

**Thoughts on Coming Apart and the Coming Great
Reset**



**Turning and turning in the widening gyre
The falcon cannot hear the falconer**

Kit Webster

**The BIG Problems, Tariffs, Defiance And
The Department of Education
As
Lenin's Weeks Continue To Unfold**

February 7, 2025

Themes and Theses - Why I'm Contemplating Out Loud

(Initially formulated in the early 90s, following decades of reading history, philosophy, psychology and a lot of contemplation, particularly on the subject of cycles. In the end, this is a relatively straightforward story about human nature and of history rhyming.)

The US will enter a period of crisis in the early 2000s. In the late 90s, I incorporated Strauss' and Howe's terminology of the Fourth Turning (without incorporating their generations paradigm) and agreed with Howe that the end stage of the crisis began with the Great Financial Crisis and would last into the early 2030s. We are not yet to the middle of the end stage of the crisis.

The crisis will be serious and could be existential.

Internal strife will increase, up to and including secession and civil war.

International conflicts will increase as the vacuum created by the weakening of the US is filled by other players.

There will be many threads to the crisis, but the primary thread will be debt, deficits and entitlements. Other factors include, eg, demographics, a loss of meaning and myth and a loss of self-discipline.

Politics will move leftward as citizens look for some refuge from the chaos. The US will become increasingly susceptible to a (man) on a white horse, who can come from either the left or the right.

Inflation, as the most likely way to address debt since austerity is not politically acceptable, will significantly lower standards of living, exacerbating the civil crises.

Eventually, the dollar will be inflated away and lose its reserve status.

Once the old rot is cleared out, and assuming continuity, there will be the basis for the establishment of a new order.

(Added around 2020) The loss of faith by our youth in our founding principles means that the new order will at least partially be based on new principles. As yet, I have no visibility as to what those principles might be.

(Added in the early 00s) While humans are contributing to global warming, policies implemented to address manmade global warming will create a significant energy crisis, probably toward the end of the Fourth Turning.

(Added in 2023) The lowering / elimination of standards in education, the judiciary, law enforcement, the military and other segments of our society will create a population unable to adequately comprehend, do or respond to the challenges of democracy and culture.

Quotes to Contemplate

CAPITAL FLOWS UNDER WHAT TRUMP AND BESSENT ARE PROPOSING ARE 180-DEGREES OPPOSITE OF THE FLOWS OF THE PAST 40-50 YEARS AND VERY BULLISH FOR US AND GLOBAL GROWTH, THE US INDUSTRIAL BASE, AND GOLD AND BITCOIN. - Luke Gromen

I think Trump may be one of those figures in history who appears from time to time to mark the end of an era and to force it to give up its old pretenses. It doesn't necessarily mean that he knows this, or that he is considering any great alternative. It could just be an accident. — Henry Kissinger, July 2018

The Great Rewiring of Childhood, in which the phone-based childhood replaced the play-based childhood, is the major cause of the international epidemic of adolescent mental illness. - Jonathan Haidt

We are in an absolute moral vacuum. - Grant Williams

One of the most pathetic—and dangerous—signs of our times is the growing number of individuals and groups who believe that no one can possibly disagree with them for any honest reason. - Thomas Sowell

Nobody does trench warfare like a federal bureaucracy. - Charles Murray

> Primary Ideas in This Week's Post

OUR PROSPERITY IS A DEBT-DRIVEN ILLUSION. "In Q4 it took \$5.8 of debt to create \$1 of growth, an increase from \$3.5 in Q3 and from \$1.5 in Q2. US growth was one giant illusion and was entirely the result of the ... massive debt creation spree."

We have big problems that we are not facing, so that they are festering and increasing.

Tariffs, if used well, can have beneficial characteristics.

Presidents have, in the past, defied the Supreme Court. It seems to me that a showdown between the Supreme Court and Trump is inevitable. What then?

We are having another of Lenin's weeks when decades happen. Much activity, and now much litigation as the empire begins to strike back. Democrats are disorganized and leaderless - this will change.

The Department of Education is ripe for significant reform. Like all bloated bureaucracies, it does do some good, and it has many people and constituencies that gain, rightly or wrongly, from its existence.

The BIG Problems

The #1 threat facing America is its rising debt burden. [This threat] is greater than that posed by terrorism, weapons of mass destruction, and global warming...We are borrowing money from China to build weapons to face down China. That is a broken strategy... it is a failed strategy from a national security perspective. -Former Chairman, Joint Chiefs of Staff Adm. Michael Mullen, 2011

A couple of weeks ago, I discussed what I thought were some unsolvable problems. This week, I would like to consider several really big problems.

The distinction between the two categories is not as obvious as you might think. Unsolvable problems are, well, unsolvable. Really big problems might as well be unsolvable because we are not going to do anything about them until there is a crisis large enough to demand our attention and our sacrifice. I am not under the delusion that my writings will change a thing, but it is interesting to think about these problems and how they intersect with human nature.

The three big problems I would like you to think about are

1. Debt, deficit and entitlements;
2. Education; and
3. Global warming.

Debt, deficits and entitlements -

We used to care.

Remember the Republican Tea Party that rebelled against debt and deficits? It began in 2007. In 2007, the budget deficit was \$161 billion and the national debt was \$9 trillion. This year the budget deficit will be around \$2 trillion and the national debt is \$36 trillion. In retrospect, the Tea Party was peak-caring-about-the-deficit. There are no words sufficient to describe this dysfunction.

Somewhere around the end of the Great Financial Crisis, we decided not to care anymore - laissez bon temps rouler. Up until the second Trump election, no one cared. My guess is that Trump does not care, either - he is looking for cuts to finance his tax decreases. We are literally destroying ourselves, but it is a hell of a party.

Education -

Somewhere during the introduction of "new math" our education system took a wrong turn. The educational approach that built the country and its space program was no longer good enough. Discipline was gradually abandoned. Then, we decided to improve education for blacks - a very good idea. Only, for multiple, complicated reasons, blacks only improved marginally and when there was improvement, the rate of improvement decreased. Then we decided that instead of moving black standards up, we were going to move everybody else's standards down. Ironically, in a time that will require higher achievements in STEM, we are lowering standards. We are eroding the foundation of our culture's ability to achieve and compete in the broader world.

The accusation of racism is one of our society's most powerful forces.

The road to hell is paved with good intentions.

We are now to the point at which the best and the brightest, the self-motivated, and those whose cultures support discipline and education and who have access to resources will find a way to achieve in spite of the system. Everyone else will be doomed by the system to underachievement.

Global warming -

There has actually been very little news about global warming since the late 90s. Everything is unfolding as foretold, plus or minus. Perhaps the only kinda-shock was the extent to which removing aerosols in the atmosphere through regulation has increased global warming.

Atmospheric temperatures are increasing; CO2 concentrations in the atmosphere are increasing. There has been a great deal of running around, shouting and screaming, but essentially nothing significant has been done to address global warming. The real problem is years or decades away, the cost in terms of reduced standards of living is high and everything seems more or less ok now.

One of my conclusions that I reached in my unpublished book on global warming was that because it was not an immediate threat and the cost of a cure was very high, we would do nothing about it. I don't get all my predictions correct, but this was one of the safest ones I have made.

Tariffs

I have mentioned that I think tariffs are a really bad idea. They will increase prices and have the potential to start a trade war, which could be an economic disaster. I also mentioned several times that I am not sure Trump is serious; I think his tariff threat is primarily a negotiating ploy. Finally, I think he wants a deal with China and not a confrontation.

So, imagine my surprise when two of my heroes, Lacy Hunt and Luke Gromen, said, "well, actually, they (tariffs) could be a good thing." Both reinforced my concerns, so I was not wrong, I just did not go far enough. Hunt's point was that the global economy is broken and, if used correctly, tariffs could help bring it

back into line. Gromen's point was that we are financing our government incorrectly, we need to adjust it and tariffs could help. (Gromen's point is complicated, so I won't go into the details.)

Both emphasized that, while the world could be a better place under a tariff regime, in the short term, adjusting would be painful.

Now we have to concentrate on whether Trump is actually serious and, if so, whether he will implement tariffs correctly.

Defiance

Last week, when discussing Rubicons, I said that the next Rubicon would likely occur when Trump defies a Supreme Court ruling. LK responded with a great question: "You say the next Rubicon shows up when Trump does not comply with the Supreme Court. I'm wondering why that would be different from Biden forgiving student debt despite the court's ruling."

I responded:

Excellent question.

Biden defied the Supreme Court and nothing happened.

Why did nothing happen? Basically, Biden reframed the authorities for his actions to address the Supreme Court's concerns (lawyers are paid massive sums to torture the law). I would not be surprised to see new cases show up at the Supreme Court, and Trump is trying to get in the way of the latest Biden student debt order.

I have provided ChatGPT's answer to this question below.

Now to Trump.

I asked ChatGPT to give me a summary of times presidents defied the Supreme Court. I have included its answer at the bottom of this response.

It seems that reactions fall into four categories:

1. Defiance - by Andrew Jackson and Orval Faubus. Jackson got away with it; Eisenhower enforced action against Faubus with federal troops.
2. Ultimate compliance.
3. Compliance through passing a law that resolves the issue.

4. Defiance through extortion - FDR

I don't think Trump has enough votes to apply extortion like FDR did. However, he does have the votes to pass some laws to bail him out, depending on the degree of outrage.

The Defiance response is the interesting one, reflecting Jackson's statement: "John Marshall (the then Chief Justice of the Supreme Court) has made his decision; now let him enforce it." My implied question last week was, "If Trump defies a Supreme Court ruling, what then?" There are a number of possibilities:

1. Nothing much happens. Everyone shrugs their shoulders and we all go on our way. In effect, there is then no restraint on Trump's rule and he becomes a dictator. Or not. Jackson wanted his way with Native Americans and that was it. He did not push after that. Somehow, my guess is that Trump would push.

2. Impeachment. Both Houses of Congress have slim Republican majorities. The outrage could be such that Trump is impeached.

3. An alternative I discussed some weeks back is that the military gets involved - on one side or the other. We have a long and deep tradition of the military staying out of politics, but these are not normal times.

Trump is taking a sufficient number of questionable actions so that there will likely be judicial pushback, up to and including the Supreme Court. The outcome is not predictable, but could be ugly.

There have been several instances in U.S. history where presidents have defied or resisted Supreme Court rulings. Here are some notable examples:

1. Andrew Jackson & Worcester v. Georgia (1832)

- Case: The Supreme Court ruled in Worcester v. Georgia that the state of Georgia had no authority over Cherokee lands, affirming tribal sovereignty.
- Defiance: President Andrew Jackson reportedly (though perhaps apocryphally) said, "John Marshall has made his decision; now let him enforce it."

- Outcome: Jackson did not take action to enforce the ruling, allowing Georgia to continue its policies, which ultimately led to the forced removal of Native Americans along the Trail of Tears.

2. Abraham Lincoln & Ex parte Merryman (1861)

- Case: Chief Justice Roger Taney ruled in Ex parte Merryman that Lincoln had unconstitutionally suspended the writ of habeas corpus during the Civil War.
- Defiance: Lincoln ignored the ruling, arguing that the Constitution allowed him to act in a national emergency.
- Outcome: Congress later retroactively approved Lincoln's suspension of habeas corpus.

3. Franklin D. Roosevelt & the "Court-Packing" Plan (1937)

- Context: The Supreme Court had struck down several of FDR's New Deal programs as unconstitutional.
- Defiance: While FDR did not outright ignore rulings, he attempted to reshape the Court by proposing a plan to add more justices (one for every justice over 70).
- Outcome: The plan failed, but after the controversy, the Court became more favorable to New Deal policies (the so-called "switch in time that saved nine").

4. Dwight D. Eisenhower & Brown v. Board of Education (1954)

- Case: The Supreme Court ruled that racial segregation in public schools was unconstitutional.
- Defiance: Eisenhower was initially reluctant to enforce desegregation, and he did little to push Southern states to comply.
- Outcome: However, when Arkansas Governor Orval Faubus defied the ruling by using the National Guard to block Black students from entering Little Rock Central High School, Eisenhower was eventually forced to send federal troops to enforce desegregation.

5. Richard Nixon & United States v. Nixon (1974)

- Case: The Supreme Court ruled that Nixon had to hand over the Watergate tapes, rejecting his claim of executive privilege.
- Defiance: Nixon initially refused but ultimately complied after facing immense political pressure.

- Outcome: The tapes were released, leading to Nixon's resignation.
- **6. George W. Bush & Hamdan v. Rumsfeld (2006)**
- Case: The Supreme Court ruled that Bush's military commissions for Guantanamo Bay detainees violated both U.S. and international law.
- Defiance: The Bush administration moved to pass the Military Commissions Act (2006), which effectively worked around the ruling.
- Outcome: The law allowed military trials to continue under different legal justifications.

Summary

While direct defiance of the Supreme Court is rare, presidents have historically resisted or worked around rulings, especially in matters of war, civil rights, and executive power. However, in most cases, legal and political pressures eventually force compliance.

President Joe Biden did not defy the Supreme Court's ruling regarding student loan forgiveness. Instead, after the Supreme Court struck down his initial broad student loan forgiveness plan in June 2023, the administration pursued alternative legal avenues to provide debt relief.

Supreme Court Decision:

In *Biden v. Nebraska*, the Supreme Court ruled 6-3 that the administration's plan to cancel up to \$400 billion in student loans exceeded the authority granted under the HEROES Act. The Court held that such significant debt cancellation required clear congressional authorization.

[scotusblog.com](https://www.scotusblog.com)

Subsequent Actions by the Biden Administration:

Following the ruling, the Biden administration explored other legal frameworks to offer student debt relief:

1. Higher Education Act (HEA) of 1965:
 - a. The administration initiated a new plan to forgive student loans by leveraging provisions in the HEA, which grants the Secretary of Education authority to "compromise, waive, or release" federal student loans. This approach aims to provide debt relief through negotiated rulemaking processes.

[cnn.com](https://www.cnn.com)

2. Targeted Relief Programs:

- a. The administration expanded existing programs to offer relief to specific groups:
 - i. Public Service Loan Forgiveness (PSLF): Improvements to the PSLF program resulted in over 1 million public servants having their loans forgiven.

[apnews.com](https://www.apnews.com)

- ii. Borrower Defense to Repayment: Debt relief was provided to borrowers defrauded by educational institutions.
 - iii. Total and Permanent Disability Discharge: Forgiveness was granted to borrowers with total and permanent disabilities.

These actions were designed to align with existing legal authorities and address the Supreme Court's concerns. By utilizing alternative statutory provisions and focusing on targeted relief, the administration sought to provide debt relief without contravening the Court's decision.

In summary, President Biden did not defy the Supreme Court but adapted his administration's approach to student loan forgiveness to comply with legal constraints and continue assisting borrowers.

The Department of Education

Trump wants to get rid of it.

Fair enough. It's a big, bloated, politically correct bureaucracy.

Our education system is a total mess, but the Department of Education is arguably not helping as a whole - and education is the responsibility of states and local municipalities.

BUT, here's the rub.

When you are throwing around that much money, some of it will inevitably be spent on "good" things, so some people are going to be reasonably upset. (Other people will be upset, even though the money they are receiving should not have been spent in the first place.)

One of the good things the DOE does is fund special education. I am particularly sensitive to that bit, because we had a special ed child. However, even though

our son attended one of the best school systems in the state, it was pretty mediocre stuff and we had to beg for attention. Our impression was that they were checking the boxes so that they could get the payment from the DOE. It also makes student loans and enforces Title IX.

That's not my point.

Trump wants the cost of special ed and other Department of Education functions to go to the states. He wants to distribute the money directly to the states instead of going through the DOE.

The *Babylon Bee* captures my sentiments - Country with record illiteracy worried what will happen if education system reformed.

Markets

Updated Charts

> No change in outlook - rocky road ahead

> Lacy Hunt, for whom I have great respect, is forecasting deflation, not inflation. Juliette DeClerq, another savvy analyst, sees a downturn, perhaps recession in here.

My base case remains a turndown, perhaps a significant turndown, followed by a Fed response, followed by an inflationary boom prior to a major collapse.

Trump is significantly disrupting an unstable, fragile financial system and economy and the outcome is far from clear.

> Very big - think about this and grasp it firmly - OUR PROSPERITY IS A DEBT-DRIVEN ILLUSION. "In Q4 it took \$5.8 dollars of debt to create \$1 dollar of growth, an increase from \$3.5 in Q3 and from \$1.5 in Q2. US growth was one giant illusion and was entirely the result of the ... massive debt creation spree."

So, You Say You Want A Revolution?

> Last week I discussed the incredible number of actions Trump has taken.

Imagine what happens when Democrats next come into power and they decide

to undo/reverse it all, and add a few more on for good measure. Here's the rub - to the extent Trump is able to fundamentally change the structure of the ways things are done, it will be more difficult to implement the "old" ways than just by reversing an order. You will also have to alter the structure.

> Which brings me to karma. Karma's a bitch. Strictly speaking, deeds and misdeeds in this life determine your status in the next life. With regard to Trump, he is pissing off people all over the world who have long memories. They will try to find ways to level the scales as soon as possible. No need to wait for the next life. The soap opera will be momentous. The world runs in cycles, not straight lines

> Speaking of which, the Empire is beginning to strike back:

- Illinois Governor J.B. Pritzker has banned Jan. 6 participants from state employment.
- Rep. Hakeem Jeffries promises Democrats will fight Trump's agenda "in the streets."
- Canadian province of Nova Scotia has ordered American alcohol be removed from shelves.
- Democratic Representative Al Green of Texas called for Trump to be impeached over "ethnic cleansing in Gaza" in a furious rant on the House floor.
- A federal district court judge in Maryland issued a nationwide preliminary injunction on Wednesday to block Trump's executive order attempting to eliminate birthright citizenship.
- A federal judge paused the Trump administration's "buyout" offer for federal employees, which had been set to expire Thursday night.

> Trump announced on Monday morning that 25% tariffs (with Mexico) that were to take effect at midnight Tuesday would be suspended while he and his advisers attempt to "achieve a 'deal.'" Mexico agreed to deploy 10,000 troops at the border.

> Canada's Trudeau - "I just had a good call with President Trump. Canada is implementing our \$1.3 billion border plan — reinforcing the border with new choppers, technology and personnel, enhanced coordination with our American partners, and increased resources to stop the flow of fentanyl. Nearly 10,000 frontline personnel are and will be working on protecting the border. In addition,

Canada is making new commitments to appoint a Fentanyl Czar, we will list cartels as terrorists, ensure 24/7 eyes on the border, launch a Canada- U.S. Joint Strike Force to combat organized crime, fentanyl and money laundering. I have also signed a new intelligence directive on organized crime and fentanyl and we will be backing it with \$200 million. Proposed tariffs will be paused for at least 30 days while we work together."

> Trump says the United States will impose 10% tariffs on the European Union.

> Trump has signed an Executive Order requiring that whenever an agency promulgates a new rule, regulation, or guidance, it must identify at least 10 existing rules, regulations, or guidance documents to be repealed.

> 10% tariff on China; China retaliates, including opening an antitrust inquiry on Google.

The US Postal Service has stopped accepting parcels from China and plunged the ecommerce industry into utter chaos. Trump's China tariffs are coming for Amazon.

> It's been reported that the FAA is fighting a class action lawsuit alleging it denied 1,000 people air traffic controller jobs based on diversity hiring targets.

> Tom Homan just announced that border crossings are down 93%.

> The CDC has instructed its scientists to retract or pause the publication of any research manuscript being considered by any medical or scientific journal, not merely its own internal periodicals, Inside Medicine has learned. The move aims to ensure that no "forbidden terms" appear in the work. The policy includes manuscripts that are in the revision stages at journal (but not officially accepted) and those already accepted for publication but not yet live. In the order, CDC researchers were instructed to remove references to or mentions of a list of forbidden terms: "Gender, transgender, pregnant person, pregnant people, LGBT, transsexual, non-binary, nonbinary, assigned male at birth, assigned female at birth, biologically male, biologically female," according to an email sent to CDC employees .

> Panama officially ends its 2017 Belt and Road Initiative agreement with China and plans to void existing deals.

> As we discussed, the insurance industry is going through a significant change - State Farm, the largest insurance company in California, asked to raise rates by 22%.

> The Trump administration has warned more than 1,100 EPA employees who work on climate change and other programs that it may fire them.

> Trump said he was seeking a deal to offer military aid to Ukraine in exchange for critical minerals. The country is rich in lithium and uranium.

> George Friedman explores some of the thoughts we have been contemplating concerning Rubicons and revolutions - Trump is now in his 100-day period.

Roosevelt's goal was to strip the old order of its power to rule by moral principles made obsolete and harmful. The current apparent randomness, unpredictability and recklessness should be seen in this light. Roosevelt's goal was to shatter the old elite blocking evolution. That is Trump's goal, albeit expressed radically differently. For Roosevelt, the elite represented the old orthodoxies on economics and the inevitable inequality that followed. Trump's main antagonist is an ideology, which for the sake of argument I will call hyper egalitarianism, that was, in his mind, demonizing the country and its citizens and imposing an order on cultural institutions and values to solve the inequities of the old order. It was also redefining moral obligations and even medical norms. In a real sense, Trump's goal is not to restore the country to what it was but to lay a new framework, which, I suspect, he has yet to devise. He is, for now, presiding over apparent disorder rather than aligning with what had been normal.

> Trump signed an order to explore a sovereign wealth fund. Really dumb, but great pr. We are highly indebted. There is no wealth to fund. If we buy something to put into the fund, the debt goes up.

> Trump proposed taking over Gaza and then began walking it back.

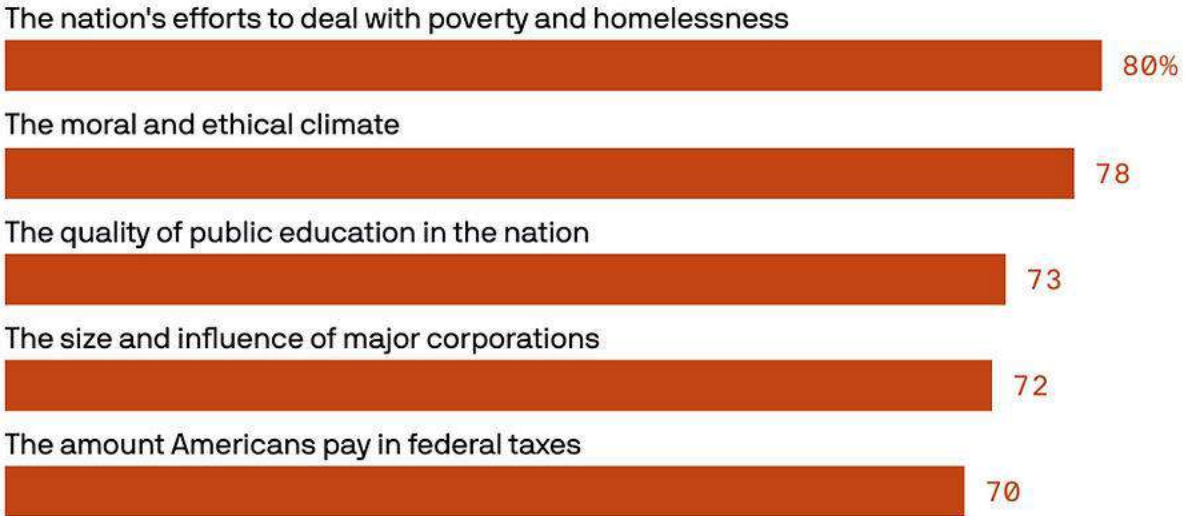
> Trump ended U.S. engagement with the United Nations Human Rights Council and halting U.S. funding for the United Nations Relief and Works Agency for Palestine Refugees in the Near East, or UNRWA

> The CIA confirmed on Wednesday that it has offered buyouts to employees who voluntarily resign, the latest group of workers targeted in President Donald Trump's push to transform the federal government.

- > Trump on Wednesday signed an executive order aimed at preventing transgender women athletes from participating in women's sports.
- > A judge this week temporarily blocked President Donald Trump's executive order, which mandated that transgender inmates who identify as women be housed in male prisons and that the government cease funding their access to hormone therapy.
- > I think so, too - from *The Morning Dispatch* - Tyler Cowen took an outside-the-box look at Trump's recent flurry of executive orders, arguing that they are less about policy and more an attempt to change American culture from the top-down. "I think of Trumpian policy, first and foremost, as elevating cultural policy above all else," he wrote. "Imagine you hold a vision where the (partial) decline of America largely is about culture. After all, we have more people and more natural resources than ever before. Our top achievements remain impressive. But is the overall culture of the people in such great shape? The culture of government and public service? Interest in our religious organizations? The quality of local government in many states? You don't have to be a diehard Trumper to have some serious reservations on such questionsSo imagine you started a political revolution and asked the simple question 'does this policy change reinforce or overturn our basic cultural messages?' Every time the policy or policy debate pushes culture in what you think is the right direction, just do it. Do it in the view that the cultural factors will, over some time horizon, surpass everything else in import."
- > The Department of Justice will ensure that, consistent with law, 'sanctuary jurisdictions' do not receive access to Federal funds from the Department,' Bondi's first-day memo says.

Share of Americans who say they're dissatisfied with select U.S. conditions

Survey of 1,005 U.S. adults conducted Jan. 2-15, 2025



Data: Gallup; Chart: Axios Visuals

- > The Department of Justice is suing Chicago and Illinois over their taking steps to resist immigration efforts.
- > Trump to Create Religious Office in White House, Target 'Anti-Christian bias'
- > The corruption continues as a Trump organization intends to form a bitcoin etf.

Short Takes

- > We are becoming unhinged - More than 10 per cent of farmland in England is set to be diverted towards helping to achieve net zero and protecting wildlife by 2050. England could disappear from the planet entirely and the global warming needle would barely budge.
- > Following up on DeepSeek, Gavekal's Tilly Zhang summed it up well: "DeepSeek stunned the AI industry with the release of two new models: V3 in December 2024 and R1 in January 2025. These perform roughly as well as OpenAI's leading models on tasks such as math and coding. But the most striking aspect is the cost: DeepSeek said training the V3 model required 2,048 of Nvidia's H800 chips—a downgraded last-generation chip designed to comply

with US export controls on China—at a cost of US\$5.6mn. By contrast, OpenAI has said it spent more than US\$100mn to train ChatGPT-4.

“DeepSeek’s achievements may not be quite as impressive as headlines imply. For starters, the new models have shortcomings. One of the key reasons they perform well despite limited access to advanced chips is due to their ‘Mixture of Experts’ approach. This means available computing power is concentrated on a few ‘expert’ tasks, while less-critical tasks may be undertrained. The models thus excel in certain areas, but their overall performance is less consistent than some rivals. For instance, one Chinese AI expert has noted that one of the models performs well on math and coding tests, but correctly answered only about half of some other classic AI test questions. In short, the models are specialists adapted to become generalists.

“The US\$5.6mn price tag should also not be taken too literally. One reason DeepSeek’s costs are low is that the company’s offerings have so far focused only on text-based large-language models, while some US rivals offer multimodal models that can handle images and videos, making direct cost comparisons misleading. Another is that the company can piggyback on the costly earlier advances made and lessons learned by US AI firms. Finally, the much-cited cost figure doesn’t account for prior research and development spending. DeepSeek’s parent company reportedly had an initial research and development budget of around RMB3bn, as well as a stockpile of about 10,000 of Nvidia’s advanced A100 chips, meaning the actual cost of development was almost certainly much higher.

“Nonetheless, the company achieved an unambiguous innovation in software architecture that allowed it to deliver strong performance on many tasks at a low cost. That reflects a broader strategy among Chinese technology firms in response to US export controls: using software to get more out of less-advanced hardware. A 2023 review of Tencent’s Hunyuan AI model by the Berkeley AI Research Lab, for instance, concluded that ‘[s]oftware advancements are making old hardware increasingly useful.’

> More DeepSeek from the *MIT Technology Review* - These early figures—based on the performance of one of DeepSeek’s smaller models on a small number of prompts—suggest it could be more energy intensive when generating responses

than the equivalent-size model from Meta.

The issue might be that the energy it saves in training is offset by its more intensive techniques for answering questions, and by the long answers they produce. Add the fact that other tech firms, inspired by DeepSeek's approach, may now start building their own similar low-cost reasoning models, and the outlook for energy consumption is already looking a lot less rosy.

> Chicago Mayor Brandon Johnson has told members of the press that members of Congress should be focusing less on arresting and deporting illegal alien criminals and more on slavery reparations.

Nature is healing - the Smurfs are back!

> New Jersey will not provide financial backing to new offshore wind projects, Gov. Phil Murphy's administration announced Monday.

Congratulations are in order for New Zealand's Mount Taranaki, which is now legally recognized as a person (it's a Māori thing).

> Drama students are being warned of suicide in *Romeo and Juliet* after a university put more than 200 trigger warnings on works of Shakespeare. The University of the West of England has issued warnings for "blood" and "psychological trauma" in *Macbeth* as well as "storms" and "extreme weather" in *The Tempest*. One theatre show of the shipwreck play was highlighted for containing the "popping of balloons".

Miscellany

The Bee wins again. Adam spotted wearing t-shirt in the Garden of Eden. (For those of you not up on your Book of Genesis, Adam was created first, before Eve.)

Too soon?

