

The Economist

Can Friedrich Merz save Germany?

How America and the EU get AI wrong

What the Letby case says about Britain

The man who understood parking

FEBRUARY 15TH-21ST 2025

BATTLE FOR THE PENTAGON

Can Donald Trump remake American defence?



Business



Photograph: AP

Emmanuel Macron hosted a summit on artificial intelligence in Paris that was advertised as a chance to speed up the development of the technology, while ensuring that “nobody is left behind”. The French president announced private-sector investments and urged Europe to “resynchronise with the rest of the world” on AI. But America and Britain spoiled the party by not signing the official declaration, which mentioned international governance, and was signed by China. J.D. Vance, America’s vice-president, warned against “excessive regulation”, which could stifle innovation, and making deals with “authoritarian regimes”.

Where does he find the time?

Elon Musk made an unsolicited \$97bn bid to buy the non-profit group that controls OpenAI. Mr Musk was one of the startup’s founders but has since had a spectacular falling out with Sam Altman, another founder and its current boss, and has launched his own rival AI firm. Mr Altman is trying to convert OpenAI from a not-for-profit entity to a for-profit company. He rejected the bid, cheekily offering to buy X, Mr Musk’s social-media platform, for \$9.74bn instead.

SoftBank reported a quarterly loss of ¥369bn (\$2.4bn), in part because of a drop in the value of the tech investments held by its Vision Funds. The Japanese conglomerate plans to raise the money for its recently announced investment in a joint venture with OpenAI on a project-by-project basis.

The EU said it would respond with “proportionate countermeasures” to Donald Trump’s proposal to impose 25% tariffs on all steel and aluminium imports to America. The EU is hoping for talks with the Americans before the duties come into force on March 12th. Meanwhile, China went ahead and imposed its counter-tariffs on American goods, after a deadline passed to reach a deal.

BP’s annual underlying profit of \$8.9bn in 2024 was its worst since 2020. Amid a chorus of criticism from investors, the oil giant promised to “fundamentally reset” its strategy. Its stock did jump earlier, however, in response to news that Elliott Management, an activist hedge fund known for shaking up management boards, has taken a stake in the company. BP’s market value is about half that of Shell’s.

Following a disappointing set of earnings for the fourth quarter, Chevron announced a cost-cutting strategy that could see it shed 20% of its workforce before the end of 2026.

The world’s biggest supplier of batteries for electric vehicles filed to sell shares in a secondary listing in Hong Kong, which is expected to be the city’s biggest stock offer since 2021. Based in China, CATL wants to raise funds for its international expansion plans.

Foxconn, an electronics contract manufacturer that assembles the iPhone, confirmed that it was interested in buying Renault’s stake in Nissan, after merger talks between Nissan and Honda reportedly fell apart. Foxconn is interested in acquiring the stake only if the deal includes co-operation on EVs, which it is developing through its Foxtron venture.

Unilever announced that it would list its ice-cream business on the Amsterdam stock exchange, with other listings in London and New York. It expects to spin off the business, which includes Ben & Jerry’s, by the end of this year.

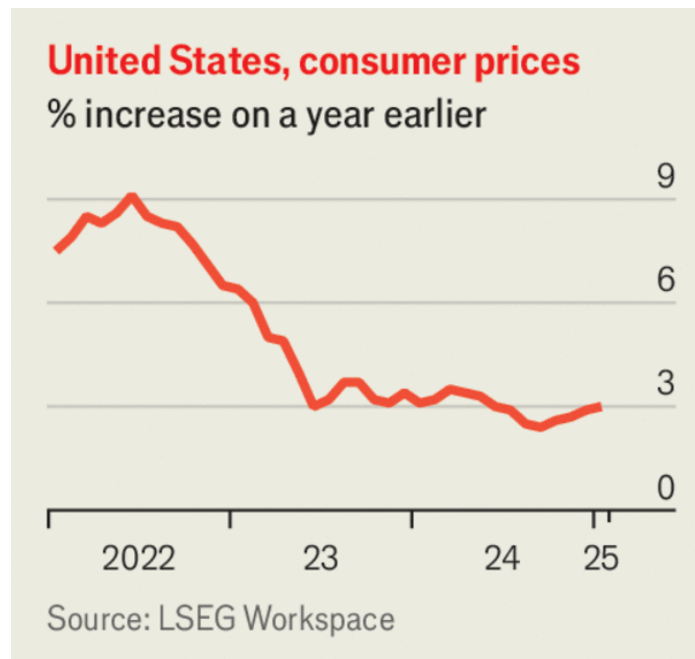


Chart: The Economist

America's annual rate of inflation rose for the fourth consecutive month in January. At 3%, it is back up to where it was last June, before the Federal Reserve embarked on a round of interest-rate cuts. In his first testimony to Congress since Mr Trump's return to the White House, Jerome Powell, the Fed's chairman, said he was in "no rush" to cut rates again.

The British economy grew by 0.1% in the last quarter of 2024 compared with the previous quarter. Markets had expected a contraction. For the year as a whole GDP expanded by 0.9%.

More firms abandoned their commitment to diversity, equity and inclusion. Disney ditched a DEI measure that contributed towards setting executive pay, replacing it with one on "talent strategy". Goldman Sachs dropped a rule that stopped it from advising firms about listing shares if the boards of those firms were all male and white. And Deloitte US asked staff working on government contracts to delete gender pronouns in emails.

The penny dropped

Donald Trump ordered the Treasury to stop producing one-penny coins because they are literally a waste of money. Each penny costs 3.7 cents to make. Canada got there first, eliminating its penny in 2012. But Americans for Common Cents, a group that wants to keep the coin, say consumers will be

short-changed as demand for nickels would rise, increasing costs to the taxpayer. A nickel is worth five cents but costs 13.8 cents to make.

Finance & economics

After DeepSeek, America and the EU are getting AI wrong

Europe has a chance to catch up, whereas America should ease up



Photograph: EPA/Shutterstock

The attempt at global harmony ended in cacophony. As Emmanuel Macron's ai summit drew to a close on February 11th J.D. Vance, America's vice-president, bluntly set out an America-first vision for artificial intelligence (AI), castigated Europe for being too rule-bound and left before the usual group photograph. eu countries, for their part, struck a collaborative tone with China and the global south, while stressing the need to limit the risks of using ai.

Both Europe and America should rethink their approach. After the work by DeepSeek, China's hotshot model-maker, Europe has been given an unexpected chance to catch up—if it can cast off its regulatory straitjacket. America can no longer behave as if it has a monopoly on ai. It should change how it wields power over its allies.

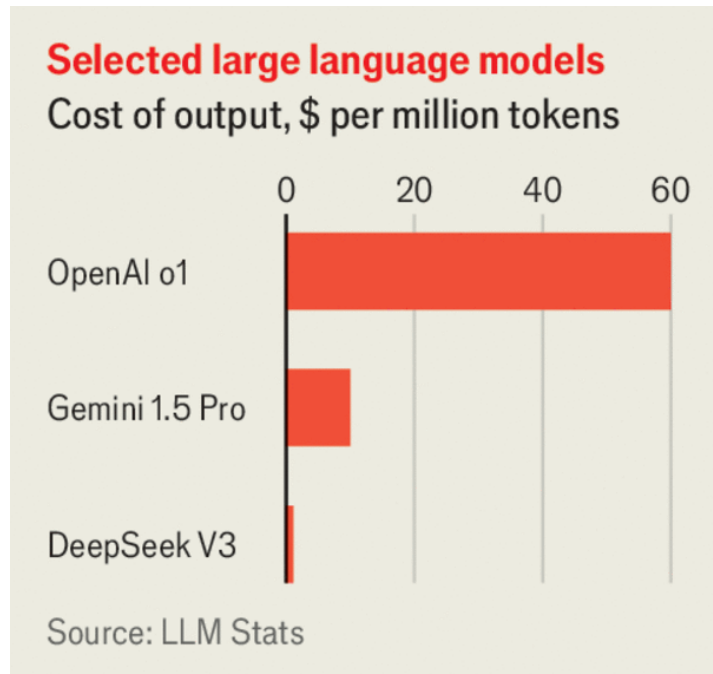


Chart: The Economist

The pace of innovation is astonishing. Barely six months ago AI looked as if it needed a technological breakthrough to become widely affordable. Since then reasoning and efficiency techniques have emerged, enabling DeepSeek to develop models close to the frontier even though it cannot use cutting-edge American chips. And DeepSeek is just exhibit A. Researchers everywhere are racing to make ai more efficient. Those at Stanford and the University of Washington, for instance, have trained models more cheaply still. Once there were concerns that the world did not contain enough data to train advanced systems. Now the use of synthetic data seems to be having good results.

For Europe, which looked hopelessly behind in AI, this is a golden opportunity. In contrast to Google's search engines, where network effects mean that a winner takes all, no law of computing or economics will stop European firms from catching up. Better policy can help close the gap. Mr Macron is rightly encouraging investment in data centres. But just as important is cutting through the red tape that prevents companies from innovating and adopting ai. The EU's ai Act is fearsomely stringent: a startup

offering an ai tutoring service, by one account, must set up risk-management systems, conduct an impact assessment and undergo an inspection, as well as jumping through other hoops.

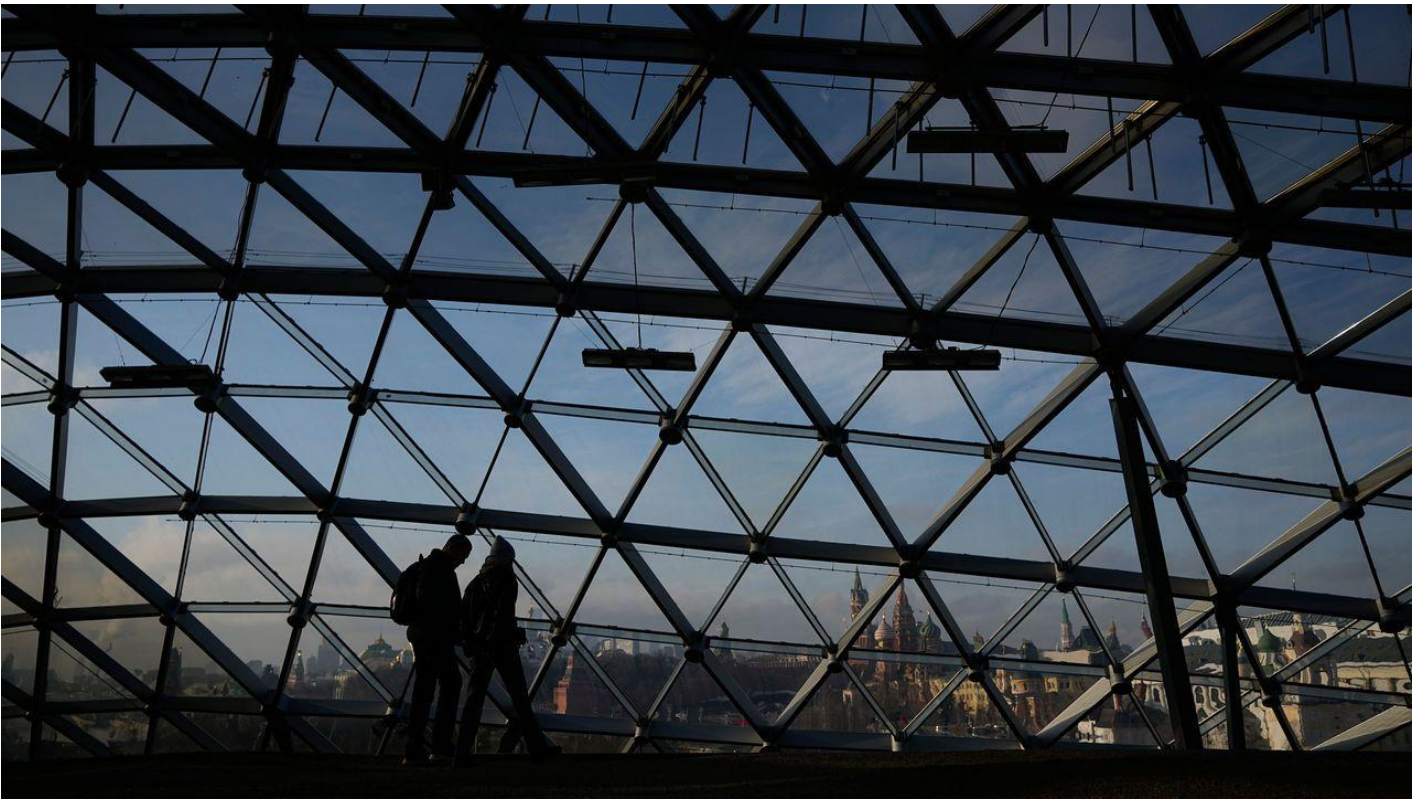
Another hurdle is privacy rules. Even big tech firms, with their huge compliance teams, now launch their ai products in Europe with a delay. Imagine the costs for startups. German manufacturers sit on a wealth of proprietary data that could feed productivity-enhancing ai tools. But fear of breaching regulations deters them. A wise relaxation of rules, as well as harmonised enforcement, would help Europe exploit AI's potential.

Uncle Sam needs to wake up, too. China's advances suggest that America has less monopoly power over ai simply by having a hold over cutting-edge chips. Instead, it needs to attract the world's best talent, however distasteful that may be to maga Republicans.

America should also change how it engages with its allies. In Paris Mr Vance rightly warned against the use of Chinese infrastructure (and the fact that China signed the summit's declaration on ai governance may explain why America declined to). But America would more successfully discourage the adoption of Chinese AI if it were more willing for its friends to use its technology. In his final days in office Joe Biden proposed strict ai controls that would hinder exports even to partners like India. Revising those would nudge countries to use American tech rather than pushing them into China's embrace. American ai now faces competition. If it wants to reign supreme, Uncle Sam will have to entice, not threaten.

Russian inflation is too high. Does that matter?

In a strong economy, price pressure can endure for a long time



Photograph: AP

While inflation has cooled almost everywhere, in Russia it is hotting up. Consumer prices rose by 9.5% year on year in December, up from 8.9% the previous month and uncomfortably above the central bank's target of 4% (see chart). The prices of fruit and vegetables have risen by more than 20% on average in the past year. In a normal country, this sort of high inflation would be unsustainable. But Russia is not a normal country.



Chart: The Economist

The latest bout of inflation is the product of both external and internal factors. In recent months, as the West has tightened sanctions, the rouble has depreciated, raising the cost of imports. Russian importers hoping to supply customers with American phones or Italian handbags have to be increasingly creative, which adds to their costs. There is circumstantial evidence that French vintners are skirting sanctions by selling to unscrupulous middlemen in Austria and Greece, among other places. Even so, the price of a bottle of the 2006 Clos de Tart, a blowout Burgundy at White Rabbit, Moscow's finest restaurant, has risen by close to 30% since Vladimir Putin invaded Ukraine.

Conscription, meanwhile, has created a labour shortage, exacerbated by the fact that many Russians have fled the country. Unemployment, at around 2% of the workforce, is the lowest on record. This, in turn, has forced employers to compete hard for workers. In 2024 nominal pay rose by an astonishing 18%, putting further upward pressure on prices. The government has also implemented enormous fiscal stimulus, lifting spending on defence, welfare and infrastructure. Strong demand, says the central bank, "still exceeds companies' capacities to expand supply".

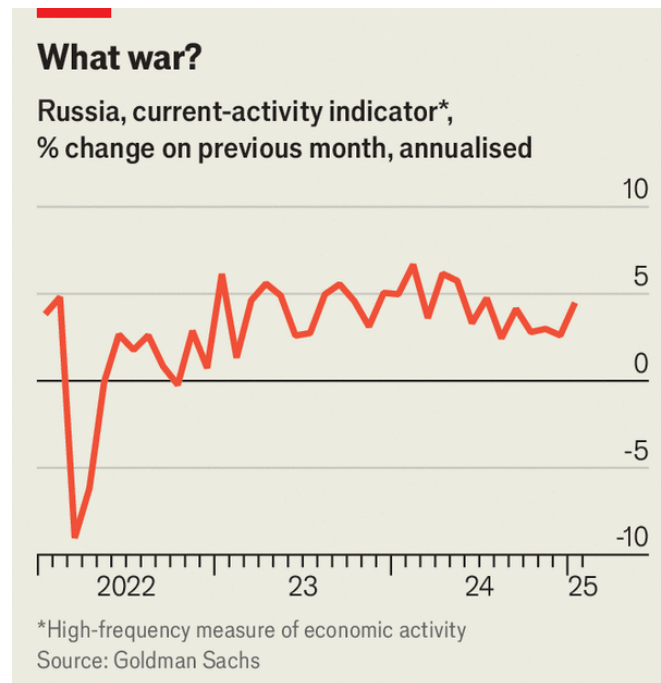


Chart: The Economist

A tussle is now under way in Russia's policymaking establishment. The central bank—stuffed with orthodox economists—is desperate to cool prices. On February 14th, following a monetary-policy meeting, it is expected to keep interest rates at 21%, their highest since the early 2000s. It has also tightened credit rules. But those close to Mr Putin have other ideas. The vast military budget keeps coming in much higher than planned, and now equals around 7% of GDP. The government is doling out huge sums, including as signing-on bonuses to soldiers and compensation to families when their relatives are killed in action. It is also pressganging the private sector into funding the armed forces, which amounts to a form of stimulus.

Is Russia's high inflation sustainable? In a typical emerging market, one of three problems arises. Sometimes high inflation can make it difficult for a country to service its foreign debts, as the currency depreciates. Yet Russia runs a large current-account surplus and has a healthy stock of net foreign assets, making such a scenario unlikely. Alternatively, spiralling inflation can push up interest rates, which raises the cost to the government of servicing its debt. Although Russian rates have indeed risen, the government's debt is low, making debt-service costs manageable.



Chart: The Economist

A third potential problem is politics. People, fed up with inflation's impact on their quality of life, demand change. It is an open question whether Russia's authoritarian rulers would switch course in the face of such grumbles. Regardless, people seem reasonably content with the economy, at least for the time being. In the past year household incomes have risen by 10%, after adjusting for inflation, with government payments and wages easily outpacing rising living costs. According to the Levada Centre, an independent pollster, consumer confidence is near an all-time high (see chart), while complaints about inflation are no higher than the long-run average. This is translating into how people spend their money. Real household consumption is at least 6% higher than it was a year ago, according to our analysis of official data.

Whether this confidence can last is another question altogether. Russians may eventually reach their limit, and start to complain about rising prices. Meanwhile, the prospect of peace talks, as suggested by Donald Trump on February 12th, raises a fresh economic challenge. Russia is producing a lot of goods and services, not least weapons, that a peacetime economy does not need. Adjusting to the end of war may therefore be a surprisingly difficult process. Unless the West lifts sanctions, Russia's long-term outlook is bleak—whatever happens with inflation.

Donald Trump's Super Bowl tariffs are an act of self-harm

Duties on aluminium and steel will throttle American industry and fragment global markets



Photograph: Getty Images

Last year dozens of countries proposed or introduced new tariffs on steel imports. Most aimed the measures at China, which they accused of flooding international markets with cheap metal. On February 9th Donald Trump took a different approach: he picked up a scattergun instead of a sniper's rifle. As the president flew to the Super Bowl, he told reporters that he would announce new tariffs of 25% on aluminium and steel imports. On February 10th the levies duly arrived.

Mr Trump sees tariffs as a way to incentivise foreign investment in America and boost domestic production. "It's going to mean a lot of businesses are going to be opening in the United States," Mr

Trump said as he signed the order, which invokes domestic security as justification. The new tariffs are due to come into effect on March 12th. They threaten to punish America's allies more than its enemies—and will harm America's own economy.

America imports 25% of the steel it consumes, four-fifths of which is currently free of tariffs under agreements with Canada, Brazil, Mexico and the EU, its biggest suppliers, as well as other countries. America also imports 70% of its aluminium, some 60% of which comes tariff-free from Canada. Doug Ford, premier of Ontario, a Canadian province, accused Mr Trump of “shifting goalposts”. Emmanuel Macron, France's president, has said he should stop bashing Europe and focus on China.

Mr Trump's first term offers a guide to what might happen next. In 2018 the president set a tariff of 25% on steel and another of 10% on aluminium. Within months he had reached deals with most of America's biggest suppliers and granted exemptions; the Biden administration later agreed to replace some tariffs with quotas. Even blunted, the measures encouraged investment in domestic steelmaking, where capacity has risen by 6% since 2018. Yet this did not lead to a big boost in production, which remains below levels in 2019, as does the number of people employed by steel mills. Last year output of fresh aluminium fell to its lowest this century. Even with tariffs, domestic demand simply has not been strong enough to produce a boom.

In principle, there is now room for metal output to grow. America's raw-steel mills are used to 60% or so of capacity (80% is seen as optimum). In reality, America will still lack the expertise to produce lots of refined products at home, says Matthew Watkins of CRU, a consultancy. Even after Mr Trump's first tariffs, America continued to import just as many high-value-added products—including packaging steel and seamless tubes, which contain and transport liquids—from Europe as it did before. America has few aluminium smelters; building new ones can take years. In the interim it will continue to rely on imports.

Domestic producers, which now face less competition, are giddy. The share prices of Century Aluminum and Nucor, the country's largest aluminium- and steelmakers respectively, rose by 10% and 6% the day after Mr Trump's announcement. The tariffs could also provide a fillip to US Steel, an ailing giant whose acquisition by Nippon Steel, a Japanese firm, was blocked by Joe Biden. But this will be more than balanced by higher prices for consumers and the fact that industrial buyers of aluminium and steel will face higher costs. Ehsan Khoman and Soojin Kim of MUFG, a bank, estimate that a 25% tariff will push up the cost of a tonne of steel imported into America from \$755 to over \$900, negating a cost advantage that America currently enjoys over Europe. Sheltered from competition, domestic producers will face less pressure to keep down prices.

Mr Trump's tariffs could have even more profound implications for global metal markets. Shares in steel firms outside America have fallen since Mr Trump's 30,000-foot message. Many will no doubt try to redirect wares, pushing down prices elsewhere. Other countries may erect trade barriers to protect their own industries. The resulting glut in aggregate capacity could, in turn, ensure that international prices remain depressed even as protected metals firms grow rustier and greedier. In America and elsewhere, Mr Trump's metals wars will corrode the economy.

Tecnology

Forget DeepSeek. Large language models are getting cheaper still

A \$6m LLM isn't cool. A \$6 one is

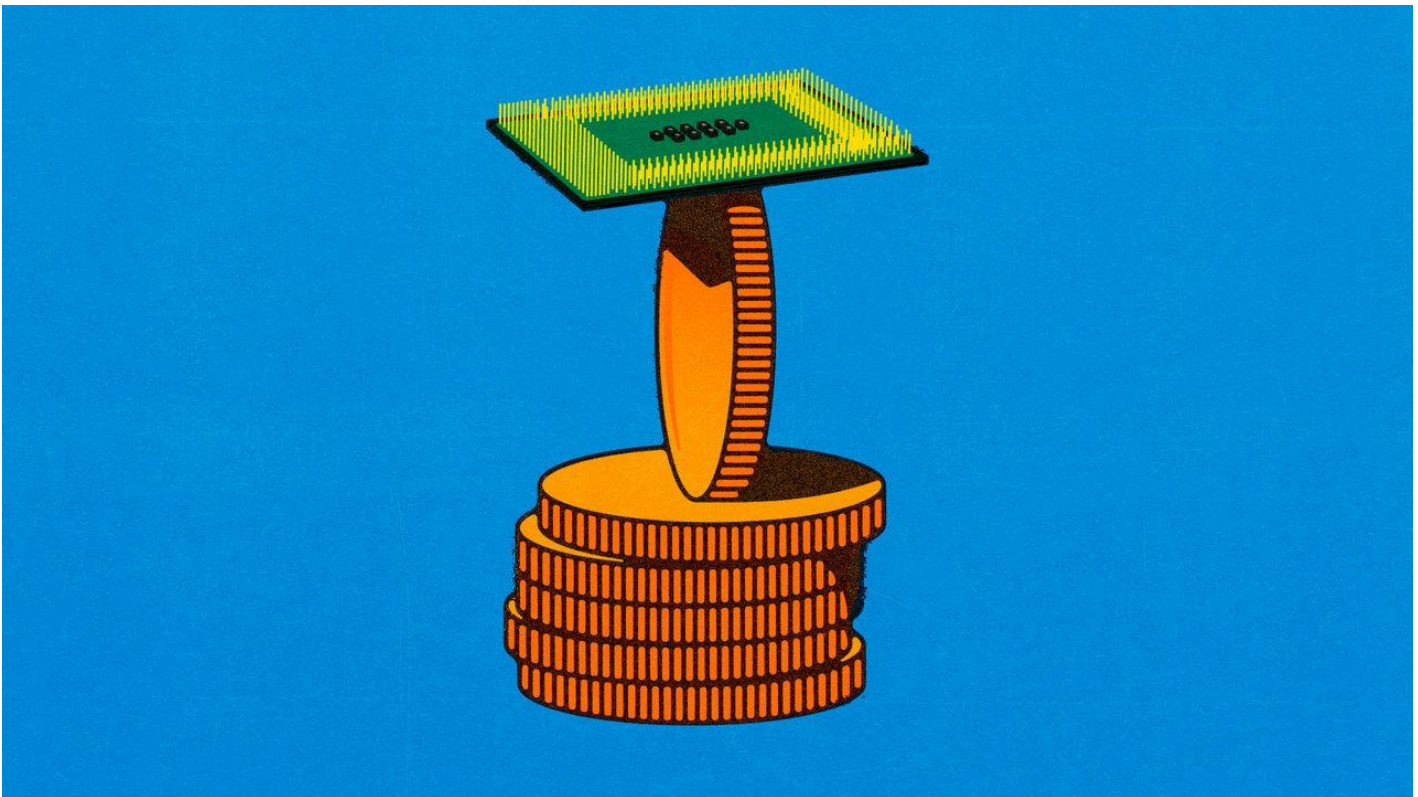


Illustration: Alberto Miranda

As recently as 2022, just building a large language model (LLM) was a feat at the cutting edge of artificial-intelligence (AI) engineering. Three years on, experts are harder to impress. To really stand out in the crowded marketplace, an AI lab needs not just to build a high-quality model, but to build it cheaply.

In December a Chinese firm, DeepSeek, earned itself headlines for cutting the dollar cost of training a frontier model down from \$61.6m (the cost of Llama 3.1, an LLM produced by Meta, a technology company) to just \$6m. In a preprint posted online in February, researchers at Stanford University and

the University of Washington claim to have gone several orders of magnitude better, training their s1 LLM for just \$6. Phrased another way, DeepSeek took 2.7m hours of computer time to train; s1 took just under seven hours.

The figures are eye-popping, but the comparison is not exactly like-for-like. Where DeepSeek's v3 chatbot was trained from scratch—accusations of data theft from OpenAI, an American competitor, and peers notwithstanding—s1 is instead “fine-tuned” on the pre-existing Qwen2.5 LLM, produced by Alibaba, China's other top-tier AI lab. Before s1's training began, in other words, the model could already write, ask questions, and produce code.

Piggybacking of this kind can lead to savings, but can't cut costs down to single digits on its own. To do that, the American team had to break free of the dominant paradigm in AI research, wherein the amount of data and computing power available to train a language model is thought to improve its performance. They instead hypothesised that a smaller amount of data, of high enough quality, could do the job just as well. To test that proposition, they gathered a selection of 59,000 questions covering everything from standardised English tests to graduate-level problems in probability, with the intention of narrowing them down to the most effective training set possible.

To work out how to do that, the questions on their own aren't enough. Answers are needed, too. So the team asked another AI model, Google's Gemini, to tackle the questions using what is known as a reasoning approach, in which the model's “thought process” is shared alongside the answer. That gave them three datasets to use to train s1: 59,000 questions; the accompanying answers; and the “chains of thought” used to connect the two.

They then threw almost all of it away. As s1 was based on Alibaba's Qwen AI, anything that model could already solve was unnecessary. Anything poorly formatted was also tossed, as was anything that Google's model had solved without needing to think too hard. If a given problem didn't add to the overall diversity of the training set, it was out too. The end result was a streamlined 1,000 questions that the researchers proved could train a model just as high-performing as one trained on all 59,000—and for a fraction of the cost.

Such tricks abound. Like all reasoning models, s1 “thinks” before answering, working through the problem before announcing it has finished and presenting a final answer. But lots of reasoning models give better answers if they're allowed to think for longer, an approach called “test-time compute”. And so the researchers hit upon the simplest possible approach to get the model to carry on reasoning: when it announces that it has finished thinking, just delete that message and add in the word “Wait” instead.

The tricks also work. Thinking four times as long allows the model to score over 20 percentage points higher on maths tests as well as scientific ones. Being forced to think for 16 times as long takes the model from being unable to earn a single mark on a hard maths exam to getting a score of 60%. Thinking harder is more expensive, of course, and the inference costs increase with each extra “wait”. But with training available so cheaply, the added expense may be worth it.

The researchers say their new model already beats OpenAI’s first effort in the space, September’s o1-preview, on measures of maths ability. The efficiency drive is the new frontier.