

ISSUES & INSIGHTS
VOL. 23, SR 4

APRIL 2023



A History of Shared Values, A Future of Shared Strategic Interests: US-Australia Relations in the Indo-Pacific

EDITED BY
ROB YORK





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Front cover image

Aboard the USS Wasp (LHD 1) at the Port of Brisbane, Army Maj. Gen. Roger Noble, deputy chief of Joint Operations (left) and Rear Adm. Fred Kacher, commander, Expeditionary Strike Group 7 (right) begin the closing ceremony for Exercise Talisman Sabre on July 27, 2019.

Photo source

U.S. Army photo by Staff Sgt. Nicolas A. Cloward

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Issues & Insights

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About this volume

Authors of this volume participated in the inaugural U.S.-Australia Next-Generation Leaders Initiative, sponsored by the U.S. Department of State through the U.S. Embassy in Canberra. With backgrounds from academia, public policy, civil society, and industry, the cohort brings rich insights on the past, present, and future of the U.S.-Australia relations. This program was conducted from February 2021 - September 2021.

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Introduction

Rob York

The United States and Australia have been treaty allies for more than 70 years. This bond endured throughout the Cold War and the War on Terror, and it increasingly looks as though they will be close partners throughout the great power competition with the People's Republic of China. The two partner countries were among the earliest critics of the PRC's handling of the COVID-19 pandemic, have shared concerns over Chinese investment and its impact on their national security, and what growing PRC influence means for them the future of democracy in the Indo-Pacific.

The two countries were early and enthusiastic members of the Quadrilateral Security Dialogue, which includes fellow Indo-Pacific democracies Japan and India, and which has moved to address pressing regional challenges such as pandemic response and climate change. Plus, with 2021's announcement of the Australia-UK-US (AUKUS) pact Canberra proved its willingness to defy not only Beijing, but also other democracies—especially in Europe—to build out its capacity to defend itself and counter the PRC's growing regional power.

The contributions to this volume each address the nature, not only of the alliance, but the challenges it will face in the years to come. Craig Kafula of the Chicago Council on Global Affairs notes that public polling in both countries reveals overwhelming agreement on most subjects related to the alliance and its forthcoming challenges, but also differences of opinion that will have to be navigated. Rick Umback of Australian National University's School of Politics and International Relations examines the growth of PRC influence over local governments and Australia, and the ramifications this has for other liberal democracies in the Indo-Pacific.

Rose Rodgers at the Center for Naval Analyses says the AUKUS has not limited, but actually increased the need for scrutiny of PRC investment in critical and emerging technologies, and other means of screening technological investments. Moving away from what the alliance means for relations with the PRC, Thom Dixon examines the field of cyberbiosecurity—the intersection of cybersecurity and biosecurity—and how US-Australian

cooperation in this field is essential to meet two of the great challenges of this age: climate change and pandemic response.

Taken together these analyses—brought to you by the next generation of American-Australian analysts—richly detail the nature of the challenges the allies face, and offer recommendations on how to meet them over the next 70 years of their partnership.

1

Americans and Australians in the Pacific Century

Craig Kafura

Abstract

Shared geopolitical interests have brought Australia and the United States into closer alignment in the Indo-Pacific. Yet mutual interests are not the only motivating factor. With a focus on democracy as a key unifying element, US President Biden looks to place as much focus on the shared democratic values of the US and Australia as on their shared security and economic interests, a focus echoed by Australian PM Albanese. Such focus reinforces the importance of understanding how Americans and Australians think about not just their bilateral relationship, but also shared regional and global challenges. The central challenges facing the US and Australia in the 21st century – such as global climate change and the rise of China – will by virtue of their scale require public buy-in. Based on an analysis of the public opinion research conducted in Australia by the Lowy Institute, in the United States by the Chicago Council on Global Affairs, and by the Pew Research Center in both countries, there are reasons for Australian and American policymakers to be optimistic about the future of the alliance. Australians continue to see the United States as an important partner for their security. Both publics feel warmly towards one another and share many of the same concerns, like climate change and the COVID-19 pandemic. And in both countries, opinion of China has turned sharply negative in recent years. However, despite sharing deeply negative views of China, the two publics do not necessarily agree on how to deal with Beijing.

Executive Summary

In 2018, Australia and the United States celebrated “100 years of Mateship” in recognition of the longstanding bond between the two countries. It is a unique relationship. Both are also vibrant, multicultural democracies, sharing a common language, a common history as former colonies of the United Kingdom, and robust economic, security, and cultural relationships. Together the United States and Australia make up of two of the Five Eyes intelligence-sharing alliance and half of the Quadrilateral Security Dialogue, one of the current organizing concepts in US security thinking on the Indo-Pacific. First promoted by Japanese Prime Minister Abe Shinzo, the Quad concept—a closer alignment of Japan, India, Australia, and the United States—has taken a firm hold in US policy discussions. The Trump administration’s 2017 National Security Strategy called out this quadrilateral cooperation as part of the broader US shift to a focus on great power competition with China and Russia, and the Biden administration’s focus on rebuilding US alliance relationships in the region has embraced the Quad—and Australia—as part of its efforts.

A greater American emphasis on Australia makes geopolitical sense: the two nations have a range of shared interests, both in the region and around the world. Globally, they have common interests in limiting climate change, preventing future pandemic disease outbreaks, and ensuring an open, liberal economic order. Regionally, both Washington and Canberra have seen their relationships with Beijing take a turn towards confrontation, with trade disputes affecting both nations’ economic and trade prospects. Additionally, with China’s growing naval forces acting more assertively in staking out regional claims, Australia and the US will need to closely cooperate to maintain the sought-after “free and open Indo-Pacific.”

Yet mutual interests are not the only motivating factor behind the renewed US emphasis on its relationship with Australia. As Tom Wright has argued in *The Atlantic*, Biden’s foreign policy worldview is built around the idea of a competition between democracies and autocracies, with the

United States and the PRC heading up their respective teams.¹ This animating principle has shown up in the administration’s early approaches in both Europe and Asia as well as in his domestic agenda. With this focus on democracy as a key unifying element in US alliances, the Biden administration looks to place as much focus on the shared democratic values of the US and Australia as on their shared security and economic interests.

That democratic focus is echoed by Australian Prime Minister Scott Morrison. In a June 2021 speech to the Perth USAsia Centre, Morrison straightforwardly argued that “The foundation for deeper cooperation amongst liberal democracies lies precisely in [our] shared beliefs and binding values” including commitments to “open, pluralistic societies ... democratic elections ... and accountable governments” that “deserve our allegiance based on their intrinsic merit and on their capacity to deliver better lives for our people.”² In this, Morrison has cleanly melded both pieces of Biden’s worldview, highlighting both the shared values and shared challenges facing democracies.

The decision to center democracy in the US-Australia alliance reinforces the importance of understanding how Americans and Australians alike think about not just their bilateral relationship, but also their shared regional and global challenges. Making democracy and democratic values a central pillar of the relationship assumes that, at some level, Americans and Australians share common beliefs about the key problems facing their countries and can agree on common approaches to deal with those challenges. Moreover, there’s little chance of taking on the major challenges facing the US and Australia without public support. The central challenges that face the US and Australia in the 21st century—such as global climate change and the rise of China—will by virtue of their scale require public buy-in.

Based on an analysis of the public opinion research conducted in Australia by the Lowy Institute, in the United States by the Chicago Council on Global Affairs, and by the Pew Research Center in both countries, there are reasons for policymakers in both countries to be optimistic about the future of the alliance.³ Despite the very public disruptions of the

¹ Thomas Wright, “Joe Biden Worries That China Might Win,” *The Atlantic*, June 9, 2021, <https://www.theatlantic.com/international/archive/2021/06/joe-biden-foreign-policy/619130/>.

² Scott Morrison, “A world order that favors freedom.” Address to the Perth USAsia Centre, Perth, Australia. June 9, 2021. <http://www.pm.gov.au/media/address-perth-usasia-centre-perth-wa>.

³ These three organizations’ research—the Lowy Polls (2005-2021), Chicago Council Surveys (1974-2021), and Pew Global Attitudes Surveys (2003-

Trump administration, Australians continue to see the United States as an important partner for their security. Both publics feel warmly towards one another, and Australian confidence in the United States has rebounded quickly under the Biden administration. The two publics also share many of the same concerns, with majorities of Australians and Americans both naming climate change and the COVID-19 pandemic as critical threats to their respective nations. And in both countries, opinion of China has turned sharply negative in recent years. However, despite sharing deeply negative views of China, the two publics do not necessarily agree on how to deal with Beijing.

Introduction: Public Opinion, Foreign Policy, and the US-Australia Relationship

As the papers written by my fellow 2021 US-Australia Next Generation Fellows demonstrate, there are many angles available to those interested in better understanding the US-Australia relationship. So why have I chosen the lens of public opinion? Why should we care what the public thinks about foreign policy?

At the simplest level, both the United States and Australia are governed by democratically elected officials. And past analyses of the relationship between public opinion and public policy find that policy and opinion generally move in the same direction, though scholars differ on the reasons and mechanisms behind that relationship.⁴ Even for those who dislike the idea of listening to the public's views on issues of their expertise, public opinion remains a factor with which policymakers must nevertheless contend. Hans Morgenthau, who spoke despairingly of the "simple and moralistic" thinking of the general public, nevertheless argued officials must be prepared to "lead" and "marshal public opinion" as part of their efforts.⁵ Perhaps for this reason, policymakers themselves are interested in, and attentive to, public attitudes on the major issues of the day, including the issues covered in this report.

However, in policy discussions, the public preference also an often overlooked one. Most coverage of policy decisions is framed around a few statements from select policymakers, politicians, interest groups, activists, or other less-representative groups of actors, rather than the broader public affected by these decisions. Certainly there are benefits to be gained from analyses of such groups' preferences. But it is also critical not to mistake the preferences of small groups for the preferences of the wider public. And while those groups may be the most intensely engaged on their issue of choice, in the end, they comprise only a small portion of the public to which democratically elected officials must answer. If these groups are unable to persuade the mass public at the ballot box, their favorite issues may well fail on the floor of Parliament or Congress. To understand the views of the general public, there remains no substitute for high-quality, scientific opinion survey research.

Beyond these broad academic considerations, there are additional reasons to consider public opinion when thinking about foreign policy these days. For one, many of the major foreign policy issues covered in this report have significant domestic impacts on ordinary Australians and Americans. Consider issues such as trade and globalization, climate change, the COVID-19 pandemic, and the national relationship with China. All of these policy areas have direct and consequential impacts on their lives: on the cost of goods at the store, on their own employment prospects, on their own health and wellbeing, and on the climate of their community.

The Biden administration has also put an additional focus on the public through its repeated invocations of democracy as a unifying force in US alliances around the world. This democratic rhetoric is based heavily on Biden's view that the world faces a conflict between democracies and autocracies. We have to prove democracy still works," said Biden in his first State of the Union address, "That our government still works—and can deliver for the people."⁶ This isn't just limited to democracy in the United States.

2021)—form the basis for most of this report. Data from these three sources was compiled by the author, based on each organization's published reports and data. Please see the appendix for more information on the surveys used, their methodologies, and the data compilation process.

⁴ For various approaches to this topic, see: Benjamin Page and Robert Shapiro, "Effects of Public Opinion on Policy," *American Political Science Review* 77(1), 1983; Benjamin Page and Robert Shapiro, *The Rational Public: Fifty Years of Trends in Americans' Policy Preferences*, 1992; Alan D. Monroe, "Public Opinion and Public Policy, 1980-1993," *Public Opinion Quarterly* 62, 1998; Ole Holsti, *Public Opinion and American Foreign Policy*, 2004; Lawrence

Jacobs and Benjamin Page, "Who Influences US Foreign Policy?", *American Political Science Review* 99(1), 2005; Benjamin Page and Marshall Bouton, *The Foreign Policy Disconnect*, 2006.

⁵ Hans J. Morgenthau, *Politics Among Nations: The Struggle for Power and Peace*, 1948.

⁶ Joseph R. Biden, Remarks as Prepared for Delivery — Address to a Joint Session of Congress, April 28, 2021. <https://www.whitehouse.gov/briefing-room/speeches-remarks/2021/04/28/remarks-as-prepared-for-delivery-by-president-biden-address-to-a-joint-session-of-congress/>.

As Biden said very clearly in his June 2021 press conference following the G7 meeting in Dover, “I think we’re in a contest—not with China per se, but a contest with autocrats, autocratic governments around the world, as to whether or not democracies can compete with them in the rapidly changing 21st century.”⁷

Nor is this a perspective limited to the United States. Australian Prime Minister Scott Morrison, in a speech to the Perth USAsia Centre just before that G7 meeting, made a similar argument: Australia and other liberal democracies faced a common challenge “to reinforce, renovate, and buttress world order that favors freedom.” Meeting that challenge, Morrison argued, required “an active cooperation among like-minded countries and liberal democracies not seen for 30 years.”⁸

This is a clear vision of the world: democracies must demonstrate they can improve the lives of their own populations, fend off challenges from rising authoritarian powers, and address the great challenges facing the world. Based on this vision, the Biden administration has spent its first year in office aiming to reinvest at home to bolster America’s own democracy, build a more cohesive grouping of friendly democracies abroad, and lead those democratic allies to deal with key challenges of climate change, COVID-19, and China.⁹

Clearly the United States under the Biden administration is more focused on democracy—and its relationships with democracies, especially in Asia—than prior administrations. But how are we to understand how Australians and Americans think about the major issues in the relationship, in the region, and around the world?

Thankfully, both countries have robust domestic public opinion research institutions, including several that focus on foreign policy issues. In the United States, the Chicago Council on Global Affairs has conducted regular, high-quality surveys of the public on a range of international issues since 1974. This research, the Chicago Council Survey, forms the backbone of the American public opinion analysis in

this report. In Australia, the Lowy Institute’s Lowy Poll is the foremost survey of the Australian public on foreign policy, and has been conducted annually since 2005. And in both countries, the Pew Research Center’s Global Attitudes Survey provides additional binational data, particularly on views of countries and leaders around the world.

Felicitously, the Lowy Poll and the Chicago Council Survey share a number of questions which have been repeatedly asked in each country. In part this is the result of past joint research between the Lowy Institute and the Chicago Council, including a 2016 five-nation report on public opinion around the Indo-Pacific region.¹⁰ Thanks to these shared questions, we can compare American and Australian opinion on a wide range of foreign policy topics, in addition to the broader items asked in Pew’s Global Attitudes Survey.

The US-Australia Alliance Relationship

The United States and Australia have had a close political, security, and economic relationship for decades.

The security relationship, structured by the Australia-New Zealand-United States (ANZUS) Treaty of 1951, celebrates its 70th anniversary this September. The two nations have fought alongside one another in every significant conflict since World War I. Americans and Australians first shared trenches at the Battle of Hamel, France in 1918. The two also enjoy a strong economic relationship with bilateral direct investment of nearly \$230 billion and an updated agreement on bilateral trade (the Australia-US Free Trade Agreement) signed in 2005.

The first two decades of the 21st century have been eventful for the US-Australia relationship. Key markers include the Australian response to the Sept. 11 attacks, which saw Australia invoke the Australia-New Zealand-US (ANZUS) treaty for the first time and join the United States in military operations in Afghanistan and Iraq. The past decade has also seen the US-Australia military relationship grow with a focus on the Asia-Pacific (now Indo-Pacific). The 2011

⁷ Joseph R. Biden, Remarks in Press Conference, Cornwall, United Kingdom, June 13, 2021. <https://www.whitehouse.gov/briefing-room/speeches-remarks/2021/06/13/remarks-by-president-biden-in-press-conference-2/>.

⁸ Scott Morrison, “A world order that favors freedom.” Address to the Perth USAsia Centre, Perth, Australia. June 9, 2021. <http://www.pm.gov.au/media/address-perth-usasia-centre-perth-wa>.

⁹ For a longer explication, see: Hal Brands, “The Emerging Biden Doctrine,” *Foreign Affairs*, June 29, 2021, <https://www.foreignaffairs.com/articles/united-states/2021-06-29/emerging-biden-doctrine>.

¹⁰ *Asia in the Age of Uncertainty*. The Chicago Council on Global Affairs (United States), Lowy Institute (Australia), Asia Pacific Foundation (Canada), Dataway Horizon (China), Genron NPO (Japan), and the East Asia Institute (South Korea). February 1, 2017.

announcement of the US Force Posture initiative inaugurated the presence of 2,500 US Marines in Darwin, Australia on a rotational basis.

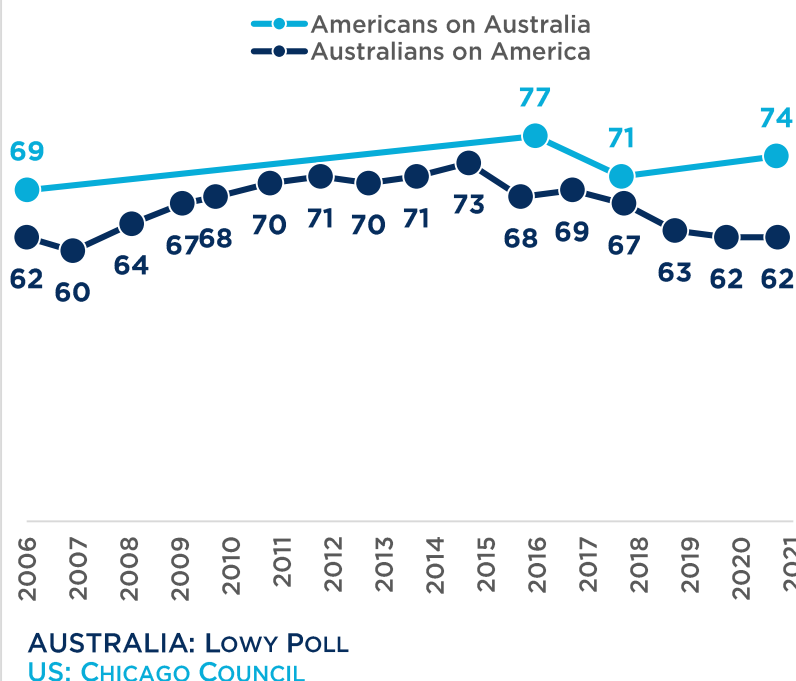
Reflecting the two nations' longstanding friendly relations, Americans and Australians have had—and continue to have—warm feelings for one another. In Lowy Polls from 2006 through 2020, Australians have consistently given the United States an average rating of between 60 and 73 on a feeling thermometer (a 0–100 scale, where 0 is a cold, unfavorable feeling and 100 a warm, favorable feeling). After peaking at 73 in 2015, Australians' feelings toward the United States have declined somewhat, down to 62 in the 2021 Lowy Poll. American feelings toward Australia are similarly warm: an average of 74 in the most recent Chicago Council survey, in line with ratings dating back to 2006.¹¹

Though warm, other countries in the Lowy Poll have often received even warmer ratings from the Australian public. In the 2021 Lowy Poll, New Zealand tops the list for Australians, coming in at a hot 87 degrees. Farther afield, Canada and the United Kingdom have both received notably warmer ratings from the Australian public; in 2020, they received mean scores of 79 and 74, respectively.

Americans, for their part, feel more warmly towards Australia than toward any other country in Asia, with only Canada and Britain viewed as or more favorably. Australia is also a nation that Americans feel they can trust. The 2015 Pew Global Attitudes Survey found that most Americans think the US can trust Australia a great deal (44%) or a fair amount (36%), putting Australia among the most-trusted nations for Americans.¹²

American and Australian Feelings Toward One Another

Please rate your feelings toward some countries (AUS: and territories), with one hundred meaning a very warm, favorable feeling, zero meaning a very cold, unfavorable feeling, and fifty meaning not particularly warm or cold. You can use any number from zero to one hundred, the



Importance of the US-Australia Alliance

The Trump administration presented a challenge for the US-Australia relationship, as it did for many of America's alliance relationships around the world. An early combative phone call with then-Prime Minister Turnbull set the tone for much of President Trump's dealings with Canberra, which left Australian policy observers¹³ wondering¹⁴ if they could trust their longtime ally. The belief that the Trump presidency damaged the US-Australia relationship was hardly limited to the Australian foreign policy establishment. The 2019 Lowy Poll found that two-thirds of Australians (66%) believed that Donald Trump had weakened Australia's alliance with the United States.¹⁵ That belief has outlived the Trump administration itself, with most Australians (58%) agreeing in the 2021 Lowy Poll as well.¹⁶

¹¹ 2021 Lowy Poll and March 2021 Chicago Council survey.

¹² 2015 Global Attitudes Survey, Pew Research Center.

¹³ James Curran, "What has President Trump ever done for Australia?" *Australian Financial Review*, Oct. 25, 2020. <https://www.afr.com/world/north-america/what-has-president-trump-ever-done-for-australia-20201025-p568at>.

¹⁴ Grant Wyeth, "After Trump, Can Australia Trust the United States?", *The Diplomat*, Jan. 12, 2021. <https://thediplomat.com/2021/01/after-trump-can-australia-trust-the-united-states/>.

¹⁵ 2019 Lowy Poll.

¹⁶ 2021 Lowy Poll.

However, despite this challenge, the underlying belief in the importance and value of the alliance relationship with the United States remains strong. Most Australians see the US alliance as important to Australians' security and have ever since the Lowy Poll began in 2005. In part, that reflects the public's view that the relationship is built not just on common interests, but on common values. Three-quarters of Australians (76%) agree with the statement that "Australians and Americans share many common values and ideals [and] a strong alliance is a natural extension of this," a statement that has resonated with most Australians since Lowy first asked about it in 2011.¹⁷ And most Australians in 2019 also agreed with the statement that the alliance relationship with the United States makes Australia safer from attack or pressure from China (56% agree, 42% disagree).¹⁸

Most Australians (62%) also reject the notion that "the US is in decline relative to China, and so the alliance is of decreasing importance." And most

Australians (75%) agree that the United States would come to Australia's defense if Australia was under threat. However, Australians also recognize that the alliance with the United States may pull the country into conflicts it would otherwise avoid. In the 2020 Lowy Poll, seven in 10 Australians (69%) agreed with the statement that "the alliance with the United States makes it more likely that Australia will be drawn into a war in Asia that is not in Australia's interests."¹⁹ With rising tension between the United States and China, that fear may play a larger role in Australian evaluations of the alliance in the coming years.

Mutual Confidence in Acting Responsibly in the World

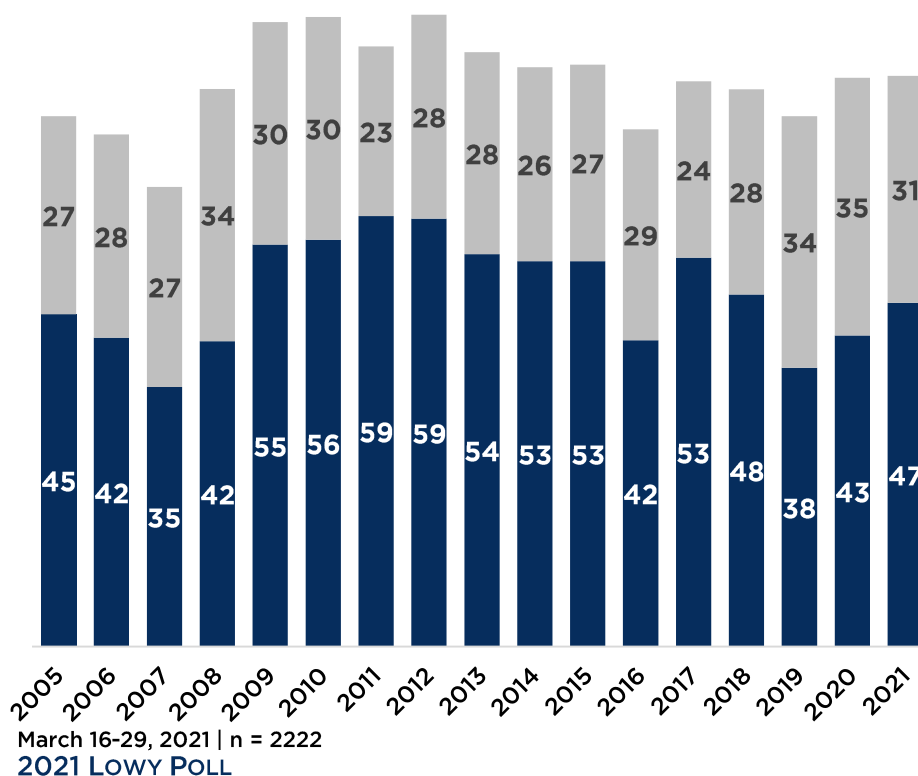
Australians also trust their alliance partner to deal with world problems responsibly, though Australian confidence in the United States has risen and fallen over the past 15 years. Confidence in the US acting responsibly hit its peak during the Obama

administration's first term in office, with more than eight in 10 Australians (83%) trusting the US to act responsibly either a great deal (40%) or a fair amount (43%).²⁰ That confidence fell after the election of Donald Trump. By his last year in office, the 2020 Lowy Poll found that a bare majority of Australians (51%) trusted the United States to act responsibly in the world (12% a great deal, 39% a fair amount). Notably, American confidence in the United States to deal responsibly with world problems also fell during the Trump administration, from 81% in 2017 to 68% by 2018.²¹ With a new administration in office, Australians' confidence has rebounded

Importance of the US Alliance to Australian Security

How important is our alliance relationship with the United States for Australia's security? (%)

■ Very important
■ Fairly important



¹⁷ Ibid.

¹⁸ 2019 Lowy Poll.

¹⁹ 2020 Lowy Poll.

²⁰ 2011 Lowy Poll.

²¹ 2018 Chicago Council Survey.

somewhat, though not to the highest seen in the early years of the Obama administration: today, six in 10 Australians (61%) trust the US to act responsibly in the world.

Australian Confidence in US Leaders and Leadership

As the shifts in Australian confidence in the United States suggest, Australians' views of the US alliance are shaped not only by views of the United States as a country, but also by Australians' evaluations of the US president. Pew data shows that Australian confidence in US leaders has swung back and forth over the years as US administrations have come and gone. Though most Australians expressed confidence in President George W. Bush in 2003, by the end of his term in office that confidence had evaporated: three in four (76%) said they had "not too much" or "no confidence at all" in him to do the right thing regarding world affairs.²²

With President Barack Obama in office, confidence rebounded, and in 2013 a similarly large majority (77%) had a lot or some confidence in the US president.²³ Confidence in the US president peaked in 2016, and then fell dramatically with the election of President Donald Trump. At the outset of his administration in 2017, seven in 10 Australians (70%) said they had not too much or no confidence at all in his doing the right thing. And by the end of his term, he had matched President Bush for a record-tying high of 76% of Australians lacking confidence in him.²⁴

The inauguration of the Biden administration has led to a rebound in Australians' confidence in US leadership that is as sharp as the decline was at the onset of the Trump administration. Per the 2021 Pew Global Attitudes Survey, three in four Australians (75%) have a lot of or some confidence in President Biden to do the right thing regarding world affairs, similar to the levels seen in 2013 when Pew conducted its first poll during the Obama administration.²⁵

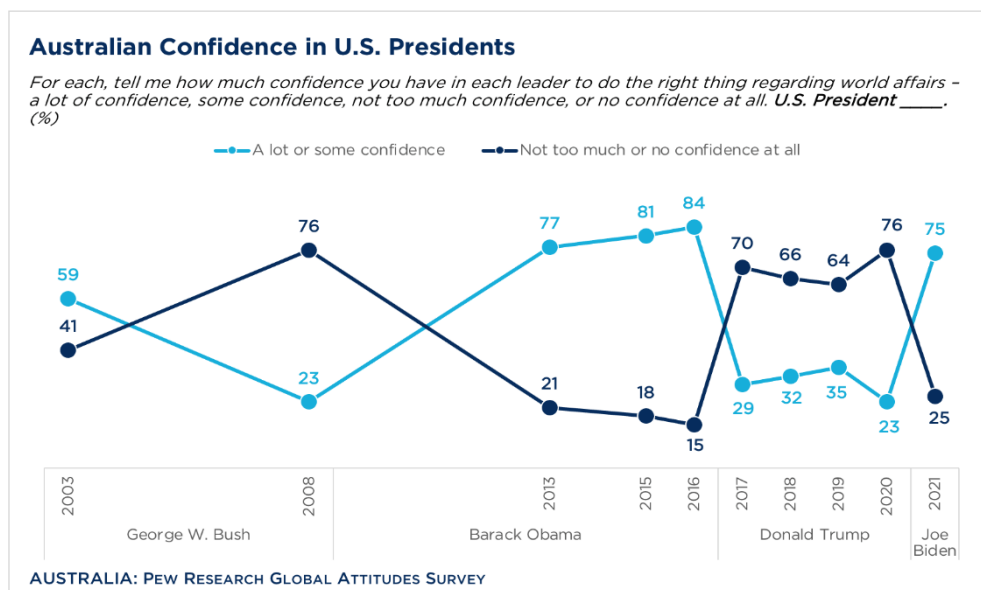
The US-Australia Alliance: Bending, not Breaking

The Biden administration's bet on democracy as an organizing pillar for its alliances requires at minimum that these alliances enjoy popular support among both the American public and the public of the ally in question. In the case of the US-Australia alliance, that's certainly the case. Though Australians do believe that the Trump administration damaged the alliance, public support for the relationship remains strong, and confidence in the United States and in US leadership has rebounded with a new administration in the White House. Thus far, Biden's focus on democratic solidarity looks like a winning one.

Australia and America's Shared Global Challenges

Focusing on democracy as a shared value for the US-Australia alliance also puts greater emphasis on public views of national priorities, and which challenges are the most important—and the most threatening—to Australians' and Americans' daily lives.

One of the key challenges that the US and Australia have faced in the first two decades of the 21st century has been international terrorism. However, in the third decade of the 21st century, America and Australia will face



²² 2008 Pew Global Attitudes Survey.

²³ 2013 Pew Global Attitudes Survey.

²⁴ 2020 Pew Global Attitudes Survey.

²⁵ 2021 Pew Global Attitudes Survey.

different global challenges together. Pandemic disease has already tested both nations, and both have felt the effects of global climate change in recent years with record-high temperatures, severe drought, and terrible wildfires.

The combination of these challenges, along with rising regional tensions with China, have taken a serious toll on Australians' sense of safety. The 2020 Lowy Poll found Australian feelings of safety at record lows, with only half of Australians (50%) saying that they felt safe. While feelings of safety have rebounded in the 2021 Lowy Poll, with seven in 10 Australians (70%) saying they feel safe or very safe when thinking about world events, this remains notably lower than the high levels of safety felt by Australians in the first decade of the 21st century, when nine in 10 reported feeling safe in the context of world events.

Critical Threats to Australians and Americans

For many Australians and Americans, the experiences of 2020 reorientated what kind of threats were most threatening to their nations. And in both countries, attention turned from the animating concern of the past two decades—international terrorism—to the global challenges of pandemic disease and climate change.

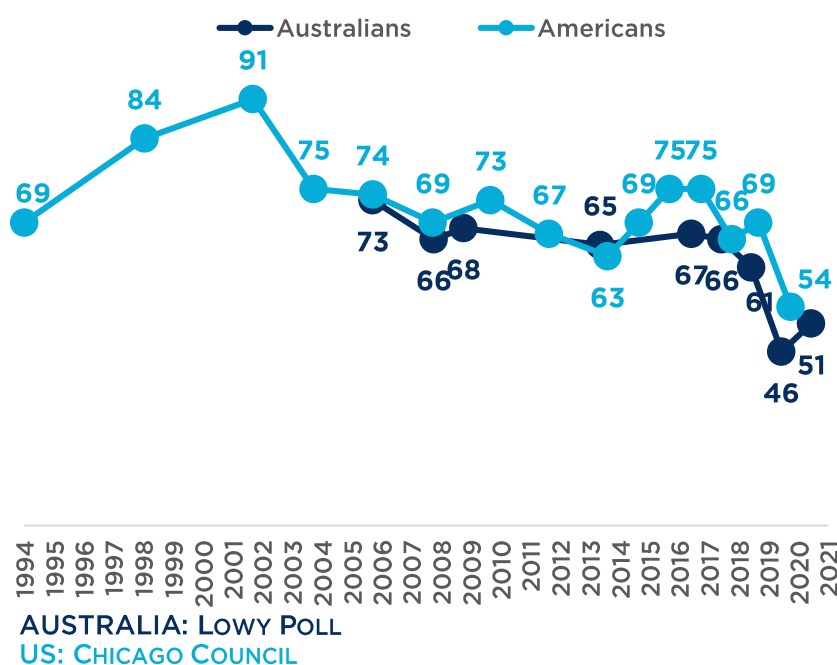
For Americans, the threat of international terrorism has long been seen as one of—if not the—top threat facing the United States. Indeed, in the 25 years from 1994 through 2019, between two-thirds and three-quarters of Americans consistently named international terrorism as a critical threat to the United States.²⁶ In that span of time, the only issues able to rival international terrorism as a threat in the eyes of the American public have been cyber-attacks on US computer networks—another threat that could severely impact Americans everyday lives—and the nuclear programs of Iran and North Korea. Concerns

understandably peaked in 2002 following the Sept. 11, 2001 terrorist attacks, and as recently as the summer of 2019, 69% of Americans named international terrorism a critical threat.²⁷

However, the era of international terrorism as a primary threat in the eyes of Americans may have ended. In 2020, Americans' largely reoriented their concerns to focus on the COVID-19 pandemic, the increasingly competitive relationship between the United States and China, and domestic issues of racial justice and right-wing extremism.

The Threat of International Terrorism

Below is a list of possible threats to the vital interest of [Australia/the United States] in the next ten years. Do you



Australian opinion on international terrorism underwent a similar shift. In the 2020 Lowy Poll less than half of Australians (46%) named international terrorism as a critical threat, a drop of 20 percentage points from 2018, when two-thirds saw it as a critical threat to Australia.²⁸ In place of terrorism, global and environmental challenges took center stage. Like most people around the world, the pandemic was high on the list: three in four (76%) named COVID-19 and other potential epidemics as a critical threat to Australia. Also of serious concern for Australians: environmental problems like drought and water

²⁶ 1994-2019 Chicago Council Surveys.

²⁷ 2019 Chicago Council Survey.

²⁸ 2020 Lowy Poll.

shortages (77%), disasters such as bushfires and floods (67%), and climate change (59%).

Many of these shifts in public concerns have persisted into 2021. As the 2021 Lowy Poll finds, climate change (61% critical threat) shares top billing with cyberattacks from other countries (62%). And while Australians are less concerned about the COVID-19 pandemic now than they were a year ago, most Australians (59%) continue to name COVID-19 and other potential epidemics as a critical threat.

Climate Change: Majorities see it as a threat and support action now

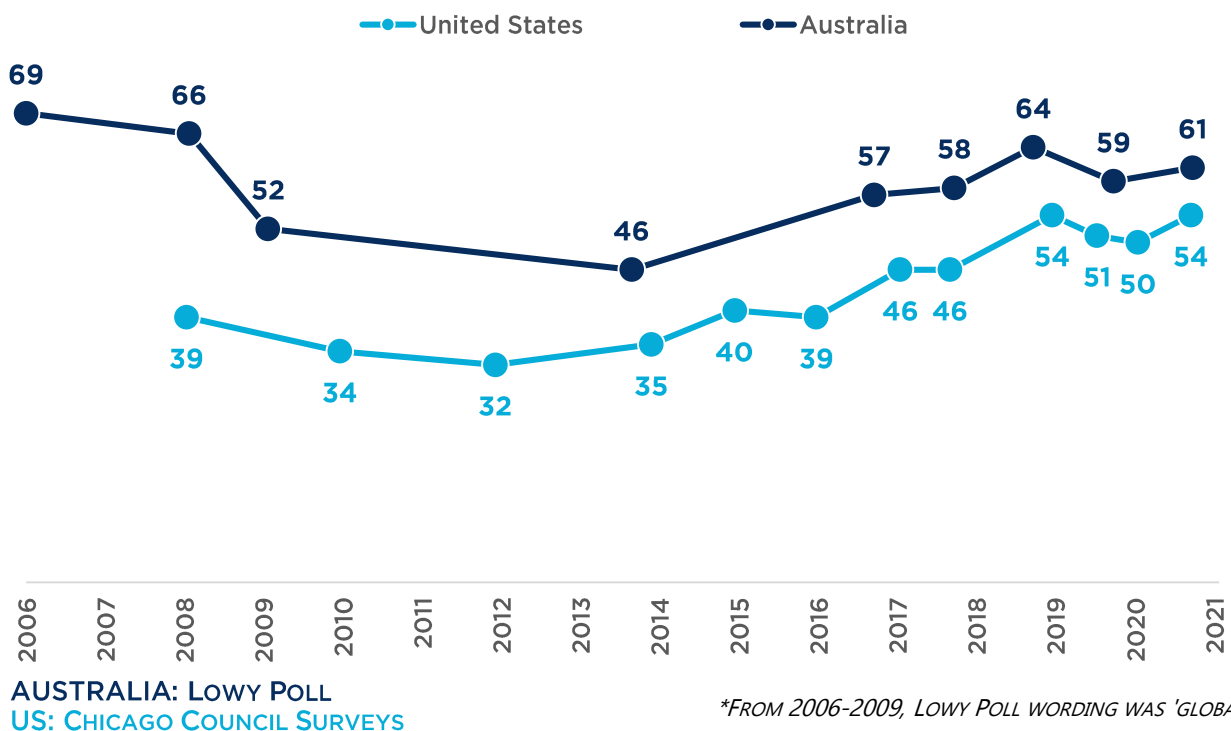
One of the most critical global challenges for the coming decades of the 21st century is global climate change, and both the United States and Australia have a lot at stake.²⁹ Thus far, Australians have been

consistently more likely than Americans to describe climate change as a critical threat to their vital interests. However, both publics have gone through a similar shift in attitudes over the past 15 years, with concerns declining slightly into the mid-2010s before rising once again. Today, most both Americans (54%) and Australians (61%) see climate change as a critical threat to their countries.³⁰

Climate change is of particular concern for Australians: a warming climate is contributing to more severe droughts and heat in Australia and amplifying the fires of the summer bushfire seasons. The 2019-2020 bushfires were catastrophic, burning a huge amount of land—more than 72,000 square miles—and followed on the heels of record-breaking temperatures across the country.³¹ According to polling by the Australian National University, most Australians (79%) were affected by the fires in some

Americans and Australians on Threat of Climate Change

*Below is a list of possible threats to the vital interest of [Australia/the United States] in the next ten years. Do you see this as a critical threat, an important but not critical threat, or not an important threat at all? **Climate Change** (% critical threat)*



²⁹ A note on language: the polling shown here from the United States uses the language of “climate change” rather than “global warming.” In 2008, the Chicago Council Survey switched from using “global warming” to “climate change” in its questions, to reflect the changing terminology used in US political debates around the topic; only the results for “climate change” are shown for the US. Data from Australia shows results for both wordings: the 2006-2009 Lowy Polls used “global warming” before changing to “climate change” in the 2010 Lowy Poll.

³⁰ 2021 Lowy Poll and March 2021 Chicago Council survey.

³¹ Jessie Yeung and Sheena McKenzie, “Australia swelters on its hottest day nationwide as wildfires rage – and temperatures are likely to rise even higher,” CNN, Dec. 18, 2019, <https://www.cnn.com/2019/12/18/australia/australia-hottest-day-record-intl-hnk-scli/index.html>.

way, including smoke exposure (57%), threats to their friends or family (39%) or themselves (10%), or being evacuated (9%).³²

And Australians clearly see a connection between the fires and global climate change. Polling by the Australia Institute found that concerns about climate changed increased because of the fires, with those directly impacted by the fires more likely to be concerned about climate and more likely to support action on climate change as a result.³³

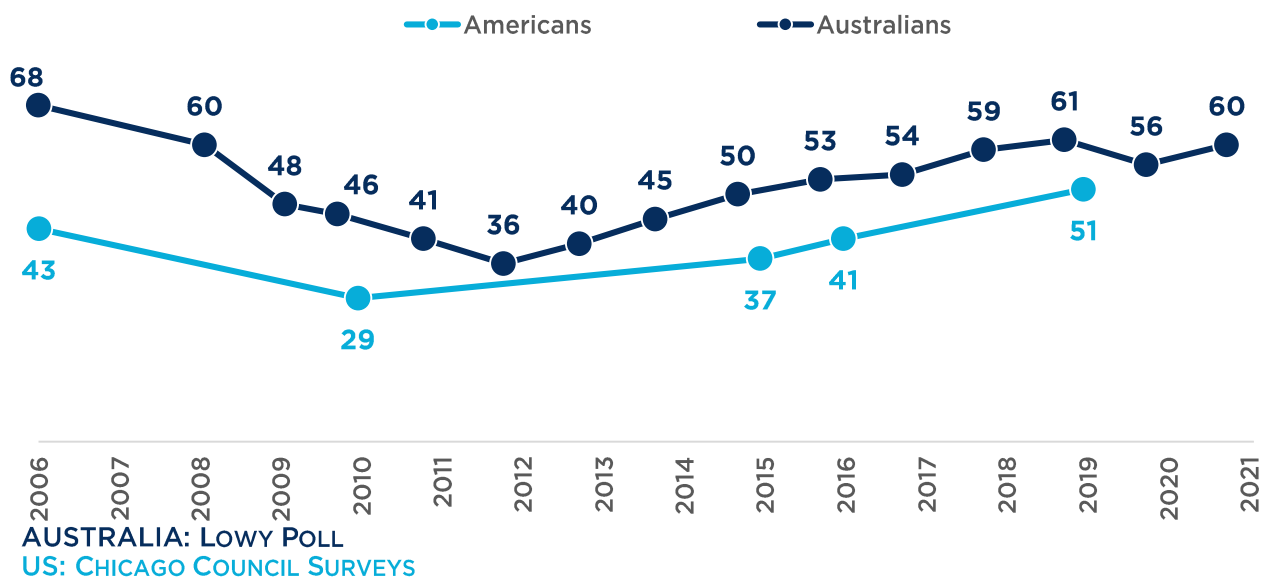
The devastating wildfires, Australia's costliest natural disaster to date, made global headlines and also got the attention of Americans.³⁴ In a Politico/Harvard School of Public Health survey in January 2020, two-thirds of Americans (67%) said they had been following the news of the wildfires very or fairly closely, though a majority (54%) were not concerned about the same kind of fires happening

in their state.³⁵ And a majority (54%) said they were related to climate change (39% said they were not).

With Australia facing such direct consequences of global climate change, it may be less surprising that Australians have generally been more likely to say that they should take actions now, even if there are serious costs. But that wasn't always the case. Even in the early 2010s, wanting to act on climate change right away was a minority viewpoint among the Australian public. Since then, support for rapid action on climate has risen steadily among Australians. In the 2021 Lowy Poll, six in 10 Australians (60%) say that climate change is a serious and pressing problem, and that we should take steps now even if it involves serious costs. Moreover, most Australians (74%) believe that the benefits of taking further action on climate change will outweigh the costs of doing so.

Australians and Americans on Global Warming / Climate Change

There is a controversy over what the countries of the world, including [Australia/the US], should do about the problem of [global warming/climate change]. Here are three statements. Please tell me which statement comes closest to your own point of view. [Global warming/climate change] is a serious and pressing problem and we should try



³² Nicholas Biddle, Ben Edwards, Diane Herz, Toni Makkai, "Exposure and the impact on attitudes of the 2019-2020 Australian Bushfires," Australian National University and Social Research Centre. Conducted Jan. 20-Feb. 3, 2020 via the SRC Life in Australia research panel among a national sample of 3,247 Australian adults.

https://csrm.cass.anu.edu.au/sites/default/files/docs/2020/5/Exposure_and_impact_on_attitudes_of_the_2019-20_Australian_Bushfires_publication.pdf.

³³ "Polling – Bushfire crisis and concern about climate change." The Australia Institute. Conducted Jan. 8-12, 2020 via YouGov among a national sample of 1,000 Australian adults. <https://australiainstitute.org.au/wp-content/uploads/2020/12/Polling-January-2020-bushfire-impacts-and-climate-concern-web.pdf>.

³⁴ Paul Read, "With costs approaching \$100 billion, the fires are Australia's costliest natural disaster," *The Conversation*, Jan. 16, 2020. <https://theconversation.com/with-costs-approaching-100-billion-the-fires-are-australias-costliest-natural-disaster-129433>.

³⁵ "Americans' domestic priorities for President Trump and Congress in the months leading up to the 2020 election," POLITICO and the Harvard T.H. Chan School of Public Health. Conducted Jan. 21-26, 2020 by SRSS via a mixed cell/landline telephone poll among a national sample of 1,011 American adults. <https://cdn1.sph.harvard.edu/wp-content/uploads/sites/94/2020/02/Politico-HSPH-Priorities-Poll-report-021020.pdf>.

Support for more rapid action on climate has also grown among Americans. After bottoming out in 2010, Americans have become steadily more likely to say that climate change is a serious and pressing problem, which requires action to combat even if those actions are costly. It became a majority viewpoint for the first time in 2019, when 51% of Americans took that position. In a similar way that the 2020 wildfires spurred increased concern among Australians, it is possible that the recent climate-related disasters in the United States—such as the record-breaking heat dome in the Pacific Northwest and the severe drought in many western states—could push American concerns higher in the coming years.

Conclusion: Shared Challenges, Shared Priorities

When it comes to the key threats facing average Australians and Americans, there's a lot of common ground to build on, with majorities in both countries seeing climate change and pandemic disease as critical threats. Additionally, though both Australians and Americans spent the past two decades focused on the threat of international terrorism, that's no longer as central a priority for either public. This shared understanding of national priorities, at a time when those priorities are changing in both countries, gives additional support to the vision of the US-Australia alliance as an alliance underpinned by shared democratic commitments.

Australians, Americans, and the Rise of China

The vision of the US-Australia alliance as a democratic one is not based solely on the democratic bona fides of both nations. Instead, it is constructed in direct contrast to the rising power of the Asia-Pacific: the People's Republic of China. The rise of China, and Beijing's increasingly assertive behavior around the region, represents a third critical challenge facing both the United States and Australia.

The challenge China poses to the US position in the region—and the world—is keenly felt among Americans. According to a March 2021 Chicago Council survey, two-thirds of Americans (67%) believe that China's intentions are to replace the United States as the dominant power in the world, while another 18% believe China aims to replace the US as the dominant power in the Asia-Pacific. Few

Americans (12%) believe China harbors no such ambitions.

For Americans and Australians alike, the last several years have seen views of China turn from favorable or neutral to downright negative, and neither public has much confidence in China on the world stage. Both Americans and Australians also support a range of policies aimed to impose costs on specific Chinese officials associated with human rights abuses inside China, and to limit the involvement of Chinese companies in critical infrastructure development in the US and Australia. But both publics also reserve some room for cooperation on key issues, and Australians in particular hold out hope that the country can maintain good relations with both major powers.

Australian and American Views of China Turn Cold

Australians have historically felt more favorably towards China than have Americans. Between 2006 and 2018, Australians gave China an average rating of between 53 and 61 degrees on a 0-100 feeling thermometer, where 0 represents a very unfavorable feeling and 100 represents a very favorable feeling. However, since 2018, Australians have gone from feeling warmly towards China to downright cold. The 2021 Lowy Poll finds that opinion towards China has hit a third record low in a row, falling to 32 degrees—a drop of 26 degrees in just three years. Americans have also cooled notably on China over the same period, though American opinion did not have as far to fall. In 2018, Americans rated China an average of 45, much like past ratings of the country dating back to the 1970s. But with relations between the United States and China heading into a sharp decline as security and economic tensions rapidly escalated, public esteem for China fell as well. By the summer of 2020, American views of China had fallen to a record-low 32, and a March 2021 survey by the Chicago Council finds that feelings remain cool today (a similarly chilly 33).

Data from the Pew Research Center's Global Attitudes Surveys over the same time period show an even more dramatic collapse in Australian and

American attitudes on China.³⁶ In 2017, Australian favorability towards China hit an all-time high in Pew's data, with two-thirds of Australians (64%) saying they held either a very or somewhat favorable view of China. From there, things fell rapidly. By 2019, that had fallen to a third of Australians (36%). The COVID-19 pandemic ensured that downward trend continued; in the 2020 Global Attitudes Survey, only fifteen% of Australians felt favorably towards China. The most recent Pew poll finds a slight rebound—though only two in 10 Australians (21%) hold favorable views of China.

spring as the United States was beginning to grapple with the COVID-19 pandemic, found views of China at a record low of 22% favorable (and a record high of 73% unfavorable).

Just as Americans and Australians have become far less favorable towards China, they've also lost confidence in China's leader. In the 2021 Pew Global Attitudes Survey, similarly large majorities of Australians and Americans (82% each) said they had not too much or no confidence at all in Xi Jinping to do the right thing regarding world affairs. For

Australians, in particular, this represents a notable change of opinion. From 2015 through 2018, most the Australian public expressed at least some confidence in Xi. However, escalating tensions between China and Australia cut into that confidence—and those tensions, combined with the COVID-19 pandemic, led to a surge of public mistrust in Xi Jinping's handling of world affairs.

American views of Xi have been more consistently negative, with six in 10 (61%) saying they viewed him unfavorably in Chicago Council polls in 2017 and 2018. And as views of China have grown more negative, so have views of Xi: a February 2021 Council survey finds that 87% of Americans have an unfavorable view of Xi Jinping.

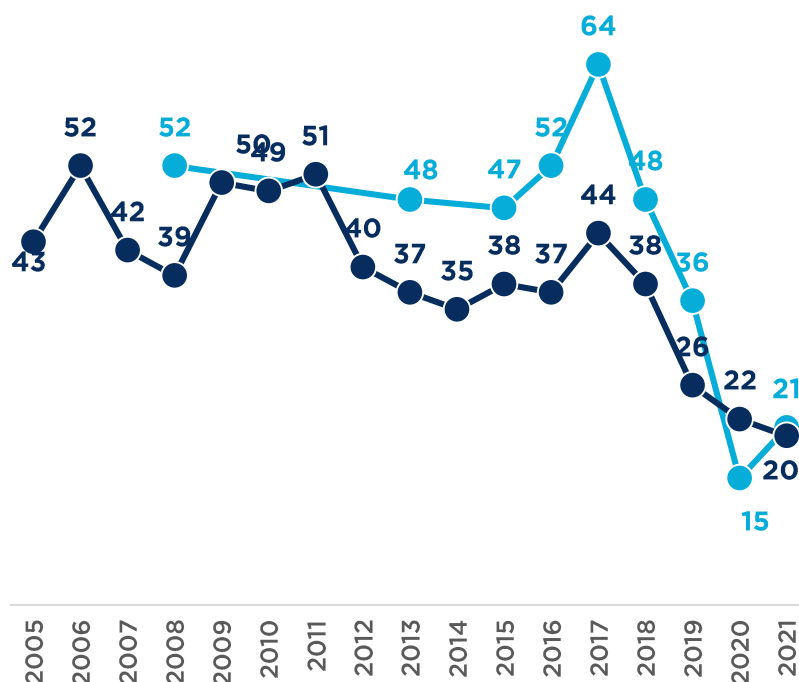
All these shifts in Australians' views of China have affected how Australians balance their relationships with the United States and with China. As views of

China have turned more negative, Australians have come to prioritize the relationship with the United States over their relationship with China. Today, most Australians (55%) see the relationship with the United States as more important than the relationship with China (40%). This marks a shift from 2016 and 2017, when Australians were divided over which relationship was more important.

American and Australian Favorability Toward China

Please tell me if you have a very favorable, somewhat favorable, somewhat unfavorable, or very unfavorable

—●— Australians —●— Americans



PEW GLOBAL ATTITUDES

Pew finds a similar, though less dramatic, decline in American views of China. Unlike Australians, views of China in the United States did not have as far to fall. From a high point of 52% in 2006, views of China remained mixed throughout the 2000s and 2010s until beginning to decline notably in 2019, as the Trump administration's trade war with China swung into full gear. The 2020 Pew survey, conducted in the

³⁶ Pew Global Attitudes Surveys in the US (2005-2021) and Australia (2008-2021).

However, Australians don't fully see this as a one-or-the-other choice. The 2021 Lowy Poll finds that seven in 10 Australians (72%) believe it is possible for Australia to have good relations with both the United States and China—though this marks a decline from the 87% who said the same in 2018.

America and Australia in Asia

Of course, the United States and China are not the only important relationships for Australia in the region. Australians are enthusiastic about the Quad, which has taken an increasingly prominent role in discussions of regional security of late. Per the 2020 Lowy Poll, nearly nine in 10 Australians (88%) support Australia "forming a partnership with the democracies of India, Japan, and the United States to promote peace and security in the region."³⁷

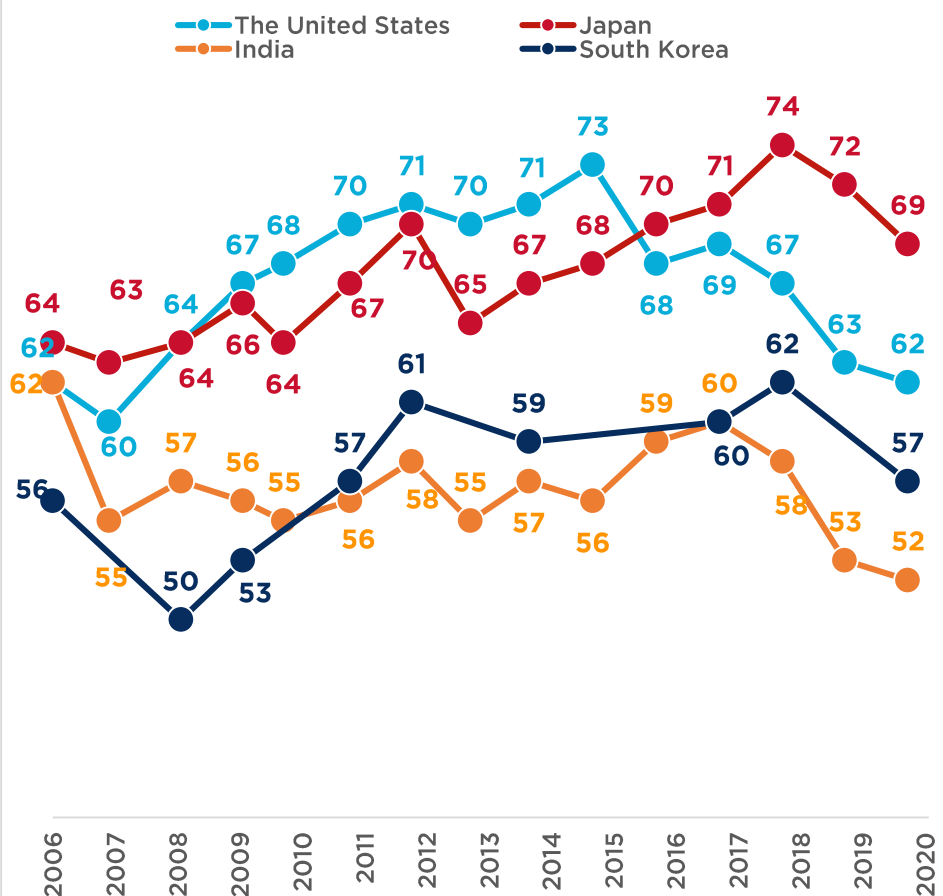
Among the major powers in Asia, the United States and Japan have been neck-and-neck in the competition for the Australian public's favor. After briefly falling below Japan in 2006 and 2007, the United States pulled ahead during the Obama administration through 2015. Since then, Japan has taken the lead once more. Australians have also generally held positive views of South Korea over the past decade. The same has been true of India, though Australian favorability of India has dipped notably in the last several years, falling to a record low of 52 in the 2020 Lowy Poll.

Americans, too, put a high value on their alliance relationships in Asia. According to a March 2021 Chicago Council survey, three in four Americans (74%) that that the US should focus on building strong relations with traditional allies in the region, even if it diminishes the US-China relationship.³⁸ This point of view has grown steadily over the past decade, while support for building a new partnership with China at the expense of traditional allies has become less attractive to Americans.

That emphasis on building strong relations with traditional allies isn't just limited to South Korea and Japan, either. Growing concerns about Chinese

Australian Feelings Toward Countries in Asia

Please rate your feelings toward some countries and territories, with one hundred meaning a very warm, favorable feeling, zero meaning a very cold, unfavorable feeling, and fifty meaning not particularly warm or cold. You can use any number from zero to one hundred, the higher the number the more favorable your feelings are toward that country or that territory. (mean score)



AUSTRALIA: LOWY POLL

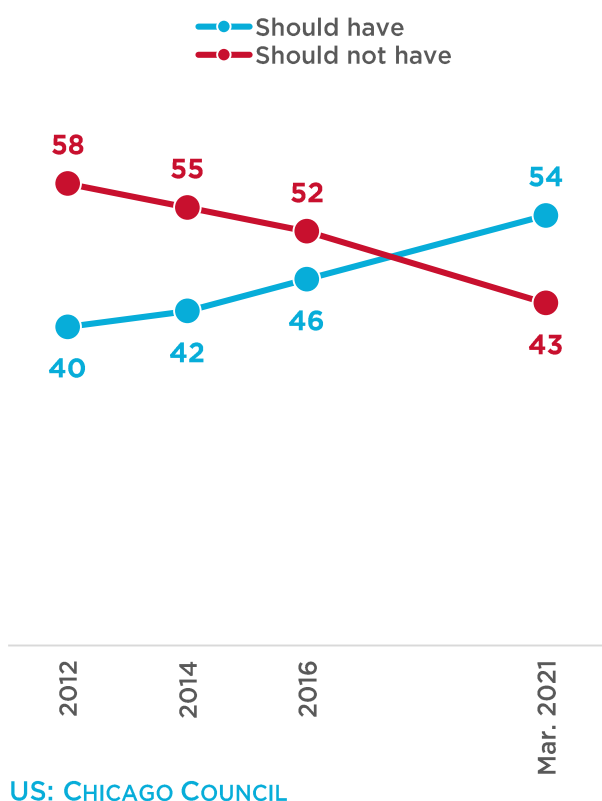
³⁷ 2020 Lowy Poll.

³⁸ March 2021 Chicago Council survey.

behavior in the region may also be behind the steadily rising American support for a US military presence in Australia. In the most recent March 2021 Chicago Council survey, most Americans (54%) support long-term bases in Australia. This continues a trend of rising support since the Council first asked the question in 2012 and is the first time most the public has supported US bases in Australia.

Americans Support US Bases in Australia

Do you think the United States should or should not have long-term military bases in the following places? Australia (%)



China: Economic Partner or Security Threat?

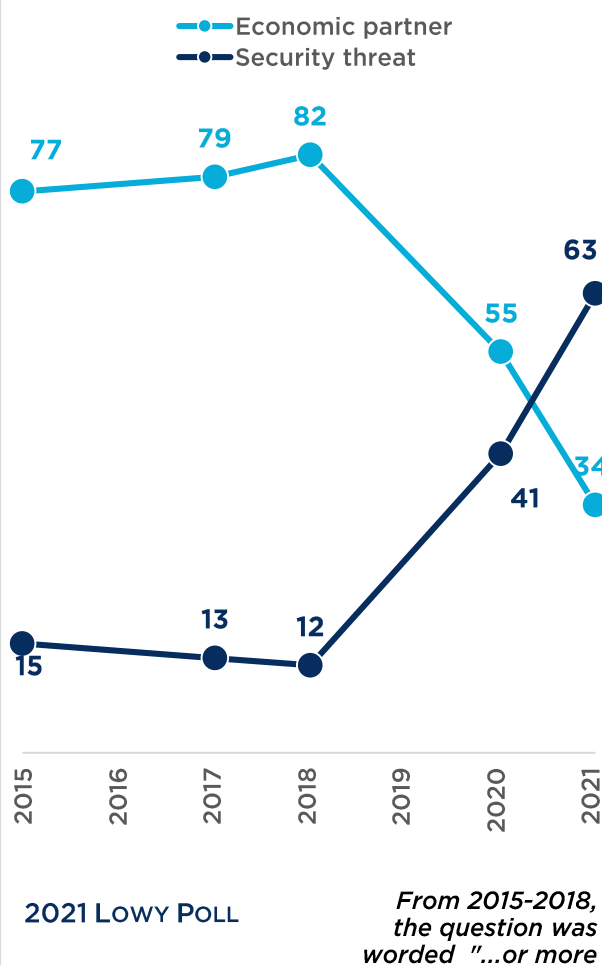
The economic relationship between Australia and China is important to both nations. Australia supplies the majority of China's iron ore, half its liquified natural gas, and is China's largest coal source. In total, China purchases over a third of Australia's exports, the majority of which are these sorts of commodities which serve as critical inputs to China's industrial sectors. However, economic relations between

Australia and the PRC have suffered³⁹ in recent years as the political relationship has gotten more contentious, with Chinese officials openly telling Canberra the sanctions on Australian goods come as acts of political retaliation.⁴⁰

The 2021 Lowy Poll finds that a narrow majority of Australians (63%) see China as more of a security threat rather than an economic partner (34%). This represents a notable decline from past trends in Australian thinking about the Australia-China relationship. From 2015 through 2018, a large majority of Australians (between 77 and 82%) consistently described China as more of an economic partner to Australia than a security threat. And even in the 2020 Lowy Poll, most Australians (55%) still

China: Economic Partner or Security Threat?

In your own view, is China more of an economic partner or more of a security threat to Australia? (%)



³⁹ Natasha Kassam, "Great expectations: the unraveling of the Australia-China relationship," Brookings Institution, July 20, 2020. <https://www.brookings.edu/articles/great-expectations-the-unraveling-of-the-australia-china-relationship/>.

⁴⁰ Stephen Dziedzic, "Chinese official declares Beijing has targeted Australian goods as economic punishment," ABC News, July 6, 2021. <https://www.abc.net.au/news/2021-07-07/australia-china-trade-tensions-official-economic-punishment/100273964>.

saw China as more of an economic partner for Australia.

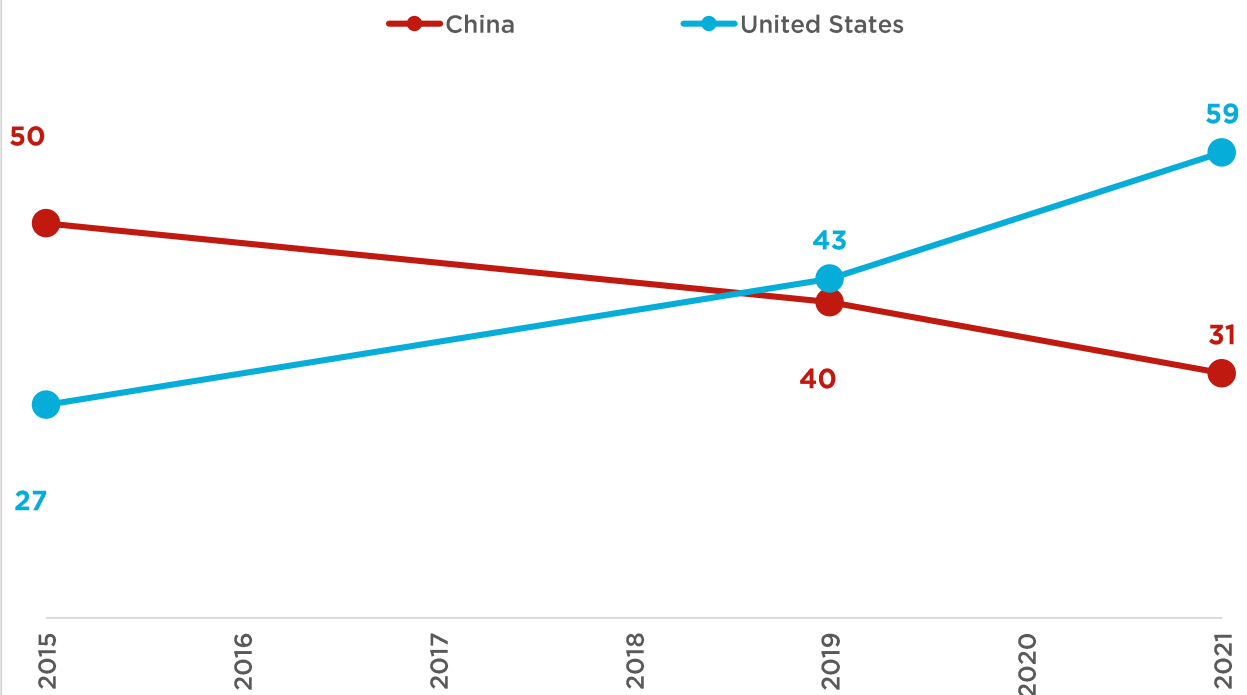
The swift downturn in economic relations between Australia and China has pushed Australians to reconsider the extent of Australia's economic ties with China: in the 2020 Lowy Poll, nearly all Australians (94%) favored working to find other markets for Australia to reduce its economic dependence on China. At the same time, Australians have changed their mind about which major power represents the more critical economic partner for Australia. In 2015 Pew polling, half of Australians said that it was more important for Australia to have strong economic ties with China, compared to a quarter who named the United States. Today, those numbers have reversed: six in 10 Australians (59%) say strong economic ties with the United States are more important, while only three in 10 (31%) pick China as the more important economic partner.

For both Americans and Australians, human rights and democratic values are an important part of their countries' foreign policies. And as Pew polling shows, large majorities of both Australians (91%) and Americans (90%) say that the government of China does not respect the personal freedoms of its people.

Though in dealing with international problems, there can sometimes be a clash between Australia's economic interests and its democratic values, the 2020 Lowy Poll found that six in 10 Australians (60%) said that Australia's democratic values should be considered more important. And as the 2021 Pew Global Attitudes Survey finds, majorities of Australians (78%) and Americans (70%) both believe that their countries should try to promote human rights in China, even if it harms economic relations with Beijing.

Prioritizing Economic Ties: China or the US?

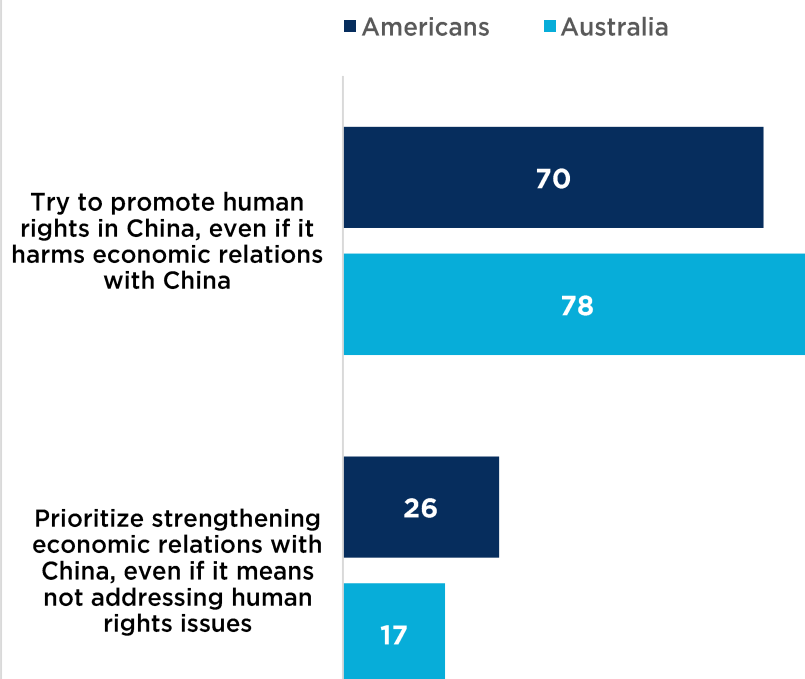
Is it more important for Australia to have strong economic ties with China or the United States? (%)



PEW RESEARCH CENTER

Prioritizing Human Rights or Economic Relations?

Which statement comes closer to your view, even if neither is exactly right? [COUNTRY] should... (%)



Australia: March 15-May 2, 2021 |
n=1,000
US: February 1-7, 2021 | n=2,596
PEW RESEARCH CENTER

For Americans, this preference to prioritize human rights over economic relations in dealing with China fits with the issues that are top-of-mind when dealing with Beijing. In a February 2021 Pew survey, when Americans were asked to name the first thing that came to mind when they thought of China, one in five (20%) raised human rights concerns—more than named any other specific topic.

American views of China as a partner have also changed sharply in recent years. Between 2006 and 2018, Americans were consistently divided over whether the two nations were mostly rivals or mostly partners. By February 2019, however, American attitudes shifted sharply, with a majority saying the two were mostly rivals. That trend continued into 2020: the 2020 Chicago Council Survey found that seven in 10 Americans (72%) saw the United States and China as mostly rivals, while only a quarter (24%) saw them as partners.

That sense of rivalry covers both the economic and security dimensions of the US-China relationship. According to a March 2021 Chicago Council survey, most Americans see China as *both* an economic threat

(67%) and a security threat (78%), rather than an economic partner (30%) or a security partner (20%). Moreover, most the American public (62%) sees China as a threat in both arenas. Only 15% describe China as an economic and security partner, and another 15% see it as an economic partner and security threat.

Americans have also rapidly shifted on how the United States should handle the rise of China. From 2006 through 2019, two-thirds of Americans consistently said that the US should aim to undertake friendly cooperation and engagement with China. Today, however, a slim majority of Americans (51%) says that the US

should actively work to limit the growth of China's power, up 20 percentage points since 2019.

Shared Reluctance to Send Military Forces into Conflicts with China

Though Australians view the alliance with the United States as important to Australian security, the public is reluctant to commit Australian forces to military conflicts under the umbrella of the alliance. The 2020 Lowy Poll finds that two-thirds of Australians (68%) believe Australia should only support US military action if it is authorized by the United Nations. Without UN authorization, only a minority of Australians favor acting in accordance with the alliance to support US military actions. Four in 10 Australians (40%) say Australian should support US military actions in the Middle East against Iran, and that's down eight points from 2013.

Indeed, the 2019 Lowy Poll found that Australians have become more reluctant in recent years to send Australian military forces abroad. While six in 10 (60%) support conducting freedom of navigation

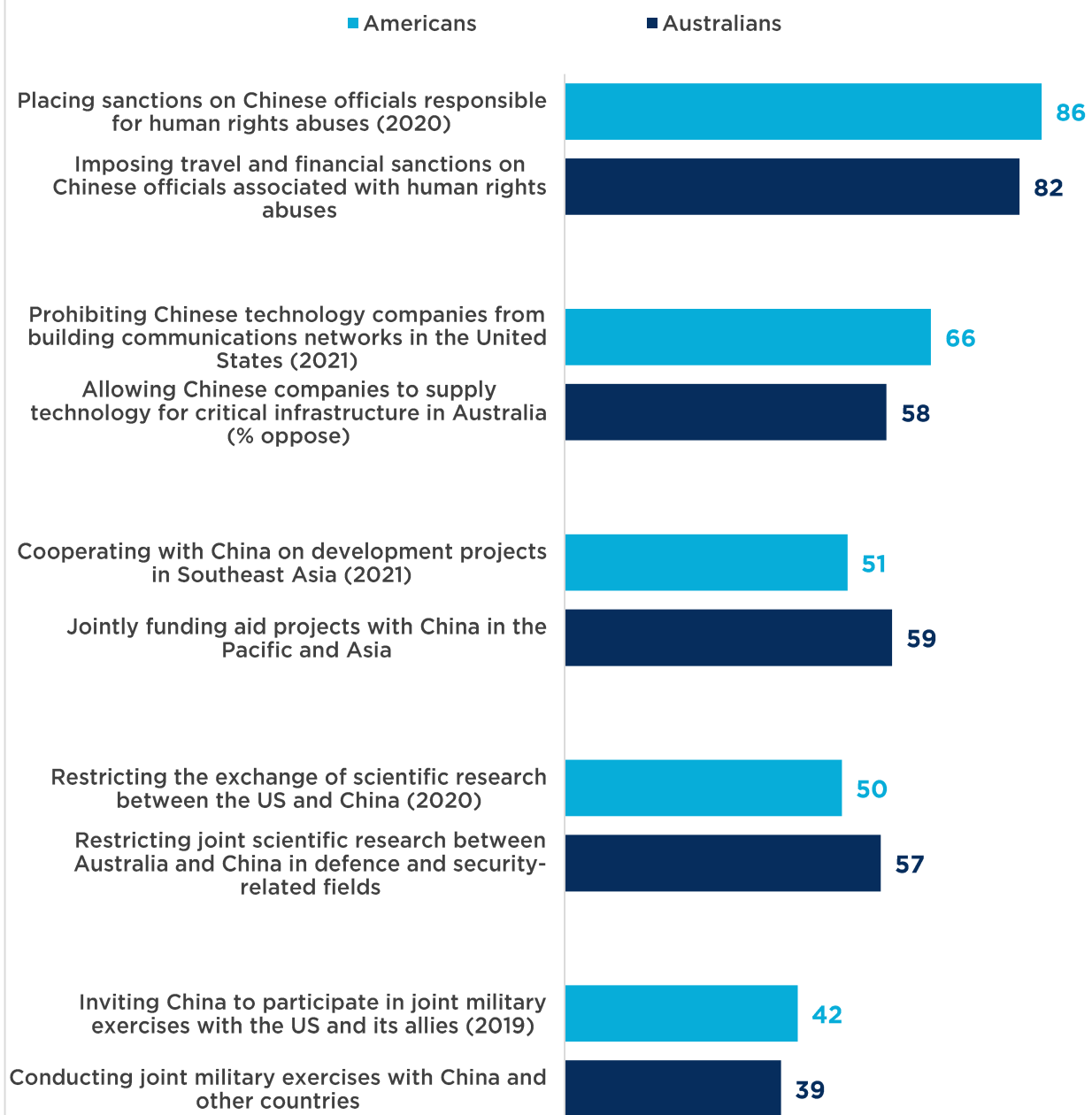
operations in the South China Sea and other disputed areas claimed by China, that's down from 74% in 2016. Similarly, only half (50%) favor using Australian forces to fight against violent extremist groups in Iraq and Syria, down from 61% in 2017.

Support is even lower for direct involvement in potential conflicts in the region. A minority of Australians supported sending Australian forces if

North Korea invaded South Korea (45%) in 2017, and in 2019, only minorities of Australians favored sending troops if China invaded Taiwan and the US decided to intervene (43%), or if China initiated a military conflict with one of its neighbors over disputed islands or territories (34%). And in event of a military conflict between the United States and China, most Australians (57%) say that Australia

American and Australian Policies towards China

Would you support or oppose the following [US / Australian government] policies towards China? (% support, unless otherwise noted)



AUSTRALIA: 2020 LOWY POLL
US: CHICAGO COUNCIL SURVEYS

should remain neutral rather than support the United States (40%) or China (1%).

Americans remain somewhat hesitant to commit US forces to a conflict with China in many scenarios. However, the 2021 Chicago Council Survey finds that most Americans (52%) support the use of US troops if China were to invade Taiwan.⁴¹ In contrast to Australians, among whom support for the use of force has declined in recent years, American support for military involvement in a Taiwan crisis is at record-high levels. Support has doubled since 2014, when only one in four Americans (26%) supported US military involvement.

Australians and Americans on Policies towards China

There are a number of policies that majorities of Australians and Americans alike support when it comes to dealing with China. At the top of the list, and matching their focus on human rights as an important factor in their foreign policies, are sanctions on Chinese officials associated with human rights abuses, favored by large majorities of Americans (86%) and Australians (82%). Majorities in both countries also favor limiting the role Chinese companies can play in domestic infrastructure construction, either specifically in communications networks (as 66% of Americans favor), or more broadly from supplying technology for critical infrastructure (as 58% of Australians say). There is also support among most Australians (57%) for restrictions on joint scientific research in defense and security-related fields, while half of Americans (50%) favor restrictions on the exchange of scientific research between the United States and China. Lastly, Australians and Americans are both divided over a potential boycott of the 2022 Beijing Winter Olympics over China's human rights record. A narrow majority of Australians say that Australia should attend the Games (51%, 45% opposed), while Americans are split (49% support, 46% oppose). However, not all measures favored by Americans and Australians are necessarily competitive: six in 10 Australians (59%), and a narrow majority of Americans (51%) favor working with China on development or aid projects in the region. And in March 2021 polling, large majorities of Americans support the United States working with China to prevent future pandemics (79%) and to limit climate change (75%).

Conclusion

So, what does all this mean for the Biden administration's focus on democracy as a keystone for the US-Australia alliance? In broad strokes, it's a bet that will succeed in some areas better than others.

For starters, the alliance is on firm footing among the public. While Australians had little confidence in President Trump to deal with international problems, confidence has rebounded under the Biden administration. And while Australians say that the Trump presidency damaged the US-Australia alliance, that damage may not be deep: views on the United States have rebounded quickly. Australians and Americans generally feel quite positively towards one another, and Australians continue see the US-Australia alliance as important to Australia's security. They also prioritize Australia's relationship with the United States rather than its relationship with China.

Moreover, there is considerable overlap between public priorities in the United States and Australia. Publics in both nations have pivoted in recent years from a greater focus on international terrorism to a greater focus on transnational challenges. Majorities of Americans and Australians both identify similar issues as critical threats to their countries, including cyberattacks, climate change, the COVID-19 pandemic, and North Korea's nuclear program. Washington and Canberra should take these findings as an endorsement of closer cooperation on the key challenges facing their countries, particularly when it comes to the transnational threats which Americans and Australians identify as critical threats to their own security.

However, the message is less clear when it comes to the most significant geopolitical challenge facing both nations: the rise of China. While there is ample mistrust of Beijing among Americans and Australians, there are limits to how far publics in both countries are willing to go in confronting Chinese behavior. Australians, in particular, are not as eager for a confrontation with China as some Americans. Despite being far more skeptical of economic engagement with China than they were just a few years prior, most Australians see a potential military clash between the United States and China as a critical threat to their own security, and would prefer to stay out of any such conflict. Nor are Australians

⁴¹ 2021 Chicago Council Survey.

eager to send their military forces into combat abroad. However, there are also several policies that do garner support among the American and Australian publics, including sanctions on Chinese officials for human rights abuses and blocking Chinese telecommunications companies from building critical infrastructure in either country.

To be sure, leaders in both nations will have to pay close attention to shifts in public attitudes to ensure the democratic alliance remains on firm footing. And in cases where the public and policymakers disagree, experts will need to break out of the policy bubble and make their case to the broader public. But ultimately, there are reasons for policymakers in Washington and Canberra to be optimistic about the future of the alliance. The combination of a strong public base of support for the alliance, and a shared set of problems for the two countries to tackle, is all good news for Biden's bet on the democratic element of the alliance.

Notes on Sources

Surveys and Methods

There are three primary sources of data for this report.

One is the Chicago Council on Global Affairs' Chicago Council Survey of the American public on US foreign policy, conducted quadrennially from 1974 to 2002, biennially from 2002 to 2014, and annually from then until the present. From 1974 through 1998 the Chicago Council Survey was conducted via in-person, face-to-face interviews. In 2002, it was conducted by telephone. Since 2004, the survey has been conducted online through the KnowledgePanel, currently administered by Ipsos. Additional Chicago Council polls cited in this report were also conducted online through the KnowledgePanel, including the March 2021 Chicago Council survey conducted as part of a trilateral survey of American, South Korean, and Japanese attitudes on foreign policy.

A second is the Lowy Institute's annual Lowy Poll of the Australian public which began in 2005. The Lowy Poll is the premier source of information about Australians' views on foreign policy and international affairs. From 2005 to 2011, the Lowy Poll was conducted by landline telephone. From 2012 to 2017, it was conducted using a mix of landline and mobile telephones. Between 2017 and 2019, Lowy

slowly transitioned its methodology over to an online sample, beginning in 2017 with a test sample run online, and in 2018, a mix of telephone and online panel. Starting in 2019, the Lowy Poll has been conducted fully online via the Social Research Centre Life in Australia panel.

The third is the Pew Research Center's Global Attitudes Survey, which has been conducted in various countries around the world since 2003, including the United States and Australia. In Australia, the Global Attitudes Survey is conducted via RDD telephosne using a mix of landline and cellphones. In the United States, the Global Attitudes Survey is conducted in English and Spanish via RDD telephone with a mix of landlines and cellphones. In both countries, the precise proportion of landline to cellphone sampled has evolved over the years to match the proportion of landline/cell use among the American and Australian populations.

For more specific information on survey methodologies for each survey by year and country, please refer to the organizations' websites (thechicagocouncil.org, lowyinstitute.org, and pewresearch.org).

A Note on Data Collection and Compilation

Producing this report comparing American and Australian attitudes on foreign policy first required an extensive process of data collection and compilation. The Pew Global Attitudes Survey was an easy source for comparative data. Pew asks identical questions in many countries around the world, and reports on those comparisons in its published documentation and datasets. The process of lining up equivalent survey items from the Lowy Poll and the Chicago Council Survey was more involved, and required searching through both organizations' published survey data to identify potential comparative items before creating comparative tables and figures. Here I am indebted to the Lowy Institute's excellent public archive of data, which made this process possible. Any errors in the data as a result of the compilation process are mine alone.

2

“Substantial and Fruitful Benefits”:

State Governments as Vectors of CCP Influence in Australia

Rick Umback

Abstract

Subnational governments in liberal democracies have emerged as significant vectors for foreign influence operations in the early 21st century. This paper examines the subject with reference to Chinese Communist Party (CCP) influence operations targeting the Western Australian and Victorian state governments within Australia's federal system. Analyzing the case studies with reference to the existing literature on CCP statecraft, the paper identifies patterns of behavior that enable the CCP to advance its geopolitical interests under the guise of acceptable behavior in a liberal democratic system. Through promoting economic exchange and “friendship” between Chinese interests and subnational governments, the CCP attains influence that can be wielded against the national governments which formulate foreign and defense policy. Ultimately, the paper identifies aspects of foreign influence operations that have relevance not only for the Australia-China relationship, but all liberal democracies. It argues for a re-assessment of the unique vulnerabilities of liberal democratic systems to foreign influence operations, and the implementation of countermeasures tailored to liberal democratic strengths.

Throughout the West, the end of the Cold War heralded a premature celebration of the perceived superiority of liberal democracy—and its attendant features—over rival systems. It is now apparent that the triumphalism of the post-Cold War years resulted in a complacency that left many unable to perceive the vulnerabilities associated with liberal democratic systems. For while the strengths of these systems are generally well-understood, the openness and diffusion of powers that characterise them present unique vulnerabilities when targeted by geopolitical opponents.

To illustrate this wider point, this essay is focused on the vulnerabilities of federalism to foreign influence operations conducted by the Chinese Communist Party (CCP), using two case studies from Australia. Federalism is one of a number of characteristic means of diffusing power within liberal democratic systems. It serves to promote greater accountability through localised decision-making, and to prevent excessive concentrations of power in national governments. However, as this essay demonstrates, the diffusion of power under federal systems can also be exploited to encourage division, and to undermine efforts to forge a unified national foreign policy.

In recent years Australia has been a major target of CCP foreign influence operations. The operations appear designed to weaken opposition to the CCP's agenda to displace the US as the world's preeminent power, and to weaken the US' network of alliances throughout the world. According to Clive Hamilton, the CCP has identified Australia as a weak link in the American alliance structure. Consequently, it is being used as a testing ground for the CCP to optimize its influence operations for use elsewhere in the world.¹ By understanding the Australian experience of CCP influence operations targeting its federal system, decision-makers across the world can identify similarities that may arise in their own countries, and devise better responses to a sophisticated and unprecedented challenge.

United Front Work

Beijing's increasingly confident, and often abrasive, assertion of its interests on the world stage has

become known as "wolf warrior" diplomacy.² However, the attention paid to the emergence of the wolf warrior diplomat has obscured other substantial changes to Beijing's international conduct in recent years. Xi's administration has renewed and reemphasised several doctrines and approaches from the Mao era, modernized in line with the exigencies of the early 21st century. One of the most important of these is the use of United Front work, which Xi has characterised as one of the CCP's "magic weapons." Under Xi, United Front work has a prominence not seen since the CCP's triumph in the Chinese Civil War.³

The United Front has its conceptual origins in Lenin's emphasis on pursuing expedient alliances in conditions of strategic weakness. As he wrote in 1920:

The more powerful enemy can be vanquished only by exerting the utmost effort, and without fail, most thoroughly, carefully, attentively and skilfully using every, even the smallest, "rift" among the enemies, of every antagonism of interest among the bourgeoisie of the various countries and among the various groups of types of bourgeoisie within the various countries, and also by taking advantage of every, even the smallest, opportunity of gaining a mass ally, even though this ally be temporary, vacillating, unstable, unreliable and conditional.⁴

United Front doctrine takes opportunities to find common cause with other groups not under the direct control of the CCP, and create and exploit divisions among its opponents. The goal is to prevent the emergence of a consolidated and focused opposition to the CCP and its objectives. As Anne-Marie Brady describes, the CCP adapted Lenin's insights for their own domestic and international purposes from the 1930s. Its United Front doctrine emphasises "coopting foreigners to support and promote CCP's foreign policy goals" through "people-to-people, party-to-party, plus PRC enterprise-to-foreign enterprise relations."⁵ It is captured in an adage of Mao's that has been resurrected by Xi, translated as "make the past serve the present, make the foreign serve China."⁶

¹ Clive Hamilton, *Silent Invasion: China's Influence in Australia*, Hardie Grant Books, Melbourne, 2018, pp. 2-3.

² See Zhiquan Zhu, "Interpreting China's 'Wolf-Warrior Diplomacy,'" *PacNet*, No. 26, May 14, 2020. https://pacforum.org/wp-content/uploads/2020/05/20200514_PacNet_26.pdf.

³ Anne-Marie Brady, "Magic Weapons: China's political influence activities under Xi Jinping," pp. 6-7.

⁴ Quoted in Anne-Marie Brady, "Magic Weapons: China's political influence activities under Xi Jinping," p. 2.

⁵ *Ibid.*

⁶ *Ibid.*

Since 2015, the renewed prominence of United Front work has been accompanied by major institutional reforms spearheaded by Xi, including increased resourcing, new guidance, and a greater degree of centralised control. The reforms have strengthened the CCP’s United Front capabilities and laid the foundations of “a new structure for United Front work that has greater coordination and strategic importance.”⁷ The reorganisation of United Front work since 2015 has instituted a new system that is “increasingly institutionalized, coordinated, and controlling,” with a greater organising role for the central agency: the United Front Work Department.⁸

Through United Front work the CCP seeks to influence external groups such as foreign political parties, universities, community organizations, business, or other civil society groups.⁹ United Front work is designed to “co-opt and neutralize sources of potential opposition to the policies and authority” of the CCP.¹⁰ Accordingly, United Front work is constantly evolving and the label is sufficiently flexible to cover a diverse range of activities. At its core, however, is the goal of “neutralizing large-scale or open political opposition...while incentivizing public displays of loyalty to the CCP.”¹¹ Some commentators have labelled the goal as attaining “discourse power”; ensuring that the CCP worldview is represented in public discourse while discouraging the expression of anti-CCP sentiment.¹² Once primarily practiced within China, United Front work is increasingly externally directed for the purpose of influencing discourse and policy internationally.¹³

The full range of elements and characteristics of United Front work are beyond the scope of this paper. There are, however, two aspects of particular relevance for understanding CCP influence operations targeting foreign subnational

governments. Both are focused on relationship-building: the cultivation of people-to-people ties, and the discourse of friendship.”

In Xi’s words, “the United Front is about working on people.”¹⁴ In particular, it targets those who are not themselves members of the CCP but who might be influenced to contribute to discourse in ways that might advance the Party’s goals. From its earliest days, the CCP’s United Front work has targeted “famous intellectuals, writers, teachers, students, publishers, and business people”—those whose views are most likely to attract a wide audience. United Front work is focused on elites, because elites exert the greatest discursive influence.

United Front work also places a strong emphasis on “friendship.” A review of the names of United Front bodies, or the pronouncements of those seeking to influence foreigners, reveals that “friendship” or its variants is commonplace. The use of friendship evokes a warm, comforting human dimension to what is in fact calculating and conditional exchange. And as Diamond and Schell describe, for the CCP “all exchanges have a political character and hopefully a political harvest.”¹⁵

The centrality of “friendship” discourse was on full display in an extraordinary address by Minister Wang Xining to the Australia China Business Council Chinese New Year dinner in March 2021. Coming in the wake of a steady deterioration of Australia-China relations over the preceding year, Wang’s address attacked Australian media for its coverage of China’s response to COVID-19. Decrying “suspicions from a small number of people” for disrupting “collaboration which has brought substantial and fruitful benefits...to both China and Australia,” Wang alleged that critics of the CCP “abused the

⁷ Peter Mattis and Alex Joske, “The Third Magic Weapon: Reforming China’s United Front,” *War on the Rocks*, 24 June 2019. <https://warontherocks.com/2019/06/the-third-magic-weapon-reforming-chinas-united-front/>

⁸ Ibid

⁹ Alex Joske, *The Party Speaks for You: Foreign interference and the Chinese Communist Party’s united front system*, Australian Strategic Policy Institute Policy Brief, Report No. 32, 2020, p. 3.

¹⁰ Alexander Bowe, “China’s Overseas United Front Work: Background and Implications for the United States,” US-China Economic and Security Review Commission Research Report, Aug. 24, 2018, p. 3. <https://www.uscc.gov/sites/default/files/Research/China's%20Overseas%20United%20Front%20Work%20-%20Background%20and%20Implications%20for%20US%20final%200.pdf>

¹¹ Ibid.

¹² Clive Hamilton and Mareike Ohlberg, *Hidden Hand: Exposing how the Chinese Communist Party is reshaping the world*, Hardie Grant Books, Melbourne, 2020, p. 12; Alexander Bowe, “China’s Overseas United Front Work: Background and Implications for the United States,” US-China

Economic and Security Review Commission Research Report, Aug. 24, 2018, p. 3.

<https://www.uscc.gov/sites/default/files/Research/China's%20Overseas%20United%20Front%20Work%20-%20Background%20and%20Implications%20for%20US%20final%200.pdf>. See also Atlantic Council, *Chinese Discourse Power: China’s Use of Information Manipulation in Regional and Global Competition*, December 2020. <https://www.atlanticcouncil.org/wp-content/uploads/2020/12/China-Discourse-Power-FINAL.pdf>

¹³ Bowe 2018.

<https://www.uscc.gov/sites/default/files/Research/China's%20Overseas%20United%20Front%20Work%20-%20Background%20and%20Implications%20for%20US%20final%200.pdf>

¹⁴ Alex Joske, *The Party Speaks for You: Foreign interference and the Chinese Communist Party’s united front system*, Australian Strategic Policy Institute Policy Brief, Report No. 32, 2020, p. 6.

¹⁵ Larry Diamond and Orville Schell (eds), *China’s Influence & American Interests: Promoting Constructive Vigilance*, Report of the Working Group on Chinese Influence Activities in the United States, Revised Edition, Hoover Institution, 2019, p. 31.

power in their hands to strike hard on China's friends in Australia, who were working so hard to enhance Australia's economic power, improve people's living standard, and store potential for future development." ¹⁶ The implication is that being a "friend of China" is associated with the best interests of the Australian people and their material quality of life. Despite the challenges he outlined, he offered hope for "China's friends" in Australia:

Don't worry, your Chinese friends will stand together with you, your friends in China will always be with you. History will prove that it is wise and visionary to be China's friends, and your children and grandchildren would be proud of you to be China's friends and they will benefit from the relationship with China. Your Chinese friends and their children will also be proud and benefit from your friendship. For a better future and for the next generation, most people choose to make friends, but some people in Australia choose to make enemies to sustain a living. Those who deliberately vilify China and sabotage the friendship between our two countries and do damage to our long-term friendship and benefits out of their sectoral or selfish interest will be casted [sic] aside in history. Their children will be ashamed of mentioning their names.¹⁷

This remarkable quote demonstrates another emphasis of the United Front activities discussed in this paper: economic relationships which are described as mutually-beneficial or, in the CCP's preferred parlance, "win-win cooperation." Although it is not a universal characteristic of United Front work, it is a central theme of the influence operations covered in this essay.

United Front doctrine is well-suited to targeting the unique vulnerabilities of liberal democratic systems. The objective, in the memorable words of one commentator, is to "strangle you with your own systems."¹⁸ The CCP's exploitation of federalism's characteristics to divide and disrupt foreign adversaries is part of this larger dynamic.

The CCP is investing heavily in influence operations directed at subnational governments throughout the world. ¹⁹ Through enlisting the support of subnational governments, the CCP can disrupt, complicate, or otherwise interfere with a national government's efforts to implement foreign policy. This is embodied in the adage "using the countryside to surround the cities"—using smaller, subnational organisations (the countryside) to isolate larger, more powerful federal entities (the cities).²⁰ And as a report published in June 2019 by a Chinese-aligned think tank demonstrates, the CCP has an awareness of the extent to which federal systems are vulnerable to discord, with the report stating that subnational officials "enjoy a certain degree of diplomatic independence" from national governments.²¹

This paper uses the examples of two Australian state governments to demonstrate the particular vulnerabilities of federal systems to foreign influence operations. These vulnerabilities are, to an extent, inherent in federalism's division of powers, responsibilities, and sovereignty between different jurisdictions. However, not until recent years have federal systems in the West come under such targeted and sustained assault. The success of CCP influence operations in Australia outlined in this paper demonstrates the necessity of policymakers recognising and addressing the vulnerabilities of federal systems, in order to make them sufficiently robust to withstand foreign influence operations.

CCP Subnational Government Influence Operations in Australia

Australia's state, territory, and local governments have become the targets of CCP foreign influence operations in recent years. Since 2017, the Australian government has sought to recalibrate various strategic policy settings in response to an increasingly assertive China. Within this context, the CCP's United Front work targeting state governments in Australia has reaped strategic rewards by encouraging and exploiting points of difference

¹⁶ Wang Xining, "It Is So Difficult to be China's Friends in Australia Today", (speech, ACBC ACT, March 20, 2021) <http://au.china-embassy.org/eng/sghdxwfb/1/t1857437.htm>

¹⁷ *ibid.*

¹⁸ See Jan Jekielek, "Joshua Philipp on Coronavirus Origins, China's 'Bat Woman,'" and the CCP's Coverup," *The Epoch Times*, April 24, 2020. https://www.theepochtimes.com/joshua-philipp-on-coronavirus-origins-chinas-bat-woman-and-the-ccps-coverup_3325507.html

¹⁹ Clive Hamilton and Mareike Ohlberg, *Hidden Hand: Exposing how the Chinese Communist Party is reshaping the world*, Hardie Grant Books,

Melbourne, 2020, chapter 5; Salvatore Babones, *A House Divided: The AFRB and China's Subnational Diplomacy in Australia*, Centre for Independent Studies Analysis Paper 17, 2020, pp. 4-5.

<https://www.cis.org.au/app/uploads/2020/11/ap17.pdf?>

²⁰ *Ibid.*

²¹ Bethany Allen-Ebrahimian, How a Chinese think tank rates all 50 US governors," *Axios*, Feb. 19, 2020. <https://www.axios.com/china-rating-us-governors-bff6cc73-e485-44f2-98d0-b7639af3f0aa.html>

between state governments and the national government responsible for foreign and defence policy.

Western Australia

Western Australia (WA) is perhaps the Australian jurisdiction that has become most economically dependent on China, and whose representatives have expressed the greatest opposition to Canberra’s recalibration of strategic policy settings. Material factors explain much of this. Despite China’s application of economic coercion to numerous Australian industries commencing in 2020—coal, barley, wine—the flow of iron ore from Australia to the PRC has continued unabated. And to such an extent that in the first quarter of 2021 the value of Australian exports to China hit a record high, despite other Australian commodities being denied access to the Chinese market—driven by high iron ore prices and strong Chinese demand.²² This is of particular relevance to WA, the source of 98% of Australia’s iron ore, and where iron ore comprises one-fifth of gross state product, more than half of the state’s exports, and mining royalties are a key revenue source for the state government.²³ In the 2019-20 financial year 82% of WA’s iron ore was exported to China, with Japan, the next largest destination, representing only 7%.²⁴ It is no exaggeration to say that the economic fortunes of WA are closely tied with China.

Closer ties, economic and otherwise, between WA and China have been years in the making. In 2011 the state government signed a Memorandum of Understanding (MOU) with the National Development and Reform Commission (NDRC) in Beijing to “promote mutually beneficial and reciprocal cooperation...in investment, resources, resources-related technologies, energy (including renewable energy), infrastructure and other key

industries.”²⁵ This MOU has formed the basis for the continuing closeness of WA with China.

Notably this has been a bipartisan affair in WA. With the preceding Premier Colin Barnett, a Liberal, having travelled to Beijing to sign the MOU in 2011. In fact WA was something of a forerunner of Beijing’s subsequent efforts to cultivate ties with subnational governments, with the MOU being the first that the NDRC had signed with a subnational government for the purposes of promoting bilateral trade and investment cooperation.²⁶ Though Barnett has subsequently denied that state governments have a foreign policy function, this was qualified by a declaration that “[states] were still sovereign in their own right and had a role in economic development.”²⁷

Barnett, who lost government in 2017, has continued to promote the China relationship since losing power. In late 2020 he suggested that state governments might need to take the lead in repairing the Australia-China relationship, suggesting that the national government has been “provocative” towards China and responsible for the poor state of the relationship: “I am not surprised the relationship has deteriorated given we were poking the panda.”²⁸ These are statements at odds with the national government, highlighting a wedge between Perth and Canberra in relation to Canberra’s principal foreign policy challenge. He also suggested that state governments were better able to maintain constructive relationships with the PRC compared to their federal counterparts, noting that “they may be the only ones able to have their phone calls returned.”²⁹ This was a backhanded reference to earlier comments from the Chinese embassy that Australian ministers’ phone calls to their Chinese counterparts would not be returned “unless Canberra stops treating Beijing as a strategic threat.”³⁰

²² Will Glasgow, “Australia’s exports to China hit new highs,” *The Australian*, April 14, 2021.

<https://www.theaustralian.com.au/business/economics/australias-exports-to-china-hit-new-highs/news-story/dda05455c091f0507593a04a5afaa50d>

²³ James Chater, “In One Australian State, Trade With China Is Still Booming,” *The Diplomat*, March 3, 2021.

<https://thediplomat.com/2021/03/in-one-australian-state-trade-with-china-is-still-booming/>

²⁴ Ibid.

²⁵ Government of the State of Western Australia, *Memorandum of Understanding Between the Government of the State of Western Australia of the Commonwealth of Australia and the National Development and Reform Commission of the People’s Republic of China on Promotion of Investment Cooperation*. Sept. 16, 2011

[https://www.parliament.wa.gov.au/publications/tabledpapers.nsf/displaypaper/3813884a5e693982278ef55348257911005af567/\\$file/3884.pdf](https://www.parliament.wa.gov.au/publications/tabledpapers.nsf/displaypaper/3813884a5e693982278ef55348257911005af567/$file/3884.pdf)

²⁶ Nicolas Perpitch and Alisha O’Flaherty, “WA-China deal at risk under ‘appalling’ Federal Government move to regulate foreign relations,” *ABC News*, Aug. 27, 2020. <https://www.abc.net.au/news/2020-08-27/wa-china-deal-at-risk-under-proposed-new-foreign-relations-laws/12601514>

²⁷ Ibid.

²⁸ Jennifer Hewett, “States might have to untangle China mess,” *Australian Financial Review*, Dec. 1, 2020. <https://www.afr.com/policy/foreign-affairs/states-might-have-to-untangle-china-mess-20201201-p56jnt>

²⁹ Hewett 2020.

³⁰ Daniel Hurst, “China to Australia: Stop treating us as a threat or we won’t pick up the phone,” *The Guardian*, Nov. 21, 2020. <https://www.theguardian.com/australia-news/2020/nov/21/china-to-australia-stop-treating-us-as-a-threat-or-we-wont-pick-up-the-phone>

Barnett's Labor successor as WA premier, Mark McGowan, despite political differences has continued to strike a different tone to Canberra in relation to the China relationship. In response to a controversy triggered by a provocative move by Beijing in which saw an official Chinese government Twitter account post a doctored image of an Australian soldier, McGowan emphasised that "I just want us to continue to have good, friendly relationships with our long-term trading partners...it's been a beneficial relationship for both countries and I think we need to make sure we have cool heads and work things out by discussion and not confrontation."³¹ Notable about the statement is its apportionment of blame to both sides, and urging both national governments to come together to discuss their issues (noting that this came after the PRC made it explicit that any talks with the Australian government would be conditional on the Australian side abandoning its "cold war mentality"). And it is not only the premier, but the state treasurer too. In November 2020 outgoing Treasurer Ben Wyatt gave a valedictory speech to the state parliament, blaming "unhelpful public commentary directed towards our most important trading partner" for the deterioration of the Australia-China relationship.³² Later, in mid-2021, McGowan further escalated his attacks on the national government, claiming that Australia was acting "against its own interests" and risking an "absolutely catastrophic" loss of its trading relationship with China.³³ McGowan's comments were quickly endorsed by Beijing, with the foreign ministry encouraging the Australian government to "heed these constructive opinions."³⁴

The bipartisan line on China in WA state politics has emerged within the context of strong economic ties between the state and the PRC. It has also been the case that United Front organisations have sought to cultivate influence through the state divisions of both major political parties.³⁵ Under cover of increasing the engagement of ethnic Chinese in WA politics, bodies such as the Australian Chinese Labor Association and Western Australia Chinese Liberal Club have been established with ties to the United

Front body Australian Council for the Promotion of the Peaceful Reunification of China. Functioning as lobby groups, their presence and activities have been linked by some commentators to choices such as the WA government's 2018 decision to award a contract to Huawei for the provision of a communications network for Perth's rail system, despite the national government having previously barred the company from participation in the National Broadband Network and in the same year barred it from any role in Australian 5G mobile. United Front activities have led some commentators to conclude it is not a well-meaning attempt to engage more Chinese-Australians in the political process, or to express sincere differences of opinion, but instead represent "a large-scale effort, directed by agencies of the Chinese government, to shape Australian public opinion and government policies in directions conducive to the interests of the PRC."³⁶

Perhaps recognizing how effectively they have managed to encourage public differences of opinion between Perth and Canberra Beijing has made it clear how much it appreciates the WA state government. In a September 2020 statement, the Consul General in Perth declared that "Western Australia continues to play a leading role in China-Australia relations and bilateral cooperation. We appreciate the positive attitude of the WA State Government and the broad society, in particular the WA business community, in developing long-term friendly relations with China."³⁷

Victoria

The state of Victoria has been at the center of one of the most contentious recent episodes in the Australia-China relationship. It relates to two Memoranda of Understanding signed by the Victorian state government and the National Development and Reform Commission in October 2018 and October 2019 to cooperate under "the Framework of the Silk Road Economic Belt and the 21st Century Maritime Silk Road," otherwise known as the Belt and Road

³¹ Nicolas Perpitch, "WA Premier Mark McGowan 'concerned' over China row amid fears iron ore industry may suffer," *ABC News*, Dec. 1, 2020. <https://www.abc.net.au/news/2020-12-01/wa-premier-calls-for-cool-heads-in-china-row-amid-iron-ore-fears/12939094>

³² Amy Johnston and Frances Bell, "WA Treasurer Ben Wyatt delivers warnings on China and GST in farewell address to Parliament," *ABC News*, Nov. 19, 2020. <https://www.abc.net.au/news/2020-11-19/ben-wyatt-delivers-china-and-gst-warnings-in-farewell-speech/12897828>

³³ Marta Pascual Juanola, Eryk Bagshaw and Hamish Hastie, "The Chinese community group, the consulate and the Labor Premier," *The Sydney Morning Herald*, June 22, 2021. [https://www.smh.com.au/world/asia/the-](https://www.smh.com.au/world/asia/the-chinese-community-group-the-consulate-and-the-labor-premier-20210621-p582ra.html)

[chinese-community-group-the-consulate-and-the-labor-premier-20210621-p582ra.html](https://www.smh.com.au/world/asia/the-chinese-community-group-the-consulate-and-the-labor-premier-20210621-p582ra.html)

³⁴ *Ibid.*

³⁵ Wai Ling Yeung and Clive Hamilton, "How Beijing is Shaping Politics in Western Australia," Jamestown China Brief Volume 19, Issue 9. May 2019. <https://jamestown.org/program/how-beijing-is-shaping-politics-in-western-australia/>

³⁶ Yeung and Hamilton 2019.

³⁷ Jin Qian, "Winter Always Turns to Spring." Consulate General of People's Republic of China in Perth, Sept. 30, 2020. <http://perth.chineseconsulate.org/eng/notc/t1820635.htm>

Initiative (BRI).³⁸ Within two years of the initial MOU it was destined to become a major flashpoint, and prompted the national government in Canberra to adopt new policy measures in response.

As one explainer outlined following the signing of the second MOU, the signed agreements were encouragement for “Chinese infrastructure firms to establish a presence in Victoria and to bid for major projects” and would in turn open opportunities for Victorian business to sell goods and services, such as wine, meat, and education, to the Chinese market.³⁹ However, there were strong connections between political and economic motivations underlying the MOU; a demonstration of the political conditionality of increasing economic ties with Beijing. As described by one correspondent: “voicing public support for a major Chinese foreign policy initiative is likely to ease the way for Chinese companies to get approval from Beijing to make investments in Victoria, and for Victorian-based companies to sell to China. For example, the partial granting in April of a licence for Bellamy’s infant formula to sell Chinese-labeled product after years of delay came just days before a visit by [Victorian Premier] Andrews to Beijing for a Belt and Road forum.”⁴⁰ As CSIS’ Jonathan Hillman concluded in an analysis of the Victorian case, the Victorian BRI MOU was typical of BRI “bilateral agreements, in which China remains the stronger party and captures more of the immediate benefits.”⁴¹ The MOUs were executed within the wider context of Victoria’s China strategy, announced in 2016.⁴² In the foreword Daniel Andrews exalted the strength of his personal connection with China, and the importance his government places on close connections with China: “I travelled to China in September 2015, in my first official overseas visit as Premier of Victoria. And I pledge to visit China every subsequent year that I am privileged to hold this office. While I was there, I had many conversations with our Chinese friends

about how we can work together as partners.”⁴³ For his part, the Chinese Consul General in Melbourne acclaimed the importance of Victoria to Australia-China relations: “Victoria is playing a significant role in the strong development of the China-Australia comprehensive strategic partnership,” and hailed Andrews’ leadership: “The Andrews Government of Victoria has seized this historic opportunity in developing a new China Strategy. Outlining a practical plan for Victoria’s cooperation with China, the Strategy reflects the profound thinking and far-sighted vision of Premier Andrews and his government on the China-Victoria relationship.”⁴⁴ The Strategy set goals for increasing Victoria’s share of Chinese investment in Australia, Victorian exports to China, and Chinese visitors and students to Victoria. A 2018 Update to the strategy relayed an update of Andrews’ political favour in Beijing, noting that “I’ve also been proud to meet some of the most senior figures in the Chinese Government, like Premier Li Keqiang...[and] in 2017, I was [honored] to be the only leader of an Australian state invited to the prestigious Belt and Road Forum for International Cooperation, held in Beijing and based on President Xi Jinping’s vision for stronger economic and social ties with partner states.”⁴⁵ Andrews set the tone for other members of his government, with a 2018 report revealing that fellow Labor MPs undertook more than 25 visits to China in the preceding four years.⁴⁶

Within this context, the 2018 and 2019 MOUs can be seen as another step towards closer relations between the two entities on terms favourable to the CCP. And the extent to which the ties between Victoria’s state government and the CCP had an influence over Australia’s internal politics became evident in 2020, in the opening months of the COVID-19 pandemic and as the mid-2020 deadline for further substantiation of the BRI framework loomed.⁴⁷ As a diplomatic confrontation between the Australian and

³⁸ N.a. “Public-Private Partnerships in Infrastructure Fields MOU,” Government of the State of Victoria, n.d. <https://www.vic.gov.au/bri-framework#download-the-framework-agreement>

³⁹ Bill Birtles, “Victoria deepens engagement with Beijing’s controversial Belt and Road Initiative,” ABC News, Oct. 24, 2019. <https://www.abc.net.au/news/2019-10-24/victoria-deepens-links-with-china-controversial-belt-and-road/11636704>

⁴⁰ Bill Birtles, “Victoria deepens engagement with Beijing’s controversial Belt and Road Initiative,” ABC News, Oct. 24, 2019. <https://www.abc.net.au/news/2019-10-24/victoria-deepens-links-with-china-controversial-belt-and-road/11636704>

⁴¹ Jonathan Hillman, “Why Victoria took a wrong turn on China’s Belt and Road,” *Australian Financial Review*, Nov. 20, 2020. <https://www.afr.com/policy/foreign-affairs/navigating-the-emperor-s-road-why-victoria-made-the-wrong-decision-20201118-p56fru>.

⁴² N.a. “Victoria’s China Strategy,” Government of the State of Victoria, n.d. <https://www.vic.gov.au/victorias-china-strategy>.

⁴³ *Victoria’s new China Strategy: Partnerships for prosperity*, 2016, p. 3. <https://www.vic.gov.au/sites/default/files/2019-01/Victorias-China-Strategy.pdf>.

⁴⁴ Ibid.

⁴⁵ Ibid.

⁴⁶ Rebecca Urban, “Victorian election: Labor MPs clock up 25-plus visits to China,” *The Australian*, Nov. 9, 2018. <https://www.theaustralian.com.au/nation/politics/victorian-election-labor-mps-clock-up-25-plus-visits-to-china/news-story/9da6379be6d216b66df71f502743eda6>.

⁴⁷ Damon Johnston and Rachel Baxendale, “Labor Treasurer Tim Pallas lashes out at Morrison government as China deal deadline looms,” *The Australian*, May 21, 2020. <https://www.theaustralian.com.au/nation/labor-treasurer-tim-pallas-lashes-out-at-morrison-government-as-china-deal-deadline-looms/news-story/bd26c2c9559a62519039d393f148e3a8>.

PRC governments was unfolding, State Treasurer Tim Pallas attacked his national counterparts for the deteriorating relationship. Describing as “dangerous, damaging and probably irresponsible” due to their “inelegant interventions” and efforts to “vilify China” over the origins of COVID-19.⁴⁸ Instead he urged “we need to basically be balanced and measured in terms of our engagement with a valuable and long-term trading partner, and certainly this [Victorian] government has no intention of seeking to vilify a government.”⁴⁹ In a separate statement Pallas declared that “I’m not a big fan of the way the federal government has managed the relationship with China.”⁵⁰ The treasurer’s extraordinary intervention has been subsequently explained by some observers as tied to the late-stage negotiations with the PRC over the next stage of the BRI agreement—with the implication being that weighing in on Beijing’s side of the dispute would result in more favorable outcomes for Victoria.⁵¹

Some commentators highlighted the role of the Australia-China Belt and Road Initiative organisation (ACBRI) in inducing Victoria’s support for BRI.⁵² ACBRI has engaged former Liberal and Labor federal ministers to assist with its mission of “articulating the relevance of the Belt & Road strategy to Australian industries and identifying practical opportunities for expanded trade and investment.”⁵³ One of its key personnel is Jean Dong, a young Chinese-Australian businesswoman who has claimed in a biographic video “to have played key roles in bringing about the China-Australia free-trade agreement, and Victoria’s Belt and Road Initiative deal, telling the story of her journey from student journalist in Beijing, to rubbing

shoulders with Australian prime ministers and premiers and Chinese president Xi Jinping.”⁵⁴ Reporting about Ms Dong revealed that she had visited China in 2014 to attend the Australia-China Youth Dialogue alongside Mike Yang, a one-time employee of Andrews and former vice president of the United Front body Australian Council for the Promotion of the Peaceful Reunification of China (ACPPRC). Yang has been credited as being the architect of Andrews’ China strategy (and is one of several purported United Front affiliates to have been employed in the Andrews government).⁵⁵ ACBRI had enjoyed privileged access to Victoria’s corridors of power. Daniel Andrews had spoken at one of their events on the benefits of stronger economic ties between Victoria and China, and ACBRI had been awarded two taxpayer-funded contracts to provide advice on the BRI that it was also promoting.⁵⁶ Despite previously boasting of the influence of ACBRI in persuading the Victorian government to sign up to BRI, in which it aspired “to make Victoria a model for Sino-Australian [BRI] cooperation,” ACBRI downplayed any influence after drawing attention from national media.⁵⁷ ACBRI later took the unusual step of removing its website following the interest in the organization that arose from the controversy.⁵⁸

And yet CCP influence operations have not exclusively targeted the Victorian Labor Party. Shortly after winning the seat of Chisholm at the 2019 election, Liberal MP Gladys Liu attracted national media attention over alleged links to the United Front

⁴⁸ Rachel Baxendale, “Coronavirus Australia: Victorian Treasurer Tim Pallas defends Belt and Road deal with China,” *The Australian*, May 13, 2020. <https://www.theaustralian.com.au/nation/coronavirus-australia-victoria-treasurer-defends-belt-and-road-deal-with-china/news-story/1bcb17898e7736090aee17f28308ffcd>.

⁴⁹ Ibid.

⁵⁰ Damon Johnston and Rachel Baxendale, “Labor Treasurer Tim Pallas lashes out at Morrison government as China deal deadline looms,” *The Australian*, 21 May 2020. <https://www.theaustralian.com.au/nation/labor-treasurer-tim-pallas-lashes-out-at-morrison-government-as-china-deal-deadline-looms/news-story/bd26c2c9559a62519039d393f148e3a8>

⁵¹ Damon Johnston, “Belt and Road Initiative: Inside Daniel Andrews’ secret China deal,” *The Australian*, April 22, 2021. <https://www.theaustralian.com.au/commentary/belt-and-road-initiative-inside-daniel-andrews-secret-china-deal/news-story/b40e9ef9c398d420d31727fe1f77a02b>.

⁵² Rachel Baxendale and Damon Johnston, “Coronavirus: Daniel Andrews clams up over DFAT advice on China,” *The Australian*, May 22, 2020. <https://www.theaustralian.com.au/nation/politics/coronavirus-daniel-andrews-clams-up-over-dfat-advice-on-china/news-story/d4d4b44773082f8c3263d8ce3007d976>.

⁵³ Ibid.

⁵⁴ Rachel Baxendale, Remy Varga, and Damon Johnston, “Dan Andrews and China’s Aussie influencer,” *The Australian*, May 25, 2020.

<https://www.theaustralian.com.au/nation/dan-andrews-and-chinas-aussie-influencer/news-story/1e1763bf4fd699f3eeca7d27830913>.

⁵⁵ Rachel Baxendale, Remy Varga, and Damon Johnston, “Dan Andrews and China’s Aussie influencer,” *The Australian*, May 25, 2020.

<https://www.theaustralian.com.au/nation/dan-andrews-and-chinas-aussie-influencer/news-story/1e1763bf4fd699f3eeca7d27830913>; Rachel Baxendale, “China-linked Victorian government staffer Nancy’s coronavirus conspiracy,” *The Australian*, June 2, 2020.

<https://www.theaustralian.com.au/nation/politics/chinalinked-victorian-government-staffer-nancys-coronavirus-conspiracy/news-story/ebeb8029f7e28d4b6e5a1e31e6d781da>; Rachel Baxendale, “Andrews dismisses links to China’s United Front Work Department,” *The Australian*, June 9, 2020. <https://www.theaustralian.com.au/nation/andrews-dismisses-links-to-chinas-united-front-work-department/news-story/a0c8c25ba4c4efbcf1d2ac9f8a2efc08>.

⁵⁶ Damon Johnston and Rachel Baxendale, “Adviser’s secret link to state’s agreement on Belt and Road,” *The Australian*, May 24, 2020.

<https://www.theaustralian.com.au/nation/advisers-secret-link-to-states-agreement-on-belt-and-road/news-story/1b6697615e166010a3376ddb2b8e1330>

⁵⁷ Ibid.

⁵⁸ Matthew Denholm, “Belt and Road’s ‘unusual’ lobbying,” *The Australian*, Aug. 3, 2020. <https://www.theaustralian.com.au/nation/belt-and-road-company-in-unusual-pitch-to-tas-gov/news-story/7c3dbfe0f005d5ab47206c00051cc0b8>.

Work Department.⁵⁹ In the same federal electorate, home to much of Melbourne’s ethnic Chinese community, a young Chinese-Australian Liberal Party member was alleged to have been cultivated by the CCP to run for Parliament, allegedly approached by a Melbourne business figure (purported to be operating on behalf of the CCP) who had offered a \$1 million AUD inducement (the story has not been substantiated).⁶⁰ More recently, a Liberal Party donor who had cultivated relationships with federal MPs was found by ASIO to have engaged in “acts of foreign interference” and had his visa revoked.⁶¹

Lessons and Recommendations for Policymakers

CCP United Front work directed at subnational governments has received considerable scrutiny in Australia.⁶² The specifics of a particular relationship matter a great deal to the form that United Front work may take. Yet they do conform to a wider pattern of engagement with subnational governments throughout the world for the purpose of building influence.⁶³ The details that have been provided in open source material demonstrate clear patterns which also appear evident in CCP operations elsewhere in the Western world.⁶⁴ As a consequence, the Australian experience is relevant to policymakers throughout the world. And much like Australia is serving as a training ground for the CCP, so too will Australia’s response provide a template that could be followed by the rest of the world.

By design, United Front work operates under conditions of ambiguity, using the cloak of legitimate activities to advance an ulterior agenda. This poses a diabolical problem for Western policymakers, because of the prospect that policy responses designed to curtail United Front work would place intolerable restrictions on the open, liberal, pluralistic

values at the core of Western governance. Furthermore, the problem is not exclusively nefarious CCP activities, but also the ease with which the CCP has been able to cultivate “friendships” with Western politicians, who “have a long history of willingly accepting free trips, gifts, and other favors from the PRC or its fronts.”⁶⁵ Recognizing these facts—that United Front work is tailored to take advantage of the openness of liberal democratic systems, and that Western subnational officials may be unaware, or dismissive, of concerns regarding engagement with the CCP—is essential if suitable policy responses are to be designed.

Australia has recently enacted legislative changes to address concerns regarding foreign influence over subnational governments. In December 2020 the Australian Parliament passed the *Australia’s Foreign Relations (State and Territory Arrangements) Act*. The Act introduced a new scheme to cover the relations between Australian subnational governments and foreign governments (and their associated entities). It was explicitly described by Prime Minister Morrison as a means to ensure that Australian governments at different levels “speak with one voice and act in accordance with one plan.”⁶⁶

The Act obliges Australian subnational governments and their associated entities (such as public universities) to notify the federal government of any written arrangements—whether binding or non-binding—with foreign governments, and for arrangements of this kind to be made available in a public register. Any arrangement considered antithetical to Australia’s foreign policy can be revoked by the Minister for Foreign Affairs.⁶⁷ In April 2021 the Act was used by Foreign Minister Marise Payne to terminate Victoria’s BRI MOU,

⁵⁹ Ryan Manuel, “The United Front Work Department and how it plays a part in the Gladys Liu controversy,” *ABC News*, Sept. 15, 2019. <https://www.abc.net.au/news/2019-09-15/gladys-lui-united-front-work-department/11511028>.

⁶⁰ Dan Conifer, “How a dead Liberal Party member put a fresh spotlight on Beijing’s foreign interference efforts,” *ABC News*, Nov. 25, 2019. <https://www.abc.net.au/news/2019-11-25/chinese-spy-parliament-foreign-interference-in-hong-kong-taiwan/11735176>; Nino Bucci and Echo Hui, “Bo ‘Nick’ Zhao was in a Melbourne jail awaiting a fraud trial during the Chisholm preselection,” *ABC News*, Nov. 29, 2019. <https://www.abc.net.au/news/2019-11-29/bo-nick-zhao-in-jail-at-time-of-chisholm-preselection/11746984>.

⁶¹ Sean Rubinsztein-Dunlop and Echo Hui, “Liberal Party donor Huifeng ‘Haha’ Liu ‘engaged in acts of foreign interference’: ASIO,” *ABC News*, March 12, 2021. <https://www.abc.net.au/news/2021-03-12/asio-assessment-revealed-in-haha-liu-court-application/13234740>.

⁶² Alex Joske’s assessment is that “outside of Australia, New Zealand and the Czech Republic, there are very few detailed country-specific studies of influence and technology transfer efforts linked to the united front system.” See Alex Joske, *The Party Speaks for You: Foreign interference and the*

Chinese Communist Party’s united front system, Australian Strategic Policy Institute Policy Brief, Report No. 32, 2020, p. 19.

⁶³ John Dotson, “China Explores Economic Outreach to US States Via United Front Entities,” *The Jamestown Foundation*, June 26, 2019. <https://jamestown.org/program/china-explores-economic-outreach-to-u-s-states-via-united-front-entities/>; Clive Hamilton and Mareike Ohlberg, *Hidden Hand: Exposing how the Chinese Communist Party is reshaping the world*, Hardie Grant Books, Melbourne, 2020, chapter 5.

⁶⁴ See Clive Hamilton and Mareike Ohlberg, *Hidden Hand: Exposing how the Chinese Communist Party is Reshaping the World*, Hardie Grant Books, Melbourne, 2020.

⁶⁵ Diamond and Schell p. 34.

⁶⁶ Stephen Dziedzic, “The Federal Government’s new foreign relations laws have passed Parliament. Here’s what that means,” *ABC News*, Dec. 8, 2020. <https://www.abc.net.au/news/2020-12-08/what-are-the-governments-new-foreign-relations-laws-about/12947590>.

⁶⁷ Melissa Conley Tyler, “What is the effect of Australia’s new foreign relations law?,” *East Asia Forum*, Dec. 12, 2020. <https://www.eastasiaforum.org/2020/12/12/what-is-the-effect-of-australias-new-foreign-relations-law/>.

characterised as “another unreasonable and provocative move taken by the Australian side against China” by an official from the embassy in Canberra.⁶⁸ Since the Victorian deal was overturned, there have been calls for a similar response to the Western Australian MOU with the NDRC.⁶⁹

The Act represents an acknowledgement from the Australian government of the danger of foreign policy objectives being undermined by the cultivation of foreign “friends” at lower levels of government. However, it has been suggested that the spirit of the Act is not fulfilled by the “under-reach” of its provisions.⁷⁰ One of the most conspicuous issues is the explicit provision stating that commercial organisations are not subject to the Act’s requirements. This would even include state-owned enterprises. Furthermore, as Salvatore Babones notes, the Act elevates form over substance—its concern with written arrangements does not cover the range of activities that lead up the signing of such arrangements. Therefore, even with the Act in force, an Australian premier:

Could travel to Beijing, speak at a Belt and Road forum, meet top Chinese leaders, endorse China’s foreign policy initiatives, praise China using standard Chinese foreign policy tropes, and pitch for investments from Chinese state-linked firms.⁷¹

Underscoring the point, the Victorian government was the only Australian state government to send a delegation to the China International Import Expo in Beijing in November 2021, six months after the federal government annulled the BRI MOU.⁷²

While suitable for revoking agreements that clearly work against national foreign policy goals, and a strong symbolic affirmation of the federal government’s exclusive role in formulating foreign policy, the Act in and of itself is not sufficient to address the problem of foreign subnational influence operations. It is best seen as a means to ameliorate the most egregious problems that might result from foreign influence operations.

Openness and transparency should be the guiding principles of the policy response to CCP foreign influence operations. Only through the open access to information can the strengths of Western civil society be marshalled in response to the challenge. The ideal response will utilise new policies to promote transparency, in concert with strengthening existing countermeasures.

Immediate Recommendations

The most pressing priority is for policymakers to recognise the problem of rampant foreign interference. In line with the dominant post-Cold War mentality in the West, there are those who deny or underplay the significance of the threat to liberal democratic systems posed by foreign influence. This position is no longer tenable given the demonstrated scale of CCP operations in Australia and elsewhere. It is necessary to come to terms with this reality as a prerequisite to adopting appropriate countermeasures.

In order to respond to current threats, which thrive in secrecy, further transparency is required. Transparency serves to discourage “friendship” with questionable associations in two ways. In a positive sense, it can educate subnational officials inclined to pursue foreign arrangements at face value with good intentions. Transparency can also be a powerful deterrent for those subnational leaders inclined to pursue unwise engagements in the expectation they will not suffer consequences. Shadowy deals with foreign governments are antithetical to the expectations of Australians, including the parliamentarians, party members, and constituents upon whom subnational political leaders rely to serve in office.

Transparency regarding foreign influence operations at the subnational level could be achieved through a variety of measures. A public register of arrangements, such as required under the *Australia’s Foreign Relations (State and Territory Arrangements) Act*, can be supplemented by investigations from media or other civil society organisations to ask probing

⁶⁸ Jade Gailberger, “Foreign Affairs Minister Marise Payne scraps Victoria’s Belt and Road deal with China,” *The Australian*, April 22, 2021. <https://www.theaustralian.com.au/breaking-news/foreign-affairs-minister-marise-payne-scraps-victorias-belt-and-road-deal-with-china/news-story/b619d2aec1ecb6963fea8165df907cd1>

⁶⁹ Daniel Hurst, “Coalition faces call to cancel investment deal between Western Australia and China,” *The Guardian*, May 5, 2021. <https://www.theguardian.com/australia-news/2021/may/05/coalition-faces-calls-to-cancel-investment-deal-between-western-australia-and-china>

⁷⁰ Salvatore Babones, *A House Divided: The AFRB and China’s Subnational Diplomacy in Australia*, Centre for Independent Studies Analysis Paper 17, 2020, p. 11.

⁷¹ Ibid.

⁷² Will Glasgow, “Andrews and Morrison part ways again over China trade,” *The Australian*, Nov. 5, 2021. <https://www.theaustralian.com.au/nation/politics/andrews-morrison-part-ways-again-over-china-trade/news-story/tf77964a73a84aac66e3e025e0c3d7757>

questions, expose incriminating details, and promote accountability. Such measures would apply pressure to existing arrangements, and dissuade arrangements that may be under consideration.

Current foreign influence operations should also be targeted by intelligence and law enforcement agencies in accordance with existing laws. Australia’s Foreign Influence Transparency Scheme, enacted in 2018, requires individuals or organisations acting on behalf of a foreign principal to register their activities in order to promote transparency in relation to foreign influence over Australia’s government and politics.⁷³ In November 2020 a former member of the Victorian Liberal Party, Di Sanh Duong, became the first person prosecuted over alleged acts of foreign interference, following investigations by ASIO and the Australian Federal Police.⁷⁴ National policymakers should ensure that the relevant federal agencies are sufficiently resourced to investigate cases of foreign interference, and prosecute breaches in accordance with their severity.

Long-Term Recommendations and Conclusion

The likelihood of future arrangements could be reduced by other measures that could be pursued by national governments. One useful measure would be outreach and education programs for subnational politicians and bureaucrats regarding the prospects and characteristics of foreign influence operations that may target them. In order to provide outreach and educational programs, federal authorities should increase the reservoir of relevant national expertise. This would include expanded resourcing for universities and think tanks to develop, recruit, and house experts in influence operations. These experts could provide materials and tailored education services to subnational leaders for the purpose of curtailing foreign influence operations.

The principle of strengthening engagement between national and subnational governments should be encouraged. Given the typical dearth of foreign affairs awareness or expertise within subnational forms of government—a deficiency which makes them a ripe target for the CCP—national officials from the foreign policy and intelligence communities

should educate and inform subnational decision-makers of the risks associated with foreign engagement. Subnational decision-makers should also have ready access to China expertise, particularly in the form of language skills and translation services. These measures would encourage subnational decision-makers to consider all relevant context when it comes to foreign engagement.

The nub of the challenge was summarised by Andrew Hastie, now Assistant Minister for Defence: “[With China] we are dealing with a state that uses the whole of society to advance its national objectives. We are less organised because we believe in individual liberty. That’s a good thing for Australia but it does make us vulnerable to authoritarian states.”⁷⁵

As Hastie implies, the necessity of adopting stronger measures to respond to foreign interference is in many ways regrettable. Liberal democratic systems operate most effectively, and offer the greatest quality of life to their citizens, when they are ordered by “soft” means such as norms, rather than “hard” means such as laws and institutions. But a rigid commitment to norms that are being exploited by foreign powers is unwise and unsustainable. Furthermore, the disadvantages of liberal democracy do not need to become existential problems if they are addressed in a manner that is timely and appropriate. And liberal democracy, when it has faced challenges in the past, has proven to permit a greater degree of adaptability compared to centralized and authoritarian rival systems. The challenge is to limit exposure to the subversion of foreign powers without compromising national character or values.

Disclaimer: The views presented in this paper are solely those of the author, and do not represent the official policy or position of the Australian government.

⁷³ N.a. “Foreign Influence Transparency Scheme”, Attorney General’s Office, n.d. <https://www.ag.gov.au/integrity/foreign-influence-transparency-scheme>

⁷⁴ Tammy Mills and Erin Pearson, “Former Liberal candidate will contest foreign interference charges,” *The Age*, The Age, Sept. 7, 2021.

<https://www.theage.com.au/national/victoria/former-liberal-candidate-will-contest-foreign-interference-charges-20210907-p58ph2.html>

⁷⁵ David Wroe, “Defending democracy a generational struggle, Australian MPs warn,” *Sydney Morning Herald*, July 10, 201. <https://www.smh.com.au/politics/federal/defending-democracy-a-generational-struggle-australian-mps-warn-20180710-p4zqlj.html>

3

Economic Mate-ship: US-Australian Policy Alignment to Counter PRC Economic Coercion

Rose Rodgers

Abstract

In recent years, the United States and Australia's foreign investment screening regulations have evolved to encompass a new concept of national security, one in which critical and foundational technologies are at the forefront. The People's Republic of China's coercive economic actions, which include a range of illicit and legal activities which ultimately support the acquisition of critical technologies for military means, fueled the enhancement of foreign screening mechanisms in both the United States and Australia. The United States and Australia cannot counter malign PRC economic activities alone; they both need the assistance of and coordination with one another. The security cooperation agreement between Australia, the United Kingdom, and the United States (AUKUS), which facilitates the sharing of military capabilities and critical technologies, further necessitates the alignment of regimes that protect sensitive technologies. The United States government is increasingly taking strict countermeasures against technology transfers to the PRC, such as increasing scrutiny on PRC investment in critical and emerging technology, tightening US export controls on sales to PRC military end-users, and restricting the People's Liberation Army ability to obtain nonimmigrant visas. PRC investment in Australia has predominantly targeted mining and real estate, including the infamous investment in the Port of Darwin, a commercial and military port in northern Australia. Since 2017, Australia has ramped up its security on foreign investment. Australia amended its Foreign Acquisitions and Takeovers Act 1975 to increase the oversight of foreign investments in critical infrastructure and permit the review of foreign investments that may harm Australia's national security writ large. This paper analyzes the degree of alignment with the US and Australian foreign investment screening mechanisms.

It is well documented that China's tactics of coercive economic behavior are constantly evolving, encompass a wide range from illicit to legal activities, and ultimately support the acquisition of critical technology for military means.¹ As the US Department of State May 28 fact sheet on Military-Civil Fusion iterated, "The [Chinese Communist Party] is developing and acquiring key technologies through licit and illicit means. These include investment in private industries, talent recruitment programs, directing academic and research collaboration to military gain, forced technology transfer, intelligence gathering, and outright theft."² It is worth noting that this is not a new phenomenon for the PRC. A 1975 RAND study on PRC technology acquisition in the aircraft industry illuminates how the PRC used an expansive toolkit to procure necessary foreign technology from advanced industrial nations.³

The United States government is increasingly taking strict countermeasures against technology transfers to the People's Republic of China (PRC), such as increasing scrutiny on PRC investment in critical and emerging technology, tightening US export controls on sales to PRC military end-users, and restricting the People's Liberation Army ability to obtain nonimmigrant visas.⁴ These restrictive economic countermeasures have become an increasingly important tool of US foreign policy in recent years. However, China's efforts to obtain foreign technology or engage in economic coercion are not limited to the US, but also target US partners and allies, particularly those in the Indo-Pacific. On December 16, 2021, Australian Treasurer Josh Frydenberg stated, "We have been on the receiving end of economic coercion from China."⁵

PRC investment in Australia has predominantly targeted mining and real estate, including the infamous investment in the Port of Darwin, a commercial and military port in northern Australia.

These investments, individually, didn't raise an alarm for the Foreign Investment Review Board, Australia's foreign investment screening mechanism. However, an Australian Strategic Policy Institute (ASPI) report noted, since 2017, the political and economic relationship between Australia and the PRC has continued to deteriorate.⁶ Amid PRC-Australian trade tensions, Australia has ramped up its security on foreign investment. Additionally, Australia maintains a robust export control regime in compliance with its multilateral export control obligations and has also begun to overhaul its espionage laws to prohibit foreign government influence in Australian politics.

Collectively, these measures more closely align the United States and Australia in countering PRC economic statecraft. Both countries have enhanced mechanisms to screen foreign direct investment. The United States and Australia cannot counter malign PRC economic activities alone; they both need the assistance of and coordination with one another. This paper will analyze the degree of alignment with the US and Australian foreign investment screening mechanisms. It will then discuss the areas in which there is close collaboration, and the paper finally concludes with an analysis of where there needs to be greater alignment.

The United States

Due to growing concerns of Chinese FDI in sensitive and critical technology firms, the US has broadened the authority of the foreign investment screening body, the Committee on Foreign Investment in the United States (CFIUS). According to the US Department of Treasury, "CFIUS is an interagency committee authorized to review certain transactions involving foreign investment in the United States and certain real estate transactions by foreign persons, in order to determine the effect of such transactions on the national security of the United States."⁷ Recent

¹ Tenyotkin et al., "Economic Statecraft: How China Legally Accesses Foreign Technologies to Build Military Capabilities."

² "Military-Civil Fusion and the People's Republic of China," US Department of State, May 28, 2020, <https://www.state.gov/remarks-and-releases-bureau-of-international-security-and-nonproliferation/mcf-and-the-prc/>.

³ Hans Heymann, "China's Approach to Technology Acquisition: Part 1 - the Aircraft Industry," RAND, February 1975, <https://www.rand.org/content/dam/rand/pubs/reports/2009/R1573.pdf>.

⁴ "Expansion of Export, Reexport, and Transfer (in-Country) Controls for Military End Use or Military End Users in the People's Republic of China, Russia, or Venezuela," US Department of Commerce, April 28, 2020, <https://www.federalregister.gov/d/2020-07241>; Chris Ford, "Technology Transfer to the PRC Military and U.S. Countermeasures: Responding to Security Threats with New Presidential Proclamation," Arms Control and

International Security Papers, vol. 1 no. 9, June 5, 2020, <https://www.state.gov/wp-content/uploads/2020/06/T-paper-Visa-Policy-Final-3.pdf>.

⁵ Wayne Cole, "Australia facing economic coercion from China - Treasurer," Reuters, Dec. 16, 2021, <https://www.reuters.com/world/asia-pacific/australia-facing-economic-coercion-china-treasurer-2021-12-17/>.

⁶ Fergus Hanson, Emilia Currey, Tracy Beattie, "The Chinese Communist Party's Coercive Diplomacy," Australian Strategic Policy Institute, September 1 2020, https://s3-ap-southeast-2.amazonaws.com/ad-aspi/2020-08/The%20CCPs%20coercive%20diplomacy_0.pdf?4MJTUAd05Bjek_hvHt1NKKdCLts4kbY.

⁷ N.a., "The Committee on Foreign Investment in the United States (CFIUS)," U.S. Department of the Treasury, n.d.

changes to US laws, under the Foreign Investment Risk Review Modernization Act (FIRRMA), expanded CFIUS's ability to block investments that it deems a threat to US national security. Under the CFIUS statute, only the President has the authority to prohibit transactions due to national security concerns. However, CFIUS offers mitigation measures a company may meet to assuage national security concerns with a given transaction.

PRC investment in critical technologies

The PRC deploys a myriad of tactics to acquire foreign technology from abroad, and the majority of these methods are perfectly legal. For example, one legal method the PRC uses to obtain foreign technology is through investments, including mergers, acquisitions, joint ventures, in foreign companies. While historically the PRC sought complete weapons platforms or systems, the PRC's focus has shifted to components, items like semiconductors or microchips, that can be incorporated into indigenously developed systems. From 2001 to its peak in 2006, PRC foreign direct investment in the US rose annually, as displayed in Figure 1. In 2015, a report from the US-China Economic Security Review Commission stated, "Chinese companies are poised to deepen their presence in the United States."⁸

However, China's investment in the US experienced an even more dramatic decrease than the overall global PRC outflow of FDI. China's investment in the US peaked in 2016 at \$48.5 billion dollars. In 2020, FDI between the US and China fell \$15.9 billion, the lowest levels since 2009.⁹ There are two drivers behind this trend:

- 1) Domestic legislation within the PRC on outbound FDI, and
- 2) US government increasing scrutiny on PRC investment, particularly in sensitive sectors related to national security.

This paper will focus on the second driver. After 2016, the US government increased scrutiny on PRC investment, particularly in sensitive sectors pertaining to national security. The USTR report stated, "China's outbound investment regime is unreasonable because it is directed and supported by the government, and unfairly targets critical US technology with the goal of achieving dominance in strategic sectors."¹⁰ Simultaneously, the US has strengthened the Committee on Foreign Investments in the United States (CFIUS),¹¹ a US interagency body tasked with examining foreign investment implications on US national security and made changes to its export control regime in an attempt to limit the acquisition of critical and emerging technologies.¹²

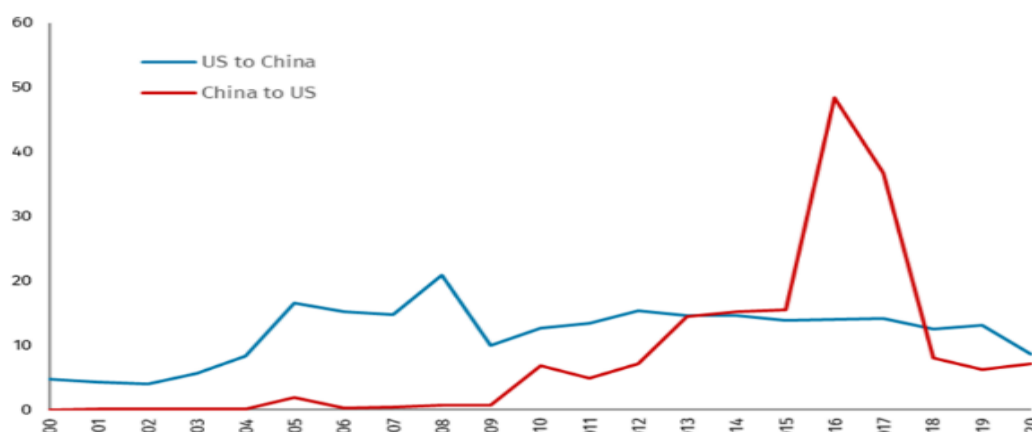


Figure 1 Annual Value of FDI Transactions between the US and China, 2000-2020 (US billions)

Source: Thilo Hanemann, et al, "Two-Way Street: 2021 Update US-China Investment Trends," May 2021, https://rhg.com/wp-content/uploads/2021/05/RHG_TWS-2021_Full-Report_Final.pdf.

<https://home.treasury.gov/policy-issues/international/the-committee-on-foreign-investment-in-the-united-states-cfius>.

⁸ Isaac Koch-Weser and Gerland Ditz, "Chinese Investments in the United States: Recent Trends in Real Estate, Industry, and Investment Promotion", U.S.-China Economic and Security Review Commission, Feb. 26, 2015.

https://www.uscc.gov/sites/default/files/Research/Ch%20invt%20paper_2%2026%2015.pdf

⁹ Rhodium Group's US-China Investment Hub, 2021, https://rhg.com/wp-content/uploads/2021/05/RHG_TWS-2021_Full-Report_Final.pdf.

¹⁰ US Office of the Trade Representative, "Findings of The Investigation Into China's Acts, Policies, and Practices Related to Technology Transfer,

Intellectual Property, and Innovation Under Section 301 of the Trade Act Of 1974," March 22, 2018,

http://www.iberchina.org/files/2018/ustr_china_summary.pdf.

¹¹ US Department of Treasury, "Summary of the Foreign Investment Risk Review Modernization Act of 2018" (FIRRMA), n.d.,

<https://www.treasury.gov/resource-center/international/Documents/Summary-of-FIRRMA.pdf>.

¹² Foreign Investment Risk Review Modernization Act of 2018, 31 U.S.C. § 802 (2018); Export Control Reform Act of 2018, 50 U.S.C. § 4801-4852 (2018).

Between 2016 and 2018, the US government blocked a series of PRC investments in the semiconductor sector. In 2016, the Obama administration prevented PRC-based Fujian Grand Chip Investment Fund from acquiring a US subsidiary of German semiconductor company Aixtron SE. The White House Press Statement stated the transaction was blocked because the PRC company “might take actions that threaten to impair the national security of the United States.”¹³ In 2017, President Trump blocked the Chinese firm Canyon Bridge Capital Partners’ proposed \$1.3 billion acquisition of Lattice Semiconductor Corporation, a US chipmaker. In 2018, President Trump prevented PRC-based Hubei Xinyan from acquiring US semiconductor testing company Xcerra Corp, again citing national security concerns.¹⁴

CFIUS reform: FIRRMA

In 2018, the US Congress passed the Export Control Reform Act (ECRA) and the Foreign Investment Risk Review Modernization Act (FIRRMA) in order to address these issues, especially as it relates to critical and emerging technologies. ECRA enhances the export controls and investment screening on emerging and foundational technologies that are considered critical to US national security. FIRRMA modernizes and strengthens CFIUS to protect critical technology and alleviate national security concerns stemming from foreign non-controlling investments (i.e., less than a 50% ownership share), which previously did not fall under CFIUS jurisdiction.

FIRRMA also encourages US partners and allies to establish and align their national security review processes with the US. Under the new legislation, specific countries - the United Kingdom, Canada, and Australia—were granted an “excepted foreign state” status, meaning investors from these countries may qualify for exemptions in the CFIUS review process.

The “excepted foreign state” status expires in two years unless these countries meet specific requirements on screening foreign investment for national security-based concerns.

Foreign entities investing in the US from exempted states must meet the following criteria:

- The foreign entity must be organized under the laws of the excepted foreign state;
- The foreign entity must have its principal place of business in an excepted foreign state or in the United States;
- 75% or more of the members of its board of directors and 75% or more of the observers on the board of directors of the foreign entity must be nationals of one or more excepted foreign states or the United States.”¹⁵

Australia

Australia’s foreign investment screening framework is established by the *Foreign Acquisitions and Takeovers Act 1975* (the Act) and successive supporting legislation and regulations. Recently the Australian Government has taken steps to increase oversight of foreign investments in critical infrastructure. The *Security of Critical Infrastructure Act 2018* and *The Telecommunications and Other Legislation Amendment Act of 2017* are used by the Critical Infrastructure Center to gather information on owners and operators of critical infrastructure in the sensitive sectors of electricity, water, ports, gas, and carrier services. The Foreign Investment Division in the Australian Department of the Treasury is tasked with the day-to-day administration of the rules and regulations surrounding FDI in Australia.

Australia’s Foreign Investment Review Board (FIRB) examines foreign investment proposals and advises the Treasurer on the implications for Australian national security.¹⁶ The FIRB regime applies to “foreign persons,” which it defines as individuals not ordinarily resident in Australia, foreign government investors, a corporation in which a foreign government holds an interest of 20 percent or more, a corporation owned by two or more persons not ordinarily resident in Australia, or a corporation where a combination of foreign governments and non-Australians own more than a 40% stake.¹⁷

¹³ The White House—President Barack Obama, *Presidential Order -- Regarding the Proposed Acquisition of a Controlling Interest in Aixtron SE by Grand Chip Investment GmbH*, by Barack Obama, Washington, D.C., 2016, <https://obamawhitehouse.archives.gov/the-press-office/2016/12/02/presidential-order-regarding-proposed-acquisition-controlling-interest>.

¹⁴ Greg Roumeliotis, “U.S. blocks chip equipment maker Xcerra’s sale to Chinese state fund,” Feb. 22, 2018, <https://www.reuters.com/article/xcerra-ma-hubeixinyan-idUSL2N1QD01X>.

¹⁵ Robert Soza, “Exceptions to Coverage for “Excluded” Foreign Investors and States and Investment Funds From the Expanded CFIUS Jurisdiction,” Feb. 18, 2020, <https://www.jw.com/news/cfius-series-excepted-foreign-investors-states/>.

¹⁶ “About FIRB,” Foreign Investment Review Board, 2020, <https://firb.gov.au/about-firb>.

¹⁷ “Definitions,” Foreign Investment Review Board, 2020, <https://firb.gov.au/guidance-resources/definitions>.

Australia's foreign investment review framework is based on a system of differentiated categories for foreign investment. These categories are based on monetary thresholds, which range from \$0, the most restrictive, to \$1.25 million, for non-sensitive businesses. The thresholds also differ from land investments to non-land investments. All investments from foreign governments require a review.

Recent reforms to the FIRB, discussed in more detail below, have been attributed to the increased concern around PRC investment in Australia. A key finding of a 2018 Lowy Institute poll was that "Only 41% of Australians view foreign interference in our political processes as a 'critical threat', but there has been a striking rise in the proportion of the Australian population (to 72%) who say the Australian government is 'allowing too much investment from China'."¹⁸ This perception is not without merit, as Australia has been a large recipient of PRC outward foreign direct investment.

PRC investment in natural resources

Simultaneous with the PRC's steady economic rise over the past two decades, PRC overseas foreign direct investment, particularly in strategic sectors in advanced industrial nations, aggressively rose. China gradually became a leading global portfolio investor. China's demand for modern technology, food security, energy, and mineral resources drove PRC enterprises' investment. Since the establishment of diplomatic relations between the PRC and Australia in 1972, the political eb and flow of tensions has historically been underpinned by relatively stable and pragmatic economic cooperation. For Australia, PRC capital represented a fairly new source of foreign direct investment.¹⁹ The PRC invested

billions in Australia's mining, real estate, and commercial services over the past 10 years.

2009, in particular, saw a flurry of investment activity from PRC enterprises in Australian mining and real estate. In February 2009, PRC-state owned Hunan Valin Steel Co., Ltd. purchased a 16.5% stake of Australian iron ore company Fortescue Metals.²⁰ In the same month, Chinese state-owned aluminum group Chinalco purchased a \$19.5 billion dollar stake in Rio Tinto, an Anglo-Australian multinational mining company.²¹ A few months later, in June 2009, Anshan Iron & Steel Group (AnSteel), a leading Chinese steelmaker, purchased a \$128 million stake in Australian iron ore miner Gindalbie Metals Ltd., increasing its ownership to 36%.²² Baosteel Group, a Shanghai-based state-owned company, acquired a 15% (\$241.2 million USD) stake in Aquila Resources, an Australian iron and ore company in August 2009.²³ Also in August, PRC's Yangzhou Coal Mining Company purchased Australian coal miner Felix Resources Ltd for \$2.9 billion.²⁴ Australia's FIRB approved each one of these transactions, and, occasionally, instituted restrictions. For example, the FIRB limited Baosteel's stake to at most 19.9%.²⁵ Despite initial roadblocks placed by the FIRB, PRC enterprises continued to pursue and purchase Australian resource companies.

According to a 2017 Deloitte study, "Capital inflows from China have increased substantially in recent years, quadrupling in value from \$19 billion in 2010 (or 1% of foreign investment in Australia) to \$87 billion in 2016 (or 2.7% of foreign investment in Australia)."²⁶ In 2015 the bulk, approximately 70%, of PRC investment was in real estate and other service sector industries. However, 2016 also marked the peak of PRC investment in Australia in the last 10 years, with aggregate levels of investment falling

¹⁸ Alex Oliver, "2018 Lowy Institute Poll", Lowy Institute, June 20, 2018.

<https://www.lowyinstitute.org/publications/2018-lowy-institute-poll>

¹⁹ "Partners in prosperity: The benefits of Chinese investment in Australia A report by Deloitte Access Economics for the Australia China Business Council and sponsored by ANZ," Deloitte, June 2017, <https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-benefits-chinese-investment-in-australia-130617.pdf>.

²⁰ Raphael Minder, "Hunan Valin buys A\$1.2bn stake in Fortescue," *Financial Times*, Feb. 24, 2009, <https://www.ft.com/content/a139d3ca-026d-11de-b58b-000077b07658>.

²¹ Sonali Paul and Eric Onstad, "Rio Tinto sells \$19.5 billion in assets to China," *Reuters*, Feb. 11, 2009, <https://www.reuters.com/article/us-riotinto-idUSSYD42367120090212>.

²² Jiang Wei, "AnSteel gets Gindalbie approval," *China Daily*, June 24, 2009, https://www.chinadaily.com.cn/business/riospying/2009-06/24/content_8330883.htm.

²³ Peter Smith and Patti Waldmei, "Baosteel to buy 15% of Aquila," *Financial Times*, Aug. 28, 2009, <https://www.ft.com/content/e306ef36-93f4-11de-9c57-00144feabdc0>; Mark Pownell,

"<https://www.businessnews.com.au/article/FIRB-rules-trigger-magic-numbers>," *Business News*, March 09, 2009, <https://www.businessnews.com.au/article/FIRB-rules-trigger-magic-numbers>.

²⁴ Denny Thomas, "China's Yanzhou Coal to buy Felix for \$2.9 billion," *Reuters*, Aug. 13, 2009, <https://www.reuters.com/article/us-felix-yanzhou-idUSTRE57C1IH20090813>.

²⁵ "Baosteel takes over stake in Aquila," *Xinhua*, Nov. 24, 2009, http://www.china.org.cn/business/2009-11/24/content_18940890.htm.

²⁶ "Partners in prosperity: The benefits of Chinese investment in Australia A report by Deloitte Access Economics for the Australia China Business Council and sponsored by ANZ," Deloitte, June 2017, <https://www2.deloitte.com/content/dam/Deloitte/au/Documents/Economics/deloitte-au-economics-benefits-chinese-investment-in-australia-130617.pdf>.

each subsequent year.²⁷ While PRC investment in Australia appeared to have no limits, rising each year, a shift was slowly occurring in Australian politics. The subtle tension that had existed for years finally erupted in 2021, which marked a 61% drop in PRC FDI in Australia, the largest drop in the past six years.²⁸ Figure 2 below shows the dramatic decline in PRC overseas FDI into Australia.

PRC investment in natural resources

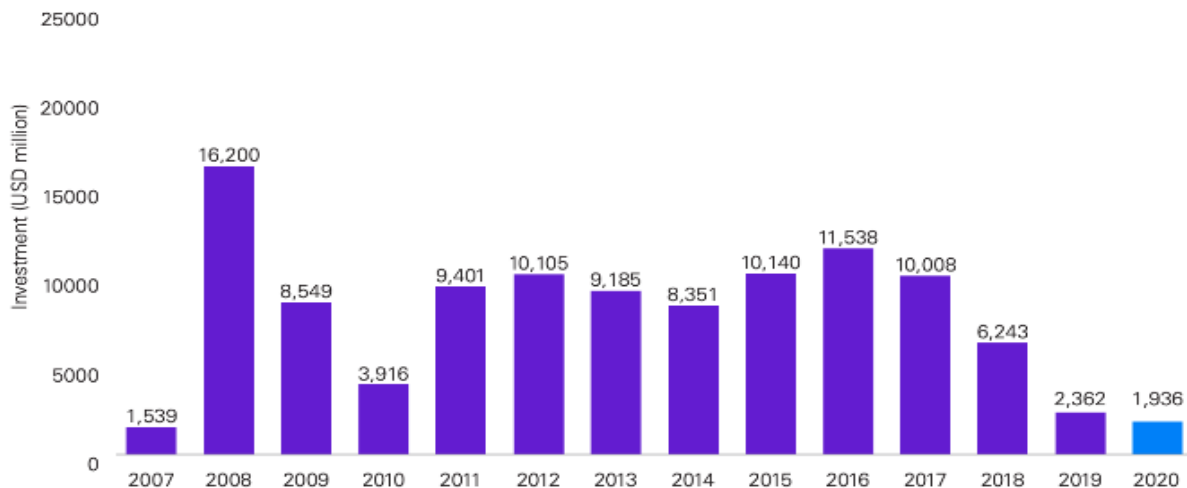


Figure 2: PRC ODI into Australia from 2007 to 2020 by value (USD million)

Source: "Demystifying Chinese Investment in Australia," the University of Sydney, July 2021, <https://assets.kpmg/content/dam/kpmg/au/pdf/2021/demystifying-chinese-investment-in-australia-july-2021.pdf>.

While many of the investments from 2009 onwards were negotiated under some level of scrutiny from the FIRB, 2015 marked a notable shift in tensions between the PRC and Australia. In October 2015, Australian Northern Territory Chief Minister Adam Giles announced that PRC Landbridge Group won the bid to operate the Port of Darwin under a 99-year lease deal worth \$506 million. Under the agreement, Landbridge would lease the Darwin Port land and facilities of East Arm Wharf, including the Darwin Marine Supply Base, and Fort Hill Wharf. Given the strategic value of the Port, it was shocking that it avoided FIRB authority. According to Peter Jennings, a former Australian defense official who is now the executive director of the Australian Strategic Policy

Institute, "About 100 navy and allied ship visits to Darwin Harbor happen every year and the number is expected to grow, particularly as the US Marine task force reaches its planned growth to 2,500 personnel with supporting ships."²⁹

In an interview regarding the purchase of the Port of Darwin, Neil James, the executive director of the Australia Defence Association stated, "It was a seriously dumb idea by a government that really hadn't thought through the consequences, and even if it had, was prepared to ignore the long-term costs,

both financial and strategic, they were inflicting on the rest of the country."³⁰ James was not alone in his criticism of the transaction, former US Deputy Secretary of State Richard Armitage, when informed of the decision, stated, "I couldn't believe the Australian defense ministry went along with this."³¹ Despite US and Australian policy makers' concerns of espionage at the Port, then-Defense Minister Marise Payne, stated, "Defense does not have security concerns about the lease of the port to Chinese interests."³² A report by the Australian Government Productivity Commission noted that the transaction avoided FIRB intervention because it occurred in a territory outside the scope of the FIRB's

²⁷ "Chinese Investment in Australia (CHIA) Data 2014-2018," China Investment in Australia (CHIA), <https://eaber.org/wp-content/uploads/2020/08/CHIA-Investment-Australia-2014-2018.pdf>.

²⁸ "Chinese investment in Australia plummets 61%," BBC, March 1, 2021, <https://www.bbc.com/news/business-56234776>.

²⁹ Paul Barnes et al., "Chinese investment in the Port of Darwin," ASPI, December 2015, https://ad-aspi.s3.ap-southeast-2.amazonaws.com/2017-07/SI101_Chinese_investment_Darwin_v2.pdf?VersionId=Ld8eqchCvcCXtq2bfBaeNmWWr21Wrkuw.

³⁰ Christopher Walsh, "How and why did the Northern Territory lease the Darwin Port to China, and at what risk?" ABC, March 11, 2019.

<https://www.abc.net.au/news/2019-03-12/why-did-northern-territory-sell-darwin-port-to-china-what-risk/10755720>.

³¹ John Kehoe and Laura Tingle, "US 'stunned by Port of Darwin Sale to Chinese'," Financial Review, November 18, 2015. <https://www.afr.com/politics/us-stunned-by-port-of-darwin-sale-to-chinese-20151117-gl0omf>

³² Michael Forsythe, "Australia Defends Port's Lease to Chinese Company with Military Ties," *the New York Times*, Nov. 13, 2015, <https://www.nytimes.com/2015/11/14/world/australia/darwin-port-australia-chinese-military.html>.

authority.³³ These concerns led to reformation of the FIRB.

FIRB Reform

As noted earlier, Australia's FIRB examines foreign investment proposals and advises the Treasurer on the implications for Australian national security and is given authority under *the Foreign Acquisitions and Takeovers Act 1975* (the Act).³⁴ On 5 June 2020, the Australian Government announced major reforms to *the Foreign Acquisitions and Takeovers Act 1975*. These reforms came into effect on 1 January 2021. They include the following:

- a. Treasurer may impose conditions or block any foreign investment on national security grounds – regardless of value
- b. mandatory notification of any proposed foreign investment in a “sensitive national security business” and similar requirements if an entity with a foreign investor commences such a business;
- c. a new “call in” power for the Treasurer to screen any investment that would not ordinarily require notification national security grounds (including during or after the investment);
- d. current money lending exemption will not apply where a foreign money lender obtains an interest in a sensitive national security business under a lending agreement;
- e. powers to impose or vary conditions to approvals or, as a last resort, require divestment of previously approved investments where national security risks emerge – this power will not be retrospective; and
- f. voluntary notification and investor-specific exemption certificate regimes.³⁵

The Treasurer has 30 days from notification to review a transaction and determine whether to grant a

(conditional or unconditional) ‘no objection’ notification or to prohibit the transaction. The Australian Government, in general, believes foreign involvement in infrastructure could potentially lead to espionage, sabotage, and coercion.³⁶ As such, it has taken steps in oversight of foreign investment that appear to be more pre-emptive as opposed to reactionary.

On June 5, in response to the COVID-19 crisis, the Treasurer of Australia announced reforms to Australia's foreign investment review system. According to the announcement, “the reform package includes measures to strengthen the existing framework with: enhanced national security review of sensitive acquisitions; extra powers and resources to ensure foreign investors comply with the terms of their approval.”³⁷ Earlier, in March, the Australian government announced it would review all proposed foreign investments in order to protect Australian interests in a time of economic insecurity caused by the global pandemic.³⁸ These temporary measures are slated to last up to six months. The Australian government has also come out strongly against Chinese attempts at economic coercion. On April 27, the Australian Foreign Minister warned China against threats of “economic coercion” in response to Australia's call for an investigation into the coronavirus pandemic.³⁹

While the new rules for FIRB did not come into effect until January 2021, the trend of Australia pre-emptively preventing investments that may harm Australia's national security began taking root earlier. In 2018, the Australian government blocked Hong Kong-based Cheung Kong Infrastructure's (CKI) 13 billion AUD takeover of Australian gas pipeline company APA Group.⁴⁰ As Australia's largest gas Transmission Company, the takeover was blocked on national security grounds with the recommendation of the FIRB and Critical Infrastructure Centre.⁴¹ Australian Treasurer Scott Morrison said the foreign

³³ <https://www.pc.gov.au/research/completed/foreign-investment/foreign-investment.pdf>.

³⁴ “About FIRB,” Foreign Investment Review Board, 2020, <https://firb.gov.au/about-firb>.

³⁵ Ibid.

³⁶ Corinne Reichert, “Government passes critical national security Bill,” ZDNet, March 29, 2018, <https://www.zdnet.com/article/government-passes-critical-infrastructure-national-security-bill/>.

³⁷ “Major Reforms to Australia's Foreign Investment Review Framework,” Australian Government Foreign Investment Review Board, June 5, 2020, <https://firb.gov.au/about-firb/news/major-reforms-australias-foreign-investment-review-framework>.

³⁸ “Australian Foreign Investment Approval Measures in Response to COVID-19 and Other Recent Australian Foreign Investment Approval

Developments,” White and Case LLP, May 21, 2020,

<https://www.jdsupra.com/legalnews/australian-foreign-investment-approval-25909/>.

³⁹ Kirsty Needham, “Australia Rejects Chinese ‘Economic Coercion’ Threat Amid Planned Coronavirus Probe,” Reuters, April 27, 2020, <https://www.reuters.com/article/us-health-coronavirus-australia-china/australia-rejects-chinese-economic-coercion-threat-amid-planned-coronavirus-probe-idUSKCN2290Z6>.

⁴⁰ Don Weiland, “Australia brands CKI bid for gas utility ‘contrary’ to the national interest,” *Financial Times*, Nov. 7, 2018, <https://www.ft.com/content/2a5ea93a-e25d-11e8-a6e5-792428919cee>.

⁴¹ Ibid.

investment proposals from the PRC "were contrary to the national interest."⁴² Increased scrutiny on PRC investments did not stop there. In 2021, after the new rules came into effect, Australia rejected PRC state-owned China State Construction Engineering Company's (CSEC) \$300 million offer to takeover South African-owned Probuild.⁴³

Australia's recent increase in blocking PRC investment due to national security comes at a low point in relations between Australia and China, which have fluctuated for years. While foreign investment is one piece of the puzzle, relations have deteriorated due to a variety of political, economic, and military issues such as Australia's criticism of human rights issues in Xinjiang, China's ban of Australian coal, and the formation of the trilateral security pact between Australia, the United Kingdom, and the United States.

Conclusion

Around the world, governments are increasingly raising national security concerns of foreign investment in critical infrastructure, technology, real estate, and natural resources. The US, Germany, and Australia have all begun reviewing links between national security concerns and overseas FDI. In the United States and Australia, PRC investments have garnered significant attention from policy makers. In 2017, then-prime minister Malcolm Turnbull announced future changes to Australia's foreign investment reviews to counter what he described as foreign powers "making unprecedented and increasingly sophisticated attempts to influence the political process, both here and abroad"⁴⁴. A few years later, in 2020, President Trump signed an executive order prohibiting Americans from investing in PRC companies that have ties to the PRC military. The order stated, "The People's Republic of China is increasingly exploiting United States capital to resource and to enable the development and modernization of its military, intelligence, and other security apparatuses."⁴⁵

Australia and the US have increasingly aligned methods for screening foreign investment. One difference is that Australia's foreign investment screening is centered on the concept of "national interest," as opposed to the US focus on "national security." However, the recent reforms to FIRB better integrate concerns of national security. As the Port of Darwin investment demonstrates, there is still a lack of coordination between the US and Australia in countering foreign investment in critical national security infrastructure. Both sides would benefit from more carefully coordinating how to address and mitigate national security risk brought on by foreign investments, perhaps by establishing a memorandum of understanding on assessing foreign investments.

The 2021 AUKUS trilateral agreement specifically focuses on technology sharing between the three parties. While the transfer of submarine technology dominated press attention, the partnership includes cooperation on many critical technologies such as quantum computing and AI. Given the influx of technological cooperation between the US and Australia, it is all the more critical that both countries seamlessly align their foreign investment review processes. Economic-mateship between the US and Australia is the only way forward to counter malign PRC investment and economic coercion.

⁴² N.a. "Australia facing economic coercion from China-Treasurer", Reuters, December 16, 2021. <https://www.reuters.com/world/asia-pacific/australia-facing-economic-coercion-china-treasurer-2021-12-17/>.

⁴³ Jamie Smyth, "Australia cites national security to block China buying local builder", Financial Times, January 11, 2021. <https://www.ft.com/content/3b233463-9eeb-4781-ab0c-50c3861d142d>.

⁴⁴ Amy Remeikis, "Chinese investment in Australia plummets 47% in a year as diplomatic tensions rise," Sept. 13, 2020, <https://www.theguardian.com/australia-news/2020/sep/14/chinese-investment-in-australia-plummets-47-in-a-year-as-diplomatic-tensions-rise>.

⁴⁵ E.O. 13959, Nov. 12, 2020, <https://www.federalregister.gov/d/2020-25459>.

4

Evolving the US-Australia Alliance: An Agenda for Cyberbiosecurity Engagement

Thom Dixon

Abstract

US-Australian cooperation in cyberbiosecurity and bioeconomic resilience can help mitigate two of the 21st century's most difficult non-traditional security challenges—climate change and global pandemics. The value of cyberbio resilience was made clear to the US and Australia throughout 2020 as the COVID-19 pandemic took hold. The acquisition, integration, and analysis of genomic, biological, medical, and health care information within cyber systems facilitated state and international responses to the pandemic. COVID-19 has shown how a state's health security is enabled via a mature and technologically sophisticated sovereign cyber-biological ecosystem. Importantly, cyberbio resilience also underpins the growing bioeconomy and the emerging circular carbon economy. US-Australian bioeconomic integration must be secured with strong cyberbio collaboration. As land use patterns accelerate deforestation, the rate of contact between humans and novel emerging infectious diseases is likely to increase. Any long-term response enhancing pandemic preparedness must address these land use patterns. Gaseous carbon waste reuse can contribute towards the circular carbon economy. The large-scale fermentation of chemicals, materials and food stuffs could fundamentally rebalance land use patterns, increase sovereign supply chain resilience, and contribute to the mitigation of climate change via the use of gaseous carbon waste as an industrial feedstock. An expansion of US and Australian bioeconomic integration will assist both countries in meeting a target of net zero carbon emissions by 2050. This paper will make recommendations for the acceleration of US-Australian cooperation on cyberbio resilience and bioeconomic security.

Introduction

The COVID-19 pandemic has shown the power of global biological shocks. The US-Australia alliance is heading into a century where the likelihood and scale of global biological shocks is accelerating. This paper is about engineering biology and cyberbiosecurity in the context of the US-Australia alliance. These two interlinked capabilities enable a state's resilience to biological shocks and US-Australian cooperation in the bioeconomy can future-proof both countries against two of the great existential risks threatening both powers: climate change and the next global pandemic. These two non-traditional threats combine in a layered manner where they amplify the likelihood and extremity of individual security events.

The US-Australia alliance can use cyber-biological technologies to combat the proximate and actual causes of climate change and emerging infectious diseases. I propose an alliance agenda defined by concrete steps that will help the US and Australia prepare for, adapt to, and mitigate a world where human social and economic patterns of interaction are contributing to both climate change and the likelihood of global pandemic occurrences. These policy proposals are framed by the emerging concept of cyberbiosecurity, a concept that has become particularly relevant since the advent of COVID-19. This article is structured into five sections: (1) an introduction to engineering biology and the bioeconomy; (2) an introduction to cyberbiosecurity; (3) a discussion of how engineering biology and cyberbiosecurity contribute to pandemic preparedness; (4) a discussion of how engineering biology contributes to climate change mitigation; (5) and a policy agenda for deepening US-Australian cooperation across engineering biology and cyberbiosecurity. This paper makes recommendations for concrete steps in the US-Australia alliance.

The bioeconomy comprises platform capabilities that are critical to securing a state's military and civilian health security.¹ Indeed, engineering biology is what is known as a general purpose science and technology, that is, it impacts on every economic sector and scientific and technological discipline. International relations discussions of the life sciences and engineering biology are often confined to arms control discussions or environmental discussions, yet these areas too often exist separately and in siloes.² There is a need for a wider understanding of the biological domain as a strategic space in its own right, of which arms control, health security and food security are specific frames of reference. This article is intended to contribute to this work by highlighting the centrality of natural and engineered living systems to the future of humanity in a changing world, and by extension, to the future of states like the US and Australia in a time of techno-strategic dynamism. In doing so it builds on previous work highlighting the potential impact of scientific disciplines like synthetic biology on foreign policy and national security.³

What is engineering biology?

Engineering biology is a term that captures multiple fields of work in the life sciences. These fields investigate the rational engineering of biological functions, biological devices and living systems.⁴ At the core of the engineering biology enterprise is the goal of bringing engineering principles to biological design; principles like modular parts, information abstraction, and standardisation. Due to the field's heavy reliance on information and computing technologies to assist in this process of rationalisation, one of the more succinct ways to describe the current technological practice is "the information-managed engineering of biology."⁵

This definition of engineering biology is in contrast to the bioeconomy. The bioeconomy is "economic activity driven by research and innovation in the life sciences and biotechnology, and it is enabled by

¹ National Academies of Science Engineering and Medicine (NASEM), *Safeguarding the Bioeconomy*. (Washington D.C.: National Academies Press, 2020).

² Through mechanisms such as the Biological Weapons Convention (the BWC), the Chemical Weapons Convention (the CWC), United Nations Security Council Resolutions (UNSCR) 1540 and their subsequent iterations. Alternatively, engineering biology is discussed in relation to the Convention on Biological Diversity (CBD) and its protocols, or the work of the World Health Organisation (the WHO), and the Food and Agricultural Organisation (FAO).

³ Thom Dixon (2019) Mapping the potential impact of synthetic biology on Australian foreign policy, *Australian Journal of International Affairs*, 73:3, 270-288, DOI: 10.1080/10357718.2019.1584154.

⁴ For an overview of engineering biology, see: Engineering Biology Research Consortium (EBRC), *Engineering Biology: A Research Roadmap for the Next-Generation Bioeconomy*, (Emeryville, California: EBRC, 2019) Retrieved from <https://roadmap.ebrc.org>. DOI: 10.25498/E4159B.

⁵ Thom Dixon, Natalie C. Curach and Isak S. Pretorius, 'Bio-informational futures: the convergence of artificial intelligence and synthetic biology', *EMBO Reports* 21: e50036 2020, p. 2, doi: 10.15252/embr.202050036.

advances in the engineering, computing and information sciences.”⁶ The term bioeconomy has been interpreted differently by different nations, with some nations including forestry and fisheries within the bioeconomy, and other nations retaining a narrow focus on economic activity driven through engineering biology and more traditional forms of biotechnology.

The COVID-19 pandemic is a great example of how the past two decades of advances in engineering biology and associated biotechnology applications can accelerate the pace of vaccine design and emergency response. Many of the large biopharmaceutical companies began developing vaccines within weeks of obtaining digital instances of SARS-CoV-2. Companies commenced developing vaccines with patented delivery technologies that had been painstakingly tested prior to when the pandemic emerged. These delivery mechanisms can be paired with a given antibody when the need arises. When COVID-19 emerged, high performance computing and artificial intelligence algorithms screened antibody candidates from open source and commercially confidential biobanks to identify candidates that could be packaged up and attached to delivery mechanisms. In some cases, these candidates were chosen within a week of the SARS-CoV-2 genome becoming available. This highlights how a parts-based approach to biology can create standardized delivery tools that drastically decrease the time required to develop and trial new vaccine candidates. The speed of this process is only increasing, especially now the learnings of the COVID-19 response are flowing through the biopharmaceutical ecosystem.

However, engineering biology hasn’t just had a transformative impact on the biopharmaceutical sector, it has taken the same methodology of rationalisation towards the manufacture of many materials including fuels, fragrances, chemicals and novel compounds. Industrial bioreactors now process the fermentation of engineered microbes to generate products like analgesics from yeast, and other high value products from enzyme engineering. Many of these products were previously bound to a single natural source, therefore confining agricultural

production (and supply chain risk) to specific parts of the world that supported a particular primary industry’s preferred climate. Today, products like milk, wheat, vanillin, meat, and many others, are being investigated for industrial scale up via engineered biological solutions. For instance, spider silk is five times stronger than steel and three times stronger than Kevlar. Companies that have been scaling up spider silk synthesis are now engaged in partnerships and pilot projects with companies like Airbus for the creation of new aviation composites. These examples offer a window on the scale of the emerging bioeconomy, yet airplanes made out of spider silk composites don’t even come close to describing the breadth of technological novelty on the horizon. Policymakers need to entirely reimagine biology if they are going to properly understand the economic transformation taking place.⁷

Yet this may be a difficult undertaking indeed. The examples above refer primarily to materials-based biomanufacturing, and there is a whole world of *bio-informational engineering* solutions now on the horizon.⁸ These solutions engineer information communication, rather than biophysical processes. Examples include sentinel plants for precision agriculture, room-based COVID-biosensors that work in real-time, and many other solutions for getting information into and out of biological systems with low latency—it’s been called the Internet of Biological Things (IoBT). The development branches available to bio-informational engineering, especially when combined with the products being developed by biomanufacturing, will truly transform national and global economies, as well as what humans can imagine and achieve with 21st century technology. The US-Australia Alliance needs to be ready for this new bioeconomic frontier.

Cyberbiosecurity

New technologies generate new security vulnerabilities. Technologically sophisticated states operate at the edge of emerging technological capabilities in order to secure themselves from newly emerging vulnerabilities, while also exploiting the vulnerabilities of other nations for as long as those vulnerabilities exist. Cyberbiosecurity is one of these

⁶ NASEM (2020).

⁷ For a full discussion of the economic transformation being precipitated by engineering biology and its relevance to International Relations, see George M Church and Ed Regis, *Regenesiis: How Synthetic Biology Will Reinvent Nature and Ourselves*, (New York: Basic Books, 2014); and Gigi

Kwik Gronvall, *Synthetic Biology: Safety, Security, and Promise*, (Baltimore, Maryland: Health Security Press, 2016).

⁸ Thomas A. Dixon, Thomas C. Williams and Isak S. Pretorius, “Sensing the Future of Bio-informational Engineering,” *Nature Communications*, Vol. 21, No. 388 (2021), doi.org/10.1038/s41467-020-20764-2.

emerging technology frontiers, and it is of particular relevance to the bioeconomy.⁹

Cybersecurity emerged from decades of scientific and technological advances in optoelectronic engineering and the information sciences. Biosecurity, though tracing a much longer history, has similarly been transformed over the last 20 years. Scientific disciplines such as synthetic biology and systems biology have discovered and rationalized the engineering of an increasingly diverse array of novel biological functions. Yet, synthetic biology and systems biology (component disciplines of engineering biology) are now almost wholly reliant on contemporary cyber systems and optoelectronic technologies.¹⁰

If one also considers the increasing reliance of health and hospital systems on electronic records management and the ongoing cost reductions in DNA sequencing and synthesis technologies that have occurred over the past two decades, then one can see the outlines of a world in which biologically structured information and digitally structured information are being merged and intermingled on a scale unparalleled in human history.

This intermingling process inherits all of the cybersecurity issues that other optoelectronic digital systems have. Yet biological information is different to digital information in key ways. The single most important of these is that biological information represents the physical and material state of a biological entity, and on a broader scale, the living world in general. Not only does this information represent the physical instantiation of living systems, but as scientific understanding of biological information improves, it also represents the ability for digital systems to monitor and control biological systems.¹¹ The long-term trend is clear, by understanding biological information better it becomes easier to interpret, engineer and control the biological signals that control living system functionality. This process is as true at the sub-cellular scale as it is for the global scale. Quarantine and mobility restrictions during COVID-19 have ultimately been policy responses that are activated by

SARS-CoV-2 testing protocols. In this case, monitored biological information at the sub-cellular scale triggered large-scale human movement management.

Cyberbiosecurity is an emerging frame of analysis that picks up on this very simple fact the emerging reliance of economies and societies on information transfer and storage processes between living and non-living systems creates novel security vulnerabilities. If the cyber systems that manage SARS-CoV-2 testing data are compromised, so too is the ability of that state to respond to viral instances within their sovereign biome. Indeed, cyberbiosecurity is giving rise to a host of new security questions around deterrence and the proportionate use of force. How would China have responded if the US had launched an offensive cyberattack on Wuhan's health systems during November 2019 through to February, 2020? How would the US respond if faced with a similar attack during the opening phases of a novel pandemic event? What does deterrence and the proportionate use of force look like in an era of grey zone warfare when information from living and non-living systems is intermingled?

This paper is written to highlight these questions, and in doing so it relies on a definition of cyberbiosecurity developed by the author in a previous analysis of cyberbiosecurity and grey zone warfare. Cyberbiosecurity encompasses those biological, medical and genomic information security vulnerabilities that arise from the interfacing of living and non-living systems, and the integration of living (animate) and non-living (inanimate) information substrates.¹² By framing cyberbiosecurity in this way, it will become apparent how engineering biology and cyberbiosecurity are critical capabilities for mitigating the two great non-traditional security threats of this century. This is why the US and Australia need to collaborate closely on developing these capabilities—that includes supporting and developing the necessary human expertise and communities of practice.

⁹ For an overview of cyberbiosecurity, see Randall S. Murch and Diane DiEuliis, eds., *Mapping the Cyberbiosecurity Enterprise*, (Lausanne: Frontiers Media, 2019), doi.org/10.3389/978-2-88963-213-8

¹⁰ Amy Webb and Andrew Hessel, *The Genesis Machine: Our Quest to Rewrite Life in the Age of Synthetic Biology*, (New York: Hachette Book Group, 2022).

¹¹ For a discussion of optogenetics, see: Zedou Liu, et al. "Programming bacteria with light—sensors and applications in synthetic biology,"

Frontiers in Microbiology, 9, 2692 (2018); for a discussion bioelectrochemistry, see: Zoe Schofield, et al. "Bioelectrical understanding and engineering of cell biology." *Journal of Royal Society Interface* 17, 20200013 (2020); for a discussion of biosensors, see: Alexander Carpenter, et al., "Blueprints for biosensors: design, limitations, and applications," *Genes* 9, 375 (2018).

¹² Thom Dixon, "The Grey Zone of Cyber-Biological Security," *International Affairs*, 97: (2021), 3, p685-702.

Pandemic Preparedness

Cyberbiosecurity systems enable pandemic preparedness in a variety of ways. The following examples will refer primarily to state responses to COVID-19 and will be broken down into the two categories of detect and respond.

Detect

Two separate examples provide for the diversity of ways in which cyberbiosecurity and engineering biology enabled the detection of COVID-19. The first example is the case study of cyber actor APT32, who is believed to operate on behalf of the Vietnamese government.¹³ On Jan. 6, 2020, cyber espionage actor APT32 was investigating the as yet unnamed virus spreading in Wuhan, China. The alleged state-based actor used COVID-19 themed malicious email attachments to compromise the professional and personal email accounts of officials working in Wuhan for the Chinese government, as well as China's Ministry of Emergency management. By undertaking these activities, APT32 may have gained access to an early bio-situational awareness of both the human populations and the novel viral instances in Wuhan. This was especially important due to the initial secrecy of the Chinese government in relation to the virus outbreak. Though much state-based cyber operations remain confidential, it is not unlikely that such operations were essential to other coalitions of state information collection programs (including the US-Australia alliance) and contributed to an initial situational awareness of the outbreak in China across the opening months of 2020.

Typically, these types of cyber operations as undertaken by advanced persistent threat (APT) actors cannot be easily mitigated by the defender due to the underlying motivation and technological sophistication of the APT actors.¹⁴ Indeed, if as Natasha Kassam and Darren Lim contend, China's prioritization of secrecy is reshaping the international order then it is likely offensive APT-linked early warning and situational awareness operations will continue to be necessary in the future as numerous governments around the world prioritize secrecy over transparency.¹⁵ Current research into emerging

infectious disease events suggest their likelihood of occurrence is increasingly linked to deforestation. Thus, as deforestation accelerates across the world, it is also likely that emerging infectious disease events will continue to occur across the medium term—perhaps at an increasing rate over time.¹⁶ These two trends: government secrecy and the likelihood of emerging infectious disease events lead to this paper's first and second recommendations for US-Australia cooperation in cyberbiosecurity.

It may be necessary for the US and Australia to cooperate on the maintenance and development of an APT early warning and situational awareness capability that can monitor the regional and global biome in near real-time. Regional mechanisms should be developed in collaboration with China to transparently discuss cyber-biological APT activities. These mechanisms should aim to develop an international policy reform agenda that increases health data reporting trust, timeliness and efficacy via established forums such as the World Health Organisation.

Due to the anticipated secrecy of numerous governments around the world regarding future emerging infectious disease events, an APT capability would necessarily be defensive in its objective of triggering US and Australian domestic emerging infectious disease policy responses when a novel outbreak is detected. Additionally, it is recommended that the US and Australia engage with China in a trilateral dialogue that transparently discusses the intention and objectives of this sovereign capability. This could be done through the creation of a new dialogue mechanism, or through existing architectures at the ASEAN Regional Forum and the East Asia Summit. It will be important for the US and Australia to be entirely transparent about such a capability due to the offensive potential of APT operations targeting health systems during emerging infectious disease events. Indeed, understanding how China interprets such operations, deploys such operations and how they might proportionally respond to them—were they deployed in China by the US-Australia alliance—will be increasingly important to the strategic calculus that guides their ongoing development.

¹³ Danielle Cave, "Data Driven: How COVID-19 and cyberspace are changing spycraft," *Australian Foreign Affairs*, No. 9, 2020.

¹⁴ Bruch Schneier, "Securing medical research: a cybersecurity point of view," *Science*, 336 (2012): 6088, p. 1527-1528.

¹⁵ Natasha Kassam and Darren Lim, "Future Shock: How to Prepare for a China-led World," *Australian Foreign Affairs*, No. 11, 2021.

¹⁶ Serge Morand and Claire Lajaunie, "Outbreaks of vector-borne and zoonotic diseases are associated with changes in forest cover and oil palm expansion at global scale," *Frontiers in veterinary science* 8 (2021): 230.

Respond

Once a pandemic outbreak is detected, there are a series of science, technology, and policy measures that are immediately triggered across a nation's private and public sectors. COVID-19 was notable in that these responses involved a clear cyber-biological hybridisation, including a reliance on decades of research into engineering biology encapsulated by biofoundry contributions.¹⁷ The most visible and important element of an initial pandemic response is the testing regime, contact tracing, and the implementation of early stage quarantine measures. The realisation of high-throughput testing that can quickly scale across both urban and rural locations has been supported across the world by both commercial and research biofoundries. In China, BGI (formerly the Beijing Genomics Institute) developed the capacity to undertake antibody tests at scale as well as the ability to set up remote laboratories for high-throughput testing. The London Biofoundry pioneered testing protocols that mitigated the reliance of existing testing regimes on specific reagents as this was creating supply chain bottlenecks. The London Biofoundry also created testing solutions that could be setup quickly in rural and remote locations and they created viral-like particles for validating new testing regimes developed by third parties.¹⁸ In the US, commercial biofoundries such as Ginkgo Bioworks and Twist Bioscience engaged in very similar work.

It quickly became clear across the course of 2020 that biofoundries need to be re-imagined as national pandemic response platforms. Importantly, these platforms can and do support the wider bioeconomy when they are not focused on responding to a major biological event. Unfortunately, Australia does not host biofoundry capabilities at a scale comparable to the US or China. This is understandable due to the difference in economic size between the three nations. However, Australia urgently needs to accelerate its investment in this critical infrastructure. The second recommendation this article makes is related to this investment need.

The US and Australia should establish a network of Indo-Pacific biofoundries that accelerates the development of Australia's capacity to support its geographical region during pandemic events and other types of regional biological shocks.

Such a network would be best activated via the Indo-Pacific Centre for Health Security in Australia and should draw on the expertise and work of practitioner communities involved in Synthetic Biology Australasia, the Global Biofoundries Alliance, the Engineering Biology Research Consortium, the Australian Research Council Centre for Excellence in Synthetic Biology, Bioplatforms Australia, and the Commonwealth Scientific and Industrial Research Organisation's Synthetic Biology Future Science Platform.¹⁹ Such a network should not be set up in opposition to China, but rather China should be invited to cooperate in this network's establishment so that biofoundry support to the wider Indo-Pacific region can be coordinated across the major actors in the region during emerging infectious disease events, agricultural blights and novel pest occurrences. Importantly, biofoundries are as useful during a major biological blight as they are during an emerging infectious disease event. This makes them unique pieces of critical infrastructure that can support crop, animal and human health regardless of the origin or substrate for a given biological shock.

Great Power cooperation in this area is essential because of the dual use potential arising from pathogen testing protocols. Testing protocols can hypothetically be a covert vector for the mass harvesting of human genomic data. Technology-taking nations in the Indo-Pacific region need to be able to trust that pandemic response programs will be provided to them in good faith and not be used to fuel grey zone cyberbiosecurity warfare operations in the future.²⁰ In the event that Great Power cooperation is not possible in this area, the US and Australia should develop a highly responsive and highly transparent pandemic response capability that can be activated in support of the Indo-Pacific in the event of a novel emerging infectious disease event.

¹⁷ Claudia Vickers, and Paul Freemont, "Pandemic preparedness: synthetic biology and publicly funded biofoundries can rapidly accelerate response time," *Nature Communications* 13, 453 (2022). <https://doi.org/10.1038/s41467-022-28103-3>.

¹⁸ Michael Crone, et. al., "A role for biofoundries in rapid validation and automated SARS-CoV-2 clinical diagnostics," *Nature Communications*, No. 11, 4464 (2020).

¹⁹ An overview of sub-national Australian and American actors to include in such an endeavour can be found by reviewing the input into Peter Gray,

et al., *Synthetic Biology in Australia: An outlook to 2030*, Report for the Australian National Council of Learned Academies, 2018; and the EBRC (2019).

²⁰ Thom Dixon, "Welcome to the Age of Bio-surveillance," *Australian Outlook*, Dec. 28, 2020, <https://www.internationalaffairs.org.au/australianoutlook/welcome-to-the-age-of-bio-surveillance/>

Establishing an Indo-Pacific Biofoundry Alliance and funding the necessary supporting Australian infrastructure, would be a good step in this direction. The author estimates that approximately \$100 million in public-private partnership²¹ would be necessary to establish Australian biofoundry capabilities at an initial level of scale. The author also notes that capital raising in the life sciences is anticipated to reach an all-time high in the US in 2021 and this creates an opportunity to direct a portion of this investment to Australia for the construction of critical infrastructure in support of US-Australian public-private partnerships.²²

The US and Australia should establish a joint working group that investigates and categorizes grey zone cyber-biological activity, and suggests policy measures to mitigate this activity. This joint working group should bring together technical, policy and commercial expertise, and should be layered over the activities of the Indo-Pacific Biofoundries Alliance.

Climate Change Adaptation and Mitigation

This critical infrastructure isn't just useful in responding to biological shocks such as global pandemics or global blights. Rather, this infrastructure is also essential to the long-term bioeconomic adaptation and mitigation of climate change. As such, investments in platform bioeconomic capabilities have multiple dimensions to their economic returns. There are two specific areas in which US-Australian cooperation can seek these economic returns in a strategic context that this paper will discuss: gaseous carbon waste reuse²³ and circular economic development for rare earths production and reclamation²⁴. Both gaseous carbon reuse and rare earth elements (REE) are important elements for adaptation and mitigation efforts in relation to climate change. REE are not only important for electric-powered devices, vehicles and

batteries, but are also essential inputs to many defence end-use technologies.

Importantly, when it comes to climate change, gaseous carbon reuse is becoming a viable alternative for the current petrochemical value chain. Meanwhile, rare earth production and reclamation is essential for enabling supply chain assurance during the transition to electric vehicles, electric-powered devices, and a rare earth reliant defence-industrial sector.

Gaseous Carbon Waste Reuse

Over the past few years a number of workhorse industrial microorganisms have been refactored to fix their carbon almost exclusively from carbon dioxide.²⁵ To put this simply, we are entering a world where it is becoming possible to capture the gaseous carbon waste of an aluminium refinery and send it to co-located bioreactors where engineered yeast can manufacture high-value chemicals and compounds based on a carbon input. Or perhaps more simply again, imagine a world of biomanufacturing where the key primary input was atmospheric carbon. This is a key technological pathway to achieving net zero emissions, and developing a net zero economy into a profitable carbon negative economy. Carbon fixation in living systems is going to be essential to achieving supply chain resilience and sovereignty in a whole range of biophysical material manufacturing essential for technologically-sophisticated 21st century economies.

As one specific example, the US Navy has led the way on research into alternative biofuels for decades. There are few other entities that share the US Navy's unique exposure to price changes in the oil market. A key area where the US-Australia alliance can focus research and development cooperation is in designing, building, testing and scaling up gaseous carbon waste reuse solutions based on living systems that produce the chemical energetics required to

²¹ Based on a conservative low-end estimate of US\$20 million per node for expanding the two existing Australian research biofoundries and establishing three new biofoundries that host comparative advantages across the research-commercial continuum.

²² Stephanie Wiser, "Q1 Shatters Previous Synthetic Biology Investment Record—Signals Projected 2021 Investment of up to \$36 Billion," in *SynbioBeta*, <https://www.builtwithbiology.com/read/q1-shatters-previous-synthetic-biology-investment-record-signals-projected-2021-investment-of-up-to-36-billion> [Accessed: 20/03/2022].

²³ NASEM, *Gaseous Carbon Waste Streams Utilization: Status and Research Needs*, (Washington, DC: The National Academies Press, 2019), <https://doi.org/10.17226/25232>.

²⁴ Jessica Urbina, et. al., "A New Approach to Biomining: Bioengineering surfaces for metal recovery from aqueous solutions," *Scientific Reports*, (2019) 9:16422, doi.org/10.1038/s41598-019-52778-2

²⁵ Schmeul Gleizer, et al., Conversion of *Escherichia coli* to generate all biomass carbon from CO₂, *Cell*, 179, 1255–1263 (2019); Thomas Gassler, et al., "The industrial yeast *Pichia pastoris* is converted from a heterotroph into an autotroph capable of growth on CO₂," *Nature Biotechnology*, 38, 210–216 (2020).

sustain maritime and air assets. Not only will this provide a new level of supply chain assurance across the long-term, but it will also send a market signal and develop the commercial readiness of technologies that ferment heavy industry energetics based on carbon reuse.

Similarly, work is needed on replacing the entire petrochemical value chain with alternatives that are based on gaseous carbon waste reuse. Across the medium term it may remain politically infeasible in both the US and Australia to introduce a market mechanism that prices carbon. However, it may not be infeasible for both the US and Australia to implement policies that require an increasing share of industrial plastics, synthetic rubbers and petrochemical-derivatives in the military-industrial supply chain to come from biomanufacturing based on gaseous carbon waste reuse.²⁶ From a military point of view, this offers an opportunity to rethink key defence supply chain features and may mean mitigating much of the risk associated with relying on extraction locations, refineries sites and storage depots for a fleet's chemical energetics. The future of industrial bioreactors suggests a movement towards dispersed and decentralized production in hardened locations or on naval platforms that meet defence needs, this could be designed in such a way to make it harder for an adversary to threaten or disrupt logistics and supply chain needs.

Industrial waste carbon reuse is likely to be of interest to technologically sophisticated countries like China because it can be used to achieve energy self-reliance across the medium-to-long term. It is one of the reasons China has been prioritising biotechnology research for many years. It is therefore critical that the US-Australia Alliance prioritizes investing in research and development in this area. Until all valuable petrochemical-derivatives can be reproduced using alternative technologies, it will continue to be necessary to undertake extractive industrial processes. In order to adapt to and eventually mitigate the increases in atmospheric carbon caused by human industrial activity, these extractive processes will need to end. The race is now on to be the first mover in these alternative technologies, and those companies and nations that cannot imagine the future will fail to acquire the necessary intellectual property portfolios as the biomanufacturing transition accelerates.

Atmospheric carbon reuse is essential to reaching a carbon negative economy. The Earth's atmosphere and oceans are carrying over a century of excess waste carbon that is available to use for those that develop the technology. The countries that achieve technological supremacy in this area are likely to accrue significant benefits. These benefits include acquiring a major role in setting international standards around atmospheric carbon reuse, and thus acquiring de facto rights as a global policymaker on geo-engineering the planet's climate as carbon negative economies reach industrial scales.²⁷ It is critical, therefore, that the US-Australia alliance aspire to become the petrochemical provider of choice in the coming world of decentralized circular, net zero, and carbon negative economies.

This paper recommends that the US-Australia alliance lead the way in this techno-strategic domain by developing carbon waste reuse technologies for defence supply chain resilience. Technological spillover will assist the civilian sector to reach economies of scale and unlock profitable models of carbon waste reuse. These models are critical for the development of the circular economy more broadly.

Circular Economy Development for Rare Earths

The circular economy is the application of the principles discussed above, but to all manufactured chemicals, compounds and materials. This is a key aspect of the emerging bioeconomy and the organic and inorganic waste of cities is often of sufficient volume that it makes many niche biomanufacturing industries profitably scalable. Whether it be using enzyme-technologies to break down and recycle the component chemicals of consumer-grade and industrial plastics, or the remediation of polluted environmental sites, the applications of circular economy bio-based tools and techniques are increasingly diverse. The opportunity for the US-Australia alliance in this area is wide ranging, but this section will focus on the specific example of rare earths biominer.

A rarely discussed application of synthetic biology is in rare earth ore recovery via bio-based recycling

²⁶ See LanzaTech for current work already underway in this area, LanzaTech, <https://lanzatech.com/> [Accessed: 20/03/2022].

²⁷ For a discussion of this hypothetical in another technological context, see: Adam Lockyer & Jonathan Symons (2019) The national security

implications of solar geoengineering: an Australian perspective, *Australian Journal of International Affairs*, 73:5, 485-503, DOI: 10.1080/10357718.2019.1662768.

processes.²⁸ As the focus of US-China technology decoupling increasingly focuses on rare earth ore and mineral supply chains there is a rising awareness that many nations have an increasing store of these rare earths in their end-of-life electronic waste. A key issue, however, has been the prohibitive cost of separating rare earths from electronic waste. It has typically been more cost effective to procure new REE from Chinese producers, as this offsets the large environmental cost (a cost that Chinese producers are willing to absorb) associated with the chemical processes required for separating and concentrating rare earth elements.²⁹

The US Department of Energy is already supplying research funding in this space. However, given that many Australian minerals companies are becoming preferred suppliers for US rare earths, it is important that the US and Australia work together on advancing biomining technologies. This will ensure that US and Australian industry players can reduce waste during the initial extraction and separation processes, but it will also increase the reclamation rates of REE from end-of-life assets. A circular economy model of rare earths is necessary if the US and Australia are to successfully mitigate decades of Chinese efforts focused on market monopoly. Chinese efforts to achieve a market monopoly have in part relied on a policy that rewarded the onshoring of production facilities into China in order for manufacturers to gain preferential access to rare earths at discounted prices.³⁰ Onshoring of course required partnering with Chinese companies and this led to technological transfer - a process well documented elsewhere. US companies reliant on Chinese rare earth supply were content to onshore production facilities to China because China was willing to absorb the environmental, health and economic cost that comes with mining and refining rare earths.

Two things need to occur across the long term for the US and Australia to make significant inroads into the REE production market. One is providing incentives to onshore production in either the US or Australia in order to access discounted rare earths that are competitively priced with their Chinese equivalents. The second is either accepting or mitigating the

environmental, health and economic costs that come with mining and refining rare earths. Synthetic biology based biomining may offer a way to mitigate the environmental and health costs, rather than the politically unacceptable alternative of finding a community and an environment that can absorb those costs.

This is, of course, an example of just one industry that is critical to the supply chains of the future, and an example of how even the extraction of inorganic materials can benefit from the engineering of biology. Many of the bio-based technologies that will make the circular economy a reality are at low levels of technological readiness. Not only is investment in research and development required, but so is industrial policy that ensures these technologies can transit the “valley of death” that often ends new-to-the-world enterprises seeking to scale novel technologies. In the US and Australia the concept of industrial policy has been politically unpalatable for many decades, but as Linda Weiss notes, the US has a long history of strategic industrial policy that can be traced back to Sputnik in 1957 via Soviet/Japanese techno-strategic competition in the 1970s and 1980s.³¹ Today is no different in that it requires the same kind of imaginative policies, and the same kind of innovative civil-military fusion strategies in order to out-compete Chinese industrial power and maintain technological supremacy.

This paper recommends that US-Australian cooperation on critical minerals needs to incorporate specific circular economy objectives that prioritize the commercialisation of bio-based REE reclamation from extractive processes as well as consumer-grade and industrial waste. These technologies will need to be environmentally sustainable so that they are politically acceptable in liberal democracies. It is important to note that this is a long game, and will likely require at least a decade of research and development contributions and matched industrial policy in order to commercialize these technologies at acceptable levels of scale. However, techno-strategic rivalry in the Indo-Pacific is expected to be a multi-decade affair and rare earths are an increasingly critical component of next-generation technology supply chains. It is important to start now.

²⁸ Jessica Urbina, et. al., “A New Approach to Biomining: Bioengineering surfaces for metal recovery from aqueous solutions,” *Scientific Reports*, 9, 16422 (2019). <https://doi.org/10.1038/s41598-019-52778-2>.

²⁹ For a full discussion, see Guillaume Pitron (translated by Bianca Jacobsohn), *The Rare Metals War*, (Brunswick, Victoria: Scribe Publications, 2020).

³⁰ Pitron 2020.

³¹ Linda Weiss, *America Inc.?: Innovation and Enterprise in the National Security State*, (New York: Cornell University Press, 2014).

Policy Agenda

Engineering biology is a general purpose science and technology that has many potential applications, including strategic contributions ranging from rare earth reclamation, aircraft made out of high-tensile spider silk composites, real-time airborne SARS-CoV-2 biosensors, atmospheric carbon reuse, and others. Engineering biology stands to fundamentally change the military-industrial landscape and the US-Australia alliance can capture significant economic and strategic benefits from being a first mover in this area.

Indeed, each of these areas of positive economic, technological and strategic development have dual uses and a cyberbiosecurity awareness will be essential for tomorrow's bioeconomy practitioners. This is because biofoundries are the platform technologies that enable many applications for engineering biology. These facilities work at the edge of physical and digital instantiations of life, and they necessarily carry proprietary information that will be of great value to competing Great Powers. Engineering biology and the bioeconomy can assist states in adapting to and mitigating two of the great non-traditional security threats of the 21st century. Yet, this fact makes the industrial and defence locations that undertake the work of engineering biology important targets for espionage and illicit technology transfer. Cyberbiosecurity is an emerging framework that describes, analyses and seeks to mitigate this reality of cyber-biological convergence.

Drawing on the discussions of how engineering biology and cyberbiosecurity can contribute to pandemic preparedness and climate change mitigation, this paper proposes the following policy agenda for the US-Australia alliance:

1. It may be necessary for the US and Australia to cooperate on the maintenance and development of an APT early warning and situational awareness capability that can monitor the regional and global biome in near real-time.
2. Regional mechanisms should be developed in collaboration with China to transparently discuss cyber-biological APT activities. These mechanisms should aim to develop an international policy reform agenda that increases health data reporting trust, timeliness

and efficacy via established forums such as the World Health Organisation.

3. Establish an Indo-Pacific Biofoundries Alliance and source \$100 million in new public-private funding to build Australia's critical infrastructure biofoundry capabilities. This alliance should ideally be situated within the Indo-Pacific Centre for Health Security and have landing pads in major Australian and US biotechnology cities.
4. The US and Australia should establish a joint working group that investigates and categorizes grey zone cyber-biological activity, and suggests policy measures to mitigate this activity. This joint working group should bring together technical, policy and commercial expertise, and should be layered over the activities of the Indo-Pacific Biofoundries Alliance.
5. Commence US-Australian defence prioritisation of sourcing chemical energetics from gaseous carbon waste stream reuse. This should involve long term techno-strategic plans that ensure these processes can contribute to a carbon neutral, and then a carbon negative bio-based economy.
6. Commence US-Australian prioritization of research and development funding for bio-based recovery of rare earth minerals in order to decrease the associated environmental and health impacts of the production process and therefore increase the economic efficiency of rare earth production outside of China. This should be accompanied by city-based circular economy planning for rare earth reclamation from locally sourced eWaste streams.

There is, of course, a need for a community of practitioners to take this work forward. The risks of dual uses in the bio-based economy need to be continually reviewed as the technology continues to advance. This leads to the final recommendations of this paper.

7. Open the John Hopkins Centre for Health Security Emerging Leaders in Biosecurity Fellowship to Australians. This initiative would ensure Australian cohorts can acquire world-leading biosecurity expertise with their American, British, and Canadian counterparts.
8. Establish a US-Australian Cyberbiosecurity Horizon Scanning Initiative that undertakes annual reviews of the relevant science and technology and makes recommendations to

policymakers. This initiative would benefit from input and association with the Centre for the Study of Existential Risk at Cambridge University in the United Kingdom as they have undertaken two horizon scans of engineering biology since 2018.

9. Create an Australian landing pad for the Engineering Biology Research Consortium (EBRC). The US-Australia alliance should seek to coordinate public-private research and development coordination to achieve a shared agenda in the Indo-Pacific.

Conclusion

The US-Australia alliance stands to gain from the future of engineering biology. Though this paper has focused on the ways in which engineering biology can assist the US-Australia alliance mitigate these two great non-traditional security threats of the 21st century, engineering biology has applications to a host of other security questions including the developing space-based techno-strategic competition. The co-mingling of digital and living systems, and the integration of living and non-living information substrates, generates novel security issues. It is not possible to advance the sciences and technologies of engineering biology and the bioeconomy without generating those dual use issues inherent to cyberbiosecurity. This is very similar to how cyber security more generally was an emergent property arising from decades of advances in semiconductors and optoelectronic engineering.

Climate change and the next pandemic constitute global-level shocks that operate across varying time scales and can significantly disrupt the current global distribution of power. The technologies that are required to adapt to and mitigate these non-traditional security issues have vast net benefits for the civilian bioeconomy. The US and Australia have deeply integrated and enmeshed economies and security architectures, it is important that this previous work of integration is leveraged for the benefit of future generations by developing platform technologies that can mitigate the two great non-traditional threats of this century. If the US and Australia do not do this, another power distribution will become the next-generation technology provider of choice for the Indo-Pacific region.

The US-Australia alliance exists within a region where there are competing visions for the development of technology, including what technology is for and how it should be used. In order for a US-Australia vision to continue having a role in shaping the norms and global structures that underpin emerging technology domains, the US-Australia alliance needs to be at the forefront of technology development and deployment for the benefit of all countries in the Indo-Pacific region. The use of these technologies needs to be embedded with the best characteristics and values that liberal democracies inherit, and transparency is one of these core values. The US and Australia need to be on the front foot anticipating and shaping globally agreed patterns of use for these emerging technologies. This is essential work, not just so that the region may adapt to and mitigate climate change and emerging infectious diseases, but also to consciously shape the longer historical curve that characterizes US-China techno-strategic competition in the 21st century.

ABOUT THE AUTHORS

Thom DIXON is undertaking a multidisciplinary PhD at Macquarie University in international relations and synthetic biology. He is a member of the Australian Research Council Centre of Excellence in Synthetic Biology. In 2018, he completed a Non-resident WSD-Handa Fellowship with the Pacific Forum on synthetic biology and Australian foreign policy. Thom is an alumni of the 2017 EU-Australia Leadership Forum and the 2021 US-Australia Next-Generation Leadership Initiative. He is the Vice President of the Australian Institute of International Affairs in NSW and the Manager, National Security and Defence at Macquarie University. His research focuses on the convergence of the life sciences with the information sciences and how international relations can better enable the global bioeconomy.

Craig KAFURA is the assistant director for public opinion and foreign policy at the Chicago Council on Global Affairs, a Security Fellow with the Truman National Security Project, and a Pacific Forum Young Leader. At the Council he coordinates research on public and elite opinion on a wide variety of foreign policy and international affairs issues, with a particular focus on Asia. Since joining the Council in 2011, Craig has authored or coauthored dozens of reports and briefs on public opinion and foreign policy. His writing has appeared in a variety of outlets including Foreign Affairs, The National Interest, and The Diplomat, and he is the coauthor of “Foreign Policy Beliefs Among Leaders and the Public” for *The Domestic Sources of American Foreign Policy*, 7th edition. Craig holds an MA in political science from Columbia University and a BA in political science from Yale University.

Rose RODGERS is a DC-based political-military analyst. Her research focuses on PRC strategic forces, export controls, nuclear nonproliferation, and arms control. Rose has a Masters in Nonproliferation and Terrorism Studies from the Middlebury Institute of International Studies. She studied Mandarin at Tsinghua University in Beijing, China as a Boren Fellow.

Rick UMBACK holds a Ph.D. from the Australian National University's School of Politics and International Relations. His research interests cover the intersection of technology, industry, public policy, politics, and strategic affairs. He is currently employed in the public sector and has previously worked in academia and Parliament.



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(808) 521-6745 • PACIFICFORUM@PACFORUM.ORG • WWW.PACFORUM.ORG