Strategic Estimate 2025

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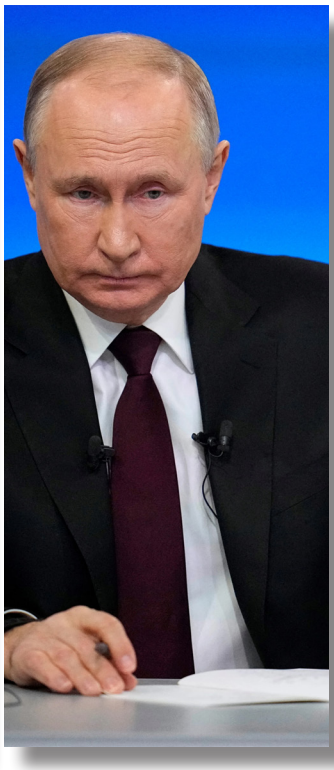



USA

President Trump 2.0

Donald J. Trump won the US presidential election in November 2024, to become the 47th President of the US to the adulation of some and to the shock and horror of many others. Leaders around the world, from allies to enemies and many within American institutions began recalibrating their positions for another term of the unpredictable president. Trump is a vociferous liar, who has a very flexible relationship with facts where he is always right and everyone else is wrong. So, what can we expect from a second Trump term?

The first Trump presidency left a lot to be desired. Donald Trump, at the time, made more than 280 campaign promises. President Trump delivered on tax cuts, left the Paris climate accord and reformed the judiciary. He also delivered on moving the US embassy from Tel Aviv to Jerusalem, increasing military spending and cutting regulation. This is where his achievements ended with the common factor being delivering on business related promises. Trump made little progress on building the Mexican wall, repealing Obamacare, reducing the national debt, deporting illegal immigrants and rebuilding infrastructure which the US so desperately needed. President Trump completely abandoned exiting NATO, approved waterboarding and prosecuting Hilary Clinton. Trump's final tally was he managed to deliver on only 35% of his promises, he broke 43% of them, compromised on 12% of them, and the remaining 10% of promises were so vague they couldn't be measured.

The Impossible President

When Trump announced that he would again run for president back in 2022, he caused strong concern among the factions of the US establishment that collaborated against him. The Republican party stood against Trump when he first stood back in 2015, but he defeated seasoned Republican politicians one after the other. But after he won the primaries and then the presidency they were forced to support him.

With all the court cases against Trump and after the events of Capital Hill in January 2021 where he refused to accept the electoral result, senior Republicans believed Trump shouldn't be allowed to stand as their official candidate again. Liz Chaney, daughter of former Vice President Dick Cheney even

campaigned against Trump, but she was forced to accept that Trump's popularity among the electorate remains so high that Republican politicians fear to speak out publicly against Trump, even if they disagree with him. Instead, they try to ally with him in order to personally benefit from his popularity.

Trump's popularity is what allowed him to increase his influence in the official institutions of the Republican Party. He pressured the chairperson of the Republican National Convention (RNC), Ronna McDaniel, to resign. Trump then publicly supported Michael Whatley to take her place. At the same time, Trump's daughter-in-law Lara Trump joined the RNC election for the co-chair position. Their first act was the appointment of the manager for Trump's 2024 election campaign, Chris LaCivita, as the RNC's chief operating officer. This ensured that anything the RNC did, supported Trump's attempt to be re-elected as president.

Donald Trump's takeover of the Republican Party was further consolidated when a number of Republican mega-donors saw a second Trump presidency as an opportunity to get their preferred policies implemented. This saw significant support for Trump from many think tanks, in particular The Heritage Foundation.

The 47th US President

What can we expect from Trump's second term? From Trump's first term, despite the high turnover of staff, his personnel choices will shape his administration, and different factions have been jockeying for influence. Some have radical ideas about transforming the administrative state and American foreign policy, others with more conventional views. It looks like the more extreme factions will have the upper hand, and they will press their advantage to contain more moderate voices, hollow out the ranks of civilian and military professionals they see as "the deep state," and perhaps use the levers of government to go after Trump's opponents and critics.

Trump's campaign for the presidency offers little insight into what his approach will be as it lacked detail, coherence and much of it was not even true. What we do know about Trump's worldview is its based upon zero sum transnationalism. America first is translated into raw nationalism and militarism, alongside authoritarianism and Trump, himself and the US having honour, status and respect. These have been the only constants in Trump's political career.

Trump had long outsourced his transition to the Heritage Foundation who came up with Project 2025 and the less well-known transition project of the America First Institute. The work done by MAGA true believers on those projects is indicative of what a Trump administration will do.

The Heritage Foundation has led the effort in developing the Presidential Transition Project. Their key policy proposals were documented in a publication from April 2023, entitled "Mandate for Leadership: The Conservative Promise". Which also included a "180-day playbook" to manage the transition period after Trump wins the 2024 presidential elections.

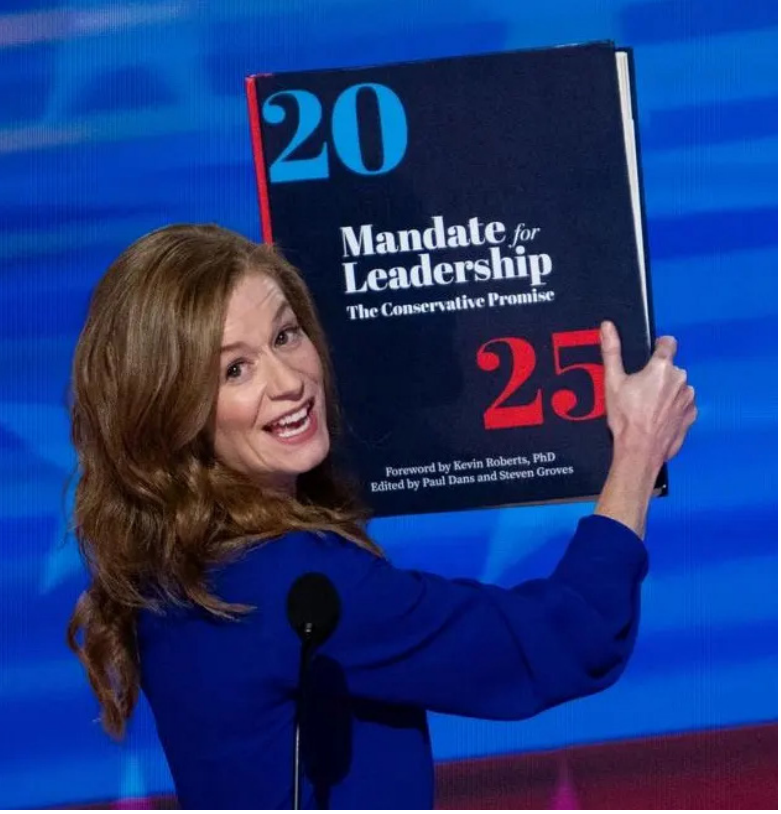
> ***"The Heritage Foundation has led the effort in developing the Presidential Transition Project."***

At the core of the policy proposals is "the unitary view of executive power". It proposes that the US president is given more power, at the expense of government institutions. In this way, the US president would be enabled to determine public policy. The role of the government institutions would then be limited to executing these policies which are presidentially decreed, and they would no longer be an active member in the deliberations that lead to the formulation of the policies as is presently the case.

In the "180-day playbook", it proposed Trump fires thousands of civil servants upon his appointment as president and replaces them with "conservatives" who support the policy proposals set out by Project 2025. After this "shock therapy", Project 2025 proposes that an even larger number of positions inside the US government institutions are to become political appointments, meaning that the president and his staff determine who holds the position. This is to ensure the government institutions remain unquestioning executors of presidential policy decisions. These proposals are to avoid a repeat of Trump's experiences during his first tenure as president, when government institutions conspired to prevent him from having a real impact on policy and decision-making.

International Domain

As to the policy recommendations of the "Mandate for Leadership," it proposes that the US end its support for the global climate change agenda and refo-



cus its energy policy back on domestically produced fossil fuels. As a consequence it proposes that the US (again) withdraws from the Paris Climate Accord, ends all types of government support for green energy solutions, including electric cars and instead supports coal, oil and gas companies to increase fossil fuel production inside the country.

In the international arena the Mandate proposes that the US works to restore its position of hegemonic power in the world via a focus on military strength. It identifies China as "…the United States' most important enemy…", and the Department of Defense is to be given significantly more resources to dominate it. These additional resources should be invested in additional soldiers, and in the development of new nuclear weapons and other forms of nuclear technology.

This aggressive, militaristic approach to international relations is to be supported by the United States diplomatic corps. The Mandate proposes that it adopts a more aggressive stance towards both American allies and enemies. Allies are to be put under pressure to become stronger and more active supporters of the policies of the United States, while enemies are to be threatened with regime change to make them fall in line.

The United States' support for international institutions such as the World Bank (WB), International Monetary Fund (IMF), and even the United Nations (UN), the World Trade Organization (WTO) and the North Atlantic Treaty Organization (NATO) is to be scaled back or even ended if these institutions do not unquestioningly side with the United States.

In an interview with the New York Times the president of the Heritage Foundation explained that it is also against the European Union, and more generally against the "European Project" that is targeting far-reaching collaboration between the European nations. Instead of the US collaboration with regional coordinating or collaborating bodies such as the EU and the Association of Southeast Asian Nations (ASEAN), the Heritage Foundation proposes one-on-one, bilateral collaborations between the US and other nations.

In the economic realm, all relations with China are to be ended. Domestically, taxes are to be lowered and markets are to be deregulated further. The Mandate also proposed to end the Federal Reserve and establish a system of "free banking".

As far as social policy is concerned, the Mandate proposes a "Christian values" based approach, focusing on support for "the traditional family" and ending government policies that target "diversity" and "LGBTQ" promotion.

The policies proposed by the Heritage Foundation do not address the economic frustrations of America's middle class. Fundamentally, the economic policy vision proposed by the Heritage Foundation is a continuation of the neoliberal agenda that caused the worsening of income inequality in the US (and globally) since the 1970s that underpins these frustrations. The current US' billionaire class support for a second Trump presidency is exactly because they believe they can again "manage" him to implement lower taxes and market deregulations that "support business".

As far as international policy is concerned, the policy proposals of the Heritage Foundation are eerily similar to the proposals of the "Project for A New American Century (PNAC)" that guided the presidency of George W. Bush (2001 – 2009). PNAC also proposed a "military first" vision for the US, based on the belief that the US could best secure its interests by dominating the rest of the world militarily. The results of this policy are well known. The US ended up entering wars in Afghanistan and Iraq that almost bankrupted it, while the neglect of diplomacy in its War on Terror caused it to lose significantly in the area of "soft power."

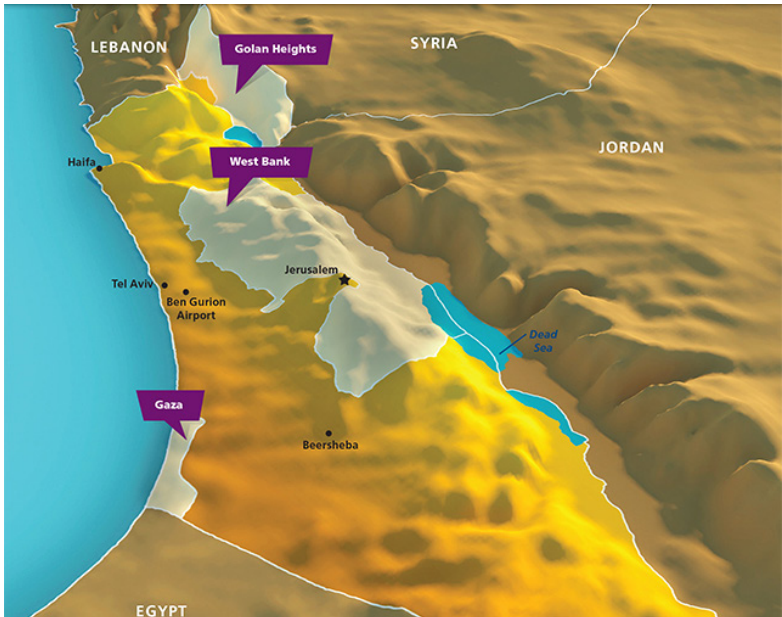
All this indicates that a new Trump presidency is most likely to further worsen the polarisation of American society, weaken the US influence internationally, and lead to heightened geopolitical instability. Polarisation will worsen because Trump himself antagonises a large section of the American public, while his policies will not resolve the frustrations being felt by the section of the American public that supports him.

America's Israel Problem

In June 2024 Israeli Prime Minister Benjamin Netanyahu launched a tirade against US President Joe Biden's decision to stop a shipment of large bombs to Israel. In the video Netanyahu said: *"It's inconceivable that in the past few months the administration has been withholding weapons and ammunitions[sic] to Israel. Give us the tools and we'll finish the job a lot faster."*[1] Netanyahu, in front of the whole world, slammed the US president who had supplied much of the weapons used by the Israeli military to continue their slaughter in Gaza. Whilst the US and Israeli relationship is described as a special relationship that has endured for decades, problems have been growing for some time as the child the US has long raised has its own opinions.

Prior to the events of October 7th, problems with Israel were increasing, despite the public portrayal of a special relationship. From the 1967 war the US introduced the two-state solution as the model for the region. This requires Israel giving up the Golan heights, West Bank and Gaza and the Sinai, with the West Bank and Gaza becoming a Palestinian state and Israel having fixed borders. The US was able to impose this on Israel after the 1973 war when Israel believed it was on the verge of being annihilated. Israel's acceptance would see the US get the surrounding Arab nations to normalise relations with Israel, something Israel always desperately needed. In 1979 the region's most powerful nation, Egypt, normalised relations with Israel and then in 1994 Jordan normalised relations and recognised Israel's right to exist. But with the Cold War over, Palestine ceased to be a priority as the US was busy with globalisation, Central Asia and establishing a new global order. As the 21st century began the US got busy with its invasions of the Muslim world and therefore no progress was made on the two-state solution.

During this period Israel did not sit idle. Israel's right wing always disagreed with the idea of a Palestinian state as Zionism always viewed the Jewish presence in Palestine as one of settlement with the expulsion of the indigenous people. Any state in the West Bank would be a security nightmare for Israel as its strategic territory which would not be in Israel's possession and would be beyond its capabilities to defend against. What Israel has been doing ever since is to



build and expand settlements to expand the Zionist nation. Israel consistently maintained a brutal occupation of the Palestinians. In 2005 Israel relocated from its settlements in Gaza and moved to the border of Gaza and has maintained what many describe as the 'world's largest open-air prison.' In the West Bank, Israel regularly 'mows the lawn' and settlers forcibly steal land and expel Palestinians. Benjamin Netanyahu, the Likud party and Israel's right-wing have openly and constantly stated they stand against any Palestinian state in all forms. The RAND think tank opined in 2024 that Netanyahu *"...may be standing in the way of a two-state solution. but he's far from alone."*[2] Israel's parliament overwhelmingly passed a resolution in January 2024 that rejects the establishment of a Palestinian state. The resolution completely rejected Palestinian statehood, even as part of a negotiated settlement.[3]

Israel has not lived up to its promises under all the previous agreements, road maps and promises with the US. This even includes the Abraham Accords. On the issue of a Palestinian state Israel has hardened its policies. Zionist settlements in the Palestinian territories occupied by Israel have expanded, and settler violence against Palestinians has been allowed to increase. The Israeli government has also now advanced a record number of settler housing units and transferred administration of the occupied territories from military to civilian hands, which is widely interpreted as sign Israel plans to formally annex these regions.[4]

The US strategy with Israel has always been to invest in her and build up her capabilities is order to make her a permanent part of the Middle East. As Israel is a foreign entity in the region a foreign patron was necessary for Israel. For Britain and then the US Israel was to act as a forward base in the region to protect western interests. In many ways the US raised a child, smothered it with money, resources and aid and as this child grew up it not only became used to this but always wanted more.

Biting the Hand the Feeds You

Israel's disobedience has become broader, deeper and far worse since Hamas's assault and the subsequent Israeli response after October 7th. Israel has escalated, expanded and disobeyed the White House throughout its onslaught on Gaza and the region. Israel was looking to carry out a full-scale invasion of Gaza and said it wanted to push the Gazans into the desert. The White House and many administration officials criticised this approach but then Israel went ahead with this approach and the Biden administration's hand was forced. In January 2024 the White House released information to let it be known that it was reviewing the possibility of slowing down weapons deliveries to Israel, in order to force it to comply with American demands.[5]

The US attempted to push Israel to shift to a new phase in its war, in which Israel ends its carpet bombing of Gaza and instead focuses "in more precise ways on targeting the leadership" of Hamas. But Israel continued its pushback to US demands, arguing it could only change its military tactics after the War on Gaza had lasted for several more months.

Israel then under pressure from the US escalated the war to the wider region when it began attacking Lebanon and then in April 2024 launched a strike in Syria against the Iranian consulate. The US then in back-channel talks with Iran was able to de-escalate and limit Iran's response to ensure a full-scale regional wide war didn't kick-off. Iran's Foreign Minister Hossein Amir-Abdollahian confirmed through back-door channels to the US: *"…an important message was sent to the American government as a supporter of the Zionist regime."*[6]

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When US president Joe Biden proposed a ceasefire proposal which many in Israel accepted, Netanyahu dragged out the negotiations by constantly adding new and unreasonable terms. Incensed by this, US president Joe Biden admitted in a Time magazine interview in June 2024 *"…there is every reason for people to conclude that Israeli Prime Minister Benjamin Netanyahu is prolonging the war in Gaza for personal political survival."*[7]

The US and France brokered a ceasefire deal between Hezbollah and Israel, which both Netanyahu and Hezbollah leader Hassan Nasrullah signed-off on. Israel immediately carried out the assassination of

Nasrullah and then proceeded to target the leadership of Hezbollah, including the use of pagers and walkie-talkies filled with explosive material that led to the deaths of over 300 people.

As the Israelis escalated attacks on Lebanon, the US on the other hand worked to actively block this Lebanon war plan. President Biden dispatched his envoys regularly to talk down Israel, but did not use the leverage of arms supplies or economic aid against Israel

Netanyahu since the events of October 7th has worked to keep the slaughter going as this serves the Zionist greater Israel agenda and preserves his own personal position. Netanyahu and his allies want the complete surrender of the Palestinians and have successfully opposed all US peace and ceasefire initiatives.

Strategic Liability?

The US has for long funded, protected and provided cover to Israel as it was a means to an end for its balance of power strategy in the region and she acted as an aircraft carrier for the US in the region and beyond. But when the Cold War ended, the US prioritised other global issues. The Israeli government and leaders have pushed back against the US agenda for a Palestinian state and actively worked against it. Israel's ruling class do not want to see a Palestinian state and want to swallow all of historic Palestine and even have ambitions for a greater Israel.

For long, Israel's utility to the US was never in doubt and American public opinion in support of US funding for Israel and for Israel itself resonated with the US public. But Israel's behaviour throughout 2024 is changing this. A Gallup poll in June 2024 concluded: "*While Americans have always sympathized more with the Israelis, the gap has narrowed in recent years, reflecting a drop in the percentage of Americans saying they are sympathetic to the Israelis and an increase in sympathy for the Palestinians.*" [8] The Israeli institute for National Security Studies (INSS) concluded: *"...recent public opinion polls in the United States have underscored the polarizing support for Israel. This diminishing support should be a worrisome sign for Israel's relationship with the United States."*[9] The Brookings Institute found there was a generational divide in the US over Israel, with the young no longer looking upon Israel favourably, with their sympathies now with the Palestinians.[10]

The slaughter over 2024 in Gaza is indicative of where the US-Israeli relationship is now. Despite numerous attempts to curtail Israeli massacres, agreeing to ceasefire and long-term solutions Israel has been able to effectively disobey the US president whose hands have been tied to make use of the many tools at his disposal to bring Israel into line. The Israel lobby, defence industry and Zionists in the US have curtailed attempts by the US president to punish and bully Israel into line. With Israel's reputation at historic lows, with the international order now undermined as it did nothing in the face of a genocide, Israel is becoming a liability for the US and its likely Israel's continued aggression will lead to instability in the region. For the moment, the American political class do not see Israel as a strategic liability, but the US may need to decide, quite soon, if it wants to go down with Israel or does it put its interests first and bring the spoilt child into line.

Does the US Want Ukraine to Win or Lose?

The war in Ukraine at the beginning of 2024 was not looking good for the country. Ukraine's 2023 summer offensive was meant to bring the initiative back to Kyiv and weaken Russia's position in the territory in Eastern Ukraine. But Ukrainian forces, despite weapons and equipment from the US, failed to counter Russia's extensive fortifications. Ukrainian commanders were forced to admit in the end when winter set in that they struggled with Russian tactics. By the end of 2023 president Zelensky admitted the counter-offensive had failed and during a joint press conference with European Commission President Ursula von der Leyen said that there was growing fatigue in the West over his country's war against Russia and that it was *"…clear the war in the Middle East…"* had *"…taken over the focus of international attention."*

As 2024 began Ukraine had few resources with which to mount another counter-offensive. As a result, Ukraine focused on launching hit and run attacks along the long front-line against Russian forces. It also increased drone and missile strikes deep into Russia, with some targeting Moscow.

The US has remained the top provider of military assistance, contributing over $175 billion in total aid since the conflict began in 2022. In 2024, the Biden administration announced a historic $6 billion security assistance package, that included additional munitions for Patriot air defence systems, counter-drone equipment, artillery rounds (including for HIMARS) and tactical vehicles and radars. Beyond military support, the US has allocated over $23 billion in humanitarian and economic aid in 2024. This included assistance for displaced populations, funds to bolster Ukraine's industries and infrastructure.

But despite this, like previous years, the US curtailed the use of its weapons by Ukraine by constantly changing its mind about the use of long-range drones and long-range strikes deep into Russia. The US has supported Ukraine in its war effort, it even stopped Ukraine from negotiating with Russia, despite the promise of 'however long it takes.' But then the US withholds or refuses to provide sufficient military equipment or restricts its use when it's necessary for Ukraine to deliver a fatal blow to Russia. Why doesn't the US ramp up help so Ukraine can defeat Russia?

It's important to keep in mind this is not something new but the same position the US took in Syria when it never provided the many militia groups with sufficient quantities of weapons or more sophisticated weapons that would make the difference in the war. Israeli officials and American hawks in the US have both criticised the White House for not providing sufficient ordinance during Israel's slaughter of Gaza. These contradictory positions are because the US is pursuing aims that are different and in many cases the opposite to the publicly stated position.

In the case of the war in Ukraine the US has long had a strategic view of the European continent and

this war for the US is a means to an end and this end is very different to the view the Ukrainians have. America's strategic outlook towards the world begins with the challenges that can emerge from the Eurasian continent as this continent consists of multiple powers as well as a market that can rival the US economy. This is the continent where rival powers can and have emerged. The US intervened on the European continent in both World Wars which stopped Germany becoming a continental power. Ever since, the US has provided security to Europe to stop both Soviet and Russian domination of the continent. But when the Soviet Union collapsed in 1991, Europe stopped worrying about the Eastern threat and talk of an independent European defence structure began alongside a Europe independent from the US. The US needed Russia to remain a threat to Europe so the continent see's the constant need for US security guarantees. During President Trump's term, transatlantic relations hit rock bottom with French president Emmanual Macron questioning the viability of NATO and with Trump undermining NATO and criticising Europe for not contributing sufficient finance towards the security alliance. When Russia invaded Ukraine on the 23rd of February 2022, Europe got firmly behind the US for its security and Russia did what the US always needed – to show it's a threat to European security and sovereignty.

It is not in US strategic interests for Russia to be defeated, it's also not in US interests for Russia to defeat Ukraine and shift the balance of power on the European continent. This is why the US has supplied Ukraine with weapons and supplies to stay in the battle, but not the appropriate quantity or quality to defeat Russia. Russia being a menace to Europe actually serves the US agenda, but Russia shifting the balance of power on the continent doesn't serve the US agenda. The US used the war to get Europe firmly behind it for security purposes. The US used the war to end Germany's energy relations with Russia, something the US never liked. France, who opened up its own channels with Russia prior to the war, is now firmly on the side of the US. The Ukraine war has allowed the US to create a balance of power that serves its strategic agenda. Unfortunately, Ukraine is merely a proxy war for the US and that's why the US will not go to war with Russia for Ukraine, unless Ukraine was overrun by Russia which would shift the balance of power on the continent.

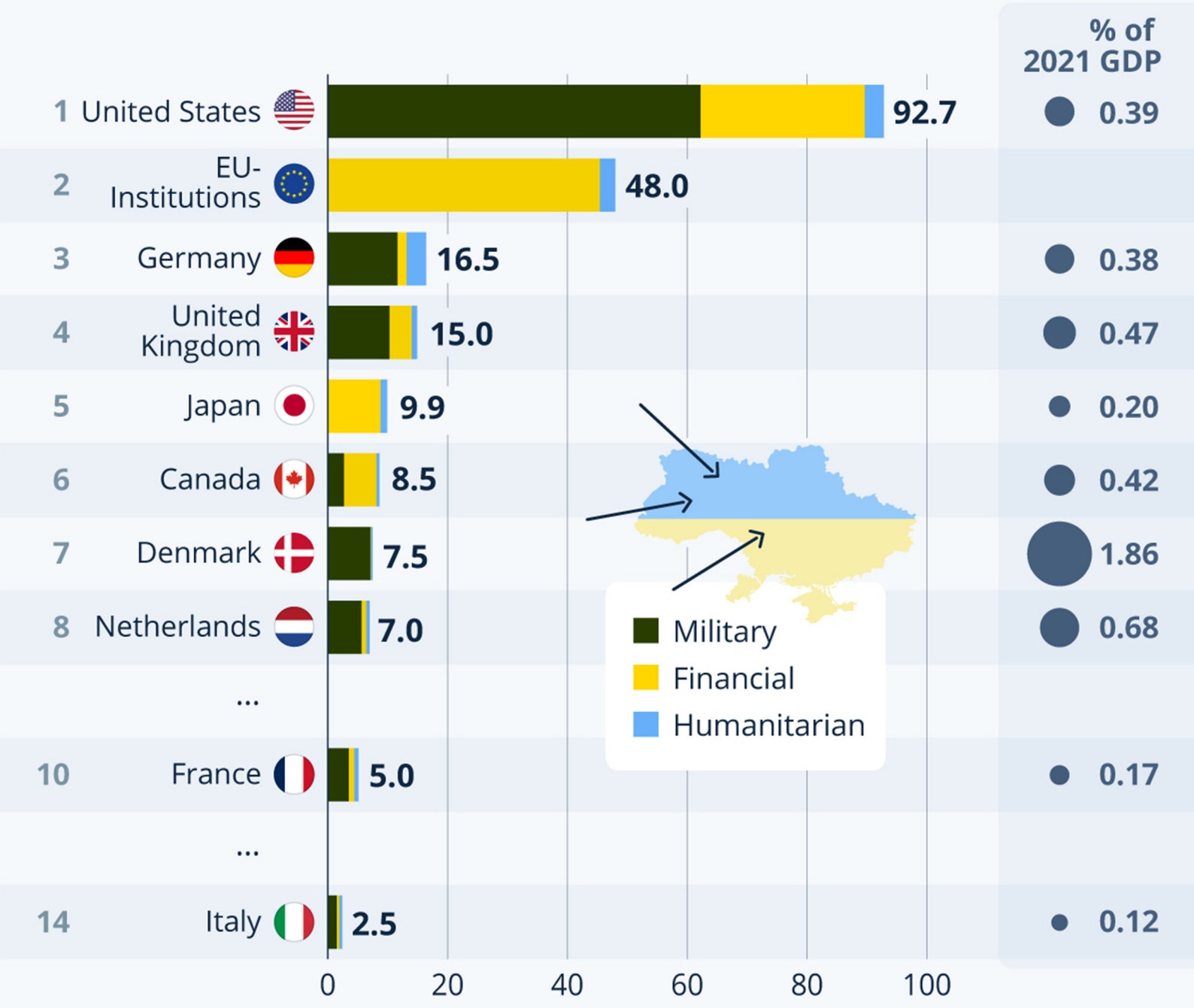
The US now has Russia under extensive sanctions which will take Moscow years and numerous negotiations to get removed, something the US will use to get concessions from it. The US has made it difficult for most nations in the world to trade in energy with Russia, as they want to avoid US sanctions and with Russia expelled from the SWIFT system and Russian currency reserves in western banks frozen and effectively seized. The US is in a strong position for Ukraine to begin talks, something Donald Trump has long advocated.

No single weapons system can change the trajectory of the war, and the US and Europe have consistently not provided sufficient weapons systems that will deal a fatal blow to Russia. The end game is one of a few possibilities. This first would be a Russian breakthrough from the Donbass up to the Dnieper River. This would prove to everyone that no number of western weapons can prevent Russia from defeating the Ukrainian military. The second possible outcome is the western public realising the risk of war escalating is not good for global well-being, and consequently a stronger push is needed to find a solution in peace negotiations instead of military escalation. The US was never going to give Ukraine the resources to defeat Russia, but she also doesn't want to see Ukraine lose.

As we fast approach the 3-year anniversary of the war in Ukraine, the US strategy seems to be to escalate to be strong enough to reach a decent settlement.

The Countries Committing the Most Aid to Ukraine

Countries committing the most aid to Ukraine from Jan. 24, 2022 to Aug. 31, 2024 (in billion U.S. dollars)



Converted from Euros on Oct. 11, 2024

Source: IfW Kiel, Ukraine Support Tracker

US-China Trade War Continues

The great power battle of our time is between a declining US vs an ascendent China. During the Trump administration and despite Trump's portrayal of Xi Jinping as a strong leader and someone he looked up to, beyond the personal niceties, Trump ramped up the trade war with a raft of sanctions and tariffs on Chinese goods.

When President Joe Biden took office in 2021, he described China as the greatest competitor of the US. His Secretary of State, Anthony Blinken reiterated the same throughout their term in office. President Biden continued with the Trump administration's policy, he continued with the Trump-era tariffs on China, despite the fact that several top US officials, including Treasury Secretary Janet L. Yellen, questioned their purpose and impact. The State Department kept the Trump-era genocide designation on China for its repression of Uyghur Muslims. Biden officials continued to send US naval ships through the Taiwan Strait and transfer weapons to Taiwan. On China, the Biden administration took an aggressive position which included placing an embargo on advanced microchip technology to China. All of this was before 2024.

In 2024 President Biden escalated the trade war further with China by increasing tariffs and imposing new trade measures targeting several critical sectors. Biden hiked tariffs on Chinese electric vehicles (EVs), which saw duties rise from 27.5% to 102.5%. This was part of a broader effort to protect the US auto industry from cheaper Chinese imports. The White House also increased tariffs on key technological imports such as lithium batteries, solar cells and semiconductors, which now face levies as high as 50%.

These moves were the latest in a broader strategy by the Biden administration to combat what it calls China's "unfair trade practices," particularly those related to forced technology transfers, intellectual property theft, and state-subsidised industries. The Biden administration's last act was to put under review sectors such as medical supplies and industrial machinery

All of these actions are to protect US industries and part of the broader great power competition between the US and China. The economic war has also led to military developments. In September 2024 the US Department of Defense announced it was launching military repair hubs in the Indo-Pacific countries of Japan, South Korea, Australia, Singapore and the Philippines as it envisions a global network of repair hubs for key warfighting platforms. The Pentagon's new Regional Sustainment Framework (RSF) envisions utilising existing industrial capabilities of its allies and partners so that it can conduct maintenance, repairs and overhauls of its ships, planes and vehicles closer to their area of operation instead of bringing them back to the continental US.

The US in its competition with China is battling on all fronts, economic, trade, monetary, industrial, tech and military. China is seen as a peer competitor by US officials and each year the arena of struggle is increasing and broadening.

AMERICA'S TARIFF INCREASES on China

	CURRENT RATE Implementation year	NEW RATE Implementation year
Electric vehicles	25% 2018	100% 2024
Semiconductors	25% 2018	50% 2025
Solar cells	25% 2018	50% 2024
Syringes and needles	0%	50% 2024
Some steel and aluminium products[1,2]	7.5% 2019	25% 2024
Lithium-ion EV batteries[1]	7.5% 2019	25% 2024
Lithium-ion non-EV batteries[1]	7.5% 2019	25% 2026
Battery parts[1]	7.5% 2019	25% 2024
Some personal protective equipment[1,2]	7.5% 2019	25% 2024
Rubber medical and surgical gloves[1]	7.5% 2019	25% 2026
Natural graphite and permanent magnets	0%	25% 2026
Other critical minerals	0%	25% 2024
Ship-to-shore cranes	0%	25% 2024

The U.S. is increasing tariffs on these imports under **Section 301**, punitive measures implemented by the Trump administration.

Section 301 tariffs currently apply to **over $300 billion** of Chinese imports.

[1] Tariffs implemented in 2019 started at 15% and were reduced to 7.5% in January 2020.
[2] Current rate for steel and aluminium products and personal protective equipment ranges from 0 to 7.5%.
Source: The White House

COLLABORATORS **RESEARCH + WRITING** Kayla Zhu, Niccolo Conte | **ART DIRECTION + DESIGN** Sabrina Lam

Is USA Becoming the New USSR

The US has always taken pride in its Cold War victory over the Soviet Union. The decades-long battle between the liberal, individualistic, free market ideology faced off against the centrally driven, communalist and workers ideology. In 1991 after decades of stagnation and malaise the Soviet Union collapsed with a whimper with no global revolution, but with the Soviets abandoning the ideology. Three decades on the US has faced no peer competitor, but now the US is characterised with malaise, decline and stagnation. It's the US that now seems to be facing the same problems the Soviet Union faced not so long ago, and we all know how that ended.

A City Upon a Hill

It is no secret that the US is looking for reform. Both Joe Biden's "Build Back Better" and Trump's "Make America Great Again" (MAGA) campaign slogans are a yearning to go back to an undefined, idyllic period in US history. They want American society to be "A City Upon A Hill" the way John Winthrop famously described in a sermon, "for all to observe."

The rise of populism and the adversarial attitudes towards the political class demonstrates that people have resorted less to trusting political institutions to resolve their issues — and more towards demagogue-type characters to grab the bull by the horns and steer the people towards better days, even if the bull destroys China along the way. For the time being, Trump has done well to craft his image as an almost messianic figure among Republicans, with the assassination attempts on his life only adding to this perception.

In 1985, Mikhail Gorbachev was the man. "He may smile, but he has iron teeth," is one of the best remembered descriptions of the late Soviet leader Mikhail Gorbachev. The line belonged to long-time Soviet Foreign Minister Andrei Gromyko, a grim-faced Stalinist who offered it upon Gorbachev's elevation to general secretary of the Soviet Communist Party.

Gorbachev embodied the hopes of a reformist faction within the Soviet Union that realised the USSR could not survive without major renovation. As the West and much of the rest of the world raced past the Soviet Union in every measurable category of success and prosperity, Gorbachev came to the forefront as a divided leadership eventually settled on him as the new leader.

Contrary to popular beliefs, Gorbachev's policies of Glasnost (openness) and Perestroika (restructuring) weren't made to turn Soviets into Jeffersonian democrats but to remove or neutralise counterproductive

features of the Soviet regime so that the USSR could remain a viable world power governed by Leninist party-state apparatus that was answerable to no one other than itself. His job: make the Soviets great again.

This proved to be his undoing as his reforms did not address the fundamental problems laced into Communism. Charisma, reforms and tackling institutions wasn't enough as the Communist ideology crumbled under its own weight with its top-down economic and political controls.

Gorbachev was seen by Communist party as a solution, a young reformer, but he simply accelerated the demise of the USSR. For the US, its leaders face similar challenges as their respective fans pin their hopes on personality politics to overcome deep-rooted, systemic rot.

Soviet Succession Was Bad. America's Is Worse

In the mid-1980s, although its dissolution was nearly at hand, few were predicting the complete demise of the Soviet Union. But when it came to the politics of leadership succession, a country that had been widely feared or respected for decades had already begun making a mockery of itself. Gerontocratic leadership was one of the hallmarks of late Soviet leadership, personified by the senility of Leonid Brezhnev, Yuri Andropov, and Konstantin Chernenko.

But by American standards, the Soviet leaders were not old. Brezhnev was 75 when he died in 1982, Andropov was 68 when he succeeded Brezhnev and Chernenko was 72 when he came to power. All were afflicted with a variety of health issues from strokes and kidney failure to heart failure and pneumonia.

While Biden and Trump's good health is a testament to American healthcare compared to the Soviet regime of old, Donald Trump is 78 — hardly a flush of vitality. Biden's incoherent waffling during his presidential debate and repeated gaffes during a summit in which he referred to Ukrainian President Zelenskky as "President Putin" and a conference where he referred to Kamala Harris as "Vice President Trump" is just the tip of the iceberg. This ultimately led to the end of his presidential campaign. Trump is a convicted felon and unrelenting in his claim that the 2020 elections were rigged. His running mate for Vice President JD Vance, a "Never Trumper" who only a few years earlier had compared Trump to Hitler. America's senior leaders and prospects are a damning indictment on the leadership choices the US has to offer.

The new Sick Man

There's a perception that the resilience of the free market cannot be compared to a dysfunctional planned economy that Stalin built and bequeathed to his heirs. The Soviet system squandered resources and shortages of consumer goods were all but guaranteed. The Soviet healthcare system was crippled by dilapidated hospitals and chronic shortages of equipment. There was grinding poverty, hunger, and child labour.

In the US, these conditions may only exist in the bottom 20% of economic distribution but the extent to which they do exist is appalling. Infant mortality in the late Soviet Union was around 25 per 1,000. The figure for the U.S. in 2021 was 5.4, but for single mothers in the Mississippi Delta or Appalachia it is 13 per 1,000. Life expectancy in general has also declined in a way that we do not find across other developing countries; 1.3 million deaths due to drugs and alcohol between 1990 and 2017 among the working population. In 2022 alone, more Americans died of fentanyl overdoses than were killed in three major wars: Vietnam, Iraq, and Afghanistan. It's little wonder why American Starbucks culture and drugs go hand-in-hand: one to keep citizens functioning during work and the other to numb their pain.

> ***"The Soviet system promised a micromanaged economy that was bound to fail but capitalism demands overproduction and perpetual debt."***

The US economy might be the envy of the rest of the world today, but recall how American experts overrated the Soviet economy in the 1970s and 1980s. Meanwhile, the anticipated AI and Fourth Industrial Revolution to transform the US economy hasn't announced itself as expected — many businesses are looking at conventional solutions and "on-shoring" after the logistical nightmare during and after Covid disruptions and shutdowns. Productivity in the US business sector outside of agriculture has declined for 20 years, interrupted only last year with an uptick

that has slowed since then.

Yes, the Soviet system promised a micromanaged economy that was bound to fail but capitalism demands overproduction and perpetual debt. The federal debt is reaching unsustainable levels as interest payments on debt will not be serviced unless the US makes changes to its budget that can directly affect defence spending.

While some economists remain positive and think in terms of slowing down inflation and stocks that remain in the bull market, average people think in terms of pricing and whether they're better off financially than a year ago; today, the consumer sentiment remains below pre-pandemic levels.

A Bloated Military

The US certainly has the largest and most expensive military ever assembled. However, the American military today is simultaneously expensive and unequal to the challenges it faces as it struggles to quickly adapt to modern challenges and methods of war.

Nowhere is this being exemplified more than the battles the Pentagon is facing in the Red Sea where Yemen continues to hold its blockade in response to Israel's ongoing genocide in Gaza. Effectively, the US is using munitions worth millions of dollars to blow up unmanned aerial systems that can be made with off-the-shelf parts for thousands of dollars. This trade is already proving to be unsustainable.

"If we're shooting down a $50,000 one-way drone with a $3 million missile, that's not a good cost equation…" Bill LaPlante, the Pentagon's chief weapons buyer, told a Senate appropriations subcommittee.[11]

US spending will also face changes. The federal government will almost certainly spend more on debt service than on defence; the share of gross domestic product going on interest payments towards the federal debt will be double what is spent on national security by 2041.[12]

Even during times of economic chaos, the Soviet leaders were adamant that the Red Army was the biggest and therefore the most lethal military in the world till the bitter end. Like the US today, this was true on paper. But this didn't help the Soviets win their war in Afghanistan after ten years of death and destruction. The US spent twice the time fighting the Taliban only to leave them back in power. America may still have more military resources than all other members of NATO put together — but to contend with a coalition of China, Russia, Iran and other emerging regional actors in the near future will be too much. The US military is overstretched and is already taxing the public beyond what they are willing to accept.

The US and NATO

The USSR had its own NATO-style military alliance and formed the Warsaw Pact. It ended in 1991 when Gorbachev's policy of openness (Glasnost) and restructuring (Perestroika), together with other initiatives inadvertently opened the way for popular uprisings. Among the newly-formed independent countries was Ukraine. The USSR reminded the republics of its global standing and global struggle but to no avail — Warsaw pact nations had lost faith and pushed for independence, which they eventually got.

NATO nations were left reeling when Trump threatened to leave the alliance during his first term. Trump's view was controversial — during a campaign rally he said he would "...encourage.." Russia "...to do whatever the hell they want…" to NATO allies who don't spend enough defence funds.[13]

Gorbachev's reforms only hastened the disintegration of the Warsaw alliance and the rhetoric on NATO has spooked European leaders into thinking about more independent policies. French President Macron has warned that Europe must become more independent

for its own defence and to ensure energy supplies after Russia's invasion of Ukraine. In an address on prime-television he stated, *"We can no longer depend on others to feed us, care for us, inform us, finance us…".* In a clear message of growing disillusionment from the US he went on to say, *"We cannot depend on others to defend us, whether on land, at sea, under the sea, in the air, in space or in cyberspace. In this respect, our European defence must take a new step forward."* [14]

For the last five years, Macron has repeatedly proposed a new non-NATO, Europe-only security architecture: a "...strategic autonomy…" intended to be more flexible and responsive to continental Europe's needs, and independent of America's isolationist whims. In other words, something made for exactly this kind of moment.

The spectre of a break-up doesn't just haunt Europe but looms within the United States too. Trump and his army of Groypers repeat their mantra to Make America Great Again (MAGA) but calls for secession are growing across US States. As of 2024, over six states are said to have growing secessionist movements, those being Alaska, California, Texas, Louisiana, Florida and New Hampshire.

Admittedly, these grievances emerged before Trump as America's secular, liberal ideology divides the country on everything from abortion issues to gender and from the US's global role to its election results. Without a philosophy or belief system anchored in fundamental truths and clear moral guidelines, US society is lost at sea and can't seem to come together. Movies in 2024 such as Civil War and Leave the World Behind (produced by Barack Obama) are already being labelled as "predictive programming" for what's to come by suspicious segments of the public. These elements hold that "…the modern Western liberal state is so corrupt and inept that it is beyond redemption and must be destroyed in order to create a new society and way of governance." It's easy to draw parallels with the apocalyptic visions that are prevalent among Christian extremists.

While it is easy to look at the cracks in the Soviet system and understand how it led to its rapid demise, perhaps the alliances inside and outside the US are becoming just as untenable.

Implosion

The "decline of the US Empire" has often been a lazy cliche; overused, with many antagonists hoping it becomes a self-fulfilling prophecy rather than describing reality as it is. However, the direct parallels with the end of the USSR provide a modern example of how one of the largest and most powerful empires in history quickly fell apart.

It provides a backdrop of a revolutionary empire that was facing crises across multiple institutions and facets of its ideology, with a divided public placing their hopes in reformers with questionable credentials. The reformers, establishment figures, weren't interested in understanding the fundamental problems with their belief systems and ideology but intent on reviving their state through policy changes. In the end, it only accelerated the collapse of the state instead of reviving it or even slowing it. The US could be sharing this prospect.

It is interesting to note that in the 1980's the world saw a global struggle between two ideological powers — sides had to be picked, someone had to win. In the case of the US however, since the collapse of the Soviet Union in 1991, it has had a clear run. As Fukuyama put it, it was meant to be "the end of history". Instead of asserting its global dominance in a way that builds confidence in liberalism and capitalism, the American Eagle flapped its wings of neoconservatism and neoliberalism and has put itself in a very difficult position. The unique, unipolar position they found themselves has bred arrogance and with the "War on Terror"" onwards, trampled over all the values they advocated.

Now the US faces multiple challenges that could lead to its end as the preeminent power. This can come externally from rising regional powers such as China or a completely new emerging power from a very unstable and fluid Middle East as the US pivots to the Pacific. Or it comes from complete disintegration internally as people lose confidence in the economy, in liberalism and in its leaders. For now this looks remote, but ask those in 1985 USSR if they envisaged what would happen in 1989.

Conclusions

The US has now reached a point many empires found themselves in where the perception of its power is being questioned and the elites and political leaders are battling between domestic considerations and global entanglements. Whilst the US remains the global superpower, there are serious question marks if the US can maintain this for the foreseeable future.

The US is increasingly polarised domestically on issues that range from identity, abortion, to foreign entanglements to the national debt. For the first time dissent has emerged over America's long term Israeli policy and it's likely to only get worse. Elections are now becoming more an exercise that highlights US divisions rather than unity.

The Joe Biden Presidency Biden brought a semblance of stability to US foreign policy that was needed after the administration of Donald Trump and he continued with America's competition with China and continued to finance Ukraine's war with Russia. The challenges to America's global position continue to grow and this remains America's biggest challenge in 2025 and beyond.

Russia

Time is Running out for Ukraine

At the beginning of 2024 Russia was on top in the war against Ukraine and the disaster that took place when it invaded Ukraine in 2022 is now a distant memory. Russia gave up the fronts where its forces performed poorly and redeployed these troops elsewhere in order to support other fronts and to be able to fight another day.

Throughout 2024, Russia's military strategy in Ukraine remained focused on sustaining pressure through smaller tactical attacks, rather than launching large-scale offensives. This approach was designed to gradually wear down Ukrainian forces and consolidate control over key regions, especially in eastern Ukraine. This seems to have worked as support for Ukraine has been waning in western capitals and it's what led to the Ukrainian Kursk offensive in August 2024. Ukraine redeployed its troops from other areas to undertake this offensive this included withdrawing some of its best brigades from Donbass. As Russia already had numerically and qualitatively superior forces in the central Donbass area it brought in troops from other areas to push back in the Kursk region and to expand towards the Dnieper River.

Russia has continued to pump money into its economy to ensure it can support the war effort. Whilst Russia is spending over $300 million a day to fight the war,[15] it's earning around $800 million every day from energy exports.[16] Russia is facing 16,000 sanctions from 49 nations of the world, but the remaining countries of the world are happy to do business with it. China has replaced Europe as Russia's top energy destination. So, despite the collapse in energy imports from Europe, Moscow has replaced the continent with exports to China, India and Turkey.

Russia has got around the G7 and EU leaders price cap plan that aimed at limiting the revenue Russia earns from its oil exports, by trying to keep it below $60 a barrel in order for vessels to get insurance and permits for energy supplies. But Western experts have conceded that Russia has been able to circumvent this with its shadow fleet of tankers and by using third party nations customs clearance to get around the sanctions.

Since Russia's invasion of Crimea back in 2014, Moscow has been preparing for western sanctions and was reducing its dependency on the dollar in order to isolate its economy from sanctions. Russia pegged its currency, the ruble, to gold, and 5,000 rubles will now buy an ounce of pure gold. The plan was to shift the currency away from a pegged value and onto the gold standard itself so the ruble would become a credible gold substitute at a fixed rate. According to the World Gold Council, Russia is now the second largest producer of gold.

As we fast approach the 3rd anniversary of the Ukraine war Russia remains on top and western attempts to weaken and undermine Russian power have not prevailed. Ukraine is running out of time, support and public opinion and has been unable to make a dent on the battlefield. When talks do begin to end the war Russia is in a position of strength to demand its terms.

A Year Since Wagner's Mutiny

In June 2024 a year passed since Wagner mercenary boss Yevgeny Prigozhin died in a plane crash. Prigozhin and his mercenary organisation, Wagner were unique in Russian history as there has never been an organisation like it. With the patronage of Putin, Wagner intervened in conflicts in Africa and built its own economic empire. But problems grew between Wagner and Russia's defence officials who wanted to bring Wagner under the national military command structure,

Prigozhin's end came weeks after he led a rebellion or an uprising that constituted a challenge to the established rule in Moscow. For many the episode will always be dominated by how Prigozhin survived for the weeks he did and why he willingly boarded a plane. When Prigozhin's plane crashed exactly two months after his rebellion on the 23rd of August 2024 it also led to the deaths of several senior Wagner commanders. The GRU's (Military Intelligence) General, Andrei Averyanov took over Wagner's Expeditionary Corps. He's famous for having headed Unit 29155, a unit specialising in assassinations and destabilising foreign governments.

Putin had already dismantled the Wagner Group when Prigozhin's plane crashed. The FSB – Russia's intelligence agency took over Prigozhin's domestic commercial enterprises, the SVR (foreign intelligence service) received his communications businesses, and GRU, the military intelligence took over the foreign military aspects of Wagner operations. GRU used a corps – calling it a volunteer corps that dealt with Wagner operations in Ukraine. Prigozhin's son Pavel tried to offer Wagner to the Rosgvardiya, or National Guard, in a move that was partially approved and so sparked a bidding war for commanders. Some ex-Wagner mercenaries have been traced to the Rosgvardiya and Chechen Akhmat forces.

Moscow made it a requirement for Wagner soldiers to pledge allegiance to the Russian state, and warned Wagner fighters that non-compliance would bring harsh reprisals. With Prigozhin now gone no figurehead emerged for any further mutiny.

Wagner has for long been a key tool of Moscow's foreign policy, it was the instrument that offered unstable regimes security in return for lucrative mining rights. After Prigozhin's revolt ministers from the Kremlin went on tours of Middle Eastern and African capitals to reassure the rulers that they could still turn to Russia for all their rebellion-quashing needs.

> ***"The short period where mercenary forces were aided and supported proved they can become a liability. This is why Wagner has been subsumed by Russia's national security architecture."***

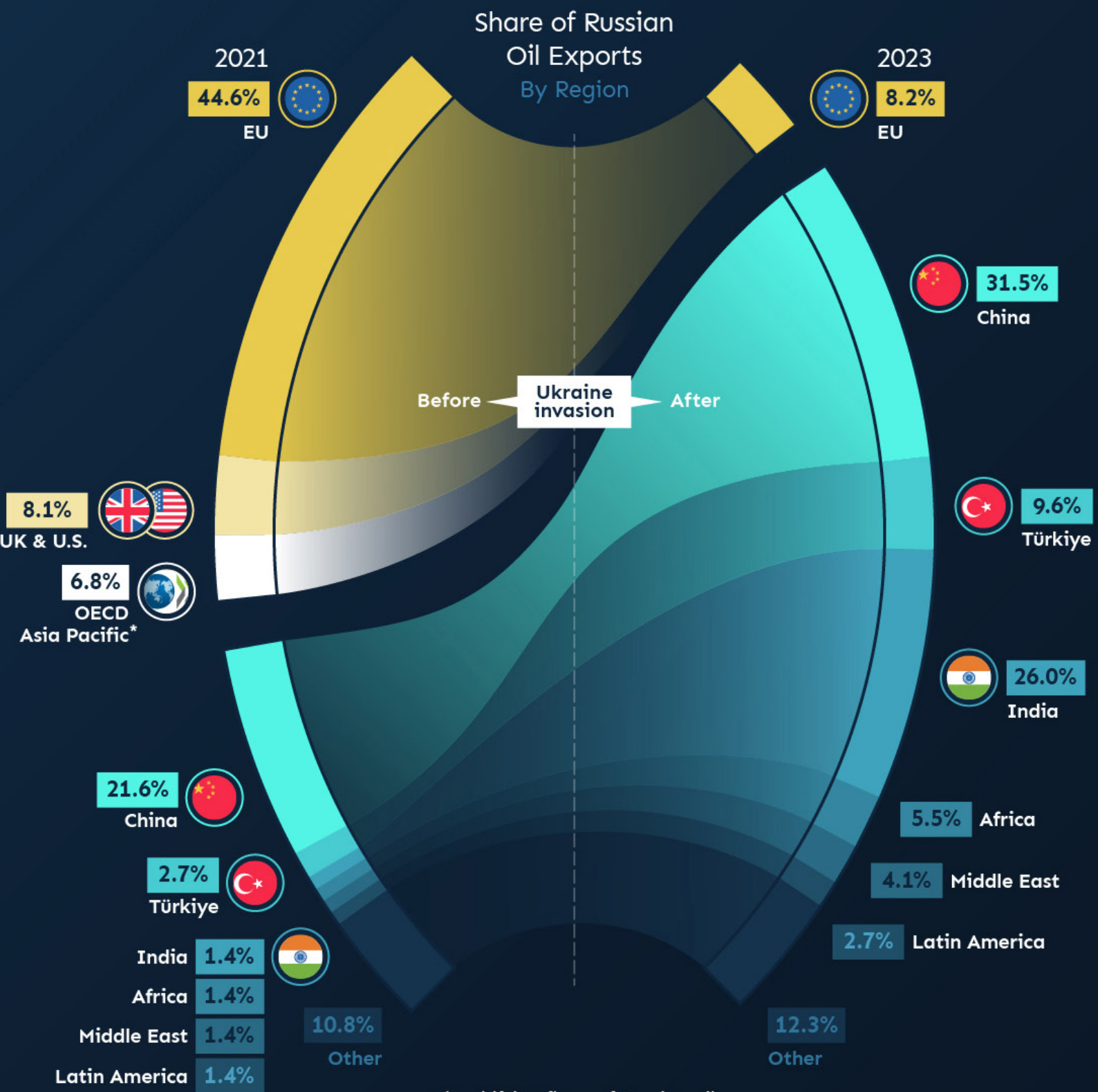
Wagner and its new set up suffered a major setback in August 2024 during all the changes.
Ukrainian forces managed to take the fight to those mercenaries who once forced them from such cities as Bakhmut and Soledar. But an ambush in Mali in August 2024 claimed the lives of 47 local soldiers and 84 Russian mercenaries. Ukrainian military intelligence confirmed that Tuareg rebels had *"...received necessary information, and not just information, which enabled a successful military operation against Russian war criminals."*[17] Ukrainian special forces trained the Tuareg separatists to use attack drones. As Moscow was prioritising African ties to circumvent the West's sanctions and diplomatic isolation, the attack was not only embarrassing but damaging, as local leaders were forced to reevaluate the value of Moscow's mercenaries.

A year since Prigozhin's mutiny his organisation continues by being integrated into Russia's national security architecture. Many of its signs and emblems have been changed or have disappeared. In Russia's long history there have been very few occasions an organised and capable mercenary force existed. Due to Russia's history of instability, successive Russian leaders saw the need to control heavy weapons and the armed forces. The short period where mercenary forces were aided and supported proved they can become a liability. This is why Wagner has been subsumed by Russia's national security architecture.

HOW OIL IS ADDING FUEL TO GEOPOLITICAL FRAGMENTATION

Trade Flows of Russian Crude Reflect Deeper Geopolitical Divisions

The West imposed sanctions on Russian oil exports over the Ukraine war but shipments have remained steady as new buyers stepped in.



The shifting flows of Russian oil are a proxy for the formation of rival trade blocs.

Russia's Africa Strategy

In July 2024, Tuareg rebels from Mali's Permanent Strategic Framework for the Defence of the People of Azawad killed at least 84 members of Russia's paramilitary Wagner Group, as well as over 47 Malian security forces near the northern town of Tinzaouaten, marking this one of Wagner's largest defeats on the continent. Russia's presence in Africa has gained significant global attention over recent years and has been seen by many as Russian power expanding around the world. Like the US and China, Russia has also given attention to Africa looking to get the continent to join its alliance system and establish an alternative order to rival the western led order.

Russia has been a long-term provider of low cost, low sophisticated weapons to Africa. During the Cold War, Russia supported various rebel groups and regimes across Africa in an attempt to compete with Western influence. This strategy also included directly supporting proxy wars against US and European-supported forces. Today, Russia's direct involvement in Africa is nowhere near where it was during the Cold War era. But its political and economic relationships have survived in large part to the limited overturn of governance in many African countries. The leaders or future leaders that the Soviet Union educated and trained all still hold significant influence in many of these countries and some, such as Angolan President Joao Lourenco, even remain in powerful positions today.

Russian presence on the continent saw the first deployment of the Wagner Group, who was also known as the Africa Corps in 2018, when it deployed to the Central African Republic. From here Wagner expanded its military footprint in Africa to Libya, Sudan, Mali, Burkina Faso and Niger. This was very different to Russia's usual way of operating on the continent which involved state-to-state relations. Wagner played the role of a semi-independent group engaging with the continent which served Russia's agenda. Wagner focused on helping regimes hostile to the West, which served Moscow's agenda.

While late Wagner leader Yevgeny Prigozhin first oversaw these deployments, Russia's Ministry of Defense took over the group's operations on the continent following Prigozhin's failed uprising on Moscow in June 2023. Moscow used Wagner's relations to expand its diplomatic activity on the continent, signing a wide range of economic and technical cooperation agreements focusing on energy, natural resources and infrastructure. The Kremlin also deployed a string of information and misinformation campaigns on the continent to fuel the rise of anti-Western sentiment.

One of Moscow's key goals in Africa has been to find alternative markets that would help shore up its economy in any scenario where tensions rose with the West. This is the situation Russia found

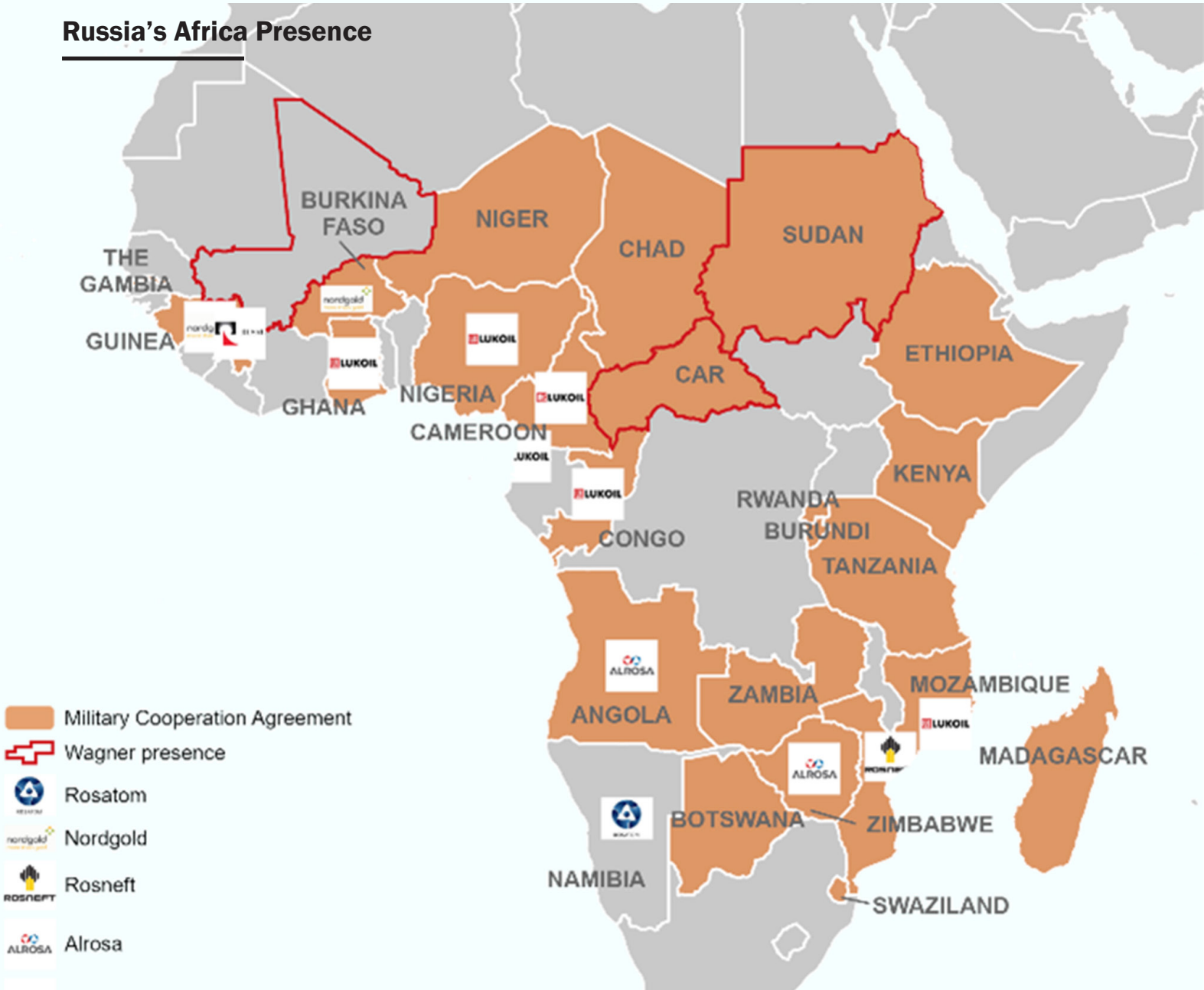
itself in in 2022 when it invaded Ukraine. Russia has worked to shore up its war economy by developing sanctions-proof revenue streams with the continent. Despite Western criticism, many African leaders have welcomed Russia's efforts to expand economic cooperation, and the expansion of Russia-Africa trade has led to the vast majority of countries on the continent not imposing sanctions on Russia.

Russia chose Africa to show the western powers that it is not isolated and has the support of numerous rulers around the world. This became even more important when the West has been trying to isolate Russia after its invasion of Ukraine. Many governments across Africa have bought into the Kremlin's portrayal of the war as an anti-imperial conflict.

Russia provides weapons and military equipment to the continent and its paramilitaries, such as the Wagner group protect African military leaders as well as mining operations. In exchange, the African military juntas permit Russian firms to extract gold, oil, diamonds and other valuable commodities. From there, Russia can transport the commodities north to Libyan ports, where they are loaded onto ships and sold abroad. Due to its close partnership with Libyan rebels, Russia is also able to disguise its natural gas as Libyan and sell it to Europe, undermining European efforts to end its dependence on Russian energy while refilling the Kremlin's coffers.

Russia has successfully created the image that it is engaged in Africa, especially in the Sahel region and should be treated as a global power. Moscow has been able to develop relations with autocratic leaders and in return for access to mines provides security to these leaders who face many struggles from sectarianism, tribal warfare and lack of effective governance. Russia's priority will always be its border in Europe and Ukraine will always matter more to Moscow than Africa, Syria or Cuba. For Moscow its Africa strategy is a low cost venture to show the West it has allies to counter what the West throws at it.

Russia's Africa Presence



The Year of the Family

The Russian government declared 2024 as the year of the family, as President Putin recognises Russia has an adverse demographic outlook. Russia's demographic decline is now more than birth rates, migration, labour shortages and population density and has now reached a critical juncture.

The collapse of the Soviet Union and the malaise that followed during the 1990s triggered huge social and economic problems. A massive wave of emigration took place, birth rates collapsed, the mortality rate increased and the brain drain intensified. All these issues continued into the 2000's and have never really been solved. As a result, these demographic issues have become even more pronounced as the years have gone by and amid Russia's confrontation with the West. With sanctions and tech embargo's now on Russia, economic independence and self-sufficiency has for long been Russia's strategy. To achieve this Russia needs human capital and for Russians to accept shortfalls in public funding. This means previous policies to stop demographic decline have been failures and now the Kremlin is being forced to enact heavier-handed policies.

Moscow has tried through state-sponsored support programs to encourage the migration of Russians back to Russia. Moscow expanded its immigration policies by offering special privileges to former Soviet territories. Immigrants came mostly from Central Asia; today, nearly 90% of foreign labourers in Russia are from Uzbekistan, Tajikistan and Kyrgyzstan.

Moscow has continued to offer financial assistance to women who give birth to at least two children and subsidised mortgages for families, but the results have not been good. But with the high cost of the Ukraine war, the Kremlin sees no room for additional funding and has scaled back mortgage programs. As a result, Moscow is moving toward harsher measures, such as potential penalties for childless families and aggressive pro-natalist propaganda. Muscovite women were offered free anti-mullerian hormone tests, which assess fertility, at city clinics. A bill has been introduced in the State Duma to ban childfree propaganda, with proposed fines of up to 400,000 rubles for individuals, 800,000 rubles for officials and 5 million rubles for legal entities. Several Russian regions have also passed laws banning "inducement to abortion." Other birth related proposals include incentives for childbirth among minors. One suggestion is to consider childbirth as an individual achievement when applying to universities.

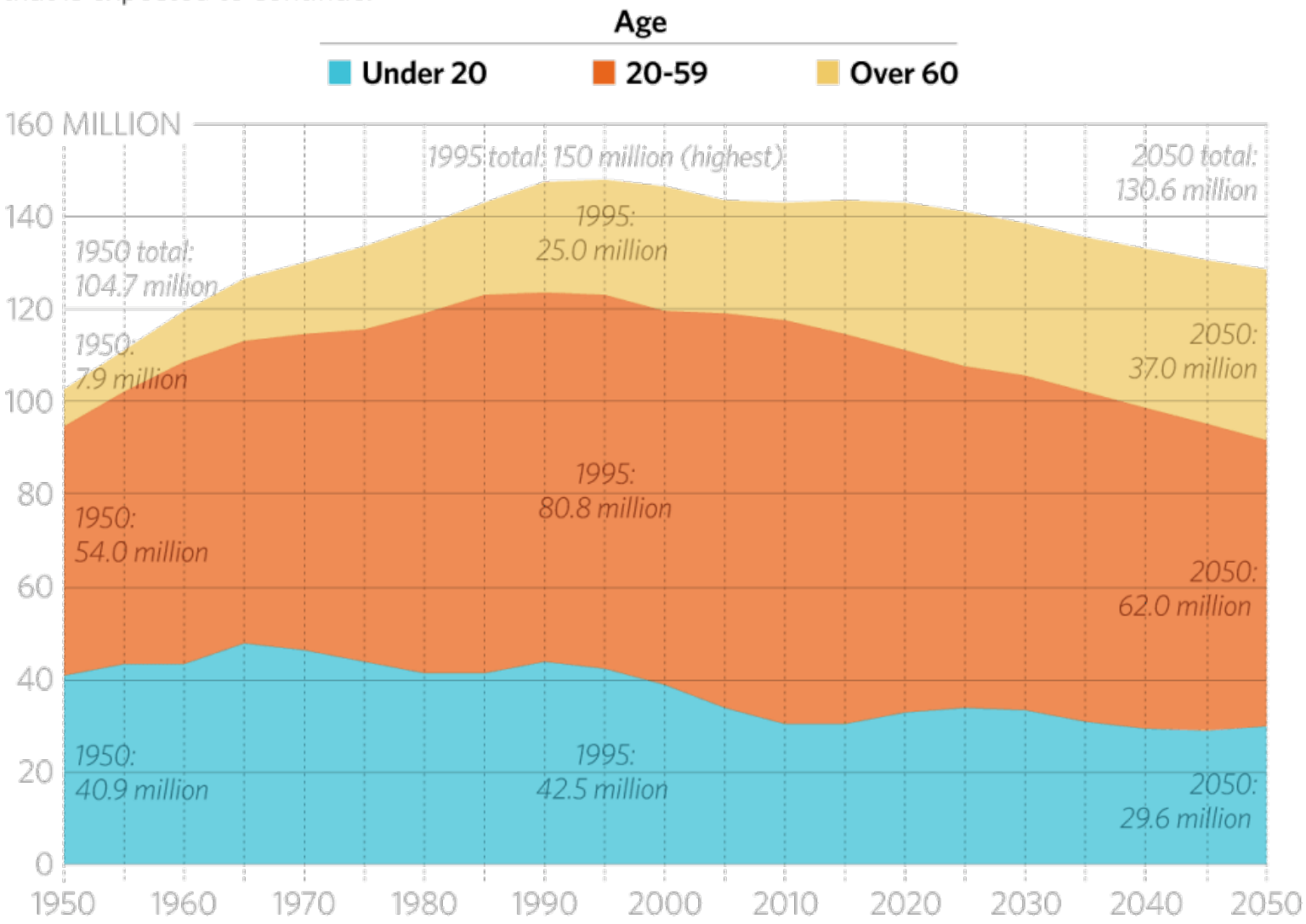
Another proposal centers around territorial development via migration and resettlement to underdeveloped and sparsely populated areas. This is something Russia has done in the past during imperial eras. Russia is the largest country on earth, but it is extremely unevenly populated; more than 66% of all Russians live in just 20% of Russia's territory. Naturally, this has resulted in an uneven distribution of workers able to materially improve Russia's economy and the respective regions they live in.

Moscow is now committed to repopulating the Arctic and the eastern parts of the country, which boast abundant natural resources and access to the new Northern Sea Route and which can strengthen Russia's presence in the Pacific. But Moscow has been reluctant to force its citizens to migrate, and not cause resentment and unrest. Moscow has introduced incentives, including offering plots of up to one hectare per person for free in the Far East or the Arctic, one-time payments when moving to the Far East, social support, a percentage increase in salary and even transportation at public expense.

Russia's demographic policy has been forced to evolve, and the state is now making a risky foray into its citizens' most private affairs. Russia's previous attempts at stopping population decline have all failed and the new strategy, though it is early to determine its success or failure, comes upon the back of failed initiatives.

Russia's Population Distribution

As the number of working-age Russian has shrunk, its elderly population has increased, a trend that is expected to continue.



Source: U.N. Population Division

Conclusions

When Russia invaded Ukraine back in 2022 and the problems that ensued, these are now all in the past as Russia is on top in the war in Ukraine, with western support for Kyiv floundering. Russia's war of attrition is significantly taxing Ukraine and it's slowly losing the support needed to maintain its war. Russia has proven adept at promoting an image of power around the world, but it does this as its domestic problems are growing and it remains to be seen if Russia can out run its real capabilities.

China

China's Economic Woes

In September and October 2024 China's Central Bank announced a raft of measures to revive the national economy that has been struggling to grow at the levels the Chinese are used to. China's economy used to grow at well over 5%, but with a number of mounting issues, that include the knock-on effects of Covid-19, China's economic model has run out of steam and major strategic changes are necessary.

Since the global financial crisis in 2009 China's economic model of rapid economic growth through the processing of raw materials into finished goods which are exported around the world has run as far as it could. Despite huge stimulus measures which created a real estate boom, Chinese authorities eventually came up with the Belt and Road Initiative (BRI).

But after more than a decade of BRI, things haven't turned out the way the Chinese expected, and a number of strategic issues have caught up with them. BRI really expanded China's supply chain to beyond its borders to include much of the world. It didn't change China's dependency on exports but continued this dependency.

The Covid pandemic and China's lockdown beginning in late 2019 compounded the problems for China's export driven economy. The Xi Jinping regime used serious authoritarian powers to control Chinese society and manage the nation through the pandemic. Ever since China has struggled to generate economic growth and has missed its 5% target consistently.

It was in this light the announcement was made in October 2024 of three stimulus programs by the regime. Much like Japan did through the 1990s the aim of stimulus is to generate economic growth when the usual economic tools are no longer working.

Economic growth has also been impacted by Chinese demographics. In 2021 the Chinese population grew at the slowest rate for the last decade since records began in 1953. The Chinese birth rate and workforce was falling and shrinking and had now taken over from the decades long breakneck population growth. Today China has more people over 50 than under 50 years of age. If China wanted to shift to a consumption based economic model where its large population consumes what the nation manufactures it was now too late as China's consumer base would be too small to sustain Chinese economic growth.

For at least a decade Chinese officials have been talking about deepening reform and advancing modernisation. There has been a push for self-sufficiency in science and technology amid rising tensions with the US. But this is something that will take decades and is more a long-term plan.

China is looking to shift towards high tech. It's already a leader in electric batteries and green technologies. For the short term the Chinese authorities plan to deal with the nation's problems by throwing more money at it, which will increase China's already huge national debt. The stimulus measures that were announced were earmarked to buy up China's huge property sector, which is straddled with debt with ghost towns sitting empty and many property

developers carrying huge debt. This is effectively a bailout for China's ballooning property sector. The stimulus measures are also being used to bail out local authorities, who like many other nations do not raise revenues from imposing local taxes. They therefore borrow in order to spend and have debts of $4 trillion, which the stimulus plan is attempting to address. The plan also aims to build more industrial capacity. With China's economy suffering from overcapacity as its economic model has always ever produced to keep prices down. Throwing money at this will likely cause deflation.

China for the short to medium term will have to go through pain as it has no good options. But its long-term plan of moving up the tech ladder and exporting these, is also facing challenges. Chinese manufactured goods, especially high-tech products are facing tariffs and many nations, especially in Europe and the US are trying to close them out. Due to the country's demographic situation, it cannot use domestic consumption as an economic model, whilst moving towards high tech exports is also running into problems.

Made in China 2025: A Resounding Success

In 2015, China set out on an ambitious 10-year plan – dubbed "Made in China 2025" (MIC2025) to achieve self-reliance, innovation and strength in the manufacturing industry within a decade. Nobody envisaged a trade war would begin with the US trying its best to stop China developing an advanced manufacturing industry. China set many ambitious goals for this project and 2025 was the deadline for the initiative.

China has long struggled with the problems that fully modernised economies like the US, Japan and Germany have mastered, particularly development of core technologies and native innovation. The MIC2025 plan admitted this and described the task at hand: *"China's manufacturing sector is large but not strong, with obvious gaps in innovation capacity, efficiency of resource utilisation, quality of industrial infrastructure and degree of digitisation."* The MIC2025 plan identified ten sectors where the bulk of this effort was to take place. China wanted 70% of basic core components in these sectors to be sourced from domestic suppliers by 2025.

When the plan was first set out, most cars on Chinese roads were from western carmakers, and Chinese airspace was dominated entirely by aircraft made by Boeing and Airbus. Many Chinese factories could not operate without imported machine tools. Semiconductors, operating systems, and software in computers and mobile phones were mostly sourced from the US. Even the databases used by Chinese banks relied on foreign corporations for coding and maintenance. Back then, China stood at the lower end of the global industrial value chain, producing mostly cheap and simple products that the world needed. MIC2025 sought to change that, allowing Chinese manufacturing, through scientific and technological advancements, to produce high-quality, hi-tech and high-value products.

Since it was unveiled in 2015, MIC2025 has undergone changes in marketing and emphasis. The changes in marketing have occurred in response to external criticism by China's trading partners. The policy has gone underground, communicated in new slogans away from the glare of international media attention. The changes in emphasis reflect China's experience with industrial policy, as it shifts additional resources and focus to sectors that are succeeding. Despite these changes, the main goals of the strategy remained the same; turn China into a "manufacturing powerhouse," make the country self-reliant and achieve technological leadership and supply chain dominance.

The goal of MIC2025 that drew the most attention was to promote the rapid development of 10 strategic industries. These goals came with ambitious export targets for each sector, raising alarm that the world would be engulfed by another wave of heavily subsidised, inexpensive Chinese exports, this time of high-value-added, high technology products.

Aerospace and Aviation

MIC2025 targeted aviation and space technology for development with the emphasis on commercial jet aircraft, while the emphases of its space agenda were heavy-lift rockets and satellites. Despite this a third group of technologies—aerial drones and their manned cousins, electric vertical take-off and landing aircraft—which were not envisioned by MIC2025, have emerged in recent years as a driver of China's industry.

China is just one of three nations capable of independently launching humans into outer space, alongside the US and Russia. Since 2021, China is also the only country with an independent, permanently crewed space station. The launch of the Tiangong ("Sky Palace") represented the culmination of a two-decade-long effort to develop China's manned space program. MIC2025 also focused on developing China's rockets and satellites. China's Long March rockets are the backbone of its space-launch capabilities. China has several proven medium-lift launch vehicles and one proven heavy-lift launch vehicle of this type. For the moment China has nothing like SpaceX's Starship and NASA's Space Launch System that use reusable rockets.

Beijing has for long hoped to break into commercial aviation. Beijing has spent decades and billions to build its state-owned champion, the Commercial Aircraft Corporation of China (COMAC), into a competitor of Boeing and Airbus. But China has struggled to bring its commercial aerospace offerings to the world.

The US pioneered the use of drones for military purposes, and the US-led smartphone revolution perfected the lightweight sensors and semiconductors that power small commercial drones. However, the US commercial drone industry has since been all but wiped out by Chinese drone makers like DJI and Autel, which have received heavy state subsidies. Today, China has captured 90% of the US market for commercial drones. Countless Chinese drones are flying over American skies, collecting—and potentially transmitting—treasure troves of data.

Agricultural Machinery

China's prioritisation of agricultural machinery may seem odd in a list dominated by cutting-edge technology like semiconductors and airplanes. But China has a unique vulnerability in agriculture. China does not make enough food for its large population. China's insecurity in this area is growing worse, not better, despite feverish efforts to reclaim farmland, mechanise agriculture, and grow food.

China thus started a crash program of land conversion to increase the amount of arable land for agriculture, reversing an earlier policy of reforestation. But Chinese official statistics show this campaign has yet to succeed. The amount of cultivated land in China fell from 333 million acres in 2015 to 315 million in 2022, close to the level that Beijing believes is a bare minimum for food security.[18]

China's mechanisation of agriculture has also fared poorly. Despite great advances in manufacturing, China has failed to raise a manufacturer of agricultural equipment that can compete with the likes of John Deere. China has failed to build internationally competitive manufacturers of agricultural machinery. China today remains deeply reliant on foreign sources, including the US, for food, despite a crash program to increase the supply of arable land.

Of the 10 sectors China is looking to become self-sufficient in, Agricultural machinery has not succeeded.

Biotechnology

Prior to MIC2025 China's vast chemical industry was already a world leader in the production of low-end active pharmaceutical ingredients (APIs), which are used in generic drugs. But Beijing's ambitions in biotech were far bigger than generic drugs. The CCP wanted China to become a "biotech superpower" with companies capable of competing with Western pharmaceutical multinationals on the frontier of medicine.

The Australian Strategic Policy Institute's (ASPI) Critical Technology Tracker found that China leads in research of four out of seven biotech categories: synthetic biology, biological manufacturing, genome and genetic sequencing and analysis, and novel antibiotics and analysis. In one of those categories (synthetic biology), ASPI judges there is a "high" risk of China monopolising that technology. Despite this China still struggles to produce novel drugs and therapies and remains deeply reliant on Western resources in this sector.

China's biotech industry has benefited from an influx of foreign capital, technology, and talent. In 2021, $2 billion in venture capital and private equity flooded into the sector. Most of the Western multinationals have major footprints in the country, often entering joint ventures with Chinese firms in the hunt for new drugs. These efforts are starting to bear fruit, although China remains behind the pack in drug discovery. China has had more success in the field of genomics. Its national champion is the now partially blacklisted, BGI Group, which began as a research institute of the (also now blacklisted) Chinese Academy of Sciences and runs the country's gene bank.

With COVID-19 believed to have originated in China and China's biotech companies working in secret ways suspicion of China's biotech companies likely will worsen the outlook for these companies in the years ahead, which will test the strength of its research base and native talent. In this sector China remains dependent still, after a decade on Western talent, technology, and capital,

Electric Vehicles (EVs)

No technology better exemplifies China's rise in manufacturing than electric vehicles (EVs). The daily news is filled with articles about the threat that Chinese EVs pose to Western automakers. These EVs are cheap. Some entry-level models, such as the BYD Seagull hatchback, sell for as little as $10,000. But Chinese EVs are not merely cheap. Thanks to sustained investment and focus on battery technology, drivetrains, and other fundamentals, Chinese automakers are producing EVs of impressive quality, with strong range, innovative features, and luxury stylings. China did not start from zero on autos or even EVs. When MIC2025 was announced, the country already had a large auto industry, dominated by China's big four state-owned enterprises.

MIC2025 set an ambitious goal of 3 million domestically made EV sales per year by 2025. China shattered that goal. In 2023, 6 million EVs were sold at home, plus an additional 2.8 million plug-in hybrids. Incredibly, China's supply has far outstripped substantial domestic demand. It exported nearly five million cars of all kinds in 2022, dethroning Japan as the world's largest auto exporter. Of those, more than one million were EVs, which have begun piling up at
European ports.

Energy and Power Generation

China is now the world's dominant power in energy and power generation equipment. The gulf between China and the rest of the world is most obvious in solar energy, one of the "new three" technologies that China is prioritising, along with batteries and EVs. The US Department of Energy's deeply researched report on the world's solar photovoltaic supply chain makes for sobering reading on this score. According to that report, China's share of the global supply chain exceeds 80% in 2021, China had 70% of the world's production capacity for metallurgical grade silicon, 98% of ingot capacity, 97% of wafer capacity, 81% of solar cell capacity, and 77% of solar module capacity.[19]

China has also snatched the lead from the US in nuclear technology, although its dominance is not nearly as complete as in solar. As with other fields, China established its footing in nuclear energy through joint ventures with Western companies, notably Westinghouse (US) and Areva (France). The condition for market access in China was technology transfer to China's two nuclear state-owned enterprises. These firms then collaborated on a design for their own third-generation nuclear reactor, heavily copied from foreign sources, and climbed the value chain in components, construction, and operation. As a result, China is now in an exclusive club of countries that have designed their own nuclear reactors and have the capacity to construct them using entirely domestic firms.

Despite these advances, China's nuclear expansion has fallen short of the CCP's ambitious goals. The country did not meet its target of 85 GW of installed capacity by 2020 and is still just shy of that target. It has also struggled to export reactors overseas, despite its grand vision of building a "Nuclear Belt and Road" of 30 overseas reactors by 2030. So far, Pakistan is the only country with Chinese nuclear reactors

High Speed Rail

China has laid more high-speed rail than the rest of the world combined, despite the country's late start at developing such a network. Today, China's high-speed rail stretches 28,000 miles, twice its length a decade ago, when MIC2025 was announced. China developed its rail industry using the time-tested strategy of forced joint ventures and technology transfer. China invited foreign companies to participate in the construction of its high-speed rail network, promising massive potential profits for an equally massive infrastructure buildup. As a condition of market entry, China forced these companies to enter joint ventures with Chinese firms, leading to the diffusion of knowledge and technology. China's supposedly indigenous high-speed trains bear striking resemblance to the trains that foreign companies like Canada's Bombardier and France's Alstom brought to China years ago. As in so many areas, China copied and stole from the best, then kicked out its foreign competition.

China uses high-speed rail as a diplomatic tool to integrate foreign countries into the Belt and Road network and develop export markets. But despite this the export performance of China's state-owned rail companies is underwhelming, and China has failed to meet the export targets it set in MIC2025.

Advanced and New Materials

In 2023, the scientific community was abuzz about South Korean scientists claiming to have discovered a room-temperature superconductor. The discovery would have been a monumental breakthrough in physics and materials science, dramatically decreasing the amount of energy required to run machines as diverse as supercomputers and MRI machines. Instantly, an international race began to recreate the crystalline material used by the South Korean scientists and replicate their findings.

Chinese scientists—many of whom were affiliated with the country's most prestigious national laboratories and universities—were among the first to recreate the material in question, and their preprint manuscripts flooded the internet. This episode demonstrated Beijing's ambitions in materials science. China still lags in many areas of materials science, but it has created a massive research and development (R&D) complex to catch up with its competitors—and ultimately, it hopes, leap ahead.

Of the 10 technology areas related to advanced materials, China has a research lead in all, meaning Chinese institutions are publishing the most highly-cited, high-quality research in those fields. In nanoscale materials, which are engineered materials up to 100nm in size that hold great potential for medical, energy, and construction applications. The Australian Strategic Policy Institute (ASPI) finds that nine out of the top 10 institutions in this field measured by the Hirsch index—a metric of scholarly impact—are in China, led by the Chinese Academy of Sciences. Measured another way, by proportion of most-cited papers, the entire top 10 list is dominated by Chinese institutions.

In lightweight, stiff, and strong carbon fiber, the advanced material key to strategic industries, China is now the world's dominant producer and has now been locked out of the market for advanced carbon fiber (so-called T1000 carbon fiber), due to multilateral export controls.

Robotics and Machine Tools

China has introduced robots into its factories on a scale and at a speed never before seen in history, China is in a race against time, as it attempts to automate its industry to make up for a shrinking pool of prime-age workers. The urgency of this task has made China dependent on foreign manufacturers of robots and advanced machine tools, like high-end computer numerical control machines. Beijing's goal in MIC2025 was to end this dependency. China has not yet built a national champion in robotics capable of challenging the world's leading companies.

Instead, China bought a champion. The country's most important robotics asset is KUKA, a more than century-old German manufacturer. The Chinese electrical appliance manufacturer Midea absorbed KUKA in 2016, one year after MIC2025 was launched. Midea initially took a small stake in the company before expanding that stake to 95% of outstanding shares and pushing aside its CEO. Tesla reportedly relies on KUKA robotic arms in its Gigafactories, including the Austin Gigafactory that produces the Cybertruck.[20] Midea undoubtedly hopes to digest the technology and knowledge that KUKA has built over the past century to improve China's standing in robotics.

China has not yet become a major exporter of industrial robots and has a limited footprint in the high end of the robotics and machine tool market, but its firms are becoming more sophisticated as they learn to service industrial clients at home.

Semiconductors

Today, China still trails much of the developed world in cutting-edge semiconductor fabrication, semiconductor manufacturing equipment, Electronic Design Assistance (EDA) software, and advanced materials like substrates and gases. It also runs a substantial trade deficit in semiconductors, relying on imports, mostly from Taiwan and South Korea, to meet the big demands of its internal market and manufacturers. However, it is developing home-grown alternatives in each area.

China has invested heavily to develop an indigenous semiconductor industry, spending potentially more than $150 billion in the past decade through state-led investment. This state-directed investment has produced some expensive failures, notably Tsinghua Unigroup, whose overextension and decline led to a round of corruption probes, prosecutions, and purges of company executives and managers. However, the investment has also produced successes. China's memory champion, Yangtze Memory Technologies Corp. (YMTC), was formerly owned by Tsinghua Unigroup, and has similarly benefited from massive state investment. The company is successful enough that in 2022, Apple considered using its memory products in devices for the Chinese market, although it scrapped that plan due to political backlash.

China's premier manufacturer of logic chips is Semiconductor Manufacturing International Corp. (SMIC), a state-owned firm with close ties to the Chinese military. SMIC has also battled US sanctions with considerable success. Multilateral export controls on semiconductor manufacturing tools have cut off SMIC's access to the most advanced chip making equipment produced by firms like ASML. In response, SMIC has pushed the boundaries of what is possible with older equipment. In 2022, Huawei stunned industry observers by releasing a new smartphone powered by a SMIC logic chip at the 7 nm node of production, just a few generations away from the cutting edge. SMIC produced this chip using older tools, although it is unclear whether this workaround can produce chips in sufficient quantities and with a high enough yield to be profitable.

Despite these advances, China remains substantially behind the cutting edge in virtually
all areas of semiconductor manufacturing. In particular, China lags in lithography equipment and EDA software and remains reliant on a handful of Western firms for such products. But the picture changes when one looks at legacy or "mature" chips, as well as other parts of the supply chain. These areas have not been the subject of as much attention or concern in Washington. But China's semiconductor industry is robust in them, posing a distinct threat to manufacturers elsewhere in the world.

Shipbuilding

In 2022 the US Office of Naval Intelligence reported that China's shipbuilding capacity exceeded America's more than 200 times over. This remarkable statistic speaks to the equally remarkable rise of China as a shipbuilding power. Chinese shipyards now float as much tonnage each year as the rest of the world's shipyards combined, while US commercial shipbuilding has shrunk to a fraction of a percent of global output, behind small maritime powerhouses.

The three "crown jewels" of the shipbuilding industry are aircraft carriers, liquified natural gas (LNG) tankers, and luxury cruise ships. China has proven its metal in all three areas. In May 2023, the PLA Navy (PLAN) began sea trials of the Fujian, China's third aircraft carrier and its first to be designed and built domestically, as well as its first to employ catapults. China is competing fiercely with Korea for LNG tanker orders, with three shipyards taking contracts for the huge vessels in recent years. China's Hudong-Zhonghua shipyard recently released a design for the world's largest such tanker, in collaboration with Qatar. In 2022 China's first domestically built luxury cruise liner, the Adora Magic City, embarked on its maiden voyage.

But whilst China has demonstrated the ability to build these cutting-edge vessels this does not mean its shipbuilding industry as a whole is cutting-edge. The Fujian is not nuclear powered (although the PLAN has a host of nuclear-powered attack submarines), and has fewer elevators and catapults than the US Navy's Ford class carriers. Korean shipyards remain the most sought-after destinations for LNG tankers. And the Adora Magic City is far from the world's largest or most advanced cruise liner—and in fact, only 30% of the ship's suppliers were Chinese. Despite this, China's growing strength in shipbuilding is already having strategic consequences.

Smart Manufacturing

At the centre of MIC2025 is to build a modern and sustainable manufacturing sector. Beijing promotes "smart manufacturing" as a means of upgrading Chinese industry so that it is advanced, not merely large. Smart manufacturing integrates digital technology and automation into factory settings to monitor production, increase productivity, and reduce downtime and reliance on line workers.

China has made great strides to upgrade its industry, dramatically increasing factory automation and building cutting-edge factories in large numbers. However, China still depends on foreign multinationals and imports to satisfy its voracious demand for advanced machine tools and robots. It also lags behind the most developed countries in its degree of automation, reflecting the fact that much of China's mammoth industrial base is not yet cutting edge—though it is still formidable.

China's installation of industrial robots is a useful proxy for the state of its manufacturing base. According to the International Federation of Robotics, China installed more industrial robots in 2022 (290,258) than the rest of the world combined and has been the world's largest market for industrial robots for more than a decade. Perhaps a more useful statistic than sheer volume of robots is robot density, which measures how many industrial robots a country has against the number of workers it employs in manufacturing. China has made strides here as well. In 2021, China surpassed the United States in robot density. It now ranks fifth in the world, well below the world leaders of Korea and Singapore, but evenly matched with Germany and Japan. This is an impressive feat, given the sheer size of China's manufacturing sector; it employs roughly 38 million people in manufacturing.

In Smart manufacturing China still relies on the expertise and technology of foreign multinationals for some categories of high-end, high-value industrial goods. However, China's aggressive procurement of such technology, paired with its leadership in telecommunications, shows that its manufacturing sector is far more advanced than it was a decade ago.

Conclusions

A 2024 analysis by the South China Morning Post found that of the more than 260 goals proposed under the MIC2025 plan, more than 86% of the targets have been achieved. The report found targets in sectors such as electric vehicles and renewable energy were well surpassed, all the goals in robotics, agriculture machinery, biopharmaceuticals and marine engineering were fulfilled, though some targets such as advanced photolithography technology, intercontinental passenger aircraft and broadband internet satellite networks were unfulfilled. The sector with the lowest completion rate was new materials, at 75%[21].

MIC2025 has been a resounding success and has seen China achieve in a decade what previously would take a lifetime. By focusing on strategic sectors, throwing money at it and acquiring the skills and knowledge from abroad it now leads in areas that just a decade ago was led by the tech and science giants from the West. China has reached, or is near to reaching, the technological cutting edge in most of the sectors it has targeted. Of the 10 sectors targeted by MIC2025, China can credibly claim to be the world leader in four (Electric Vehicles, Energy and Power Generation, Shipbuilding, and High-Speed Rail); China is therefore shaping up to be a superpower of green energy and advanced logistics, often in areas of technology with obvious military application. In five sectors, China has made substantial progress toward the technology frontier but is not yet a leader: Aerospace and Aviation, Biotechnology, New Materials, Robotics and Machine Tools, and Semiconductors. In just one sector, Agricultural Machinery, has China fallen short of its aims. If Xi Jinping were a fund manager, he would have every reason to be pleased with the performance of this portfolio. China's investments have generated outsized returns in not one, but several sectors.

CPEC: A Decade On

In a visit to Pakistan back in April 2015, Chinese premier Xi Jinping signed the China-Pakistan Economic Corridor (CPEC) agreement with then Prime Minister Nawas Sharif. This was to be the flagship for China's much-vaunted Belt and Road Initiative (BRI). In 2025 the $62 billion mega project will be a decade old. Whilst both nations called the project a win-win at the time as it would provide much-needed infrastructure investment for Pakistan and shorten trade routes for China with direct access to the Indian Ocean. But a decade on the project is suffering from numerous challenges, delivering little, exacerbating long standing tensions and attracting myriad controversies.

The One Belt One Road (OBOR) project is now officially called the Belt and road initiative (BRI) and was a mega project to create economic corridors that would criss-cross Eurasia. After the global economic crisis of 2008 China's leaders recognised, they needed to change their economic model as the export driven model had run out of steam. Unable to shift to another model after spending a few years stimulating the economy, Chinese leaders turned to creating economic corridors. The Belt aspect of the project was to create infrastructure in a new 21st century Silk Road with railways, roads, optical fibre and other communication tech. The Road aspect was not a physical road but sea lanes linked together by ports.

China's dependency on sea routes meant its economy could be halted in any blockade or war and here CPEC was born. China also needed to develop the Western portion of the county that had largely been left behind as China's rapid economic growth began three decades ago. The mission envisaged a 1,800 mile long infrastructure network project which would shorten the route for China's energy imports from the Middle East avoiding the existing path through the Straits of Malacca between Malaysia and Indonesia, which could be blockaded in the case of war.

The initiative was divided into three phases. The short-term phase from 2015-2022, focused on basic infrastructure, energy, and port development projects. The medium-term phase from 2021-2025, aimed to establish 33 special economic zones (SZEs). The long-term phase from 2030 envisaged linking together all the different infrastructure projects to deliver the benefits of the economic corridor. However, a decade on the initiative in Pakistan has met multiple roadblocks, delivering very little and attracting myriad controversies. CPEC projects have seen delays due to political instability, financial crisis, and terrorism which have all limited the implementation of CPEC projects.

Due to the ambition of CPEC, Pakistan has been the biggest recipient of BRI funds. China's $62 bil-

lion investment in CPEC funded a wide range of schemes. Some of these programs were successful, like the $1 billion coal power plant established in the Thar Desert. However, the vast majority of Pakistan's BRI-funded projects ran into trouble—20% have been cancelled completely or stalled indefinitely—and the slew of loans compounded Pakistan's $100 billion foreign debt, a third of which is owed to China. For China, CPEC is a key aspect of its BRI goals. For this to all happen a host of additional development was needed in Pakistan to support the corridor. As Pakistan has suffered from mismanagement and corruption for decades this was going to be a mammoth task that would need new highways, railways, energy and power development and new ports.

"a decade on the initiative in Pakistan has met multiple roadblocks, delivering very little and attracting myriad controversies. CPEC projects have seen delays due to political instability, financial crisis, and terrorism which have all limited the implementation of CPEC projects."

Half of CPEC projects were spent on energy, due to Pakistan's energy problems. CPEC has made tangible contributions to Pakistan's infrastructure and energy sectors. The projects in the energy sector added over 5,000 MW to the national grid. Despite this Pakistan still suffers from persistent electricity cuts and load shedding. But all this has come at a major cost to Pakistan as its national debt has increased. CPEC was funded largely by loans Pakistan took from China and now over a third of Pakistan's $100 billion plus debt is owed to China and debt repayment is consuming half of Pakistan's national budget.

The first phase of CPEC was hampered by the fact that the Chinese did not undertake a feasibility exercise of Pakistan, and this has led to persistent delays as a lot of basic infrastructure was not in place. The second phase of CPEC has also seen delays due to political instability, financial crisis, and terrorism, all have limited the implementation of CPEC projects over the past ten years.

Whilst Pakistan originally touted CPEC would lead to job creation and development in provinces such as Baluchistan as the decade went on these have not transpired and has led to persistent attacks on Chinese workers in Pakistan's poorest province and now there is a full-blown insurgency taking place by the Baluchi separatists. Besides the resistance groups, many locals also do not trust the Chinese any more than they do Islamabad. CPEC activities in Gwadar have also not managed to change the fate of its people, and the influx of Chinese workers and Pakistani soldiers to work on the projects and provide security has led to further alienation.

The Gwadar port on the Indian Ocean was meant to be the crown of Pakistan development. The port was completed in 2007 and handed over to a Chinese operating company in 2013 and was to become the heart of the CPEC. It would be integrated into a new special economic zone that would transform Gwardar into a bustling port city. But the port has only logged 22 ships in its best year to date.[22] It has also failed to attract any regularly scheduled deep-sea shipping lines. Gwadar is operating at very limited capacity, processing almost no cargo that could generate income for Pakistan — or, for that matter, for the Chinese operating company. After a decade of CPEC, the port at Karachi handles more cargo.

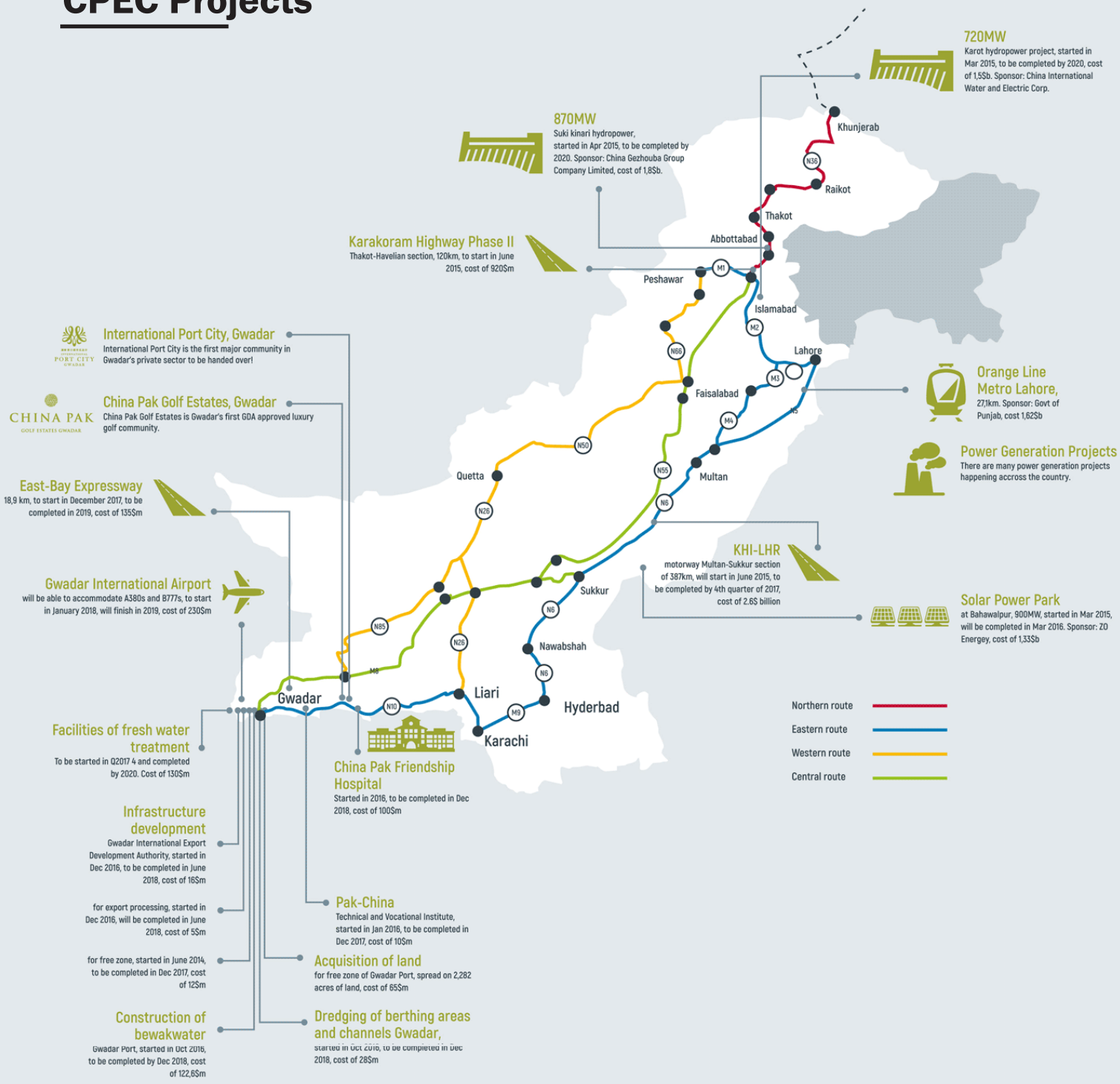
Not surprisingly Saleem Mandviwalla, the chairman of the Senate Standing Committee on Planning and Development confirmed in 2021, the Chinese were not satisfied with the pace of work on CPEC and no progress on the portfolio was seen during the last three years. *"They are crying, the Chinese ambassador has complained to me that you have destroyed CPEC and no work was done in the past three years."*[23]

The Special Economic Zones (SEZ) were meant to be a key part of the second phase of CPEC. Islamabad was hoping it could have its own Shenzhen and Shantou to drive economic growth. But there has been no visible impact on Pakistan's exports or the broader economy. China has not followed through with investment in the SEZs, which has resulted in this aspect of CPEC also stalling.

The China-Pakistan Economic Corridor (CPEC), one of the BRI's cornerstone initiatives, has not lived up to the promise of building an economic corridor promoting bilateral connectivity. Massive Chinese loans for CPEC have done little to achieve the dream of creating an industrial partner in the region. The initiative on the other hand has compounded Pakistan's economic problems by exacerbating corruption and creating further debt for Pakistan. The initiative is too big to fail and ambitions and expectations have been scaled back. Whilst CPEC has not failed, it has not lived up to the lofty ambitions from a decade ago. Fixing this requires many other issues to also be

solved, which is very unlikely and it's likely China will try to muddle through and get the best it can as the project is just too important for China's brand to be abandoned.

CPEC Projects



Is China the New Power in the Middle East?

The 10th China-Arab States Cooperation Forum concluded on the 30th of May 2024 with a joint statement on the on-going war in Gaza. Addressing Arab leaders, Chinese premier Xi Jinping said Israel's war on Gaza *"…should not continue indefinitely…"* and *"…justice should not be absent forever".* In his keynote address, the Chinese leader also said China was willing to work with Arab countries to deepen cooperation in fields ranging from oil and gas to trade and investment, as well as forge new areas of growth such as in artificial intelligence. *"China will further strengthen strategic cooperation with the Arab side in oil and gas and integrate supply security with market security,"* he said. Chinese ties with the Middle East rulers have grown over the past decade and this has worried several US policy makers. Despite the media coverage and calls for concern, China remains a lightweight in the strategic region and this is unlikely to change in the near term.

Up until the 1990s China was virtually absent in the Middle East. Aside from supplying cheap, hard-to-get weaponry for states such as Iraq, Iran and Saudi Arabia, China had no economic and diplomatic ties. China looked at the Middle East as an arena where the US and Soviet Union were competing with each other, and China's foreign policy was focussed on its desire to isolate Taiwan and trying to get much of the world to recognise Beijing as the legitimate ruler over all of China. In the months following the 1989 Tiananmen Square massacre, the Middle East leapt to prominence for China as Western capitals ostracised Beijing and imposed sanctions. By 2000, all states in the Middle East had broken official ties with Taiwan and established full diplomatic relations with the Communist Party, which they recognised as the sole legitimate government of all of China.

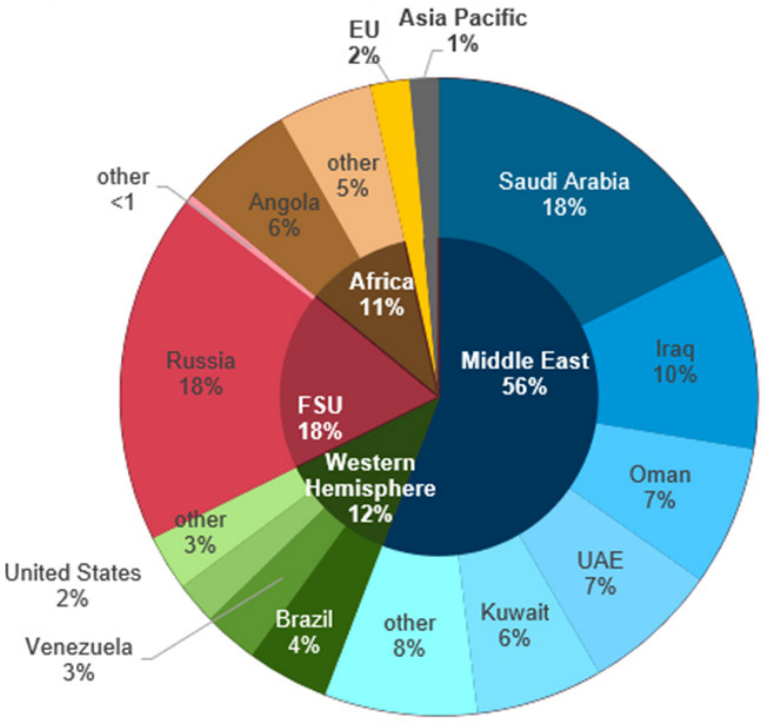
The Thirst for Oil

In 1993 China was unable to fulfil its domestic energy needs from domestic production and it turned to the Middle East for its energy imports. By 1995 the Middle East became the number one source of oil for China. China's rapid growth and stature as well as enormous population means it needs supply lines for raw materials, commodities and more importantly oil, and this is where the Middle East came into the picture. China consumed 15 million barrels per day (mbd) of oil in 2022. But only 5 mbd of this is from domestic sources, leading China to surpass the US as the top global importer of oil in 2017. There are 45 nations that fulfil China's demand for oil; over half of this oil comes from nine countries in the Middle East, with Saudi Arabia providing the lion's share. China's most important reason for being present in the Middle East is energy. The Middle East will remain China's largest source of oil imports and that is the strategic significance of the Middle East.

The Middle East has also grown in importance for China as the US and Europe engage in a trade war with Beijing. With western markets likely to place further restrictions on Chinese goods, the Middle East with its growing population will become even more important for Beijing.

Trade data over the past six years underlines the shift. China and the Middle East traded $507.2 billion of goods in 2022, according to customs data, double

China Oil Imports



the level in 2017. Trade with the Middle East rose 27% in 2022, surpassing the growth with Southeast Asian nations (15%), the European Union (5.6%) and the US (3.7%). Over 80% of Chinese trade with the region is over petrochemicals. China also now has at least 20 port projects along critical maritime passages that straddle the Middle East and North Africa. China enjoys comprehensive strategic partnerships or strategic partnerships with 12 Arab countries, and 21 Arab states, along with the Arab League, all have formally signed onto the Belt and Road Initiative (BRI).

The Iran factor

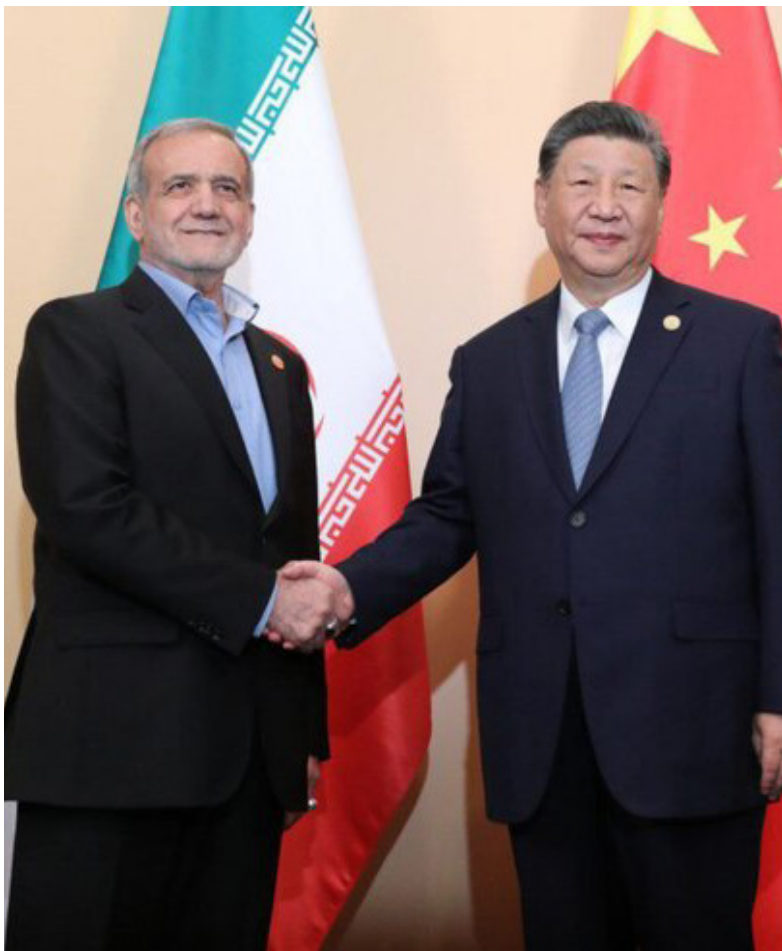
The Iran–China 25-year Cooperation Program agreement was announced in July 2020 and led to much speculation regarding its impact in the volatile Middle East region. The possibility of China securing vital commodities, providing a lifeline to the embattled regime in Tehran, establishing a strategic footprint in the region and challenging the US were seen as real possibilities with the deal. Beijing committed to investing in Iranian oil and gas sectors, constructing railroads and improving manufacturing. In exchange, Iran agreed to provide energy to China at a special discount. The deal also incorporated strong military cooperation between the two nations.

But nearly 5 years on little progress has been made, whilst Iran's isolation has got worse. Iran in the past turned to China to relieve economic pressure but China doesn't have a good track record of delivering. Not surprisingly there are a lot of promises in the China-Iran Cooperation Programme, but many challenges will need to be overcome for this strategic deal to come to fruition. Whilst it's too early to assess its impact, for the moment it's a deal that remains on paper.

The gathering of the Middle East leaders in Beijing saw a lot of fighting talk about the Gaza war and the broader issue of Palestine. China has criticised the western position of supporting Israel in its genocidal war. Despite China's two-decade involvement in the region it hasn't got involved in arbitrating local disputes. China has called for a Palestinian state, but this has been the long-term plan of the US. Even Chinese mediation between Iran and Saudi Arabia in 2023 was in coordination with the US and Saudi officials remained in close contact with US officials as the talks progressed. China's challenge in the Middle East is the fact it has no security presence that would allow it to impose and maintain its diplomatic architecture in the region. The US maintains influence in the Middle East through vassal states, through its maintenance of Israel and its military presence via bases, troops and aircraft carriers in the region. China's military involvement in the region remains virtually non-existent so far. China's naval base in Djibouti is the most visible sign of Beijing's regional presence. But for the moment China looks happy with pursuing trade under the US regional security umbrella.

Beijing has traditionally preferred the promotion of trade and investment in the region and whilst its ambitions in the Arab world have expanded beyond trade in recent years, trade is dominated by petrochemicals. Beyond oil, Chinese officials seem to be more interested in courting Muslim-majority nations in the Middle East to temper international criticism of the Communist Party's efforts to forcibly assimilate Muslim minorities in the northwestern region of Xinjiang.

China's strategy towards the Middle East is best characterised as that of a wary dragon; eager to engage commercially with the region and remain on good terms with all states in the Middle East, but most reluctant to deepen its engagement, including strengthening its diplomatic and security activities beyond the minimum required to make money and ensure energy flows.



China's Africa Ambitions

On 5th September 2024, Xi Jinping gave a keynote speech in Beijing at the 2024 Forum on China-Africa Cooperation (FOCAC) summit. At the triennial summit, Xi outlined plans for engagement with Africa and denigrated Western modernisation efforts in the developing world as bringing ''great suffering,'' and juxtaposed China's support as providing Africa with a ''new type of international relations''

China has significant political and economic engagement with the region and views its activities there as important to supporting continued Chinese economic growth and international development. Politically, close relations with African countries provide China with a strong dose of international legitimacy and support for a range of international and political issues.

Economically, Beijing has focused on gaining access to natural resources, creating markets for Chinese-manufactured goods, and developing manufacturing facilities that can take advantage of the continent's low labour costs. China's Belt and Road Initiative also envisions linking at least the East Coast of Africa to its 21st Century Maritime Silk Road,

China's engagement with Africa began soon after the People's Republic of China was established in 1948. As China was so far from Africa initial relations were based around third world solidarity, anti-colonialism and support for African independence movements. By the 1970's China sought allies on the continent against Taiwan and for the CCP to be seen as the legitimate representative of all of China. This paid off in 1971 when support from 26 African states helped ensure the passage of UN General Assembly Resolution 2758, which expelled

Taiwan from the UN and declared that the People's Republic was the sole legitimate representative of China at the UN.

As China began to open and reform from 1979, it reached out economically to Africa. Chinese companies initially had trouble competing with more experienced Western firms, but—aided by Chinese subsidies, loans to African governments, and high-profile public works gifts that won local leaders' favour—they eventually made inroads in the resource- and labour-intensive petroleum, mining, and construction sectors.

Chinese interests in Africa revolve around three key interests. Access to natural resources, particularly oil and gas. Export markets for Chinese manufactured goods. As well as international political legitimacy as a global power, including recognition of Beijing as the sole representative of China and acknowledgement of the principle of non-interference in sovereign countries internal affairs.

Chinese economic engagement gains considerable global media attention. China's economic engagement has focused on gaining access to natural resources, creating markets for Chinese manufactured goods, and developing manufacturing facilities that can take advantage of the continent's low labour costs. China's principal interest in Africa is to ensure access to the raw materials it needs to fuel its own economy—principally oil, gas, metals, and minerals. It thus invested heavily in countries that are richly endowed with such resources, and its trade with the continent is overwhelmingly concentrated in raw materials.

From 2003 to 2010, more than half of China's investment in Africa was concentrated in the oil sector. Today, China's imports from Africa consist overwhelmingly of natural resources; 64% of its imports from the continent consist of petroleum, 16% consist of iron and other metals, and 6% consist of copper. China looks to Africa as a growing market for Chinese-made products. Although Africa is the destination for the smallest share of China's exports overall, with only 3% of China's exports ($125 billion in 2023), this figure has risen more than 41-fold since 2000.

With the cost of labour in China increasing, Chinese companies have increasingly established manufacturing facilities in Africa (as well as other countries). Chinese firms now manufacture everything from electronics to vehicles to shoes in African countries, in some cases from Special Economic Zones (SEZ) that host nations have established to attract such Chinese investment.

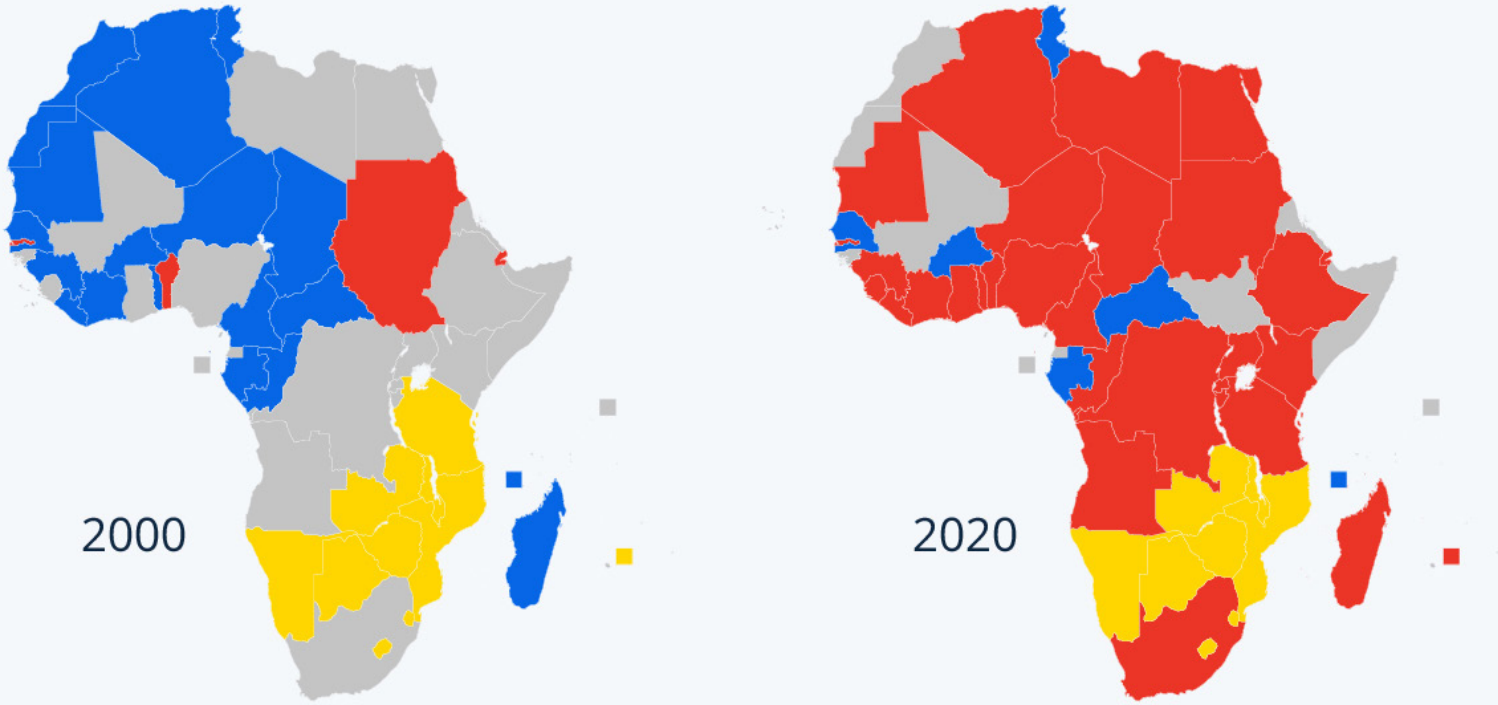
China has been increasing its military and security engagement in the region. This culminated in China's first overseas military base in Djibouti, China refers to this as 'a facility to provide logistical support to Chinese fleets performing escort duties in the Gulf of Aden and the waters off the Somali coast" but that others have subsequently described as China's first overseas military base.

Africa is now a battleground between Russia and China on one side and the US and its allies on the other. Xi's speech showed that China looks upon Africa as vectors to push Chinese diplomatic and political objectives amid its strategic competition with the West. Xi's explicit condemnation of Western development efforts and lauding of China's ''alternative model," as well as his characterisation of China as a leader of the Global South and an ''all-weather" partner of Africa, show Beijing's long-term commitment to ideological competition with Western liberal democracies and fostering international acceptance for development models that promote economic growth without democratisation.

China's African Trade Takeover

Top source country for imports in African countries*

France South Africa China Other



* Based on value of imports. 2019 data for Angola, Cameroon, Côte d'Ivoire, Gabon, Libya, Somalia, and Sudan. South Sudan became independent from Sudan in 2011.

Sources: OEC, World Bank, Statista research

Conclusions

China received global headlines as the nation that will challenge US hegemony. But China's priorities and challenges are closer to home. Domestically, China faces major challenges with its economy and after more than a decade it has not been able to transition to a more sustainable economic model. China's main foreign policy challenge is dealing with US containment strategies and whilst the CCP is pushing back against America's trade war and economic sanctions, aside from talk about dropping the dollar China has little political capital to stand up against the US. The US has continued to use provocations against China with its aircraft carriers regularly traversing the Straits of Taiwan. The longer Taiwan remains independent the more difficult it will become for China to reunify with the island and its military will remain the only option. China has watched closely the tactics the US used against Russia in Ukraine and will be wary to undertake any offensive until it's firmly ready to deal with the repercussions. All of this takes place with China's domestic problems growing.


Europe

Europe Waning Support for Ukraine

When Russia invaded Ukraine in February 2022, a divided European continent got its house in order. Europe was divided between those who saw Russia as the enemy and those that saw it as an energy supplier. There were those who believed you could do economics with Russia but not politics. When Russian troops moved into Ukraine the European continent got behind the US and decided it was now at war with Russia.

In 2024 Europe continued to provide both military and economic support to Ukraine. Europe has contributed over $47 billion in military aid. This includes significant deliveries of weapons such as tanks, air defense systems, fighter jets, and artillery ammunition. The EU also committed $6.6 billion through the European Peace Facility and launched a Ukraine Assistance Fund worth $5.4 billion to enhance Ukraine's defence capabilities. Additionally, the EU has trained around 60,000 Ukrainian soldiers and provided equipment for humanitarian efforts in liberated areas. At the same time the EU has committed more than $60 billion in economic and humanitarian aid, ensuring Ukraine can maintain essential public services such as hospitals, schools, and housing, as well as paying wages and pensions. Europe has absorbed around 8 million Ukrainian refugees, primarily women and children, and allocated $18 billion to support them with access to work, healthcare, accommodation, and education. By the end of 2024, the EU agreed to commit an additional $54 billion for Ukraine's recovery and reconstruction, bringing its total pledges to more than $167 billion. These funds are targeted at rebuilding infrastructure and helping Ukraine carry out reforms necessary for its path towards future EU membership.

But despite all of this support, the restrictive conditions placed by Europe on how weapons can be used on the battlefield together with sluggish decision-making translated into an inconsistent pace of supply. Much of this is due to European nations not having a consensus on how to help Ukraine. This is especially visible when comparing support coming from Germany and the UK, the top two European spenders on military aid for Ukraine. The two states disagree on how the military equipment they provide can be used on the battlefield. Germany disagrees with the UK position of supporting Ukrainian missile strikes into Russia.

Europe faced another problem in 2024, that of waning support amongst its public for the war. In Germany every poll shows support is waning and this is what led to Berlin to announce in July 2024 it was cutting its support in half in 2025. Across Europe 'as long as it takes,' is now shifting to Ukraine should accept territorial losses and enter into talks with Russia. The waning of public support is a major problem for Europe as Russia's effective annexation of European territory poses a major long-term threat to them.

In this light a number of European nations made public the need for bringing back the draft as opin-

ion seems to be forming that continental wide war may be the only way to roll back Russia's expansion. Several European nations have reintroduced or expanded compulsory military service amid Moscow's mounting threat, part of a range of policies aimed at boosting defences that are likely to be scaled up even further. Robert Hamilton, head of Eurasia research at the Foreign Policy Research Institute, who served as a US Army officer for 30 years said: "*We are coming to the realization that we may have to adjust the way we mobilize for war and adjust the way we produce military equipment and we recruit and train personnel. It is tragically true that here we are, in 2024, and we are grappling with the questions of how to mobilize millions of people to be thrown into a meat grinder of a war potentially, but this is where Russia has put us.*"[24]

"Across Europe 'as long as it takes,' is now shifting to Ukraine should accept territorial losses and enter into talks with Russia."

Debates about conscription have also been taking place in a number of European countries that currently don't require it. In the UK, the Conservative government floated the idea of military service in their ill-fated election campaign. But perhaps the most surprising transformation is underway in Germany, which since the end of World War II has had an aversion to militarisation. In another first since the Cold War, Germany in 2024 updated its plan should conflict erupt in Europe. The Defense Minister Boris Pistorius presented a proposal for a new voluntary military service.

Europe in many ways is giving up on Ukraine but preparing for the longer-term threat posed by Russia. But with the European defence industry unable to supply European armies for the future confrontation this remains Europe's critical vulnerability.

Boosting Europe's Defence Capabilities

The Ukraine war exposed the de-industrialisation that has for long been taking place in Europe and calls for Europe taking responsibility for its own defence and equipment has been growing. The fact that Europe needed the US to do the heavy lifting both financially and militarily in Ukraine only exposed how deep the decline is. It was in this context in March 2024 the European Commission unveiled the European Defence Industry Strategy (EDIS) and the European Defence Investment Program (EDIP), both of which were meant to boost the bloc's defence development capabilities.

Europe is currently going through its largest rearmament process since the Cold War, but the war in Ukraine has only highlighted the numerous challenges the continent faces when it comes to defence production. A September 2023 study by the French think tank IRIS showed how the vast majority of European defence spending was going to foreign companies, with the EU sourcing nearly 80% of its weapons from contractors outside the bloc (and more than 60% from the US alone). Moreover, according to the European Defense Agency, only 18% of EU arms procurements are currently done in a cooperative manner.

The new EU defence industrial strategy seeked to support member states' efforts to restock and acquire new defence equipment in the short term and boost the European Union's ability to enhance its defence capabilities and acquire more strategic autonomy on defence in the long term. The new defence strategy tried to redress this situation.

The European Defence Industry Strategy (EDIS) and the European Defence Investment Program (EDIP), both aim to facilitate cross-border cooperation for arms production, purchase and ownership between EU member states, strengthen the bloc's defence technological and industrial base, and create an EU market for defence.

The EDIS set targets for EU nations to procure at least 40% in a collaborative manner by 2030. It aims to promote more coordinated investment in Europe. It intends to also support strategic projects for Europe and foster greater defence-industrial ties between member nations. The EDIS will also see the creation of a European Military Sales Mechanism, which would be Europe's version of the US Foreign Military Sales mechanism, under which the US helps foreign countries buy from US companies. The European Defence Investment Program (EDIP) aims to support investment in production capacity and research and development (R&D). It will create a fund to help support supply chain transformation and find the integration of the EU's defence industrial base.

Both the EDIS and EDIS touch on issues which have long caused tensions amongst member states, that of sovereignty and independence. This defence industrial strategy has integration as a central component which has long been problematic amongst member states. The need for the EU to achieve strategic autonomy in defence requires the fostering of a resilient military-industrial base, but significant differences remain among member states over the scale and type of financing for the initiative, as well as what role

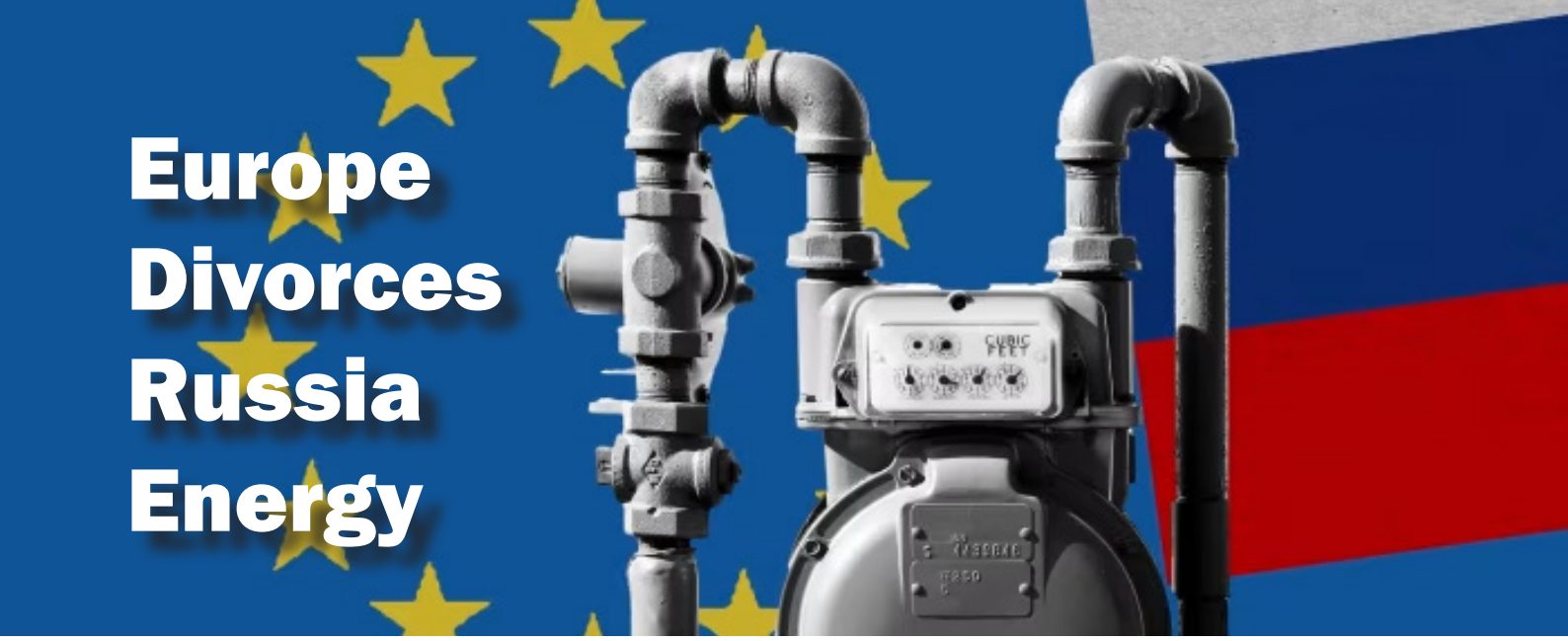
Brussels will have in coordinating arms sales and procurement.

The European Commission has so far only earmarked €1.5 billion for EDIP until 2027. In order to significantly transform the EUs military-industrial complex much higher spending levels will be needed. European Commissioner for Internal Market Thierry Breton said as much as €100 billion was needed to achieve the goals of the strategy. Without a substantial funding increase, plans for a new joint procurement mechanism will not have much impact. Many of the initiative's objectives and proposals will likely be watered down once they're translated into concrete policy proposals due to disagreements on spending, centralisation of responsibilities, and potential interoperability issues with NATO that could emerge.

The only way the EU will meet the aims of this strategy is by the continued expansion of national defence budgets. But this will likely be curtailed by funding limitations and rising economic challenges. Rising debt levels, the decarbonisation agenda and supporting Ukraine in its war will all act as constraints to the budget demands upon the EU.

Whilst the EU has recognised it needs to make deep changes and stop the decline of its defence industrial base the solutions being proposed will face major challenges. If the war in Ukraine does expand and Russia escalates the war, Europe is not in any position to ramp up production for the war effort.

Europe Divorces Russia Energy



Europe has for long spoken about the need to reduce its energy dependency on Russia. Germany and much of Eastern Europe's dependency on Russian energy has been seen as a security issue and successive EU reports and investigations proposed reducing dependency on Russian energy. These concerns went into fifth gear when Russia invaded Ukraine and sanctions were placed on Russia.

Europe was importing 96% of its oil, prior to Russia's invasion of Ukraine, with a quarter of this coming from Russia. 85% of the continent's natural gas was also being imported with Russia supplying over 50% of this. Europe's dependency on Russian energy was so high alternatives would take decades to develop. But Europe's campaign to sever its energy links with Russia took-off in earnest when Russia invaded Ukraine.

Russia has been a key supplier of energy to Europe. Europe needs energy, and Russia needs revenues, and this arrangement spawned the construction of a network of pipelines that made them all but inseparable partners. But after the invasion of Ukraine, Western countries could not allow the Kremlin to continue receiving money that could be used for military purposes, so the energy sector was the first to be hit.

By the end of 2024, Europe has significantly reduced its oil imports from Russia due to sanctions and efforts to diversify energy sources. Russian oil now only makes up 1% of the European total oil imports, a steep drop from the 21% share in 2022. The EU achieved this by turning to other suppliers like the US, Kazakhstan, Norway, and Saudi Arabia to replace Russian oil. However, some countries in Europe, particularly Hungary and Slovakia, continue to receive Russian crude oil via pipelines, which are not fully sanctioned. In June 2024, EU oil imports from Russia were recorded at around 862,000 tonnes, down 44% from the previous year.

Reducing Europe's Natural gas dependency from Russia was a much more difficult task. Before Russia's invasion of Ukraine, Europe received 44% of its natural gas supplies from Russia. It planned to completely abandon Russian gas by 2027. After the Yamal-Europe pipeline stopped transporting and the Nord Stream exploded, Russia's share of Europe's gas imports fell from 44% to 15% as Norway and the US jumped to the top of its supplier list. But natural gas was unique in that it never really fell under sanctions. Only the transit of Russian LNG through the ports and terminals of EU member states to third countries – not a ban on supplies to the EU itself were sanctioned. So though Russian gas is diminished in the European market, it is still a source of income for Moscow. Thus, contravening the entire point of sanctions.

The EU overestimated its ability to completely leave Russian natural gas and find alternative sources of gas and expand the production of renewable energy. Both are critical in electricity generation, with 20% of Europe's electricity production coming from burning natural gas and 40% from renewables. Increasing renewables would make Europe more dependent upon China who dominates solar panel production.

After the initial successes, Europe's campaign to sever its energy links with Russia appears to have hit a standstill. Options for filling gas pipelines with non-Russian gas are few and far between. LNG supplies fluctuate and require new infrastructure. And many European governments are wary of trading dependence on Russian fossil fuels for dependence on Chinese solar panels and wind turbines.

Hungary's Strongman

Viktor Orban has been Prime Minister of Hungary since 2010 and for many across Europe, he represents a sentiment many have long subscribed to. Vehemently anti-immigrant and considering him a defender of Christna values, as a nationalist he has stood up against every EU policy. The movement against European integration finally got the person they long desired and he has delivered as far as they are concerned. But in April 2024 his long reign was challenged as tens of thousands of demonstrators gathered in the country's capital, calling for his downfall.

Soon after Orban became Prime Minister he created an ideology around himself which has influenced many across Europe. The key aspect of this ideology is to be against migration, something many in Europe have turned against as the economic conditions have declined, and migration has increased.

Orban came to power in 2010 around the same time millions of people from the Middle East and North Africa came to Europe seeking refuge. Despite domestic resistance many European governments allowed them entry. Orban however went against the EU. His position was that Hungary was not just a place but a culture and that waves of immigrants threatened that culture and history. His position won support in Central Europe, where an anti-migration coalition formed in opposition to the prevailing view in Brussels. Over the years, Orban's view has gained many more adherents throughout Europe.

Orban was hostile to what he referred to as "woke" culture, particularly its attitude toward homosexuality. His criticisms were based on a conservative understanding of Christianity but even more on the belief that homosexuality would corrupt Hungarian society. He took a stand against the EU, and his position gained acceptance in other countries over time. In Holland, the party of Geert Wilders, who has been an open ally of Orban, achieved a similar feat by unseating the government in general elections in March 2024.

Orbán's influence also reached the US. During a trip in March 2024, Orban met Donald Trump. They appeared to reach a common understanding as both referenced the meeting in subsequent speeches.

Another aspect of Orbán's ideology is standing with Russia and not with Europe over the Ukraine war. Orban visited Moscow just before Putin's invasion in February 2022. His trip was given significant media attention. Orban suggested that Russia's demands were reasonable and said sanctions against the Kremlin would not work. In doing so, he broke rank with Hungary's NATO. Shortly after the war started, Orban refused to commit Hungarian forces or even to allow NATO to base weapons in or transport them through Hungarian territory, which was a setback for the NATO and EU campaigns to support Ukraine, which shares a border with Hungary. Orban's positions seem to track more closely with Putin than Europe.

Orban, like many anti-EU politicians, is tapping into sentiments that are widely prevalent across Europe. Hungarian public opinion wanted no part in the war in Ukraine, just as it did not want immigrants. Orban, much like Trump, has long been very effective in tapping into public sentiment, whilst mainstream politicians have failed.

Since Orban became Prime Minister back in 2010, the Hungarian opposition has been fractured and been ineffective. This has allowed Orban to pass laws and restrict freedom of speech and maintain his grip on power. Orban in many ways is the European version of Donald Trump and his decade long rule shows the values and future the EU long promoted is struggling for survival.

The German Crisis

Germany is the world's largest economy after the US and China. It is however Europe's largest economy by a considerable margin. There was less than a year left until the next general election was due but the government in Berlin collapsed in November 2024 after differences in the rainbow coalition caught up with them. 2024 has been an unprecedented year in German history as a number of decisions made by the German political class have now caught up with them. The collapse of the government is relatively minor compared to the strategic challenges that are now engulfing Europe's premier nation.

Germany in the decades after WW2 and since reunification in 1990 has built a manufacturing giant. Germany created a manufacturing colossus that outstrips the German public's capability to consume it all. German consumption, even before its population was in decline, was never sufficient as a result Germany came to see the European Union as its very own domestic market. This is why Germany joined the union from its inception. This is why today 50% of German GDP is based upon exports.

Germany's focus on external markets has seen various brands emerge as global power houses. Many German brands are well renowned in automobiles, chemicals, sports, banking, telecoms and civil engineering. German brands such as Mercedes, Volkswagen, Siemens as well as a host of other German companies are world renowned brands due to Germany being an industrial power that focused on exports. German carmakers are so important to the German economy they constitute 10% of Germany's GDP. That's why the world was shocked in October 2024 when Volkswagen announced, it was for the first time in its near century history closing multiple plants as its sales continue to decline.

The reason why German automobiles, who for long have been global leaders, are struggling is due to the rise of China. Like many other companies' German carmakers also opened plants in China to take advantage of cheap Chinese labour. But China has now learnt the skills and acquired the technical knowledge to make its own cars and compete with German car makers. China is a global leader in Electric Vehicles due to advances in battery technology and has surpassed anything produced by western car makers. China is on its way to becoming the world's largest car maker, it's already the world largest EV producer. German car makers, despite their istory, are struggling to compete with Chinese car makers. If 10% of Germany's economy depends on motor vehicle production, this is an ominous moment in modern German history.

Manufacturing industries need immense sources of energy to fuel them. Germany has long relied on

Russian natural gas. Ever since Russia discovered gas in its vast Siberian fields, Russia laid pipelines in the 1960s to deliver fuel to and through the satellite states of the Soviet Union to Europe. Since the breakup of the Soviet Union, Russian natural gas has come to be delivered to Europe and this is where Germany has for long received large volumes of regular and reliable supply of gas. Germany's problem is it imports 95% of its natural gas, 98% of its oil and 100% of its coal. Germany has so little energy, it's been long importing from abroad and Russia has played a critical role in supplying the German industrial plant.

> ***"When Russia invaded Ukraine, Germany abandoned Russia and sided with the US and is now paying the price."***

But Germany cut its ties with Russia after it invaded Ukraine and this has seen the German economy plummet. The energy shock caused by divorcing from Russia has led to the biggest collapse in German living standards since the second world war and a downturn in economic output comparable to the 2008 financial crisis.

The Rainbow coalition had no solutions on how to deal with this perfect storm of crisis of expensive energy, declining industry and declining industrial exports. For long Germany was happy with US security guarantees and cheap Russian energy. When Russia invaded Ukraine, Germany abandoned Russia and sided with the US and is now paying the price. China is challenging German industry and its automobile brands, Germany has no energy sources of its own and its export driven economy has gone from an asset to a strategic liability. Whoever wins the German election in 2025, faces some major strategic challenges on the future of the country.

Conclusions

Europe may have once been the epicentre of the world but today it's in rapid decline. The US is leading the battle against Russia in Ukraine and despite many opportunities to take the lead, Europe, time and time again, showed she couldn't lead and relied on the US. It's becoming questionable how much of a player Europe will remain in the world when there are very few global issues she leads on. Europe is divided and this gets in the way when it comes to EU expansion, on how to help Ukraine and even on whether China is a competitor or a partner. Throughout Europe there are large anti-EU movements and this trend is only set to get worse.

Global Economy

Cold War 2.0

China and Russia have for over a decade been pushing the narrative that the western led order has had its day and that it's passed its sell by date. They continue to argue that a new multipolar system is needed which caters for the majority of the world, and not just for the West. Whilst the US has probably done the most damage to the western led order with Donald Trump openly undermining it. The Russia-China alternative order doesn't have an official name, but it continues to gain considerable airtime, with many considering the orders future a matter of when not if. What are the constituent parts of this order? Is the order ready to take the place of the order that emerged from the west and has dominated the world for so long?

The western led liberal order was based upon free trade and free markets, with the US navy providing the security for the supply chains that traversed the world. In 2013 China launched its Eurasian economic order – the One Belt One Road (OBOR) project, which eventually became the Belt and Road Initiative (BRI). The trillion-dollar global investment project planned to build roads, ports and other critical infrastructure around the world.

The aim of the BRI was to link China with 70 other countries across Asia, Africa, Europe, and Oceania. The two parts to the initial BRI vision: The "Belt" sought to recreate the old Silk Road land trade route, and the "Road," which was not actually a road, but a series of ports creating a sea-based trade route spanning several oceans. The initiative was to be actualised through a number of separate but linked investments in order to create economic corridors.

China has made major strides with this Eurasian economic corridor, but it faces three major issues. The **first** is China's rush to generate projects has led to many not being financially viable. China has created infrastructure in places where there was little business and commercial prospects, as this is a strategic project for China it will require China to continue subsidising it. **Secondly,** debt accumulation has been a major issue and has brought a lot of negative publicity to BRI. As many of the participating nations are from the developing world, who are already indebted, they will increase their debt burden if they remain part of China's BRI. Pakistan now owes more money to China than to western institutions.

Thirdly, Russia and China have very different visions for the world they would like to see. China sees Eurasia as a continent that is criss-crossed with economic corridors and trade routes from the Atlantic to the Pacific. China also wants to use the continent as its main export market that circumvents the global sea lane of communication (SLOC), which is dominated by the US. Russia on the other hand sees the borderlands adjacent to her in Europe as its sphere of influence, with Russia having exclusive control and-power in these territories.

All BRICS and no Mortar?

Russia and China have established four multinational organisations they want to turn into global institutions. The first of these and the most important is BRICS. Established in 2009 after a Goldman Sachs economist coined the acronym BRIC referring to the next set of developing economies, Brazil, Russia, India and China. The 'S' for South Africa was added in 2010. As the years have gone by, the BRICS nations have made the most of presenting themselves as an alternative to the global order and many are excited at the prospect of a challenger to the western liberal order.

BRICS are a group of countries with emerging economies and nationalistic governments, which consider existing management of the global order as unfair to them and in different degrees have opposed the rules dictated by the G7 nations. Although most of the BRICS dynamic has been rhetorical, their joint statements have had a meaningful impact on the international public opinion. That is why, since the formation of the group, the question of what position the BRICS take towards existing international institutions and norms is seen as important.

BRICS is growing with Iran, Egypt, Ethiopia, and the United Arab Emirates joining in 2024. There are a host of other nations also queuing up to join. But whilst the G7 summits discuss global issues and agree on policy, for over a decade BRICS has said a lot but hasn't actually done anything tangible. If we set the rhetoric aside that comes from Russian and China, BRICS has no headquarters, no rule book, no procedures, no membership criteria or application process and whilst BRICS gains a lot of media attention for the moment it largely exists on paper.

Asia's NATO

The Shanghai Cooperation Organisation (SCO) is sometimes referred to as Asia's NATO and has been pushed by both China and Russia as a Eurasian economic and security organisation. Established in 2001 by China and Russia, the SCO was the successor to the Shanghai Five that was formed in 1996 between China, Kazakhstan, Kyrgyzstan, Russia, and Tajikistan. In 2001 Uzbekistan also joined and the Shanghai Cooperation Organisation (SCO) name was adopted. India, Pakistan, Iran and Belarus also subsequently joined. Several countries are engaged as observers or dialogue partners.

The SCO started out by the constituent members dealing with their border disputes and for much of its history, despite the label of being a Eurasian bloc it's been focused and driven by developments in Central Asia. The SCO's main achievement since its inception has been to offer its members a cooperative forum to balance their conflicting interests and to ease bilateral tensions. It has built up joint capabilities and has agreed on common approaches in the fight against terrorism, separatism and extremism. Whilst China sees the bloc from an economic lens and has used the forum to invest and build infrastructure in Central Asia. Russia sees the bloc from a defence perspective and military perspective.

The SCO is not remotely close to NATO or the G7. Its focus remains central Asia with the smaller nations looking to receive funds from China and the authoritarian leaders looking for Russian protection. The SCO has not achieved much in the past quarter of a century despite the media coverage it gets.

The World Bank v The New Development Bank

China established two financial and development institutions in 2015 which it views as rivals to the Bretton Woods institutes of World Bank and the IMF. The New Development Bank (NDB), formerly the BRICS Development Bank, was established by BRICS and according to the Agreement on the NDB, "*...the Bank shall support public or private projects through loans, guarantees, equity participation and other financial instruments.*" Moreover, the NDB *"... shall cooperate with international organisations and other financial entities and provide technical assistance for projects to be supported by the Bank."* The initial authorised capital of the bank was $100 billion, divided into 1 million shares. The NDB's main purpose was to mobilise resources for infrastructure and sustainable development projects in member countries and other developing economies, it's also based upon the Woods principle of non-interference in the internal affairs of countries and is also one of the leading features of the bank. To date the NDB has approved 96 projects spending $32.8 billion. As the multilateral bank approaches its tenth anniversary it remains a small bank, when we compare it with the World Bank that lends over $100 billion annually. The NDB is nowhere close to competing with the western development bank.

The Asian Infrastructure Investment Bank (AIIB) is also approaching its tenth anniversary in 2025. The multilateral development bank was established to support the building of infrastructure. The bank currently has 70 members as well as 23 prospective members from around the world. Currently the bank has invested in over 250 projects worth $40 billion. This is a relatively small amount compared to the World Bank. The AIIB is also largely Asia focused and is not a global institution like the Bretton Woods institutes. Despite the noise that comes from these organisations they are not really, for the moment in the same league as the western versions.

The Quest to Replace the Dollar

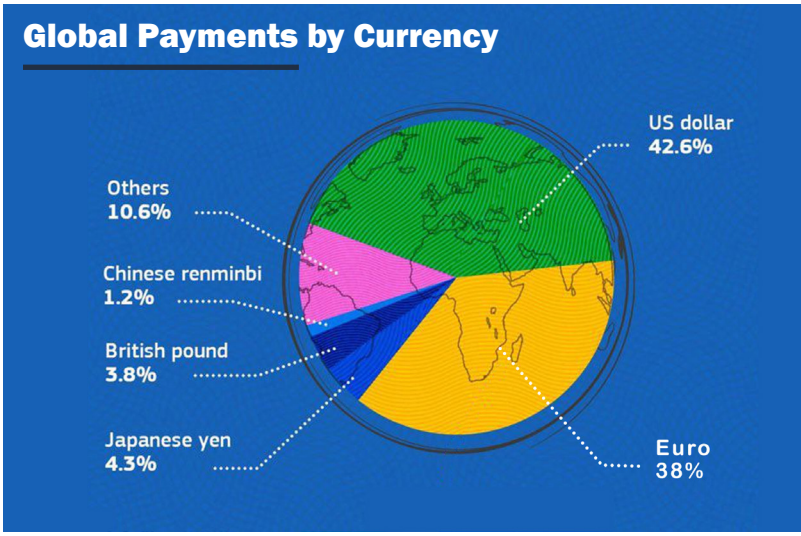
Calls for replacing the dollar have been growing for the past decade. The loudest on this issue has been both China and Russia. With the sanctions the US imposed upon Russia when it invaded Ukraine, China has been pushing the fact that the dollar has always been weaponised by the US. Whilst many nations agree with China and Russia, there still remains no currency that can replace the US dollar currently.

The dollar is the lubricant in trillions of daily transactions and is used outside the US more than it is on the US continent. Whichever currency plans to replace the dollar it needs to be available for the whole world to use and the daily fluctuations shouldn't be a problem for the host nation. China has done a good job promoting its currency the Renminbi, but the Renminbi is used in only 4.3% of global payments, the Canadian and Australian dollars are used in more transactions for global trade. The Renminbi is also only used for 2.2% of global reserves.

China places many restrictions on the use of the Renminbi in order to maintain a low exchange rate, which has played a key role in China's economic model. China restricts access to the Renminbi globally and does not have an open capital account. China has done a good job of appearing to challenge the dollar, but it is not actually doing the actions needed to make the Renminbi a global currency and challenge the dollar. For the moment China seems content being seen to be challenging the dollar without actually doing so.

The Battle for Payments Systems

Payment systems are the plumbing of international finance and China has long called for the establishment of an alternative to the western dominated SWIFT (Society for Worldwide Interbank Financial Telecommunication) system. China's Cross-Border Interbank Payment System (CIPS) has been receiving increasing attention. CIPS clears and settles renminbi (RMB) transactions. The system deals with 25,900 transactions daily. In 2023, CIPS processed 6.6 million transactions, totalling $17.09 trillion. CIPS participants are located in 114 countries, it has 150 direct Participants and 4401 Indirect participants.



CIPS competes with the SWIFT system which was created by institutions from the US, the EU and G-7 countries in 1973. Today, it has 11,000 financial institutions in over 200 countries and territories as members, who exchange on average over 32 million messages per day.

"China has done a good job of appearing to challenge the dollar, but it is not actually doing the actions needed to make the Renminbi a global currency and challenge the dollar."

CIPS, however, is not the same as SWIFT. Whereas SWIFT is a secured messaging protocol that lets banks "talk" to one another, CIPS clears, with efficient Renminbi transactions and funds. SWIFT is a global secure messaging system that allows banks to communicate with each other with high efficiency and low cost. It facilitates the secured flow of financial information across borders to support transactions. CIPS, by contrast, is a Renminbi clearing and settlement mechanism (clearing entails movement of funds from institution A to institution B, and settlement is the finalisation of moved funds). CIPS is comparable to CHIPS (Clearing House Interbank Payments System) in the US which allows banks to net-off fund transfers. CIPS is a system focused on China's currency and allows them to clear financial transfers. CIPS doesn't not deal with non-Renminbi to non-Renminbi transactions. In fact, CIPS as a Renminbi clearing and settling institution has to utilise SWIFT messaging to facilitate Renminbi transactions with the rest of the world. Therefore, China's CIPS is not a challenge to the SWIFT system, despite the global coverage it receives,

Energy

Energy has been one of the key strategic aspects of the Sino-Russo marriage. The two nations have signed several major energy deals. Russian oil has made up a steadily growing share of China's energy portfolio for years and in 2016 Russia became the country's biggest oil supplier. China, for its part, has begun to substantially invest in Russia's upstream industry while its state-run banks have heavily bankrolled pipelines connecting the two countries. Beijing acquired a large stake in Russian oil giant Rosneft. With sanctions imposed on Russia for invading Ukraine, Moscow has replaced energy exports to Europe with exports now to China. China is also the largest importer of Iranian oil and with the Russian-Iran $40 billion energy corridor a energy cartel is emerging from Europe, through Iran and to central Asia ending in China.

For the moment there is one oil and gas price, but as these regional dynamics deepen and spread its likely regional energy hubs will emerge and China and Russia, along with Iran and Central Asia are well placed to lead in this area.

Values

The Soviet Union took up the mission of spreading communism to the world. The US was the leader of the capitalist world and undertook the task of spreading its ideology around the world and protecting the world from communism. These global missions turned both Russia and the US into global powers as they sought to establish their visions for the world.

Today neither Russia or China has a mission similar to the Soviet Union. They have no such ideological vision. China and Russia do not subscribe to the values that underpin the liberal order, and criticise this as the US attempts to impose its values upon other nations. China has long criticised America's hegemony and the unilateral position it holds and believes there should be other nations which balance the US. Whilst Russia would like to be the global hegemon, China doesn't want to become the global hegemon as it doesn't want the responsibilities that come with it. What China and Russia are calling for is a world where there should be no global hegemon but a multipolar world consisting of multiple powers or even regional powers who all balance each other out. China sees this vision as an ideal that will create a world which suits her and which she believes is the best for the world. Russia and China's global vision is not based on any values but is objective based. Whilst China and Russia have won some adherents to this it has for the moment, not been enough to win liberal nations to its side.

China and Russia are making strides in building an alternative order, but creating a fully established new global order that rivals the current one is unlikely in the short-to-medium term. They can certainly weaken the dominance of the Western-led system, particularly in certain regions and sectors, but in the realm of ideas and values, both China and Russia have little to offer.

Where Does Money Come From?

The US national debt reached astronomical proportions in 2024, exceeding $34 trillion. Just the interest repayments on this is costing the US taxpayer $1 trillion a year. This is money now no longer going towards education, healthcare or infrastructure. In her documentary - Finding the money, economist Stephanie Kelton looked at modern money theory. In her interview with Jared Bernstein, who was President Joe Biden's economic advisor, he struggled to explain why the US was in debt when it prints its own money. When Keltan asked "...if we can print our own money, it obviously begs the question why exactly are we borrowing in a currency that we print ourselves." Bernstein went into a long rant where he said he couldn't explain why the US government was in debt when it prints its own money and borrows in its own money.[25] In order to understand this we need to look at where money comes from and the role of central banks.

The US central Bank, the Federal Reserve like all central banks is separate and independent from the government and was established like this on purpose. They are private corporations whose product is the creation of money in the form of credit. The US has had a long and difficult relationship with its central bank.

The founding fathers of the US were well aware of the power of banks and banking dynasties. They therefore categorically resisted the establishment of a central bank. Most of America's founding fathers were against the establishment of a central bank as they worried about the likes of the Rothchild banking dynasty that established a banking empire in Europe, who issued debt to the monarchies and governments at interest and grew their influence over the rulers of Europe. Most of the American founders saw money printing as the right of the government and not for private businesses, such as a central bank. It would take three attempts and 130 years to establish a permanent central bank in the US by Europe's premier banking dynasty.

The first central bank which was known as the 'First Bank of the United States,' was established by Alexander Hamilton, who supported privatising money printing leading to President George Washington in 1791 to sign a charter for the bank for 20 years. Congress reluctantly incorporated the Second Bank of the United States in 1816. Like its predecessor, the Second Bank of the United States was a privately held corporation that enjoyed the enviable position of being the sole depository of US government revenue and issuer of US currency, which it lent at interest to the US government in exchange for Treasury Bonds. Its charter, like its first, was only for 20 years.

The charter of the Second Bank of the United States was due to expire in 1836, but its directors applied for renewal four years early in the hope of thwarting opposition from then President Andrew Jackson, a fierce opponent of the bankers. Jackson vetoed renewing the charter and opened an investigation into reports of widespread corruption. In 1836 the central banks charter expired and no central bank would exist in the US for the next eight decades.

By the turn of the 20th century, Europe's banking giants with the likes of JP Morgan and Goldman Sachs famously met in 1910 at Jekyll Island, Georgia to work out how to put an end to the lack of a cen-

tral bank in the US. They wrote the details of what they wanted, and this became incorporated into the Federal Reserve Act that was passed by Congress on the 23rd of December 1913, creating the Federal Reserve Bank. The Federal Reserve was established as a private company, controlled by its shareholders who would issue money at interest to the US government. The bill was bitterly opposed in the Senate, with nearly half of the senators missing and only a minority voting for the bill.

The nightmare of the US founding fathers came true after 163 years since the founding of the United States. When a banking crisis arrived in the 1930s, triggered by the Federal Reserve's very own policies of excessive credit creation, the Fed failed to act. Hundreds of thousands of farmers lost their land and livelihoods. The Great Depression changed the face of America. Yet the Fed has never been held accountable for its policies.

America's financial industry has expanded and evolved from the creation of the federal reserve in 1913. What we have today in the US was started by Europe's banking dynasties in much the same way they came to dominate Europe's financial system.

When the US government needs to balance its budget, it needs to borrow money, and it does this in two ways. It borrows directly from the federal reserve, which it then needs to repay with interest. Or as is most common the federal reserve issues bonds on behalf of the government and the government then has to repay this debt with interest from its revenues. The largest single owner of US treasury bonds to the tune of $6 trillion is the Federal Reserve itself. The US federal government owes the most debt to the Federal Reserve itself.

If the US federal government nationalised the Federal Reserve, then it would be issuing its own money and could print the dollar at will. But money printing in the US economy, much like most of the world, is in the hands of central banks and not the central government. It is the US central bank, the Federal Reserve that determines how much money is in the US economy. In the US today, 97% of money is issued by banks in the form of loans. Whilst there are over 5000 banks in the US, a mere five banks control half of the nation's banking assets. The dollar is, as a result, not issued by the federal government, but by the federal reserve and 5 large banks.

This raises the question, who does the Federal Reserve report to when it's an independent corporation? The Fed is managed by the central bank of central banks - the Bank of International Settlement (BIS) in Geneva who gather annually in the Swiss Alps to determine their policies. The BIS was established after WW1 by Europe's banking dynasties who wanted to create a global banking system.

Therefore, the reason why the US federal government is in debt and owes $34 million is because it doesn't own its national currency, this was privatised to the US central bank, the federal reserve back in 1913.

The Emerging Middle East Order

The latest war in the Middle East began in October 2023 and reached its one-year anniversary on the 7th October 2024. It has now expanded to Lebanon, Iran, Iraq Yemen and Syria. What has become clear over the course of this war is its much more strategic with actions underway looking to alter the regional landscape for the foreseeable future. In some ways it seems at times the US has lost control as Israel openly contradicts what the US orders from it. On the other hand, Iran, one of the regional powers appears to be in retreat with its reginal proxies being decimated.

Starve and Surrender

After more then a year of slaughter in Gaza things are not just desperate in the small enclave but what the world is witnessing is apocalyptic. Images continue to beam around the world of widespread destruction, infrastructure demolition and aid being blocked with Gaza's healthcare system long bombed into oblivion.

Israel has maintained its intensification in Gaza and especially upon Northern Gaza. There has always been speculation Israel was executing the "Generals Plan", which is also known as the 'starve and surrender' plan. Near the end of October 2024 Israel announced anyone remaining in Northern Gaza would be designated as Hamas and then targeted for killing. Israel has for long tightened its siege and cut-off aid in order to force the remaining population to flee, making Gaza uninhabited. The plan to depopulate Gaza was confirmed on the 21st of October 2024 when representatives of Israel's Mossad spy agency and its security agency Shin Bet visited Cairo and informed them of their plan to create a buffer zone in northern Gaza, forcing hundreds of thousands of Palestinians to move to areas close to the Egyptian border.[26]

The general's plan is clearly genocidal in nature and the ethnic cleansing of the inhabitants has been in motion for some time. This is despite the fact this all of this goes against international law and most nations' rules of war. It's also against the US administration's view, who from the start of the war declared there should be no buffer zones inside Gaza.

The Biden administration responded to this major escalation by sending a letter to Israel and giving it an ultimatum. In the letter, US Secretary of State Antony Blinken and Defence Secretary Lloyd Austin warned Israeli Prime Minister Benjamin Netanya-

hu's government to lift restrictions on aid into Gaza within 30 days or face unspecified policy 'implications' including the potential halting of US weapons transfers. As its Israel's siege that's halting aid deliveries this was a call to end the siege. In the end the US never followed this threat up, which has been a regular feature for over a year.

Netanyahu then responded that the Israeli plan was to eventually allow civilians back into Northern Gaza, but only after clearing it of Hamas. The Israeli regime then said the area will be controlled by Israel and this will be done through local tribes that oppose Hamas. This was all to placate the US administration as Israel has constantly delayed, obscured, obfuscated and made U-turns whenever the White House made demands of it. Israel has continued to pursue the Generals Plan through forced evacuations, and mass killings on a scale not seen previously (Although this may be hard to comprehend with the level of devastation witnessed throughout 2024). Despite this ultimatum the Financial Times reported that at the end of October 2024 aid had fallen to its lowest level since the war began as Israel continued to block aid from reaching the inhabitants of Gaza.[27]

When the war in Gaza reached its first anniversary on October 7th 2024, Israel had continued with its onslaught despite the position of the Biden administration. The White House threatens Netanyahu but failed for over a year to come down upon Netanyahu and use its extensive power over Israel to force it into line.

War Expands to Lebanon

Ever since the events of October 7th Israel was concerned Hezbollah may open a front in Northern Israel, and this would overstretch Israeli forces when it was planning to go into Gaza. To deal with this Israel moved 60,000 residents to temporary housing from Northern Israel to ensure it could focus its limited resources on Gaza and therefore not fight on two fronts. But tensions continued to grow between Hezbollah and Israel and regular attacks between them escalated. Whilst divisions between the Israeli military leadership, the war cabinet and other officials grew over Gaza, in Lebanon there was unity that something needed to be done. Opposition leader Benny Gantz, a former army chief, who quit the emergency war cabinet in June, stated that the 1st of September, the start of the school year, was the deadline for northern Israeli residents to return to their homes. *"You can't lose another year in the north. It will happen either via [a diplomatic] arrangement or via [military] escalation,"* Gantz said.[28] Israelis of all stripes had been threatening more intense action against Hezbollah after an escalation in cross-border fire, increasing tensions all the while promoting the prospect of all-out war with the Lebanese group.

The Biden administration since the events of October 7th 2023 was arguing against Israel opening a second front by attacking Lebanon. President Biden dispatched the energy specialist and former IDF soldier, Amos Hochstein to the region in June 2024 to try and cool tensions and halt any Israeli war plan against Lebanon. When Hochstein left Israel for Lebanon on 17th June 2024, Israel killed a number of Hezbollah fighters and commanders. Once in Beirut Hochstein reportedly told officials that the White House was ready to support an Israeli offensive in southern Lebanon if a "diplomatic solution" is not found to stop cross-border hostilities with Hezbollah.[29] Hochstein achieved the complete opposite to what President Biden had dispatched him for!

Amos Hochstein as presidential advisor was effectively the US Middle East war envoy, along with Brett McGurk, the White House coordinator for the Middle East. Amos and Brett, along with Deborah Lipstadt, who is a US ambassador, with diplomatic clearance, the special Envoy to Monitor and Combat Antisemitism have all given Israel complete support

and cover and have done the opposite to what the administration has been trying to achieve. Each time Hochstein and McGurk travelled to the region with strict instructions to get Netanyahu to agree to a ceasefire or halt military activity, both envoys come away agreeing with the Israeli position, seeing their logic and effectively sanctioning its actions. POLITICO revealed in September 2024 that Hochstein and McGurk, told top Israeli officials that the US agreed with Israeli Prime Minister Benjamin Netanyahu's broad strategy to shift Israel's military focus to the north against Hezbollah in order to convince the group to engage in diplomatic talks to end the conflict.[30] They both did this despite the President working on a ceasefire to the opposite. Hochstein, McGurk and other top US national security officials described Israel's Lebanon operations as a history-defining moment — one that will reshape the Middle East for the better for years to come.

In September, Israel took full advantage of this support from US officials to carry out deadly strikes against Hezbollah and Lebanon. On 17th September Israel detonated explosives it had placed in pagers and walkie-talkies by intercepting the supply chain of these electronic devices, which it believed were used by Hezbollah. It led to the death of 42 people and severely injured over 3000 people. Israel was planning to use the electronic attack as cover to launch an assault on Southern Lebanon but moved early fearing they had been compromised. Then two weeks after this assault despite a ceasefire being agreed by US President Biden and France, with Nasrullah and Netanyahu agreeing to the terms,[31] Israel carried out a major attack using a bunker buster bomb in a suburb of Beirut that killed Hezbollah leader Hassan Nasrullah. Israel proceeded to target Hezbollah's leadership and wiped out its entire leadership.

Israel shifted to full scale war in Southern Lebanon, which is still continuing in parallel to its slaughter in Gaza. Israel is arguing it wants to see UN resolution 1701 implemented, under which Hezbollah retreats behind the Litani river. But Israeli actions go well beyond this, and it is looking like it is pursuing in Lebanon what it's long been pursuing in Gaza. That of depopulating Southern Lebanon under the guise of a buffer zone for security.

The destruction by Israel of Southern Lebanon can be seen from satellite imagery, where Israel wiped 11 villages next to the Lebanese border on the map.[32] In Ramyah, barely a single structure still stands on the village's central hilltop, after a controlled detonation that Israeli soldiers showed themselves carrying out in videos posted on social media. In Aita al-Shaab Israeli bombardment turned the hilltop with the highest concentration of buildings into a wasteland of rubble. In another controlled detonation much of the village of Odeissah was levelled with an explosion so strong it set off earthquake alerts in Israel. Israel is not only striking Southern Lebanon but continued targeting Beirut and the Beqaa Valley as well as the roads that lead to Syria.

> ***"In the case of Gaza the US administration opposed, criticised and even threatened Israel. In the case of Lebanon this has not been the case. No one in the US has raised concerns about civilian casualties, forced evacuation orders, the huge destruction of civilian infrastructure, attacks on financial institutions as well as the lack of proportionality."***

In the case of Gaza the US administration opposed, criticised and even threatened Israel. In the case of Lebanon this has not been the case. No one in the US has raised concerns about civilian casualties, forced evacuation orders, the huge destruction of civilian infrastructure, attacks on financial institutions as well as the lack of proportionality. This would indicate that unlike Gaza where there are differences between the US and Israel, with Netanyahu continuing to undermine the US president, in Lebanon there are shared interests.

America's goals were revealed by the US Ambassador to Lebanon, Lisa Johnson, who said her agenda is to prepare Lebanon for a "post-Hezbollah era" by mobilising "internal" forces against the resistance movement while it fights the Israeli Army.[8] At the same time both Amos Hochstein and Brett McGurk continued travelling to the region to work on a ceasefire deal that will see UNIFIL and the Lebanese army take over southern Lebanon, under direct supervision of the US military. The US proposal even included an Israeli demand of the continued right for Israel to attack any target, anywhere in Lebanon. Whilst Israel has much bigger aims of territorial acquisition the US is focussed on Hezbollah and undermining Iran's influence, a policy the US has been pursuing for nearly a decade.

Iran: To Escalate or not to Escalate

On the 1st of April 2024, Israel launched missile strikes targeting the Iranian consulate in Damascus, killing senior commanders of the IRGC, including Brigadier General Mohammad Reza Zahedi and his deputy. Tehran's ambassador to Syria, Hossein Akbari, promised a decisive response, but the retaliation was muted. In what was presented as an act of vengeance, Iran launched over 300 projectiles against Israel, perfectly telegraphed and easily intercepted, leaving minimal damage on the ground.

This incident served to seriously undermine the rhetoric of resistance and reasserted Iran as a regional actor whose military threats increasingly lacked credibility, limiting its leverage in both regional diplomacy and strategic deterrence.

With Iran's proxies on the retreat, Iran responded once again on the 1st of October with a direct strike on Israel in retaliation for Israels slaughter in Lebanon and the assassination of Hezbollah leader Hassan Nasrullah. Iran launched around 200 ballistic missiles and drones at Israel. The strikes were extremely limited in the end and led to no destruction in Israel and the strike did not hit any major military or civilian infrastructure. The strikes were underwhelming which would indicate Iran was trying to save face rather than escalating matters.

"Israel has been promoting the idea that the "success" in Gaza and Lebanon has created a "unique opportunity" to create a new reality in the Middle East. Israel has used its escalation to convince the US that its actions will create a new Middle East which is also beneficial to the US."

Israel has been promoting the idea that the "success" in Gaza and Lebanon has created a "unique opportunity" to create a new reality in the Middle East. Israel has used its escalation to convince the US that its actions will create a new Middle East which is also beneficial to the US. Israel has found strong support for this course of action from the neoconservatives amongst the US political elite or the Deep State is it's commonly known. The neocons like the idea of a new Middle East and they have been promoting the idea of supporting Israel's attacks on Iran and pushing the US to participate in the attacks. During the 1990's, when the Neocons rose to prominence and began introducing ideas of US unilateralism and regime change, they received widespread support from the Zionists. Netanyahu has never hidden the fact that Israel wanted to launch strikes against Iran as he and many Zionists consider Iran the head of the octopus that threatens Israel. The Israeli regime has found some of the Deep State also see the region as Israel does and they have been working together and this is what forced the hand of the US president so many times since the 7th October 2023.

However, there are those within the Deep State that oppose this and have stood in the way of escalating war with Iran. This was on full display when Israel was looking to launch attacks on Iran in response to its 1st of October strikes upon Israel. President Biden announced the transfer of the THAAD missile defence system to Israel. But this was on condition that Israel shared the details of its plans to attack Iran and after this this faction of the US moved to ensure any attack on Iran was limited.

Israel's war preparations and US intelligence of this was then leaked, which highlighted how much logistical support Israel needed from the US.[33] When Secretary of State Anthony Blinken visited the region from the 21st of October, whilst the public message was a ceasefire in Gaza, in reality he was ensuring all the parties understood the US position and their dependency on the US for their futures. In the end Israel carried out a limited attack on Iran that saw its bombers launch strikes from Iraqi airspace into Iran, no oil or nuclear facilities were struck in the end. Rather, military facilities and ammunition sites were struck. Israel even informed the regional leaders of the attacks prior to launching them and the Dutch Foreign Minister was told to pass the message to Iran. On this occasion the faction within the Deep State who doesn't see US interests in escalation prevailed, over those who support Israel in its escalation strategy.

Syria Caught in the Crossfire

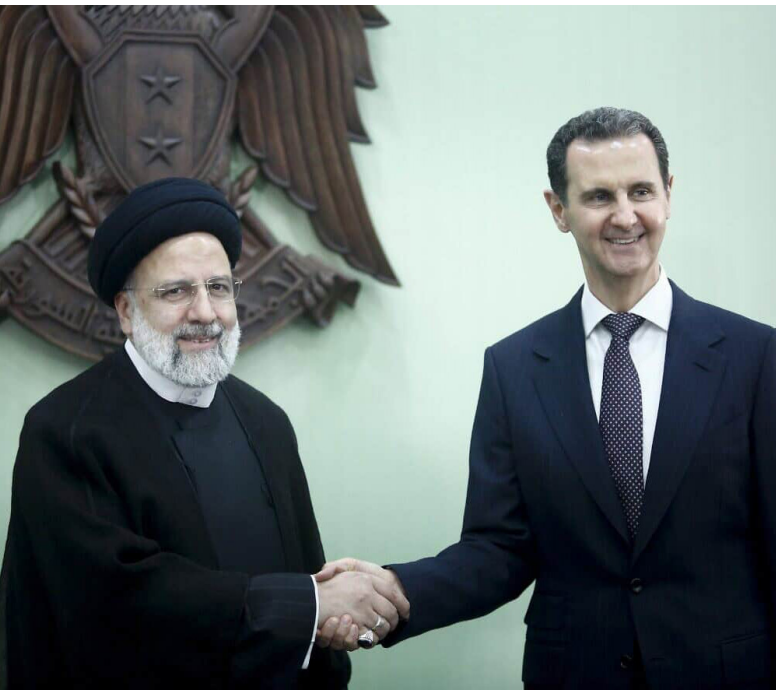
On Sunday 8th December in the early hours, Syria's long term leader Bashar al-Assad boarded a plane from Russia's Khmeimim Air Base to go into exile to Russia. It was a humiliating end for the dictator who has barrel bombed his own people over 13 years in order to maintain his grip on power. Just a week before, his forces didn't put up a fight against rebel forces in Aleppo and the capitulation of the city set in motion events that led to Damasus to eventually fall.

When the uprising in Syria began back in 2011 Israel watched on in horror at the idea of al-Assad falling. Israels most secure border has for long been its border with Syria, despite its occupation of the Golan heights. Bashar and his father used anti-Israel rhetoric to shore up their position, but they never did anything against Israel as they were solely focused on regime survival and rhetoric against Israel secured this.

Form 2011 a number of Israeli intelligence officers and generals both retired and serving came out in defence of al-Assad as for decades they ensured Israels most secure border was the one with Syria. When the uprising began the last thing Israel, and the US wanted was the fall of the regime. It was also necessary to ensure the uprising failed as it was a grass root uprising that was challenging the status quo in the region.

The US with the reginal nations financed, supported and directed many of the rebel groups. This was never for them to succeed, it was in order to cripple them, This ensured they joined western supported international summits to negotiate with the regime. The US needed regional powers to provide the leg up to the Syrian regime and this came in the form of Iran and its proxies, it also included Hezbollah and Russia who intervened in 2015.

This worked as Russia carried out air strikes massacring thousands and Hezbollah and Iranian militia's carried out atrocities on the ground. When the rebel groups were planning to descend on Damascus in 2013, ISIS emerged in Syia from Iraq, and they targeted the North of Syria which was already under rebel control. ISIS never fought the al-Asaad regime and only targeted the rebel groups.



This complex interference of so many nations and proxies led to the rebels to be forced to the north of Syria in Idlib. The fall of Aleppo to the regime in 2016 effectively was the end of the of the uprising. From 2016 and in 2020 Turkey, Iran and Russia agreed a deal where Turkey would manage the rebel groups in the North of Syria in return for a de-escalation with the al-Assad regime. Al-Assad had after many years of massacres, chemical weapons and barrel bombs, survived. From 2020 the Arab league welcomed Bashar al-Assad back to the organisation and the West were looking to welcome him back to the international community.

Whilst Bashar Al-Assad had won, he did no control all of Syria's territory. The north-East of Syria, around 30% of the nation's territory was in reality in the hands of Kurdish groups. The North-West as well as the Turkey-Syrian border was not in the regime's hands but under Turkish control with rebel groups controlling Idlib and the areas north of Aleppo. This was why when Turkey attempted to agree a permanent settlement with al-Assad to normalise this status quo, al-Assad refused as this would contradict his claim he controls all of Syria's and therefore being the de-facto ruler of all of Syria.

Relations between al-Assad and Russia and Iran were also detreating. From 2024 Iran found its once-considerable influence over Damascus steadily eroding, with al-Assad increasingly charting an independent course that often conflicted with Tehran's regional objectives. Iran's suspicions of Assad deepened after a series of leaks disclosed the movements of IRGC officials that culminated in Israeli strikes on these officials in Syria. The Quds Force, once given relatively free rein in Syria, now found its movements increasingly restricted by the Syrian authorities. Most provocatively, Damascus had begun limiting Shi'ah religious activities throughout Syria—a direct challenge to Iran's efforts to expand its influence in the region. Russia was particularly incensed by al-Assads repeated violations of the Idlib de-escalation agreement and stubborn resistance to any form of a negotiated settlement.

After 13 years of propping up al-Assad, after spending considerable sums on maintaining him Russia and Iran, in 2024 saw him more a liability then an asset. By the time rebels launched their offensive, in late November 2024 neither Iran nor Russia saw sufficient value in expending further resources to propping up the regime.

With Israel crippling Hezbollah in Lebanon, Israel had for long convinced the US of reshaping the region, where Israel has buffer zones for its security and despite Israels long and stable relationship with al-Assad they needed Hezbollah supply lines cut that traversed Syria. Now was the best time to achieve this with Hezbollah decimated and the US supporting Israels concerns position.

The plan to overthrow Bashar al-Assads regime began to take shape soon after Israel crippled Hezbollah in October 2024. In October 2024 the British and American-trained fighters in the Revolutionary Commando Army (RCA), a group aligned against Islamic State, were told "this is your moment" in a briefing by US Special Forces before Assad was ousted. Capt Bashar al-Mashadani, an RCA commander, told The Telegraph: "We were just told: 'Everything is about to change. This is your moment. Either Assad will fall, or you will fall." In the weeks before the briefing at the US-controlled Al-Tanf air base on the border of Iraq, according to Capt Mashadani, the RCA's ranks were swollen by smaller freelance units like his brought under its command. As the main rebel force swept south to Damascus in a lightning offensive towards the end of November, the RCA advanced out of Al Tanf and now occupies roughly one fifth of the country, including pockets of territory in the north of the capital. All members of the force continued to be armed by the US and to receive their salary of $400 (£315) a month, nearly 12 times what the soldiers in the now defunct Syrian army were paid. Capt Mashadani said the RCA and the fighters of HTS, which is led by Syria's interim leader Mohammed al-Jolani, were co-operating, and communication between the two forces was being co-ordinated by the Americans at Al-Tanf.[34]

The fall of the al-Assad regime on 8 December 2024 after 24 years of rule and 54 years since his father's coup took place in a whimper. Bashar in the middle of the night abandoned his forces who had capitulated in Aleppo, Homs and Hama. The US and Turkey now had a decade of experience working and organising multiple rebel factions and determined this was the time to alter the regime in Damacus as the broader region was going through major reshaping.

After defending the al-Assad regime by infiltrating the various rebel groups and pushing them into conferences and summits. Turkey, the US and Israel changed tune and brought Syria into line with the broader reshaping taking place in the region. This new set up is about Israel getting buffer zones under the guise of security and the regional Arab leaders then entering normalisation agreements with her. This necessitated the ending of all armed groups and that's why Hamas and Hezbollah have been crippled and Syria's role in supplying these groups now ended.

The Israeli plan, which the US seems to have accepted was outlined in a foreign affairs piece by two former military leaders. They confirmed Israel believes they have an opportunity to get the US to lead an effort to establish further Abraham Accords based on Israeli wants and wishes. These wants and wishes include a NATO-like military alliance in the Middle East led by the US, which effectively puts the military forces of the Arab states under the control of the US-Israeli alliance and thereby enables the US-Israeli alliance to use the Arab forces against the enemies of the US-Israeli alliance. They also include a peace process with the Palestinians under which the Palestinians first have to prove that they accept the current state of Israel. Until that moment Israel should continue military control of the Palestinian territories. If the Palestinians make the mental change, which means they "surrender", then the Palestinians will be granted a territory, but without full sovereignty as it will not have a military, and its security forces will remain under control of the US-Israeli alliance.[35] Israel and it would seem the US, are completely disregarding of the wants and wishes from all the other inhabitants of the Middle East. The most likely outcome of all of this is, eventually, another Arab Spring where the people of the Middle East revolt against their rulers for agreeing to an "unconditional surrender" of their interests.

12 Lessons From 12 Months of War

Israel's Propaganda War Has Been a Failure - Israel has spent billions over the decades in propaganda, lobbying and influence to create a favourable opinion about its settler colonial agenda. In the West it supported politicians, think tanks, influential personalities and other causes to ensure it dominated public opinion about the occupation. Mainstream media has for long been dominated by pro-Zionist voices that silenced any alternatives. But with many now viewing mainstream media as fake news and no longer referring to them as a source, many now use social and alternative media which has shown the world what Israel has really been up to.

Israeli officials, communication specialists and personalities came out in force after October 7th. One by one, every argument was exposed from the events of October 7th being discredited to the Israeli military machines targeting of hospitals, civilians, places of worship and the massacring children and women. This one issue has seen Israel's decades of propaganda work go down the drain. What Israeli propagandists have been telling the world, is not what the world is seeing. Many around the world saw the large discrepancy between what they were hearing and seeing. What everyone saw was the complete destruction and collective punishment of Gaza. As a result, the self-defence narrative and the "do you condemn Hamas" narrative failed to take hold. The fundamental issue for Israel has been the fact that it's trying to defend the indefensible and it doesn't help when Israeli officials keep making genocidal calls and then try to deny that was what they meant.

What Israeli propagandists have been telling the world, is not what the world is seeing. Many around the world saw the large discrepancy between what they were hearing and seeing

Israel's 7th October Claims Have Been Discredited – Israel's propaganda machine went into full gear after the events of 7th October. Numerous shocking and wild claims were made that were adopted by the global media. From Hamas deliberately targeting civilians to sexual violence, mutilation and the most infamous 40 beheaded babies!

The Bituah Leumi, Israel's social security agency, provided a list of the dead from October 7th. Nearly 400 of the dead were security personnel. In a 16-page report titled "Our Narrative" published on the 21st of January 2024 by Hamas's political wing it explained it was targeting Israeli security personnel in order to take them hostage and use them to free Palestinian prisoners.

The claims of sexual violence were based on accounts by survivors and by the first responders who found dead bodies. In December 2023 the New York Times did an in-depth investigation and published their findings in a piece 'Scream without words: How Hamas weaponized sexual violence.' They accused Ha-

mas of using rape as a weapon. It was subsequently brought to light that one of the authors of the piece – Anat Schwartz, not only shared a tweet saying Israel needed to "turn the strip into a slaughterhouse." But she had no reporting experience and had been a spy for Israel. To make matters worse, no forensic evidence was used to corroborate any of the claims.

A lot of the sexual assault claims came from Zaka which is a religious organisation of volunteers that acts as first responders and deal with the dead bodies, meeting Jewish religious requirements. They were accused of handling the bodies incorrectly, moving them around and contaminating them. The organisation was also in trouble before October 7th as it was on the verge of insolvency and one of its founders had resigned due to allegations of rape and paedophilia.

The allegations of mutilations were spread by ZAKA and Israeli officials. It also needs to be taken in account that Israel resorted to the Hannibal directive, and this is why there was serious structural damage to property and vehicles which was beyond the light weapons used by the Gaza groups.

The 40 beheaded babies' allegation was traced back to Israeli settler and soldier David Ben Zion, who had previously incited violent riots against Palestinians and called for a West Bank town to be wiped out. No evidence has ever been produced to support the claims of beheaded babies.

Muslim Rulers Abandon Palestine – The Muslim rulers in the Middle East and beyond have been exposed for being all talk and no action. For years they verbally supported Palestine but in their time of need Erdogan in Türkiye and the rulers in Tehran abandoned the people of Gaza. The Muslim rulers in Egypt and Jordan were worried for months about the sentiments of their people and resorted to arrests and clamp downs as their people came out in support of the people of Gaza.

Both Erdogan and the Iranian clerics built their reputation on supporting the Palestinian cause. For years they offered fighting talk on what they would one day do to Israel in support of the Palestinians. When it came to delivering, they continued with their fighting talk when they needed to deliver on such colourful language.

The Jordanian monarchy went a step further and took part in defending Israel when Iran launched missiles against the Zionist entity. The Jordanian authorities faced a deluge of criticism after the government confirmed that its forces downed Iranian missiles targeting Israel in early October. Mohammed al-Absi, a member of the Democratic Unity Party (Wehda) explained: *"What we witnessed yesterday was a contradiction in positions. There was popular sentiment that rejoiced at the Iranian missiles striking the Zionist entity. However, shooting down Iranian missiles does not align with the popular position supporting the resistance in Palestine and Lebanon."*[36] the Jordanian authorities faced a deluge of criticism after the government confirmed that its forces downed Iranian missiles targeting Israel in early October

Hezbollah's Syria Curse – On the 17th of September 2024, Israel detonated thousands of booby-trapped pagers after years of painstaking intelligence gathering. More than 3,500 people were injured and 12 people were killed. A week later Israel assassinated Hezbollah General-Secretary Hassan Nasrallah after tracking him to an underground bunker. Hezbollah has been in disarray ever since.

Hezbollah has spent the last decade defending Bashar al-Assad's regime in Syria. Hezbollah deployed in large numbers and carried out massacres to break the back of the uprising that began in 2014 as the Arab Spring swept the region. The success in Syria in the end turned out to be Hezbollah's curse.

In a Financial Times analysis: *"…a former high-ranking Lebanese politician in Beirut said the penetration of Hizbollah by Israel or US intelligence was the price of their support for Assad. They had to reveal themselves in Syria, where the secretive group suddenly had to stay in touch and share information with the notoriously corrupt Syrian intelligence service, or with Russian intelligence services, who were regularly monitored by the Americans."*[37] As Hezbollah expanded into Syria this weakened their internal control mechanisms and opened the door for infiltration. Israel was able to collect a vast amount of data about Hezbollah's membership, senior commanders and then kept them under surveillance. Which they put to devastating effect giving a severe blow to the group. Hezbollah's Syria foray has now come to haunt the group.

Iran: Between Escalation and De-escalation – Whilst Iran has gained significant media attention and with Israel constantly blaming the country for tensions in the Middle East, Tehran has been trying to de-escalate and has shown little appetite for any escalation. In a November 2023 meeting, Iran's supreme leader reportedly criticised Hamas for providing no warning of the October 7th attack, and stated that Tehran would not enter the war on their behalf, underscoring its reluctance to be drawn into the conflict.[38]

Iran only moved, when after seven months of Israel's slaughter in Gaza, its consulate was attacked in Syria by Israel. This was when Iran telegraphed its response against Israel by informing the regional nations and the US of its attack. Similarly, Iran once again informed the regional leaders and the US of its aim to target Israel after the assassination of Hezbollah leader Hasan Nasrullah. The attack was extremely targeted and damaged little and killed one Palestinian civilian who was hit by falling shrapnel. This indicates Iran has no appetite to escalate. In fact, Iranian president Masoud Pezeshkian said Iran was prepared to de-escalate tensions with Israel as long as it sees the same level of commitment on the other side.[4]

The same week that most of Hezbollah's leadership was assassinated, the Iranian president was in New York for the annual UN General Assembly summit. The Iranian president called for nuclear talks to resume. As bombs fell on Lebanon and Iran's premier proxy, the Iranian president was clear where Iran's priorities lay. Alex Vatanka, the director of the Iran Program at the Washington-based Middle East Institute explained Iran's position: *"The Iranian leadership is prepared to accept a humiliating retreat in the face of Israeli strikes in the short term to safeguard the regime in the long run, and this explains Tehran's lack of retaliation so far."*[39]

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The Houthi War Effort – The Houthis in Yemen made headlines in 2023 when they boarded the Galaxy Leader, an Israeli linked sea vessel, leading to the expansion of the war in Gaza to the Red Sea. The Houthis' targeting of Israel with ballistic missiles has seen them shoot to fame across the world and put the Axis of Resistance – Iran's informal political and military coalition in the Middle East – on the map. The West was forced to launch Operation Prosperity Guardian, which was a coalition of western allies, carrying out airstrikes against the Houthis in order to stop the impact they were having on global shipping and global trade.

The Houthis have been engaged in a multi-decade battle with the government and in 2015 they were able to overthrow the national government. Ever since the Houthis took power they have struggled to rule effectively as the decades long war has destroyed the economy and the Saudi intervention made things even worse.

It was in this context, the Houthi leadership increased popular mobilisation as a means of reducing resistance to its misrule. It undertook a risky strategy externally by escalating attacks on Israel through missile strikes and targeting Israeli linked shipping, despite turmoil domestically. The Houthis gained considerable global coverage with bombastic statements. But the reality is they have had no impact on the on-going war and in fact this deflects from the dire situation the Houthis face domestically.

America Schizophrenic Approach – In times of chaos the global superpower would be expected to bring warring parties together and get them to agree to a ceasefire or a peace deal. But the US and the US president seems to be suffering from Schizophrenia. For almost a year now, Israeli Prime Minister Benjamin Netanyahu has persistently rebuffed the US, while the US has been unwilling to use its leverage over Israel. Each time the US has called for de-escalation or to stop civilian deaths Israel has not only escalated but explained itself to US officials who came around to seeing Israeli logic and agreeing with it.

America's schizophrenic approach has been caused by the fact that not all institutions of the US are on the same page and have not been working on the same policy. While President Biden and his staff have consistently sought to apply pressure on Netanyahu and his government to get it to align its course with the US, others in the US Deep State have followed a different path, a path of consistent unconditional support for the Zionist program.

American duplicity is due to the fact that the tools of leverage are simply not available to the US president,

because not all influential people in key positions of the broader US state and beyond are following their own policy preferences rather than one policy, which in this particular case is the Zionist program. The various reports of political infighting inside the State Department are evidence of this.[40]

The Death-Nail of the Global Rules Based Order – The global rules based order that the US and the West promoted for decades was already struggling before October 7th, but the actions of the West have now completely exposed that the order is not worth the paper its rules are written on. The US had already undermined the global order with its actions in Iraq and Afghanistan when it openly trampled over it by creating a global torture network, abandoned the rule of law as well as international law.

But with Israel's genocidal war in Gaza and South Africa taking the case to the ICJ, the West is now acting like the mafia against the very order it created and for long promoted. The US House of Representatives has voted to pass legislation that will sanction the International Criminal Court (ICC) after its prosecutor applied for arrest warrants against Israeli officials. A group of Republican US senators even sent a letter to International Criminal Court (ICC) Chief Prosecutor Karim Khan threatening his family! Whether it is the UN, the ICC or even the ICJ they are now labelled as antisemitic and are being threatened for investigating and carrying out their job of investigating crimes against humanity. The West supported the court when it issued arrest warrants for Vladimir Putin, but the US has done the most to destroy and undermine the global order than any other person ever could.

One Year On: Israel is Neither Safe, Stable or Secure – The events of October 7th have seen Israeli military and security superiority take a major hit as armed groups from Gaza ran riot and took hostages. Since then, Israel has been working to collectively punish the Palestinians. Israel has made use of Artificial Intelligence (AI) to trawl through large amounts of data to identify and select bombing targets. The pager campaign that saw the detonation of thousands of pagers and walkie-talkie's leading to untold injuries came on the back of a decade's long intelligence program. Alongside this the Israeli war machine has seen the deployment of state of the art tanks, precision missiles and the use of 2000 pound bombs.

On the anniversary of October 7th Israel has turned Gaza into rubble, it's been targeting Iran in Syria, its assassinated the leadership of Hezbollah and it regularly launches strikes on Yemen. Israel is at war on multiple fronts, and it could be argued that Israel's obsession with security is finally in sight. Israel, however, has continued to escalate and cannot deescalate because despite all these achievements, the truth is after a year of war it still is not safe, stable or secure. With its enemies on the run Israel is not safe and will likely never be stable or secure as it has lost the hearts and minds of the region who will always see it as an occupier. Despite its battlefield success, Israel is more a pariah today than ever before.

Israel Has Created a Man-Made Famine – Israel now stands accused by almost everyone of triggering a man-made famine by deliberately obstructing the entry of aid into Gaza. Due to Israel's long-term occupation of Gaza the strip has long relied on over 200 trucks bringing in food and aid on a daily basis. Two days after October 7th Israel announced it was blocking the entry of food and water into Gaza. As Gaza was already reliant on food aid, the repercussions were felt immediately. By the end of October, Cindy McCain, executive director of the UN World Food Programme, stated people were "…literally starving to death as we speak."[41] Aid trucks, today remain parked up on the Gaza-Egypt border and are refused entry into Gaza by Israeli security personnel and on many occasions the aid has been ransacked by Israeli settlers as many in Gaza look on.

Israel's actions, according to its government, aim to neutralise Hamas as a security threat, including preventing military resources from being smuggled under the guise of humanitarian aid. But Israeli officials have made clear, as the Israeli Finance Minister Bezalel Smotrich did, that blocking humanitarian aid to the Gaza Strip is "…justified and moral…" even if it causes two million Gazans to die of starvation.[42]

The US has also acknowledged Israel is blocking even US aid in its starvation strategy. US Secretary of State Anthony Blinken ignored US assessments that Israel was blocking aid to Gaza. The US Agency for International Development (USAID) told the State Department in an April report that Israel was subjecting US humanitarian aid destined for Gaza to *"…arbitrary denial, restriction and impediments".* But in May, Blinken delivered a State Department report to Congress with a different conclusion that contradicted his own agencies findings.[43]

Between Collective Punishment and Genocide – A year since the October 7th assault, Israel's Gaza strategy has 5 types of policies:

1. 'Domicide' – The scale, extent, and pace of destruction of buildings in the Gaza Strip ranks among the most severe in modern history, surpassing the bombing of Dresden, Hamburg, and London combined during World War II. The 29,000 munitions—shells and bombs—that Israel had dropped on Gaza in three months greatly exceeded the amount (3,678) dropped by the US between 2004 and 2010 after its invasion of Iraq. After seven months, Israel's war left 37 million tonnes of rubble, much of it with unexploded bombs and averaging 300 kilograms of rubble per square metre of Gaza, with an estimated removal time of 14 years. The damage to buildings in northern Gaza reportedly exceeds that in Bakhmut and Mariupol in the Russian invasion of Ukraine. The Guardian reported that the scale of destruction has led international legal experts to raise the concept of 'domicide,' which it describes as "…the mass destruction of dwellings to make [a] territory uninhabitable."[44]

2. Starvation – Israeli officials are on record that they are using famine as a war tool in Gaza. Israel has not only blocked food and aid conveys but told its citizens to ransack trucks carrying aid for Gaza, aid that the strip relies upon. Israeli forces even carried out at least eight strikes on aid workers' convoys and premises in Gaza since October 7th, even though aid groups had provided their coordinates to the Israeli authorities to ensure their protection. Israel's attack on April 1st on the World Central Kitchen convoy, which killed seven workers, far from being an isolated "mistake," is just one of at least eight incidents that Human Rights Watch highlight that UN agencies had communicated with Israeli authorities and provided the GPS coordinates of aid convoys and premises and yet Israeli forces attacked the convoy or shelter.[45]

3. Targeting Hospitals – Israel specifically targeted the healthcare system of Gaza and destroyed it by carrying out attacks on hospitals and health facilities. By May 2024, the World Health Organisation documented 450 Israeli attacks on Gaza's healthcare system. Gaza hospitals began shutting down as they ran out of fuel. When hospitals lost power completely, multiple premature babies in NICUs died. Omar Rahman, a fellow at the Doha-based Middle East Council on Global Affairs explained the reason why Israel targets hospitals is "It is a form of psychological warfare. Attacking hospitals tells the population that nowhere for [Palestinians] is safe." He added that Israel acts with "total impunity".[46]

4. Forced Displacement – When Israel launched its war on Gaza at the end of October 2023 it told Gazans in North Gaza to move to South of Gaza. Then it told Gazans in South Gaza to shift to Rafah City on the Egyptian border area as Israel carried out its bombing campaign. In May 2024 Israel carried out a massacre in Rafah. Despite the fact that the people of Gaza are in the most densely populated strip in the world, Israel has used displacement as a war tool. A UK based Human Rights group – Restless Beings, concluded mass expulsion are "*…identifiable strategies…"* of Israel's military campaign in the Gaza Strip. Israel's intensification of its military assaults on the Gaza Strip's shelter centres has been part of a declared effort to carry out its displacement plans against the Gazan people, in order to give them the impression that there is nowhere safe for them to live within the Strip and worsen their suffering.

5. Targeting Civilians – Israel has been deliberately targeting civilians despite claiming its fighting against Hamas implementing a criminal policy of bombings. Analysis by Haaretz found the aerial bombing campaign by Israel in Gaza is the most indiscriminate in terms of civilian casualties in recent years. The civilian proportion of deaths is higher than the average in all world conflicts in the second half of the 20th century, according Haaretz data. A UN-backed independent commission reported in June 2024 the Israeli military's "deliberate" use of heavy weapons in the Gaza Strip has been an *"…intentional and direct attack on the civilian population."*[47]

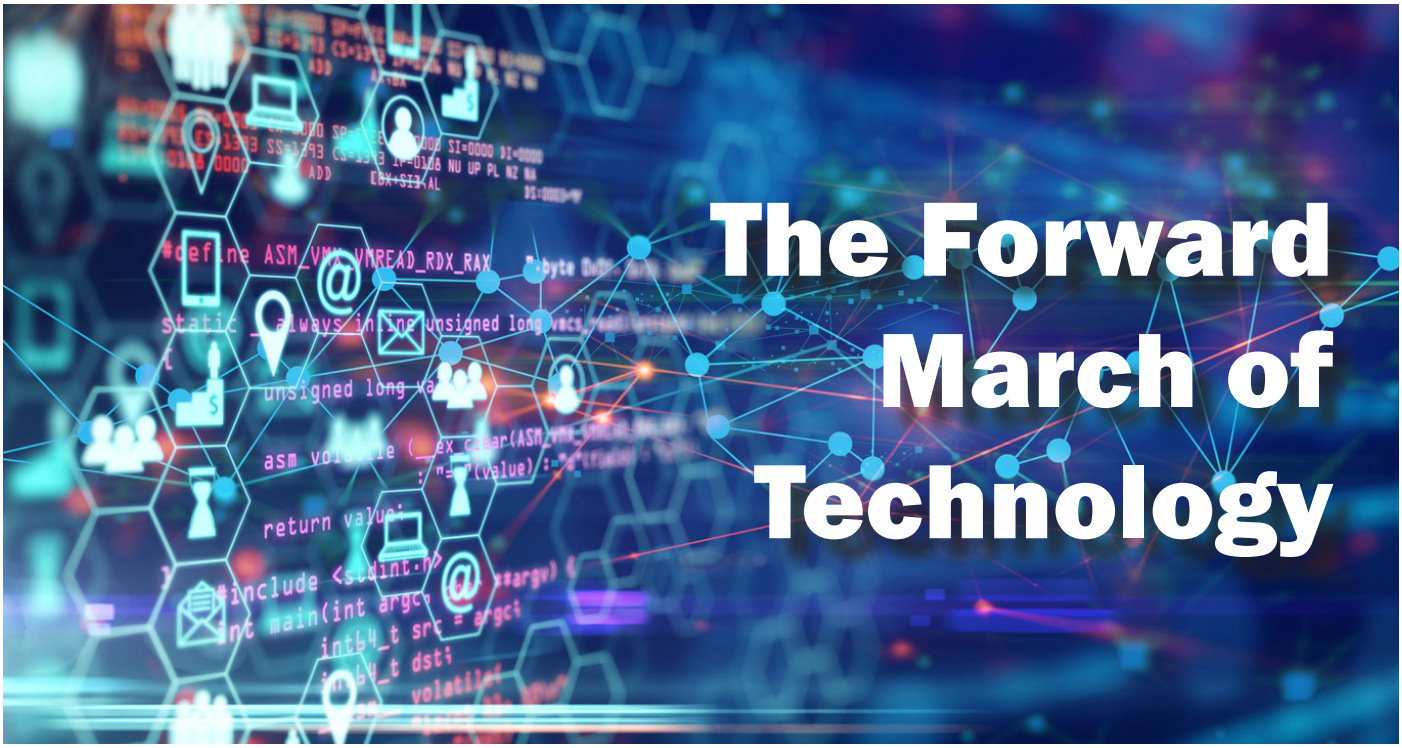
From Genocide Victims to Genocide Perpetrators – To the shock of many around the world South Africa dropped a bombshell in December 2023 when it took a case to the International Court of Justice (ICJ), the United Nations' highest judicial body. It accused Israel of committing genocide in Gaza. The ICJ ruled that South Africa's genocide case against Israel should proceed due to the plausibility of a genocide taking place. Israel is now on trial.

This was an extraordinary moment as the nation that had come about due to being victims of a genocide were now being accused of committing one in the 21st century. There will be serious implications for Israel if it's found to be perpetuating a genocide. As a result the Israeli Foreign Ministry instructed its

embassies to pressure politicians and diplomats in their host countries to make statements opposing South Africa's case at the ICJ. Israel has historically not participated in international tribunals in order to undermine them and present an image that it doesn't recognise them and therefore they have no jurisdiction. But in the end the Israeli government decided to participate in the ICJ proceedings.

The ICJ court case in many ways sums up where the slaughter in Gaza is on the one-year anniversary of the events of October 7th. Whilst Israel had global sympathy after October 7th, the world now stands with Palestine and Israel has become a pariah state with global sympathy completely with the Palestinians as Israel is being accused of committing a genocide.

Deep Dive: The Geopolitics of Technology



The Forward March of Technology

The application of knowledge and research for practical use is something humans have endured since the dawn of humans. Being able to reproduce these results and expand this productive process is the very definition of technology. Since the dawn of man, humans were required to live, eat, travel, fight, play and survive. All of this required using what was in their environment, making sense of this environment and then making practical use of them.

The first technology is considered by many to have been simple stone tools developed through observation and trial and error. The simple hand ax forms part of history's first wave of technology. Animals could be killed more efficiently, carcasses butchered, rivals fought. Eventually, early humans learned to manipulate these tools finely, giving rise to sewing, painting, carving, and cooking. The discovery of fire is considered by many as the greatest discovery ever. Fire, fuelled with wood and charcoal, allowed early humans to cook their food to increase its digestibility, improving its nutritional value and broadening the number of foods that could be eaten. The invention of the polished stone axe allowed large-scale forest clearance and farming which increased agriculture, which now meant people could have children and families.

The invention of clothing, adapted from the fur and hides of hunted animals is considered to have helped humanity expand into colder regions; humans began to migrate out of Africa.

Understanding fire and continuing improvements led to the furnace and bellows and provided, for the first time, the ability to smelt and forge gold, copper, silver, and lead – native metals found in relatively pure form. The advantages of copper tools over stone, bone and wooden tools were quickly apparent to early humans. The working of metals led to the discovery of alloys such as bronze and brass.

After harnessing fire, humans discovered other forms of energy. The earliest known use of wind power was the sailing ship; the earliest record of a ship under sail is that of a Nile boat dating to around 7,000 BCE. This now meant the oceans could be traversed cutting down journey times.

Archaeologists estimate that the wheel was invented in Mesopotamia somewhere in between 5,500 to 3,000 BCE. The invention of the wheel revolutionised trade and war. It did not take long to discover that wheeled wagons could be used to carry heavy loads. The use of the wheel as a transformer of energy, through water wheels, windmills, and even treadmills revolutionised the application of nonhuman power sources.

The invention of silk, horse collar and horseshoes revolutionised transport and survival. The lever, the screw, and the pulley may be considered simple tools today, but they were the machines of the Middle Ages. They were combined into more complicated tools that led to the wheelbarrow, windmills and clocks.

The reformation and enlightenment in Europe led to the formulation of knowledge, leading to the emergence of universities in Europe and the spread of ideas and practices including the movable type printing press.

The development, refinement and operationalisation of the Compass, Cross-staff, Carvel technique and Gunport led to the emergence of Europe's first modern powers - Portugal and Spain. The Iberian Peninsula went from being a quiet corner of Europe to the centre of the world in the 16th century.

The Industrial revolution in the 18th century developed the technology that created the modern world we live in today. It began with steam power emerging as an energy source that replaced muscle, wind, and water as the primary means of power. The first successful modern steam engine was introduced to pump water out of coal mines, thus allowing for deeper excavations. This made accessibility to coal abundant, leading to developments in power, smelting and transport. In a parallel development Industry breakthroughs led to steel becoming available in high enough volumes and strength to be used to build railroads and steel ships, which revolutionised transport. The first wave of the Industrial Revolution combined steam power, mechanised looms, the factory system, and canals.

Steam engines then became small and powerful enough to power steel vessels and railway locomotives. Steamships made navigation— deepwater and riverine—faster, more versatile, and more cost-efficient by breaking the link between seasonal winds and shipping.

The age of railways, telegraphs, and steamships, and then steel and machine tools formed the First Industrial Revolution. Then in the Second Industrial Revolution came the internal combustion engine, chemical engineering, powered flight, and electricity.

Breakthroughs in chemicals led to the mass production of sulfuric acid and sodium carbonate, which led to the precursor materials for everything from glass, dyes, toothpaste, and washing detergent to steel, paper, medications, and fertilizer.

The need to communicate saw the world move from flying pigeons and horseback messengers to the telegraph, undersea cables, satellites and eventually the internet.

The Two World wars were the first industrial wars in history and led to the atomic age. The need to break Nazi communication led to the first computers that could crunch large amounts of data. Analog computers were invented to make the complex calculations faster, which were needed for nuclear detonation, missile launches and eventually space travel.

These early computers were eight-foot-tall behemoths of thousands of vacuum tubes capable of three hundred operations a second. When the first transistor was invented, it was a crude device, comprising a paper clip, a scrap of gold foil, and a crystal of germanium that could switch electronic signals. This laid the basis for the digital age. Eventually imprinting multiple transistors on silicon wafers produced what came to be called silicon chip. This led Gordon Moore to propose his eponymous "law": every twenty-four months, the number of transistors on a chip would double, implying the world of digital and computational technology would be subject to the upward curve of an exponential process. This computational power led to a flowering of devices, applications and users.

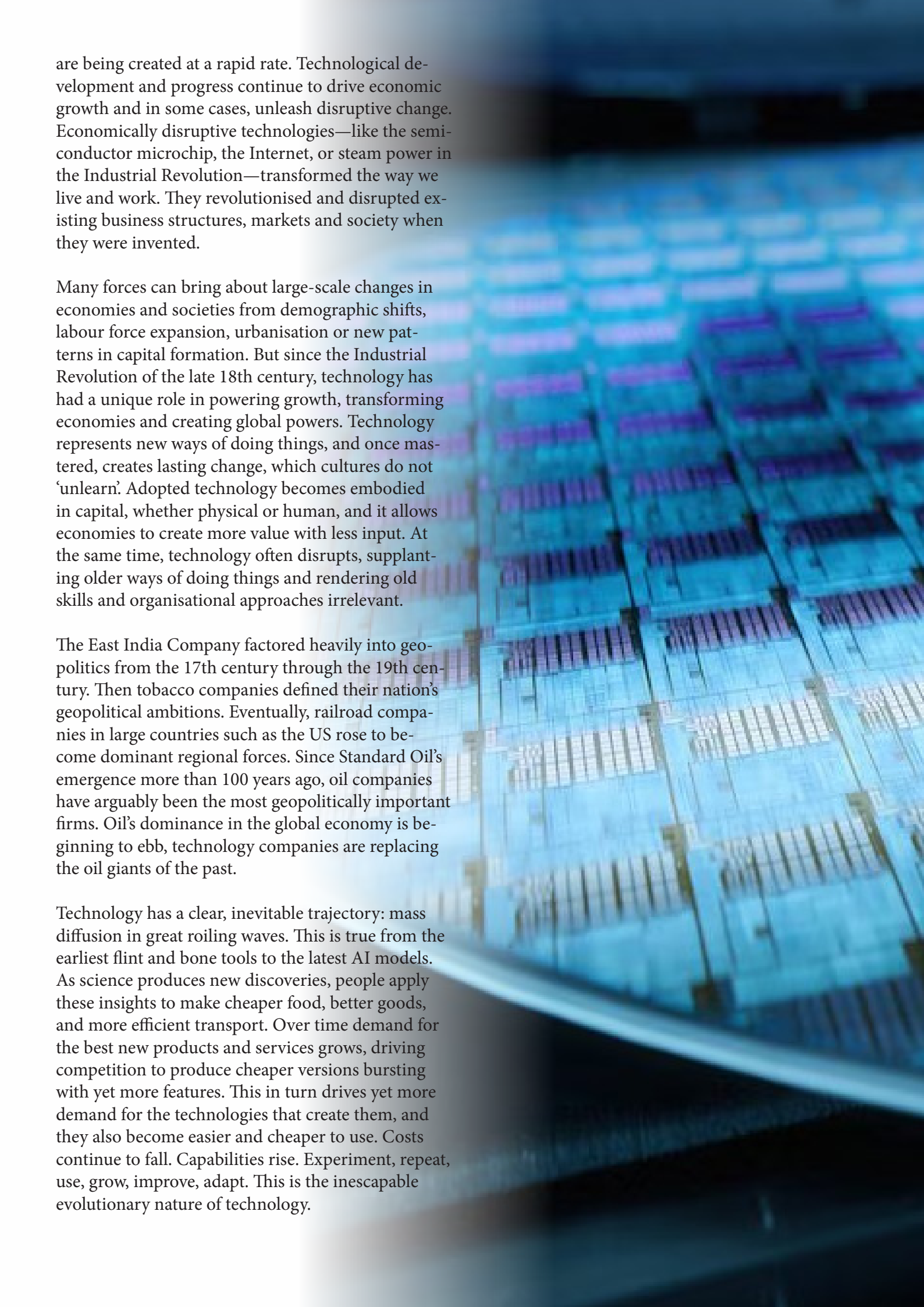
This extremely condensed time-line of technology development shows the forward march of tech development. There has been more technological development in the last 100 years than all of human history put together. Technology is now moving so quickly, and in so many directions, that new markets

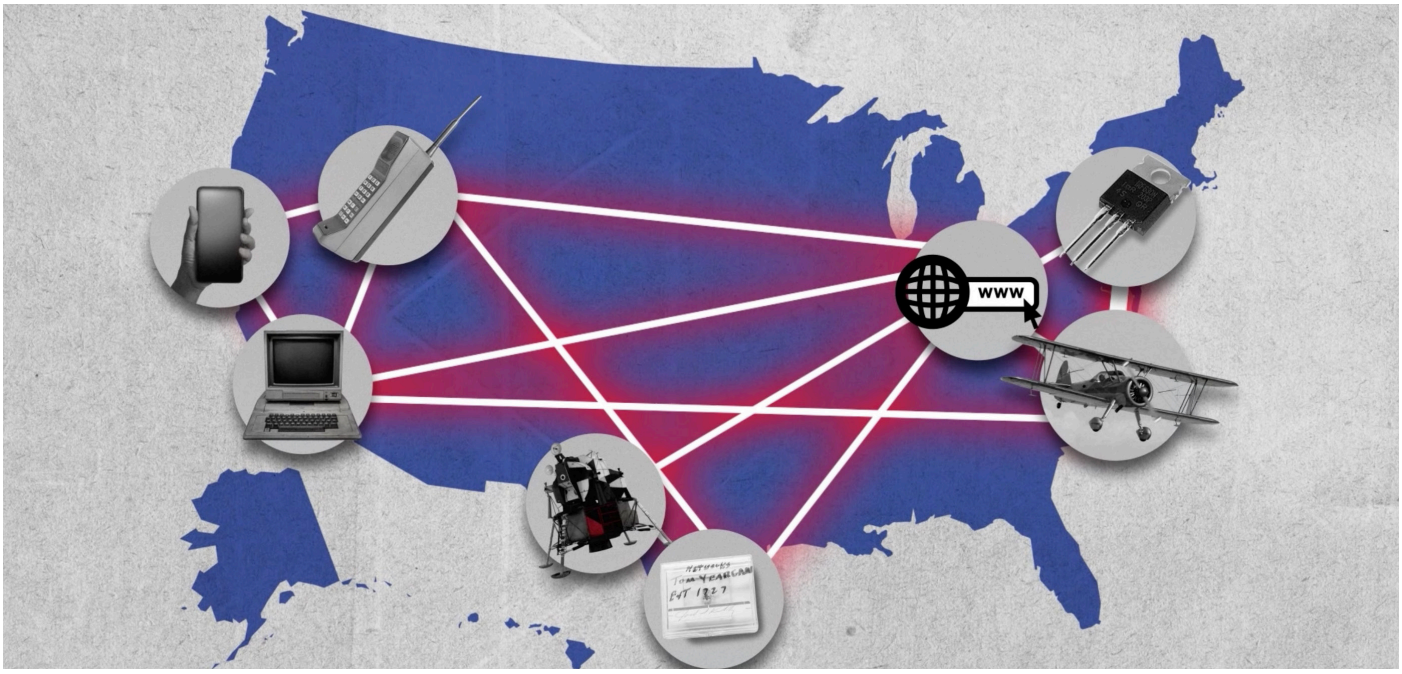
are being created at a rapid rate. Technological development and progress continue to drive economic growth and in some cases, unleash disruptive change. Economically disruptive technologies—like the semiconductor microchip, the Internet, or steam power in the Industrial Revolution—transformed the way we live and work. They revolutionised and disrupted existing business structures, markets and society when they were invented.

Many forces can bring about large-scale changes in economies and societies from demographic shifts, labour force expansion, urbanisation or new patterns in capital formation. But since the Industrial Revolution of the late 18th century, technology has had a unique role in powering growth, transforming economies and creating global powers. Technology represents new ways of doing things, and once mastered, creates lasting change, which cultures do not 'unlearn'. Adopted technology becomes embodied in capital, whether physical or human, and it allows economies to create more value with less input. At the same time, technology often disrupts, supplanting older ways of doing things and rendering old skills and organisational approaches irrelevant.

The East India Company factored heavily into geopolitics from the 17th century through the 19th century. Then tobacco companies defined their nation's geopolitical ambitions. Eventually, railroad companies in large countries such as the US rose to become dominant regional forces. Since Standard Oil's emergence more than 100 years ago, oil companies have arguably been the most geopolitically important firms. Oil's dominance in the global economy is beginning to ebb, technology companies are replacing the oil giants of the past.

Technology has a clear, inevitable trajectory: mass diffusion in great roiling waves. This is true from the earliest flint and bone tools to the latest AI models. As science produces new discoveries, people apply these insights to make cheaper food, better goods, and more efficient transport. Over time demand for the best new products and services grows, driving competition to produce cheaper versions bursting with yet more features. This in turn drives yet more demand for the technologies that create them, and they also become easier and cheaper to use. Costs continue to fall. Capabilities rise. Experiment, repeat, use, grow, improve, adapt. This is the inescapable evolutionary nature of technology.





USA: From Nuclear Power to AI

The US has been the world's leading science, technology and innovation power since WW2. But after seven decades its position at the top is being challenged and it appears change is a foot with the rise of China.

US innovation in science and technology is a broad-based system that includes public-private partnerships, government-funded research, public venture capital initiatives and a huge private sector that all act as supply lines that turned the US into a technological superpower.

Prior to WW2 the US was characterised by state development and a number of huge infrastructure projects that saw the creation of the Transcontinental Railroad. The needs of WW2 and the global environment thereafter propelled US innovation. What emerged during and after WW2 was the national security state (NSS) which led to the expansion and transformation of US resources in order to deal with the needs of permanent war.

It was the government that drove, funded and organised the technology, research and creation of the first nuclear bomb in the Manhattan project. This created the foundation for the research universities of today. The project brought together the best minds in physics and engineering, with the state coordinating the scientists, engineers and the industrial partners.

The Sputnik Moment

The Soviet Union launched the first satellite, Sputnik in 1957, causing panic among US policymakers who were fearful that they were losing the technological battle. Whilst the US led the development of the nuclear bomb, it came as a shock that the USSR created the world's first satellite. The US response was the creation of the Defense Advanced Research Projects Agency (DARPA) in 1958. Prior to DARPA, the military was the sole controller of all military Research and Development (R&D) dollars. Through the formation of DARPA a portion of military spending on R&D was now designated to 'blue-sky thinking' – ideas that went beyond the horizon in that they may not produce results for one or two decades. DARPA's job was to focus on advancing innovative technological development. The results ever since have included technologies like the semiconductor chip, GPS, human computer interface, voice recognition and the internet. It also led to development of the computer industry in the US during the 1960s and 1970s and the emergence of Silicon Valley as well as the personal computer.

DARPA played the role of an intermediary that facilitated and acted as a middle-man for researchers to gather and share ideas while also learning of the paths identified as 'dead ends' by others. DARPA linked university researchers to entrepreneurs interested in starting a new firm, connecting start-up

firms with venture Capitalists as well as finding larger companies to commercialise technology.

The US then built on the successes of DARPA's decentralised industrial policy with the Small Business Innovation Development Act in 1982. This set up a consortium between the Small Business Administration and different government agencies like the Department of Defense, Department of Energy and Environmental Protection Agency. The Small Business Innovation Research (SBIR) programme required government agencies with large research budgets to designate a fraction of their research funding to support small, independent, for-profit firms. As a result, the programme has provided support to a significant number of highly innovative start-up firms ever since.

Biotech: From War to Peace

The Biotech industry in the US was created in 1969 by President Nixon, although he did not know this at the time. Nixon ordered for the conversion of the country's biological warfare program into a biological research program. All the scientists, labs, and equipment that were focused on developing weapons were suddenly redirected to explore the potential of biology for peaceful purposes. This laid the groundwork for the whole commercial biotechnology industry. Many of the early pioneers in biotechnology were scientists who used to work on the American biological warfare program. All the knowledge, infrastructure and expertise of the US biological warfare programme was given a new mission and a huge head start in civilian biotechnology.

Silicon Valley

Silicon Valley emerged and eventually became a global hub for technology and innovation. It achieved this due to the coming together of multiple factors. Stanford University played a pivotal role originally through its collaboration with industry. Frederick Terman, a professor and later dean, is often called the "Father of Silicon Valley" for encouraging students to start tech companies. An example of this is the establishment of Hewlett-Packard (HP), who with ties to Stanford focused on electronics and radio technology.

Two technologies drove the original rise of the Silicon Valley area, that of aerospace and the semiconductor. The Cold War drove federal investment in defence and aerospace technology, much of it centered in California. This drove companies like Lockheed to establish research centers in the area, attracting talent and infrastructure for electronics and innovation.

In the 1950s, William Shockley, a co-inventor of the transistor, founded Shockley Semiconductor Laboratory in Silicon Valley. His firm attracted talented engineers and several of them left to form Fairchild Semiconductor in 1957, which became the bedrock for the semiconductor industry. Fairchild's alumni went on to create iconic companies like Intel and AMD, which developed the profile of Silicon Valley being a hub for expertise on emerging tech.

The emergence of the personal computer in the 1970s saw venture capital arrive providing startups with funding and mentoring. This created a cycle of innovation and entrepreneurship, drawing more talent to the area. When companies like Apple and Microsoft were created, they capitalised on the expertise in Silicon Valley making it the epicentre of American tech.

The Internet

During the Cold War, US authorities were concerned about the possibility of nuclear attacks and the state of communication networks following the aftermath of a possible attack. Paul Baran, a researcher at RAND – an organization with its origins in the US Air Force's project for 'Research and Development', or RAND for short – recommended a solution that envisioned a distributed network of communication stations as opposed to centralised switching facilities. With a decentralised communication system in place, the command and network system would survive

during and after a nuclear attack. The technological challenges of devising such a network were overcome thanks to the various teams assembled by DARPA to work on networking stations and the transmission of information. Although DARPA approached AT&T and IBM to build such a network, both companies declined the request believing that such a network was a threat to their business. DARPA eventually successfully networked various stations from the west to east coast of the US. From the 1970s through to the 1990s, DARPA funded the necessary communication protocol (TCP/IP), operating system (UNIX) and email programs needed for the communication system, while the National Science Foundation (NSF) initiated the development of the first high-speed digital networks in the US.

"Apple's innovative products are in fact the results of decades of federal support for innovation."

In the late 1980s, British scientist Tim Berners-Lee was developing the Hypertext Markup Language (HTML), uniform resource locators (URL) and uniform Hypertext Transfer Protocol (HTTP). Berners-Lee, with the help of another computer scientist named Robert Cailliau, implemented the first successful HTTP for the computers installed at CERN. Berners-Lee and Cailliau's 1989 manifesto describing the construction of the World Wide Web eventually became the international standard for computers all over the world to connect. Public funding played a significant role for the Internet from its conception to its worldwide application. The Internet is now in many ways a foundational technology that has affected the course of world history by allowing users all over the globe to engage in knowledge sharing, commerce and socialising.

Nanotech

The National Nanotechnology Initiative (NNI) was set up in 1998 in order to find the 'next new thing' to replace the Internet. After receiving 'blank stares,' from the private sector, the US government Invested in the creation of a new research agenda. With the private sector focused on at most a 5-year horizon they were unable to provide a list of new era technologies that the US government should fund. In the end US civil servants succeeded in convincing President Bill Clinton, and then George W. Bush, that investment in nanotechnology would have the potential to "...spawn the growth of future industrial productivity…", and that "...the country that leads in discovery and implementation of nanotechnology will have great advantage in the economic and military scene for many decades to come." The US is today the leading researcher and developer in nanotechnology.

Apple and the iphone

Apple is the world's largest company valued in excess of $3 trillion. Apple has been at the forefront of introducing the world's most popular electronic products as it continues to navigate the seemingly infinite frontiers of the digital revolution and the consumer electronics industry. The popularity and success of Apple products like the iPod, iPhone and iPad have altered the competitive landscape in mobile computing and communication technologies. In less than a decade the company's consumer electronic products have helped secure its place among the most valuable companies in the world. Whilst Apple and its late founder Steve Jobs gain a lot of credit for innovation and making mistakes and learning from these, Apple is a good example of where commercial companies fit into America's innovation ecosystem.

Whilst small private companies gain a lot of coverage and credit when it comes to innovation, they are really a small part of the broader innovation process and are more a part of the commercialisation process.

Apple's innovative products are in fact the results of decades of federal support for innovation. While the products owe their beautiful design and slick integration to the genius of Jobs and his large team, nearly every state-of-the-art technology found in the iPod, iPhone and iPad is the research efforts and funding support of the government and military. Apple incorporated in 1976 as a personal computer company during the rise of the computer industry in the US. Originally named Apple Computer Inc. and for 30 years focused on the production of personal computers. In 2007, the company announced it was removing the 'Computer' from its name, reflecting its shift in focus from personal computers to consumer electronics. This was the same year Apple launched the iPhone and iPod Touch featuring its new mobile operating system.

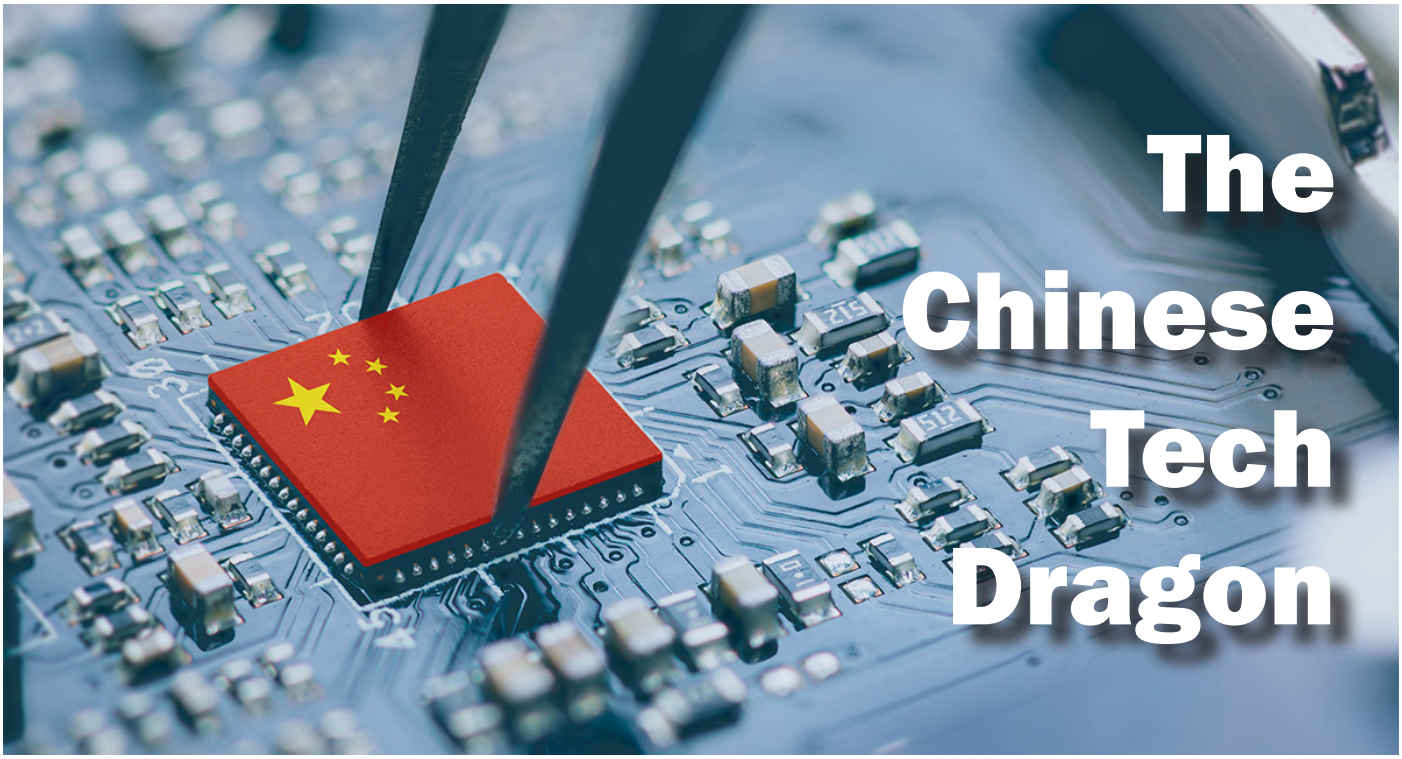
What Apple did and showcased is through concentrating its ingenuity not on developing new technologies and components, but on integrating them into

an innovative architecture. Apple integrated and merged technologies that were first developed and funded by the US government and military. Apple's capabilities are recognising emerging technologies with great potential, applying complex engineering skills that successfully integrate recognised emerging technologies, and maintaining a clear corporate vision prioritising design-oriented product development for ultimate user satisfaction.

There are 12 major technologies integrated within the iPod, iPhone and iPad that stand out as features from the semiconductor devices such as the central processing units (CPU). The liquid-crystal displays (LCDs), the lithium-polymer (Li-pol) and lithium-ion (Li-ion) batteries, as well as the Internet; the Hypertext Transfer Protocol (HTTP) and Hypertext Markup Language (HTML) and cellular technology and networks. Alongside these technologies, what made the Apple products drastically impact consumer expectations and user experiences was the integration of GPS, the click-wheel navigation and multi-touch screen and artificial intelligence with a voice-user interface program (a.k.a. Apple's SIRI).

America's corporate sector may get the most media coverage, but they are the smallest part of the innovation curve, but as they are the entities that commercialise the technologies, they receive the most attention. But they form a very small aspect of America's innovation ecosystem.

The US has for long stood at the forefront of research and development in almost all areas of science and technology. The country boasts strong institutions that work on developing long term innovative ideas and alongside its education system can attract foreign researchers, But America's decades long dominance is now facing major competition.



The Chinese Tech Dragon

China has made a number of impressive achievements on the technology front. It is considered to have leaped frogged the US in areas such as artificial intelligence (AI), life sciences, 5G and quantum computing. Whilst China is long known for creating cheap knockoffs and imitations it is now a major threat in the 4th industrial revolution of technologies.

China's commanding lead in high-impact research in almost every critical technology may be surprising for many. However, the CCP has been signalling, for decades now, the importance it places on technological advancement, talent, research and 'emerging strategic industries,' and those priorities are regularly and publicly outlined in its visions and plans.

China's view towards science and technology and its importance is rooted in its history. For millennia, China was a great and powerful civilisation that had technology, wealth and prosperity. But then the industrial revolution took place and China stagnated and fell behind the West. The Europeans with their superior technology and violence descended upon China, beginning with the opium war in 1839 and forced their way into China. This was the beginning of China's humiliation which would last for 100 years. The century of humiliation ended with the defeat of the Japanese at the end of World War 2. The rejuvenation of the Chinese nation – the slogan adopted by successive leaders is by revitalising the economy which will be achieved by being at the forefront of new technologies.

During the Mao era technology was transferred from the Soviet Union to China, from nuclear reactors to military jets and engines. But little progress was made by the CCP to develop indigenous technologies as Mao focused on consolidating China and its borders and firmly establishing the CCP as the sole political entity in the country. The disaster of the great leap forward from 1958-1962 set the country back and then the Sino-Soviet split and the Cultural Revolution (1964-1974) all obstructed the conditions needed to excel in technological development. Chinese science and technology were in a perilous state due to years of isolation from the global mainstream, the systematic disparagement of intellectuals under Mao and the collapse of the formal education system during the Cultural Revolution left their marks on China.

The Open and Reform era

The passing of Mao led to the emergence of Deng Xiaoping and the beginning of China's economic rise. Under his leadership an analysis of the nation was undertaken by technocrats from the CCP. The analysis presented at the 3rd Plenary Session of the 11th Central Committee of the Communist Party of China in 1978, concluded that the prior efforts to develop China had been failures. Mao's theory of continued revolution under socialism was abandoned and mass class struggle came to an end. It proposed a new comprehensive policy for China called the "Four Modernizations" of industry, agriculture, national defence and science-technology.

Realising China's industrial base was in a poor state, Deng established Special Economic Zones (SEZs) and focused on developing infrastructure such as ports, roads, railways and telecommunications in order to attract foreign companies. What China was offering the world's manufacturers was an endless supply of labour, cheaper than anywhere in the world. This offer was based on foreign firms transferring skills and technology to China's large labour force. Since 1979 many of the world's premier brands shifted manufacturing facilities to China to take advantage of the cheap endless supply of labour. The CCP carefully managed this process ensuring tech, skills and foreign companies came to China, rather than their foreign ideas and values.

Scientists suffered under the Cultural Revolution as they were accused of not being ideologically pure. In 1978 the National Science Conference in Beijing was a milestone in science policy. The conference, called by the CCP Central Committee, was attended by many of China's top leaders, as well as 6,000 scientists and administrators. It publicly announced the government and party policy of encouragement and support of science and technology. Science and technology were assigned a key role in China's "New Long March" toward the creation of a modern society by the year 2000. A major speech by then-Vice Premier Deng Xiaoping declared: *"The crux of the Four Modernizations is the mastery of modern science and technology. Without the high-speed development of science and technology, it is impossible to develop the national economy at a high speed."*

"China has made a number of impressive achievements on the technology front. It is considered to have leaped frogged the US in areas such as artificial intelligence (AI), life sciences, 5G and quantum computing. Whilst China is long known for creating cheap knock-offs and imitations ."

China's R&D had for long followed the Soviet model where experts worked in specialised research institutes rather than in academic or industrial enterprises. The research institutes, of which there were about 10,000 in 1985, were funded by various central and regional government bodies. Who also determined their research tasks as well as the employment of scientists. Scientists usually spent their entire working careers within the same institute with the usual features of lifetime employment and limited contact with other units not in the same chain of command. The limited channels for exchanges of information led to little innovation and often duplication and repetition of research.

As a result the CCP made sweeping reforms of science management. The main reforms made a major break with past practices. It changed the method of funding research institutes, encouraging the commercialisation of technology and the development of a technology market, and rewarding individual scientists. The reforms were meant to encourage the application of science to the needs of industry. It was envisaged that most research institutes would support themselves through consulting and contract work and would cooperate with factories through partnerships, mergers, joint ventures, or other appropriate and mutually agreeable means. The ultimate goal was to encourage exchange and cooperation and to break down the compartmentalisation characterising China's research and development structure.

The principal means for accomplishing the reforms was changing the funding system to force research institutes to establish contact with productive enterprises and to do work directly supporting those enterprises. Direct allocation of funds to research institutes was to be phased out and replaced by a system under which institutes sold their services in the marketplace. The reforms were not intended as a budget-cutting measure, and total state funding for science and technology actually increased.

What China did was build a system in which Chinese companies and innovation satisfy the vast internal market, while exporting around the world. Deng Xiaoping's open and reform was designed to attract technology, skills and talent. This lure of China's colossal market has seen companies, researchers, scholars and universities from around the world transfer, or otherwise hand over their knowledge and experience, which has helped China build its technological capabilities. In this way China's State-Owned Enterprises (SOEs) flourished throughout the 1980s and helped form the foundation of China's economic miracle.

Up to the early 2000s China focused on acquiring, learning and mimicking foreign technology. As the 2000s went by, talk of indigenous innovation and self-sufficiency began to emerge at CCP summits and policy papers. When the CCP was pushing its industrial titans to invest abroad it was also to acquire the technology needed to move China up the tech ladder. Three broad tactics evolved ever since China's national champions went global:

Acquisitions – Mergers and acquisitions have been a major hallmark of China's global companies. Chinese companies have been buying up tangible assets such as mineral deposits and oil reserves. By 2009 more than 70% of Chinese deals involved either energy or natural resources. Among these were Yanzhou Coal's $2.8 billion takeover of Australia's Felix Resources, and Sinopec's $7.2 billion acquisition of the Swiss-registered oil and gas company Addax.

China National Chemical Corporation (ChemChina), took over French Adisseo in 2006. By buying the French company for $480 million, ChemChina obtained methionine production technologies that were then non-existent in China. The Chinese also targeted companies that can deliver emerging and new technologies and possess offshore R&D facilities. Their value lies in their intellectual property, knowledge, and research and design processes. Patents and blueprints can be beamed to China, where an engineer can easily interpret them.

Cybertheft – China has state-sponsored hacking that focuses on stealing intellectual property and in 2021 it reached a record high. Cybertheft has ranged from theft of designs for advanced US fighter planes and gas distribution networks to personal information from healthcare providers. The process has lasted years, with almost daily raids on Silicon Valley firms, military contractors and other commercial targets. In 2020 Chinese hackers reportedly stole data from the credit rating firm Equifax. Data of over 145 million Americans was compromised. The huge cyber effort by China has seen a massive theft of intellectual property from companies around the world and is now referred to as "the greatest transfer of wealth in history,"

Espionage - China and its Ministry of State Security has been implicated in scores of espionage activities in the US and around the world. Between 1996 and 2019, China faced 66 (32%) of the 206 US federal cases involving charges related to economic espionage. From 2016-2019 China accounted for half of all charges related to economic espionage (18 of 36 cases). Researcher Nicholas Eftimiades estimated that Chinese economic espionage activities accounted for $320 billion in losses per year as of 2018, or 80% of the total cost of intellectual property theft to the US estimated at $400 billion per year by the director of national intelligence. China's major scalp was Su Bin who established an aerospace firm in Canada who successfully targeted US defence companies and managed to get hold of over 630,000 files containing information on the C-17, F35 and F22. China's J-20 and F-31 were produced by China's air force with this information

China's innovation and technology strategy is built on forced technology transfer, cybertheft, massive state-led capital investment, and global strategic acquisitions done by state-run corporations. When the world's largest companies come up against Chinese companies they are in effect competing with a 17 trillion-dollar state who is pouring billions into robotics, biotechnology, and quantum computing, or snapping up strategic acquisitions such as deep-sea mining corporations and leading-edge aerospace composites companies. The CCP has also brought China's corporations and military together through a policy of "Civil Military Fusion." Here, China's private sector and military technology development combine, spanning a wide range of emerging technologies from artificial intelligence to robotics.

China's DARPA

The Chinese Academy of Sciences (CAS), is the world's best-performing institution when it comes to technology research. It has been found to be the world leader in research in over half the technologies of the future. CAS is more than a research institute; it plays a vital role in China's whole-of-nation approach to Science and Technology (S&T) policy and has been at the centre of the country's major technological breakthroughs since the founding of the People's Republic in 1949. CAS is a ministerial-level institution sitting directly under the State Council and has spearheaded the development of China's indigenous science, technological and innovation capabilities, including in computing technologies, nuclear weapons and intercontinental ballistic missiles. It's believed to be the world's largest scientific institution, with a reported departmental budget of $23.8 billion, has more than 69,000 employees, as well as investment arms and a large number of branches, institutes and national labs. CAS has a robust internal communist party apparatus, and CAS members are required to 'model love of the Party', 'serve national security' and follow the policies of the Chinese Communist Party's Central Committee. CAS specialises in commercialising its findings and creating new companies. That approach can be traced back to 1985, when CAS undertook a reform named 'one academy, two systems' which encouraged its research institutes with application capabilities to enter the market.

CAS specialises in commercialising its findings and creating new companies. That approach can be traced back to 1985, when CAS undertook a reform named 'one academy, two systems' which encouraged its research institutes with application capabilities to enter the market. According to CAS, by 2022 more than 2,000 companies had been founded from the commercialisation of its scientific research. Companies that CAS has established or helped to create include Lenovo, iFlyTek, Sugon, Cambricon Technologies and Loongson. A number of them have been added to the US Entity List over the past five years for reasons ranging from links to China's military modernisation to human-rights violations.

Whilst CAS is not exactly the same as America's DARPA, it has played a central role in developing China's innovation capabilities.

Made in China 2025

The state driven Made in China 2025 (MIC2025) plan unveiled in 2015 aimed to lift the country's industries up the value chain, replacing imports with local products and building global champions able to take on the Western technology giants in cutting-edge technologies. The strategic plan of China issued by Chinese Premier Li Keqiang and his cabinet in May 2015 aimed to move China away from being the world's factory floor for cheap goods and low quality and to move to higher value products and services. Made in China 2025 is the natural evolution of China's strategy of being a technology giant and self-sufficiency in the next generation of technologies.

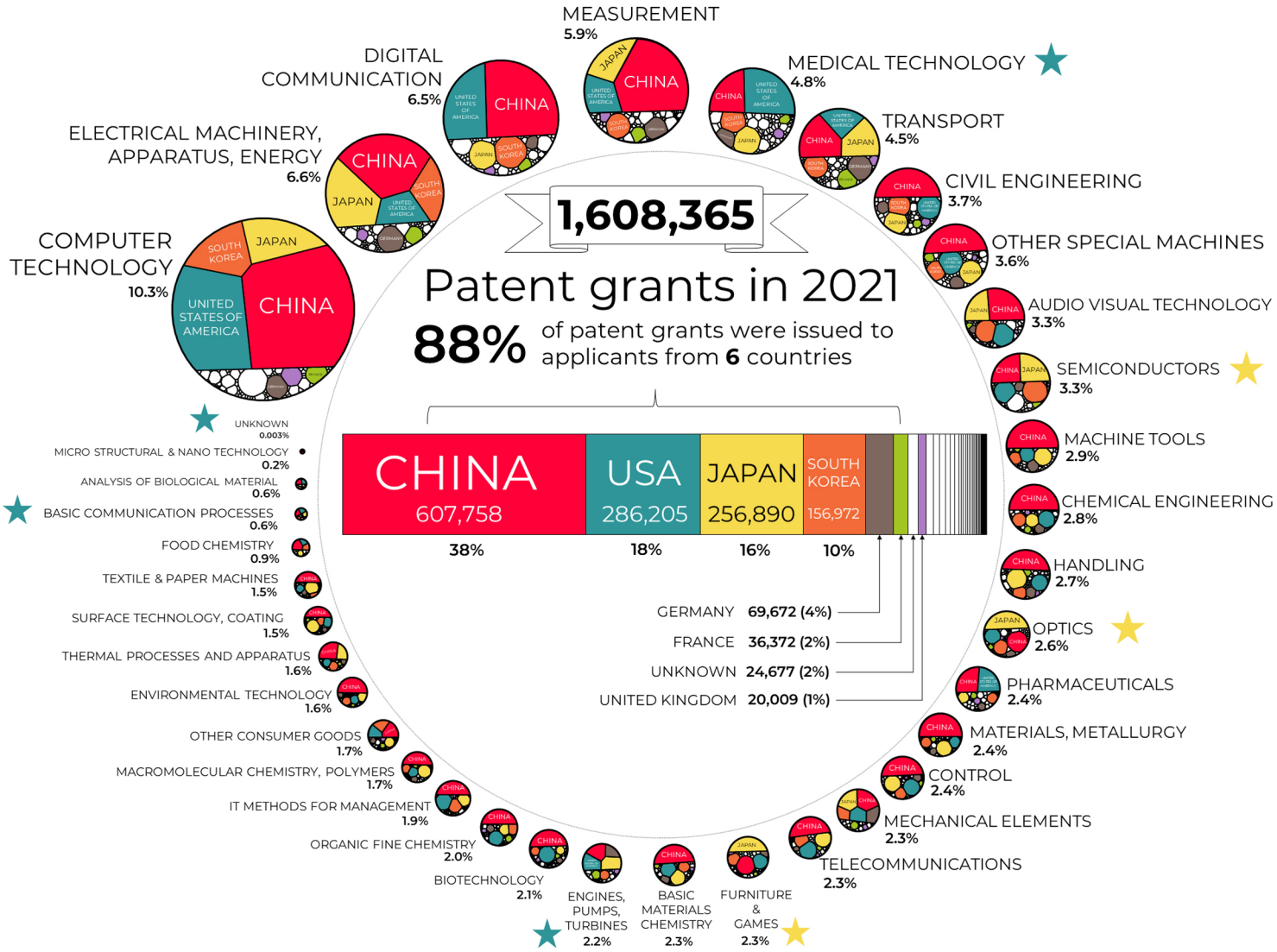
The goals of 'made in China 2025' included increasing the Chinese-domestic content of core materials to 40% by 2020 and 70% by 2025. The plan focused on high-tech fields including the pharmaceutical industry, automotive industry, aerospace industry and semiconductors, IT and robotics etc, which are presently the purview of foreign companies. It was an initiative to comprehensively upgrade Chinese industry.

A 2024 analysis by the South China Morning Post found that of the more than 260 goals proposed under the MIC2025 plan, more than 86% of the targets had been achieved. The report found targets in sectors such as electric vehicles and renewable energy were well surpassed, all the goals in robotics, agriculture machinery, biopharmaceuticals and marine engineering were fulfilled, though some targets such as advanced photolithography technology, intercontinental passenger aircraft and broadband internet satellite networks were unfulfilled. The sector with the lowest completion rate was new materials, at 75%.[48]

MIC2025 has been a resounding success and has seen China achieve in a decade what previously would take a lifetime. By focusing on strategic sectors, throwing money at it and acquiring the skills and knowledge from abroad it now leads in areas that just a decade ago was led by tech and science organisations from the West. China has reached, or is near to reaching, the technological cutting edge in most of the sectors it has targeted. Of the 10 sectors targeted by MIC2025, China can credibly claim to be the world leader in four (Electric Vehicles, Energy and Power Generation, Shipbuilding, and High-Speed Rail); China is therefore shaping up to be a superpower of green energy and advanced logistics, often in areas of technology with obvious military application. In five sectors, China has made substantial progress toward the technology frontier but is not yet a leader: Aerospace and Aviation, Biotechnology, New Materials, Robotics and Machine Tools, and Semiconductors.

China in just two decades has moved into pole position to be a technological leader and this is threatening the US who has held the position since the 1950s.

PATENT GRANTS BY ORIGIN COUNTRY & FIELD OF TECHNOLOGY



Japan tops **3** fields
Semiconductors, Optics, Furniture & Games

China tops **29** fields

USA tops **4** fields
Medical technology; Engines, pumps, turbines; Basic communication processes; Unknown

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* DATA SOURCE: WWW.WIPO.INT/IPSTATS (UPDATED FEB 2023)

Technologies of the Future

The technologies of the future are many and can be grouped into a number of categories. From advanced materials to Quantum technologies. In this section we will look at the key categories of technologies that are currently leading research and development and have the potential to disrupt societies, economies and national security.

Most are dual or multi-use and have applications in a wide range of sectors. By focusing early on the science and technology (S&T) life cycle, rather than examining technologies already in existence and fielded, this provides insights into which technologies that are likely to dominate the future.

Research and Development (R&D) is only one piece of the puzzle. Actualising and commercialising research performance into major technological gains, no matter how impressive a breakthrough is, can be a difficult, expensive and a complicated process. A range of other inputs are also needed, such as a manufacturing base and ambitious policy implementation. But the research into key technologies is an indicator of national priority and allows us to assess which technologies are being prioritised and then we can look at who leads research into them and compare and contrast who will be the technological leader of the future.

Defence, space and robotics

Advance aircraft engines, Drones, swarming and collaborative robots, Small satellites, Autonomous systems operation technology, Advanced Robotics and Space launch systems

The world was shocked in 2021 when it was revealed that China had tested a nuclear-capable hypersonic glide vehicle. What many did not know was China dominates the research into the next generation of aircraft engines, including hypersonics. The Australian Strategic Policy Institute (ASPI), technology tracker found China had a 48% share of the world's most high-impact research in this area, well ahead of the US who only has a share of 11% of high-impact research in the area.

The challenge with hypersonics is the difficulties for a projectile to reach hypersonic speeds - over mach 5, while enduring the stress and extreme temperatures of hypersonic flight. Then there are the challenges of maintaining such speeds for an extended period of time. Then there are the high velocities that can result in instability in the missile's airframe during flight. China is the global leader in most of the technological fields relevant to advancing hypersonic missiles, including novel metamaterials, coatings and high-specification machining processes. This is what has allowed China to build a world-dominating lead in these distinct but interrelated research fields.

Drones have become a key tool on the battlefield as well as civilian use. A number of nations are working on creating a multiplier effect by creating the tech that will allow drones to calibrate independently. Swarming drones represent a cutting-edge approach to unmanned aerial systems (UAS), where multiple drones coordinate their actions autonomously to achieve a shared objective. This technology is inspired by natural swarms (e.g., birds or bees) and relies on advanced algorithms, sensors, and communication systems. Currently China is leading the research into this area.

The other area that is showing great promise is in advanced robotics, which encompasses cutting-edge systems designed to perform complex tasks autonomously or collaboratively with humans. These systems combine artificial intelligence (AI), machine learning (ML), sensor technologies, and advanced materials to push the boundaries of what robots can achieve. Current research includes Collaborative Robots (Cobots), where robots will work alongside humans safely in shared spaces. As well as soft robots that will use flexible, deformable materials to mimic biological structure. Both China and the US are neck and neck when it comes to high impact research in this area

Artificial Information and Communication

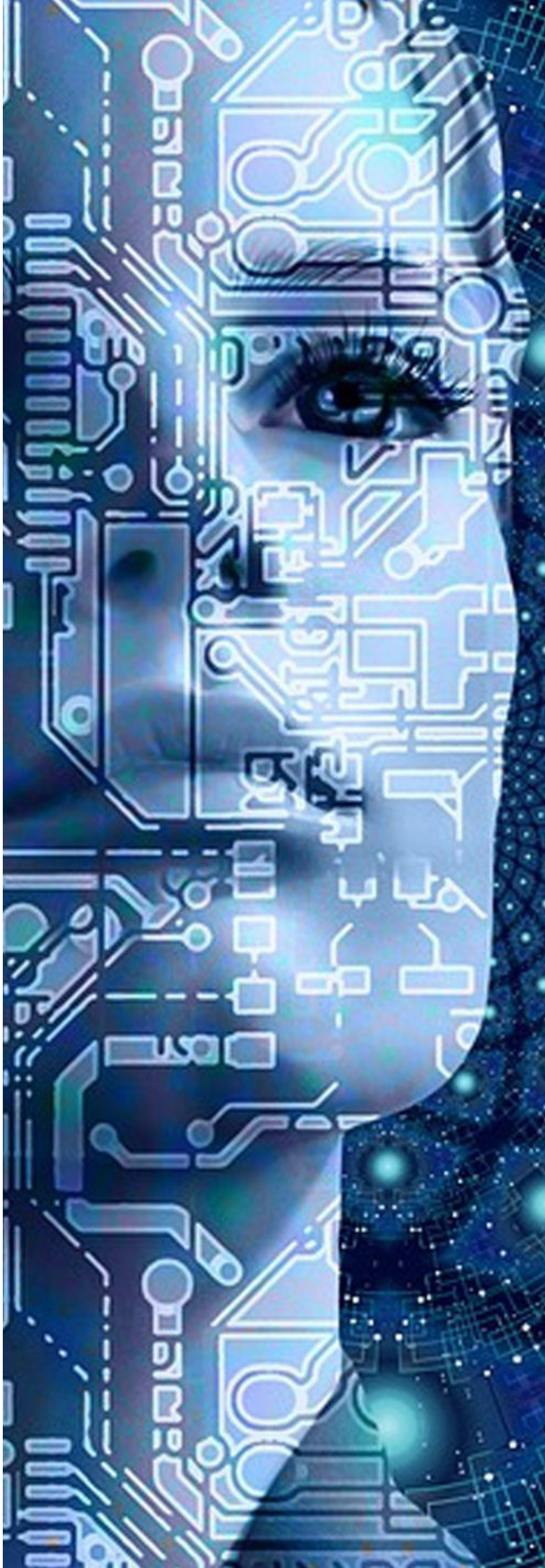
Advanced radiofrequency communications (5G and 6G), Advanced optical communications, Artificial intelligence (AI) algorithms and hardware accelerators, Distributed ledgers, Advanced data analytics, Machine learning (neural networks and deep learning), Protective cybersecurity Technologies, High performance computing,

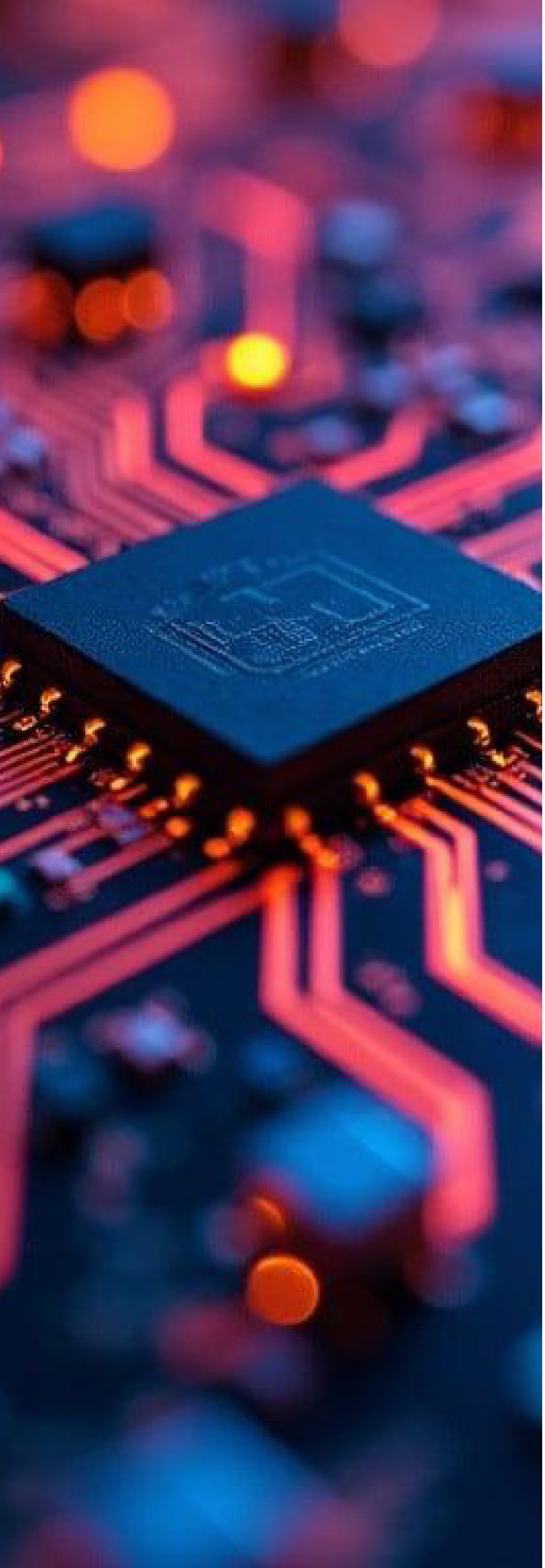
AI, more than any other technology, continues to dominate the tech of the future. Within two months from its release by OpenAI, the online chatbot ChatGPT acquired over 100 million regular users. It took TikTok over nine months and Instagram over 2 years to achieve the same user take-up. Most significantly, ChatGPT aspires to satisfy the Turing test, in which a human is unable to distinguish a chatbot-generated response from a human response. ChatGPT is built on a language model trained on big data, combining supervised learning and reinforced learning from human feedback. Thus, chatbots such as ChatGPT, Google's Apprentice Bard and the like benefit from developments in a number of other AI subcategories.

The progress in AI has been due to developments in Natural Language Processing (NLP), a field that uses computational linguistics and statistical modelling to enable computers to process and generate naturally developed languages at a level that's indistinguishable from human interaction. Breakthroughs in deep learning over the past two decades have made such interactions possible, using large language models (LLMs) trained on growing volumes of data.

The future of this technology is being dominated by the need to integrate it more deeply into human activities, address its limitations, and leverage new technologies. This includes expanding AI to control autonomous robots, vehicles, and drones. Creating hardware designed to mimic the human brain's architecture for AI and creating a direct interaction between AI systems and the human brain.

Whilst US corporations dominate the commercial products that have been released, its Chinese institutions that are dominating all the high-level research in all areas of information and communication.





Advanced integrated circuit design and fabrication

The demand for faster AI capabilities has placed semiconductor chips at the centre of the race for a tech-driven economy and boosted research. Currently the most advanced semiconductor chips are IBM's 2-nanometer (nm) chips, unveiled in 2021. These chips boast transistors as small as 2 nm, smaller than the width of a strand of DNA. With such tiny transistors, a chip the size of a fingernail can hold about 50 billion transistors, significantly improving performance and energy efficiency compared to older technologies like 7nm or even 5nm chips.

The semiconductor industry is evolving rapidly to meet the demands of advanced technologies like AI, IoT, 5G, and renewable energy. Innovations in materials, design, and manufacturing processes are driving the future of semiconductors. Today design and fabrication processes are optimised towards scaling the smallest feature on the chip down to 2nm. Because the scaling happens in all three dimensions, completely different processes (and tools) are required for every generation of chips.

As we get to smaller semiconductors at 1 nm, quantum phenomena like Quantum tunnelling and leakage currents become significant issues as transistor gates shrink below 2 nm, requiring the development of new materials and architectures. Traditional silicon may not remain effective at this scale due to its physical limitations. Extreme ultraviolet (EUV) lithography, which enables the production of 2 nm chips, will likely not suffice for 1 nm features; more advanced methods, such as high-energy electron-beam lithography or novel quantum-based techniques, are being explored.

The US excels in the design and development of the most advanced semiconductor chips and has a research lead in the technology areas of high performance computing and advanced integrated circuit design and fabrication. It's worth mentioning that, while Taiwan is a semiconductor manufacturing powerhouse and is supplying over 90% of the world's advanced semiconductors, most of the chip research and design is conducted in the US. Taiwan interestingly ranks ninth for the number of papers in the top 10% of highly cited papers for advanced integrated circuit design and fabrication.

Quantum technologies

Quantum computing, Quantum communications, post-quantum cryptography and quantum sensing

Quantum technologies are systems and devices that leverage the principles of quantum mechanics, which is the fundamental framework that describes the behaviour of particles at the smallest scales. These technologies harness quantum phenomena such as superposition, entanglement, and quantum tunneling to perform tasks that are infeasible for classical systems.

Quantum computers use quantum bits, or qubits, which can represent both 0 and 1 simultaneously due to superposition. Superposition in quantum systems can exist in multiple states simultaneously and this allows quantum computers to process massive amounts of data. Using quantum states allows the performance of certain computations in a fraction of the time required to perform the same tasks on classical computers.

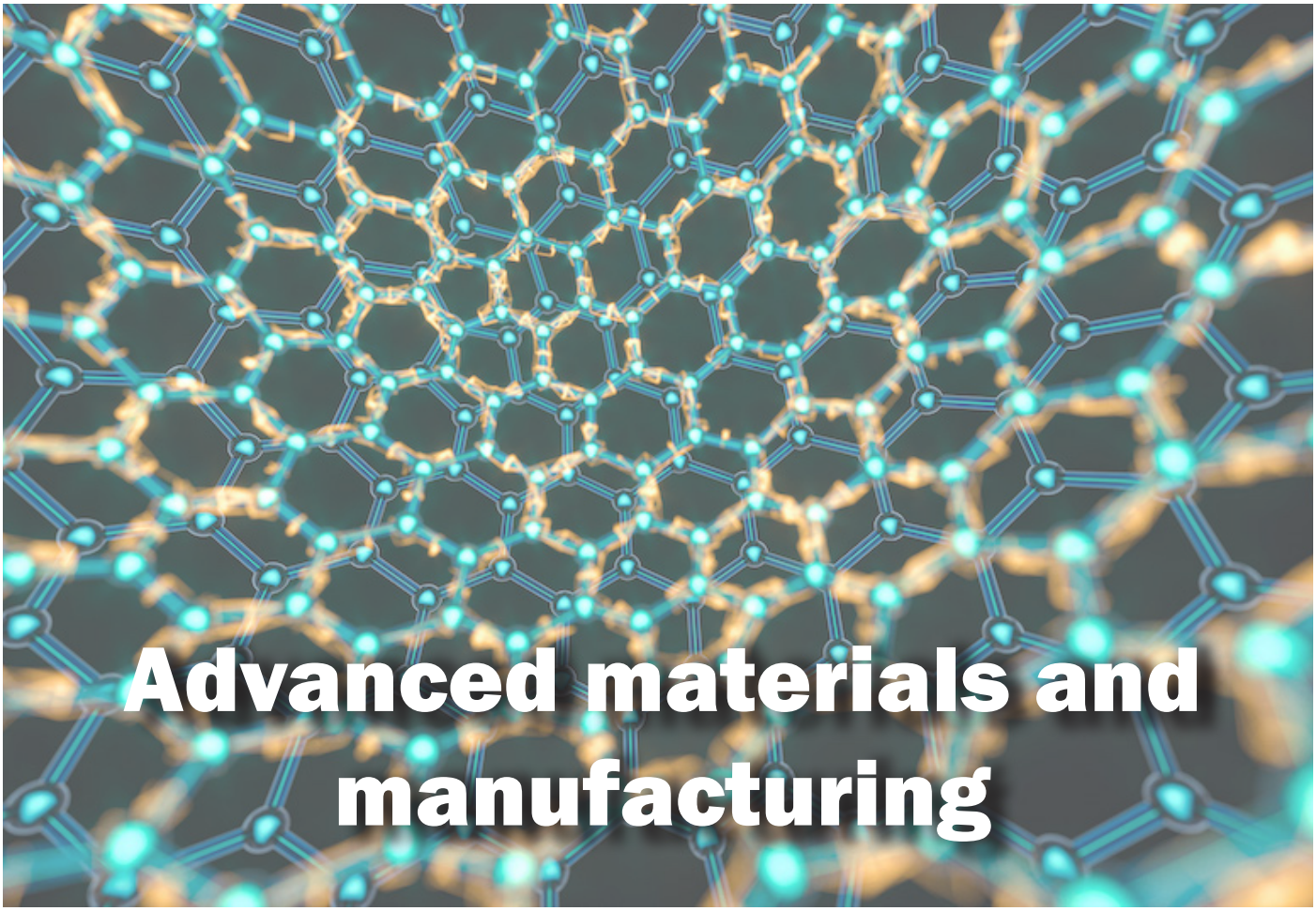
In secure communication systems based on quantum mechanics these systems use properties like entanglement to ensure eavesdropping can be detected. This is because Quantum entanglement is a phenomenon in quantum mechanics where two or more particles become interconnected in such a way that the state of one particle instantly influences the state of the other(s), regardless of the distance between them.

Quantum technologies promise revolutionary advancements in computing power, communication security, and measurement precision. They can solve problems far beyond the reach of classical systems, with the impact ranging from accelerating AI development to ensuring secure communications.

The current challenges include building large, error-tolerant quantum systems as well as getting over Quantum systems being easily disrupted by noise, requiring specialised environments.

Quantum technology is currently supported by over $30 billion of public R&D funding internationally.[49] China is estimated to have the highest level of public funding allocated to quantum technologies (over $14 billion), followed by the EU ($7.2 billion) and countries such as Germany, France, the Netherlands and Sweden are among the top funded European nations.

The US dominates high impact research into quantum computing, whilst China leads in quantum communication, sensors and cryptography. The world's largest quantum device is IBM's "Condor" quantum processor, with 1,121 qubits. It's the largest general-purpose quantum computer, capable of performing a wide range of tasks and represents a milestone in scalable quantum computing. IBM is also working on modular systems to connect multiple processors, aiming to achieve over 4,000 qubits.



Advanced materials and manufacturing

Nanoscale materials and manufacturing, Coatings, Smart Materials, Advanced composite materials, Noval Metamaterials, High-specification machining processes, Advanced explosives and energetic materials, Critical minerals extraction and processing, Advanced magnets and superconductors, Advanced protection, Continuous flow chemical synthesis and Additive manufacturing

Advanced materials encompass all the materials that have been engineered to display superior and novel properties compared to their un-engineered properties. Progress in the field of advanced materials has the potential to shape the future of technological-advance-generating outputs that include new materials with high performance characteristics that could, for example, be more cost-effective, energy efficient, durable, lightweight, fire resistant or smaller. There are clear gains to be made from advances in this area whether from manufacturing, trade or defence.

The area of most research in advanced materials is on nanoscale materials, also known as nanomaterials. Nanoscale materials have various major applications that exploit their engineered mechanical, electrical and photonic properties. Eleven of the 12 subcategories in the advanced materials category are directly related to their applications. Critical minerals extraction and processing has broader indirect applications in electric batteries, superconductors and magnets.

China dominates high impact research on advanced materials. In all the 12 subcategories Chinese institutes do the most high impact research and are referenced the most by others. The US comes second with its institutes and its research is quoted the most after China with advanced materials.

India also enters the fray with its researchers quoted the most after China when it comes to high-specification machining processes, smart materials and high-specification machining processes.

When it comes to smart materials three Iranian institutions are ranked among the top 20 institutions: the Islamic Azad University, Babol Noshirvani Institute of Technology and the University of Tehran.

The research into advanced materials is focused on engineering them to possess superior properties such as strength, flexibility, conductivity, and sustainability. Materials for polymers, coatings and antimicrobial and Hygienic Materials all need research and innovation.

Biotechnology, gene technologies and vaccines

Synthetic biology, Biological manufacturing, Novel antibiotics and antivirals, Genetic engineering, Genomic sequencing and analysis, Nuclear medicine and radiotherapy and Vaccines and medical countermeasures.

Biotechnology is a multidisciplinary field that utilises biological systems, organisms, or derivatives to develop technologies and products that improve human life, health, and the environment. It encompasses technologies that integrate biology and engineering into new products and processes.

The financial incentives to gain advantage in the sector are enormous given most countries spend more than 6% of their annual gross domestic product on healthcare, which accounts for more than 50% of the biotech industry.

The huge investment driven by the Covid-19 pandemic has helped boost the market to an estimated value of $2.44 trillion. Future tech and current research are dominated by the intense competition between the US and China which, along with artificial intelligence, is anticipated to deliver some of the most life-changing technologies over the coming decades. Not surprisingly it is China and the US that dominate high impact research in this area.

Synthetic biology is the most nascent of the biotechnologies and is an emerging technology on par with quantum. The field involves redesigning living organisms into ones with new functions with applications in medicine, manufacturing and agriculture. The main distinction between synthetic biology and genome editing is that compared to genome editing, synthetic biology can involve the insertion of longer sections of DNA with the possibility of creating an entirely different organism like a recorded E. Coli. Lab grown meat is another example of synthetic biology, as is engineering of stem cells into mini robots.

China produced the most high impact research in biological manufacturing, genome sequencing and synthetic biology. Whilst the US leads the high impact research in genetic engineering and nuclear medicine.

Sensing, timing and navigation

Inertial navigation systems, Multispectral and hyperspectral imaging sensors, P hotonic sensors, Sonar and acoustic s ensors, Magnetic field sensors, Atomic Clocks and Gravitational-force sensors

Acoustic sensors have long dominated military and civilian needs for detection, measurement and analysis. The technology that detects, measures and converts sound waves or vibrations into electrical signals for analysis and interpretation have played a critical role in both the military and commercial world.

The next generation of sensors being researched include devices with extremely sensitive detection capabilities for magnetic and gravitational fields, light and radio waves. As well as measuring time with atomic precision. These include atomic clocks, inertial navigation systems, gravitational force sensors, magnetic field sensors, multispectral and hyperspectral imaging sensors.

These all have the potential to make use of light, energy, atoms and sound waves to make more accurate measurements which will help from missile accuracy to GPS navigation. The US leads in high impact research in quantum, gravitational force sensors and atomic clocks. Whilst China leads in 7 out of 10 of the other next generation sensors. In 4 out these 7, China is so far ahead there is the risk it will monopolise the commercial applications and achieve technological dominance.

Energy and Environment

Electric batteries, Hydrogen and ammonia for power, Directed energy technologies, Nuclear waste management and recycling, Photovoltaics, Biofuels and Nuclear energy.Electric batteries, Hydrogen and ammonia for power, Directed energy technologies, Nuclear waste management and recycling, Photovoltaics, Biofuels and Nuclear energy.

The battle to find alternatives to fossil fuels has been on-going for over a decade and this has seen the emergence of renewable energy sources and other technologies. There are numerous energy sources being researched as potential replacements for fossil fuels as well as technologies that can store and direct energy for specific uses.

The area of a lot of research and already seeing some commercial applications is electric batteries and the electrification of transport. Policies banning the internal combustion engine vehicles in favour of Electric Vehicles (EVs) has accelerated battery innovation. This has already led to the rising adoption of EVs that require batteries with higher energy density, longer lifespan, and faster charging capabilities. Next generation technologies include changing the chemical composition of batteries with Lithium-Sulfur (Li-S) batteries, Sodium-Ion Batteries, Zinc-Based Batteries and Magnesium and Aluminium Batteries. The research into these batteries creates the opportunity for large-scale batteries for grid energy storage and battery-powered aircrafts and ships.

China dominates high impact research into electric batteries, Hydrogen and Ammonia power and Supercapacitors. Its lead is large enough that it is likely China will have a monopoly in these technologies when developed commercially, we are already seeing these EVs. China is already pushing the boundaries in battery technology, and manufacturing excellence, which is putting EV manufacturing costs below that of the combustion engine.

China is also leading the high impact research into supercapacitors. This is an energy storage device that bridges the gap between traditional capacitors and rechargeable batteries. It stores energy electrostatically, enabling rapid charging and discharging compared to batteries, but with lower energy density. China's dominance of research in this area means it will likely have a monopoly over the technology when it is developed for commercial and military purposes.

The two fuels that are receiving the most study as future replacements for fossil fuels are Hydrogen and Ammonia. Ammonia is seen as a promising fuel in the global transition to net-zero emissions. Hydrogen is also considered a clean and versatile energy source, especially when produced using renewable methods, as it generates little to no emissions at the point of use. China also leads the high impact research into these fuels and potentially will monopolise the technology when it's commercially available.

The other technology China is leading high impact research into is directed energy technologies (DET). These are systems and devices that generate and project energy in a focused and controlled manner to achieve specific effects. These technologies are often associated with military, industrial, and research applications and typically involve energy forms like lasers, microwaves, or particle beams. They hold significant potential for reshaping defence systems, industrial processes, and medical applications. Advances in power generation, miniaturisation and material science are expected to overcome current limitations. China in this area and all the current research on the future energy tech research, dominates and leads the research and is well ahead of the US and others.

Conclusions

AI, drones and many of the technophiles analysed are general purpose technologies that all have the ability to transform economies, societies and the lives of people. But the west, who has for long dominated research and development and innovation, this is also changing. China's lead continues to grow in innovation and is currently leading in 57 of 64 critical technologies of the future. Over the past two decades, China's rise from a mid-tier position in global research in the late 2000s to mid-2010s into a research and science powerhouse today has been gradual but consistent. It's been able to convert its research lead into manufacturing in some fields such as electric batteries, though there are other areas in which China has been slower to convert its strong research performance into actual technology capability

The US is losing the strong historical advantage that it had. Over the last two decades the US has been unable to hold its research advantage. In the early to mid-2000s, the US was by far the dominant research power. Its performance between 2003 and 2007 saw it leading in research for 60 out of 64 technologies of the future. But now, that research lead has slipped to only seven technologies. The notable holdouts include quantum computing and vaccine and medical countermeasures, in which the US still maintains a dominant position. The knowledge, expertise and institutional strengths built over decades of investment and pioneering research are likely to continue to benefit the US in the short term, but China is catching up rapidly through huge investments in its own Science and technology areas and supporting top-performing institutions, especially in key defence and energy technology areas.

2024 Conclusions

At the end of 2024 the US remains the global superpower but its credibility, image and soft power have all taken a major hit. Whilst the US continues to engage in global issues it continues to be accused of failing in these endeavours and US strength is further undermined as many consider the US actions as haphazard and not decisive.

A case in point is Ukraine, whilst the US never intended to give the resources for Ukraine to defeat Russia, it also doesn't want Ukraine to lose in the war. This position makes US actions appear as weak, uncoordinated and lacking the authority a global power would possess. Whilst the US has sanctioned Russia and worked to isolate her, many see Russia after nearly three years of war as stronger, adapted to sanctions and is on top in the war. Similarly in Gaza it appears to many that Israel drives US policy in the Middle East and the US looked impotent in the face of the Netanyahu regime as it carries out a genocide. The US is not looking like a global power, despite having the resources to do so.

The main challenger to the US is China. The US began a trade, economic and technology war with China and the Biden administration continued with this and expanded it. China is attempting to build an alternative bloc and alternative institutions but for the moment these are unable to compete with the US dominated order and it will be sometime before they ever will. China has continued to pose challenges to the US in South-East Asia, and this is the region China poses a major challenge to the US global power. But all of this takes place with Chinese domestic issues growing in scope and depth and these all have the potential to derail China's ascent.

The key area of competition between the US and China is in the arena of technology. It's the area the US long dominated but China has made large strides and developed in areas and even leapfrogged the US. Throughout history the global power has usually been at the forefront of new tech and the US faces a major challenge from China on this front. The outcome of this battle will likely determine who will be the global superpower.


2024
5

Germany in crisis

Germany was for long the adult in the room, the stable nation that maintained order and created consensus on major issues. But now a perfect storm of crises have all caught up with the industrial nation. Germany has for long been suffering from demographic decline but the decision to abandon Russia and join the US when the Ukraine war began has created a major crisis. The loss of cheap and abundant Russian gas has created major industrial and economic problems. The rise of Chinese motor giants has caused Volkswagan, for the first time in its 86 year history, to close factories and make redundancies. It was not surprising the German rainbow coalition collapsed before its term ended. But with new elections due in 2025 it remains to be seen, whoever forms the government, how they can navigate Germany from this a perfect storm of crises. The underlying issue is the abandonment of cheap Russian gas. Without this underlying issue being addressed its likely blame will turn on immigration which will cause further tensions as Germany's challenges continue to grow.

Israeli credibility hits rock bottom

Israel has spent billions over the decades on propaganda, lobbying and influence to create a favourable opinion about its settler colonial agenda. Mainstream media has for long been dominated by pro-Zionist voices that silenced any alternatives. But Israeli officials, communication specialists and personalities who came out in force after October 7th for Israel have failed to have any impact on global public opinion that sees Israel as the aggressor rather than the victim. One by one, every argument was exposed from the events of October 7th being discredited to the Israeli military machine targeting hospitals, civilians, places of worship and the massacring of children and women. This one issue has seen Israel's decades of propaganda work go down the drain. What Israeli propagandists have been telling the world, is not what the world is seeing. Many around the world saw the large discrepancy between what they were hearing and seeing. The fundamental issue for Israel has been the fact that it's trying to defend the indefensible and it doesn't help when Israeli officials keep making genocidal calls and then try to deny that was what they meant.

Israel's Gaza agenda

As Israel expanded its war, Gaza was overshadowed by the events in Lebanon, Syria and Iran. Israel has continued with its genocidal war which has seen large areas turned into apocalyptic scenes. Israel continued to target hospitals, places of worship and infrastructure which has led to the complete altering of the Gaza strip. The continued bombing has forced Hamas to show flexibility, but each time Hamas does this Israel increases its demands.

Hamas believes it is negotiating a ceasefire deal under which Israel eventually pulls out of Gaza. But it appears Israel has no such intention, and is instead negotiating for a complete surrender of Hamas and permanent occupation of Gaza. The Israeli position is an impossible ask. It is impossible for the Palestinians people to accept what effectively is an unconditional surrender. Israel also knows this, and this gives it room to continue its daily bombardment of Gaza, and strangulation of its civilian population, with the objective being, making the people of Gaza "voluntarily" leave Gaza such that the area is converted into a depopulated buffer zone under Israeli military control. This agenda will only lead the region to turn against Israel and this will place pressure on the region's rulers. It remains to be seen if Israel's grand plans become the very catalyst that comes out haunt it in 2025.

Will the Ukraine War end in 2025?

Despite Russia's loss in Syria, in Ukraine Russia has been on top for over 2 years now. Ukraine has been struggling with manpower, military equipment, ordinance and pretty much everything necessary to fight a high intensity war. The message from both Europe and the US has been that Ukraine needs to use the resources provided to alter the battlefield reality and that they are now done providing further resources.

From an optics perspective the West is losing and Russia is winning. Donald Trump has made it clear he wants to bring the war to an end by calling for an immediate ceasefire and doesn't see the need for the US to support the war effort. With Ukraine having lost 20% of its territory it is unable to negotiate from a position of strength. There is really no need for Russia to even negotiate when it's winning. Ukraine wants Western security guarantees to prevent future Russian attacks and this will remain the main obstacle for negotiations to begin. Therefore if the war in Ukraine does end in 2025, it will not be to the benefit of Ukraine and it doesn't deal with the underlying issue of the threat of Russia. Unless the West escalates the war, which they have shown little sign of doing, Ukraine is losing and this makes 2025 the critical year for the war.

Crunch time in Bangladesh

In January 2024 Sheikh Hasina and her Awami League won an unprecedented 3rd consecutive term in office. Her legacy appeared to be cemented. But a dispute over civil service jobs grew into a major revolt and by August 2024 Hasina fled as crowds flocked to her residence. The Awami League was replaced by an interim government led by the Nobel laureate Muhammad Yunus. The interim administration indicated that elections could take place by the end of 2025, contingent upon the completion of necessary reforms and the establishment of a consensus among political stakeholders. The interim government which consists of pro-western leaning officials have attempted to address many of the people's concerns but 2025 will be the crunch year. With elections due at the end of 2025, it remains to be seen if they will take place. But with the economic challenges still not improving it remains to be seen if the people see the interim government as their saviour or as a failure.

Could Myanmar's Junta fall in 2025?

Myanmar's military, known as the Tatmadaw, is facing unprecedented challenges that threaten its hold on power. Since the 2021 coup, the country has been embroiled in a civil war, with various ethnic armed groups and pro-democracy forces mounting significant resistance. In 2024 the Tatmadaw suffered substantial territorial losses. Notably, the Kachin Independence Army (KIA) seized Kanpaiti, a strategic border town and rare earth mining hub, diminishing the military's control over lucrative resources. The activation of conscription in early 2024 underscores the regime's desperation to bolster its ranks. The Tatmadaw's position is increasingly precarious, although it retains control over key urban centers. Myanmar's military is under severe pressure from both internal and external forces and in 2025 it remains to be seen if the military junta can maintain its grip on power.

Is the Arab Spring about to kick-off in Egypt?

It's been 14 years since the Arab Spring engulfed Egypt and it's now been 11 years since Abdel Fattah el-Sisi carried out his coup. Today Egypt is in a worse position than it was on the eve of the Arab Spring. Inflation is in double digits, the national debt is only getting worse and repression by the regime is harsher than it was prior to the Arab Spring. In order to meet IMF conditions the military regime removed subsidies which caused a cost of living crisis and made life even worse for Egyptians. Anti-government sentiment is only increasing and will result in larger and longer-lasting strikes and protests. The military regime will continue to respond with crackdowns on dissent that will likely lead to even more resentment and discontent. With the overthrow of the regime in Syria it remains to be seen if 2025 is the year the Egyptians take to the streets to bring their uprising over a decade ago back on track.

India to overtake Japan as 4th largest economy

When China overtook Japan in 2010 to become the world's second largest economy, a title Japan had held for almost 40 years, the world came to take China seriously. In 2025 India is set to overtake Japan to become the second-biggest economy in Asia and the fourth largest in the world. India's population is already bigger than China's and its economy is likely to grow significantly faster in the next few years. India's leaders want its GDP to reach $5 trillion by 2028 and its exports to reach $1 trillion by 2030. India is therefore in pole position in 2025 to be at the table with the world's powers and to be part of global institutions and decision making over global issues. India can even argue should countries like the UK, France and Germany even be at the leadership table. Whether India's leaders can convert their economic heft into political heft remains to be seen in 2025.

Iran in retreat

Iran successfully created proxies across the Middle East which gave it immense power to shape the political landscape in the region. But in 2024 Iran's proxies have been decimated as Israel pushed back after the events of October 7. Hamas is now underground and Hezbollah's leadership has been decimated. Iran and Israel engaged in direct war for the first time with Israel targeting its weapons programme in an attack in October 2024. Iran can see the odds are against it and it failed to halt Israel's expansion as well as its own retreat. With the fall of the al-assad regime Iran's power, it spent decades building and nurturing is on the verge of losing all its legs. In 2025 it remains to be seen if Iran can respond, especially as Israel continues to increase noise about Iran's nuclear programme. With Donald Trump back in power in 2025, Iran's regional role appears to be taking a big hit.

Tariff man to launch new tariff war

The US is in a full spectrum economic battle with China. Donald Trump in his first term began the economic war and a host of sanctions, tariffs and trade restrictions were placed upon China. The Biden term also saw the widening of tariffs on Chinese goods and restrictions placed on a broader set of technologies. Donald Trump even before he moves back into the White House plans to expand the trade war increasing tariffs to over 100%. But eight years since the trade war began China has not stopped being the world's largest exporter and on the technology front China is ahead in many of the next generation of technologies. The US trade war with China has not stopped China and the American trade deficit with China has not changed much. Whilst the US is extremely loud about its trade war with China, the results of US actions have not altered the trade and economic balance. This means in 2025 and beyond the US will need to take more aggressive action and this has the potential to lead to unintended consequences.

China's economic problems are only growing

China has been trying to change its economic model for over a decade now and has had little success in this endeavour. China for long relied upon exports to drive its economy and after the 2008 global economic crisis relying on western consumption became untenable. But since then China has not succeeded in developing another economic model. China utilised a number of rounds of stimulus measures which created a ballooning property sector and increased China's national debt by the trillions.

China for the short to medium term will have to go through pain as it has no good options. But its long-term plan of moving up the tech ladder and exporting these, is also facing challenges. Chinese manufactured goods, especially high-tech products are facing tariffs and many nations, especially in Europe and the US are trying to close them out. Due to the country's demographic situation, it cannot use domestic consumption as an economic model, whilst moving towards high tech exports is also running into problems. As the Trump administration increasingly turns against China, 2025 will test China's economic resilience.

Is global innovation shifting from west to east?

Since the industrial revolution the West has dominated science and technological development and been the flag bearer of innovation. But this is changing as China has now developed so rapidly that in 2025 it will switch places with the US as the overwhelming leader in research and development, something it achieved in just two decades. China now outclasses the US in the quality and quantity of scientific papers.

The Australian Strategic Policy Institute defines critical technologies as current or emerging technologies *"...that have the potential to enhance or threaten our societies, economies and national security..."*, most of which have applications across a broad range of important sectors, including defence, space, energy, the environment, artificial intelligence (AI), biotechnology, robotics, cyber, computing, advanced materials and key quantum-technology areas. China now leads in terms of research and innovation in 60 out of the 64 critical technologies of the future. China's dominant position within the global tech-research community is being further cemented with every passing year and is testament in part to Beijing's long-term planning and unwavering commitment to achieving its goals in this field. History has shown that the nation that leads in technology usually becomes the global power and in 2025 it looks like China will overtake the US in another metric.

Will China become the global green superpower in 2025

In July 2024 China hit its target of having 1,200 gigawatts of installed solar and wind capacity, enough to power hundreds of millions of homes each year, six years early. Around two-thirds of all new solar and wind power projects globally under construction are happening in China.

The scale and pace of the country's transition away from fossil fuels has smashed international forecasts and exceeded Beijing's own targets. The unparalleled investments in renewables comes as China desperately searches for new long-term economic growth drivers. Decarbonisation is the key to unlocking China's long-held ambition of energy independence. Europe was for long the region that had renewable energy as a large share of its energy use but like many other trends power is now shifting from west to east. In 2025 and beyond the competition over renewable energy tech is only heading in one direction.

Can 2024s new leaders deliver in 2025

2024 was the year of democracy when over half the world's population voted for new governments and leaders. A few leaders despite winning elections were thrown out of office before the year even ended. Across the world populist leaders and right wing leaders have taken power as many have lost confidence in mainstream political parties and politicians, who have for long paid lip service to the demands of the masses. The challenge facing the leaders who took power in 2024 is that the elites in their nations want policies which are diametrically opposite to what the masses want. Whilst many populists have come to power in the past few years, all of them failed to deliver. In 2025 it remains to be seen if these new leaders can navigate these competing challenges.

The death knell of the global rules based order

The global rules based order that the US and the West promoted for decades was already struggling before the events of October 7th 2023, but the actions of the West have now completely exposed that the order is not worth the paper the rules are written on. The US had already undermined the global order with its actions in Iraq and Afghanistan when it openly trampled over it own values by creating a global torture network, abandoned the rule of law as well as international law.

But with Israel's genocidal war in Gaza and South Africa taking the case to the ICJ, the West is now acting like the mafia against the very order it created and for long promoted. The US House of Representatives voted to pass legislation that will sanction the International Criminal Court (ICC) after its prosecutor applied for arrest warrants against Israeli officials. A group of Republican US senators even sent a letter to International Criminal Court (ICC) Chief Prosecutor Karim Khan threatening his family! Whether it is the UN, the ICC or even the ICJ they are now labelled as antisemitic and are being threatened for investigating and carrying out their job of investigating crimes against humanity. The West supported the court when it issued arrest warrants for Vladimir Putin, but the US has done the most to destroy and undermine the global order than any other person ever could. In 2025 another piece of the western order is crumbling.

Global demographic decline

Over half the world's nations have fertility rates below the replacement rate. In order to maintain a stable population a nation needs on average for there to be 2.1 children per woman. In the next 25 years over 75% of the world's nations are expected to have fertility rates below this replacement rate. Whilst the end of the 20th century was dominated by rising populations and talk of a global catastrophe with the resources and agriculture not available to support an ever growing population. In the 21st century we are seeing the complete opposite. The developed nations have for long had declining fertility rates with Japan and Germany already in population decline. The population of a country affects everything from government budgets, the size of one's military and the labour force. In Europe population decline is already having social implications with the dependency on immigration only growing. The trend to watch in 2025 is western attempts to deal with this growing menace.

Will Europe ever prepare for war?

In 2025 Russia will have the upper hand in Ukraine and the US will be looking towards Asia. European defence capabilities are perilously weak due to decades of cuts and lack of investment. With European leaders too busy dealing with domestic challenges they are unable to put up an effective front against Russia and have relied upon the US to take the lead. To deter Russia, Europe needs to be equipped by a defence industry with greater capacity. They need a command structure that unifies the European front. European security has for long been dominated by relying on the US and their ambition to go it alone. Muddling through is no longer a viable option. With Russia on top in Ukraine, 2025 is likely going to be the last point Europe can effectively alter the battlefield reality.

Will 2025 be the death knell for global free trade?

The US ever since it emerged the global superpower from the ashes of WW2 advocated global free trade. During the Cold war it was used to create prosperity in the West and after the USSR collapsed it went into fifth gear to globalise the world and turn it into one global market. But ever since Donald Trump came to power in 2016 he's been calling for economic protectionism over free trade and nationalism over globalisation. He and his supporters now actually promote trade restrictions, tariffs and economic nationalism. Even before Trump has taken office in 2025 his economic plan consists mostly of anti-free trade policies. It's China who now advocates for free trade and open markets. With Trump taking office on 20th January 2025 it's likely we will see the funeral of free trade.

Incumbents have their work cut out curbing migration

2024 was being called the year of democracy, where half of the world population went to the polls. The majority of incumbents were voted out of power due to their economic performance and immigration record. Voters punished the incumbents in the US and UK for failing on immigration. In 2025 the new rulers have their work cut out as dealing with immigration is not straight forward. Donold Trump is advocating mass deportations, but with the US in population decline without immigration his policy may be extremely difficult to implement. Across Europe immigrants are being blamed for all sorts of ills, but despite this immigration continues to rise as Europe needs foreigners to fill the gaps caused by population decline. The longer immigration is blamed for national problems, these problems and their causes will not be addressed and this will fuel further resentment. In 2025 it remains to be seen if nations that rely on immigration can balance between competing needs.

Will the AI bubble burst in 2025

The mania for AI began with the launch of ChatGPT at the end of 2022. OpenAI's chatbot attracted 100 million users within weeks, faster than any product in history. Investors also piled in and spending on AI data centres between 2024 and 2027 is expected to exceed $1.4 trillion. The market value of Nvidia, the leading maker of AI chips, has increased eightfold, to more than $3 trillion. But across the US only 5% of American businesses say they are using AI in their products and services. Few AI startups are turning a profit, and the energy and data constraints on AI model-making are becoming steadily more painful. The disparity between investor enthusiasm and business reality looks untenable—which means 2025 is shaping up to be a crunch year. The race to make AI more efficient and more useful, before investors lose their enthusiasm, is on.

Will 2025 be the death Knell for climate politics

The past few years have been difficult ones for climate politics. The COP29 summit in Azerbaijan at the end of 2024 ended in failure as fossil fuel lobbyists were able to water down emission reduction targets and action on them. The writing was on the wall on green politics since Russia's invasion of Ukraine as cutting off from Russian energy led many European nations to delay green targets and emission reduction goals. According to the Financial Times, "climate politics" could well shift into reverse during 2025. It is not only Trump who proposes a fundamentally different perspective on energy policy. Elections are either under way or coming in Canada, Germany and Australia, and possibly France, and in all these countries a debate is centring around energy costs and the negative impacts of decarbonisation policies.

Is Europe's centre ground breaking

The poor performance of centrist parties in the EU elections in 2024 and the collapse of the government in the two heavyweights of Europe spells continued crises for the centre in Europe. The two countries who are central to the European Union, the European economy, European defense, and any hope of European strategic autonomy, France and Germany, within a month of each other, both saw their governments collapse due to battles over how to reduce their growing budget deficits. In both cases, their fiscal woes have been dramatically worsened by a combination of economic stagnation and pressure on welfare budgets with the new costs of rearmament and support for Ukraine. In both cases, the fiscal crisis has fed into the decay of the mainstream political parties that alternated in power for generations. The only alternatives to the centre are populist parties and leaders who usually are on the right and that creates all sorts of long-term problems. In 2025 it remains to be seen if these trends will spread to other parts of Europe where the political mainstream has been shifting to the right.

NATO Calls for wartime mentality

In December 2024 the NATO secretary-general gave a speech after meeting Donald Trump at the Carnegie Europe think tank in Brussels. Mark Rutte told security experts and analysts that "*It is time to shift to a wartime mindset". Putin "...is trying to crush our freedom and way of life",* Rutte said. *"How many more wake-up calls do we need? We should be profoundly concerned. I know I am…"* he said. He urged the defence industry to boost production for defences against drones and other new war tactics. In the speech Rutte directly addressed the European populace when he said that they should tell their banks and pension funds that it is *"...simply unacceptable that they refuse to invest in defence industry…"* What this all means is that the drums of war are beating loudly. There is, by and large, a consensus among western political elites already that military escalation is the right path forward. Now, the wider society is being made mentally ready for the changes this entails. The peacetime dividend of the 1980s until the 2010s is gone now. In its place comes the war risk premium.

Is the world edging towards WW3?

In Europe the West is at war with Russia and in the Far East the US is gathering a bloc to counter China. After a three decade hiatus, great power competition is back and back with a vengeance. China and Russia are seen as the autocrats who want to uproot the global order and economic, social and military competition is playing out from the Pacific to the Mediterranean. Europe is being pushed to ready its population for war. NATO's continued supply of arms and equipment to Ukraine will not be sufficient to push back Russia and in the Far East the US containment strategy has only seen Chinese military and technology capabilities grow. To maintain the status quo and to ensure the US remains the global superpower all the options short of war have not worked and what remains is for war between the two competing blocs. Whether this takes place in 2025 remains to be seen, but the march to war has begun.

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