New Cold War: De-risking US-China conflict

BY ALAN DUPONT RESEARCH FELLOW, HINRICH FOUNDATION



Contents

| EXECUTIVE SUMMARY | 4 |
|---|----|
| Structure of this report | 5 |
| RECOMMENDATIONS | 6 |
| CHAPTER 1: THE TRADE WAR | 10 |
| Origins of the trade war | 10 |
| Leveling the playing field | 11 |
| Box: Why the Doha Round failed | 12 |
| Beijing's perspective and strategy | 14 |
| The phase one trade deal | 16 |
| Box: Trade deal doubts | 17 |
| Implications for international trade | 18 |
| Structural tensions | 19 |
| Box: China's challenge to WTO rules | 20 |
| Geopolitical Implications | 20 |
| CHAPTER 2: THE TECH WAR | 23 |
| Box: Digital exchanges more valuable than trade | 24 |
| China's techno-mercantilism | 24 |
| US fears of a cyber "Pearl Harbour" | 25 |
| The view from Beijing | 26 |
| Reconciliation, separation or divorce? | 27 |
| Impact of the coronavirus | 29 |
| Box: Calls for hard decoupling | 30 |
| Box: The costs of decoupling | 31 |
| 'Balkanising' the internet | 31 |
| Huawei: national champion or 'stalking horse' for China? | 34 |
| Speed versus security | 36 |
| China's response | 36 |
| Artificial intelligence, quantum computing and semiconductors | 37 |
| Winning the tech war | 38 |
| Box: Security implications for 5G | 40 |
| CHAPTER 3: THE FOOTHILLS OF A NEW COLD WAR | 41 |
| Why a Cold War? | 41 |
| Competing strategic ambitions | 42 |
| US military decline | 43 |
| China's military build-up | 43 |
| Political warfare and 'unrestricted' war | 44 |
| The Pence indictment | 45 |
| Beijing returns fire | 47 |
| Cold War parallels | 48 |
| Box: Was the Cold War avoidable? | 50 |
| The historical record | 50 |
| Box: The Quingguo and Rosencrance case studies | 52 |

| Opposing values and the psychology of conflict | 52 |
|--|----|
| Interdependence doesn't preclude war | 53 |
| CHAPTER 4: MITIGATING THE NEW COLD WAR | 54 |
| Recommendation 1: Protect democratic values and interests | 54 |
| Recommendation 2: Maintain a military edge | 56 |
| Recommendation 3: Manage decoupling to minimise disruption | 57 |
| Recommendation 4: Reform the WTO | 59 |
| Recommendation 5: Strengthen international cooperation, | |
| middle power diplomacy and back channels | 61 |
| Recommendation 6: Develop new cyber and tech rules, | |
| protocols and agreements | 63 |
| Recommendation 7: Integrate economic and security policy | 66 |
| RESEARCHER BIO: DR. ALAN DUPONT | 68 |
| ENDNOTES | 69 |
| ACKNOWLEDGEMENTS | 85 |

Executive summary

This report concludes that the linked US-China trade, technology and geopolitical conflicts have precipitated a new Cold War. In an epoch-defining clash for global leadership, the world's two major powers are wrestling for strategic advantage in an increasingly bitter contest to determine which of them will be the pre-eminent state of the 21st century. No matter how cleverly spun, a trade deal is not going to get the relationship back on track because both countries have moved from a framework of cooperation to one of open rivalry and strategic competition.

Beijing thinks Washington is bent on containing China to prolong the declining power of the US while denying a resurgent Middle Kingdom its rightful place in the sun. US elite and popular views of China have soured for different reasons. The previous goodwill — which took decades to build — is rapidly dissipating especially within the once overwhelmingly pro-China US business community. Americans increasingly believe China is threatening US security interests, undermining its prosperity, interfering in its democracy and challenging its values. Anti-China sentiment unites an otherwise divided and partisan Washington and will endure long after Donald Trump has departed the White House.

Preventing, or mitigating, worst case outcomes will require the US and China to accommodate each other's strategic interests. This won't be easy because of diminished trust, their different world views, the systemic nature of their confrontation and domestic politics. Although a simmering rivalry is more likely than a hot war, this is hardly cause for relief or complacency. A second Cold War could be worse than the first, given the interdependence of the US and Chinese economies, their centrality to global prosperity and the proliferation of dangerous military and digital technologies.

This report draws out the risks — and likely consequences — for a system already in a state of flux as the transition to a post-American world accelerates and the coronavirus wreaks havoc on the world economy and international trade. A hard decoupling of global supply chains in the wake of the coronavirus crisis would not only delay and complicate economic recovery. It could also lay the seeds for a second global recession, or even depression. A worsening of the US-China trade and tech wars would fracture already-stressed supply chains, reduce international cooperation, reinforce protectionist tendencies and open up new arenas of conflict and contestation.

However, a managed decoupling is already underway and is necessary to preserve the integrity of an open, robust trading system and a liberal international order. This is not an attempt to isolate China or deny it a position of influence in the world. But China's leadership ambitions won't be realised if they undermine democracies and the principles, rules and institutions that are intrinsic to fair and open trade. Democracies need to consider common approaches to managed decoupling that still permit global engagement and open trade with one another and China, while facilitating reform of trade and technology governance.

Structure of this report

The report comprises four chapters and recommendations. Chapter 1 examines the origins of the most serious trade dispute since the 1930s from both an American and Chinese perspective, focusing on the phase one trade deal, the increasing 'weaponisation' of trade and the implications for the multilateral trading system.

Chapter 2 sheds light on the linked tech war, explains why industry policy has become a new Sino-US battleground and assesses the probability of a Balkanised internet and decoupled global supply chains.

Chapter 3 appraises China's strategic challenge and the US response, drawing out the parallels between this era and that of the first Cold War. It concludes that the real problem in the bilateral relationship is the diametrically-opposed political systems and values of the two powers, compounded by their sense of exceptionalism.

Chapter 4 outlines a strategy for reducing Sino-US tensions. No strategy can hope to resolve the myriad problems afflicting US-China relations, no matter how astutely crafted, or rigorously implemented. The aim here is to illuminate pathways to compromise and renewed habits of cooperation by making an explicit effort to understand the causes of their differences and to suggest ways of mediating them.

A report of this length cannot do justice to all elements of the US-China conflict. More comprehensive accounts will no doubt include China's ambitious Belt and Road Initiative and 'debt-trap diplomacy', as well as other important sources of economic and geopolitical friction between the two nations — such as currency flows, investment rules and China's influence operations. Moreover, this is an unfinished story. Like all epochal events, it will be subject to conflicting interpretations and judgements by analysts and historians as American and Chinese leaders attempt to shape events over time.

The celebrated German statesman, Otto von Bismarck, believed that we can't create or divert "the stream of time", merely "travel on it and steer with more or less experience and skill, in order to avoid shipwreck."¹ But shipwrecks can be avoided if far-sighted and determined leaders are committed to problem solving rather than provocation. This report is a modest attempt to provide a blueprint for action to help guide the world through the dangerous shoals ahead.

Recommendations

These seven recommendations comprise a strategy for ameliorating US-China conflict and the new Cold War. They are elaborated in Chapter 4.

Recommendation 1: Protect democratic values and interests



Having a clear-eyed view of China is an essential first step to protecting the foundational values, norms and institutions of the liberal international order. China was never going to be a responsible stakeholder in a Western designed international system. A frank acknowledgement that the US and China are now adversaries is a necessary precondition for a realistic strategic accommodation that constrains their rivalry and avoids worst case outcomes. China is playing a full-court power game on a scale not previously seen which the US needs to match. Otherwise Beijing will have little incentive to negotiate or change tack.

The weakness of Trump's pushback is his unwillingness to enlist the support of like-minded countries. Democracies need to act collectively and construct coalitions of the willing when China acts in ways that are detrimental to the rules-based order. Both sides should tone down the inflammatory public rhetoric that permeates official exchanges, inciting hostile media commentary and fuelling further rounds of the blame game.

Recommendation 2: Maintain a military edge



If China prefers a system based on power, rather than rules, the US must maintain a military edge to deter adventurism and raise the costs of geopolitical coercion and threshold warfare. American hubris, overstretch, complacency, division and triumphalism have all played a role in US military decline. America needs a different kind of military - one that is more lethal, flexible, technologically advanced, distributed, networked and resilient. The US should also revitalise its much-diminished defence industrial base.

To counter China's growing military power and maintain the rulesbased order the US must rejuvenate its fraying global alliance system and seek new strategic partners in Asia. Long standing allies need reassurance a more transactional US approach will not impose onerous financial costs on them that undermine domestic political and public support for the alliance or draw them into high-risk, low-return disputes with China that do not threaten their core interests. Building more diverse and flexible strategic partnerships would help constrain China's hegemonic ambitions.

Recommendation 3: Manage decoupling to minimise disruption



The US is moving aggressively to decouple from China-controlled supply chains for trade, security and existential reasons. Some degree of economic separation is necessary to preserve the integrity of a robust, open trading system and democratic values, freedoms and institutions. Decoupling is not an attempt to isolate China or deny it a position of influence in the world, but rather to establish a sustainable relationship between competitor states with different political systems.

Democracies need to embrace common approaches to managed decoupling that still permit global engagement and open trade with one another and China, while building a new consensus for reform of trade and technology governance. Every effort must be made to keep decoupling within manageable limits to contain the damage to US-China relations, value chains and the world economy. A hard decoupling would not only delay and complicate global economic recovery. It could also sow the seeds for a second global recession, or even depression.

Recommendation 4: Reform the WTO



The WTO is no longer fit-for-purpose. The organisation is moribund and unable to fulfil its primary role, so reform is essential if it is to retain its relevance. The impending appointment of a new WTO directorgeneral presents an immediate opportunity for positive change.

New trade rules are becoming increasingly urgent for services, investment, digital trade, industrial subsidies and intellectual property protection. There is no realistic possibility of new rule-setting within the WTO by unanimous multilateral agreement. Rather than discarding the WTO, a "third way" must be found to leverage plurilateral trade agreements such as the CPTPP to include more countries willing to sign up to their commitments.

Many of these agreements use the WTO rule-set as their foundation, underlining the importance of maintaining members' commitment to these rules and the WTO's supervision of their implementation. The WTO could provide advisory support to achieve expanded membership of plurilateral agreements according to a more workable majority agreement mechanism, and without the concept of "developing country" status. The WTO's appellate function should be outsourced to qualified professional organisations agreed by the disputing parties.

Recommendation 5: Strengthen international cooperation, middle-power diplomacy and 'back-channels'



Making the US and China great again can't be at the world's expense. International cooperation is essential to achieving equitable and enduring solutions to complex global problems. The aftermath of the coronavirus pandemic will present new opportunities for meaningful and effective middlepower diplomacy. Asia's middlepowers need to use their collective influence and diplomatic clout to warn the US and China that they need to reverse their escalating rivalry, tone down their inflammatory language, re-engage and use the existing multilateral architecture to find constructive solutions to their disputes starting with the East Asia Summit, Asia's premier multilateral institution.

Washington and Beijing should draw upon their resident diplomatic expertise and the wider international community to develop a fit-forpurpose suite of geopolitical, trade and technology confidence building measures (CBMs) to make their intentions and behaviour more calculable and predictable. But conflict prevention and crisis management cannot be left entirely to governments. 'Back-channel' diplomacy has made a significant contribution to strategic problem solving and should be enlisted as a source of policy ideas, advice and technical expertise.

Recommendation 6: Develop new cyber and tech rules, protocols and agreements



Democracies should work towards cyber and technology standards that preserve an open, free, safe and secure internet. Digital infrastructure is an essential enabler of freedoms and innovation. Its openness and accessibility must be proactively maintained whilst also adequately regulated. There is a pressing need to develop a comprehensive set of global rules, standards and norms in cyber-space and associated areas of technology and industry. Mobilising the full suite of multilateral tools at the disposal of the international community will be necessary to prevent the loss of global connectivity stemming from the emergence of a 'digital iron curtain' separating the world into two competing technology blocs.

Governance, cyber-theft of commercial IP, dual-use technologies, grey-zone practices, the risk of a Balkanised internet and the prevention of tech wars all merit consideration for inclusion in a global cyber and technology policy agenda. Any new approach to creating rules-based frameworks and protocols around cyber and tech issues will have to involve non-state actors, especially leading multinationals. Europe's General Data Protection Regulation is the world's best practice domestically and should be emulated and extended internationally.

Recommendation 7: Integrate economic and security policy



Governments and large international institutions are often too siloed in their thinking and approach to develop effective responses to contemporary security problems. The risk that US-China rivalry could trigger a second Cold War has been dismissed, or poorly appreciated, because the analytical lenses applied were developed for the analogue world of the 20th century. They need to be recalibrated for the digital world of the 21st century in which trade, technology and geopolitics are treated as intertwined elements of a fluid, coupled global ecosystem.

Economists, technologists and strategists must learn to work more closely with each other and bring their skills, disciplinary knowledge and perspectives together in a collaborative approach to problem solving. Governments should be encouraged to create economic security divisions or groups in their key ministries and to put economics and trade at the heart of national security policy. New epistemic networks of think tanks should be established to deepen and cross-fertilise ideas for reducing trade, technology and geopolitical frictions. Business groups and security communities must build awareness of each other's concerns, interests and thinking in order to build a powerful business-security partnership to create a wider constituency for change.

Chapter 1: The trade war

There is already a rich expert literature on the US-China trade war.² Much of it, however, fails to shed light on the underlying causes or the salient connections between the two nations' trade and strategic ambitions. Trade analysts forensically examine the impact of tariffs on international trade flows and speculate about the prospects for a comprehensive trade deal, but they rarely consider the geopolitical drivers of the conflict or their wider consequences. Conversely, geopolitical experts tend to neglect the trade war seeing it as a second-order issue or derivative of the more important strategic rivalry. These siloed views work against the holistic analysis that is required to understand the most serious trade dispute since the 1930s, one that has already morphed into a technology war.

Origins of the trade war

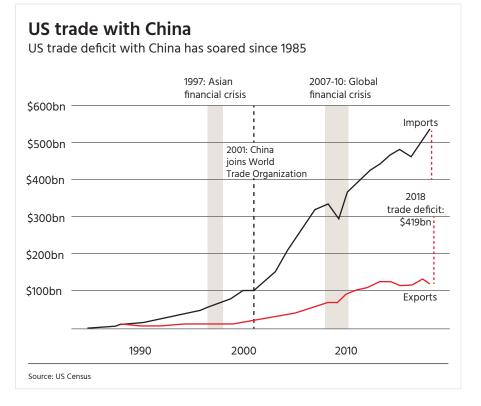
The origins of the trade war can be traced to China's entry into the World Trade Organisation in December 2001, when hopes were high in Washington that WTO membership would accelerate the communist nation's transition to developed nation status but within a US designed and enforced rulesbased system.³ China saw WTO membership as an essential step towards its long-term goal of raising living standards and giving the country a seat in the decision-making halls of the first world.⁴

Neither went to script. Believing that the US intended to contain its rise, China decided to become a rules setter and work towards supplanting the US as the world's premier economy by exploiting Washington's preoccupation with overseas wars and the 2008-09 global financial crisis. Disillusioned US policy elites soon began to accuse Beijing of manipulating WTO rules, encouraging large bilateral trade imbalances, hollowing out US manufacturing with an attendant loss of jobs and pressuring American companies to trade off intellectual property in exchange for access to the vast China market. Towards the end of President Barack Obama's second term, trade disputes had multiplied in frequency and scope, with the Obama administration openly identifying China as a threat to the US in high-end technologies such as semiconductors and artificial intelligence. Where trade and economic interdependence was once seen as mutually beneficial, by the time Donald Trump was inaugurated as the 45th President of the United States sentiment in Washington had shifted decisively towards the view that China was getting ahead at America's expense.⁵

Hopes were high in Washington that WTO membership would accelerate China's transition to developed nation status but within a US designed and enforced rulesbased system.

By the time Donald Trump was inaugurated as the 45th President of the United States sentiment in Washington had shifted decisively towards the view that China was getting ahead at America's expense.





Leveling the playing field

Trump immediately ramped up pressure on China "to level the playing field" for US firms, a constant campaign theme in the run up to the 2016 presidential election. The opening shot in the US-China trade war was the US president's March 2018 decision to levy tariffs of 25 percent on steel imports and 10 percent on aluminum imports from a range of countries, including China. But the bilateral trade conflict did not really get under way until 6 July when the US applied punitive duties of 25 percent on US\$34 billion of Chinese imports following the collapse of negotiations. Beijing responded by imposing tariffs of equal size and scope on US imports.⁷

Washington's concerns about China's unfair trade practices were set out in a special report by the US Trade Representative Office in the same year. The USTR complained that China had failed to implement promises to strengthen intellectual property protection, open its market to foreign investment, allow the market a decisive role in allocating resources, and refrain from government interference in private sector technology transfer decisions.⁸ Trump's initial aim was to secure concessions from China on better market access for American companies and a reduction of the US\$375 billion annual merchandise trade deficit with China. The US president argued that China's trade practices had damaged American manufacturing and unfairly restricted US farm exports. "We are now making it clear to China," Trump declared, "that after years of targeting our industries and stealing our intellectual property, the theft of American jobs and wealth has come to an end."⁹

Trump immediately ramped up pressure on China "to level the playing field" for US firms, a constant campaign theme in the run up to the 2016 presidential election. Trump is not the first US president to demand trade reciprocity or use tariffs to force market entry. Trump is not the first US president to demand trade reciprocity or use tariffs to force market entry. Economist Henry Ergas points out that "if there is a constant in American trade policy it is the emphasis on commercial reciprocity and the willingness to use every means to secure it."¹⁰ Former president and free trader, James Madison, was a strong advocate for using America's trade muscle to unleash commercial warfare against Great Britain in the early 1800s.¹¹ After the Second World War, Republican and Democratic administrations sought to cement a liberal trading system by taking firm action against British import restrictions. Ronald Reagan forced Japan to dismantle protectionist barriers in the 1980s by imposing a wide range of trade restrictions using tariffs and quotas on politically sensitive Japanese export industries like cars and motorcycles.¹²

The US desire to reduce agricultural restrictions against the background of an export subsidy war with the European Union was a significant driver of the successful Uruguay Round of multilateral trade negotiations that ushered in the most successful period of trade liberalisation since 1945.¹³ At the peak of its power, the US instinct was still to enlarge the trade agenda rather than resort to mercantilism when confronting protectionism. But not after the failed Doha Round that ended in 2015 after 14 years of inconclusive negotiations. Thereafter, the US was more prepared to use its economic strength to achieve favourable national trade outcomes.¹⁴

Why the Doha Round failed

"Three problems rapidly became evident. One, behind the mask of solidarity between developing countries lay deep divisions, for example between agricultural net importers and exporters, preventing constructive proposals for liberalisation. Two, countries such as China transformed beyond recognition during the round, becoming global export powerhouses yet continuing to plead developing country status. Three, the US in particular proved to be largely spineless in taking on its own farm lobby, which demanded improbable amounts of market access abroad in return for subsidy cuts at home." – *Financial Times*¹⁵ What is new about Trump's approach is the extent to which he has been willing to leverage the formidable array of economic and trade tools available to the presidency in his push-back against China and other countries. What is new about Trump's approach is the extent to which he has been willing to leverage the formidable array of economic and trade tools available to the presidency in his push-back against China and other countries. This reflects both the Trump persona, his nationalist agenda and the dominance of trade hawks in his cabinet. A purge of senior officials in 16 tumultuous days at the end of March 2018, unusual even by the standards of the Trump White House, saw the departure of an establishment group that had exercised a moderating influence on Trump's populist instincts.¹⁶ Control over trade policy shifted to Robert Lighthizer and the once marginalised trade advisor, Peter Navarro, who along with Commerce Secretary Wilbur Ross has taken a consistently hard line on China. The effect of these changes was to harden the administration's approach to economic and security issues, restore the influence of 'American Firsters' and embolden Trump to pursue his political instincts and revisionist agenda.

Navarro argued that since China was waging an economic war the US had to fight fire with fire. This strategy appealed to Trump, who understood that America's still unparalleled economic and financial strength could be deployed for geopolitical advantage in the trade stand-off with China.¹⁷ Despite China's impressive growth over the past 40 years the US still outguns it on most measures of economic and financial power and is at the centre of a reinforcing network of Western oriented rules, technologies, institutions, companies and norms that largely govern how the world works. These are as much a source of America's strength, vitality and primacy as its aircraft carriers and nuclear weapons. Even though its share of world domestic product has fallen from 38 percent in 1969 to 24 percent in 2019, the US "controls or hosts over half the world's cross-border bandwidth, venture capital, phone operating systems, top universities and fund-management assets." Eighty-eight percent of currency trades use the US dollar, millions use a device with a Qualcomm chip or watch Netflix, and US tech companies dominate the information highway.18

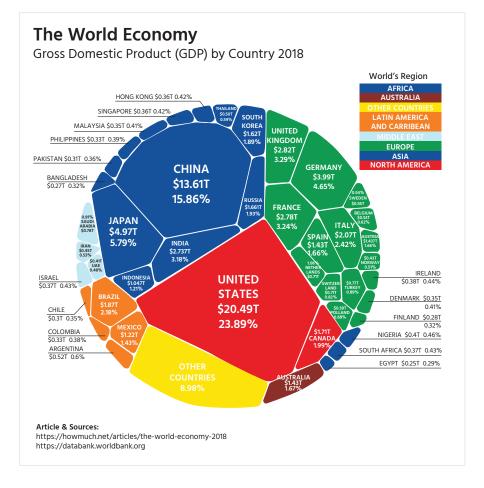


Figure 1.1 – US-China share of global GDP¹⁹

These power relativities are highly relevant to Trump's trade strategy. As a businessman, he understands how to leverage trade and financial strength for political gain. He knows that China's greatest vulnerability is its dependence on exports. Although falling, they still account for around one fifth of the country's growth. This dependence is exacerbated by the asymmetric nature of the trade relationship between the US and China. Eighteen percent of China's exports go to the US while China accounts for only 7.2 percent of US exports, which poses a political as well as an economic problem for President Xi Jinping.²⁰ In the absence of free elections, "performance legitimacy" is critical to the stability of authoritarian regimes and Xi's is no exception.

Beijing's perspective and strategy

Not surprisingly, Chinese leaders see the trade dispute and growing strategic rivalry in quite different terms. Although some of their rhetoric is clearly designed to shape domestic opinion, there is genuine resentment at perceived US interference in China's internal affairs, Trump's desire to contain China, his 'insincere' approach to negotiations and ignorance of China's interests and history. China's 2019 White Paper on US Economic and Trade Talks, is a comprehensive rebuttal of the US trade stance.

China's 2019 White Paper on the US Economic and Trade Talks is a comprehensive rebuttal of the US trade stance. The White Paper accuses the US administration of adopting "a series of unilateral and protective measures", wielding tariffs as a "big stick", coercing other countries into accepting its demands and "causing disruption to the global economic and trade landscape." Furthermore, "trumpeting America First", it has turned a blind eye to "China's unremitting efforts and remarkable progress in protecting intellectual property and improving the business environment for foreign investors." Allegations of forced technology transfer are "baseless and untenable" and the restrictive measures imposed on China "are not good for China or the US, and still worse for the rest of the world." The trade war has not "made America great again."²¹

However, when the world's most powerful state throws its considerable economic weight around indifference is not an option, so China's president had little option but to negotiate. Xi's tactics were to concede enough to mollify Trump without damaging the slowing Chinese economy or jeopardising his declared ambition to make China great again. Xi's response to the imposition of US tariffs was threefold. He attempted to seize the moral high ground by presenting China as the defender of the multilateral trading system against a protectionist America. Using a conventional carrot and stick approach he offered concessions but threatened retaliation if the US did not back down. The farming states that propelled Trump to victory in 2016 were targeted with punitive tariffs on agricultural exports notably, sorghum, corn, pork and soybeans. These measures were underpinned by a countervailing narrative that blamed the US for starting the trade dispute, portraying it as a futile attempt by an insecure and declining super-power to prevent China's inevitable rise.

Initially, this seemed a well-crafted strategy for riding out the storm. As an authoritarian, one-party state China has significant advantages over democratic competitors and trading partners in its ability to integrate and harness state power to a single national purpose. All Chinese companies, not just state-owned enterprises, are ultimately subject to government control and direction in a way that Western companies are not. Moreover, the sheer size of China's market, declining dependence on exports and ability to source alternative suppliers for many US imports gave Xi confidence that Trump would blink first in the high stakes game of brinkmanship underway. Many Western commentators thought so too.²²

Xi calculated that Trump would be forced to make concessions as the US economy slowed, the stock market came off the boil and farmers began to feel the pain of higher tariffs. "The best retaliation is letting US tariffs on China hurt the US's own economy," opined one prominent Chinese economic advisor, a strategy seemingly borne out by a dramatic decline in US farm imports.²³ According to the US Department of Agriculture, China imported US\$21.8 billion in farm goods in 2017, the year before the trade dispute, but only US\$10 billion in 2019.²⁴

But although the trade dispute periodically roiled international markets it has been less of an impost on the US economy than pessimists anticipated. Overall, there was a reduction in two-way trade of just over US\$100 billion, not enough to significantly affect the US\$21 trillion US economy which continued to perform strongly throughout 2019. Trump kept the farming

Xi's tactics were to concede enough to mollify Trump without damaging the slowing Chinese economy or jeopardising his declared ambition to make China great again.

As an authoritarian, oneparty state China has significant advantages over democratic competitors and trading partners in its ability to integrate and harness state power to a single national purpose.

> HINRICH FOUNDATION REPORT - NEW COLD WAR: DE-RISKING US-CHINA CONFLICT Copyright © Alan Dupont and Hinrich Foundation. All rights reserved.

Although the trade dispute periodically roiled international markets it has been less of an impost on the US economy than pessimists anticipated. community largely on side by providing US\$28 billion in aid. He also dangled the glittering prize of a trade bonanza should a comprehensive deal succeed in prising open the full potential of the world's biggest market.²⁵ However, the dispute came at a bad time for Xi as he grappled with a range of distracting domestic and international problems, vitiating China's strengths and providing unexpected opportunities for Trump to exploit which the US president seized with alacrity.

The phase one trade deal



After 18 months of often acrimonious negotiations, during which equity markets gyrated wildly between bouts of euphoria and pessimism depending on the perceived state of trade negotiations or the latest Trump tweet, US and Chinese officials delivered an interim, phase one "skinny" settlement on 15 January 2020. Under the deal China committed to purchase an additional US\$200 billion of American agricultural products; create stronger laws to protect foreign IP, patents and trademarks; abstain from making competitive currency devaluations; and allow American companies fair access to Chinese financial services. It also agreed to halve tariffs on US\$75 billion of US imports. In return, the US agreed to cut by half the 15 percent tariffs applied in September 2019 to 7.5 percent on US\$120 billion of Chinese goods. If grievances are not resolved, unilateral penalties and tariffs may be used to enforce fair trade practices.²⁶

With characteristic immodesty, Trump proclaimed the agreement as "the biggest deal anyone has ever seen."²⁷ But the phase one agreement is little more than a temporary truce because the dispute's underlying issues are not going to be easily or quickly resolved for four reasons.

First, China has committed to buying US agricultural and manufactured products that represent ambitious 60 and 65 percent increases respectively on 2017 levels by the end of 2020.²⁸ It is hard to see how these targets will be

The phase one agreement is little more than a temporary truce because the dispute's underlying issues are not going to be easily or quickly resolved. reached given China's slowing economy and the unexpected hit to growth from the COVID-19 coronavirus which is eroding trust, encouraging the US and China to rethink trade dependencies and could reignite trade tensions in the recovery phase.²⁹

Ironically, given the political capital the Trump administration has invested in the tariff war, American farmers and manufacturers may have difficulty in ramping up production to take full advantage of the opportunities provided by the agreement. The temptation for Chinese officials will be to fudge the trade statistics by transporting goods through the US from other countries or by shipping some US goods directly to the mainland, rather than through Hong Kong, creating the impression they are buying more. Other trade partners worry that China could redirect imports away from them to the US, further distorting trade flows and undermining support for the global trading system.³⁰

US Treasury Secretary, Steve Mnuchin, has admitted that a second phase trade deal would not necessarily be "a big bang" that removes all tariffs. Second, the interim trade deal still leaves a substantial US\$360 billion in tariffs on Chinese imports to the US, which represents a continuing drag on the global economy with every likelihood they will remain in place unless a comprehensive trade deal is struck. US Treasury Secretary, Steve Mnuchin, has admitted that a second phase trade deal would not necessarily be "a big bang" that removes all tariffs.³¹ And there is no detail about how China's promise to "refrain" from forcing foreign companies to transfer technology will be measured or enforced. Without tough enforcement measures Beijing has little incentive to change the trade practices that have facilitated the country's rapid economic development.

Trade deal doubts

"...it is hard to believe that China will actually establish a new "nationwide system for pharmaceutical products" as agreed in the deal, or that it will shift the "burden of proof" in industrial espionage cases onto the accused, or revoke Alibaba's operating licence if counterfeit goods are sold on the site, or stop making technology transfer a condition of American investment in China. China will not give American financial services firms unfettered access to the Chinese market, as it promised to do when it joined the WTO in 2001." – Salvatore Babones, The University of Sydney³² Both sides are under domestic political constraints that reduce the prospects of a comprehensive trade deal.

The tariff dispute has further weakened the international trading system and the WTO's supporting rules and architecture. Third, the agreement reduces rather than enhances the prospects of a comprehensive trade deal because it allows Trump and Xi to credibly claim progress without having to address the much harder issues at the heart of the dispute. These will continue to fester and could become even more tendentious if Joe Biden wins the US presidency. Many leading Democrats are to the right of Trump on China trade. If Xi is waiting for a less protectionist, free-trade Democrat to occupy the White House he is likely to be seriously disappointed.³³ Xi won't find it easy to make further trade concessions either, because they would require winding back the mercantilist policies that have helped propel China to great power status, a non-negotiable strategic ambition that is central to Xi's political legitimacy and Marxist-Leninist ideology.³⁴ With his economy under pressure on multiple fronts, his promises to eliminate poverty in 2020 and become a "moderately prosperous country" by 2021 are unlikely to be realised, limiting the political space for the compromises that will be necessary to secure a comprehensive trade deal.³⁵

Fourth, there is no guarantee that Trump won't open another front in the trade war. A likely candidate is China's preferential treatment as a selfdeclared developing country, an anomaly in the WTO rules which Chinese leaders have exploited to shield the country from the higher standards expected of developed countries.³⁶ As an emerging great power, the world's second biggest economy and largest merchandise trader, Beijing's claim to be a developing country on a par with Mexico or Argentina will be increasingly difficult to defend. Trump has already proclaimed that he will never accept China's claim to developing country status because "virtually every current economic indicator belies China's claim."³⁷ He's not alone in this view. Australian Prime Minister, Scott Morrison, maintains that as a newly developed economy and major world power China needs to accept greater trade and environmental responsibilities in a reformed WTO.³⁸ But China's state media has vehemently rejected any change to the country's status, branding such suggestions as self-serving and designed to deprive China of its legitimate rights as a developing country.³⁹

Implications for international trade

None of this is good news for multilateral trade or the health of the global economy. A stock market spike driven by investor relief over the trade truce was predictably short-lived, failing to obscure the reality that the tariff dispute has further weakened the international trading system and the WTO's supporting rules and architecture. Trump has never disguised his visceral disdain for the WTO branding it the single worst trade deal ever made. He has repeatedly threatened to leave the organisation unless it is reformed, complaining that the WTO has been "screwing us for years. And it's not going to happen any longer."⁴⁰

Trump believes that the WTO has unfairly tilted the trade playing field towards competitors, particularly China, which has "cheated" on the rules turning the Western devised system against the West.⁴¹ His administration has responded by threatening to withhold funding from the WTO, blocking appointments to its appellate body — the ultimate adjudicator of trade

The phase one agreement takes the world further down the path towards a power-based trading system.

The lesson from the 1930s is that trade wars and military wars are often connected. disputes — and raising the prospect of withdrawing from the WTO altogether unless American complaints are addressed. Although China could replace the US as the biggest financial contributor without much difficulty, it is doubtful that the WTO could survive in its present form if the US walked away. Should the WTO grind to a halt, the possibility exists of a reversion to protectionism that would be detrimental to international trade heightening the probability of a recession, a break down in the rules-based trading system and serious geopolitical conflict.

The real danger of the phase one agreement is that it takes the world further down the path towards a power-based trading system where the strong do what they want and the weak suffer what they must.⁴² Some believe that the trading system is already power-based, largely because of China, and that the WTO is so dysfunctional the world would be better off without it. But in the absence of the protective umbrella of existing WTO rules, smaller economies would be forced to cut unfavourable deals with the big players and will have no recourse to an effective and equitable dispute resolution process without an appellate body.⁴³

Even the US may come to regret Trump's breezy assertion that "trade wars are good" and "easy to win." In May 1930, another US president — Herbert Hoover — signed the Smoot-Hawley bill imposing tariffs on 20,000 imports in an ultimately unsuccessful attempt to protect American producers. Although the bill did not directly cause the Great Depression, economist Emmanuel Martin reminds us that it "triggered a series of reprisals, further fragmenting the world market and thus contributing to the rise of economic nationalism in the 1930s — a major cause of World War II. The lesson is that trade wars and military wars are often connected."⁴⁴ But although trade wars are rarely easy to win it is not the case that no one wins a trade war. Sometimes they are necessary to establish freer trade because the long-term effect is to reduce rather than increase trade barriers despite short-term pain.⁴⁵

Structural tensions

It is important to recognise that Washington's concerns about the adequacy and fairness of WTO rules precede Trump and are widely shared. Europeans were also complaining about unfair Chinese trade and currency practices as far back as 2010, with Brussels levying allegations against Chinese telecommunications companies, Huawei and ZTE, of subsidised dumping in 2012.⁴⁶ However, blowing up the WTO is not a solution. Trump's crash-through, 'America first' unilateralism has lost him the support of potential allies who also worry about the imposition of non-tariff barriers by China to preference domestic industries, pressure technology transfers, constrain foreign firms' activities and steal, or unfairly acquire, IP.

Many trade experts and WTO members believe that China has gamed the system and that its centrally controlled dirigiste economy is the antithesis of "Western capitalism and the foundational principles upon which the rules-based trade system was built."⁴⁷ During the Cold War, the competing democratic and authoritarian political systems were economically separated in their own trade groupings. Now, the leaders of two systems with starkly opposed political values and priorities are members of the same trade club,

China's challenge to WTO rules

"As China's economic might continues to grow, the incompatibilities between its system and the assumptions about how trade would be conducted under a WTO rules-based system are coming into sharper relief. Massive state-owned enterprises, enjoying direct and indirect forms of government support, are engaging in a lop-sided competition against private companies that are constrained by market realities. Unwritten rules and informal "understandings" between business and government can block market access in China for foreign competitors who were led to believe the door would be open. Central and provincial governments can use their oftentimes preponderant position in the market to "encourage" foreign technology transfers that otherwise would not have happened. WTO rules... have proven incapable of satisfactorily adjudicating these systemic frictions and incompatibilities." - Stephen Olson, Hinrich Foundation 49

creating structural strains beyond the capacity of the WTO to resolve without agreed reforms.⁴⁸ Unfortunately, Trump has made matters worse, by failing to build an international consensus for action, needlessly alienating friends and perversely allowing China to portray itself as the defender of the rules-based system developed and nurtured by every other US president since World War II.

Moreover, the risks of collateral damage are growing. Wielding a big tariff stick to achieve trade and political "wins" has encouraged retaliatory and imitative behaviour. Canada, India, Mexico and Turkey have all slapped tariffs on US imports since the trade war began.⁵⁰ Should negotiations on a comprehensive trade pact fail, the EU has threatened levies of US\$100 billion on trans-Atlantic trade if the US goes ahead with tariffs on US\$60 billion worth of European car and car part imports.⁵¹ And Indian Prime Minister, Narendra Modi, has resisted US pressure to wind back tariffs while promoting his China-lite, "Made in India" mantra. Trump has labelled India the "tariff king", complaining that the world's fifth largest economy has been "hitting us very, very hard for many, many years". ⁵²

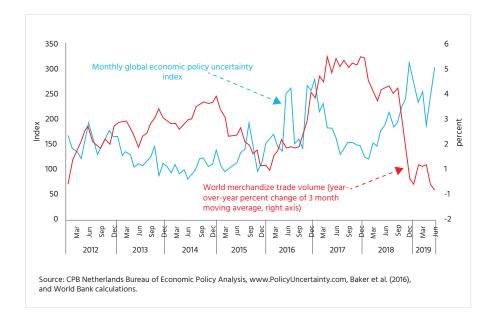
Geopolitical implications

Often forgotten in conventional analyses of trade disputes is that the international trading system established by the US and other Western nations was also about alliance management as well as institutionalised commitments to free trade. Trade tensions between the US and Europe could fragment NATO – the North Atlantic Treaty Organisation – and adversely impact on the US alliance system in Asia. US allies, Japan and South Korea, have long been at loggerheads over compensation for Koreans employed as "comfort women" by Japan during World War II. But in July 2019, Tokyo

The use of tariffs and other forms of trade discrimination for geopolitical purposes is fast becoming a tool of first resort in the national strategies of the larger economies. upped the ante by unilaterally imposing export controls on a range of critical materials supplied to the Korean electronics industry for smart phone screens and chip manufacturing, marking a radical shift towards the politicised trade strategies favoured by Trump.

The use of tariffs and other forms of trade discrimination for geopolitical purposes – what Walter Russell Mead calls the "Trumpification of world politics" – is fast becoming a tool of first resort in the national strategies of the larger economies, so it would be wrong to single out Trump for weaponising trade.⁵³ China has increasingly used its trade and economic clout to punish or pressure other countries into compliance.⁵⁴ Witness the decisions to deliberately disrupt or delay imports of bananas from the Philippines, Canadian canola, Australian coal, South Korean merchandise and rare earth exports to Japan. Under Xi, China has also perfected the use of financial inducements and so called "debt trap diplomacy" to secure ownership of strategic infrastructure and land when loan recipients are unable to make repayments.

Figure 1.2 – Economic policy uncertainty index⁵⁵



All this points to a period of heightened trade tensions, economic policy uncertainty, rising protectionism and the possibility that the WTO rulesbased system could unravel to the detriment of all countries. The phase one deal has not resolved the issues that are at the heart of the US-China trade conflict. In the absence of enforcement measures, it is difficult to see China's leaders compromising on the trade practices that have been instrumental in its economic and geopolitical rise. All the more so given the dramatic decline in trade flows caused by the coronavirus, which is likely to reinforce protectionist tendencies and magnify the voices of US trade hawks calling for increased onshoring of manufacturing and greater economic self-reliance. WTO economists expect world merchandise trade to decline by between 13 percent and 32 percent in 2020, exceeding the trade slump brought on by the global financial crisis.⁵⁶ A worsening trade war will exacerbate rising US-China technology and strategic tensions as the following chapters make clear.

140 130 120 110 100 90 80 70 60 50 40 2006 - 2007 - 2007 - 2009 - 2009 - 2009 - 2009 - 2009 - 2001 - 20 2005 002 2003 004 2020 2021 2022 2000 2018 019

— Optimistic scenario —— Pessimistic scenario

Figure 1.3 – World merchandise trade volume, 2000-2022 (Index, 2015=100)⁵⁷

HINRICH FOUNDATION REPORT - NEW COLD WAR: DE-RISKING US-CHINA CONFLICT Copyright © Alan Dupont and Hinrich Foundation. All rights reserved.

Merchandise trade -----

Source: WTO Secretariat.

= = = = Trend 1990-2008 • • • • • Trend 2011-2018

Chapter 2: The tech war

Provided it conforms to equitable and transparent rules, technological competition is essential to human progress and a healthy, functioning liberal trading system. The Trump administration accuses China of bending, circumventing and manipulating competition rules to acquire and steal IP that is the lifeblood of the US economy and systematically targeting advanced US and Western technologies in its quest to control the high-tech industries of the future. That's why IP protection has risen to the top of the administration's trade policy agenda. It's likely to stay there. Witness the list of 1,300 imported items listed by the US for tariffs which broadly correspond to the ten strategic manufacturing sectors China has identified as critical to future global economic primacy. These were first revealed in the contentious 'Made in China 2025 Report' (MIC25), a 2015 plan to comprehensively upgrade Chinese industry and lift the sector into the highest levels of global value chains.⁵⁸

As the trade war has widened into a tech war, industry policy has become a new Sino-US battleground because it is central to military capability as well as economic competitiveness. Better market access for US companies, or reductions in the trade deficit, are not going to diminish Washington's deep-seated fear that its technological edge is rapidly eroding in the face of China's unprecedented challenge. Any state able to exercise a controlling influence over information and communications technology, artificial intelligence, quantum computing and semiconductors will be well placed to become the next global rules setter and the world's indispensable power. It's now abundantly clear that the US will not allow China to dominate supply and value chains for these emerging technologies. Tougher restrictions on China's access to the large and advanced markets it needs are almost certain, as are measures to slow its capacity to accelerate innovation and acquire technology and associated know-how.⁵⁹

As the trade war has widened into a tech war, industry policy has become a new Sino-US battleground.

Digital exchanges more valuable than trade

"The trade war is merely about the two exchanges of goods and services worth just under one trillion dollars per year in 2019. By contrast, the tech war directly impacts the continuity of global financial services involving the world's two richest economies, and therefore the rest of the world. The total value of daily exchanges that depend on a standardised, non-combative and relatively secure global ICT environment is almost nine times the annual value of bilateral US-China trade, standing at almost nine trillion dollars." – *Greg Austin, The International Institute for Strategic Studies*⁶⁰

China's techno-mercantilism

Although industry policy has only emerged in recent years as a core problem in the US-China relationship, like the trade conflict its genesis can be traced back at least a decade. Flush with state funds, Chinese firms began to acquire leading US high-tech companies and innovative start-ups a decade ago, siphoning off the IP and gradually absorbing it into their own businesses or competitor Chinese start-ups. Over time this would have meant a damaging and potentially fatal transfer of knowledge from America to China, an outcome that no US administration could tolerate. A prime example is China's attempt to buy, or appropriate, the intellectual jewels of leading foreign tech start-ups especially those with military as well as civilian application.⁶¹ China's leaders understand the crucial importance of nurturing technologies with military utility for the development of their defence sector and wider industrial base. In recent years, they have funneled substantial resources into the research and development of dual-use technologies under a program known in China as "military-civil fusion".⁶²

Far from guaranteeing a win-win situation in which every nation is liftedup by a rising technological tide, Beijing's strategy seems designed to do precisely the opposite – lock in Chinese hegemony for a generation and consign other states to a subordinate or inferior position. Once ahead, China is likely to keep its foot on the accelerator so that technology competition risks descending into a winner take-all power game. The US is not the only developed nation worried about this prospect. French President, Emmanuel Macron, has proposed a united European Union response to Chinese acquisitions of iconic European companies and technologies. Germany, considered China's most important European partner, is worried about the propriety of Chinese commercial practices following the attempted takeovers of cutting-edge robotics company Kuka and Aixtron, which manufactures advanced tools for making semiconductors.⁶³

China's leaders understand the crucial importance of nurturing technologies with military utility. Chinese government money is being deployed to acquire intellectual property for strategic purposes. The Aixtron case is instructive. The company's share price crashed in 2015 following the unexpected cancellation of a large order by a Chinese client San'an Optoelectronics. Aixtron was quickly snapped up by a Chinese Investment Fund, Fujian Grand Chip, which had multiple connections to San'an including "a common investor and an existing financial arrangement."⁶⁴ Three days after the Aixtron bid was announced, a new semiconductor company was registered in Quanzhou, China at the same address as that listed by Fujian Grand Chip with San'an as an investor.⁶⁵ Although there was nothing illegal about Fujian Grand Chip's purchase of Aixtron, the takeover illustrates how Chinese government money is being deployed for strategic purposes in ways that directly threaten the technological leadership and economic future of the US and other advanced democracies. The danger is that once Chinese investors have accessed the knowledge they seek, they will abandon or run down the local company and absorb the IP into China's value chain.

There are understandable concerns about the fairness of these tactics and the consequences for the long-term economic health of affected countries. Such takeovers also pose difficult policy and operational conundrums. How does one differentiate between legitimate private investment and state sponsored investment designed to acquire cutting-edge technology to advance China's strategic interests?⁶⁶ Conversely, how should US and Western firms respond to prohibitions on takeovers of Chinese companies and deal with regulatory and other restrictions that don't apply to their Chinese counterparts? Facebook and Twitter are not permitted to operate in China, while US companies have been forced to form joint ventures with Chinese partners, fined for anti-competitive behaviour and had their services blocked or severely restricted.

US fears of a cyber "Pearl Harbour"

Dealing with the 'grey zone' practices China uses to acquire leading edge technology from competitors that bend — as well as break — the rules is a particular problem for the US as the world's technology leader.⁶⁷ Alarm bells were ringing in Washington about the national security implications of China's use of cyber theft to acquire commercial IP long before Trump became president. In 2009, US Deputy Secretary of Defense Bill Lynn was one of the first senior officials to openly express Washington's concerns about cyber theft, quantifying the annual loss of IP stolen from networks maintained by US businesses, universities and government agencies as "many times larger" than all the intellectual property in the vast Library of Congress.⁶⁸

In 2011, CIA Director Leon Panetta dramatically warned that the US faced the growing threat of a 'cyber Pearl Harbour'.⁶⁹ This was followed by a congressional report written by the authoritative government owned Office of the National Counterintelligence Executive, which specifically named Chinese actors as "the world's most active and persistent perpetrators of economic espionage."⁷⁰ A further wake-up call came in July 2012, when the head of the National Security Agency and US Cyber Command, General Keith Alexander, referred to the nation's loss of IP and industrial information through cyber espionage as the "greatest transfer of wealth in history."⁷¹ US

In 2011, CIA Director Leon Panetta dramatically warned that the US faced the growing threat of a 'cyber Pearl Harbour'. concerns were such that President Obama felt obliged to go public about China's theft of American IP raising the subject directly with Xi in a leadership dialogue at Camp David.⁷² Resentment over China's seemingly cavalier attitude to the issue increased when it became clear that Xi had no intention of honouring his promise to desist from commercial cyber-spying and that his cyber warriors were also hacking into US defense databases and classified military technology.

In 2015, US officials were stunned by two major security breaches in which state sponsored Chinese hackers gained access to the personnel records and security-clearance of 22.1 million people revealing almost everyone with a security clearance, a 'gold mine' for Chinese intelligence.⁷³ Terabytes of military secrets have also been stolen by China's intelligence services. A 2019 internal Navy review concluded that China had "derived an incalculable near-and long-term military advantage" from hacking "thereby altering the calculus of global power." ⁷⁴ In February 2020, US Attorney-General William Barr indicted four Chinese military officers for complicity in stealing the personal information of some 145 million Americans in a massive hack of giant US credit agency Equifax. Barr singled out China as the only country that has swept up data on civilians to feed the massive data requirements of their world leading Al sector.⁷⁵

Beijing's widespread hacking has created a backlash in Washington, hardening attitudes and intensifying the administration's determination to clip China's technology wings by aggressively pushing back on a broad front. Prominent foreign policy analyst, Robert Kaplan, captured the prevailing mood. "The constant, interminable Chinese computer hacks of American warships' maintenance records [and] Pentagon personnel records...constitute war by other means. This situation will last decades and will only get worse, whatever this or that trade deal is struck between smiling Chinese and American presidents in a photo-op that sends financial markets momentarily skyward." ⁷⁶

The view from Beijing

But why has Beijing so aggressively acquired advanced technology and data from the West when it must have been obvious that at some stage there would be a serious pushback? There are two plausible reasons. Early in the country's modernisation drive, China's leaders recognised it would be impossible to bridge the then yawning technology gap with the US, move up the industrial value chain and realise their global ambitions without access to Western IP. Since it would not be given willingly, a decision was made to mobilise the instruments of state power to acquire the desired IP by any means. This involved a degree of political risk. But given the payoff, it seemed a risk worth taking. Despite a huge investment in legitimate research and development, China would not be where it is today without stolen or coerced IP.

Chinese leaders were also convinced the US had hard-wired in its technological dominance by controlling virtually all aspects of the information highway from the internet to the myriad devices and protocols that form the backbone of the operating system. The key companies responsible — Cisco,

A 2019 internal Navy review concluded that China had "derived an incalculable near- and long-term military advantage" from hacking "thereby altering the calculus of global power."

Chinese leaders were also convinced the US had hardwired in its technological dominance by controlling virtually all aspects of the information highway. IBM, Google, Qualcomm, Intel, Apple, Oracle and Microsoft — have been dubbed the 'eight guardian warriors' of American tech by the Chinese media and are likened to the eight-nation alliance that looted Beijing's magnificent old summer palace during the ill-fated Boxer rebellion in 1900.⁷⁷ Longstanding suspicions that China had been 'infiltrated' by American tech companies intensified after the bombshell disclosures in 2013 by US intelligence contractor, Edward Snowden, that the US National Security Agency was carrying out systematic, high-tech spying of China and other countries.⁷⁸

The Snowden revelations and Trump's 2019 decision to ban or restrict companies like Huawei and ZTE from the US telecommunication network has only reinforced China's determination to become more self-reliant in high tech industries and to protect and nurture local champions.⁷⁹ To take the steam out of US criticisms, public references to the controversial Made in China 2025 report have disappeared from China's official discourse and been replaced by bland euphemisms such as "promote the development of high-quality manufacturing."⁸⁰ But there won't be any diminution in its commitment to become a technology leader. Nor is there any sign of a willingness to reduce the intrusive cyber-hacking operations that have so angered the US.

What this means is that technology and industry policy have become the defining theatres of competition in the wider strategic rivalry between the US and China, permeating every aspect of their relationship. This rivalry will profoundly shape the emerging international system for the rest of this decade and beyond, compelling all nations to adapt, make unpalatable political choices and grapple with difficult policy questions. Among them are whether the new era of techno-nationalism forces a decoupling of global supply chains and a 'Balkanisation' of the internet, weakening the vital information and trading architecture underpinning international society. Who will set the equally important global rules, standards and norms that govern the way in which countries and companies cooperate and interact in the digital world? Can the US or China win a tech war and, if so, at what cost to themselves and others?

Reconciliation, separation or divorce?

Experts are divided on virtually every aspect of the decoupling story — its likelihood, extent, consequences and solutions. But there are three credible scenarios: reconciliation, separation or divorce. These are explored in some detail by the Taskforce on Transforming the Economic Dimension of the US China Strategy, chaired by former Congressman Charles Boustany and Princeton academic Aaron Friedberg. Its main conclusion is that while moves towards disengagement or decoupling of their economies could be reversed (reconciliation) it is more likely that the US and China will move towards a significant degree of disentanglement (separation) especially in the tech sector.

Technology and industry policy have become the defining theatres of competition in the wider strategic rivalry between the US and China.

It is more likely that the US and China will move towards a significant degree of disentanglement especially in the tech sector. In a worse-case scenario, caused by rising tensions over separation, an external geopolitical crisis over Taiwan, North Korea, the South China Sea — or some combination of the three — disengagement could accelerate and become more complete, resulting in a high degree of separation between the two economies (divorce).⁸¹

Reconciliation is unlikely because US-China economic differences have emerged against a background of intensifying competition over ideology, geopolitics, trade, technology and industry policy, which is muting cooperative impulses. A trade deal, even at the more ambitious end of the spectrum, will do little more than briefly pause the downward spiral in relations between the two countries. But if reconciliation is improbable does that mean the US and China are headed for divorce? And what would that mean in practice?

For the moment, both countries recognise that divorce is unappealing as the costs would be extremely high. The US and Chinese economies remain deeply enmeshed. For every US firm that has become disenchanted with Xi's evocation of the potential of the vast China market there is another willing to go in search of the promised El Dorado, including super-sized corporations like Apple and Qualcomm.

Beyond their bilateral relationship both countries are deeply integrated into the wider global trading system and economic and financial institutions. China's economy is virtually impossible to isolate because of its size, dynamism and centrality to international commerce and investment. A Cold War style containment policy would be doomed to failure and highly disruptive to the world economy. Unlike the Soviet Union, which could not compete with the US economically or technologically, China produces a range of goods and services that are not easily replicated or substituted. The Lowy Institute's John Lee points out that China is the only country which can meet the insatiable developing country demand for commodities and technologies that are 'good enough'. It also provides investment not readily attainable elsewhere.⁸² For developed economies, China is a huge market for value added products, a large and still relatively cheap educated labour pool for research and development and a testbed for emerging technologies.

Even friends and allies are unlikely to fully support a US containment strategy as it would be detrimental to their growth and prosperity. Why else do German automakers partner with Chinese firms to develop selfdriving cars, Swiss robotics companies build cutting edge plants in China and Italian politicians want Chinese investment in port infrastructure? It's hard to dispute Lee's conclusion that "a comprehensive, blunt force attempt at decoupling" will undermine US leadership, fracture the global economy and force China to become more efficient and less dependent on US trade and therefore a stronger competitor.⁸³

Global supply chains and the broader world economy are unlikely to completely decouple even in a worst-case scenario given today's much higher levels of economic, financial and trade interdependence. But some level of separation is probable and even necessary to protect American IP

China's economy is virtually impossible to isolate because of its size, dynamism and centrality to international commerce and investment.

Global supply chains and the broader world economy are unlikely to completely decouple even in a worst-case scenario. and a fair, open, rules-based system. If the US fails to protect its competitive advantages China's dominance is all but guaranteed. The stronger the separation impulse, the greater the political and strategic implications, as other countries come under pressure to choose between competing US and Chinese systems of governance and technology.

The key question is how much separation and over what time frame? Will the US and China live together under the one roof, separate apartments or in different neighbourhoods? The further apart they are and the more bitter the separation, the more probable it is that global supply chains will be seriously disrupted. It's conceivable that the world could divide into two competing trade and geopolitical blocs, much like the Cold War, except that the bifurcation would be more fluid and fragmented. The Boustany/Friedberg report envisages a US bloc that would build outward from North America, and include some Latin American and African countries, parts of Asia, Australia and most European states. China's bloc would extend across Eurasia, the Central Asian republics and much of Southeast Asia. It could also capture a significant number of countries in Africa, the Middle East and Latin America although these regions would be contested by the US and other major states, notably Russia, Japan and India.⁸⁴

What we know so far is that the push to disengage, or decouple, has traction in both Washington and Beijing. Administration hawks consider that the best way of preserving America's dwindling economic and technological lead and protecting against avaricious Chinese practices is to reduce trade exposure to China and restrict the country's access to American technology and education. China expert and former Obama administration adviser, Ely Ratner, sees tariffs and tech restrictions as part of a suite of linked policy tools that are deliberately designed to decouple the US and Chinese economies. The aim is to reduce US dependence on China for technology, trade and resources seen as an unwelcome source of vulnerability. Ratner believes that the debate within the administration "is over the extent of that decoupling."⁸⁵ Chinese 'dragons' also want China to wean itself off technological and financial dependence on the US which they view as an unacceptable vulnerability.⁸⁶

Impact of the coronavirus

The coronavirus has shifted sentiment in Washington in favour of a more severe decoupling of the US and Chinese economies than previously contemplated following the realisation that US dependence on China extends to pharmaceuticals and medical equipment critical to combating the spread of the virus and maintaining public health.⁸⁷ Early decouplers argued for a selective disengagement focusing on China's predatory economic practices, technologies with military application, high value commercial IP and sensitive areas of the knowledge economy. But the gravity of the coronavirus crisis has spurred talk in US policy circles of the need to consider a more extensive disentanglement of the US and Chinese economies and supply chains.

Hard decouplers, like Peter Navarro, have used the crisis to argue for greater economic self-reliance on public health and national security grounds, and a lessening of dependence on foreign markets, especially China. Navarro

The world could divide into two competing trade and geopolitical blocs.

The aim is to reduce US dependence on China for technology, trade and resources seen as an unwelcome source of vulnerability. wants "to look strategically about moving supply chains on shore for essential medicines so that the American public is safe and the US economy is secure."⁸⁸ Director of the US National Economic Council, Larry Kudlow, has floated the idea that the government could pay 100 percent of the removal costs of American firms willing to relocate manufacturing from China back to the US.⁸⁹

The shift is also being driven by an increasingly vitriolic blame game about responsibility for the pandemic. Trump has unapologetically labelled COVID-19 as "the Chinese virus" and criticised Beijing for allowing it to get out of control. There have also been calls for China to pay reparations for the damage inflicted by the coronavirus and for an international investigation to determine its origins and how it spread so rapidly. Chinese officials have struck back by suggesting that American soldiers visiting China were the initial source of the virus.⁹⁰ And China's state media has once again drawn comparisons to the eight-nation alliance that put down the Boxer Rebellion and carved up the powers and territories of the Qing government while extracting reparations.⁹¹

Some US hardliners view COVID-19 coordination with China as a "selfharming exercise in zero-sum competition for global leadership", while their Chinese counterparts see opportunities to advance the country's economic and geopolitical influence as foreigners look to invest in early recovered economies.⁹² They argue that China's ability to weather the pandemic's storm on its own proves that the country has nothing to fear from a decoupled world which may well occur on Beijing's terms.⁹³

Calls for hard decoupling

"This is information warfare. China is using every means available to spin something they are largely responsible for. My call is for a hard decoupling between the US and China. The longer we stay in this relationship, the more we will see how devastating it is to us.....Why would we continue doing business with [China]?" – Andrew Michta, Dean of the George C. Marshall European Centre for Security Studies ⁹⁴ The Chinese economy can't spring back without strong demand from Western markets.

Such views are dangerously optimistic, ignoring the upside of international cooperation and the reality that all countries are affected by the pandemic. Bringing manufacturing back to the US is easier said than done with most big US firms in China reluctant to incur the costs of moving although some reshoring will inevitably take place.⁹⁵ The Chinese economy can't spring back without strong demand from Western markets and a sustained, wider recovery will be more difficult to achieve without US-China cooperation. Both countries moved in lock-step to stimulate the global economy after the 2008-09 financial crisis. Presidents George W. Bush and Hu Jintao, jointly lobbied fellow G7 and G20 members to coordinate their policies. They also worked together on a financial rescue package that required China not to sell any of its trillion dollar cache of US securities for fear of plunging ailing financial markets into a catastrophic sell-off.⁹⁶ A narrative war over the origin of the coronavirus and responsibility for its destructive effects will only serve to fuel tensions, weaken the nascent global recovery and intensify the decoupling momentum in both the trade and tech arenas.

The costs of decoupling

"COVID-19 has showcased the enormous costs we all stand to face from economic decoupling. The economic shutdown from COVID-19 has sent shock waves through global trade, running up and down global value chains, cascading the economic shock through supplier countries. The threat from knee-jerk protectionism to global trade recovery looms large." – *Editors, East Asia Forum*⁹⁷

'Balkanising' the internet

Could decoupling lead to a 'Balkanised' internet? Even before the coronavirus pandemic, this was a real possibility as the US and China battled for control over next generation information and communications technology (ICT) systems. Technological excellence has always underpinned economic and military capability and is a powerful catalyst for change in the international system. The internet is no exception. Popularised by a British engineer as the world wide web, the internet is no longer dominated by the West. China and other authoritarian states seek a more prominent role in shaping its rules and architecture.⁹⁸

From Beijing's perspective, domination of next generation ICT networks would provide unparalleled opportunities for intelligence collection and market leadership, creating a deep pool of countries willing to support

Could decoupling lead to a 'Balkanised' internet?

31

Competitive tensions are being exacerbated by the lack of international agreement about the rules, standards and norms that will govern cyberspace.

The world could split into two separate information worlds, one led by the US and the other by China. China's authoritarian friendly concept of cyber sovereignty over competing Western notions of openness and inclusiveness. Competitive tensions are being exacerbated by the lack of international agreement about the rules, standards and norms that will govern cyberspace. China has suggested a radical change to the way the internet functions to the International Telecommunications Union (ITU), a UN body whose primary role is to standardise global telecommunications technologies, services and operations. The Chinese proposal envisages a different standard for core network technology called New IP (internet protocol) that would make the internet more efficient and better structured for the digital age. But US and European critics contend that New IP would bake authoritarianism into the architecture underpinning the web and "give state-run internet service providers granular control over citizens' use."⁹⁹

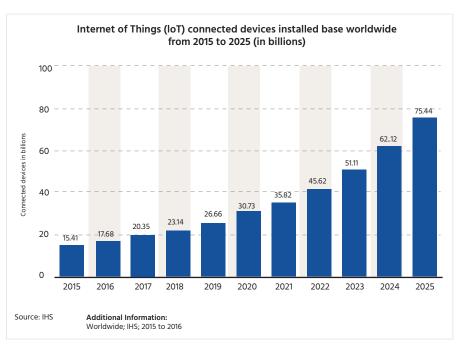
Acceptance of the proposal by the ITU would realise a long-term Chinese digital foreign policy goal — to entrench Chinese standards and technology as the foundation stones of the future internet, since the new global network would be designed and built by Chinese engineers, led by telecommunications giant Huawei. The US is highly unlikely to accept this outcome because internet power is mostly held by four large American corporations: Apple, Google, Amazon and Facebook.¹⁰⁰ New IP would end this virtual oligopoly, turbocharge China's march to technology leadership and facilitate the export of its authoritarian model globally. If no consensus emerges, which seems probable, the world could split into two separate information worlds, one led by the US and the other by China.

Even on fundamental concepts such as the definition of cyber space there are serious divisions. The US regards the domain as the technology (hardware/ software) that enables free access. China defines it as the content and interactions (speech, expression) between the users of cyberspace reflecting their determination to shield their netizens from information regarded as subversive, corrupting or inimical to national security.¹⁰¹ For democracies, this raises the troubling question of what an internet dominated by China might look like as Beijing pulls out all stops to shape fifth generation mobile network technology.



Figure 2.0 – The e-commerce universe ¹⁰²

Figure 2.1 – Growth of the Internet of Things ¹⁰³



HINRICH FOUNDATION REPORT - NEW COLD WAR: DE-RISKING US-CHINA CONFLICT Copyright © Alan Dupont and Hinrich Foundation. All rights reserved. Propelled by artificial intelligence, 5G promises to be transformational. The technology will incorporate the emerging Internet of Things, where machines can talk to one another, and will be critical to the development of smart utility grids, autonomous robots, drones and electric vehicles. 5G will also have far reaching military and intelligence applications, further blurring the boundaries between commerce and security. Countries which provide the technology and set global standards will reap enormous rewards in royalties, fees and innovation giving them pole position in the race to develop the cyber-physical systems of the fourth industrial revolution. In a white paper on the geopolitics of 5G, the Eurasia Group concluded that "every major issue associated with 5G networks has become politicized" and that the next phase of the digital revolution will have significant implications for "the long-term balance of global power."¹⁰⁴

Reflecting the view of American pessimists, emerging technologies expert Adam Segal contends that the US has ceded leadership in cyberspace to China. Xi Jinping has set his country on the path to cyber dominance by integrating domestic regulations, technological innovation and foreign policy. His aim is to build an 'impregnable' cyber defence system, foster more world class companies, lead the world in advanced technologies and give China greater voice in internet governance. If this happens, says Segal, "the internet will be less global and less open" because China has a diametrically opposed view to the US about the purpose of the internet and how it should operate.¹⁰⁵ Xi promotes the virtues of cyber sovereignty as the primary organising principle of internet governance in direct opposition to US support for a global, open internet.

Whether or not Segal is right, there is no doubt Xi has resolutely moved to cocoon his people inside the 'Great Firewall of China' and is busily constructing a comprehensive surveillance system built on advanced technology and the use of big data that would be impossible in a democracy because of privacy provisions and human rights constraints. The Trump administration fears that Xi will be able to bar unapproved content domestically and eventually hold the master keys to US secrets and personal data, if he succeeds in setting global standards and making Chinese technology central to global information architecture.

Huawei: national champion or 'stalking horse' for China?

Others believe that Beijing has already achieved a fundamental shift of technological power in its favour by using companies like Huawei to establish digital beachheads on foreign soil. Huawei is no ordinary company. It has exalted status in China as a national champion and is at the epicentre of the struggle for digital dominance. Huawei wants to use its pricing power and market dominance to control not only 5G, but also future telecommunications networks beyond 5G starting with 6G.¹⁰⁶ The tech leviathan is the embodiment of China's aspirations for technological leadership. This means curbing competition against Huawei wherever possible to entrench the company's products in critical infrastructure globally.

What makes Huawei a lightning-rod for US grievances and suspicions are the company's close ties to the Chinese Communist Party and Washington's

The next phase of the digital revolution will have significant implications for the long-term balance of global power.

The Trump administration fears that Xi will be able to bar unapproved content domestically and eventually hold the master keys to US secrets and personal data. The US sees Huawei as a stalking horse for the Chinese state.

Washington is digging in for a long fight with Beijing over 5G. belief that Huawei's path to technological leadership has been aided and abetted by state subsidies and the theft of American IP. With Communist Party officials on its board, the US sees Huawei as a stalking horse for the Chinese state because Huawei is not an independent, 'private' company in any meaningful sense of the word.¹⁰⁷ There are concerns — shared by other democracies — that China could weaponize 5G by ordering Huawei to insert technological 'backdoors' and 'kill switches' in 5G hardware, collect intelligence and control critical infrastructure.¹⁰⁸

Huawei is not the only Chinese tech company under scrutiny for activities deemed contrary to US economic and security interests. The Trump administration imposed a ban on Chinese electronic giant ZTE before rescinding it in 2018. In the same year, US government officials ordered Beijing Kunlun Tech to sell gay-dating app Grindr, fearing it could be used by China to blackmail US government employees with security clearances. Other countries have followed suit as the 'Huawei effect' raises red flags about Chinese tech titans and their products.¹⁰⁹

In 2019, the US began to tighten the screws on Huawei's operations in the US. In May that year, Trump signed an executive order foreshadowing the termination of all ICT trade and technology transfers between the US and China on national security grounds. The White House followed up by effectively barring Huawei and 70 affiliates from access to the US telecommunications system and technology by placing them on the Commerce Department's so-called Entity List.¹¹⁰ On 13 January 2020, two days before the phase one trade agreement was signed, US Secretary of State, Mike Pompeo made the administration's intent crystal clear. In a speech to Silicon Valley he called on US tech corporations to distance themselves from any business in China that might strengthen China's military, "tighten the regime's grip of repression", or help to "power a truly Orwellian surveillance state."¹¹¹ Then in April, the Commerce Department introduced new export controls which restrict the sale of dual use goods and technology to any Chinese company that deals with the People's Liberation Army (PLA).¹¹²

It is not just the administration that has Huawei in its sights. Key House Republicans introduced a bill in January 2020, that would bar intelligence sharing with countries that allow Huawei access to their nascent 5G networks.¹¹³ Other measures under consideration suggest that Washington is digging in for a long fight with Beijing over 5G. However, one big problem for the US is that there is currently no local alternative to Huawei — a strategic and commercial shortcoming. American companies dropped the ball on 5G years ago because it seemed a low profit market and state-supported Chinese companies were squeezing their margins. "Huawei alone is competitive in network hardware, chip design and end user devices, making it the equivalent of Ericsson, Intel and Apple rolled into one," says analyst Phillip Orchard.¹¹⁴

Knowing that it could take several years and substantial resources to bridge this technology gap, Washington is starting to think about strategies for restoring US competitiveness in next generation communication systems while attempting to pull back China's lead with an array of defensive measures.¹¹⁵ They include funding Huawei's main European competitors Nokia and Ericsson; disrupting the 5G status quo; privileging security over speed by raising awareness of the risks of using Huawei technology; and pressuring allies to ban Huawei from their 5G networks.

Speed versus security

The reluctance of the UK and Germany to accede to US pressure highlights the difficulties the US faces in convincing the rest of the world to ban Huawei's superior technology from their 5G networks. German Chancellor, Angela Merkel, has accepted the position of the major German telecommunications companies that Huawei's exclusion would cost billions of Euros and add years of delays. Fear of Chinese trade retaliation was also a contributing factor. China's Ambassador to Germany pointedly warned that "if Germany were to take a decision that leads to Huawei's exclusion from the German market, there will be consequences."¹¹⁶ UK Prime Minister, Boris Johnson, took a similar position in agreeing to allow Huawei access to his country's 5G network, albeit with significant restrictions.¹¹⁷ As a core member of the so-called 'Five Eyes' intelligence community, the UK decision was a significant setback to US efforts to constrain Huawei in what has become a proxy contest for the hearts, minds and wallets of other nation states.¹¹⁸

These Chinese successes may yet turn out to be Pyrrhic victories. Merkel's and Johnson's decisions have sparked domestic opposition to Huawei and stoked Sino-scepticism across Europe, reflecting a hardening view that authoritarian states should not be allowed to control the digital arteries of democracies. Prominent members of Merkel's own party have criticised her decision in unusually strong terms. Other mainstream parties have described it as "a grave error", "naïve" and "dangerous".¹¹⁹ Johnson's Conservative government was almost defeated in the House of Common's in March, 2020, when 36 members of his own party rebelled against the decision to allow Huawei into Britain's high speed telecommunications network.¹²⁰ Like London, Paris has opted to allow Huawei only into the non-core parts of its 5G network which will make it difficult for the company to retain its precarious foothold in the French telecommunications system over time.¹²¹

China's response

China's response to the mounting US pressure has been typically robust. The Foreign Ministry branded US action on Huawei as "economic bullying" and an attempt to block China's rise. Huawei accused the US of "using every tool at its disposal" to disrupt and stymy the company's business activities globally by visa denials, detaining shipments, conducting cyber-attacks on Huawei's networks and menacing its employees.¹²² This was an obvious reference to the detention in Canada of senior Huawei executive Meng Wanzhou, at Washington's request, and her indictment for breaching US sanctions on Iran amid CIA claims that the telco giant is funded by China's intelligence and security agencies.¹²³ Beijing has increased diplomatic and economic pressure on wavering customers to use its 5G offerings and doubled-down on investment in the local tech sector, pouring billions of dollars into developing alternatives to US semiconductors and accelerating plans to increase local content in strategic industries.¹²⁴

Chinese successes may yet turn out to be Pyrrhic victories.

Beijing has increased diplomatic and economic pressure on wavering customers to use its 5G offerings. Every foreign company with Huawei could face an unenviable dilemma: "Choose US law or Chinese regulations." China has also drawn up its own "unreliable entities list" to punish individuals and organisations that harm the interests of Chinese companies, threatening to make good on its threat if Sino-US trade talks are not satisfactorily resolved.¹²⁵ This would have a chilling effect on foreign companies doing business with China, subjecting their operations to arbitrary determinations of reliability and their executives to possible detention should they visit or work in China. Editor of the Sinocism newsletter, Bill Bishop, warns that every foreign company which severs ties with Huawei to comply with the Trump administration's sanctions could face an unenviable dilemma: "Choose US law or Chinese regulations." ¹²⁶

Artificial intelligence, quantum computing and semiconductors

Although 5G has been the most visible part of the tech war to-date the battle for dominance has spread to three other seminal and interconnected technologies — artificial intelligence, quantum computing and semiconductors. Al, otherwise known as machine learning, is a branch of computer science concerned with building smart machines capable of performing tasks that typically require human intelligence, such as deep learning. It's about to revolutionise the tech sector. In some areas, China may already have its nose in front having invested heavily in the technology and enjoying an authoritarian state's natural advantage in collecting and assembling the large data sets that are necessary to fully harness the power of Al. Leadership in the field will go a long way to determining whether the US or China prevails in their tech rivalry.

So will their respective advances in quantum computing which promise order of magnitude increases in computing power and the possibility of rendering conventional encryption systems obsolete. This would have enormous implications for every sector of society, but especially national security, should the break-through country be able to access every other country's secrets while making their own invulnerable to hacking. China launched the world's first quantum satellite in 2016. It has also created an ultra-secure ground link between Beijing and Shanghai using quantum-encrypted keys, which reportedly serves the central 200 state institutions and enterprises but with limited bandwidth relative to the conventional trunk routes.¹²⁷

While China has achieved significant advances in quantum communications, the real action is hard-core, brute-force computing where quantum computers come into their own.¹²⁸ Here, China lags the US which has ramped up its own spending since 2019 and is developing quantum-resistant algorithms. Home to IBM, Google, Amazon and Microsoft the US has a built-in advantage over China because these tech leviathans spend billions of dollars on quantum research and development giving them a two to three year lead over their Chinese competitors. In October 2019, Google announced it had achieved 'quantum supremacy' by demonstrating a supercomputer many times faster than conventional digital machines, albeit in specific and quite narrow areas of problem-solving.¹²⁹

The real action is hard-core, brute-force computing where quantum computers come into their own. The US and China are in the midst of a semiconductor arm-wrestle.

Semiconductors are a third arena of intense US-China competition. Extensively used in electrical circuits for microchips, they are "the central nervous systems and brains inside all new age technology."¹³⁰ This is an area of traditional US superiority. It has 45 percent of global market share and is probably three to five years ahead of China compared with China's one to two year advantage in 5G.¹³¹ Until recently, China was almost entirely dependent on American and foreign semiconductors, importing more of them than oil in 2018.¹³² In a major report on the semiconductor industry, business analyst Alex Capri details how the US and China are in the midst of a semiconductor arm-wrestle that is destabilising the entire technology sector and altering the global economic landscape. He believes that decoupling is inevitable in the semiconductor space with China certain to be the short-term loser despite its attempts to boost local production and wean itself of US semiconductors.¹³³

China's weakness in semiconductors could potentially dent its AI and 5G ambitions because of the interrelationship between these sectors. Nvidia, a US company that dominates the production of graphic processing units for Al's deep learning algorithms is now barred from supplying advanced GPU's with super-computer application to Chinese companies. Any fall in Huawei's mobile customer base and disruptions to the smartphone supply chain will negatively impact its 5G plans. But the US will suffer pain too as companies with major China exposure will take a revenue hit and be forced to consider alternative markets and suppliers.¹³⁴ So the Trump administration is moving cautiously, using a scalpel rather than a hammer, to prevent advanced technology leaking or being acquired commercially by China. Meanwhile, Huawei aims to eliminate its reliance on US companies for key components (notably, in radio frequency chips) by expanding the capabilities of its chipmaking arm, HiSilicon.¹³⁵ In response, Washington is contemplating rules on limiting the supply and use of its equipment and software tools used by foundries serving HiSilicon, in an action-reaction pattern reminiscent of military arms-racing.

Techno-economist, Julian Snelder, argues that the technology divide is becoming more evident in other areas of the global economy too, with Beijing relentlessly focused on developing and promoting a 'Chinese tech stack' comprising integrated layers of linked software and hardware that could allow it to capture entire market ecosystems in user countries. In the automobile sector, there is a broad consensus that the autonomous driving world will split in two, one that follows Google/GPS and one that conforms to Beijing's strict mapping protocols and an entirely different set of standards.¹³⁶ The Economist agrees, opining that "China's approach to self-driving reflects its attitude to development more broadly: heavy on infrastructure and government oversight, lighter on cutting-edge technology and civil liberties. It may one day prevail over the Western path to autonomy."¹³⁷

Winning the tech war

In this clash of the tech titans is it conceivable that one could emerge victorious? The answer depends on how victory is defined. For the moment, the contest for tech primacy is delicately balanced. China is certainly ahead in 5G and may have a slight lead in some areas of AI and quantum

China has competitive capabilities in most of its 25 strategic industries. communications. It's also competitive in most other areas of the 25 strategic industries singled out for attention. But the US remains the biggest market in the US\$250 billion a year global industry for telecom equipment and related infrastructure, is well ahead in semiconductors and still has a significant, though shrinking lead, in most other tech sectors.¹³⁸ So this is a contest between near peers. Neither the US nor China can win the tech war in the sense of becoming the technological hegemon that the US was for most of the second half of the 20th century.

Moreover, it's very unlikely that the US will be able to dissuade China from abandoning its attempt to control the future high-tech landscape by subsidising local companies, stealing competitor's IP and forcing foreign companies to transfer technology to Chinese partners. These practices are integral to the CCP's plans for achieving technological breakthroughs, boosting productivity, sustaining growth, preserving social stability and maintaining its grip on domestic power.

Perhaps the best that can be hoped for in the short term is that Xi will curb some of the more egregious elements of China's techno-mercantilism. He may have an incentive to do so if Washington's pressure develops into a basketball-like full court press, and Trump (or his successor) can unleash the country's innovative spirits, a traditional American strength. That would pose a much more formidable long-term challenge for China and offset its dirigiste advantages in long-term planning, resource mobilisation and state funding of strategic industries.

Navigating a more contested tech environment poses three dilemmas for both countries. First, how much risk does a specific technology realistically pose to national security? Those with direct military application are obvious. But much new technology is dual-use, so this is not a black or white choice. Second, what is the appropriate mix of defensive (export controls/black-lists) and self-strengthening policy options (investment/innovation)? Third, will targeting another country's technology do more harm than good to one's own technology and supply chains?¹³⁹

Navigating a more contested tech environment poses three dilemmas for both countries.

Security implications of 5G

"Given the blurring lines between commercial and military or intelligence technologies, it's not hard to come up with reasons why just about any emerging Chinese technology could threaten US interests. Chinese 5G infrastructure, for example, could ostensibly be weaponized to divert sensitive data to Beijing or wreak havoc on US military logistics and communications lines just as the PLA makes it move on Taiwan. Chinese-made train cars could be rigged to paralyze major U.S. cities." – *Phillip Orchard, Geopolitical Futures* ¹⁴⁰

Even on Huawei, the US is conflicted about how far it should exclude the company's products from global supply chains and to what extent it still needs to cooperate in order to retain a strong voice in global standards setting. The Pentagon objected to a Commerce Department proposal to restrict US firms from selling to China from overseas facilities, fearing it would lose a prime source of revenue depriving them of money for research and development.¹⁴¹ Defense Secretary, Mark Esper, conceded that the US has to be "conscious of sustaining" its own technology companies' supply chains and innovators. "That's the balance we need to strike."¹⁴² When engineers in some US companies stopped engaging with Huawei to develop standards after the Commerce Department blacklisted the company in 2019, Huawei gained a stronger voice "as US engineers sat back in silence." Commerce now wants to allow US companies to work with Huawei on setting standards for next generation 5G networks.¹⁴³

The reality is that tech wars are very expensive. They are also complicated and hard to win. The Economist estimates that it would take China 10-15 years to become self-sufficient in computer chips and for America to shift suppliers. To build a duplicate tech-hardware supply chain in a divorce scenario would cost around US\$2 trillion, 6 percent of their combined GDP.¹⁴⁴ For the US, there is also the loss of high-value operational expertise to China, a generational forfeiture of talent, knowledge and experience which it will need to recover.

US tech companies need to be engaged in standard setting rather than allowing Chinese competitors to fill the void.

Chapter 3: The foothills of a new Cold War

The trade and tech wars are symptomatic of a deeper and more dangerous geopolitical divide.

A Cold War is a multidomain, adversarial contest for global supremacy between the two dominant powers of the day with system wide effects. Unless the US and China can moderate their aspirations for global leadership and reach some form of strategic accommodation, a comprehensive settlement of their disputes is unlikely. Trust, already in short supply, is steadily being eroded by rising nationalist and protectionist sentiment reinforcing suspicions about the purpose of each other's trade and industry policies. While important in themselves, the trade and tech wars are symptomatic of a deeper and more dangerous geopolitical divide rooted in their strategic ambitions, different political systems and sense of exceptionalism.

For Trump, the contest with China is not only about redressing past inequities but consolidating the US position as the paramount global power. Xi, too, wants to correct past injustices and grasp his carpe diem moment to return China to its 'rightful' place as the dominant state in Asia and eventually the world. Time is running out for Xi to achieve this ambition and escape the middle-income trap because of demographic decline, falling productivity, environmental pressures and the US pushback.

Why a Cold War?

Finding the middle ground will not be easy. In the past, such cleavages have often preceded military conflict or an extended period of confrontation and instability. Without a circuit breaker, a ratcheting-up of Sino-US tensions could worsen the emerging Cold War. As its name implies, a Cold War is a multi-domain, adversarial contest for global supremacy between the two dominant powers of the day with system wide effects that is below the threshold of a major 'hot' war, although it could easily result in one unless carefully managed. Many well-credentialled analysts and former policymakers accept that a Cold War is likely, or already underway, foreshadowing an era of heightened strategic competition that would be enormously disruptive to international trade and world order.

Former US Treasury Secretary, Hank Paulson, worries about the prospect of an economic iron curtain descending across the world that "throws up new walls on each side and unmakes the global economy, as we have known it."¹⁴⁵ Former CIA Director, Michael Morell, thinks the US and China are heading for a new Cold War based on economic competition and the pursuit of influence, whether they like it or not.¹⁴⁶ Economic historian Niall Ferguson says that Cold War II began in 2019 when the trade conflict "rapidly metamorphosed into a cluster of other conflicts."¹⁴⁷ The Asia Society and the University of California, San Diego, published a comprehensive review of US-China relations in 2019 which said the US and China "are on a collision course." The review concluded the current downturn in the relationship is "unprecedented" in the past 40 years, and of great concern because it is occurring at a time when the US and China are more evenly matched "making the dangers of overt conflict far greater."¹⁴⁸ This is no ordinary dispute. Nor is it just about trade or technology leadership.

China's leaders understood that they could never be a superpower without a world class military and mastery of the cutting-edge technology necessary to sustain it.

By the end of the Obama presidency, China's revamped military seemed to be everywhere. Deniers dismiss such warnings as exaggerated, scare-mongering or counter factual. Trade luminaries assert that it is in neither country's interest for the trade conflict to be prolonged or worsen in what would amount to an act of mutual self-harm. Some historians maintain that invoking the spectre of a Cold War is dangerously misleading because the circumstances confronting the US in its confrontation with China are entirely different from those of the late 1940s.¹⁴⁹ Others warn of the perils of using Cold War language or the language of war to describe Sino-US competition and the construction of simplistic or 'alarmist' threat scenarios that distort the complex reality of the relationship.¹⁵⁰

But the deniers are wrong. This is no ordinary dispute. Nor is it just about trade or technology leadership. Trade, tech and geopolitical disputes are metastasising into a wider, more serious confrontation between the US and China.

Competing strategic ambitions

How did we get to this point? Answering this question requires an understanding of the origin, nature and scope of China's global challenge to US primacy and the breadth of the US pushback. At the end of the last century, China's leaders understood that they could never be a superpower without a world class military and mastery of the cutting-edge technology necessary to sustain it, so they launched a major effort to modernise the Peoples Liberation Army (PLA) and close the yawning military technology gap with the US.

This resulted in double digit increases in annual defence and national security spending and massive, sustained investment in defence technology. As the new force developed it became clear that Chinese leaders aspired to match, and eventually surpass, the capacity of the US to project military power into the Western Pacific. They reasoned that if a rising America could formulate a Monroe Doctrine in the 19th century as a blunt, but effective instrument for keeping other powers out of the Western hemisphere, why should an ascendant, 21st century China not seek a comparable outcome in its own maritime backyard?¹⁵¹

But the US had a very different view particularly after China forcibly occupied and garrisoned disputed islands in the South China Sea, began regular incursions into contested areas of the East China Sea and launched its ambitious Belt and Road Initiative (BRI), also known as the New Silk Road project, which aims to pull large parts of Central, South and Southeast Asia into China's orbit.¹⁵² These initiatives were widely regarded in Washington as a direct challenge to US power and evidence that China had no intention of becoming a 'responsible stakeholder' in a liberal, democratic order.

By the end of the Obama presidency, China's revamped military seemed to be everywhere, sailing through the Bering Straits off the coast of Alaska, holding joint exercises with Russia in the Mediterranean, sending submarines to Sri Lanka and developing a new military base at the strategically located former French colony of Djibouti adjacent to the mouth of the Red Sea. A secret space facility in Argentina, ostensibly for civilian purposes but

HINRICH FOUNDATION REPORT - NEW COLD WAR: DE-RISKING US-CHINA CONFLICT Copyright © Alan Dupont and Hinrich Foundation. All rights reserved. with potential military application, underlines just how intertwined China's commercial and national security objectives have become in the country's quest for superpower status.

US military decline

As China ramped up its military power the US was trending in the opposite direction. The seeds of decline were sown at the end of the Cold War when the US began to lose its advantage in key military and dual use technologies. From the 1950s to the mid-1980s, the US was supreme in computer chips, precision guided munitions and space. However, defence research in these areas stimulated advances in the private sector reducing costs, making the technology widely available and reducing the Pentagon's control and leading role.

The evangelising, nation-building zeal of George W. Bush's neo-cons – who erroneously believed that they could democratise the Middle East – and the distracting global war on terror consumed much of the budget surplus built up under previous administrations. Precious defence resources were redirected towards hugely expensive counter-terrorism and counterinsurgency operations in ungoverned spaces around the world, wearing out much of the Pentagon's equipment and draining inventories of materiel and expensive, smart munitions.

Between 2002 and 2017, the US spent an astonishing US\$2.8 trillion on funding the war against terror and counter insurgency wars in Iraq, Afghanistan and Syria, equivalent to 16 percent of the government's entire discretionary budget.¹⁵³ By comparison, World War II is estimated to have cost US\$4-5 trillion.¹⁵⁴ For nearly two decades America took its eye off the main game as China, Russia and other adversaries built up their arsenals and sought to neutralise US advantages. Compounding this error of judgement, the Bush and Obama administrations underestimated the determination of China and Russia to reassert themselves in Asia and Europe.

Overuse and underspending on conventional weaponry have weakened the sinews of the once peerless US military. The defence budget flat lined under Obama. Forced defence cuts by Congress, known as sequestration, exacerbated the Pentagon's funding problems from 2013. In 2017, exasperated former US Defence Secretary Jim Mattis famously declared: "No enemy in the field has done more to harm the combat readiness of our military than sequestration." ¹⁵⁵

China's military build-up

Learning from the effectiveness of the Pentagon's 2003 'shock and awe' Iraq campaign, which overwhelmed Saddam Hussein's well-equipped army, PLA strategists intend to match and eventually outstrip the US in conventional military power. They believe, with some justification, they have found a winning formula in outspending and outbuilding the US in naval ships, submarines and missiles while closing the gap in just about every other measure of military capability.¹⁵⁶

Overuse and underspending on conventional weaponry have weakened the sinews of the once peerless US military. China's navy will have roughly the same number of warships as the US by 2021 but with a higher proportion of modern ships. The country already boasts the world's largest force of conventionally armed ballistic and cruise missiles. On current trends, China's navy will have roughly the same number of warships as the US by 2021 but with a higher proportion of modern ships. Its submarine fleet is already larger and the navy is on track to have 6 aircraft carriers by 2030, which would enable it to deploy four powerful carrier groups to support Beijing's territorial claims in the East and South China Seas.¹⁵⁷ This means that forward deployed US forces in Japan, South Korea, Guam and even Hawaii are now vulnerable to attack from Chinese bombers and missiles launched from the mainland, garrison islands in the South China Sea and the Chinese fleet.

Perhaps the greatest threat to US military pre-eminence is China's singleminded, strategic approach to developing the enabling technologies and capabilities crucial to future great power status, in contrast to the disjointed and domestically contested US approach. Space is illustrative. Once a space neophyte, the landing of a lunar explorer on the dark side of the moon in January, 2019 was an impressive demonstration of China's determination to become this century's space power.¹⁵⁸ The Chinese moon landing is the product of clear goals, sustained funding and programmatic stability while US space policy lacks focus and waxes and wanes with the political tide.



Chinese aircraft carrier Liaoning exercising in the West Pacific.

Political warfare and 'unrestricted' war

Of even more concern to the US is the realisation that the PLA's conventional military build-up is only one part of a wider strategy for entrenching China's pre-eminence by mobilising all elements of national power in an adaptation of political warfare that states have practised for centuries.¹⁵⁹ While interference and influence operations have captured the headlines, China's expanding political warfare tool-kit includes a raft of other policy instruments that have been cleverly integrated into a whole of nation strategy that has proved difficult for the US and the West to combat. They include propaganda, aggressive diplomacy, sophisticated disinformation campaigns, media manipulation, subversion, financial inducements, the theft of IP, lawfare, coercion and the use of economic and military pressure for strategic purposes.

China uses a whole-ofnation defence strategy. Xi has elevated interference and influence operations into an art form.

The idea of 'unrestricted warfare' infuses the CCP's thinking about how to confront and defeat a technologically superior foe by undermining its will and ability to resist.

The 2017 National Security Strategy accused China of wanting "to shape a world antithetical to U.S. values and interests." Xi has elevated interference and influence operations into an art form, sowing discord in democratic societies and co-opting sympathetic or naïve elites while cocooning his own people inside thickening walls of repression and control. This is classical asymmetric warfare because it plays to China's strengths in political mobilisation and domestic control while exploiting the West's relative openness, tolerance and diversity. The US has been hobbled in its response by a mixture of complacency, technological determinism, expensive legacy systems and self-imposed legal, cultural and political constraints that are necessary for the functioning, freedoms and legitimacy of democratic governments.

Political warfare is not just a strategy for undermining the West. It reflects the ideology of an insecure state that feels imperilled by liberal values. In a comprehensive review of Xi's stewardship, veteran China watcher Elizabeth Economy concludes that China's president considers constitutional democracy, human rights, academic freedom, judicial independence and freedom of the press as fundamental threats.¹⁶⁰ The accompanying idea of 'unrestricted warfare', an innovative concept articulated by two influential PLA colonels in the late 1990s, infuses the CCP's thinking about how to confront and defeat a technologically superior foe by undermining its will and ability to resist.

Colonels Qiao Liang and Wang Xiangsui argued that the battlefield had fundamentally changed. It was no longer a place where militaries met and fought. Instead, society itself was now the battlefield. Future wars would inevitably encompass attacks on all elements of society without limits, using military force, coercion, pressure and both lethal and non-lethal means to compel an enemy to accept one's interests. The barrier between soldiers and civilians would be erased because the battle would be everywhere. The number of new battlefields would be "virtually infinite," and could encompass environmental, financial, trade, cultural and legal warfare, among others.¹⁶¹

The ideas of Qiao and Wang stimulated the development of two important strategic concepts that have shaped contemporary PLA planning and tactics. First is the adoption of 'threshold' or 'tolerance' warfare. Its central idea is to opportunistically seize territory or attack opponents without triggering an overwhelming response.¹⁶² Second, is the use of proxies to help achieve strategic objectives. Proxies may be military professionals masquerading as volunteers, or paramilitaries acting as spear-carriers and providing cloaking support for regular forces. Both tactics were employed in the stealthy seizure and militarisation of disputed islands in the South China Sea, with China's fishing fleet and coast guard leading the way.¹⁶³

The Pence indictment

Recognising the breadth and seriousness of Beijing's challenge, the incoming Trump administration determined to push back initially choosing national security and defence, not trade. The 2017 National Security Strategy (NSS) accused China of wanting "to shape a world antithetical to US values and interests" and "displace" the US in the Indo-Pacific region. Foreshadowing the punitive tariffs he would later levy on China, the NSS declared that the US would "counter all unfair trade practices that distort markets using all

HINRICH FOUNDATION REPORT - NEW COLD WAR: DE-RISKING US-CHINA CONFLICT Copyright © Alan Dupont and Hinrich Foundation. All rights reserved. appropriate means, from dialogue to enforcement tools."¹⁶⁴ A few months later, Trump's defence strategy doubled down on the NSS, bluntly casting China as a "revisionist power" and "strategic competitor" and accusing it of using "predatory economics to intimidate its neighbours while militarising features in the South China Sea." The administration signalled that it would respond by building a more lethal and agile force "to maintain effective deterrence without dominance."¹⁶⁵ The gloves were off.

Subsequent headland speeches by Vice President Mike Pence and Secretary of State Mike Pompeo make abundantly clear that Washington's main concern is China's strategic ambition, transcending trade and technology differences. They accuse Beijing of a litany of sins, notably, the unfair use of industrial policy to dominate the commanding heights of the global economy; industrial scale cyber-attacks to steal US and Western secrets and IP; interference in US domestic politics; attempts to create a new hegemony in the Indo-Pacific; and the use of political warfare to undermine the social and political cohesion of the US and its democratic allies.¹⁶⁶

Of the two speeches, Pence's is the most sweeping and authoritative statement of US grievances against China which has not been given the attention it deserves in the academic literature or mainstream media. The Vice President's speech essentially reset the administration's relationship with China from partnership to rivalry underlining how trade, tech and geopolitical disputes are morphing into a wider, more serious confrontation between the world's two most important states.

Pence's criticisms are systemic, bi-partisan and not easily addressed. He asserts that Washington has long supported and sponsored China's remarkable rise by opening the US economy to China, bringing the country into the WTO, investing heavily in it and training a new generation of Chinese engineers, business leaders, scholars and officials. In short, the US helped rebuild China. But in return, Beijing modernised its manufacturing base "at the expense of its competitors, especially America," and now seeks to control "90 percent of the world's most advanced industries" (as evidenced by its Made in China 2025 strategy). If uncontested, the US and the rest of the world would be relegated to second class status and irreversible decline.

Furthermore, declared Pence, China has attacked the foundations of US power by obtaining American IP — the foundation of US economic leadership — "by any means necessary." Using that "stolen technology" and "economic aggression" the Chinese Communist Party is turning "ploughshares into swords on a massive scale." China wants to push the US from the Western Pacific and prevent it from coming to the aid of allies. Beijing is also accused of manipulating and malignly influencing US politics, academe, business, the media and even Hollywood, while oppressing its own people. It has built "an unparalleled surveillance state" (often with US technology), implemented an Orwellian control system and persecuted religious and ethnic minorities. And it has bullied weaker states to advance its interests through debt diplomacy.

In response, Pence promised that US power would be mobilised on a scale that has not been seen since the beginning of the Cold War. Pulling no

Pence's speech essentially reset the administration's relationship with China from partnership to rivalry.

China has attacked the foundations of US power by obtaining American IP — the foundation of US economic leadership. punches he vowed that the administration would strengthen the military; ensure continued dominance of space; demand fair and reciprocal trade deals; end the theft of American IP; advance the vision of a "free and open" Indo-Pacific; build bonds with nations that share US values; forge new bilateral trade deals; provide a "just" alternative to China's debt-trap diplomacy and strengthen foreign investment guidelines. The aim? To persuade China's leaders to change course and work with, not against, America "to meet the future together." ¹⁶⁷

The Pompeo speech is equally censorious of China's behaviour; noting the "fundamental differences" between the two countries, the hostility of the CCP to the US and its values, the lack of respect for "fairness, the rule of law and reciprocity", and the threat to America's national security posed by China's "asymmetric weapons."¹⁶⁸

Not all members of the Washington policy elite agree with this critique or are enamoured of the administration's characteristically assertive prosecution of China policy, including several prominent Republicans.¹⁶⁹ They decry the shift from cooperation to confrontation, accept that both sides must share the blame, and fear that confrontation will become a self-fulfilling prophecy producing a "prolonged, costly and potentially dangerous struggle between two militarily and economically powerful states."¹⁷⁰ Others are critical of Trump for being out of step with long standing US foreign policy. But the administration's stance has been much more within the Jacksonian mainstream of US foreign policy than the idiosyncrasies of Trump's negotiating style suggest, or his critics maintain. Like his distant predecessor, President Andrew Jackson, economic nationalism, populist values and military strength are the cornerstones of Trump's policy approach.¹⁷¹

Beijing returns fire

All signs point to a protracted rivalry that is more likely to escalate than de-escalate. China's leaders know trade is the spearhead of a much wider US pushback designed not merely to reduce the trade deficit but to prevent China from surpassing America as this century's leading state. "Trump's actions have seriously agitated the Chinese leadership," says prominent academic, Shi Yinhong. They now realise there's "no chance of reaching a fair deal with the US for the foreseeable future. China is not just preparing for a protracted trade war but also an escalating conflict."¹⁷² A leaked internal report to Beijing's top leaders in May 2020 warned that global anti-China sentiment led by America is the highest since the 1989 Tiananmen crackdown and that they need to be prepared for armed confrontation with the US.¹⁷³

The problem for Xi is that he has limited room for manoeuvre. He can't afford to make too many concessions on industry, trade and strategic policy for fear of attracting domestic opposition and derailing his ambition to make China the leading power regionally, by 2030, and globally, by 2050. Uncharacteristically pushed onto the defensive by Trump's Twitter blitz in the early stages of the trade dispute, Chinese officials and state media have become more assertive across a broad range of contentious issues. The US has been accused of stirring up trouble in Hong Kong by signing into law the 2019 Hong Kong Human Rights and Democracy Act which Beijing

Economic nationalism, populist values and military strength are the cornerstones of Trump's policy approach.

All signs point to a protracted rivalry that is more likely to escalate than de-escalate.

Chinese officials and state media have become more assertive across a broad range of contentious issues.

> HINRICH FOUNDATION REPORT - NEW COLD WAR: DE-RISKING US-CHINA CONFLICT Copyright © Alan Dupont and Hinrich Foundation. All rights reserved.

has denounced as "meddling", threatening unspecified "consequences."¹⁷⁴ Chinese officials have also vowed to counter any moves by the US to base intermediate range missiles in the Pacific and castigated Washington for withdrawing from a landmark Intermediate Range Nuclear Forces Treaty.¹⁷⁵

Fu Cong, a senior arms control official, gave voice to China's growing concerns about US behaviour in late 2019, accusing Washington of "trying to contain and seek overwhelming military superiority" over China "in all fields and with all means imaginable", and of "introducing political ideology into the international discourse on arms control and non-proliferation leading to heightened risks of an arms race and confrontation." He also lambasted the US for "Cold War thinking", imposing unilateral sanctions with "extra-territorial jurisdiction in violation of international law" and undermining both bilateral and multilateral arms control and non-proliferation agreements.¹⁷⁶

Cold War parallels

These differences are more than just rhetorical. The Pence speech outlines an agenda for action that defines the contours of a new strategic rivalry that has clear parallels with the Cold War, heralding an unprecedented, whole-ofgovernment push-back against China on multiple policy fronts, redolent of Winston Churchill's watershed 5 March 1946 'Iron Curtain' declaration.¹⁷⁷ The consequences are likely to be as profound and enduring.

The Cold War was essentially a confrontation between the two leading powers of the time (the US and Soviet Union) to shape the emerging international order and determine its rules. To defend the liberal international system and its underlying values the Truman administration sought to contain the Soviet Union, portraying its competition as an existential clash between "totalitarian regimes" and "free peoples." President Eisenhower continued and refined this policy evoking the derivative image of a 'Bamboo Curtain' veiling a subordinate threat from a hostile, communist China on the rise.

This led to a de facto division of the world into two opposing camps, with a significant third group of nominally non-aligned nations. Democracies were largely united in their opposition to the distinctly undemocratic Soviet empire and its satellite states with China emerging as a communist challenger to the Soviet Union. Neither communist state could prevail economically against the demonstrable strengths of Western free markets which ultimately led to the Soviet Union's demise and China's 1979 decision to embrace a hybrid market system "with Chinese characteristics", often referred to as state capitalism.

The twin themes of confrontation and containment are strikingly evident throughout Pence's speech. Other commonalities are the whole-of-government response, a desire to cast the competition as one between contrasting values and global visions and the portrayal of the policy shift as a necessary response to a rival's aggression. As in 1946, the US position is fundamentally a defensive one in the face of a perceived threat from a rapidly modernising and expansionist rival. ¹⁷⁸

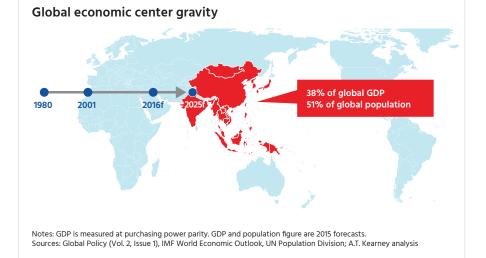
There are, of course, significant differences. China has supplanted Russia as the main threat. "What the Russians are doing pales in comparison to

The Cold War twin themes of confrontation and containment are strikingly evident. what China is doing across this country," says Pence. Strategic competition between the US and the Soviet Union largely played out in the political and military domains. There was little trade between the two competing blocs. However, the core contest between the US and China is economic which means that trade, investment, technology and strategic industries are central to today's rivalry. At its high point, the GDP of the Soviet Union was only 40 percent of that of the US.

But China's is already at 65 percent and growing rapidly.¹⁷⁹ Between them, the US and China account for around 40 percent of global GDP.¹⁸⁰ If either of these two titans sneezes the rest of the world catches a cold.¹⁸¹ Literally, in the case of China, as the coronavirus ravages the world. Another notable difference is the explosion in digital trade and communications which now connect the world but have also become areas of contestation. The US and China are increasingly at loggerheads about who will control the digital economy.¹⁸²

Figure 3.0: Economic power moving to Asia ¹⁸³

Asian economic power is growing, shifting the world's economic center of gravity to the East



Although the new Cold War is playing out across the world its geographic centre of gravity is the Indo-Pacific, not Europe.

The US and China are

digital economy.

increasingly at loggerheads about who will control the

Although the new Cold War is playing out across the world its geographic centre of gravity is the Indo-Pacific, not Europe, because the epicentre of global commerce and trade has moved from the Atlantic to the Pacific reflecting Asia's rise and Europe's decline. Moreover, the US and China are both Pacific powers. Their rivalry will be felt most keenly in the Indo-Pacific, particularly in the maritime domain, where their interests collide and there are several potential triggers for military confrontation. North Korea and the East and South China Seas are the most likely candidates. But Taiwan and Hong Kong are potentially arenas for conflict too, and not just because of their political significance. Taiwan is a critical technology producer for the US and China. Hong Kong is China's financial portal to the world and the US dollar which remains the dominant currency for international trade.

Was the Cold War avoidable?

"It is hard to argue that a global Cold War that was to last for almost 50 years and threaten the obliteration of the world could not have been avoided. There were points along the way when leaders could have held back, especially on military rivalry and the arms race. But the ideological conflict at the root of the tension made such sensible thinking very difficult to achieve. People of good will on both sides believed that they were representing an idea whose very existence was threatened. It led them to take otherwise avoidable risks with their own lives and the lives of others." – Odd Arne Westad, The New York Times ¹⁸⁵

These differences do not invalidate the comparison with the Cold War since no historical pattern is entirely the same as its antecedent. In describing the connection between war and the quest for economic and geopolitical supremacy, George Modelski cautioned against interpreting historical patterns or cycles as history repeating itself.¹⁸⁴ Although there is a regularity to each cycle, and common features, every cycle has novel, distinguishing hall marks since each is an evolution of the global system. What is important are the essential commonalities.

There are six that matter. First, the US-China rivalry is between the world's two most powerful states, one a liberal democracy and the other avowedly communist. Second, it is a system wide contest for supremacy. Third, it is about ideology (values) as well as national power (interests). Fourth, it will be a multi-decade struggle for global ascendancy. Fifth, a second geopolitical bifurcation of the world is likely. Sixth, neither side wants a full-scale military confrontation. In short, it is not your run-of-the-mill great power conflict. Only structurally does it bear comparison with other great power conflicts in the modern era. Even viewed through this narrower analytical lens, the auguries do not bode well for a speedy and peaceful resolution of Sino-US differences.

The historical record

There is rich academic literature explaining why countries go to war or engage in hostilities.¹⁸⁶ Although there are many theories and interpretations, it is generally accepted that a primary cause is the structural tension between independent states trying to maintain their security in a system where there is no supranational authority to maintain order. The weak and vacillating United Nations hardly qualifies. Harvard scholar, Graham Allison has popularised this structural problem (also known as the security dilemma) by describing it as Thucydides Trap, a reference to the great Athenian historian's insights into the causes of the Peloponnesian War in the fifth century B.C. Thucydides observed that when a rising power threatens a ruling power the

A second geopolitical bifurcation of the world is likely.

Thucydides observed that when a rising power threatens a ruling power the result is often war.

Of the 16 cases examined in which a rising power threatened to displace a ruling power, 12 ended in major war. result is often war. "It was the rise of Athens, and the fear that this instilled in Sparta, that made war inevitable."¹⁸⁷

Of course, not all tensions between large states end in conflict and Allison has his detractors.¹⁸⁸ They include Xi who has poured cold water on the thesis. During his 2015 visit to the US, Xi said "there is no such thing as the so-called 'Thucydides trap' in the world. But should major countries time and again make strategic miscalculations, they might create such traps for themselves."¹⁸⁹ Later, Xi was even more dismissive, arguing that: "We must all strive to avoid falling into the Thucydides Trap; the notion that a great power is bound to seek hegemony doesn't apply to China, which lacks the gene that spawns such behaviour."¹⁹⁰

However, his confidence that the two nations will reach an accommodation to avoid military conflict is not shared by Allison whose study found that of the 16 cases examined in which a rising power threatened to displace a ruling power, 12 ended in major war. Of the four that didn't, one was the Cold War. In the remaining three, the Thucydides Trap was either mitigated through open gestures of good faith and genuine negotiation, by finding other vehicles for competition or by one state facing a more present threat. In all these cases there was an understanding that the cost of falling into the Thucydides Trap would have been too high.¹⁹¹

Figure 3.1: Thucydides Trap ¹⁹²

| Century | Ruling power | Rising power | Result |
|-----------------------|------------------|---------------------|--------|
| Later 15th | Portugal | Spain | No war |
| First half 16th | France | Hapsburgs | War |
| 16th & 17th | Hapsburgs | Ottoman Empire | War |
| First half 17th | Hapsburgs | Sweden | War |
| Mid-to-late 17th | Dutch Republic | England | War |
| Late 17th to mid 18th | France | Great Britain | War |
| Late 18th/early 19th | UK | France | War |
| Mid-19th | France & UK | Russia | War |
| Mid-19th | France | Germany | War |
| Late 19th/early 20th | China & Russia | Japan | War |
| Early 20th | UK | USA | No war |
| Early 20th | UK | Germany | War |
| Mid-20th | USSR, France, UK | Germany | War |
| Mid-20th | USA | Japan | War |
| 1940s-1980s | USA | USSR | No war |
| 1990s-present | UK & France | Germany | No war |

Source: Evening Standard

HINRICH FOUNDATION REPORT - NEW COLD WAR: DE-RISKING US-CHINA CONFLICT Copyright © Alan Dupont and Hinrich Foundation. All rights reserved. An earlier study by Jia Quingguo and Richard Rosecrance came to a similar conclusion. Although the authors were personally optimistic that US-China tensions wouldn't lead to conflict, in six out of the seven historical cases they examined where a rising power challenged an existing one, war was the outcome. The only instance of a great power replacing an incumbent hegemon without serious conflict was when the US overtook Great Britain in 1890. Similar cultural and political values played a large role in determining that outcome.¹⁹³

The Jia and Rosencrance case studies

The six case studies of great power challenges in which war, or serious conflict, was the outcome were: Spain versus Holland in the 16th century; Holland versus England in the 17th century; Britain versus France in both the 18th and 19th centuries; France and Britain versus Germany in the 20th century; Germany versus Russia in 1914 and then again (as the Soviet Union) in 1941; and the Soviet Union versus the US and its allies in the Cold War after 1945. – *Jia Qingguo and Richard Rosecrance, Global Asia* ¹⁹⁴

Opposing values and the psychology of conflict

This raises the question of whether the real problem in US-China relations is their diametrically opposed political systems and associated values, compounded by their sense of exceptionalism. This is the clear inference to be drawn from the Pence and Pompeo speeches, which repeatedly stress the values differences between the US and China. Since the 2008-9 financial crisis, China's leaders have become far more critical of the perceived weaknesses of democracies and convinced of the superiority of their own authoritarian model, which privileges political stability and social order over the rights of the individual and freedom of expression.

The problem becomes more acute when both suspect their rival of wanting to impose (undesirable) elements of their own system on the other or to propagate them internationally. These perceptions are exacerbating US-China tensions, making them more difficult to resolve. China's leaders have long chafed at what they see as unwarranted interference in their internal affairs and the propensity of Americans to lecture them about their behaviour and political system. Now the boot is on the other foot as the Trump administration excoriates China for interfering in US domestic politics,

China's leaders have long chafed at what they see as unwarranted interference in their internal affairs. conducting political warfare and attempting to export its authoritarian model to other countries.¹⁹⁵

Barack Obama habitually underplayed the enormous residual power of the US perversely fuelling the myth that China's paramountcy is pre-ordained. Trump, however, has seized the psychological high ground, dominating the airwaves, forcing China onto the defensive and demonstrating that no other country can match the disruptive economic, financial and military power at his disposal. The weakness of this approach is that American power is coming to be associated with punitive 'beggar thy neighbour' policies that are alienating friends as well as adversaries and contributing to systemic instability.

Interdependence doesn't preclude war

None of this bodes well for a peaceful resolution of the many disputes threatening US-China ties, any of which could be a trigger for further confrontation. Trade and technology are now firmly entrenched as arenas of contestation. The clashing geopolitical ambitions of the two states are fuelling a rivalry that could be even more dangerous and consequential than the Cold War, because the world is so much more connected and interdependent.

Liberals believe that interdependence makes war less likely. They argue that interdependent states would rather trade than fight, fearing the loss of trade gains and the costs of economic readjustment.¹⁹⁶This ignores Germany's and Britain's willingness to go to war in 1914 despite their strong economic and trading relationship. The reality is that high levels of interdependence can be peace-inducing, or war-inducing, depending on the importance of trade balanced against perceptions of vulnerability, or dependence, on a rival.¹⁹⁷ In the US-China rivalry, both nation's fear of overdependence now outweighs the perceived benefits of interdependence.

The historical record suggests that although a hot war is not inevitable, it is a distinct possibility. More likely, however, is a festering but contained rivalry between the US and China characteristic of a Cold War that remains below the threshold of major war but is regularly punctuated by proxy conflicts, especially in cyberspace.¹⁹⁸ Although more corrosive than explosive, this would usher in an extended period of great power competition that could roll back the gains from more than 70 years of trade liberalisation, disrupt global supply chains, Balkanise the internet and bifurcate the world into two mutually incompatible political systems.

In the US-China rivalry, both nation's fear of overdependence now outweighs the perceived benefits of interdependence.

This would usher in an extended period of great power competition that could roll back the gains from more than 70 years of trade liberalisation.

Chapter 4: Mitigating the new Cold War

These seven recommendations comprise a strategy for ameliorating US-China conflict and the new Cold War. This report's main argument is that the linked trade, technology and geopolitical disputes between the world's two most powerful states are dangerously destabilising. Mitigating the consequences of the new Cold War won't be easy, because of the hostility and mutual suspicion that now infects almost every aspect of US-China relations. But given the stakes, doing nothing is not an option. If tensions continue to fester, it will become progressively more difficult to resolve differences and find circuit breakers.

Preventing, or ameliorating, worst case outcomes will require the US and China to accommodate each other's strategic interests — a challenging task complicated by diminished trust, their different values and world views and the systemic nature of their confrontation. Although a simmering rivalry is more likely than a hot war, this is hardly cause for relief or complacency. A second Cold War could be worse than the first because of the interdependence of the US and Chinese economies, their centrality to global prosperity and the proliferation of dangerous military and digital technologies.

This report makes seven recommendations for de-risking US-China conflict. It addresses their underlying political and structural causes, identifies emerging risks to the rules-based international order and outlines a strategy for their attenuation. No strategy can hope to resolve all the myriad problems afflicting US-China relations, no matter how astutely crafted or rigorously implemented. The aim here is more modest — to illuminate pathways to compromise and renewed habits of cooperation by making an explicit effort to understand the causes of their differences and suggest ways of mediating them as former US Secretary of State, Henry Kissinger, urges.¹⁹⁹ Although the core problem is bilateral, the rest of the world must be part of the solution since weaker states are more vulnerable to the economic and geopolitical fallout from a new Cold War.

Recommendation 1: Protect democratic values and interests

The great failure of liberal democracies has been their inability to understand the true nature of the Chinese state and the extent of its strategic ambition. Having a clear-eyed view of China is an essential first step to protecting the foundational values, norms and institutions of the liberal international order. These are clearly threatened by Beijing's increasingly coercive behaviour, rising military power and mercantilist instincts.

China was never going to be a responsible stakeholder in a Western designed international system. This was naïve and wishful thinking compounded by greed. The lure of China's money and vast consumer market blinded many to the true cost of doing business with the world's second largest economy. But as its chief beneficiary, China doesn't want to replace the existing order. Why go to the trouble when China can simply take it over, whole and intact?²⁰⁰

China is playing a fullcourt power game which the US needs to match if democratic values and US national interests are to be protected. China's goal is within reach as Washington retreats from key rules and standards setting international institutions leaving Beijing to fill the vacuum. Chinese nationals control four of the 15 specialised UN agencies: the International Telegraphic Union, the Food and Agricultural Organisation, the UN Industrial Development Organisation and the International Civil Aviation Organisation. In March, it unsuccessfully tried to seize a fifth: the World Intellectual Property Organisation.²⁰¹ China's economic success has been achieved at the expense of democracies – perversely, with their complicity – without having to compromise the principles of the party-state's conflicting socialist system.

Chinese leaders proudly identify as adherents of Marxism-Leninism. Far from aspiring to become more open and pluralist, they regard democracies as weak and failing. The liberal tenets of free speech, judicial independence, constitutional democracy and human rights are seen as anathema to social order, strong government and a threat to the primacy of the Communist Party. Xi Jinping believes in the innate superiority of China's political system and his version of manifest destiny – that China will inevitably become the world's dominant state. Emboldened by his country's newly acquired economic, technological and military power Xi is determined to restore China to its former greatness and expunge the memories of a century of "humiliation" at the hands of the West.

A frank acknowledgement that the US and China are now adversaries is a necessary precondition for a realistic strategic accommodation that constrains their rivalry and avoids worst case outcomes. Fortunately, we are in the foothills of a Cold War rather than its frigid heights. There is still time to flatten the spiking hostility curve, reverse the momentum towards conflict and avoid the Thucydides Trap, if there is sufficient political will in Washington and Beijing. Sceptics who argue that a democracy and an authoritarian state can never find the requisite accommodations, ignore the lessons of history. Despite their differences and a few close calls, the US and the Soviet Union found ways to work together and avoid a major war during their multidecade confrontation.

However, believing that China will voluntarily change its behaviour is a recipe for self-deception and defeat that will only encourage Beijing to continue its predatory and coercive practices. China is playing a full-court power game on a scale not previously seen which the US needs to match. Otherwise Beijing will have little incentive to negotiate or change tack.

The weakness of Trump's pushback is his unwillingness to enlist the support of like-minded countries. Democracies need to act collectively and construct coalitions of the willing when China acts in ways that are detrimental to the rules-based order. The British proposal for a D10 – the G7 democracies plus Australia, India and South Korea – to coordinate approaches to trade and tech challenges has merit and could be a template for closer cooperation in other fields. The aim must be to build a workable and sustainable relationship with China that acknowledges differences but preserves the sovereignty and core interests of democracies.

Coalitions of like-minded countries can build a workable and sustainable relationship with China that acknowledges differences but preserves all nations' sovereignty and core interests. Although some measure of competition is unavoidable, the US and China need to find ways to reduce tensions and better manage strategic risk so they don't move past the point of no return in their 'rolling retaliation'. If the geopolitical fallout of the COVID-19 virus continues to aggravate their relationship, the trade and tech wars may turn out to be only a skirmish in a bigger fight with much higher stakes and costs to both countries and the rest of the world.²⁰²

The damaging consequences of a second Cold War should be a priority agenda item in their bilateral strategic dialogue aimed at changing mindsets and risk/reward calculations, prerequisites to reversing the dangerous trend towards conflict. Xi has confidently dismissed the likelihood of falling into Thucydides Trap, but the downward spiral in relations suggests this is now a real possibility. Both sides need to tone down the inflammatory public rhetoric that permeates official exchanges, inciting hostile media commentary and fuelling further rounds of the blame game. Words are bullets in diplomacy. Resisting the urge to demonise or publicly blame each other for real or imagined sins would help arrest the worrying descent into open conflict.

Recommendation 2: Maintain a military edge

If China prefers a system based on power, rather than rules, the US must maintain a military edge to deter adventurism and raise the costs of geopolitical coercion and threshold warfare. Otherwise, there will be little to prevent China from taking what it wants by force or stealth. During the first Cold War, Western norms and institutions were underpinned by American military power, which dwarfed that of most other nations. This disparity was even more pronounced at the turn of the century when the US led in just about every significant measure of military strength. But the steady erosion of this peerless advantage has reached the point where the US might not prevail in a limited conflict with China in the Western Pacific, where the US navy once ruled supreme.

American hubris, overstretch, complacency, division and triumphalism have all played a role in this decline. The US frittered away its conventional military superiority in the global war on terror and draining conflicts in Afghanistan and the Middle East while failing to recapitalise and innovate for the wars of the future, or to prepare for the rise of authoritarian competitors. Beijing has poured enormous resources into decades-long defence modernisation programs dramatically improving its strategic reach and shifting the regional balance of power in its favour. China will soon attain military parity with the US in Asia perhaps as early as 2025.

Trump has begun to redress US military decline by significantly increasing the defence budget. But there are doubts that these increases can be sustained as resources are diverted to post-COVID stimulus spending to aid economic recovery which will push the US budget deficit into unchartered territory. Leading Democrats are calling for reductions in defence spending to fuel social programs. Regardless of who wins the coming presidential election, the next administration may have to recapitalise the military with reduced, or flatlining, defence budgets.

For the US to maintain a military edge, it requires a more lethal, flexible, technologically advanced, distributed, networked and resilient military strategy. This can't be done without rethinking a military strategy that is too reliant on a small number of highly capable but expensive and difficult to replace ships, aircraft, satellites and land-based combat systems. America needs a different kind of military – one that is more lethal, flexible, technologically advanced, distributed, networked and resilient. A force optimised for the digital battlefield of tomorrow should be constructed around large networks of smaller, cheaper, agile and more expendable autonomous systems.²⁰³

The US must also revitalise its much-diminished defence industrial base. In 1991, there were 107 major defence firms. A decade later there were only five. Between 2011 and 2015, 17,000 companies left the defence business altogether.²⁰⁴ A 2018 White House report identified more than 300 specific vulnerabilities ranging from the mundane (sourcing material to make tents and uniforms) to the strategic (rare earths critical for high end military equipment like radars, directed energy weapons, laser weapons, smart bombs and drones).²⁰⁵ In many cases, the main or sole suppliers are Chinese which puts the US in the untenable position of being reliant on an adversary for minerals and components critical to its military.

To counter China's growing military power and maintain the rules-based order the US must rejuvenate its fraying global alliance system and seek new strategic partners in Asia. Long standing allies like Japan and Australia need reassurance a more transactional US approach to allies will not impose onerous financial costs on them that undermine domestic political and public support for the alliance or draw them into high-risk, low-return disputes with China that do not threaten their core interests.

More diverse and flexible strategic relationships are needed to help constrain China's hegemonic ambitions, such as the four-nation security quadrilateral which brings together the US, India, Japan and Australia. Less formal and structured than an alliance, and without its mutual obligations, the Quad is a loose collection of democracies united in their support for a "free, open, prosperous and inclusive Indo-Pacific".²⁰⁶ If China disregards the sovereign rights and freedoms of regional states, other Asian middle-powers will coalesce around support for a rules-based regional order. Although they are unlikely to confront China directly because of the disparities in size and power, Southeast Asian middle powers like Indonesia, Malaysia, Singapore and Vietnam do not want to see the Western Pacific turned into a Chinese lake.

Recommendation 3: Manage decoupling to minimise disruption

The US is moving aggressively to decouple from China-controlled supply chains for trade, security and existential reasons. No area of the relationship will be immune. Other countries are set to follow because business as usual is no longer an option in a post COVID-19 world. The coronavirus crisis has exposed the fragility of just-in-time supply chains and the folly of relying upon a single country for critical goods and infrastructure.

Some degree of economic separation is unavoidable and, indeed, necessary to preserve the integrity of a robust, open trading system and democratic values, freedoms and institutions. This is not a rejection of trade, but

Asian middle powers have a role to play in promoting a rules-based regional order for ensuring a free, open, prosperous and inclusive Indo-Pacific.

Decoupling is not an attempt to isolate China, but rather to establish a sustainable relationship between competitor states with different political systems. a rethinking of its architecture and norms as well as interdependence. Decoupling is not an attempt to isolate China or deny it a position of influence in the world, but rather to establish a sustainable relationship between competitor states with different political systems. It must be managed in such a way that 70 years of trade benefits are preserved, and the US-China relationship is not sacrificed on the altars of ideology and nationalism.

US dependence on China for a range of critical technologies and goods has become a major security liability and must be reversed because Beijing has shown a willingness to exploit trade and investment for geopolitical purposes. Many other countries have become overly dependent on China for pharmaceuticals, medical equipment, automotive parts, computers and smart phones making them more vulnerable than the US because they don't have its countervailing power. China has practised a form of decoupling for many years, by carefully avoiding dependencies, creating protective trade barriers and positioning itself to control strategic areas of the economy – from rare earths and pharmaceuticals to advanced manufacturing. Its success has been due, in no small part, to US and European neglect of national capabilities and a reluctance to confront China's dirigiste impulses.

Xi's leadership ambitions won't be realised if he continues to undermine the principles, rules and transparency that are central to fair and open trade. In combat, when one side finds itself outflanked and in danger of defeat, the prudent course of action is to disengage, secure one's flanks and prepare for the next battle while seeking a negotiated settlement that both sides can live with — since wars are fought for political objectives. Decoupling is the equivalent in trade economics. The end game must be a new modus vivendi between the US and China, based on hard-headed realism and not fanciful notions that China will inevitably democratise as it becomes wealthier, or that the US will willingly cede power to an autocratic challenger.

China appears to have made its choice. If Xi is not prepared to address global concerns about the undesirable elements of his country's trade and industrial policies, the US will push back even harder. But a more astute approach to decoupling is required. Democracies need to embrace common approaches to managed decoupling that still permit global engagement and open trade with one another and China, while building a new consensus for reform of trade and technology governance.

Finding the right balance between risk reduction and cost reduction is a conundrum facing every policy maker in the world requiring thought, and refinement, before a new equilibrium is reached. There is no one-size-fitsall formula for managed decoupling. Each nation will have to assess its own needs and capabilities, but the trend is unmistakeable. There will be a much higher priority on self-reliance and national resilience. These will be the guiding principles in a product and industry-wide reassessment of the capabilities required for security, development and critical public goods. A renewed focus on strategic industries and national champions is likely along with pressure to deliver new social contracts in democracies. But global supply chains will continue to underpin international trade, albeit with higher levels of redundancy.²⁰⁷

Managed decoupling requires a balancing of risk reduction and cost as countries seek more self-reliance and national resilience. Every effort must be made to keep decoupling within manageable limits to contain the damage to US-China relations, value chains and the world economy. It must be done with a surgeon's scalpel not a blacksmith's hammer. A hard decoupling would not only delay and complicate global economic recovery. It could also sow the seeds for a second global recession, or even depression, as the US-China trade and tech wars would likely intensify, further fracturing global supply chains, reducing international cooperation and opening up new arenas of conflict and contestation. Once decoupled, countries have less incentive to work together on other issues and interests.²⁰⁸ Trade diversion is likely to backfire if it pushes US trade deficits with 102 countries onto China. And a hard decoupling won't resolve multilateral trade imbalances, the root cause of the US trade deficit with China.²⁰⁹

Preventing these outcomes will require a major effort by the US and Chinese policy communities, global economic and trade institutions and influential middle powers. Even as Washington looks for ways to minimise exposure to China risk, it should consider constructive measures to persuade Beijing to change course or moderate its mercantilist practices.²¹⁰ Both countries should discuss the disruptions to their economies that a hard decoupling would entail. Middle powers can make their voices heard by ensuring that decoupling is a priority agenda item in influential economic and trade meetings such as the G7, G20 and East Asia Summit.

Recommendation 4: Reform the WTO

Already under duress from China's mercantilism and the Trump administration's tariff wars, the international trading system is likely to be further weakened by rising protectionism and a renewed emphasis on self-reliance as pandemic afflicted countries re-shore, and ring-fence, the production of goods deemed vital for national security and economic resilience.

If Trump is successful in pinning the blame on China for causing the pandemic and forcing the world into a deep recession, electoral politics may cause him to erect trade barriers and initiate a new round of the tariff wars, playing to his populist base. He certainly won't be a white knight riding to the rescue of the multilateral trading system in the manner of his Republican predecessor, George W. Bush, during the 2008 global financial crisis.²¹¹ A Biden administration could be even tougher on trade policy if China becomes a defining election issue as seems likely.

Time is of the essence for the WTO to provide leadership in stepping up efforts to ensure mutually beneficial global trade. For all its flaws, the WTO and its predecessors have presided over an unparalleled era of growth and prosperity. Global value chains accounted for 73 percent of the rapid growth in global trade between 1993 and 2013.²¹² The problem is that the WTO is no longer fit-for-purpose. There is a broad agreement that the organisation, as presently constructed, is moribund and unable to fulfil its primary role of ensuring "that trade flows as smoothly, predictably and freely as possible."²¹³ With the impending appointment of a new WTO director-general, the opportunity exists to reform the role of the WTO.

With the impending appointment of a new WTO director-general, the opportunity exists to reform the role of the WTO, but time is of the essence. Of the WTO's multiple functions, the two most important are to reduce or eliminate trade barriers by facilitating comprehensive multilateral rule-setting negotiations and dispute settlement. The challenge for the WTO's broadbased trade rule-setting process is the requirement for unanimous member support for an initiative amongst 164 members.

Yet, new trade rules are becoming increasingly urgent for services (now more than 50 percent of the global economy and still poorly covered by WTO rules), investment, digital trade, industrial subsidies, intellectual property protection and a litany of non-tariff measures used regularly by countries to protect domestic industries. In its current form and with its existing membership, there is no realistic possibility of new rule-setting within the WTO by unanimous multilateral agreement. Indeed, the WTO has not concluded a single comprehensive round of multilateral negotiations in its entire history. The last successful multilateral round was the Uruguay Round (1994) which was conducted by the GATT and established the WTO.

So, what role can the WTO play and where do we go next? Out of necessity, bilateral trade agreements have flourished in the last 30 years and new plurilateral groupings have developed, which potentially hold the key to the future of trade rule-setting.

Sectoral agreements such as the Information Technology Agreement (ITA), which was initially concluded in 1996 by 29 members and now involves 82 members and 97 percent of trade in IT products, suggest that groupings of like-minded nations can achieve consensus on certain issues. There is a chance that current negotiations such as the e-commerce agreement that now involves 49 members, can be concluded without becoming too complex or too diluted to be useful, although there are major differences between the US and China on the definition of and extent to which they are willing to implement free digital trade.²¹⁴ But the Trade in Services Agreement (TISA) that started in 2012 and involved 23 parties is now defunct after President Trump pulled the US out of negotiations.

Geographic bloc negotiations such as the ASEAN Free Trade Area (AFTA), the new African Continental Free Trade Area (ACFTA) and even the United States-Mexico-Canada Agreement (USMCA) offer hope that nations with similar interests can still find agreement. More ambitious agreements such as the Trans-Pacific Partnership (TPP) and its successor, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), set the stage for higher quality trade agreements that cater to both developed and developing nations and cover contemporary trade issues such as trade in services, e-commerce and telecommunications. Although the state-owned enterprise chapter does not go far enough in addressing subsidies, in the post-COVID environment of government-targeted essential industries, the CPTPP's relatively loose treatment of government subsidies may have suddenly, and ironically, become a unique selling proposition.

Many of these agreements use the WTO rule-set as their foundation, underlining the importance of maintaining members' commitment to these rules and the WTO's supervision of their implementation. Rather than

Rather than discarding the WTO, a "third way" would involve leveraging plurilateral agreements such as the CPTPP. discarding the WTO and its rule-set, there is growing consensus that a "third way" would involve leveraging the plurilateral agreements that have been achieved to include more countries willing to sign up to their commitments, with the WTO providing advisory support to achieve expanded membership of plurilateral agreements, potentially a more workable majority agreement mechanism and without the concept of "developing country" status.

Additionally, new draft "model" agreements such as the ideal US-UK Free Trade Agreement²¹⁵ promote a different approach to trade between nations that are at similar levels of development, have similar legal systems and therefore don't require "harmonisation". The model agreement is predicated on mutual recognition of standards and qualifications such that all goods and services are considered tradeable (which reverses the presumption of most trade agreements). This is similar to the approach used in the Australia New Zealand Closer Economic Agreement (ANZCERTA) which enshrined mutual recognition in a number of areas.

The WTO's Dispute Settlement Mechanism (DSM) is now mired in a political dispute about judicial overreach, with the US withholding its approval for appointments to the appellate body. Even before the stalemate, there were challenges with enforcement of rulings made within a Western legal system in Geneva upon nations that do not subscribe to or even recognise that legal framework.

Frustrated members have already started to take matters into their own hands, in the absence of US cooperation on the issue. In May, China joined 18 other members, including the European Union, Canada, Australia, Singapore and Hong Kong, in launching a temporary DSM that does not include the US, known as the multi-party interim appeal arbitration arrangement (MPIA).²¹⁶ This approach will develop further with implementation and paves the way for the WTO to outsource the appellate body's functions to qualified professional organisations agreed by the disputing parties.

Even if the WTO cannot fulfil its original mandate of negotiating comprehensive multilateral agreements, it has been successful in providing utility to the global trading system through its trade facilitation, technical assistance, capacity building and information sharing programs. Its trade facilitation program has delivered billions (if not trillions) in global economic benefits, especially for developing countries and small and mediumsized enterprises. There are good reasons to maintain the WTO rule-set, governance mechanisms and utilities that have been developed since 1948. But where we go from here on trade agreements needs a new approach, drawing on the advances made by recent plurilateral agreements.

Recommendation 5: Strengthen international cooperation, middle power diplomacy and 'back channels'

The US and China's determination to resolve their trade and tech disputes bilaterally reflects not just their leaders' preferences, but a global swing in sentiment away from multilateral cooperation as disillusionment with globalisation fuels the rise of nationalism and nativism. However, making the US and China great again can't be at the world's expense. Neither

Middle powers should use the East Asia Summit (EAS) and the Council for Security Cooperation in the Asia Pacific (CSCAP) to seek de-escalation of US-China tensions. unilateralism, nor bilateralism, are panaceas for globalisation's shortcomings. International cooperation is essential to achieving equitable and enduring solutions to complex global problems.

Should US and Chinese leaders be unwilling to embrace change, the aftermath of the coronavirus pandemic will present new opportunities for meaningful and effective middle-power diplomacy. Following Trump's decision to withdraw the US from the TPP, the other 11 members worked together to rescue the deal and keep it open to future US membership in the hope that Trump might change his mind or a new administration would decide to re-join. Although China is not a member because it cannot yet meet the TPP's high standards on IP and investment, the willingness to keep the TPP alive with inducements for China and the US to join at a later stage shows that international cooperation on trade is not dead. The rest of the world should not be cowed into inaction if the US and China are unwilling, or unable, to bridge their differences.

Partnering with influential international institutions like the WTO, UN and World Bank, Asia's middle powers should use their collective influence and diplomacy to warn the US and China that they need to reverse their escalating rivalry, tone down their inflammatory language, re-engage and use the existing multilateral architecture to find constructive solutions to their disputes. If Cold War I was largely a transatlantic European affair, Cold War II is likely to be more transpacific and Asia-centric. Middle powers should take their concerns and work to place them on the agenda of the East Asia Summit, Asia's premier multilateral institution.

The EAS is the only leader-led conference at which all key partners meet to discuss the full range of political, security and economic challenges confronting the region. Representing more than half the world's population, and accounting for nearly 60 percent of global GDP, the EAS's membership, remit, broad networks and leadership status makes it ideally placed to discuss the strategic issues at the heart of US-China tensions.²¹⁷ It shouldn't be too much of a stretch to extend the EAS agenda to include some of the other sources of US-China tensions such as cyber threats and IP protection. This could take the form of a leader's initiative by the host country, or requests by like-minded member states to place these issues onto the agenda of the EAS Economic Ministers' Meeting.

A key component of European security during the Cold War was the development of a comprehensive set of Confidence Building Measures (CBMs) to reduce the risk of conflict, increase trust and encourage greater openness and transparency. Borrowing from the Cold War playbook, Washington and Beijing should draw upon their resident diplomatic expertise and the wider international community to develop a fit-for-purpose suite of geopolitical, trade and technology CBMs to make their intentions and behaviour more calculable and predictable.²¹⁸ They could be formulated bilaterally, or through established non-government institutional arrangements that have a proven record of feeding well formulated policy ideas into government. If necessary, new regional or international

Washington and Beijing should prioritise developing Confidence Building Measures to make their intentions and behaviour more calculated and predictable to one another and the rest of the world. architecture could be created to focus exclusively on the most tendentious aspects of their disputes.

Middle powers should prioritise a set of geopolitical CBMs to reduce tensions in the Western Pacific and reverse the dangerous militarisation of disputed islands in the South and East China Seas which could easily trigger a serious confrontation between the US and China to the detriment of the region. An initial step would be to proscribe the deployment of major weapons systems, military aircraft, ships (including coast guard vessels) and submarines to these islands. Follow up CBMs would build trust by developing verification measures and setting out a pathway for the joint development of disputed maritime resources and the shelving of territorial claims.

But conflict prevention and crisis management cannot be left entirely to governments. They do not have all the answers and, in fact, may be part of the problem. The growth of supporting, semi-official (Track 1.5) and non-official (Track 2) institutions and processes for 'back-channel' diplomacy has been particularly marked in Asia. Collectively, they have made a significant contribution to strategic problem solving and should be enlisted as a source of policy ideas, advice and technical expertise.

The Council for Security Cooperation in the Asia Pacific (CSCAP) is one of the most prominent and influential of the second track processes that now abound in the region.²¹⁹ Its membership, structure, connections and operational model are well suited to developing ideas for ameliorating the Cold War.

Chinese and US academics, technical specialists and former officials have been heavily engaged in the CSCAP process which feeds directly into the Asean Regional Forum (ARF), Asia's foremost multilateral security arrangement. CSCAP uses a flexible, issues-oriented working group model which could be adapted to cover the geopolitical causes and ramifications of US-China rivalry, an issue that has already drawn the organisation's interest.²²⁰ Other CSCAP initiatives could include the establishment of working groups to study, and recommend ways of reducing the disruptive effects of decoupling and trade disputes which could be taken up in the EAS.

Recommendation 6: Develop new cyber and tech rules, protocols and agreements

China has made no secret of its desire to control the digital infrastructure of the future to realise its global ambitions and protect the CCP's political monopoly at home. Party leaders have cleverly exploited the laissez-faire nature of global capital markets and "bottom-line" driven Western business models to orchestrate an unprecedented transfer of ICT manufacturing from developed economies, to China, in less than two decades.

Today, most new innovations coming out of Silicon Valley cannot be manufactured unless they are produced in China.²²¹ China's leaders are determined to win the tech equivalent of an arms race with the US, investing a staggering US\$1.4 trillion over the next six years in fifth generation wireless

Like-minded democracies should work quickly towards cyber and technology standards that preserve an open, free, safe and secure internet. networks, cameras, sensors, and AI software as well as other strategic infrastructure.²²² Much of this technology will be directed towards its domestic mass surveillance system and the export version it wants to embed in a new internet protocol.

This sophisticated and well-resourced strategy to hardwire its values and technology into the world's digital architecture poses two linked challenges. First, China's authoritarian friendly concept of cyber sovereignty runs counter to the established internet norms of openness and inclusiveness. Second, if China is successful in dominating the future information highway and creating tech dependencies, other nations will be relegated to a subordinate role as technology takers, putting at risk their economic vitality and independence. Information is this century's oil – a critical lubricant for industry, commerce and modern society.

To prevent these outcomes, democracies should work towards cyber and technology standards that preserve an open, free, safe and secure internet. They need to quickly reach consensus on how digital infrastructure and the internet should be regulated for the benefit of all rather than allowing China to drive standards towards its preferred model of controlled surveillance. Digital infrastructure is an essential enabler of freedoms and innovation. Its openness and accessibility must be proactively maintained whilst also adequately regulated. The US should take the lead in opposing China's new internet proposal because it would bake authoritarianism into the Internet. But Washington needs to think about ways of improving the efficiency and security of the world wide web without damaging the open architecture and inclusiveness intrinsic to its success.

Beyond the internet, there is a pressing need to develop a comprehensive set of global rules, standards and norms in cyber-space and associated areas of technology and industry. Unlike trade and geopolitics, which have established rules and processes for managing differences, cyber and technology governance is fragmented. In some areas it barely exists. To prevent the loss of global connectivity stemming from the emergence of a 'digital iron curtain' separating the world into two competing technology blocs, a serious attempt must be made to identify areas for cooperation and compromise. Governance, cyber-theft of commercial IP, dual-use technologies, grey-zone practices, the risk of a Balkanised internet and the prevention of tech wars all merit consideration for inclusion in a global cyber and technology policy agenda.

The breadth and complexity of these linked concerns makes it all but impossible to discuss them under one roof. An initial task is to determine which existing fora or dialogues have the requisite expertise and political clout to consider, advise or adjudicate contentious cyber-tech issues and whether new institutions and processes are needed. Then, the full suite of multilateral tools at the disposal of the international community, from CBMs to information exchanges, first and second track dialogues and Preventive Diplomacy need to be mobilised. The ARF's Inter-Sessional Meeting on ICT Security, co-chaired by Japan, Singapore and Malaysia is an example of a multilateral process which could be used to develop cyber-tech CBMs.²²³

Digital infrastructure is an essential enabler of freedoms and innovation. Its openness and accessibility must be proactively maintained whilst also adequately regulated. Any new approach to creating rules-based frameworks and protocols around cyber and tech issues will have to involve non-state actors, especially leading multinationals. The sources of many of today's cyber threats are non-state actors, so any new approach to creating rules-based frameworks and protocols around cyber and tech issues will have to involve non-state actors, especially leading multinationals. Rather than pursuing an exclusively top-down or bilateral approach, governments should also work from the bottom-up by establishing public-private partnerships to address and resolve sectoral and technical differences.

A pertinent example is the critical infrastructure certification process China uses that exposes foreign companies and their technology to cyber-intrusion by Chinese state and non-state actors and jeopardises their IP.²²⁴ This is a major US concern which featured in the USTR's section 301 investigation and US-China trade discussions. If the US and China can negotiate fair and reasonable protocols around intrusive national security and public interest laws, they could serve as exemplars for the resolution of other tech differences and the establishment of a broader set of rules acceptable to both.

Managed decoupling must include preparation for tech separation that stops short of Balkanisation, which is in no one's interest. Some differences between the US and China are so fundamental that it won't be easy to forge agreement on new rules of the road. The internet is a prime example. The US and other democracies must do everything possible to preserve as much openness and self-regulation as possible. That openness is being lost as authoritarian states impede and block the free flow of information in their own countries while exploiting the system's openness to weaken democracies.²²⁵ However, an excessively rigid or absolutist approach would make it impossible to reach workable compromises with China and other authoritarian states on the future internet, all but guaranteeing its Balkanisation.

There seems little chance that an agreement can be reached on 5G standards that will satisfy the security needs of both the US and other democratic nations and China's desire for surveillance and control. The 5G standard proposed by China has undergone so many revisions it no longer offers the kind of security that commercial enterprises and private citizens require. It would be more realistic to expect a bifurcated 5G (and 6G) environment, much the same as the Code Division Multiple Access (CDMA)/Global System for Mobiles (GSM) dichotomy of ten years ago.

Even in democracies, the internet is no longer as open as its founders envisaged for good reason. Children must be protected from paedophiles, companies from cyber hacking and citizens from online terrorist recruitment and intrusions into their privacy. There must be a balance between openness, regulation and privacy. Otherwise, we all face a grim future. American cryptographer and privacy specialist, Bruce Schneier, foresees a world in which technology "is being used to control what we see, what we can do, and, ultimately, what we say. It makes us less safe. It makes us less free."²²⁶ While others are more optimistic, there is little doubt that netizens are beginning to lose trust in an internet that once seemed synonymous with freedom of expression, engagement and the search for unalloyed knowledge. Big tech and dictatorships are both complicit. The reality is that the internet can threaten as well as enrich lives.

To guard against cyber-attacks, protect commercial IP, reverse the steady erosion of privacy and prevent the misuse of data, enforceable rules are essential underpinned by two guiding principles: accountability and a light regulatory touch. Europe's General Data Protection Regulation is probably the world's best practice domestically. The GDPR is the closest a regulatory regime has come to an acceptable balance between openness, privacy and government control. It should be emulated and extended internationally to help lessen differences between democracies and authoritarian states over the principles, rules and norms of cyber and tech governance. The long-term challenge will lie in the competitive advantage achieved by states like China – that routinely collect and analyse large amounts of data with little regard for privacy – over states that implement GDPR-like frameworks.

Recommendation 7: Integrate economic and security policy

Governments and large international institutions are often too siloed in their thinking and approach to develop effective responses to contemporary security problems. The risk that US-China rivalry could trigger a second Cold War has been dismissed, or poorly appreciated, because the analytical lenses applied were developed for the analogue world of the 20th century. They need to be recalibrated for the digital world of the 21st century in which trade, technology and geopolitics are treated as intertwined elements of a fluid, coupled global ecosystem.

Departments of trade, finance and defence as well as leading international institutions like the United Nations, World Bank, International Monetary Fund and the WTO were established in, and for, a world that has irrevocably changed. Their outmoded structures and ingrained cultures constrain them from thinking holistically and ill-equip them to deal with the interconnected, multi-sectoral problems of today.

Economists, technologists and strategists must learn to work more closely with each other and bring their skills, disciplinary knowledge and perspectives together in a shared approach to problem solving. Fundamental institutional reform is a generational challenge and beyond the scope of this report. However, there are some practical steps that could be taken to improve the capacity of governments and international institutions to better understand the dynamics of the rivalry between the US and China and think more broadly about risk mitigation.

Governments should be encouraged to create economic security divisions or groups in their key ministries and to put economics and trade at the heart of national security policy, emulating Japan's decision to create an economic group in the National Security Secretariat of the Prime Minister's Department.²²⁷ New epistemic networks of think tanks — including influential US and Chinese think tanks — should be established to deepen and crossfertilise ideas for reducing trade, technology and geopolitical frictions. US-China business groups and security communities must build awareness

Governments and global institutions need to recognise that trade, technology and geopolitics are inseparable and require holistic policy approaches, just as China has always done. of each other's concerns, interests and thinking, in order to build a powerful business-security partnership to create a wider constituency for change. Innovative university and higher education curricula that offer a blend of business, economic, technology and international relations courses could be designed to train and nurture a new generation of analysts and policymakers who can think across disciplinary boundaries.

Researcher bio: Dr. Alan Dupont

Dr. Alan Dupont AO is a Hinrich Foundation Research Fellow and CEO of geopolitical risk consultancy the Cognoscenti Group. He has an international reputation for his expertise on defence, foreign policy and national security and has worked extensively at the interface of security, politics, business and technology. Alan has held advisory and board positions in government and the corporate sector and senior appointments at leading Australian universities, including as the foundation Michael Hintze Professor of International Security at the University of Sydney. He has advised several Australian ministers of defence and foreign affairs and many international companies and foreign governments.

Alan has received commendations for his work from the Foreign Minister of Japan and the President of Timor-Leste and was named by the Australian Financial Review as one of Australia's leading strategists. In 2019, he was made an Officer in the Order of Australia for "distinguished service to the international community through security analysis and strategic policy development."

The author of nearly 100 books, monographs and articles on defence and international security, Alan's path breaking study of the non-military, transnational challenges to East Asia's security for Cambridge University Press (East Asia Imperilled) is generally acknowledged to be one of the authoritative academic works in the field. He holds a PhD in international relations from the Australian National University and is a graduate of the Royal Military College Duntroon and the US Foreign Service Institute.



Alan Dupont Research Fellow, Hinrich Foundation CEO, Cognoscenti Group

Endnotes

- ¹ Otto von Bismarck as quoted in: Evans, Richard. "War and Peace in Europe from Napoleon to the Kaiser: The Wars of German Unification, 1864-1871." Gresham College, February 4, 2010, https://www.gresham.ac.uk/lectures-and-events/war-and-peace-ineurope-from-napoleon-to-the-kaiser-the-wars-of-german
- ² There are many analyses of the origins of the US-China trade conflict although there is no consensus about who bears most responsibility for the current imbroglio. For a representative sample, see:

Blustein, Paul. "Schism: China, America, and the Fracturing of the Global Trading System." McGill-Queen's University Press, September 2019.

www.jstor.org/stable/j.ctvqmp1cb;

Lukin, Alexander. "The US–China Trade War and China's Strategic Future." Survival, Volume 61, Issue 1, January 29, 2019. https://www.tandfonline.com/doi/full/10.1080/00396338.2019.1568045?src=recsys and;

Chong, Terence Tai Leung & Li, Xiaoyang. "Understanding the China–US trade war: causes, economic impact, and the worst-case scenario." Economic and Political Studies, Volume 7, Issue 2, May 10, 2019.

https://www.tandfonline.com/doi/full/10.1080/20954816.2019.1595328?src=recsys

Although use of the word "war" to describe the trade and tech conflicts between the US and China is contentious it is used in this study because the alternatives don't fully capture the strategic dimension of their disputes and the word is routinely used in the academic literature and media commentary.

³ For a good overview of the WTO, particularly its judicial system, see:

Howse, Robert. "The World Trade Organization 20 Years On: Global Governance by Judiciary." European Journal of International Law, Vol.27, No.1, February 2016. pp.9-77 https://doi.org/10.1093/ejil/chw011

- ⁴ Council on Foreign Relations. "What Happened When China Joined the WTO?" World 101: Global Era Issues, accessed February-April, 2019. https://world101.cfr.org/global-era-issues/trade/what-happened-when-china-joined-wto
- ⁵ Foot, Rosemary & King, Amy. "Assessing the deterioration in China–U.S. relations: U.S. governmental perspectives on the economicsecurity nexus." China International Strategy Review, Volume 1, June 21, 2019. https://doi.org/10.1007/s42533-019-00005-y
- ⁶ US Census
- ⁷ United States of America. Executive Office of the President. "USTR Issues Tariffs on Chinese Products in Response to Unfair Trade Practices." Office of the United States Trade Representative: Washington. June 15, 2018.
 https://ustr.gov/about-us/policy-offices/press-office/press-releases/2018/june/ustr-issues-tariffs-chinese-products See also: Stewart, Cameron. "China's Heartland Attack." The Australian, August 27, 2019.
 https://www.theaustralian.com.au/inquirer/chinas-heartland-attack/news-story/2271dbfdbffc7f7da62284d3d4b76163
- ⁸ See China Country Report in the Special 301 Report, Office of the United States Trade Representative which reviews annually the state of IP protection and enforcement in U.S. trading partners around the world:

United States of America. Executive Office of the President. "2018 Special 301 Report." Office of the United States Trade Representative: Washington. 2018. pp. 38-46.

https://ustr.gov/sites/default/files/files/Press/Reports/2018%20Special%20301.pdf

- ⁹ United States of America. President of the United States of America. "Remarks by President Trump in State of the Union Address." Donald Trump's speech to Congress. White House Office of the Press Secretary: Washington. February 5, 2019. https://www.whitehouse.gov/briefings-statements/remarks-president-trump-state-union-address-2/
- ¹⁰ Ergas, Henry. "Trump is living up to a long U.S. tradition." The Australian, August 16, 2019. https://www.theaustralian.com.au/commentary/trump-is-living-up-to-a-long-us-tradition/news-story/ be44bd96aa26ee1227238e83f7c5b371
- ¹¹ Garner, Richard L. "To Rule Oneself In Antebellum America: The Concept Of Self-Government From Revolution To Secession." To Rule Oneself, Vol.2, 2010, www.toruleoneself.com/vol2.pdf

- ¹² Branstetter, Lee. "Do trade restrictions work? Lessons from trade with Japan in the 1980s." PBS Newshour, November 20, 2017. https://www.pbs.org/newshour/economy/making-sense/do-trade-restrictions-work-lessons-from-trade-with-japan-in-the-1980s
- ¹³ World Trade Organization. "The Uruguay Round." Understanding the WTO: Basics. Accessed March 2020. https://www.wto.org/english/thewto_e/whatis_e/tif_e/fact5_e.htm
- ¹⁴ Responsibility for the failure of the Doha Round is the subject of heated debate. But there is broad consensus that it seriously damaged the multilateral trading system and undermined the credibility of the WTO. See:
 "Global Trade After the Failure of the Doha Round." Editorial Board of the New York Times, January 1, 2016. https://www.nytimes.com/2016/01/01/opinion/global-trade-after-the-failure-of-the-doha-round.html
- ¹⁵ "The Doha round finally dies a merciful death." Financial Times: Opinions The FT View, December 22, 2015, https://www.ft.com/ content/9cb1ab9e-a7e2-11e5-955c-1e1d6de94879
- ¹⁶ The three officials were National Security Advisor H.R. McMaster, Secretary of State Rex Tillerson and Chief Economic Advisor Gary Cohn.

Steinberg, Marty. "From Cohn's exit to Tillerson's termination: 8 days that rocked the Trump presidency." Consumer News and Business Channel, March 13, 2018.

https://www.cnbc.com/2018/03/13/from-cohn-to-tillerson-8-days-that-rocked-the-trump-presidency.html

¹⁷ See: Trump's use of sanctions against Iran. January 10, 2020.

United State. James S. Brady Press Briefing Room. Press Briefing by Secretary of State Mike Pompeo and Secretary of the Treasury Steven Mnuchin on Iran Sanctions. Washington, D.C.: White House, January 10, 2020.

https://www.whitehouse.gov/briefings-statements/press-briefing-secretary-state-mike-pompeo-secretary-treasury-steven-mnuchin-iran-sanctions/;

See also: Trump's threats to use sanctions against Iraq if US personnel are forced to leave.

Stewart, Cameron. "Donald Trump Threatens Iraq with Bans." The Australian. January 7, 2020.

https://www.theaustralian.com.au/world/iran-assassination-iraq-votes-to-expel-foreign-troops-iran-abandons-nuclear-restrictions/ news-story/1da66c4057b4d57a7bd28c62169dddfb

- ¹⁸ "Weapons of Mass Disruption: America is deploying a new economic arsenal to assert its power". The Economist, June 6, 2019. https://www.economist.com/leaders/2019/06/06/america-is-deploying-a-new-economic-arsenal-to-assert-its-power
- ¹⁹ https://howmuch.net/articles /the-world-economy-2018; https://databank.worldbank.org
- ²⁰ See: 2018 figures.

Amadeo, Kimberley. "China's Economy and Its Effect on the U.S. Economy." The Balance, February 21, 2020. https://www.thebalance.com/china-economy-facts-effect-on-us-economy-3306345

See also:

United States of America. Executive Office of the President. "The People's Republic of China: U.S.-China Trade Facts." Office of the United States Trade Representative: Washington. Accessed March, 2020.

https://ustr.gov/countries-regions/china-mongolia-taiwan/peoples-republic-china

- ²¹ "In Full: China's White Paper on U.S. Economic and Trade Talks." Bloomberg News, June 3, 2019. https://www.bloomberg.com/news/articles/2019-06-03/read-the-full-china-white-paper-on-u-s-economic-and-trade-talks
- ²² See: For example

Gift, Thomas. "China has reasons to keep fighting a trade war." The Washington Post, September 4, 2019. https://www.washingtonpost.com/politics/2019/09/04/china-has-reasons-keep-fighting-trade-war/ See also:

Tully, Shawn. "Trump Thinks He Is Winning the Trade War. The Data Tell a Different Story." Fortune, August 16, 2019. https://fortune.com/2019/08/16/trump-china-trade-war-winner-data/

- ²³ Yu Yongding, an economist and adviser to Chinese policy makers as quoted in: Deng, Chao and Wong, Chun Han. "China Digs In to Outlast U.S. in Trade Dispute." The Australian, August 6, 2019. https://www.wsj.com/articles/china-braces-itself-for-protracted-trade-dispute-with-the-u-s-11565091208
- ²⁴ United States. Department of Agriculture. U.S. Exports of Agricultural & Related Products to *China* FY 2015 2019 and Year-to-Date Comparisons (in millions of dollars+). Washington D.C.: Foreign Agriculture Services, last updated: January 7, 2020.
 https://apps.fas.usda.gov/gats/PrintBicoReport.aspx?&PT=X&MYT=F&EY=2019&EM=11&EMName=November&RT=C&PC=CH&SY=20 14&IP=Y&PG=BICO-HS10

²⁵ Zumbrun, Josh & Debarros, Anthony. "Trade War with China took toll a on U.S. but not the big one." The Wall Street Journal, January 12, 2020.

https://www.wsj.com/articles/trade-war-with-china-took-toll-on-u-s-but-not-big-one-11578832381;

United States, Department of Commerce. "Top Trading Partners – December 2019." U.S. Census Bureau, January 31, 2020, https://www.census.gov/foreign-trade/statistics/highlights/top/top1912yr.html#exports

²⁶ United States. "Economic and Trade Agreement between the United States of America and the People's Republic of China: Phase One." USTR & Treasury: January 15, 2020. See also: Wei, Lingling. "China to Cut Tariffs on US\$75 Billion of US Goods." The Wall Street Journal, February 6, 2020.

https://www.wsj.com/articles/china-to-cut-tariffs-on-75-billion-of-u-s-goods-11580967540

- ²⁷ Kuo, Lily. "Regret and unhappiness': China offers muted response to US trade deal." The Guardian, January 16, 2020.13 https://www.theguardian.com/world/2020/jan/16/regret-and-unhappiness-china-offers-muted-response-to-us-trade-deal
- ²⁸ "The cost of America's lurch towards managed trade." The Economist, January 25, 2020. https://www.economist.com/finance-and-economics/2020/01/25/the-costs-of-americas-lurch-towards-managed-trade
- ²⁹ Olson, Stephen. "US-China war of words over the coronavirus crisis may well reignite the trade war." South-China Morning Post, April 8, 2020.

https://www.scmp.com/comment/opinion/article/3078782/us-china-war-words-over-coronavirus-crisis-may-well-reignite-trade

- ³⁰ Elmer, Keegan; Lau, Stuart & Wu, Wendy. "China's deal to buy more US goods is 'distortion of the market', Europeans complain." South China Morning Post, January 16, 2020,
- https://www.scmp.com/news/china/diplomacy/article/3046426/chinas-deal-buy-more-us-goods-distortion-market-europeans
- ³¹ Ip, Greg & Restuccia, Andrew. "Trade tensions with Europe flare amid Trump threats." The Wall Street Journal, January 21, 2020. https://www.wsj.com/articles/with-tariff-threats-trump-again-wields-economic-clout-to-solve-disputes-11579646076
- ³² Babones, Salvatore. "The US-China trade war: Will there be a Phase Two?" The Asia Dialogue, February 17, 2020, https:// theasiadialogue.com/2020/02/17/the-us-china-trade-war-will-there-be-a-phase-two/
- ³³ The Democratic National Committee called the phase one deal "a stunning betrayal of the American workers, farmers and manufacturers."

Saunders, Debra J. "Trump announces trade agreement with China." Las Vegas Review-Journal, December 13, 2019.

https://www.reviewjournal.com/news/politics-and-government/trump-announces-trade-agreement-with-china-1913445/.

Democratic presidential candidate Bernie Sanders said that "Trump's deal with China won't fix a failed trade policy that has destroyed 3.7 million U.S. jobs." And Chuck Schumer, the senior Democrat in the US Senate called it "an extreme disappointment. Trump is "conceding our leverage for vague, unenforceable 'promises' China never intends to fulfill". See:

Lemon, Jason. "Democrats Call Trump's 'Phase One' China Trade Deal an 'extreme disappointment' and a political 'photo op'." Newsweek, January 15, 2020.

https://www.newsweek.com/democrats-call-trumps-phase-one-china-trade-deal-extreme-disappointment-political-photo-op-1482412

³⁴ Xi proudly self-identifies as an adherent of Marx in his 97-page Work Report to the 2017 Party Congress and his 2013 speech setting out the reasons for the Chinese Communist Party's eventual triumph over capitalism.

The People's Republic of China: 19th CPC National Congress. "Secure a Decisive Victory in Building a Moderately Prosperous Society in All Respects and Strive for the Great Success of Socialism with Chinese Characteristics for a New Era." Speech to the 19th National Congress of the Communist Party of China, October 18, 2017. Xinhua, November 3, 2017.

http://www.xinhuanet.com/english/special/2017-11/03/c_136725942.htm

See also: Jinping, Xi. "Several Issues on Uphold and Develop Socialism with Chinese Characteristics." Speech to the Central Party School, January 5, 2013. Quishi, April 1, 2019

http://www.qstheory.cn/dukan/qs/2019-03/31/c_1124302776.htm

³⁵ Jarrett, Kenneth. "US-China Economic Relations in 2020: No Rest for the Weary." Hinrich Foundation, January 6, 2020.

https://hinrichfoundation.com/trade-research/global-trade-research/thought-leadership/us-china-economic-relations-in-2020-no-rest-for-the-weary/

- ³⁶ For example, China is not obliged to meet the same environmental and labour benchmarks and has leeway in implementing a range of global agreements including greenhouse gas emissions.
- ³⁷ Swanson, Ana. "Trump Presses World Trade Organization on China." New York Times, July 26, 2019. https://www.nytimes.com/2019/07/26/us/politics/trump-wto-china.html

- 38 Australia. Office of the Prime Minister. "Chicago Council on Global Affairs." Speech by Australian Prime Minister Scott Morrison to the Chicago Council on Global Affairs, Chicago, September 23, 2019.
 - https://www.pm.gov.au/media/chicago-council-global-affairs
- ³⁹ Han, Heidi. "Chinese state media rejects Scott Morrison's 'newly developed' tag." The Australian, September 25, 2019. https://www.theaustralian.com.au/nation/politics/chinese-state-media-rejects-scott-morrisons-newly-developed-tag/news-story/ a9bffdf60bec99be1ef04eeba98d436e
- ⁴⁰ United States of America. White House Press Office. "Remarks by President Trump on American Energy and Manufacturing." Speech by US President Donald Trump. Monaca, PA, August 13, 2019. https://www.whitehouse.gov/briefings-statements/remarks-president-trump-american-energy-manufacturing-monaco-pa/
- ⁴¹ Nixon, Simon. "Trump's China stance putting global trade at risk." The Australian, January 19, 2020.
- https://www.theaustralian.com.au/world/the-times/trumps-china-stance-putting-global-trade-at-risk/news-story/aadf98d625395d 820bb97b6370106752
- ⁴² With apologies to the Greek historian Thucydides. Thucydides, & Warner, Rex. "History of the Peloponnesian War." Baltimore, Md: Penguin Books, 1968.
- Alden, Edward. "Smaller countries lose in the US-China trade deal." East Asia Forum, February 9, 2020. https://www.eastasiaforum.org/2020/02/09/smaller-countries-lose-in-the-us-china-trade-deal/print/
- ⁴⁴ Martin, Emmanuel. "Trade wars are bad, and nobody wins them." Geopolitical Intelligence Services, March 9, 2019. https://www.gisreportsonline.com/opinion-trade-wars-are-bad-and-nobody-wins-them,economy,2491.html President Herbert Hoover signed the Smoot-Hawley Tariff Act into law in 1930 initiating a major trade war with Canada, Great Britain and leading European economies (Spain, Italy, Switzerland and France). On its causes and consequences, see: Jones, Joseph M. "Tariff Retaliation: Repercussions of the Hawley-Smoot Bill." Pennsylvania: University of Pennsylvania Press, 1934. And: Conybeare, John. "Trade Wars: A Comparative Study of Anglo-Hanse, Franco-Italian, and Hawley-Smoot Conflicts." World Politics, Vol.38, No. 1, 1985. pp.147-172
- ⁴⁵ Ergas, Henry. "Trump is living up to a long U.S. tradition." The Australian, August 16, 2019. https://www.theaustralian.com.au/commentary/trump-is-living-up-to-a-long-us-tradition/news-story/ be44bd96aa26ee1227238e83f7c5b371
- ⁴⁶ Castle, Stephen & Jolly, David. "China Escalates Trade Fight Over European Shoe Tariff." New York Times, February 4, 2010, https:// www.nytimes.com/2010/02/05/business/global/05wto.html
- 47 Olson, Stephen. "WTO Reform: Will China Be Part of the Problem or Part of the Solution?" Hinrich Foundation, November 19, 2019, https://hinrichfoundation.com/trade-research/global-trade-research/thought-leadership/wto-reform-will-china-be-part-of-theproblem-or-part-of-the-solution/?utm_source=MC-SO-Airbus-Boeing-subsidies
- 48 Liberal democracies, led by the US, supported The General Agreement on Tariffs and Trade, whereas the Soviet Union and other Communist/Socialist states were members of the opposing Council for Mutual Economic Assistance, known as COMECON.
- ⁴⁹ Olson, Stephen, WTO reform: Will China be part of the solution?, Hinrich Foundation, November 19, 2019, https://www. hinrichfoundation.com/research/article/wto/wto-reform-will-china-be-part-of-the-solution/
- ⁵⁰ Creighton, Adam. "Moving into black swan territory." The Australian, September 14, 2019. https://www.theaustralian.com.au/inquirer/moving-into-black-swan-territory/news-story/989c95845d3f505428b13f37fdfff602
- 51 Restuccia, Andrew & Ip, Greg. "Trade tensions with Europe flare amid Trump threats." The Wall Street Journal, January 21, 2020. https://www.wsj.com/articles/with-tariff-threats-trump-again-wields-economic-clout-to-solve-disputes-11579646076
- ⁵² "Trump lands for flying India visit." The Australian, February 25, 2020. pp.9 https://www.theaustralian.com.au/world/donald-trump-lands-for-india-visit-but-expectations-of-deal-are-low/news-story/64c849 4c96d5ba6641164aa40390dfd0
- ⁵³ Walter Russell Mead, "Trump goes to Japan, and Japan to him." The Wall Street Journal, July 1, 2019. https://www.wsj.com/articles/trump-goes-to-japan-and-japan-to-him-11562020774?mod=searchresults&page=1&pos=1
- ⁵⁴ As it has done historically. For example, the Qing dynasty threatened to suspend trade with Britain in 1814 if a British warship sailed up the Pearl River and failed to obey the prohibitions of the "Celestial Empire". See:

Lo-Shu, Fu. "A Documentary Chronicle of Sino-Western Relations (1644-1820)." Tucson: Uni of Arizona Press, Vol. 1, 1966. pp. 394. As quoted in Stevenson, Caroline M. "Lord Amherst's Embassy to the Jiaqing Emperor, 1816" Australian National University: PhD diss., 2018. pp. 55.

- ⁵⁵ CPB Netherlands Bureau of Economic Policy Analysis, www.PolicyUncertainty.com, Baker et al. (2016), and World Bank calculations.
- ⁵⁶ World Trade Organisation. "Trade set to plunge as COVID-19 pandemic upends global economy." WTO: Press/855press Release, April 8, 2020.

https://www.wto.org/english/news_e/pres20_e/pr855_e.htm

- ⁵⁷ WTO Secretariat.
- ⁵⁸ They are aerospace and aeronautical equipment, agricultural machinery, automated machine tools and robotics, high-tech maritime equipment, modern rail transportation equipment, energy-saving and new energy vehicles, advanced medical products, power equipment, new materials and advanced information technology. See:

The People's Republic of China. "Made in China 2025' plan issued." The State Council: Policies, May 19, 2015.

http://english.www.gov.cn/policies/latest_releases/2015/05/19/content_281475110703534.htm

The goal of raising the domestic content of core components and materials to 70% by 2025 will become much harder if US tariffs remain.

⁵⁹ Lee, John. "US-China Economic Distancing In The Era Of Great Power Rivalry And Covid-19." The University of Sydney, United States Studies Centre, May 4, 2020.

https://www.ussc.edu.au/analysis/us-china-economic-distancing-in-the-era-of-great-power-rivalry-and-cov¬id-19

- ⁶⁰ Austin, Greg. "Can there be any winners in the US-China 'tech war'?" The International Institute for Strategic Studies: Analysis, January 20, 2020, https://www.iiss.org/blogs/analysis/2020/01/csfc-any-winners-in-the-us-china-tech-war
- ⁶¹ Examples are robotics, artificial intelligence, 3D printing, sensors, rocket engines and flexible electronics which make electronic applications lighter and more usable for a range of military applications.
- ⁶² Kania, Elsa. B. "In Military-Civil Fusion, China Is Learning Lessons From the United States and Starting to In¬novate." Real Clear Defense, August 27, 2019, https://www.realcleardefense.com/articles/2019/08/27/in_military-civil_fusion_china_is_learning_ lessons_from_the_united_states_and_starting_to_innovate_114699.html
- ⁶³ Kuka was successfully acquired by China's Midea, China's largest home appliances manufacturer, in 2016. Kuka's shares plummeted after the replacement of its long serving German CEO in 2018.

Martin, Nik. "German robot maker Kuka's CEO to be replaced by Chinese owners", Deutsche Welle, November 24, 2018, https://www.dw.com/en/german-robot-maker-kukas-ceo-to-be-replaced-by-chinese-owners/a-46440242

⁶⁴ Moxur, Paul & Ewing, Jack, "Rush of Chinese Investment in Europe's Hight-Tech Firms Is Raising Eyebrows". New York Times: September 16, 2016.

https://www.nytimes.com/2016/09/17/business/dealbook/china-germany-takeover-merger-technology.html

⁶⁵ The Aixtron deal was blocked by Washington because the company owned assets in the US, causing Fujian to withdraw its takeover bid in December 2016.

Stanzel, Angela. "Germany's turnabout on Chinese takeovers." The European Council on Foreign Relations, March 21, 2017. https://www.ecfr.eu/article/commentary_germanys_turnabout_on_chinese_takeovers_7251

⁶⁶ Moxur, Paul & Ewing, Jack, "Rush of Chinese Investment in Europe's Hight-Tech Firms Is Raising Eyebrows". New York Times: September 16, 2016.

https://www.nytimes.com/2016/09/17/business/dealbook/china-germany-takeover-merger-technology.html

⁶⁷ A CSIS study team in 2019 defined "gray zones" as "an effort or series of efforts intended to advance one's security objectives at the expense of a rival using means beyond those associated with routine statecraft and below means associated with direct military conflict between rivals. In engaging in a gray zone approach, an actor seeks to avoid crossing a threshold that results in open war."

Hicks, Kathleen H.; Friend, Alice Hunt; Federici, Joseph; et all. "By Other Means: Part 1: Campaigning in the Gray Zone." Center for Strategic & International Studies, 2019.

https://csis-prod.s3.amazonaws.com/s3fs-public/publication/Hicks_GrayZone_interior_v4_FULL_WEB_0.pdf?q9dLrKGyqjW. iuMyL10MbhGi_EkNKCiN

- ⁶⁸ Lynn, William J., "Defending a New Domain: The Pentagon's Cyberstrategy", Foreign Affairs 89, No.5, 2010, pp.97-108. https://apps.dtic.mil/dtic/tr/fulltext/u2/a527707.pdf
- ⁶⁹ Ryan, Jason, "CIA Director Leon Panetta Warns of Possible Cyber-Pearl Harbour." ABC News, February 11, 2011. https://abcnews.go.com/News/cia-director-leon-panetta-warns-cyber-pearl-harbor/story?id=12888905
- ⁷⁰ United States. "Foreign Spies Stealing US Economic Secrets in Cyberspace: Report to Congress on Foreign Eco¬nomic Collection and Industrial Espionage: 2009-2011." Office of the National Counterintelligence Executive, October 2011.

https://www.globalsecurity.org/jhtml/jframe.html#https://www.globalsecurity.org/intell/library/reports/2011/foreign-economic-

collection_2011.pdf|||Foreign%20Spies%20Stealing%20US%20Economic%20Secrets%20in%20Cyberspace%20-%20Report%20 to%20Congress%20on%20Foreign%20Economic%20Collection%-20and%20Industrial%20Espionage,%202009-2011

- ⁷¹ Rogin, Josh. "NSA Chief: Cybercrime constitutes the 'greatest transfer of wealth in history'." Foreign Policy: The Cable, July 9, 2012. https://foreignpolicy.com/2012/07/09/nsa-chief-cybercrime-constitutes-the-greatest-transfer-of-wealth-in-history/
- ⁷² United States. "Remarks by the President in Town Hall at Fort Meade." The White House: Office of the Press Secretary, September 11, 2015.

https://obamawhitehouse.archives.gov/the-press-office/2015/09/14/remarks-president-town-hall-fort-meade

⁷³ Nakashima, Ellen, "Hacks of OPM databases compromised 22.1 million people, federal authorities say". Wash¬ington Post: July 10, 2015.

https://www.washingtonpost.com/news/federal-eye/wp/2015/07/09/hack-of-security-clearance-system-affect¬ed-21-5-million-people-federal-authorities-say/

See also: "Officials: Hack exposed U.S. military and intel data". CBS News: Washington: June 12, 2015.

https://www.cbsnews.com/news/officials-second-u-s-government-hack-exposed-military-and-intel-data/

⁷⁴ United States of America. "Secretary of the Navy: Cybersecurity Readiness Review." Department of the Navy. March, 2019. https://www.navy.mil/submit/display.asp?story_id=108885

See also:

Lubold, Gordon & Volz, Dustin. "Navy, Industry Partners are 'Under Cyber Siege' by Chinese Hackers, Review Asserts." The Wall Street Journal, March 12, 2019.

https://www.wsj.com/articles/navy-industry-partners-are-under-cyber-siege-review-asserts-11552415553

Barry, Rob and Volz, Dustin. "Ghosts in the Clouds: Inside China's Major Corporate Hack", The Wall Street Jour¬ney, December 30, 2019.

https://www.wsj.com/articles/ghosts-in-the-clouds-inside-chinas-major-corporate-hack-11577729061

Nakashima, Ellen and Sonne, Paul. "China hacked a Navy contractor and secured atrove of highly sensitive data on submarine warfare", The Washington Post, June 9, 2018.

https://www.washingtonpost.com/world/national-security/china-hacked-a-navy-contractor-and-secured-a-trove-of-highly-sensitive-data-on-submarine-warfare/2018/06/08/6cc396fa-68e6-11e8-bea7-c8eb28bc52b1_story.html

- "US indicts Chinese military hackers." The Australian, February 12, 2020. https://www.theaustralian.com.au/world/us-indicts-chinese-military-hackers/news-story/0d83378b6fdf550f87f6d58cafc05641
- ⁷⁶ Kaplan, Robert D. "A New Cold War Has begun." Foreign Policy, January 7, 2019. https://foreignpolicy.com/2019/01/07/a-new-cold-war-has-begun/
- ⁷⁷ Webster, Graham. "China and the Eight Guardian Warriors of American tech". Sup China: March 16, 2017. https://supchina.com/2017/03/16/china-eight-guardian-warriors-tech/
- ⁷⁸ Szoldra, Paul. "This is everything Edward Snowden revealed in just one year of unprecedented top-secret leaks." Business Insider Australia, September 16, 2016.

https://www.businessinsider.com.au/snowden-leaks-timeline-2016-9?r=US&IR=T

⁷⁹ President Xi Jinping hailed China's 70th anniversary and commended the country on its self-reliance, stating that China will continue to rely on itself and work hard to overcome "complexities and difficulties" in the "road ahead".

The People's Republic of China. President Xi Jinping. "New Year Speech." CGTN America: Chinese Media Group, December 31, 2018. https://america.cgtn.com/2018/12/31/full-text-2019-new-year-speech-by-president-xi-jinping

See also: Li Keqiang: 'Report on the Work of Government' "We will follow the principle of competitive neutral-ity, so that when it comes to access to factors of production, market access and licenses, business operations, government procurement, public biddings, and so on, enterprises under all forms of ownership will be treated on an equal footing."

People's Republic of China. Keqiang, Li. "Report on the Work of Government." Report to the 13th National Peo¬ple's Congress. Second Session: March 2019.

http://english.www.gov.cn/premier/speeches/2019/03/16/content_281476565265580.htm

People's Republic of China. Keqiang, Li. "Report on the Work of Government." Report to the 13th National Peo¬ple's Congress. Second Session: March 2019.

http://english.www.gov.cn/premier/speeches/2019/03/16/content_281476565265580.htm

⁸¹ Boustany, Charles W. & Friedberg, Aaron L. "Answering China's Economic Challenge: Preserving Power, Enhanc¬ing Prosperity." The National Bureau of Asian Research: Special Report, no. 76, February 20, 2019.

https://www.nbr.org/publication/answering-chinas-economic-challenge-preserving-power-enhancing-prosperi¬ty/

- ⁸² Lee, John. "Decoupling from China: cutting the Gordian Knot." Lowy Institute: The Interpreter, November 9, 2018. https://www.lowyinstitute.org/the-interpreter/decoupling-china-cutting-gordian-knot
- ⁸³ Lee. "Decoupling from China: cutting the Gordian Knot." 2018, https://www.lowyinstitute.org/the-interpreter/decoupling-chinacutting-gordian-knot
- ⁸⁴ Boustany, Charles W. & Friedberg, Aaron L. "Answering China's Economic Challenge: Preserving Power, Enhanc¬ing Prosperity." The National Bureau of Asian Research: Special Report, no. 76, February 20, 2019. https://www.nbr.org/publication/answering-chinas-economic-challenge-preserving-power-enhancing-prosperi¬ty/
- ⁸⁵ Friedman, Uri. "Donald Trump's Real Endgame With China: There's more at stake than trade." The Atlantic, October 4, 2018. https:// www.theatlantic.com/international/archive/2018/10/trump-china-trade/572122/
- ⁸⁶ "China Push to End Reliance on US Tech at Trade Fight's Core." Voice of America: East-Asia Pacific, July 5, 2018. https://www. voanews.com/east-asia-pacific/china-push-end-reliance-us-tech-trade-fights-core
- ⁸⁷ The United States depend on Chinese firms for more than 90 per cent of antibiotics, vitamin C, ibuprofen and hydrocortisone, as well as 70 per cent of acetaminophen and about 45 per cent of heparin. Huang, Yanzhong. "The Coronavirus Outbreak Could Disrupt the U.S. Drug Supply." Council on Foreign Rela-tions, In Brief, March 5, 2020.

https://www.cfr.org/in-brief/coronavirusdisrupt-us-drug-supply-shortages-fda As cited in: Lee, John. "US-China Economic Distancing In The Era Of Great Power Rivalry And Covid-19." The University of Sydney, United States Studies Centre, May 4, 2020.

https://www.ussc.edu.au/analysis/us-china-economic-distancing-in-the-era-of-great-power-rivalry-and-cov-id-19

- ⁸⁸ Cassella, Megan. "Break with China? Top Trump aide eyes an opening with coronavirus." Politico, February 26, 2020. https://www.politico.com/news/2020/02/26/trump-china-trade-coronavirus-117531
- ⁸⁹ Delaney, Robert. "The US doesn't need a coronavirus-driven cultural revolution in manufacturing, whatever Trump's adviser says." The South China Morning Post, April 28, 2020. https://www.scmp.com/comment/opinion/article/3081695/us-doesnt-need-coronavirusdriven-cultural-revolu¬tion-manufacturing
- ⁹⁰ Sherwell, Philip and Glancy, Josh. "Information war widens rift between China and the US." The Times, March 22, 2020. https://www.thetimes.co.uk/edition/world/pandemic-blame-game-widens-rift-between-trump-and-furious-china-gfqtflkc2
- ⁹¹ Hess, William. "China Macro Monday: Pre-NPC Themes." PRC Macro, May 4, 2020. https://www.prcmacro.com/
- ⁹² Hass, Ryan & Dong, Kevin. "The US, China and Asia after the pandemic: more, not less, tension." East Asia Forum, April 1, 2020. https://www.eastasiaforum.org/2020/04/01/the-us-china-and-asia-after-the pandemic-more-not-less-tension/
- ⁹³ Editorial Board, Australian National University. "COVID-19 heightens US-China tensions." East Asia Forum, April 6, 2020. https://www.eastasiaforum.org/2020/04/06/covid-19-heightens-us-china-tensions/
- ⁹⁴ Sherwell, Philip and Glancy, Josh. "Information war widens rift between China and the US." The Times, March 22, 2020, https://www. thetimes.co.uk/edition/world/pandemic-blame-game-widens-rift-between-trump-and-furious-china-gfqtflkc2
- ⁹⁵ Lim, Benjamin Kang. "Looming exit of US, Japan manufacturers adds to Chinese woes." The Straits Times. April 27, 2020. https://www.straitstimes.com/asia/east-asia/looming-exit-of-us-japan-manufacturers-adds-to-chinese-woes
- ⁹⁶ Davis, Bob & Wei, Lingling. "China-US virus blame game hurts global recovery." Wall Street Journal, March 27, 2020. https://www.wsj.com/articles/u-s-china-trade-blame-for-coronavirus-hampering-global-economy-res¬cue-11585248616
- ⁹⁷ Editorial Board, Australian National University. "COVID-19 heightens US-China tensions." East Asia Forum, April 6, 2020, https://www. eastasiaforum.org/2020/04/06/covid-19-heightens-us-china-tensions/
- ⁹⁸ A 2017 report by Freedom House found that internet freedom had declined for seven consecutive years largely due to restrictive practices by China, Russia and Middle Eastern autocracies. "Freedom in the World 2017: Populists and Autocrats: The Dual Threat to Global Democracy." Freedom House, 2017.

https://freedomhouse.org/report/freedom-world/freedom-world-2017

99 Gross, Anna & Murgia, Madhumita. "China and Huawei propose reinvention of the internet." Financial Times, March 28, 2020.

https://www.ft.com/content/c78be2cf-a1a1-40b1-8ab7-904d7095e0f2

- ¹⁰⁰ Gross, Anna & Murgia, Madhumita. "Inside China's controversial mission to reinvent the internet." Financial Times, March 28, 2020. https://www.ft.com/content/ba94c2bc-6e27-11ea-9bca-bf503995cd6f
- ¹⁰¹ Nagelhus Schia, Niels & Gjesvik, Lars. "China's Cyber Sovereignty." Norwegian Institute of International Affairs: Policy Brief, March 17, 2017.

https://www.nupi.no/en/Publications/CRIStin-Pub/China-s-Cyber-Sovereignty

¹⁰² Wearesocial.com

¹⁰³ IHS

- ¹⁰⁴ Eurasia Group. "Eurasia Group White Paper: The Geopolitics of 5G." Eurasia Group: Politics First, November 15, 2018. https://www.eurasiagroup.net/siteFiles/Media/files/1811-14%205G%20special%20report%20public(1).pdf
- ¹⁰⁵ Segal, Adam, "When China Rules the Web: Technology in Service of the State." Foreign Affairs 97, No.1, 2018, pp.10-18. http://cs.brown.edu/courses/cs180/sources/2018_SeptOct_FR_WhenChinaRulesTheWeb_Segal.pdf

 $^{\rm 106}\,$ Also known known as "6Genesis", 6G could be available by the mid-2020s

¹⁰⁷ The founder of Huawei is a former senior officer of the People's Liberation Army:
 "Huawei Personnel work with China Military on research projects." Bloomberg News: June 27, 2019.
 https://www.bloomberg.com/news/articles/2019-06-27/huawei-personnel-worked-with-china-military-on-research-projects

- ¹⁰⁸ China's 2017 Intelligence Law obliges all Chinese citizens and organisations to support national intelligence work. Article 14, grants intelligence agencies authority to insist on this support: "state intelligence work organs, when legally carrying forth intelligence work, may demand that concerned organs, organizations, or citizens provide needed support, assistance, and cooperation." See: Girard, Bonnie. "The Real Danger of China's National Intelligence Law." The Diplomat, February 23, 2019. https://thediplomat.com/2019/02/the-real-danger-of-chinas-national-intelligence-law/
- ¹⁰⁹ India, Bangladesh and Indonesia have all banned Chinese social media app TikTok although India later re¬versed the ban after tighter privacy provisions were added. Gapper, John, "TikTok is causing almost as much panic as Huawei." Australian Financial Review: December 5, 2019.

https://www.afr.com/technology/china-s-internet-interference-is-tiktok-famous-20191205-p53h3l

¹¹⁰ Shepardson, David & Friefeld, Karen. "Trump administration hits China's Huawei with one-two punch." Reuters, May 16, 2019. https://www.reuters.com/article/us-usa-china-trump-telecommunications/trump-administration-hits-chinas-huawei-with-onetwo-punch-idUSKCN1SL2QX

The ban on Chinese devices went into effect in August 2019. See: Bur, Jessie. "A ban on Chinese tech is on the books. Are feds ready?" Federal Times: Acquisition. August 8, 2019. https://www.federaltimes.com/acquisition/2019/08/08/a-ban-on-chinese-tech-is-on-the-books-are-feds-ready

The United States of America. The Department of State. "Silicon Valley and National Security." The Secretary of State, Mike Pompeo. San Francisco, California: Speech. January 13, 2020.

https://translations.state.gov/2020/01/14/silicon-valley-and-national-security/

- ¹¹² Rodrigo, Chris. "Commerce secretary tightens restrictions on military technology exports." The Hill, April 27, 2020. https://thehill.com/policy/technology/494884-commerce-tightens-restrictions-on-military-technology-exports
- ¹¹³ Miller, Maggie. "House Republicans introduce resolution condemning UK's decision to allow Huawei in 5G net¬works." The Hill, February 3, 2020.

https://thehill.com/policy/cybersecurity/481246-house-republicans-introduce-resolution-condemning-uks-deci¬sion-to-allow

- ¹¹⁴ Orchard, Phillip. "5G, China and the Race to Dominate High-Tech." Geopolitical Futures, January 30, 2019. https://geopoliticalfutures.com/5g-china-race-dominate-high-tech/
- ¹¹⁵ Many of the ideas are coming out of the US think tank community. For example: Kania, Elsa B. "Securing Our 5G Future: The Competitive Challenge and Considerations for U.S. Policy." Center for a New American Security, November 7, 2019.
 https://www.cnas.org/publications/consts/cons

https://www.cnas.org/publications/reports/securing-our-5g-future

¹¹⁶ Duben, Bjorn Alexander. "No end in sight for Germany's troubles with Huwei." Lowy Institute: The Interpreter, January 23, 2020.

https://www.lowyinstitute.org/the-interpreter/no-end-sight-germany-s-troubles-huawei

The EU's security guidelines for next gen networks also stopped short of a ban on Huawei.

Chan, Kelvin & Lee, Matt. "EU stops short of ban on Huawei." The Australian, January 31, 2020

https://www.theaustralian.com.au/world/eu-stops-short-of-banning-huawei-from-europes-5g-rollout/news-story/9f7fc7ccbfff5c48 4b575005a6a7871f

- ¹¹⁷ Huawei was only given permission to build "non-core" parts of the UK's 5G network. It cannot exceed 35 per¬cent of the overall project and will be excluded from sensitive areas of the network such as military bases and nuclear power plants.
- ¹¹⁸ Three of the "Five Eyes" Australia, New Zealand and the US have already banned 5G from their networks.
- ¹¹⁹ Duben, Bjorn Alexander. "No end in sight for Germany's troubles with Huawei." Lowy Institute: The Interpreter, January 23, 2020. https://www.lowyinstitute.org/the-interpreter/no-end-sight-germany-s-troubles-huawei
- ¹²⁰ Lawless, Jill. "UK lawmakers challenge government over 'high risk' Huawei." Associated Press, March 10, 2020. https://www.ksat.com/business/2020/03/10/uk-lawmakers-challenge-government-over-high-risk-huawei/
- ¹²¹ Rosemain, Mathieu & Barzic, Gwénaëlle. "Exclusive: France to allow some Huawei gear in its 5G network." Reu¬ters, March 13, 2020. https://www.reuters.com/article/us-france-huawei-5g-exclusive/exclusive-france-to-allow-some-huawei-gear-in-its-5g-network-sources-idUSKBN20Z3JR
- ¹²² Strumpf, Dan & Yao, Chuin-Wei. "Huawei Accuses the U.S. of Cyberattacks and Staff Threats." The Wall Street Journal: September 3, 2019.

https://www.wsj.com/articles/huawei-accuses-the-u-s-of-cyberattacks-threatening-its-employ¬ees-11567500484

¹²³ Benner, Katie; Goldstein, Matthew & Sanger, David E., "Huawei and Top Executive Face Criminal Charges in the US." New York Times: Washington: January 28, 2019.

https://www.nytimes.com/2019/01/28/us/politics/meng-wanzhou-huawei-iran.html

¹²⁴ China's former industry and information technology minister, Li Yizhong, said that the government intended to lift local content to 40 percent by 2020 and 70 percent by 2025.

Bermingham, Finbarr. "US-China tech war to be 'defining issue of this century', despite signing of phase one trade deal." South China Morning Post, January 17, 2020.

https://www.scmp.com/economy/china-economy/article/3046562/us-china-tech-war-be-defining-issue-centu¬ry-despite-signing

- "125 "China publication of 'unreliable entities list' depends on Sino-U.S. trade talks." Reuters: Business News, Octo¬ber 12, 2019. https://www.reuters.com/article/us-usa-trade-china-entities/china-publication-of-unreliable-entities-list-de¬pends-on-sino-u-strade-talks-sources-idUSKBN1WQ28L
- ¹²⁶ Shih, Gerry. "China to blacklist 'unreliable' companies, force them to choose sides." The Sydney Morning Her¬ald, June 1, 2019. https://www.smh.com.au/world/north-america/china-to-blacklist-unreliable-companies-force-them-to-choose-sides-20190601p51thz.html
- ¹²⁷ Yiu, Yuen. "Is China the Leader in Quantum Computing?" American Institute of Physics: Inside Science, Janu¬ary 19, 2018. https://www.insidescience.org/news/china-leader-quantum-communications
- ¹²⁸ Interview with leading techno-economist, Julian Snelder, April 9, 2020.
- ¹²⁹ Herman, Arthur. "The Quantum Computing Threat to American Security." The Wall Street Journal, November 10, 2019. https://www.wsj.com/articles/the-quantum-computing-threat-to-american-security-11573411715
- ¹³⁰ Capri, Alex. "Semiconductors at the Heart of the US-China Tech War." The Hinrich Foundation, January 21, 2020. https://hinrichfoundation.com/trade-research/global-trade-research/thought-leadership/semiconductors-at-the-heart-of-the-uschina-tech-war/
- Author's assessment based on the publicly available literature. See, for example:
 Lapedus, Mark. "5nm Vs. 3nm." Semiconductor Engineering, June 24, 2019.
 - https://semiengineering.com/5nm-vs-3nm/;

Lapedus, Mark. "5/3nm Wars Begin." Semiconductor Engineering, January 23, 2020.

https://semiengineering.com/5-3nm-wars-begin/ and;

Cutress, Ian. "Intel's Manufacturing Roadmap From 2019 To 2029: Back Porting, 7nm, 5nm, 3nm, 2nm, And 1.4mm." AnandTech, December 11, 2019.

https://www.anandtech.com/show/15217/intels-manufacturing-roadmap-from-2019-to-2029 Showing the US and non-Chinese leads in nano chips as a key benchmark.

¹³² Bermingham, Finbarr. "US-China tech war to be 'defining issue of this century', despite signing of phase one trade deal." South China Morning Post, January 17, 2020.

https://www.scmp.com/economy/china-economy/article/3046562/us-china-tech-war-be-defining-issue-centu¬ry-despite-signing

- ¹³³ Capri, Alex. "Semiconductors at the Heart of the US-China Tech War." The Hinrich Foundation, January 21, 2020. https://hinrichfoundation.com/trade-research/global-trade-research/thought-leadership/semiconductors-at-the-heart-of-the-uschina-tech-war/
- ¹³⁴ McAlinden Research Partners. "Semiconductor Trade Tensions Set to Shock US and China Tech Sectors." Hedge Connection: Daily Intelligence Brief, November 19, 2019. https://hedgeconnection.com/blog/?p=11287
- ¹³⁵ Ho, Julian & Ke, Willis. "HiSilicon to ramp up 5nm chip orders with backend houses in 3Q20." Digitimes, April 14, 2020. https://www.digitimes.com/news/a20200414PD200.html
- ¹³⁶ Interview with leading techno-economist, Julian Snelder, April 9, 2020.
 Pizzuto, Luca; Thomas, Christopher; Wang, Arthur; & Wu, Ting. "How China Will Help Fuel The Revolution In Autonomous Vehicles."
 McKinsey & Company: McKinsey Centre for Future Mobility, January, 2019.
 https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/how-china-will-help-fuel-the-revolution-in-autonomous-vehicles
- ¹³⁷ Beijing and Palo Alto. "Chinese firms are taking a different route to driverless cars." The Economist: Business, October 12, 2019. https://www.economist.com/business/2019/10/12/chinese-firms-are-taking-a-different-route-to-driverless-cars
- ¹³⁸ Woo, Stu and Volz, Dustin. "Trump may cut China out of 5G." The Wall Street Journal, June 23, 2019. https://www.wsj.com/articles/u-s-considers-requiring-5g-equipment-for-domestic-use-be-made-outside-chi¬na-11561313072
- ¹³⁹ Orchard, Phillip. "Washington's Tech Conundrum." Geopolitical Futures, November 15, 2019. https://geopoliticalfutures.com/washingtons-chinese-tech-conundrum/
- ¹⁴⁰ Orchard, Phillip. "Washington's Tech Conundrum." Geopolitical Futures, November 15, 2019,

https://geopoliticalfutures.com/washingtons-chinese-tech-conundrum/

- ¹⁴¹ Gould, Joe. "Key Republicans seek ban on intel sharing with countries that use Huawei", C4ISRNET, January 28, 2020. https://www.c4isrnet.com/congress/2020/01/27/key-republicans-seek-ban-on-intel-sharing-with-countries-that-use-huawei/
- ¹⁴² Davis, Bob. "Pentagon Blocks Clampdown on Huawei Sales." The Wall Street Journal, January 27, 2020. https://www.wsj.com/articles/pentagon-blocks-clampdown-on-huawei-sales-11579870801
- ¹⁴³ Freifeld, Karen & Prentice, Chris. "Exclusive: U.S. drafts rule to allow Huawei and U.S. firms to work together on 5G standards sources." Reuters, May 6, 2020. https://www.reuters.com/article/us-usa-china-huawei-tech-exclusive/exclusive-u-s-drafts-rule-to-allow-hua¬wei-and-u-s-firms-towork-together-on-5g-standards-sources-idUSKBN22I1ZY
- ¹⁴⁴ "Don't be fooled by the trade deal between America and China." The Economist: Leaders, January 2, 2020, https://www.economist. com/leaders/2020/01/02/dont-be-fooled-by-the-trade-deal-between-america-and-china
- ¹⁴⁵ Paulson, Henry. "Remarks by Henry M. Paulson, Jr., on the United States and China at a Crossroads." Paulson Institute: United States, November 7, 2018.
 - https://www.paulsoninstitute.org/press_release/remarks-by-henry-m-paulson-jr-on-the-united-states-and-china-at-a-crossroads/
- ¹⁴⁶ Kitney, Damian. "US-China starting 'new Cold War'."The Weekend Australian, February 22-23, 2020. https://www.theaustralian.com.au/business/leadership/uschina-new-cold-war-not-in-the-interests-of-the-global-economy-saysformer-cia-director-and-magellan-financial-group-adviser-michael-morell/news-story/4e19453b6ed98df774c879e13e8ddc0a
- ¹⁴⁷ Ferguson, Niall. "The New Cold War? It's with China, and It Has Already Begun." The New York Times, December 2, 2019. https://www.nytimes.com/2019/12/02/opinion/china-cold-war.html
- ¹⁴⁸ Schell, Orville & Shirk, Susan L. "Course Correction: Toward an Effective and Sustainable China Policy." Asia Society: Center on U.S.-China Relations, February, 2019.

https://asiasociety.org/sites/default/files/inline-files/CourseCorrection_FINAL_2.7.19_1.pdf

- ¹⁴⁹ Leffler, Melvyn. "China Isn't the Soviet Union. Confusing the Two Is Dangerous." The Atlantic, December 2, 2019. https://www.theatlantic.com/ideas/archive/2019/12/cold-war-china-purely-optional/601969/
- ¹⁵⁰ Zakaria, Fareed. "The New China Scare". Foreign Affairs 99, No.1, 2020, pp.52-69.
- ¹⁵¹ Dupont, Alan. "An Asian Security Standoff." The National Interest, No. 119, June 2012. pp. 55-61. https://www.jstor.org/stable/42896454?seq=1
- ¹⁵² The New Silk Road project, more commonly known as the Belt and Road Initiative (BRI), is the world's largest infrastructure project. Morgan Stanley estimates that it could cost China over US\$1.2 trillion by 2027. More than 60 countries have signed on or have indicated an interest in doing so. The Trump administration has raised alarm about the initiative viewing it as a Trojan horse for China-led regional development and military expansion.

Chatzky, Andrew & McBride, James. "China's Massive Belt and Road Initiative." Council on Foreign Relations: Backgrounder, January 28, 2020.

https://www.cfr.org/backgrounder/chinas-massive-belt-and-road-initiative

- ¹⁵³ Donati, Jessica. "U.S. Has Spent US\$2.8 Trillion on Terrorism Fight, Study Finds." The Wall Street Journal, May 16, 2018. https://www.wsj.com/articles/u-s-has-spent-2-8-trillion-on-terrorism-fight-study-finds-1526486451
- ¹⁵⁴ In 2010 dollars. Daggett, Stephen. "Costs of Major U.S. Wars." Congressional Research Service, June 29, 2010, https://fas.org/sgp/crs/ natsec/RS22926.pdf
- ¹⁵⁵ Cook, Paul. "Military Readiness Is Not a Bargaining Chip." Real Clear Defense, January 23, 2018.

https://www.realcleardefense.com/articles/2018/01/23/military_readiness_112944.html

- ¹⁵⁶ Dupont, Alan. "A new type of war at our door." The Australian, August 10, 2019. https://www.theaustralian.com.au/inquirer/a-new-type-of-war-at-our-door/news-story/243b8fcaee5e0fa8bcb817f7ce971073
- ¹⁵⁷ Dupont, Alan. "West at risk as US loses military edge." The Australian, January 25, 2019. https://www.theaustralian.com.au/nation/inquirer/west-at-risk-as-us-loses-military-edge/news-story/3c202675c19adf7cdbbd1d37f7 8e9584
- ¹⁵⁸ "China lands spacecraft on 'dark' side of moon in world first." NBC News, January 3, 2019. https://www.nbcnews.com/mach/news/chinese-spacecraft-makes-first-landing-moon-s-far-side-ncna954066
- ¹⁵⁹ For an elaboration of China's and Russia's political warfare techniques and some possible responses see:
 Babbage, Ross. "Winning Without Fighting: Chinese and Russian Political Warfare Campaigns and How the West Can Prevail." Center for Strategic and Budgetary Assessments, July 24, 2019.
 https://csbaonline.org/research/publications/winning-without-fighting-chinese-and-russian-political-warfare-campaigns-and-how-the-west-can-prevail)
- ¹⁶⁰ Economy, Elizabeth. "The Third Revolution: Xi Jinping and the New Chinese State." New York:Oxford University Press, 2018.
- ¹⁶¹ Barno, David & Bensahel, Nora. "A New Generation of Unrestricted Warfare." War on the Rocks, April 19, 2016.

https://warontherocks.com/2016/04/a-new-generation-of-unrestricted-warfare/;

For an English translation of their writings, see:

Liang, Qiao & Xiangsui, Wang. "Unrestricted Warfare", Echo Point Books and Media, November 10, 2015.

https://www.dymocks.com.au/book/unrestricted-warfare-by-qiao-liang-and-wang-xiangsui-9781626543058?gclid=Cj0KCQjwy6T1BR DXARIsAIqCTXrOqIu8HHg2Vnkm1As6vbkqRzhWuKWVRcnFZeBQJ-FBtErq¬mwqCdOkaAmINEALw_wcB

¹⁶² On tolerance warfare see: "Prospectives." International Institute for Strategic Studies, Strategic Survey, vol.118, no.1, 2018. https://www.tandfonline.com/doi/pdf/10.1080/04597230.2018.1533077

¹⁶³ On China's use of maritime paramilitary forces see:

Kennedy, Connor & Erickson, Andrew. "China Maritime Report No.1: China's Third Sea Force, The People's Armed Forces Maritime Militia: Tethered to the PLA." U.S. Naval War College, CMSI China Maritime Reports, March 2017. https://digital-commons.usnwc.edu/cgi/viewcontent.cgi?article=1000&context=cmsi-maritime-reports

¹⁶⁴ United States of America: Office of the President of the United States. "National Security Strategy of the United States of America." Washington: The White House, December 2017. https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf

- ¹⁶⁵ United States of America. "Summary of the 2018 National Defense Strategy." Department of Defence, January 19, 2020. https://dod.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf
- ¹⁶⁶ United States of America: Vice President of the United States. "Vice President Mike Pence's Remarks on the Administration's Policy Towards China." Hudson Institute: Washington, October 4, 2018. https://www.hudson.org/events/1610-vice-president-mike-pence-sremarks-on-the-administration-s-policy-towards-china102018; See also:

United States of America: US Department of State. "2019 Herman Kahn Award Remarks: U.S. Secretary of State Mike Pompeo on the China Challenge." Hudson Institute: Washington, October 30, 2019.

https://www.hudson.org/research/15444-2019-herman-kahn-award-remarks-u-s-secretary-of-state-mike-pompeo-on-the-china-challenge

¹⁶⁷ United States of America. Vice President of the United States. "Vice President Mike Pence's Remarks on the Administration's Policy Towards China." Hudson Institute: Washington, October 4, 2018.

https://www.hudson.org/events/1610-vice-president-mike-pence-s-remarks-on-the-administration-s-policy-towards-china102018

¹⁶⁸ United States of America. US Department of State. "2019 Herman Kahn Award Remarks: U.S. Secretary of State Mike Pompeo on the China Challenge." Hudson Institute: Washington, October 31, 2019.

https://www.hudson.org/research/15444-2019-herman-kahn-award-remarks-u-s-secretary-of-state-mike-pompeo-on-the-china-challenge

¹⁶⁹ For example, Robert Zoellick, former US Trade Representative in the George W. Bush administration and President of the World Bank. See:

Zoellick, Robert. "Can America and China be Stakeholders? Address to the 40th Anniversary Gala dinner of the US-China Business Council." Brunswick Group: Washington, December 11, 2019.

https://www.brunswickgroup.com/bob-zoellick-can-america-and-china-be-stakeholders-i14750/

¹⁷⁰ Stein, James B. "What went wrong? U.S.-China relations from Tiananmen to Trump." Texas National Security Review, vol.3, no.1, 2019/2020.

https://tnsr.org/2020/01/what-went-wrong-u-s-china-relations-from-tiananmen-to-trump/

- For a full exposition of the Jacksonian tradition in US foreign policy see: Mead, Walter Russell. "Special Providence: American Foreign Policy and How it Changed the World." Routledge: New York, September 6, 2002.
 https://www.amazon.com/Special-Providence-American-Foreign-Changed/dp/0415935369
- ¹⁷² Deng, Chao & Wong, Chun Han. "China Digs In to Outlast U.S. in Trade Dispute." The Wall Street Journal, August 6, 2019. https://www.wsj.com/articles/china-braces-itself-for-protracted-trade-dispute-with-the-u-s-11565091208
- ¹⁷³ "Exclusive: Internal Chinese report warns Beijing faces Tiananmen-like global backlash over virus." Reuters, May 4, 2020. https://www.reuters.com/article/us-health-coronavirus-china-sentiment-ex/exclusive-internal-chinese-report-warns-beijing-facestiananmen-like-global-backlash-over-virus-idUSKBN22G19C
- ¹⁷⁴ The Act mandates sanctions on those responsible for human right's violations in Hong Kong and puts at risk the island's special trading status allowing it to import advanced "dual use" technologies from the US. United States of America. 116th Congress. "H.R.3289. Hong Kong Human Rights and Democracy Act of 2019." House Foreign Affairs; Judiciary; Financial Services, 2019-2020.

https://www.congress.gov/bill/116th-congress/house-bill/3289

See also:

Delaney, Robert & Churchill, Owen. "Donald Trump signs Hong Kong Human Rights and Democracy Act into law, brushing off China's warnings." South China Morning Post, November 28, 2019.

https://www.scmp.com/news/china/diplomacy/article/3039673/donald-trump-signs-hong-kong-human-rights-and-democracy-act

- ¹⁷⁵ Deng, Chao & Wong, Chun Han. "China Digs In to Outlast U.S. in Trade Dispute." The Wall Street Journal, August 6, 2019. https://www.wsj.com/articles/china-braces-itself-for-protracted-trade-dispute-with-the-u-s-11565091208
- ¹⁷⁶ The People's Republic of China. Director-General of the Department of Arms Control. H.E. Mr. Fu Cong. "The Future of Arms Control and Non-Proliferation Regime." Chinese Ministry of Foreign Affairs: Remarks at the 2019 Moscow Non-Proliferation Conference, November 8, 2019.

https://www.fmprc.gov.cn/mfa_eng/wjbxw/t1714403.shtml

¹⁷⁷ United Kingdom: Former Leader of the Opposition. Churchill, Winston. "The Sinews of Peace ('Iron Curtain Speech')." Speech given: Westminster College, Fulton, Missouri, March 5, 1946. The International Churchill Society, Accessed 2020.

https://winstonchurchill.org/resources/speeches/1946-1963-elder-statesman/the-sinews-of-peace/

- ¹⁷⁸ State capitalism, underpinned by politically and financially powerful state-owned enterprises, gives China a systemic advantage over competing Western firms that operate without state support. See: United States of America. Hirson, Michael. "State Capitalism and the Evolution of "China, Inc.": Key Policy Issues for the United States." U.S.-China Economic and Security Review Commission: Testimony before the Commission on "China's Internal and External Challenges", February 7, 2019.
- https://www.uscc.gov/sites/default/files/Hirson_USCC%20Testimony_FINAL.pdf 073
- ¹⁷⁹ Dupont, Alan. "A new type of war at our door." The Australian, August 10, 2019. https://www.theaustralian.com.au/inquirer/a-new-type-of-war-at-our-door/news-story/243b8fcaee5e0fa8bcb817f7ce971073
- ¹⁸⁰ As measured in nominal GDP. World Economic Forum. "The US\$86 trillion world economy – in one chart." WEForum: Reports, September 10, 2019. https://www.weforum.org/agenda/2019/09/fifteen-countries-represent-three-quarters-total-gdp/
- ¹⁸¹ With apologies to the distinguished 19th century Austrian diplomat, Klemens von Metternich, who is alleged to have said that when France sneezes, Europe catches a cold.
- ¹⁸² For an American view about the need to meet the China digital challenge. See: Kliman, Daniel. "Why the United States Needs a Digital Development Fund." Center for a New American Security, October 2019. https://s3.amazonaws.com/files.cnas.org/documents/CNAS-Report_China-Digital-Expansion_DoSProof.pdf?mtime=20191008172137
- ¹⁸³ Global Policy (Vol. 2, Issue 1), IMF World Economic Outlook, UN Population Division; A.T. Kearney analysis
- ¹⁸⁴ Modelski, George. "Long Cycles in World Politics." Seattle: University of Washington Press, 1987.
- ¹⁸⁵ Westad, Odd Arne. "The Cold War and America's Delusion of Victory." The New York Times, August 28, 2017, https://www.nytimes. com/2017/08/28/opinion/cold-war-american-soviet-victory.html
- ¹⁸⁶ Among the most insightful are: World Politics. Jack S. Levy (1985). Theories of General War; https://www-jstor-org.ezproxy1.library.usyd.edu.au/stable/pdf/2010247. pdf?refreqid=excelsior%3Ad9531c8903bbb626212eb5f0a5747c53 See also:

Waltz, Kenneth. "Theory of International Politics." Addison-Wesley Pub., 1979. Mearsheimer, John. "The Tragedy of Great Power Politics." Norton: New York, 2001.

- ¹⁸⁷ Thucydides & Warner, Rex. "History of the Peloponnesian War." Penguin Books: Baltimore, 1968.
- ¹⁸⁸ Representative examples are: Waldron, Arthur. "There is no Thucydides Trap." The Straits Times, June 18, 2017. https://www.straitstimes.com/opinion/there-is-no-thucydides-trap; Kagan, Donald. "Thucydides: The Reinvention Of History." Brécourt Academic, December 31, 2009.
- ¹⁸⁹ Gautam, Pamire. "President of the People's Republic of China, Xi Jinping as cited in: US, China and the 'Thucydides trap'." China Daily, August 15, 2018. http://www.chinadaily.com.cn/a/201808/15/WS5b7397bca310add14f385e37.html
- "President of the People's Republic of China, Xi Jinping as cited in: China 'Lacks the Gene' to Fall Into the Thucydides Trap, Says Xi Jinping." Medium: Yicai Global, September 20, 2017. https://medium.com/@yicaichina/china-lacks-the-gene-to-fall-into-the-thucydides-trap-says-xi-jinping-ccade48ac392
- ¹⁹¹ Allison, Graham. "Destined for War: Can America and China Escape Thucydides's Trap?" Houghton Mifflin Harcourt, May 30, 2017. Destined for War: Can America and China Escape Thucydides's Trap?
- ¹⁹² Evening Standard
- ¹⁹³ Qingguo, Jia & Rosecrance, Richard. "Delicately Poised: Are China and the US heading for Conflict?" Global Asia: A Journal of the East Asia Foundation, January 8, 2010. http://www.globalasia.org/v4no4/feature/delicately-poised-are-china-and-the-us-heading-for-conflict_jia-qingguorichardrosecrance
- ¹⁹⁴ Qingguo, Jia & Rosecrance, Richard. "Delicately Poised: Are China and the US heading for Conflict?" Global Asia: A Journal of the East Asia Foundation, January 8, 2010, http://www.globalasia.org/v4no4/feature/delicately-poised-are-china-and-the-us-heading-forconflict_jia-qingguorichard-rosecrance
- ¹⁹⁵ China expert, William Overholt, rejects the idea that China is interested in exporting its model arguing that "Chinese thought leaders have largely recognised that the model is not widely replicable." He believes that "Western leaders' fears of a universalising

Chinese model are misplaced."

Overholt, William. "Is the China model a threat?" East Asia Forum, July 7, 2019.

https://www.eastasiaforum.org/2019/07/07/is-the-china-model-a-threat/

Others differ. See:

Edel, Charles & Brands, Hal. "The Real Origins of the U.S.-China Cold War." Foreign Policy: The Big Think, June 2, 2019. https://foreignpolicy.com/2019/06/02/the-real-origins-of-the-u-s-china-cold-war-big-think-communism/

¹⁹⁶ In 1855, Richard Cobden asserted that free trade unites states and Norman Angell famously argued that wars were unprofitable and therefore futile, in his book The Great Illusion, published just prior to World War 1.

Cobden, Richard. "The Political Writings of Richard Cobden." London: T. Fischer Unwin, 1903. p.225

https://oll.libertyfund.org/titles/cobden-the-political-writings-of-richard-cobden-vol-1 and;

Angell, Norman. "The Great Illusion. 2d ed." New York: G.P. Putnam's Sons, 1933.

¹⁹⁷ For a comprehensive treatment of the subject, see: Copeland, Dale C. "Economic Interdependence and War: A Theory of Trade Expectations." International Security, Vol.20, No.4, 1996. pp. 5-41.

https://www.jstor.org/stable/2539041?&seq=1

¹⁹⁸ Without an international covenant and with AI on the threshold of automating computer weapons, chances are that the next war will begin in cyberspace. Many believe that there is already an undeclared cyberwar which is undermining the trust essential to the maintenance of an open internet.

Flournoy, Michele & Sulmeyer, Michael. "Battlefield Internet: A Plan for Securing Cyberspace." Foreign Affairs, September/October 2018.

https://www.foreignaffairs.com/articles/world/2018-08-14/battlefield-internet

- ¹⁹⁹ In a speech at a Bloomberg event in the presence of the Chinese Vice President, former US Secretary of State, Henry Kissinger, warned that both the US and China needed to understand the damage that comes with being on "the foothills of a cold-war".
 "Foothills of Cold War." New York: Bloomberg, November 22, 2019.
 https://www.bloomberg.com/news/articles/2019-11-21/kissinger-says-u-s-and-china-in-foothills-of-a-cold-war
- ²⁰⁰ Gokhale, Vijay. "China Doesn't Want a New World Order. It Wants This One." The New York Times, June 4, 2020. Gokhale is the former Indian Ambassador to China.

https://www.nytimes.com/2020/06/04/opinion/china-america-united-nations.html

- ²⁰¹ Packham, Ben. "Push for stronger links with global bodies as US turns inwards." The Australian, June 8, 2020, p.4.
- ²⁰² Hess, William. "Macro Update: Evolving US-China Bilateral Tensions. PRC Macro, May 6, 2020. https://www.prcmacro.com/
- ²⁰³ Brose, Christian. "The Kill Chain: Defending America in the Future of High-Tech Warfare." Hachette Books, April 2020.
- ²⁰⁴ Brose, Christian. "The End of America's Era of Military Primacy". The Wall Street Journal, May 22, 2020. https://www.wsj.com/articles/the-end-of-americas-era-of-military-primacy-11590155833
- ²⁰⁵ United States. "Assessing and Strengthening the Manufacturing and Defense Industrial Base and Supply Chain Resiliency of the United States." Report to President Donald J. Trump by the Interagency Task Force in Fulfillment of Executive Order 13806, September 2018.

https://media.defense.gov/2018/Oct/05/2002048904/-1/-1/1/ASSESSING-AND-STRENGTHENING-THE-MANUFACTURING-AND%20 DEFENSE-INDUSTRIAL-BASE-AND-SUPPLY-CHAIN-RESILIENCY.PDF

²⁰⁶ Lee, Lavina. "Assessing the Quad: Prospects and limitations of quadrilateral cooperation for advancing Australia's interests." Lowy Institute Analysis, Sydney, May 19, 2020.

https://www.lowyinstitute.org/publications/assessing-quad-prospects-and-limitations-quadrilateral-cooperation-advancing-australia

- ²⁰⁷ King, Stephen. "After the pandemic Economics Global: The long-term consequences of COVID-19." HSBC: Global Research, May 1, 2020. https://www.gbm.hsbc.com/insights/global-research/after-the-pandemic
- ²⁰⁸ Paulson, Henry M. "Delusions of Decoupling." At the New Economy Forum: Beijing, China: November 21, 2019. https://www.paulsoninstitute.org/press_release/remarks-by-henry-m-paulson-jr-on-the-delusions-of-decoupling/
- ²⁰⁹ Roach, Stephen. "Why Trump's tariffs will backfire." The Australian Financial Review, November 27, 2019. https://www.afr.com/policy/economy/why-trump-s-tariffs-will-backfire-20191126-p53e4i

²¹⁰ Boustany Jr., Charles W. and Friedberg, Aaron L. "Answering China's Economic Challenge: Preserving Power, Enhancing Prosperity." The National Bureau of Asian Research: NBR Special Report #76, February 2019.

https://www.nbr.org/wp-content/uploads/pdfs/publications/special_report_76_answering_chinas_economic_challenge.pdf

²¹¹ Bush and the leaders of the G20 pledged to "underscore the critical importance of rejecting protectionism and not turning inward in times of financial uncertainty." As quoted in:

Bown, Chad. "COVID-19 Could Bring Down the Trading System: How to Stop Protectionism From Running Amok." Foreign Affairs, 28 April 2020.

https://www.foreignaffairs.com/articles/united-states/2020-04-28/covid-19-could-bring-down-trading-system

- ²¹² Roach, Stephen. "Why Trump's tariffs will backfire." The Australian Financial Review, November 27, 2019. https://www.afr.com/policy/economy/why-trump-s-tariffs-will-backfire-20191126-p53e4i
- ²¹³ The World Trade Organization. "The WTO in Brief." WTO: About WTO, accessed April-May 2020. https://www.wto.org/english/thewto_e/whatis_e/inbrief_e/inbr_e.htm
- ²¹⁴ Gao, Henry S., Digital or Trade? The Contrasting Approaches of China and US to Digital Trade (December 28, 2017). Journal of International Economic Law, Volume 21, Issue 2, 1 June 2018, Pages 297-321, DOI: 10.1093/jiel/jgy015. Available at SSRN: https://ssrn. com/abstract=3162557 or http://dx.doi.org/10.2139/ssrn.3162557
- ²¹⁵ The Ideal US-UK Free Trade Agreement, A Free Trader's Perspective, edited by Daniel Ikenson, Simon Lester and Daniel Hannan, 2018
- ²¹⁶ Zhou, Xin. "China, EU join 19-member temporary global trade dispute system, but US, UK, Japan, India not included." South China Morning Post, May 4, 2020.

https://www.scmp.com/economy/global-economy/article/3082748/china-eu-join-19-member-temporary-global-trade-dispute

²¹⁷ Established in 2005, its 18 members include the whole of East Asia (excluding Taiwan), plus the US, Russia, India, Australia and New Zealand. Australia, Department of Foreign Affairs, "East Asia Summit." DFAT: Regional Architecture - East Asia Summit, Accessed March-April 2020.

https://www.dfat.gov.au/international-relations/regional-architecture/eas/Pages/east-asia-summit-eas

²¹⁸ Higgins, Holly. "Applying confidence-building measures in a regional context." Institute for Science and International Security, July 2001.

https://www.isis-online.org/publications/dprk/higginspaper.pdf CBMs are sometimes referred to as Confidence and Security Building Measures (CSBMs) or Trust Building Measures (TBMs).

- ²¹⁹ For a critical review of CSCAP's first decade see: Canberra Papers on Strategy and Defence No. 139. Ball, Desmond. "The Council for Security Cooperation In The Asia Pacific: Its Record and Its Prospects." Canberra, The Australian National University: Strategic and Defence Studies Centre, 2000. http://sdsc.bellschool.anu.edu.au/experts-publications/publications/3113/council-security-cooperation-asia-pacific-cscap-its-record
- ²²⁰ In its 2020 Security Outlook, CSCAP highlighted "the end of ambiguity and denial" about whether the US and China saw themselves as engaged in an "adversarial contest for global pre-eminence. Council for Security Cooperation in the Asia-Pacific, "Regional Security Outlook 2020." Australia: CSCAP, 2020.

www.cscap.org/uploads/cscap%202020%20v3.pdf

- ²²¹ Capri, Alex. "Strategic US-China Decoupling in the Tech Sector: Why and How its Happening." The Hinrich Foundation, June 2020.
- ²²² "China's Got a New Plan to Overtake the U.S. in Tech." Bloomberg News, 21 May 2020. https://www.bloomberg.com/news/ articles/2020-05-20/china-has-a-new-1-4-trillion-plan-to-overtake-the-u-s-in-tech?sref=jeNvC3eC
- ²²³ See: Japan. "ARF-ISM on ICT Security 5th SG." Ministry of Foreign Affairs, January 16, 2020.

https://www.mofa.go.jp/press/release/press4e_002757.html

- ²²⁴ China's Catalogue of Critical Network Equipment and Network Security Products rule requires certain "critical network equipment and network security products" to go through a certification process before being marketed in China. China's new encryption law stipulates that commercial encryption services must pass checks and obtain certifications if they involve "national security and public interest." This means that foreign companies are subject to intrusive reviews of their technology and demands that they use Chinese encryption algorithms for their commercial services and products.
- ²²⁵ A 2017 report by Freedom House found that internet freedom had declined for seven consecutive years largely due to restrictive practices by China, Russia and Middle Eastern autocracies. Their chosen tools of control include outright censorship, proscribing virtual private networks and banning the use of messaging apps which use end-to-end encryption, such as Telegram and WhatsApp. See:

Puddington, Arch and Roylance, Tyler. "Populists and Autocrats: The Dual Threat to Global Democracy." Freedom House: Freedom in the World 2017, 2017.

https://freedomhouse.org/sites/default/files/FH_FIW_2017_Report_Final.pdf

²²⁶ Bruce Schneier as cited in: Dixon, Helen. "Regulate to Liberate: Can Europe Save the Internet?" Foreign Affairs, September-October 2018.

https://www.foreignaffairs.com/articles/europe/2018-08-13/regulate-liberate

²²⁷ Glosserman, Brad. "NSC change prepares Japan for new global realities." Japan Times, April 1, 2020. https://www.japantimes.co.jp/opinion/2020/04/01/commentary/japan-commentary/nsc-change-prepares-japan-new-global-realities/

Acknowledgements

This report has benefited greatly from the constructive and insightful comments of the four members of my research reference group: former Australian Ambassador to the World Trade Organisation and former head of the Australian Trade and Investment Commission, Bruce Gosper; technoeconomist, hedge fund founder and former head of technology investment banking at Morgan Stanley, Julian Snelder; trade and industry consultant and former Executive Director of the Australia-Japan Economic Institute, Manuel Panagiotopoulos; and Asia Group Partner and former Principal Deputy Assistant Secretary for Economic and Business Affairs at the US State Department, Ambassador Kurt Tong.

I am also grateful to Professor Aaron Friedberg, of Princeton University, for drawing my attention to his coauthored report "Answering China's Economic Challenge: Preserving Power, Enhancing Prosperity"; and Dr. Charles Edel, a colleague and Senior Fellow at The University of Sydney's United States Studies Centre for a long and helpful discussion about the Cold War. Finally, my thanks to my tireless assistant, Sam Heskett, for his research support and forbearance in reading, and amending, earlier iterations of this report.

This report is an updated version of a paper by Dr Alan Dupont released by the Centre for Independent Studies in May 2020, entitled "Mitigating the New Cold War: Managing US-China trade, tech and geopolitical conflict". Following intense interest in the paper, detailed feedback and further evaluation of potential solutions to the burgeoning US-China Cold War, Dr Dupont has updated his recommendations, now included in this report.

hinrich foundation

advancing sustainable global trade

The Hinrich Foundation is a unique Asia-based philanthropic organization that works to advance mutually beneficial and sustainable global trade.

We believe sustainable global trade strengthens relationships between nations and improves people's lives.

We support original research and education programs that build understanding and leadership in global trade. Our approach is independent, fact-based and objective.

MEDIA INQUIRIES

Ms. Berenice Voets, Director of Public Affairs T: +852 9081 8210 berenice.voets@hinrichfoundation.com

There are many ways you can help advance sustainable global trade. Join our training programs, participate in our events, or partner with us in our programs. inquiry@hinrichfoundation.com Receive our latest articles and program updates by subscribing to our newsletter hinrichfoundation.com



hinrichfdn
 hinrichfoundation
 hinrich foundation

hinrichfoundation