What being a services startup is teaching us about AI and the economy

Report for the week ending 14 February, 2026

Dylan Smith

Monologue

> *It has become appallingly obvious that our technology has exceeded our humanity.*
>
> ***— Albert Einstein (Scientist)***

> *You cannot endow even the best machine with initiative; the jolliest steamroller will not plant flowers.*
>
> ***— Walter Lippmann***

> *The real danger is not that computers will begin to think like men, but that men will begin to think like computers.*
>
> ***— Sydney J. Harris***

Investors have lost faith in software providers' ability to deliver market-beating returns amid a broadening of the applications of core AI models. The "Software and Services" component of the S&P 500 Information Technology sector has fallen by 19% since the start of the year.

The general belief that AI itself will deliver on its profitability promise is holding up. Semiconductor stocks have risen by 3.4% over the same period, and hardware and equipment stocks are essentially unchanged (-0.3%) from a starting point of historically elevated valuations.

What we're dealing with then is a new software-specific fear: that the "foundation model providers" that develop the massive core models at the heart of the AI boom (Anthropic's Claude, OpenAI's ChatGPT, Google's Gemini, etc.) will drink the milkshake of specialist software developers. The concern is that, instead of providing the infrastructure for software companies to improve their services using AI, the foundation model providers will simply replace the services that software companies offer in the first place.

Indeed, the software rout started in the week that Anthropic released a new model, a new set of tools specifically designed for lawyers and bankers, and deepened their integration with standard business tools in the Microsoft Office suite.

We can think of these concerns about software services being replaced as the algorithmic analogue to the fear that AI will replace human workers *en masse*, triggering an employment crisis. In fact, let's link those two concepts together and think about what kind of "disruption" AI is causing to how firms operate, and where these trends may be headed.

We have the perfect case study to hand: my own research and services consulting startup, which I launched in "stealth mode" around a year ago. arcMacro was born in the age of AI, and is growing up as an "AI-native" company.

What does my experience reveal about how AI is affecting business in the professional services industry?

Here is a list of everything I've used AI for in the past week.

- Coding an extension to our core factor models.
- Coding a small analysis project to produce unusual and complex charts.
- Building a draft PowerPoint deck using my descriptions of what each slide should say.
- Synthesizing the conclusions and agreement/disagreement of a handful of academic papers.
- Listing out all the publicly available data sources relating to a specific topic.
- Generating a market intelligence report on a sub-sub sector of the investment industry for use in sales planning.
- Building and maintaining a lightweight sales tracker and customer relations management (CRM) system in Excel.
- Maintaining and updating an expenses tracker.

To my mind, this single week of work provides convincing evidence on three major AI debates, at least in the context of my industry (professional services) and scale (small startup).

First, I am unquestionably a lot more productive. Code that would have taken a couple of weeks to develop now takes a couple of hours. My time is spent mostly on getting the coding structure and design right, and on quality control and debugging; AI takes care of everything in between. Similarly, I've cut down on time spent on tiresome administrative tasks, helping me focus on the core work of building my business.

Second, I have delayed or avoided software purchases. I have not spent startup capital on software I would otherwise have been forced to purchase by now — notably a CRM system and basic bookkeeping software. As arcMacro grows in size and complexity, I will need to purchase more software, but perhaps less than before. Meanwhile, in the startup phase, AI is proving invaluable in keeping costs down and helping me avoid a distracting learning curve on each new service.

Third, I have delayed hiring junior employees. To put it bluntly, AI has replaced the dogsbody intern and negated my need for a research analyst. Again, as I grow, I will make more hires. When I do, I'll be hiring for specific skills, not drone work.

With my investor hat on, my experience as a business owner does make me leery about the software sector. My tentative conclusion – based mostly on frustrations with my data vendors (classified as "software as a service" companies) – is that software firms that are willing to rethink their "moat" and offer great integration with the core AI models that are increasingly coordinating tasks across workflows (rather than building siloed AI-driven services) will be successful.

With my economist hat on, my emotions are more mixed. I'm concerned for the young people entering the professional labor market. Most of the evidence suggests that the current weakness in graduate hiring predates the launch of ChatGPT. It's probably true that the employment glut that resulted from the COVID-19-era hiring spree is partly to blame. But based on personal experience, it's very hard not to conclude that AI is devaluing inexperienced hires and exacerbating the problem.

On the other hand, the productivity gains are genuinely exciting. Importantly, I'm "consuming" all of the higher productivity AI is giving me. I'm working the same long hours to get more done, not halving them to do the same amount of work and heading to the beach for the afternoon.

That's revealing: it supports my instinct that for the most part, AI – as with any technological breakthrough I can think of – will enhance human labor, not replace it.

Talking to friends in smaller professional services shops and academia, I'm hearing a similar story across the board. Nobody is worried about being replaced by AI; they're enjoying the amazing productivity boost it's giving them and are optimistic about where it will help them take their careers.

With that in mind, and still thinking with my economist hat on, I can make a hypothesis about how AI is affecting the wider economy:

Hypothesis: We should be seeing a boom in small firms starting up, and these firms should be highly productive compared to existing small businesses.

Indeed, this week's Memo tests that hypothesis on the aggregate economic data, with mixed results.

There is another, more cautious conclusion I'm drawing about AI from my experience starting a business. It comes from analyzing the *négatité* – what AI is *not* doing for me. It's not setting my goals, it's not helping me figure out what to spend my time doing, I don't use it to write a single word of prose, and beyond automation, it's not helping me study the economy at all. I don't include any references to it in sales pitches.

It may sound twee, but the value of "humanness" is rising.

An inherent feature of AI is that, when deployed outside a narrow and well-defined context, it tends toward mediocrity. This is by design; it's trained on as much data as can be found to feed it, not on the very best, highest quality data exemplifying the best humanity can do. Hence all the slop.

Take the example of AI's writing style: it's grammatically correct, but it's easily identifiable as AI, and reading a lot of it rapidly numbs the senses. Not all humans write well, but those who do write far more engagingly than large language models ever will.

Mediocre code is useful to me – it's an improvement on my own, and easy to fix. If it works, it works. Mediocre writing, by contrast, hurts my business.

So, I'm seeing a rising premium on "human" things: trusted personal relationships, character, creativity, the ability to entertain and to spark ideas, sound judgment, ethics.

Unfortunately (at least for me, a high-functioning introvert) this lifts the premium on personal branding at the expense of corporate branding. I would prefer that the arcMacro brand become more famous than any of its people. It's no coincidence that The Economist is ditching more than a century of tradition and putting bylines on some of its stories while placing individual journalists in the public spotlight.

This personalization of production is both a challenge and an opportunity.

Tying it back to those recent graduates facing such a challenging labor market, I think the kids will be all right. After all, they're the first generation of "AI-native" humans. Their main challenge will be getting the (human) experience they need to flex their AI-enhanced productivity and creativity while maximizing the value of their humanity.

Dylan Smith

Founder and Chief Economist

Marginal Movers

Rising 👆

- **NATO:** US Secretary of State Marco Rubio's Valentine's Day speech had a bouquet of roses for European allies, reinforcing the US commitment to "international cooperation."
- **Nuveen:** The American investment manager is buying Schroders, a jewel of the City of London — positioning for a new push of private markets into retail.

Falling 👇

- **Danish Empire:** French President Emmanuel Macron warned that the Greenland spat is not over on the same day The New York Times reported that the Faroe Islands are getting nervous.
- **US consumers:** New research from the New York Fed this week showed they're footing 90% of the cost of import tariffs.

Must-Reads

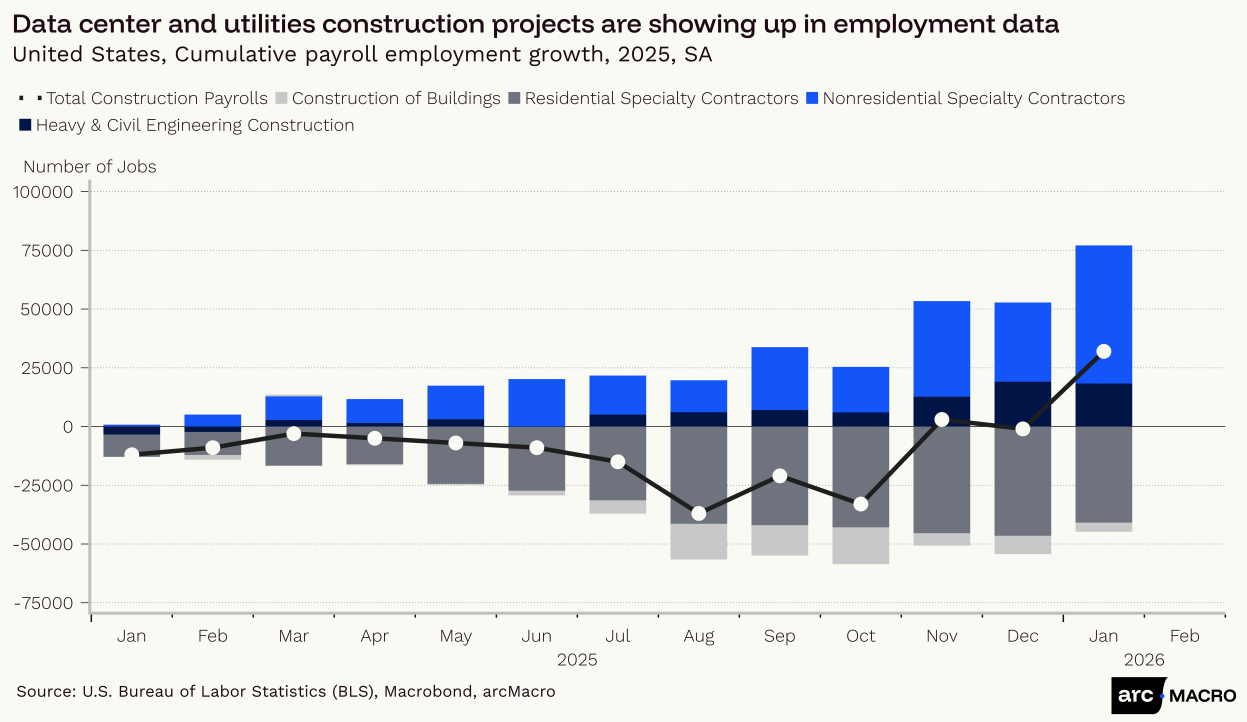
- **ChatMacro: Evaluating Inflation Forecasts of Generative AI**: We're *completely* talking our book here, but still: "This paper assesses the out-of-sample forecasting accuracy of LLMs by eliciting real-time forecasts of U.S. inflation from ChatGPT. We find that out-of-sample predictions are largely inaccurate and stale."
- **A New U.S. Productivity Chapter? What Industry Data Say About AI**: "While higher AI adoption is associated with faster productivity growth across industries, it explains little of the shift in aggregate contributions, suggesting AI adoption is still spreading."
- **Banking on Nonbanks**: The IMF confirms that the rise in "shadow banking" stems from tighter macroprudential regulation of banking groups since 2008.

Macro Monitor

The US Labor market is stabilizing

US jobs growth came in far stronger than expected in January, with employment rising by +130k. That's the first print over +100k since December 2024, and it still looked strong after netting off -17k revisions to the prior two months. The gains were driven by the Education and Health Services sector, which, at +137k job gains on the month, doubled its average contribution over the past 12 months.

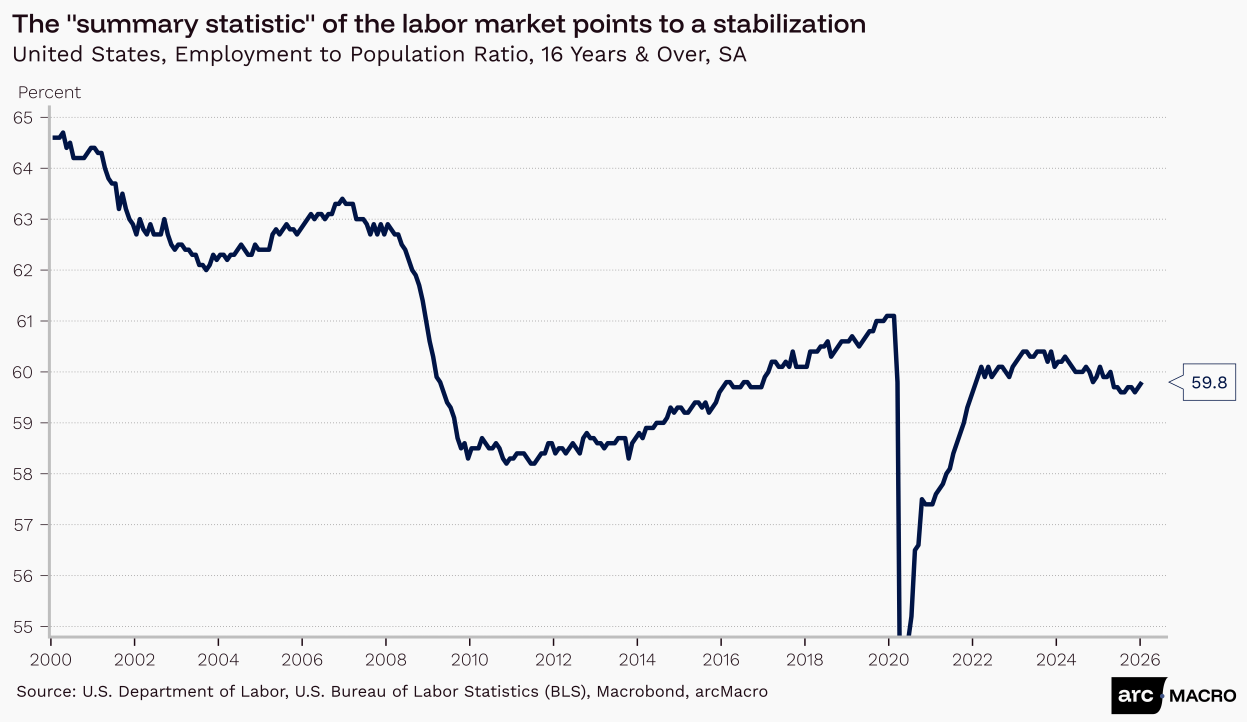
Construction payrolls were up meaningfully too, rising by 33k in January. Looking at the breakdown, we see that employment of data center and utilities-related building specialists is outweighing the weakness in residential construction.



The Establishment Survey, which produces the nonfarm payrolls data, underwent its usual annual benchmarking and seasonal adjustment revisions this month. These showed that job gains averaged just +15k a month over the last year, marked down from the +49k pace reported before the revisions. This was entirely expected, since other data sources enable analysts to triangulate the likely revisions, and we know that weaker immigration has been weighing on employment growth. The important point is the direction of travel, and this week's data confirmed that the labor market has stabilized for now.

Indeed, the separate "Household Survey" showed the unemployment *rate* ticking down from 4.4% to 4.3%.

In our view, far slower immigration inflows and a larger proportion of already-employed work visa holders among entrants are roughly cancelling out businesses' reluctance to hire amid an uncertain outlook, keeping the labor market in a dynamic equilibrium. Looking at the simple employment-to-population ratio cuts through the complexity in the labor market data and confirms this read. It's now back up to April 2025 levels.

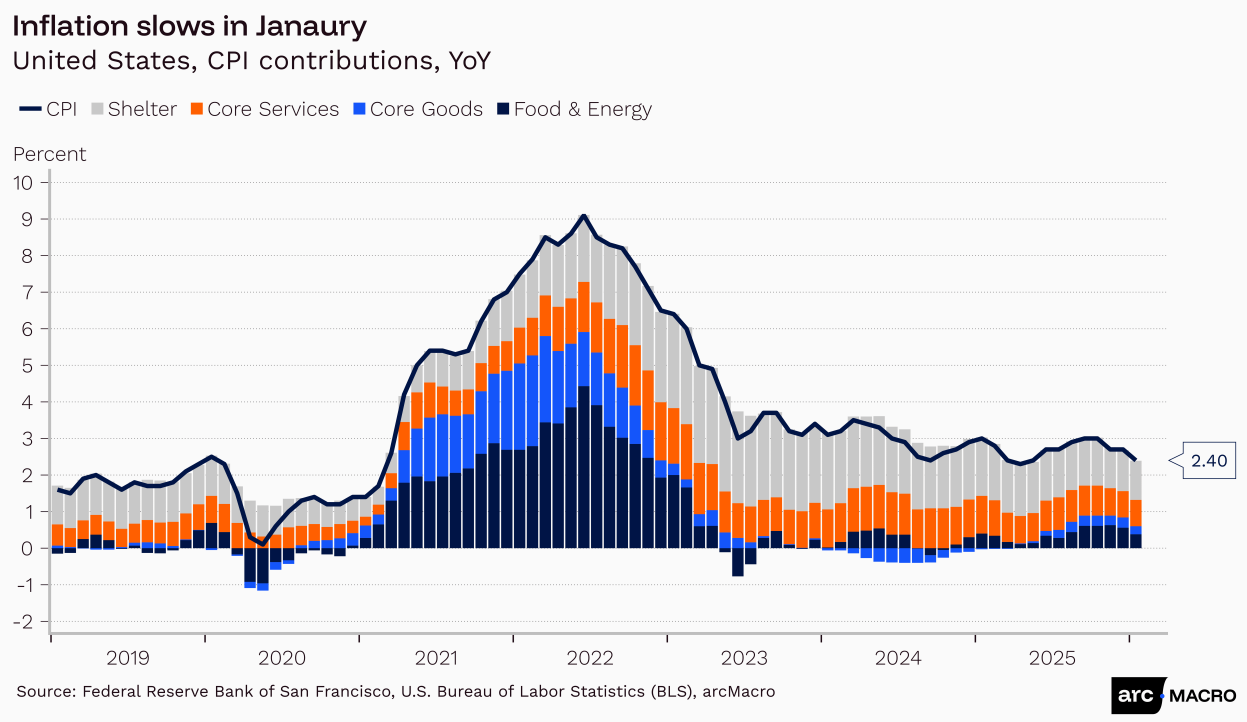


Good news on inflation

Fears of a significant post-holidays inflation spike have been alleviated by the January CPI data, which came in softer than expected (headline inflation was 2.4% YoY and core 2.5%, both lower than December). Our arcMacro inflation factor fell back below the historical mean as a result.

The inflation data over the next few months will be critical for the medium-term outlook. With the labor market stabilizing, it will gain primacy in interest rate decisions, and a broad set of factors (tariffs and a weak dollar, demand surge, immigration restriction, AI infrastructure boom) point to significant upside risk emerging.

In that context, President Trump's decision to drop certain aluminum and steel tariffs provided further good news and may have come just in time to mitigate rising prices in sections of the goods manufacturing value chain.



Interest rate path blurs

Before the soft inflation and strong labor market numbers were published, Fed officials had largely stuck to their arguments for somewhat lower interest rates based on weak job growth. But with inflation falling and the labor market clearly stabilizing, this argument is not holding water. It will be interesting to see if the arguments change to fit the data (a sudden emphasis on inflation, not jobs), or if a rethink on the pace of easing emerges.

What matters most is what Trump's Fed Chair nominee, Kevin Warsh, thinks of the data flow.

He's unlikely to say anything firm until he's confirmed, so for now, markets are left weighing what the data are saying against their read of Warsh's priorities and character. After this week's trend reversals, traders are still baking 50 basis points of cuts into forward interest rates by the end of 2026, but have raised the implied probability of an extra 25 basis points of easing from 25% to 30%.

Earnings confirming upswing

We have not been out of step on the view that economic activity is improving in the US (where we are more worried than most about the inflation front). Still, it's good to get confirmation that the dominant narrative on growth does not need to be rethought. Bloomberg points out that around 65% of small caps on the Russell 2000 index are beating earnings estimates, the highest share since the 2021 boom. That's got little to do with AI and everything to do with a general rise in demand, lifting all small boats.

Market Monitor

Public markets

The major themes established at the beginning of February continued to play out this week. Investors resumed their rotation from growth to value stocks, now preferring to bet on the fundamental economic cycle rather than the AI boom (with Software hit particularly hard).

The exception is Japan, where Prime Minister Takaichi's snap election gambit paid off spectacularly. Voters delivered her a supermajority in parliament and a resounding mandate. Japanese stocks hit record highs on the expectation of significant stimulus, and the Nikkei 225 is up 13% this year.

The rotation out of high-risk equities and into bonds overpowered news that Chinese President Xi Jinping was pressuring local banks to reduce their purchases of US assets in pursuit of "reserve currency" status for the yuan (see last week's note for our view on this). Sovereign fixed income rallied across the globe, with the 10-year US Treasury dropping a hefty 18 basis points.

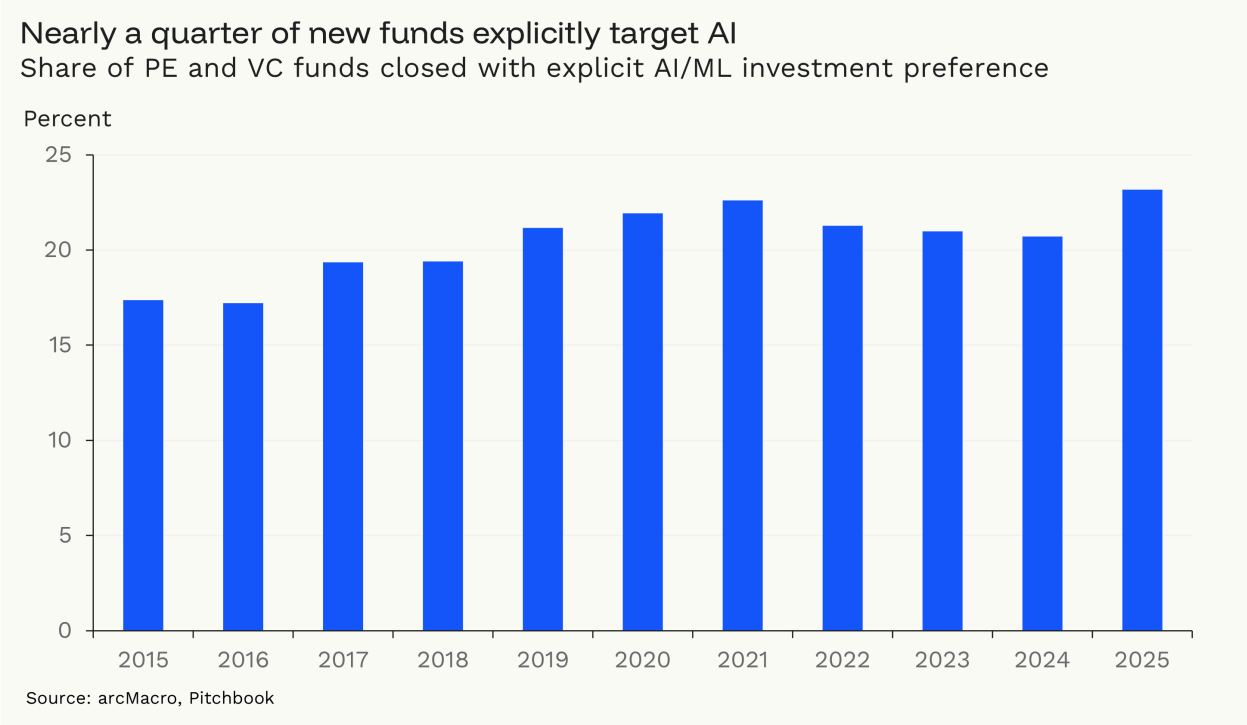
Corporate fixed income didn't quite follow the move, with spreads rising a touch – no doubt affected by large tech borrowing announcements, including a 100-year bond issued by Google parent Alphabet.

The gold price moved sideways despite the general "risk off" sentiment. We see that as evidence of a speculative element in gold's recent run. More to come from us on that theme in future notes.

Private Markets

With public-market investors losing faith in technology companies amid AI-related concerns, a natural question for LPs with private-market investments is how exposed the illiquid portion of their portfolios might be to the same worries.

The answer is "very." Private market funds tend to be more heavily invested in technology and software than the S&P500. And, as the chart below shows, a quarter of private equity and venture capital funds explicitly state a preference for investing in AI and machine learning.



See the appendix for the Market Monitor summary chart.

Memo

Is AI creating a mid-market/startup boom?

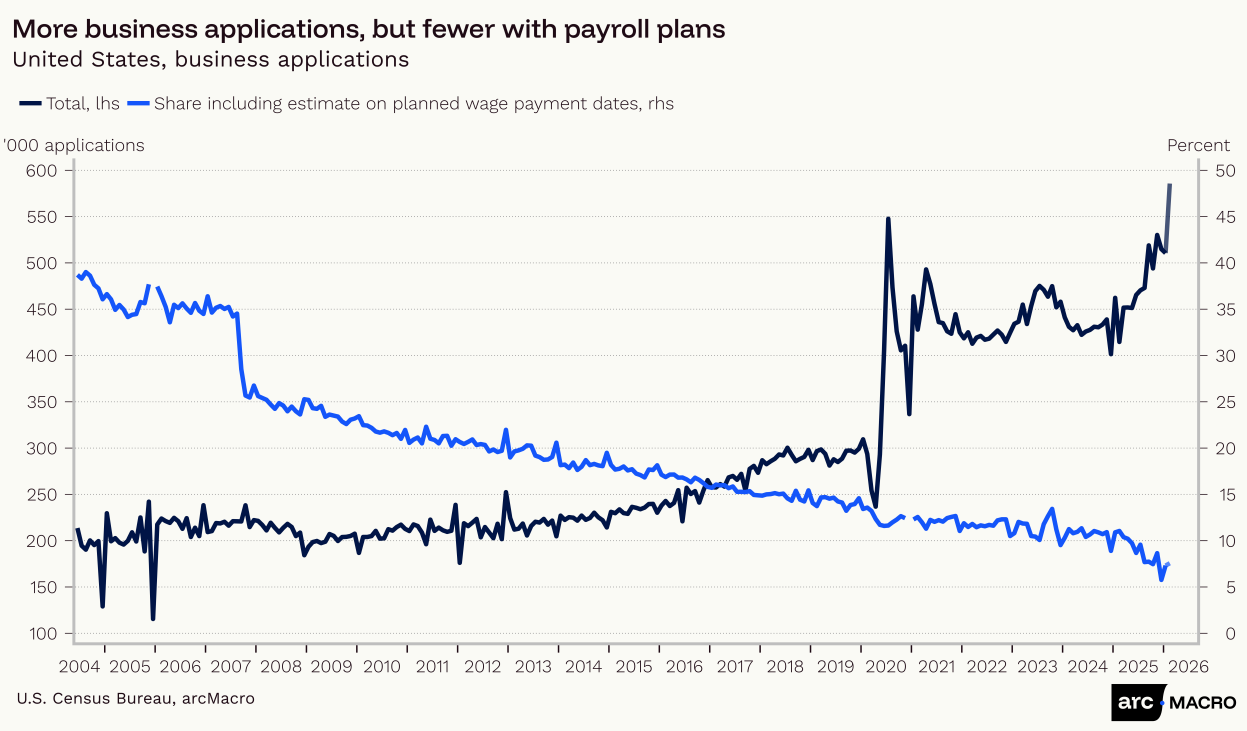
Bottom line: *Maybe. Business formation has risen, but survey data suggests that AI use is lowest among small businesses. Improved dynamism in the "small" economy appears to stem from general economic optimism more than from AI itself, though we can't rule it out as one contributing factor.*

What it means for businesses and investors: *AI may not be moving the broad economic aggregates yet, but that doesn't mean there aren't opportunities for smaller AI-native disruptors to unseat slow-moving established players across a range of industries. This dynamic won't show up in the macro data, but it may drive private equity and venture capital returns over the next decade, especially in operations departments.*

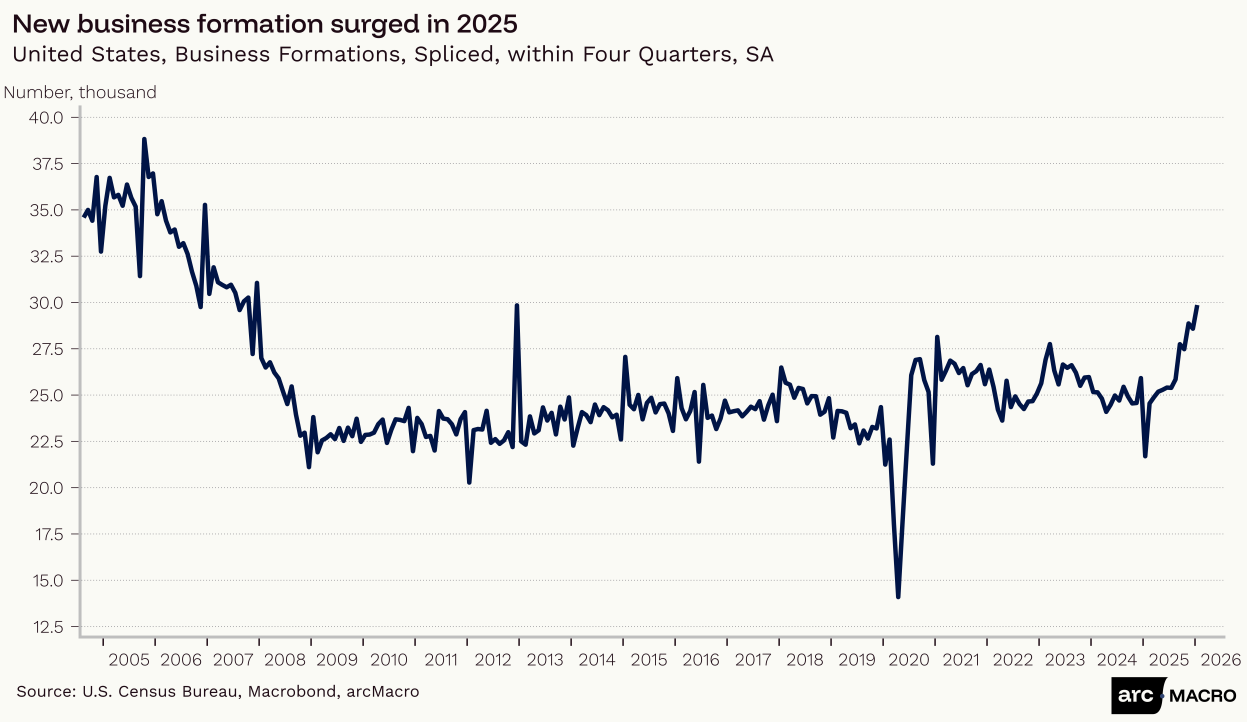
This Memo investigates a simple hypothesis: that the productivity enhancements from AI are disproportionately positive for small businesses and start-ups, and will be evident in affecting activity and employment data for the small business sector.

Direct and detailed data on AI usage are hard to come by, but looking at the available macro aggregates, we are able to draw a few tentative conclusions.

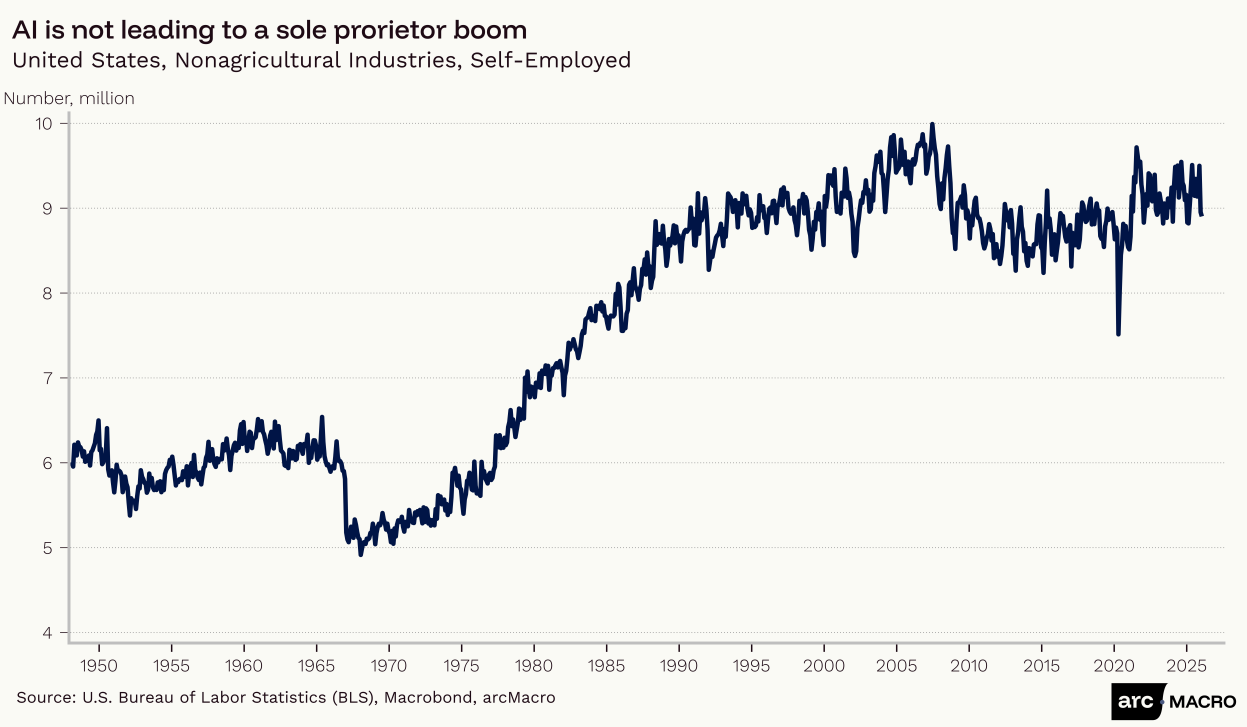
1. Applications for new employer numbers began to surge in early 2025. However, application quality is falling, with founders not submitting information on their expected timeline for beginning wage payments.



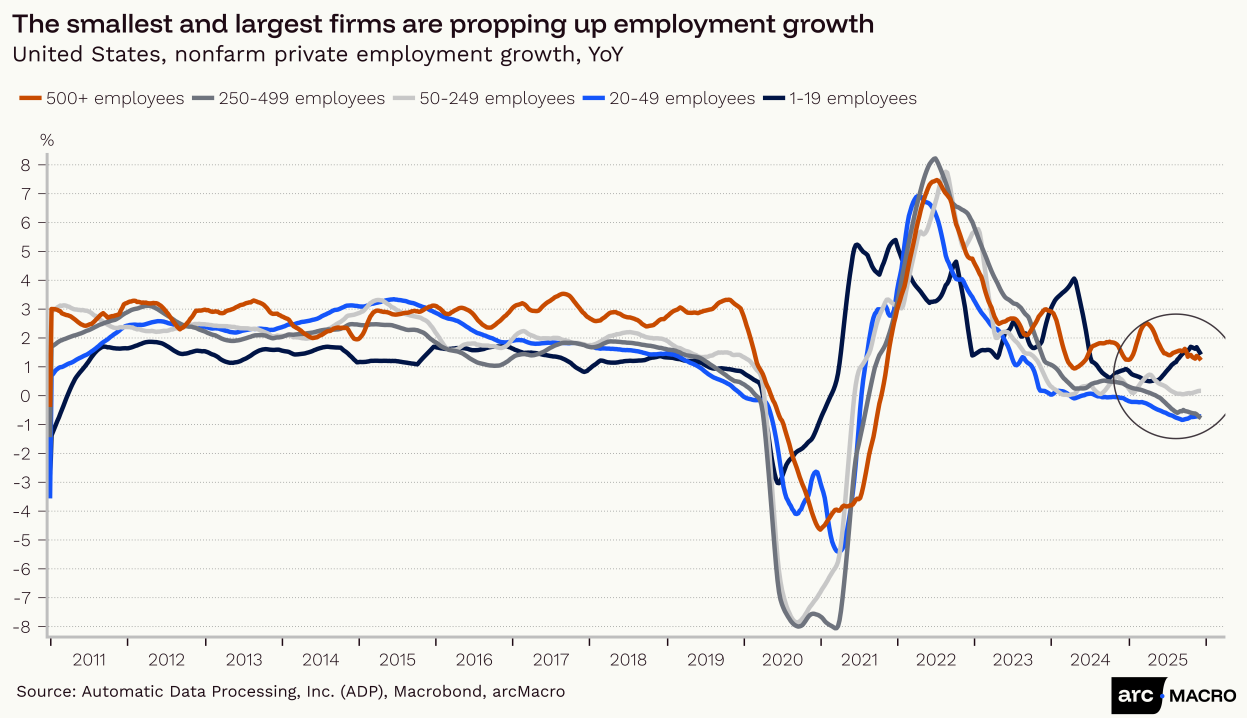
2. Encouragingly, official data on actual business formation – which counts the number of businesses that appear on payroll records (i.e., with employees) – has matched the rise in business applications with a slight lag, confirming that the trend is real.



3. Self-employment is not following the same trend as small business formation.

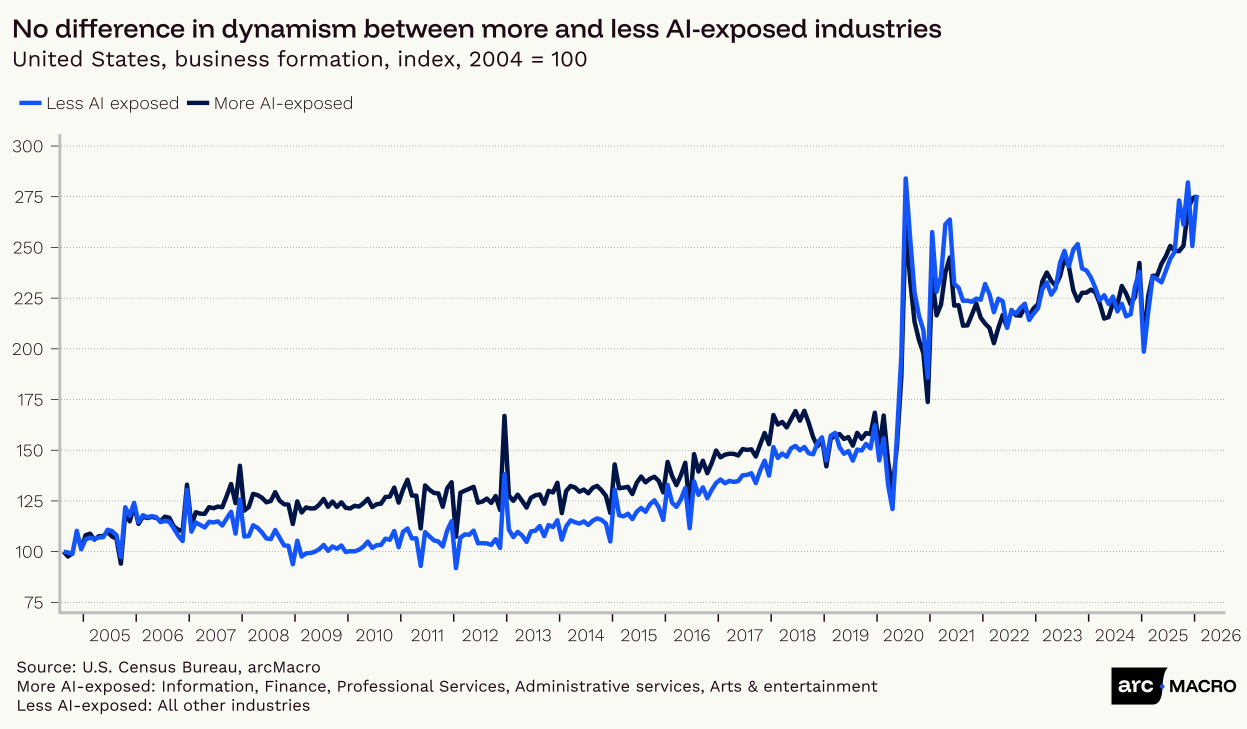


4. On aggregate, it's very small and very large firms that are driving employment growth.



5. Small business employment growth is nothing spectacular in level terms, sitting almost exactly at the 2012-2020 average (although recovering from a period of deeper weakness).

6. We find no difference in business formation in industries with high AI exposure – like professional services – and industries with low AI exposure, like construction.



7. The smaller the firm, the less likely it is to have adopted AI to some degree.

Smaller existing firms are slower to adopt AI

United States, Firm-level AI adoption rate

Industry	Firm size						
	1-4	5-9	10-19	20-49	50-99	100-249	250+
Construction	9.8	10.8	14	17.4	21.6	23.8	
Manufacturing	10.5	11.2	14.1	15.2	15.8	22.3	19.7
Wholesale trade	14	13.5	16.1	20.8	20.4	19.6	33.8
Retail trade	11.5	12.3	13.2	17.6	27.3		38.5
Transport & warehousing	6.3	6.6	9.8	13.6		28.5	
Information	41.2	36.8	30	59.2	47.1	61.6	48.8
Finance	29.1	38.7	36.4	43.5	39.8	41.5	48.7
Real estate	20.5	28.3	26.8	18	38.1	0	45.3
Professional services	35.1	40.5	40.6	35.9	49.7	40.5	48.8
Administrative services	19	20.9	20.7	16.2	30.5	27	38.2
Education	33.3	29.3	39.8	42.6	34.4	27.4	63.6
Health care	21.7	18.3	21.8	22.4	27	27.5	29.3
Arts & entertainment	12.7	19.9	27.6	25.9	22.4	25.7	
Accommodation & Food	5.6	5.6	10.2	8.3	14.4	15.1	25.5
Other services	8.7	12.3	14.3	20	26.4		

Source: US Census Bureau, arcMacro

Taken together, this investigation shows that while business registrations are rising sharply, overall small business employment is not yet following suit.

This could point to a dynamic in which AI enables new businesses to hire fewer employees initially. However, we also know that adoption rates are lowest among smaller businesses, and the timing of the small-business registration surge appears more tied to the political climate than to technological disruptions.

Overall, it's too early to say how much AI is affecting small-business productivity overall. Instead, it looks like AI will drive competitive dynamics between firms within size categories, with newer firms adopting AI and positioning to outcompete established players. This won't show up in the aggregate data for a long time and will take the form of persistent incremental productivity improvements.

Appendix

Proprietary Factor and Regime Model and Key Macro Indicators

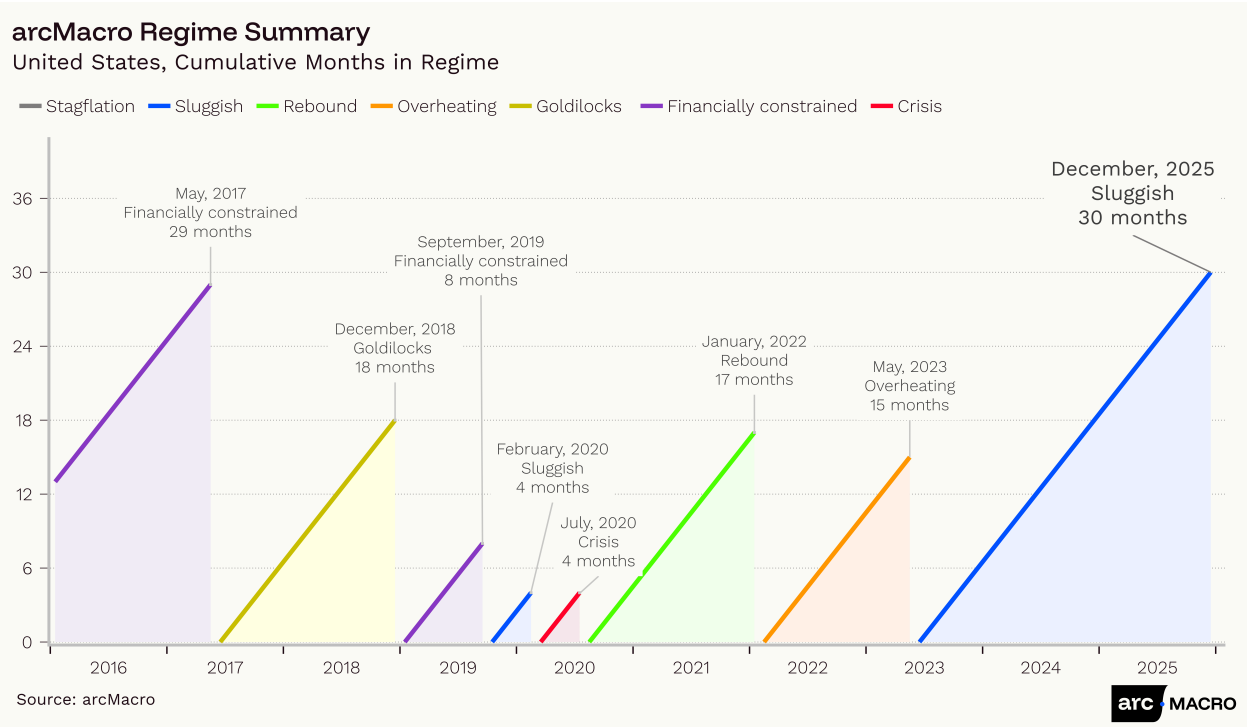
The Week in Markets

	Latest*	Change since last week (units)	Change since last week (%)	3-month change (units)	3-month change (%)	Year-to-date change (units)	Year-to-date change (%)
Equity							
S&P 500	6836	-96.1	-1.4	-15	-0.2	-9.33	-0.1
Information Technology			-2.0		-7.4		-5.0
Financials			-4.8		-3.8		-5.9
Consumer Discretionary			-2.1		-5.8		-5.0
Communication Services			-3.5		2.6		-2.5
Health Care			-0.1		3.2		1.7
Industrials			0.6		12.9		12.3
Consumer Staples			1.4		16.1		15.6
Energy			1.7		20.9		21.3
Utilities			7.1		3.5		8.7
Real Estate			3.9		6.1		8.4
Materials			3.7		19.7		16.6
Nasdaq Composite	22547	-485	-2.1	-860	-3.7	-695	-3.0
Dow Jones Industrial Average	49501	-615	-1.2	1246	2.6	1438	3.0
Russell 2000	6578	-58.8	-0.9	487	8.0	410	6.6
Sovereign Fixed Income							
US: 2-year Treasury Note	3.4	-0.10		-0.16		-0.070	
US: 5-year Treasury Note	3.61	-0.15		-0.070		-0.12	
US: 10-year Treasury Note	4.04	-0.18		-0.040		-0.14	
FRA: 10-year OAT benchmark	3.34	-0.11		-0.040		-0.22	
GER: 10-year Bund benchmark	2.77	-0.05		0.1		-0.080	
CHN: 10-year CGB benchmark	1.79	-0.02		-0.00250		-0.0545	
CAN: 10-year GoC benchmark	3.34	-0.06		0.17		-0.080	
Corporate Bond Spreads							
US: A-rated	70.3	4.6		-3.8		0.5	
US: BBB-rated	107	6.0		-2.7		2.2	
Leveraged Loan Spreads							
US: B-rated	428	0.497		26		35.9	
US: BB rated	265	-1.44		3.2		9.04	
US: CCC-rated	1781	27.2		365		217	
Foreign Exchange Rates							
DXY US Dollar Index	96.9		-0.7		-2.6		-1.4
EUR/USD	1.19		0.6		2.6		1.1
USD/CAD	1.36		-0.7		-3.2		-1.0
USD/CNY	6.9		-0.6		-3.1		-1.3
USD/JPY	153		-2.4		-0.8		-2.0
GBP/USD	1.36		0.6		3.8		1.4
USD/CHF	0.766		-1.5		-4.5		-3.3
Commodities							
WTI Crude	62.7	-0.64	-1.0	4.5	7.6	5.34	9.3
Gold	4995	46.9	0.9	858	20.7	627	14.4
S&P GSCI Commodities			-0.6		4.5		6.4
S&P GSCI Industrial Metals			-0.7		10.9		2.7
S&P GSCI Agriculture			0.6		-6.3		-2.1

* Weekly closing value. Color indicates positive (green) or negative (red) change since prior week.

Source: S&P Global, Russell Investment Group, Nasdaq, U.S. Department of Treasury, Macrobond Financial AB, Central Bank of Germany (Deutsche Bundesbank), Bank of Canada, Intercontinental Exchange (ICE), International Monetary Fund (IMF), LBMA (London Bullion Market Association), Robert Shiller, Chicago Board Options Exchange (CBOE), U.S. Department of Labor, U.S. Bureau of Labor Statistics (BLS), Federal Reserve Bank of Atlanta, Citi, Pitchbook | LCD, arcMacro


arcMacro Real Time Factors
United States, z-score
Real Factor
Std dev
Price Factor
Std dev
Financial Factor
Std dev
Sentiment Factor
Std dev
Current Regime
(Sluggish)
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
Source: arcMacro


arcMacro Regime Summary
United States, Cumulative Months in Regime
Stagflation
Sluggish
Rebound
Overheating
Goldilocks
Financially constrained
Crisis
May, 2017
Financially constrained
29 months
December, 2018
Goldilocks
18 months
September, 2019
Financially constrained
8 months
February, 2020
Sluggish
4 months
July, 2020
Crisis
4 months
January, 2022
Rebound
17 months
May, 2023
Overheating
15 months
December, 2025
Sluggish
30 months
Source: arcMacro
arc MACRO