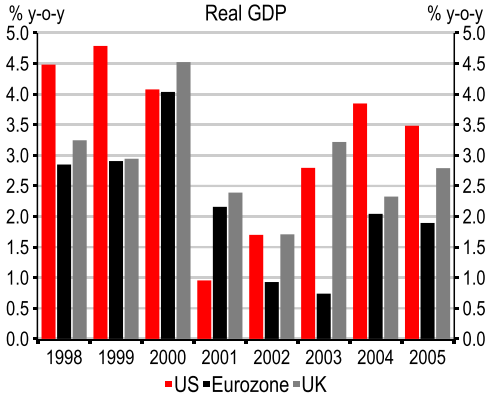
Source: ONS, Macrobond, HSBC

Less vulnerable to a bursting bubble?

The Dotcom crash contributed to a slowdown in European domestic demand

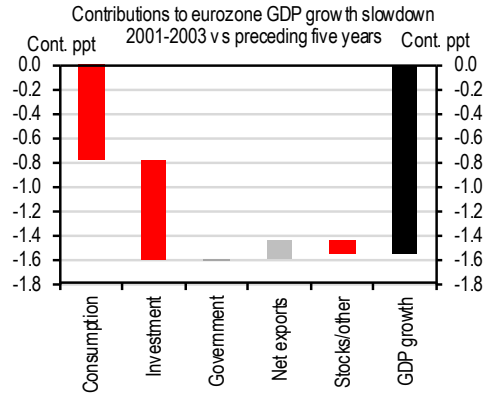
For the global economy, and for the US in particular, a potential bursting of the 'AI bubble' is one of the main downside risks to our outlook (*Global Economics Quarterly: Shaky foundations*, 5 January 2026). And on that front, the ICT/Dotcom episode of the early 2000s offers another potentially sobering example for Europe – although Europe did not benefit as much from the productivity boon from IT adoption, growth was significantly reduced (Chart 14), not via a drag from net trade stemming from lower US growth, but via a slowdown in domestic consumption and investment (Chart 15). A large portion of that slowdown appears to have reflected a reduction in IT investment levels (despite a smaller run-up than in the US), as well the broader weakening in confidence in the global economy.[14]

14. The Dotcom crash weighed significantly on European growth…



Source: BEA, Eurostat, ONS, Macrobond, HSBC calculations

15. …mostly due to a slowdown in private domestic demand



Source: Eurostat, Macrobond, HSBC calculations. Red = negative contribution, grey = positive contribution, black = total GDP slowdown

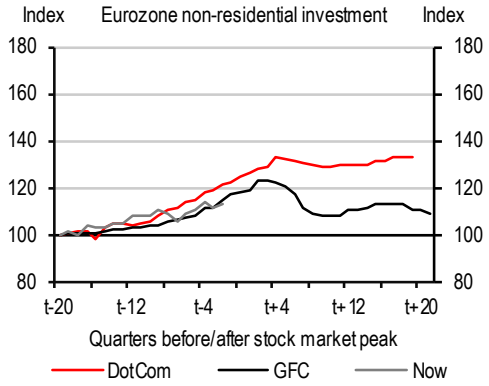
14 'The EU economy: 2002 review', European Commission

This time around, we see four potential areas of vulnerability for Europe if the 'AI bubble' were to burst, but we think each of those vulnerabilities to be fairly limited this time around (see *European Economics Quarterly: Dubble bubble?* 23 December 2025).

There's not a big IT investment or stock market run-up to unwind in Europe

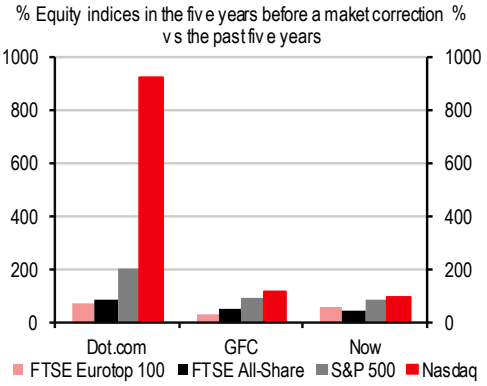
- **A fallback in IT-related investment.** Of course, if fears grow that AI-related investment will not make a satisfactory return, that investment might be scaled back. But as discussed above, IT investment in Europe hasn't risen very much at all, so any investment fallback is likely to be limited. Indeed, the broader investment runup so far is not only much smaller than that of the US, but also relative to that seen ahead of the Dotcom crash (Chart 16).
- **A potential stock market crash.** Globally, the runup in stock prices has been much less pronounced this time around (Chart 17). And in the event of a crash, less European wealth is tied up in equities – particularly tech stocks – than in the US. So while apparent confidence effects in the early 2000s are a cautionary tale, at least the wealth effect of a tech stock slump should be limited in Europe.
- **Reduced demand from the US.** If there is a sharp slowdown in US demand if the 'AI bubble' burst, that would likely reduce US demand for IT hardware (a problem for Asia, not for Europe) and possibly also consumer goods, given potential stock market wealth effects. The latter could act as a headwind to European exports, with Germany and Italy potentially the most exposed of the largest economies (Chart 18).
- **A drop in USD (and a rise in EUR).** A burst of the 'AI bubble' could also lead to currency volatility, possibly weakness in USD if capital flows out of the US and/or the Federal Reserve responds to a downturn by cutting policy rates. European competitiveness would, in turn, be eroded. It is worth noting, though, that while USD stopped appreciating during the Dotcom crash, it didn't fall sharply (at least not until 2002 as the US recovery led to a widening in the trade deficit – Chart 19). It is unclear how significant FX effects would be this time around.

16. There has only been a modest runup in European investment…



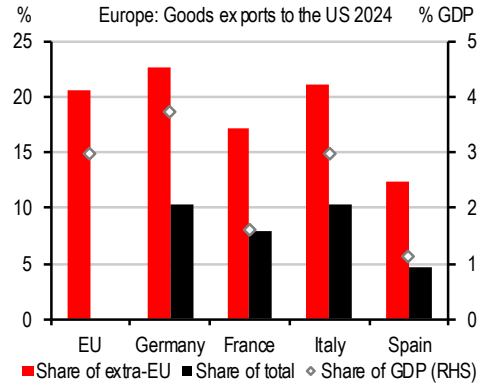
Source: Eurostat, HSBC. Note: x axis refers to number of quarters following Q1 1995 for Dotcom, Q1 2001 for GFC, and Q1 2020 for Now (of course, stock markets have not yet peaked this time, but we choose Q1 2020 (the onset of the COVID-19 pandemic) as a natural starting point for recent investment trends.

17. …and stock markets



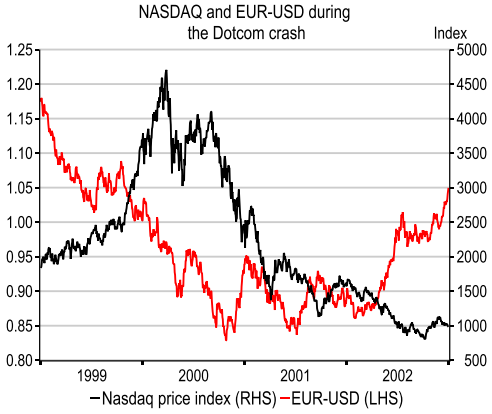
Source: S&P Global, Nasdaq, FTSE, HSBC

18. European exporters could be exposed to a US slowdown…



Source: Eurostat, HSBC calculations (2023 data)

19. …potentially compounded by a weaker USD



Source: Nasdaq, Macrobond, HSBC

Conclusion

Smaller party, smaller fallout?

All told, we take a cautious view of the prospective economic boost from AI for the European economy, compared to the US. Bar a couple of exceptions (Iceland, possibly the UK), there is scant evidence of an IT investment boom afoot. And while it's tempting to hope that Europe can eventually benefit from the potential productivity boost from the adoption of AI tools, the example of the ICT boom of the 90s/00s suggest that's far from guaranteed.

But at least Europe is probably less exposed to the downsides of AI. Slower adoption should imply less sudden disruption to the labour market. And we are fairly relaxed about the prospect of major economic damage to Europe from a bursting of the 'AI bubble', at least for now.

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