LOWY INSTITUTE

ASIA POWER INDEX

KEY FINDINGS 2020

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INTRODUCTION

The annual Asia Power Index — launched by the Lowy Institute in 2018 — measures resources and influence to rank the relative power of states in Asia. The project maps out the existing distribution of power as it stands today, and tracks shifts in the balance of power over time.

The Index ranks 26 countries and territories in terms of their capacity to shape their external environment — its scope reaching as far west as Pakistan, as far north as Russia, and as far into the Pacific as Australia, New Zealand and the United States.

The 2020 edition — which covers three years of data — is the most comprehensive assessment of the changing distribution of power in Asia so far. Among other things, it aims to sharpen the debate on the geopolitical consequences of the COVID-19 pandemic.

The project evaluates international power in Asia through 128 indicators across eight thematic measures: military capability and defence networks, economic capability and relationships, diplomatic and cultural influence, as well as resilience and future resources. Over half of our data points involve original Lowy Institute research, while the rest are aggregated from hundreds of publicly available national and international sources.

This year, the Index includes three new indicators that track major ecological threats, bilateral and plurilateral defence dialogues, and perceptions of the international and domestic handling of the COVID-19 pandemic. Papua New Guinea, a Pacific country on the geographical continuum of Southeast Asia, has also been included for the first time.

Key findings in the Asia Power Index 2020 include:

- COVID-19 rushes in a new regional disorder, in a race to the bottom between Asian powers
- The United States remains the most powerful country in the region but registered the largest fall in relative power of any Indo–Pacific country in 2020
- China has emerged diplomatically diminished from the pandemic. But Beijing is holding ground in its overall power
- India falls just short of the major power threshold in 2020 and its position as a future peer competitor to China has become less certain
- Japan, the quintessential smart power, will take the longest in the region to recover from the economic fallout of the pandemic
- Middle powers — Vietnam, Australia and Taiwan — are the only countries to gain relative power in 2020
- The climate race is the new space race.

DIGITAL PLATFORM

The Lowy Institute Asia Power Index is available through a specially designed digital platform that maximises both interactivity with the data and transparency of the methodology.

Dynamic features — including an interactive map, weightings calculator, network analysis, country comparisons, and drill-down explorations of each indicator across multiple years — establish the Lowy Institute Asia Power Index as an indispensable research tool for the study of power in Asia.

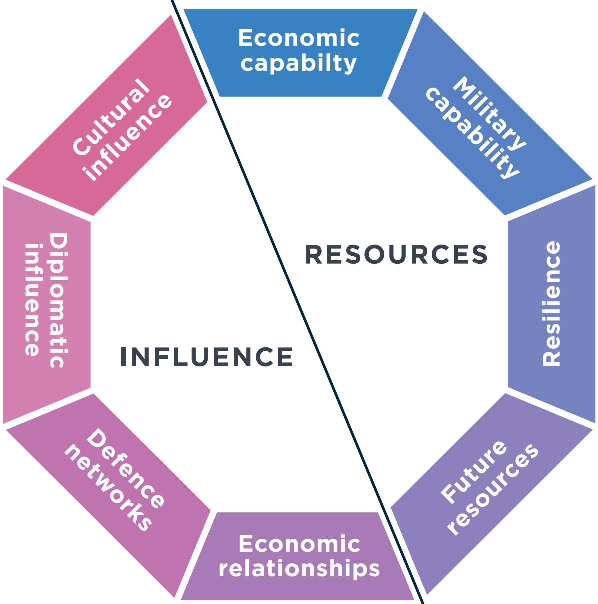
Explore now: **power.lowyinstitute.org**

Power can be measured in two ways.

The Index distinguishes between resource-based determinants of power — in other words, what countries have — and influence-based determinants of power — what countries do with what they have.

Resources measures

The first four measures of the Index — economic capability, military capability, resilience and future resources — are requisite factors in the exercise of power.



Influence measures

The next four measures — economic relationships, defence networks, diplomatic influence and cultural influence — assess levels of regional influence, lending the Index its geographical focus.

For the purposes of this Index, power is defined as the capacity of a state to shape their external environment and to direct or influence the behaviour of other states, non-state actors, and the course of international events. At its most rudimentary, power is the capacity to impose costs and confer benefits that shape the choices of other states.

A country's comprehensive power is its weighted average across eight thematic measures of power:

ECONOMIC CAPABILITY
Core economic strength and the attributes of an economy with the most geopolitical relevance; measured in terms of GDP at purchasing power parity, international leverage, technological sophistication and global connectivity.

MILITARY CAPABILITY
Conventional military strength; measured in terms of defence spending, armed forces and organisation, weapons and platforms, signature capabilities and Asian military posture.

RESILIENCE
The capacity to deter real or potential external threats to state stability; measured in terms of internal institutional stability, resource security, geoeconomic security, geopolitical security and nuclear deterrence.

FUTURE RESOURCES
The projected distribution of future resources and capabilities, which play into perceptions of power today; measured in terms of estimated economic, defence and broad resources in 2030, as well as working-age population forecasts for 2050.

ECONOMIC RELATIONSHIPS
The capacity to exercise influence and leverage through economic interdependencies; measured in terms of trade relations, investment ties and economic diplomacy.

DEFENCE NETWORKS
Defence partnerships that act as force multipliers of autonomous military capability; measured through assessments of alliances, regional defence diplomacy and arms transfers.

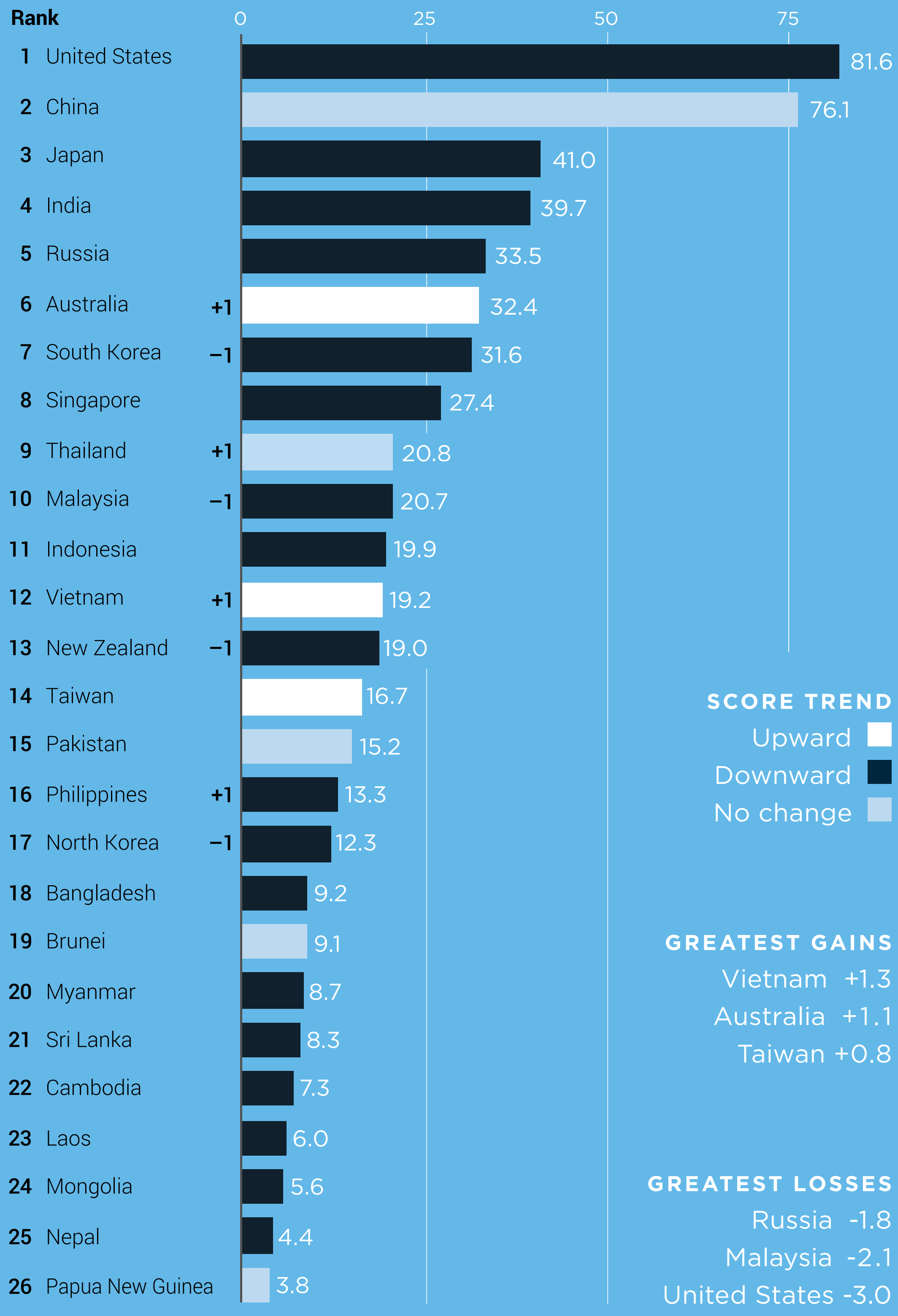
DIPLOMATIC INFLUENCE
The extent and standing of a state's foreign relations; measured in terms of diplomatic networks, involvement in multilateral institutions and clubs, and overall foreign policy and strategic ambition.

CULTURAL INFLUENCE
The ability to shape international public opinion through cultural appeal and interaction; measured in terms of cultural projection, information flows and people exchanges.

For an in-depth summary of the conceptual framework of the Index, see 'Measures of Power'.

2020 RANKINGS

COMPREHENSIVE POWER



2020 RANKINGS

COMPREHENSIVE POWER

Rank		Country / Territory	Score	Trend†	
1		United States	81.6	↘	**Super powers** ≥ 70 points
2		China	76.1	–	
3		Japan	41.0	↘	**Major powers** ≥ 40 points
4		India	39.7	↘	**Middle powers** ≥ 10 points
5		Russia	33.5	↘	
6	+1	Australia	32.4	↗	
7	–1	South Korea	31.6	↘	
8		Singapore	27.4	↘	
9	+1	Thailand	20.8	–	
10	–1	Malaysia	20.7	↘	
11		Indonesia	19.9	↘	
12	+1	Vietnam	19.2	↗	
13	–1	New Zealand	19.0	↘	
14		Taiwan	16.7	↗	
15		Pakistan	15.2	–	
16	+1	Philippines	13.3	↘	
17	–1	North Korea	12.3	↘	
18		Bangladesh	9.2	↘	**Minor powers** < 10 points
19		Brunei	9.1	–	
20		Myanmar	8.7	↘	
21		Sri Lanka	8.3	↘	
22		Cambodia	7.3	↘	
23		Laos	6.0	↘	
24		Mongolia	5.6	↘	
25		Nepal	4.4	↘	
26		Papua New Guinea	3.8		

**Trend arrows track annual changes in scores above a minimum absolute (≥ 0.15) and percent (≥ 1%) change threshold*
***Papua New Guinea is a new entry in the Asia Power Index with no results prior to 2020 to compare against*

GREATEST GAINS

Vietnam +1.3
Australia +1.1
Taiwan +0.8

GREATEST LOSSES

Russia -1.8
Malaysia -2.1
United States -3.0

ANALYSIS OF KEY FINDINGS

COVID-19 rushes in a new regional disorder, in a race to the bottom between Asian powers.

For several decades, global wealth and power have been shifting eastwards. Asia had been poised to become larger than the rest of the world economy combined by 2020. But a once-in-a-century pandemic has precipitated an abrupt turn of fortunes. Governments and societies, almost without exception, now face a perfect storm of public health, economic and strategic challenges in ways few could have imagined a year prior. The world after the pandemic, in the words of the Australian government, has become "poorer, more dangerous and more disorderly".

Power shifts happen only slowly outside of wartime. But the pandemic changes that. The 2020 Asia Power Index reveals a race to the bottom where countries compete with each other only by degrees of under-performance. Eighteen states in the Indo–Pacific experienced significant downward shifts in their relative power in 2020.

The coronavirus has also accelerated a rebalancing of global power. Divergent national responses to COVID-19 have sharpened the contrasts — and narrowed the power differential — between the United States and China. Great power politics, as well as the virus itself, now threaten to undo the promise of a benign Asian century. Blame, disinformation and confrontation between two superpowers frames a new regional disorder.

The United States remains the most powerful country in the region but registered the largest fall in relative power of any Indo–Pacific country in 2020.

Despite its continuing pre-eminence, US standing has waned in all but one of the eight Index measures. A ten-point overall lead over China two years ago has been narrowed by half in 2020. This closing power disparity suggests that Washington, far from being the undisputed unipolar power, can more correctly be described as the first among equals in a bipolar Indo–Pacific.

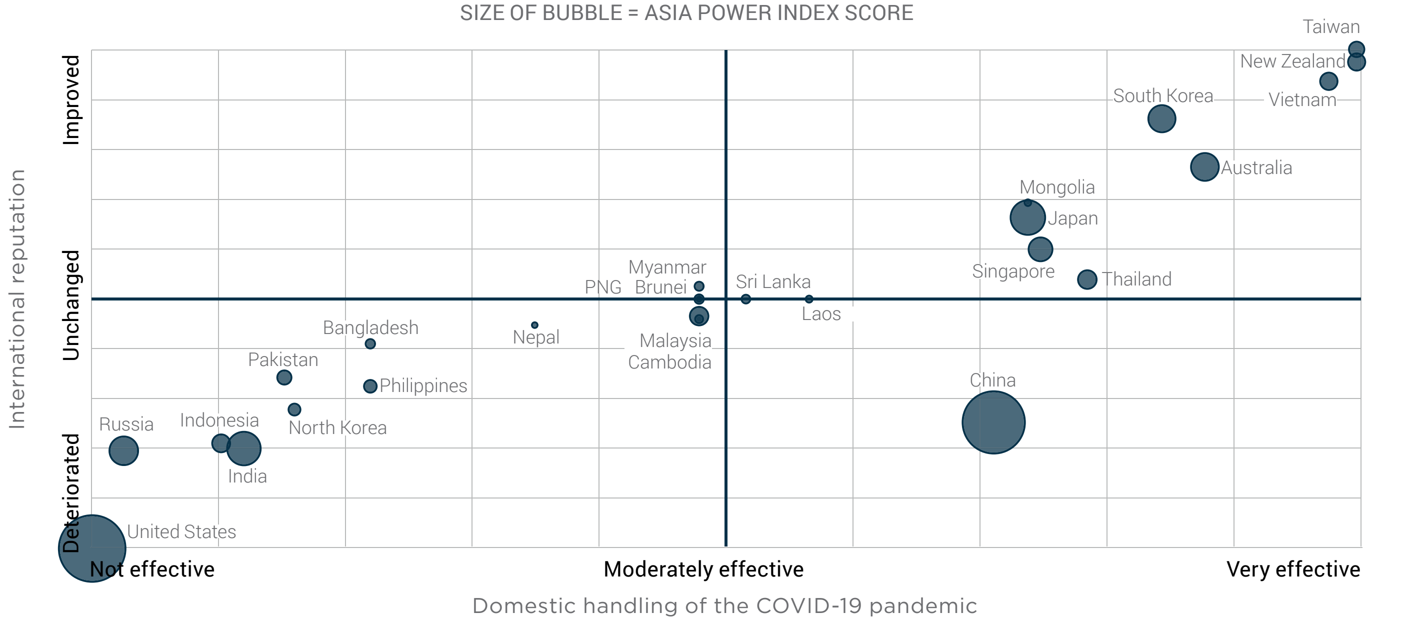
The United States claims the top spot in half of the Index's measures of power, including for its military capability, defence networks and cultural influence. However, it lost the most points in the measures in which China is ahead: economic relationships (–5.9), economic capability (–4.8) and diplomatic influence (–4.7).

America still has significant advantages. Its monetary power remains second to none. The US Federal Reserve's currency swap lines have been critical to stabilising the global financial system amid the economic fallout from the coronavirus pandemic. Gains in America's resilience provide another boon. After a 70-year period as a net energy importer, which helped to determine US involvement in and dependence on the Middle East, America became a net energy exporter in 2019.

However, the Trump administration's unilateral inclinations mean the United States is an underachiever in its ability to wield broad-based power in Asia. In addition, the coronavirus has contributed to a loss of US prestige. America has suffered the largest reputational hit in the region for its domestic and international handling of the COVID-19 pandemic. The result is a powerful reminder that legitimacy and leadership on the world stage start with the capacity of leaders to govern well at home. It testifies in equal measure to the consequences of a failure in global leadership.

INTERNATIONAL REPUTATION AND HANDLING OF THE COVID-19 PANDEMIC

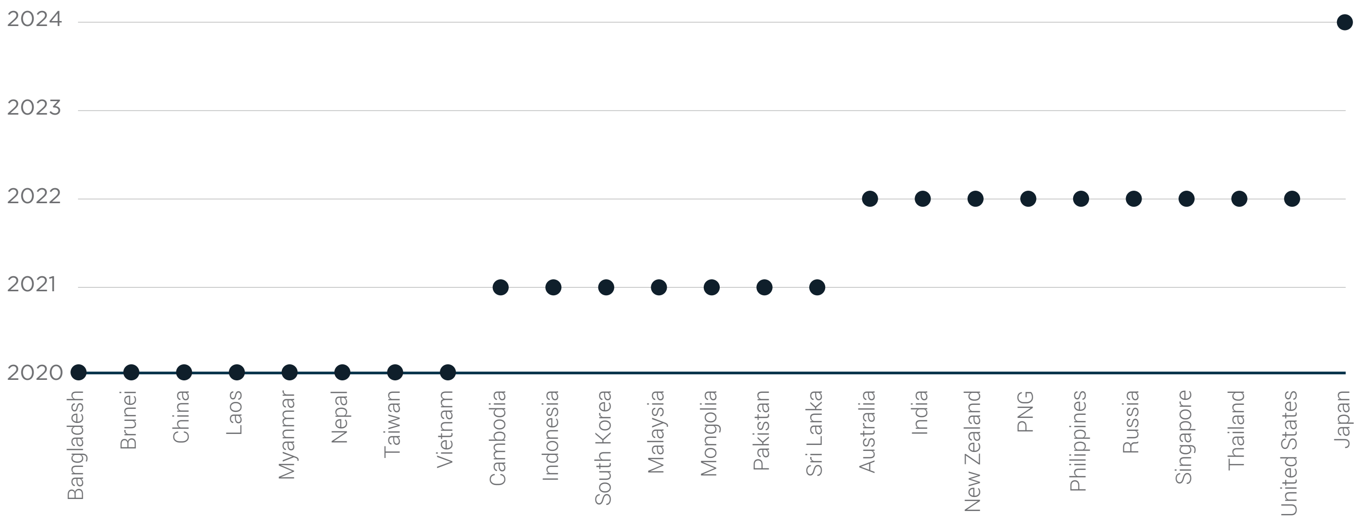
SIZE OF BUBBLE = ASIA POWER INDEX SCORE



The longer-term consequences of the coronavirus will likely be just as severe for the United States. Uneven economic recoveries will alter the distribution of power between the leading global players well into the next decade. Despite setbacks due to the pandemic, China's economy has bounced back faster than any other major economy. It is forecast to grow in 2020, while advanced economies such as the United States and Japan may take until 2022 and 2024, respectively, to recover to 2019 levels of economic activity.

China's rapid recovery will further entrench the country's economic centrality in its region, while the relative importance of the US economy in Asia will likely decline.

YEAR WHEN OUTPUT RECOVERS TO 2019 LEVELS



IMF World Economic Outlook, October 2020

China has emerged diplomatically diminished from the pandemic. But Beijing is holding ground in its overall power.

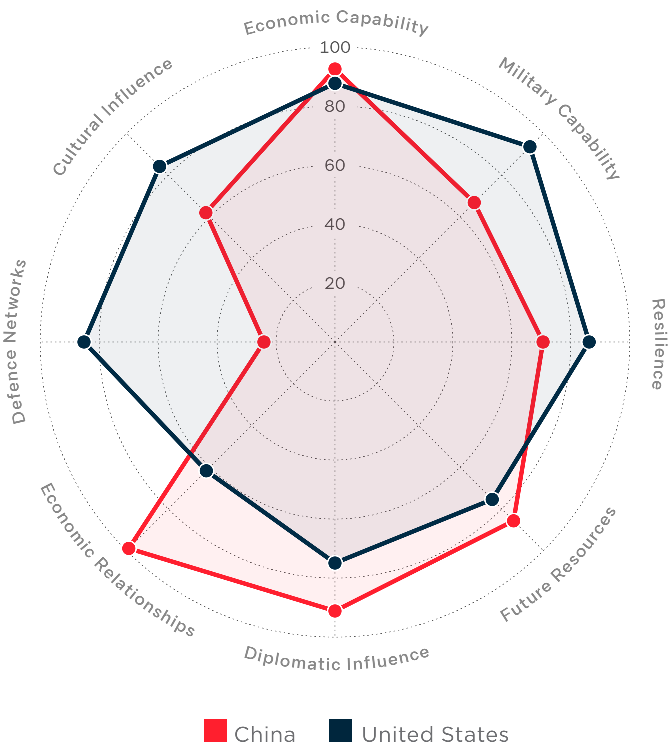
China's power has stalled and its diplomatic standing diminished. But in conditions where most countries are less powerful than a year ago, China's fast economic rebound from COVID-19 will widen the power differentials between itself and the rest of the region.

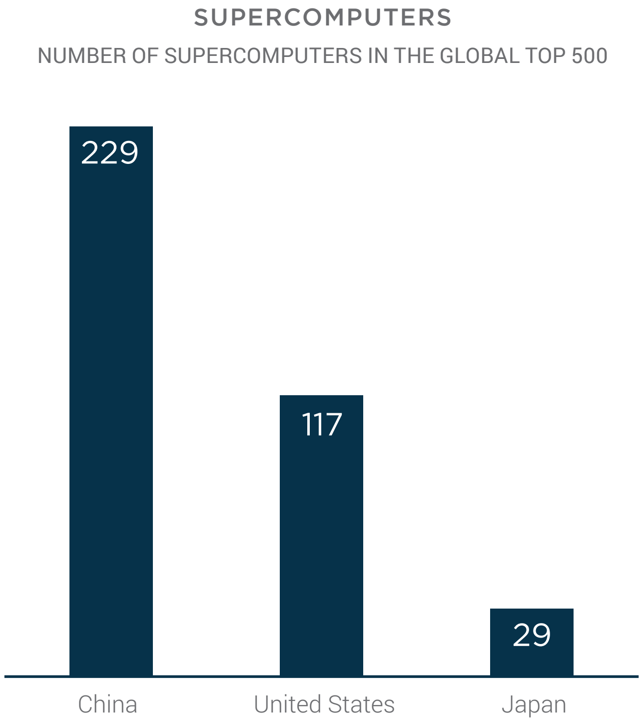
China's unchanged overall score — after netting the highest gains in power in 2019 — illustrates both the strengths and limitations of its ascendancy. China leads in four of the eight measures of power: economic capability, diplomatic influence, economic relationships and future resources. But the country delivers inconsistent results in the other measures, with stark strengths and weaknesses. By contrast, US performance in the Index still appears more rounded.

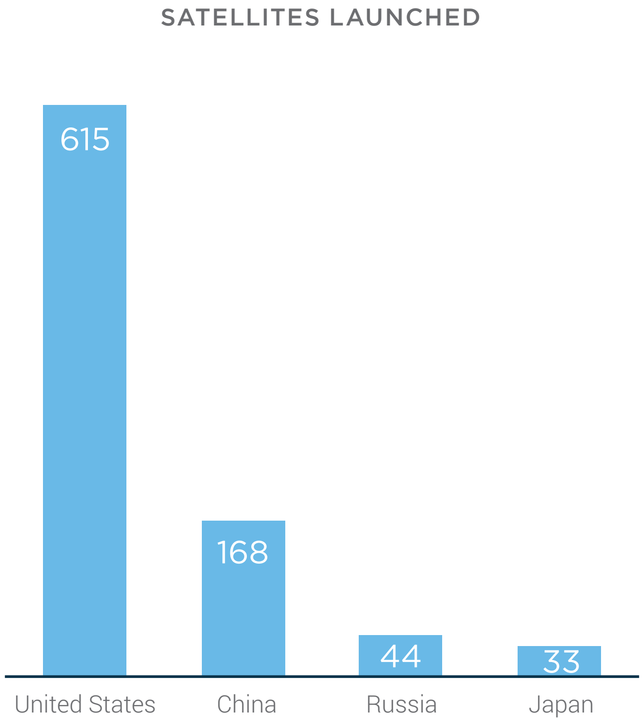
China now wields a larger global and regional diplomatic network than any other country. Yet its lead for diplomatic influence has narrowed in the wake of the pandemic and it is increasingly at risk of being overtaken by Japan. This is already evidenced in two of the Index's diplomatic indicators. Beijing's political leadership on the international stage was outranked in expert surveys by Japan globally, and by Singapore in the region. Its adoption of a more strident diplomatic tone – its so-called wolf-warrior diplomacy — and threats of economic coercion against multiple countries appear to have backfired in the eyes of regional policymakers and experts.

Beijing has enhanced its military capability by investing in weaponry that could threaten US and allied bases in the region. Political will and defence economics will be deciding factors in the military rivalry with the United States. However, a lack of trust among 11 neighbours with which China has boundary disputes or legacies of interstate conflict undermines the potential for Beijing to replace Washington as the security guarantor in the region. China's deepening defence ties with Cambodia and Pakistan — and its historic alliance with North Korea — remain the exceptions to the rule.

UNITED STATES VS CHINA







China's technological gap with the United States has widened slightly in 2020. China now has 229 of the world's 500 most powerful supercomputers, in comparison to the 117 in the United States. However, there is no Chinese equivalent to Silicon Valley, where entrepreneurs are injecting new dynamism into US technological innovation — including through private–public partnerships on the US space program. The United States launched 615 satellites into space in the last three years — three times more than China.

On current trends, China still appears set to close the gap with the United States by the end of the decade, but Beijing is unlikely to pull ahead by a meaningful margin. Internal hurdles will grow after 2030. China's workforce is projected to decline by 177 million people from current levels by mid-century. This presages social and economic challenges to come. Meanwhile, the one-party state still spends more on projecting power inwards, on internal security challenges, than it does on projecting it outwards, on military spending.

India falls just short of the major power threshold in 2020 and its position as a future peer competitor to China has become less certain.

With an overall power score of 39.7 — down from 41.0 points in 2019 — India has fallen just short of the major power threshold of 40 points in 2020. Asia's second most populous country is now considered to be a high-performing middle power in the Indo–Pacific.

India is more than likely to recover its major power status in coming years. However, its step down in the Index's power classification is telling of the country's predicament. Of all countries in the Indo–Pacific, India's economy has lost the most growth potential through the damage inflicted by the pandemic.

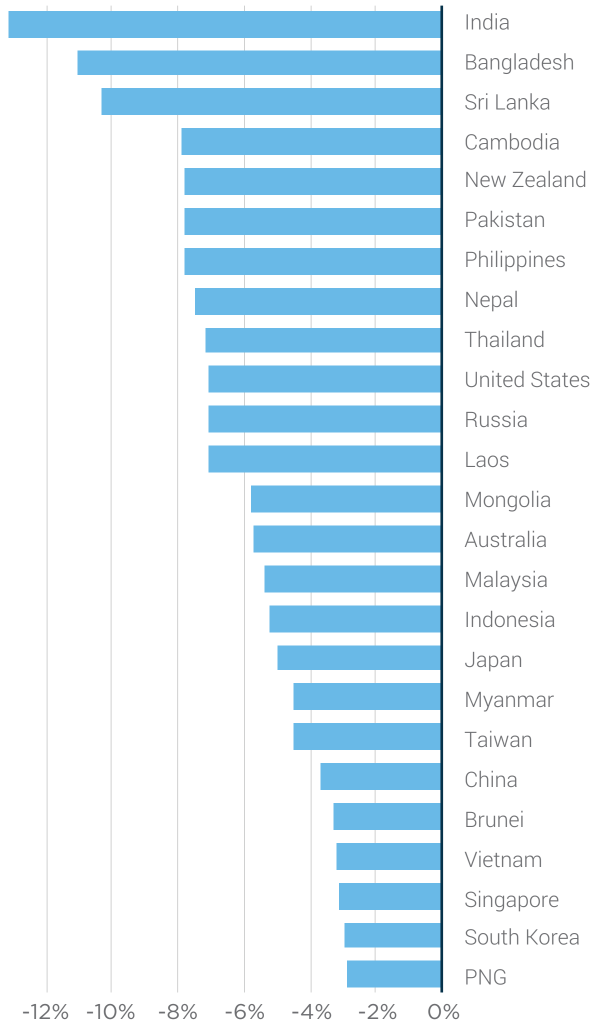
Advanced economies may take longer to recover from the pandemic, but emerging economies have been hardest hit relative to their growth paths prior to the pandemic. India's economy by 2030 is set to be 13% smaller than originally forecast prior to the pandemic, which equates to a downward adjustment of approximately $3 trillion dollars at purchasing power parity. This has led to a fall of nearly five points in India's score on the future resources measure.

While India is the only country with the demographic scale to match China, expectations that it can begin to level with China in coming years are unrealistic. Indeed, the pandemic's significant toll on Indian society has only widened the power disparity between Asia's two most populous countries. On current trends, India will only reach 40% of China's economic output by the close of the decade — down from the 50% forecast in the 2019 Asia Power Index.

India needs to be understood on its own terms. Its rise as a superpower, if it happens, will be a multi-decade effort and is unlikely to be linear. Nevertheless, its ambitions to play a larger role in the region are evident in 2020. New Delhi saw its diplomatic influence ranking improve by two places, overtaking Seoul and Moscow, to finish 4th overall.

Yet India's progress across the Index has been uneven. It is trending in opposite directions for its two weakest measures of power. On defence networks, it has improved by one place, where it now ranks 7th – reflecting progress in its regional defence diplomacy — notably with the quadrilateral security grouping, which includes Australia, Japan and the United States. On economic relationships, India has slipped into 7th place, overtaken by Australia, as it falls further behind in regional trade integration efforts.

PERCENT CHANGE IN PRE- AND POST-COVID 2030 GDP FORECASTS



India's decision to withdraw from the Regional Comprehensive Economic Partnership (RCEP) has been damaging in this regard. Meanwhile, China's economic clout continues to grow in India's near abroad — including in Nepal where Beijing has displaced New Delhi as the primary foreign investor.

Japan, the quintessential smart power, will take the longest in the region to recover from the economic fallout of the pandemic.

The only major power left standing in Asia is an overachiever, but one that is in long-term decline. Japan's overall score of 41 points dropped by 1.5 points in 2020. The premature resignation of Prime Minister Shinzo Abe in 2020 coincides with an unusually challenging set of circumstances for the country. A recession brought on by the COVID-19 pandemic will be compounded by the structural challenges posed by Japan's demographic decline adversely impacting productivity. Japan's eventual recovery to pre-COVID levels of economic output is on a distant horizon relative to the rest of the region, in around 2024.

The test for new prime minister Yoshihide Suga will be to manage these trends at home while emerging from Abe's towering shadow on the international stage. He will need to defend Japanese sovereignty, maintain Japan's levels of economic diplomacy in Southeast Asia, and defend a fragmented liberal order in Asia amid US–China competition and a fluid regional power balance.

Tokyo continues to be the quintessential smart power, using the country's limited resources to wield broad-based influence in the region. Japan exerts more influence in the region than expected given its available resources, as indicated by the country's positive Power Gap score. But while Japan remains the standout net overachiever in Asia, its Power Gap deteriorated in 2020. Tokyo has fallen five points in the economic relationships measure. This reflects a relative loss in standing in comparison with China's gains in its average share of regional foreign investment.

The country performs best in the diplomatic influence measure, where it has reached near parity with first placed China. In 2020, Japan surpassed South Korea, and achieved the highest points gain in the region for its defence networks, reflecting progress in its regional defence diplomacy. However, Japan's lowest rankings continue to be in the military capability and resilience measures, where it lags in 7th place.

Middle powers — Vietnam, Australia and Taiwan — are the only countries to gain relative power in 2020.

Three middle powers — Vietnam, Australia and Taiwan — were the only actors to gain in comprehensive power in 2020. Their competent handling of the COVID-19 pandemic was a necessary, but not sole condition for improving their regional standing. Other countries with successful pandemic responses — including New Zealand and South Korea — still experienced declines in their power.

Instead Vietnam, Australia and Taiwan have each sought at the margins to shape the regional order, even if none is powerful enough to dictate it. All three must contend with the consequences of fading US strategic predominance and unusually difficult relations with China. The performances of these three powers illustrate how the future is likely to be defined by asymmetric multipolarity. When neither the United States nor China can establish undisputed primacy in Asia, the actions, choices and interests of middle powers will become more consequential.

Vietnam overtook New Zealand to place 12th in 2020, with the largest improvement in relative power of any country — gaining 1.3 points. Vietnam is now within one point of matching Indonesia in its overall score. Vietnam performs best in the diplomatic influence measure, where it places 9th, up by three places from last year. Hanoi has become an effective multilateral player in regional forums and trade initiatives — whether in terms of steering negotiations for the Regional Comprehensive Economic Partnership agreement as ASEAN chair, or as one of 11 countries to have resuscitated the Trans-Pacific Partnership. Vietnam has also improved its scores for economic capability and defence networks, where it jumped three places.

Australia overtook South Korea as the Indo–Pacific's sixth most powerful country, with a gain in overall score of 1.1 points in 2020. Its greatest improvement was in cultural influence, where it moved up four places, with the addition of Papua New Guinea in this year's Asia Power Index capturing more of Australia's influence in the Pacific. Australia's comparative advantages as a middle power are most evident in its defence networks, where it ranks second behind the United States. Despite a far more modest military capability, Australia is ranked ahead of the United States for its defence diplomacy with non-allied partners. Canberra has led the way in forging variable geometry — bilateral, trilateral, quadrilateral and 'quad plus' — defence partnerships with a diverse range of countries, including India, Japan, Indonesia and Vietnam. Australia carries less 'great power baggage' and has demonstrated it can be far nimbler in Southeast Asia than its US ally.

Taiwan — ranked 14th for overall power — remains of central, strategic importance to the regional balance of power. Backed by the United States, it presents a formidable check on China's aspirations to become a fully-fledged sea power. Taiwan performs best in the economic capability measure, where it places 8th. Taiwan remains a diplomatic outsider in the region, with its lowest ranking in the diplomatic influence measure, coming in at 19th place. However, Taipei's competent handling of the COVID-19 pandemic has boosted its international reputation. Taiwan also maintains a substantial network of unofficial representative offices abroad, engaged primarily in diversifying the island's economic relationships. Taipei's foreign policy bureaucracy is ranked 10th in the region for its efficacy.

Australia, together with New Zealand, enjoys the most favourable strategic geography in the region — surrounded by ocean and framed by peaceful relations with immediate neighbours. The same cannot be said of Vietnam or Taiwan whose proximity, disputed boundaries, and legacies of conflict with China play far more directly into their geopolitical vulnerability. Nevertheless, Australia is trending downward slightly for resilience, due partly to major ecological threats facing the country. Australia also continues to import more refined fuel than any other economy in the region — including China and Japan. This leaves it vulnerable to potential disruptions in major sea lines of communication.

Australia's economic contraction in the wake of the pandemic is also set to be more pronounced than that of either Taiwan or Vietnam. However, Australia is one of the few advanced economies in the world to benefit from high productivity and a growing working-age population. Yet, net migration intake — the primary driver of its population and a key factor in its long-standing economic growth — has declined to negative levels for the first time since the Second World War due to the coronavirus outbreak. Dropping out of the demographic 'Goldilocks zone' will have adverse implications for Australia's fundamentals as a young and growing middle power. The failure to reverse this trend in the next few years would result in a smaller, poorer and ultimately less secure nation.

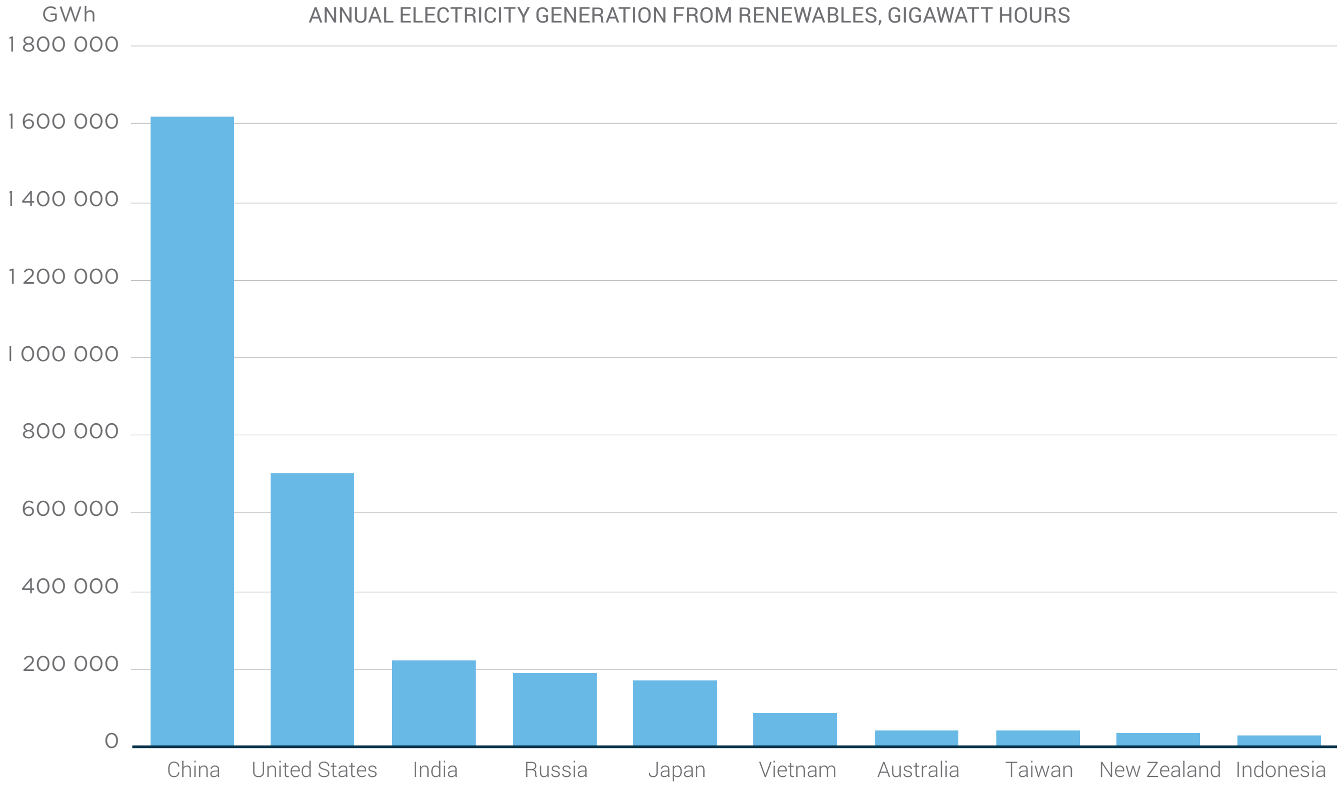
The climate race is the new space race.

An emerging climate race has the potential to generate the same kind of soft power dividends once associated with the space race of the Cold War. The resilience and prestige of countries rests increasingly on their capacity to manage problems such as pandemics, climate change, energy security and sustainable growth. In 2020, China became the largest greenhouse emitter to commit to a goal of carbon neutrality this century — by 2060, with emissions peaking in 2030. It is a stark shift from 2009, when China was blamed for destroying the Copenhagen conference on climate change, leaving the world with no successor to the Kyoto Protocol. The emissions pledge will likely help China build influence within multilateral forums. It will also add to pressure on the United States to re-enter the Paris agreement and make commensurate commitments.

Despite being the world's top emitter, China has also made the most significant investments in renewable energy. This is designed in part to offset its strategic dependence on energy imports. By contrast, US renewable energy generation still lags far behind, but has gained momentum. Australia's favourable geography also gives the island-continent the potential to become a leader in the post-carbon world economy. Yet, for now, the gap between reality and expectations has never been greater. Australia trails developing economies — including Vietnam, with a fraction of its landmass — for renewable energy generation.

RENEWABLE ENERGY

ANNUAL ELECTRICITY GENERATION FROM RENEWABLES, GIGAWATT HOURS



Top 10 Asia Power Index countries by production of renewable energy

MEASURES OF POWER

A country's comprehensive power is calculated as a weighted average across eight measures of power, each of which aggregates data from three to five distinct sub-measures.

The Index's measures and sub-measures seek to capture the many and varied means that enable countries to pursue favourable geopolitical outcomes, as well as respond to how the international environment affects them.

ECONOMIC CAPABILITY

Core economic strength and the attributes of an economy with the most geopolitical relevance; measured in terms of GDP at purchasing power parity (PPP), international leverage, technological sophistication and global connectivity.

Size: The economic weight of a country as reflected by its GDP, which is the total value of all final goods and services produced annually within an economy. Purchasing power parity exchange rates are used to allow for a reliable comparison of real levels of production between countries.

International leverage: Resources that give governments enhanced financial, legal and sanctioning powers abroad. These include global corporations and internationalised currencies, as well as sovereign wealth funds, export credit agencies and official reserves.

Technology: The technological and scientific sophistication of countries. This is measured through indicators such as labour productivity, high-tech exports, supercomputers, renewable energy generation and input variables including R&D spending.

Connectivity: The capital flows and physical means by which countries connect to and shape the global economy, including through international trade, global inward and outward investment flows, merchant fleets and international aviation hubs.

MILITARY CAPABILITY

Conventional military strength; measured in terms of defence spending, armed forces and organisation, weapons and platforms, signature capabilities and Asian military posture.

Defence spending: Annual spending on military forces and activities. This sub-measure looks at current resources devoted to maintaining, renewing, replacing and expanding military capability, measured in terms of military expenditure at market exchange rates and estimated defence-sector PPP rates.

Armed forces: Total active military and paramilitary forces, readiness and organisation. This sub-measure is principally focused on the size of armed forces, but also takes account of their combat experience, training and preparedness, as well as command and control structures.

Weapons and platforms: A country's stock of land, maritime and air warfare assets and capabilities. This sub-measure consists of a number of proxy indicators for capability across the three domains and assesses the sophistication of weapons and platforms.

Signature capabilities: Military capabilities that confer significant or asymmetric tactical and strategic advantages in warfare. These include ballistic missile capabilities, long-range maritime force projection, intelligence networks, and defensive and offensive cyber capabilities.

Asian military posture: The ability of armed forces to deploy rapidly and for a sustained period in the event of an interstate conflict in Asia. This sub-measure consists of qualitative expert-based judgements of a country's ability to engage in either a maritime or continental military confrontation in the region.

RESILIENCE

The capacity to deter real or potential external threats to state stability; measured in terms of internal institutional stability, resource security, geoeconomic security, geopolitical security and nuclear deterrence.

Internal stability: Institutional and environmental factors that enhance domestic governance and provide protection from external interference in internal affairs. This sub-measure includes indicators assessing government effectiveness, political stability, major ecological threats, and the absence of internal conflict.

Resource security: Secure access to energy and other critical resources essential to the functioning of a country's economy. This sub-measure looks at dependency on energy imports, energy self-sufficiency levels, refined fuel security and the supply of rare-earth metals.

Geoeconomic security: The ability to defend against other states' economic actions on a country's geopolitical interests and economic activity. This sub-measure looks at an economy's diversity of export markets and products, as well as its levels of dependency on primary trade partners and global trade.

Geopolitical security: Structural and political factors that minimise the risk of interstate conflict and enhance a country's territorial security. This sub-measure includes indicators such as population size relative to neighbours and geographic deterrence based on landmass, as well as active border disputes and legacies of interstate conflicts with neighbours.

Nuclear deterrence: Strategic, theatre and tactical nuclear forces that can be used to deter potential aggressors by threatening a retaliatory nuclear strike. This sub-measure assesses nuclear weapons range, ground-based nuclear missile launchers and nuclear second-strike capabilities.

FUTURE RESOURCES

The projected distribution of future resources and capabilities, which play into perceptions of power today; measured in terms of estimated economic, defence and broad resources in 2030, as well as working-age population forecasts for 2050.

Economic resources 2030: Future economic size and capabilities. This is measured by forecast GDP at purchasing power parity in 2030 and the Beckley formula for estimating economic power; multiplying forecast GDP by forecast GDP per capita.

Defence resources 2030: Future defence spending and military capability enhancements. This sub-measure consists of two indicators. The first looks at forecasts of absolute levels of military expenditure in 2030, holding the current ratio of defence spending to GDP constant. The second looks at expected gains in military expenditure as a proxy for investments in military capability above replacement levels.

Broad resources 2030: Estimated score for a country's broad resources and capabilities in 2030. This sub-measure estimates broad resources in 2030, based on every country's current ratio of GDP and military expenditure to their aggregate score for economic resources, military capability and resilience.

Demographic resources 2050: Demographic variables that are expected to contribute to future GDP beyond 2030. This sub-measure consists of a forecast of the working-age population (15–64) in 2050 as well as the expected labour dividend from gains in the working-age population adjusted for quality of the workforce.

ECONOMIC RELATIONSHIPS

The capacity to exercise influence and leverage through economic interdependencies; measured in terms of trade relations, investment ties and economic diplomacy.

Regional trade relations: The ability to influence other countries through bilateral trade flows and relative dependencies. This sub-measure focuses on an economy's relative importance as an importer, exporter and primary trade partner for other countries, based on annual bilateral trade flows.

Regional investment ties: The ability to influence other countries through foreign direct investment flows and relative dependencies. This sub-measure focuses on an economy's relative importance as a source and destination of foreign investment for other countries, based on ten-year cumulative flows of foreign capital investment.

Economic diplomacy: The use of economic instruments to pursue collaborative interests and beneficial geopolitical outcomes. This sub-measure tracks economic diplomacy through free trade agreements and outward foreign assistance flows.

DEFENCE NETWORKS

Defence partnerships that act as force multipliers of autonomous military capability; measured through assessments of alliances, regional defence diplomacy and arms transfers.

Regional alliance network: Number, depth and combined strength of defence alliances in the region. This is measured in terms of codified security guarantees, military personnel deployed in Index countries, joint military training exercises, arms procurements from allied partners and combined operation years with allies.

Regional defence diplomacy: Diversity and depth of defence diplomacy in the region. This sub-measure assesses defence dialogues, defence consultation pacts, foreign deployments between non-allied defence partners, joint military training exercises, combined operation years and arms procurements from non-allied countries.

Global defence partnerships: Arms trade patterns indicative of global security partnerships and collaboration across defence industries, measured in terms of annual arms trade flows and number of arms export recipients over a five-year period.

DIPLOMATIC INFLUENCE

The extent and standing of a state's or territory's foreign relations; measured in terms of diplomatic networks, involvement in multilateral institutions and clubs, and overall foreign policy and strategic ambition.

Diplomatic network: The regional and global reach of a country's diplomatic offices, measured in terms of total number of embassies, high commissions, permanent missions and other representative offices.

Multilateral power: A country's participation and diplomatic clout in multilateral forums. This sub-measure examines membership in select summits, diplomatic clubs and intergovernmental organisations, as well as financial contributions to the United Nations and development banks, and voting alignment with other countries in UN resolutions.

Foreign policy: The ability of government leaders and foreign policy bureaucracies to advance their country's diplomatic interests. This sub-measure aggregates qualitative expert-based judgements of how effectively leaders pursue their country's diplomatic interests, their demonstrated level of strategic ambition, and the wider efficacy of a country's foreign policy bureaucracy. This year, the sub-measure includes a one-time indicator measuring expert perceptions of the handling of the COVID-19 pandemic and its reputational impact on countries.

CULTURAL INFLUENCE

The ability to shape international public opinion through cultural appeal and interaction; measured in terms of cultural projection, information flows and people exchanges.

Cultural projection: Cultural influences and exports that help to enhance a country's reputation abroad. This sub-measure looks at online search trends in the region, exports of cultural services, global brands, and the international status of a country's passports, cities and heritage sites.

Information flows: The regional appeal of a country's media outlets and universities. This sub-measure looks at the online search trends in the region for selected national news agencies, newspapers, television and radio broadcasters, as well as the number of inbound international students from the region enrolled in tertiary education.

People exchanges: The depth and influence of a country's people-to-people links in the region. This sub-measure tracks the size of regional diasporas, and the attractiveness of countries as travel and emigration destinations.

2020 POWER GAP

The Power Gap is the difference between a country's comprehensive power score and what its power would be expected to be given its available resources. The Asia Power Index consists of four resource measures, which look at what countries have, and four influence measures, which look at what countries do with what they have.

The Power Gap provides a secondary analysis to the Index based on the interplay between resources (what countries have) and influence (what countries do with what they have). Countries can be overperformers or underperformers, irrespective of where they place in the rankings.

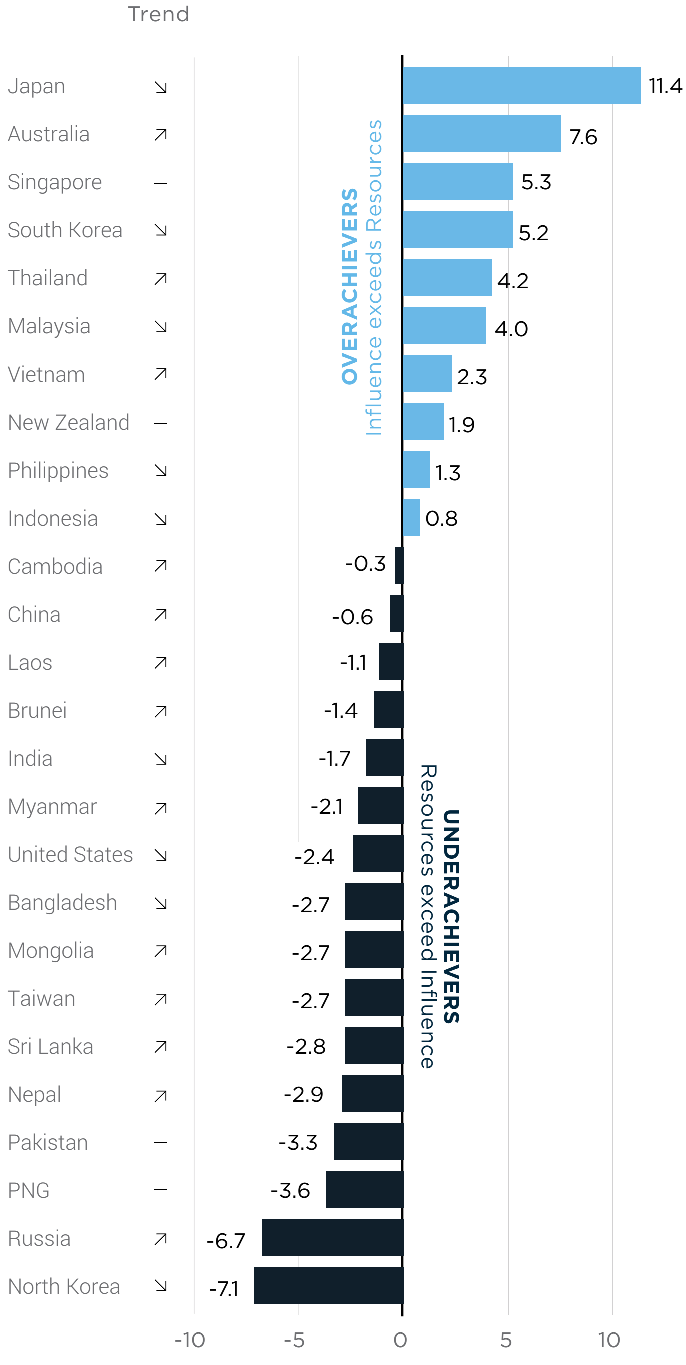
Countries with outsized influence in Asia relative to their resources have a positive Power Gap. Conversely, countries that exert undersized influence relative to their resources register a negative Power Gap.

Japan's Power Gap score of 11.4 reveals it to be a quintessential smart power, making efficient use of limited resources to wield broad-based diplomatic, economic and cultural influence in the region. Russia's Power Gap score of –6.7 indicates its influence may be limited by its position on the geographic periphery of Asia.

Australia, Singapore, and South Korea have more influence than their raw capabilities would indicate. This points to their ability and willingness to work collaboratively with other countries to pursue their interests. They are highly networked and externally focused.

Developing countries often register influence shortfalls — reflecting their unrealised power potential and internal constraints on their ability to project power abroad. Meanwhile, misfit middle powers — such as North Korea and Taiwan — are geopolitical outcasts that deliver inconsistent performances across the influence measures.

The distance from the trend line — which is determined using a linear regression — reveals how well each country converts its resources into influence in Asia.



Trend arrows track annual changes in Power Gap scores above a minimum threshold (≥ 0.15)

METHODOLOGY

The Lowy Institute Asia Power Index consists of eight measures of power, 30 thematic sub-measures and 128 indicators. Over half of these indicators involve original Lowy Institute research, while the rest are drawn from hundreds of publicly available national and international sources.

The 2020 edition of the Index has expanded to include one new country — Papua New Guinea — and three new indicators that track major ecological threats, bilateral and plurilateral defence dialogues, and perceptions of the international and domestic handling of the COVID-19 pandemic. These new indicators form part of the resilience, defence networks and diplomatic influence measures, respectively.

The selection of indicators was driven by an extensive literature review and expert consultations designed to address these methodological hurdles. As such, each indicator represents a carefully selected proxy for a broader category of variables often more difficult, if not impossible, to measure comparatively.

The methodological framework of the Index is informed by the OECD's Handbook on Constructing Composite Indicators. A distance-to-frontier approach is used to compare a country's results with the best performing and worst performing countries in each dataset.

The distance-to-frontier method allows for different indicators to be made comparable across a diverse set of metrics, while preserving the relative distance among the original data values. The method also reflects the notion that power in international relations is relative, measured as a comparative advantage in a given frame of reference.

WEIGHTINGS

The Lowy Institute has assigned a set of weightings to the component parts of the Asia Power Index that reflect their relative importance for exercising state power.

These authoritative weightings reflect the collective judgement of Lowy Institute experts on the basis of relevant academic literature and consultations with policymakers from the region. They take into account the dimensions of power considered most advantageous to countries given the current geopolitical landscape of the region.

Measure	Weighting
Economic resources	17.5%
Military capability	17.5%
Resilience	10%
Future resources	10%
Economic relationships	15%
Defence networks	10%
Diplomatic influence	10%
Cultural influence	10%

While our weightings are consistent with broadly held views in the policy and scholarly communities, it is of course possible to reach other value judgements about the relative importance of the measures.

An innovative calculator on the Index's digital platform enables users to adjust the principal weightings according to their own assumptions and reorder the rankings on that basis.

Sensitivity analysis has determined that the large number of indicators included in the Index, and variations across countries within those indicators, are quantitatively more important than our weighting scheme. The data points play the primary role in determining the rankings of the Lowy Institute Asia Power Index.

REVIEW: THREE STAGES

The Index model underwent three stages of review after development. First, the analytical assumptions and findings were submitted through an extensive peer review process. Second, a team of fact checkers verified that the raw data points and their normalised scores were factually correct and drew on the latest available data. Third, PwC provided a limited integrity review of the spreadsheets and formulas used to calculate the eight measures of the Index.

INDICATORS AND SOURCES

ECONOMIC CAPABILITY

Sub-measure	Indicator	Technical description; source
Size	GDP	*Estimated GDP at purchasing power parity, current prices (2020); Lowy Institute; OECD; World Bank; IMF*
International leverage	Corporate giants	*Number of public companies listed in the Forbes 2000 (2019); Forbes 2000*
	Global reserve currency	*Currency composition of official foreign exchange reserves, annualised average (2018–19); IMF*
	International currency share	*Share of international financial transactions undertaken in national currency, annualised average (2019); Society for Worldwide Interbank Financial Telecommunication (SWIFT)*
	Official reserves	*Official reserve assets including gold, current dollars (2018); World Bank; Reuters; Central Bank of Taiwan; CIA World Factbook*
	Export credit agencies	*Export credit agencies, total assets, current dollars (2018); Lowy Institute*
	Sovereign wealth funds	*Sovereign wealth funds, total assets, current dollars (2020); Lowy Institute; Sovereign Wealth Fund Institute*
Technology	High-tech exports	*Estimated technological sophistication of exports EXPY, 0–100 (2018); World Bank World Integrated Trade Solutions (WITS) database; Lowy Institute*
	Productivity	*GDP output per worker, constant 2010 dollars (2019); International Labour Organization*
	Human resources in R&D	*Total R&D researchers, full-time equivalent (latest year available); UNESCO; Taiwan Statistical Data Book; Lowy Institute*
	R&D spending (% of GDP)	*Gross domestic expenditure on R&D as a share of GDP (latest year available); UNESCO; Taiwan Statistical Data Book; Lowy Institute*
	Nobel prizes (sciences)	*High achievements in physics, chemistry, and physiology or medicine (1990–2019); NobelPrize.org*
	Supercomputers	*Number of supercomputers in the global top 500 (2019); Top 500.org*
	Satellite launched	*Satellites launched by country of ownership or operation (2016–19); Union of Concerned Scientists Satellite Database*
	Renewable energy	*Annual electricity generation from renewables, gigawatt hours (2017); International Energy Agency; Lowy Institute*
Connectivity	Global exports	*Exports of goods and services, current dollars (2018); World Bank; CIA World Factbook; Observatory of Economic Complexity*
	Global imports	*Imports of goods and services, current dollars (2018); World Bank; CIA World Factbook; Observatory of Economic Complexity*
	Global investment outflows (%)	*Three-year cumulative flows of outward foreign capital investment (2017-2019); FDI Markets; Lowy Institute*
	Global investment inflows (%)	*Three-year cumulative flows of inward foreign capital investment (2017-2019); FDI Markets; Lowy Institute*
	Merchant fleet	*Total fleet, dead-weight tons (2019); UN Conference on Trade and Development*
	Travel hubs	*Direct international connections from principal airport hub (2020, prior to COVID-19 pandemic); Lowy Institute; Open Flights*

MILITARY CAPABILITY

Sub-measure	Indicator	Technical description; source
Defence spending	Military expenditure, market exchange rates	*Estimated military expenditure, current dollars (2020); Lowy Institute; US Bureau of Arms Control, Verification and Compliance*
	Military expenditure, defence sector PPP	*Estimated military expenditure at defence sector purchasing power parity, current prices (2020); Lowy Institute; US Bureau of Arms Control, Verification and Compliance*
Armed forces	Military and paramilitary forces	*Active military and paramilitary personnel (2020); IISS Military Balance 2020*
	Training, readiness and sustainment	*Expert survey: Training and preparedness for sustained operations in the event of interstate conflict, two-year rolling average, 0–100 (2018-19); Lowy Institute*
	Organisation: Combat experience	*Expert survey: Combat experience relevant to the ability of armed forces to engage in interstate conflict, two-year rolling average, 0–100 (2018-19); Lowy Institute*
	Organisation: Command and control	*Expert survey: Exercise of authority and direction over armed forces in the event of an interstate conflict, two-year rolling average, 0–100 (2018-19); Lowy Institute*
Weapons and platforms	Land warfare: Manoeuvre	*Proxy: Main battle tanks and infantry fighting vehicles (2020); IISS Military Balance 2020*
	Land warfare: Firepower	*Proxy: Attack helicopters, used in close air support for ground troops (2020); IISS Military Balance 2020*
	Maritime warfare: Sea control	*Proxy: Principal surface combatants — frigates, destroyers, cruisers and carriers (2020); IISS Military Balance 2020*
	Maritime warfare: Firepower	*Proxy: Missile vertical launching cells on board surface combatants and submarines (2020); IISS Military Balance 2020*
	Maritime warfare: Sea denial	*Proxy: Tactical submarines (2020); IISS Military Balance 2020*
	Air warfare: Fighters	*Fighter/ground attack aircraft (2020); IISS Military Balance 2020*
	Air warfare: Enablers	*Proxy: Transport aircraft, airborne early warning and control (AEW&C) aircraft, and intelligence, surveillance and reconnaissance (ISR) aircraft (2020); IISS Military Balance 2020*
	Technology, maintenance and range	*Expert survey: Technology, maintenance and range of weapons systems, equipment and materiel, two-year rolling average, 0–100 (2018-19); Lowy Institute*
Signature capabilities	Ground-based missile launchers	*Launching platforms for intercontinental ballistic missiles (ICBM), intermediate-range ballistic missiles (IRBM), medium-range ballistic missiles (MRBM), short-range ballistic missiles (SRBM), and ground-launched cruise missiles (GLCM) (2020); IISS Military Balance 2020*
	Ballistic missile submarines	*Ballistic missile submarines (2020); IISS Military Balance 2020*
	Long-range maritime force projection	*Proxy: Carriers and principal amphibious ships (2020); IISS Military Balance 2020*
	Area denial capabilities	*Expert survey: Air defence, anti-naval, and intelligence, surveillance, reconnaissance and targeting capabilities, two-year rolling average, 0–100 (2018-19); Lowy Institute*
	Intelligence capabilities	*Expert survey: Institutional know-how, overseas reach, personnel and technological sophistication of intelligence agencies, two-year rolling average, 0–100 (2018-19); Lowy Institute*
	Cyber capabilities	*Expert survey: Defensive and offensive cyber capabilities, two-year rolling average, 0–100 (2018-19); Lowy Institute*
Asian military posture	Ground forces deployment	*Expert survey: Ability of ground forces to deploy with speed and for a sustained period in the event of a major continental military confrontation in the Asia-Pacific region, two-year rolling average, 0–100 (2018-19); Lowy Institute*
	Naval deployment	*Expert survey: Ability of the navy to deploy with speed and for a sustained period in the event of a major maritime military confrontation in the Asia-Pacific region, two-year rolling average, 0–100 (2018-19); Lowy Institute*

INDICATORS AND SOURCES

RESILIENCE

Sub-measure	Indicator	Technical description; source
Internal stability	Government effectiveness	*Government effectiveness: Worldwide Governance Indicators; percentile rank, 0–100 (2018); Worldwide Governance Indicators*
	Political stability	*Political stability and absence of violence/terrorism: Worldwide Governance Indicators; percentile rank, 0–100 (2018); Worldwide Governance Indicators*
	Major ecological threats	*Number of catastrophic ecological threats facing countries between 2020 and 2050; from water stress, food insecurity, droughts, floods, cyclones, temperature rise, sea level rise and population growth (2020); Ecological Threat Register 2020; Lowy Institute*
	Internal conflict years	*Number of years since 1946 in which at least one internal armed conflict resulted in 25 or more battle-related deaths (1946–2018); Uppsala Conflict Data Program*
	High-intensity internal conflict years	*Number of years since 1946 in which at least one internal armed conflict resulted in 1,000 or more battle-related deaths (1946–2018); Uppsala Conflict Data Program*
	Infant mortality	*Number of infants dying before reaching one year of age, per thousand live births (2018); World Bank; CIA World Factbook*
Resource security	Energy trade balance	*Net energy exports in million tonnes of oil equivalent, Mtoe (2017); International Energy Agency; Economic Research Institute for ASEAN and East Asia*
	Energy self-sufficiency	*Primary energy production as a share of total primary energy use (2017); International Energy Agency; Economic Research Institute for ASEAN and East Asia*
	Fuel trade balance	*Net exports of refined petroleum, current dollars (2018); Observatory of Economic Complexity; Atlas of Economic Complexity*
	Fuel security	*Deficit of refined petroleum as a proportion of GDP (2018); Lowy Institute*
	Rare-earth metals supply	*Mining production of rare-earth metals, tonnes (2019); US Geological Survey*
Geoeconomic security	Diversity of export products	*Total products exported to at least one foreign market with a value of at least US$10,000 (2017); World Bank World Integrated Trade Solutions (WITS) database*
	Diversity of export markets	*Foreign markets to which exporter ships at least one product with a value of at least US$10,000 (2017); World Bank World Integrated Trade Solutions (WITS) database*
	Dependency on global trade	*Trade measured as a proportion of GDP (2018); World Bank; CIA World Factbook; Bank of Korea; IMF; Observatory of Economic Complexity; Lowy Institute*
	Dependency on primary trade partner	*Two-way trade with primary trade partner as a share of total trade (2017); World Bank World Integrated Trade Solution (WITS) database*
Geopolitical security	Population relative to neighbours	*Population as a share of neighbouring country populations: weighted at 100% for neighbouring countries with land borders; 75% for neighbouring countries divided by a strait; 25% for neighbouring countries with touching or overlapping claimed EEZ boundaries (2018); Lowy Institute*
	Landmass deterrent	*Country landmass, square kilometres (2018); World Bank; Taiwan Statistical Data Book*
	Demographic deterrent	*Total population (2018); World Bank; Taiwan Statistical Data Book*
	Interstate conflict legacies	*Years of interstate conflict with neighbouring Index countries as a primary party (1948–2020); Uppsala Conflict Data Program; Lowy Institute*
	Boundary disputes	*Overlapping territorial claims and/or unresolved land border and maritime demarcations (2019); Lowy Institute*
Nuclear deterrence	Nuclear weapons capability	*States with nuclear weapons (2020); Lowy Institute*
	Nuclear weapons range	*Maximum estimated nuclear missile range, kilometres (2020); CSIS Missile Defense Project; Lowy Institute*
	Ground-based nuclear missile launchers	*Launching platforms for intercontinental ballistic missiles (ICBM), intermediate-range ballistic missiles (IRBM), medium-range ballistic missiles (MRBM), short-range ballistic missiles (SRBM), and ground-launched cruise missiles (GLCM) containing nuclear warheads (2020); IISS Military Balance 2020*
	Nuclear second-strike capability	*Proxy: Ballistic missile submarines (2020); IISS Military Balance 2020*

FUTURE RESOURCES

Sub-measure	Indicator	Technical description; source
Economic resources 2030	GDP baseline	*Estimated GDP at purchasing power parity, current prices (2020); Lowy Institute; OECD; World Bank; IMF*
	GDP forecast 2030	*GDP forecast at purchasing power parity, constant 2019 prices (2030); Lowy Institute*
	Economic capability 2030	*Beckley formula: GDP by GDP per capita forecast at purchasing power parity, 0–100 (2030); Lowy Institute*
Defence resources 2030	Military expenditure baseline	*Estimated military expenditure at defence sector purchasing power parity, current prices (2020); Lowy Institute; US Bureau of Arms Control, Verification and Compliance*
	Military expenditure forecast 2030	*Estimated military expenditure forecast at defence sector purchasing power parity, constant 2019 prices (2030); Lowy Institute*
	Military capability enhancement 2021-30	*Forecast absolute increase in military expenditure above existing levels at estimated defence sector purchasing power parity, constant 2019 prices (2021–30); Lowy Institute*
Broad resources 2030	Estimated broad resources 2030	*Estimated aggregate score for* economic resources, military capability *and* resilience *measures based on GDP and military expenditure trends, 0–100 (2030); Lowy Institute*
Demographic resources 2050	Working-age population baseline	*Total working-age population, 15–64 (2020); UN Population Division; Lowy Institute*
	Working-age population forecast 2050	*Medium variant forecast for total working-age population, 15–64 (2050); UN Population Division; Lowy Institute*
	Labour dividend 2020-50	*Forecast gains in working-age population, adjusted for quality of the workforce and climate resilience (2020-50); quality is proxied by GDP per worker in 2019 at purchasing power parity; Lowy Institute*

ECONOMIC RELATIONSHIPS

Sub-measure	Indicator	Technical description; source
Regional trade relations	Trade with region	*Total value of trade with Index countries, current dollars (2018); World Bank World Integrated Trade Solutions (WITS) database; Observatory of Economic Complexity; Lowy Institute*
	Primary trade partner	*Number of Index countries in which state is the primary regional trading partner (2018); World Bank World Integrated Trade Solutions (WITS) database; Observatory of Economic Complexity; Lowy Institute*
	Regional selling power	*Average imports share in 25 Index countries (2018); World Bank World Integrated Trade Solutions (WITS) database; Observatory of Economic Complexity; Lowy Institute*
	Regional buying power	*Average exports share in 25 Index countries (2018); World Bank World Integrated Trade Solutions (WITS) database; Observatory of Economic Complexity; Lowy Institute*
Regional investment ties	Foreign investment in region	*Ten-year cumulative flows of outward foreign capital investment in Index countries (2010–19); FDI Markets; Lowy Institute*
	Primary foreign investor	*Index countries in which state is the primary regional inward foreign direct investor, based on ten-year cumulative flows of foreign capital investment (2010–19); FDI Markets; Lowy Institute*
	Average share of foreign investment	*Average share of inward foreign direct investment in 25 Index countries, based on ten-year cumulative flows of foreign capital investment (2010–19); FDI Markets; Lowy Institute*
	Investment attractiveness	*Ten-year cumulative flows of inward foreign capital investment (2010-19); FDI Markets; Lowy Institute*
Economic diplomacy	Global FTAs	*Bilateral and multilateral free trade agreements concluded by Index countries with other countries (2020); World Trade Organization; Lowy Institute*
	Regional FTAs	*Bilateral and multilateral free trade agreements concluded with Index countries (2020); World Trade Organization; Lowy Institute*
	Foreign assistance (global)	*Annual overseas development assistance (ODA) and other official flows (OOF), current dollars (2018); Organisation for Economic Co-operation and Development; AidData*
	Foreign assistance (regional)	*Annual overseas development assistance (ODA) and other official flows (OOF) to Asia, current dollars (2018); Organisation for Economic Co-operation and Development; AidData*

DEFENCE NETWORKS

Sub-measure	Indicator	Technical description; source
Regional alliance network	Regional military alliances	*Number of codified alliances between Index countries, including a mutual defence clause or actionable security guarantee (2020); Lowy Institute; Alliance Treaty Obligations and Provisions Project*
	Allied force deployments	*Allied military personnel deployed in Index countries: minimum of 50 personnel deployed on a permanent or semi-permanent rotational basis (2020); Lowy Institute; IISS Military Balance 2020*
	Joint training (allies)	*Number of joint training exercises conducted with allied Index countries (2015–); Lowy Institute*
	Combined operation years (allies)	*Cumulative years fought alongside allied Index countries in individual conflicts, as a primary or supporting party (1948–2018); Uppsala Conflict Data Program*
	Arms procurements (allies)	*Arms imports from allied Index countries expressed in SIPRI Trend Indicator Values (2013–18); SIPRI Arms Transfer Database*
	Alliance force multiplier	*Ratio of combined allied military capabilities to autonomous military capability (2020); Lowy Institute*
Regional defence diplomacy	Defence Dialogues	*Number of bilateral and plurilateral defence diplomacy meetings held between Index countries (2019); Lowy Institute*
	Defence consultation pacts	*Defence consultation pacts between non-allied Index countries (2020); Lowy Institute*
	Foreign forces and deployments	*Military personnel deployed to and from non-allied Index countries: minimum of 50 personnel deployed on a permanent or semi-permanent rotational basis (2019); Lowy Institute; IISS Military Balance 2020*
	Joint training (non-allies)	*Number of joint training exercises conducted with non-allied Index countries (2015–); Lowy Institute*
	Combined operation years (non-allies)	*Cumulative years fought alongside non-allied Index countries in individual conflicts, as a primary or supporting party (1948–2018); Uppsala Conflict Data Program*
	Arms procurements (non-allies)	*Arms imports from non-allied Index countries expressed in SIPRI trend indicator values (2013–18); SIPRI Arms Transfers Database*
Global defence partnerships	Global arms trade	*Annual arms imports and exports, current dollars (2017); US Bureau of Arms Control, Verification and Compliance*
	Arms export partnerships	*Number of arms export recipients, including state and non-state groups (2013–18); SIPRI Arms Transfers Database*

DIPLOMATIC INFLUENCE

Sub-measure	Indicator	Technical description; source
Diplomatic network	Embassies (regional)	*Number of embassies, high commissions and permanent missions in Index countries (2019); Lowy Institute Global Diplomacy Index*
	Embassies (global)	*Number of embassies, high commissions and permanent missions globally (2019); Lowy Institute Global Diplomacy Index*
	Second-tier diplomatic network (regional)	*Consulates and other representative offices in Index countries (2019); Lowy Institute Global Diplomacy Index*
Multilateral power	Summits, clubs and organisations	*Membership in select summits, diplomatic clubs and regional intergovernmental organisations (2020); Lowy Institute*
	Institutional voting shares	*Average voting shares by subscribed capital in major multilateral development banks (2019); Lowy Institute*
	UN capital contributions	*Net capital contributions to the United Nations Secretariat, share of global total (2020); UN Official Document System*
	Voting alignment	*Voting alignment with other Index countries in adopted United Nations General Assembly resolutions (2019); UN Digital Library*
	Voting partners	*Times country featured among top three voting partners for other Index countries in United Nations General Assembly (2019); UN Digital Library*
Foreign policy	Political leadership (regional)	*Expert survey: Efficacy of political leaders in advancing their country's diplomatic interests in Asia, 0–100 (2019); Lowy Institute*
	Political leadership (global)	*Expert survey: Efficacy of political leaders in advancing their country's diplomatic interests globally, 0–100 (2019); Lowy Institute*
	Strategic ambition	*Expert survey: Extent to which political leaders demonstrate strategic ambition, two-year rolling average, 0–100 (2018-19); Lowy Institute*
	Diplomatic service	*Expert survey: Efficacy of country's diplomatic service and wider foreign policy bureaucracy, two-year rolling average, 0–100 (2018-19); Lowy Institute*
	COVID-19 Response	*Expert survey: Perception of international and domestic handling of COVID-19 pandemic (2020); Lowy Institute*

CULTURAL INFLUENCE

Sub-measure	Indicator	Technical description; source
Cultural projection	Online search interest	*Online interest for a given Index country in 24 other Index countries; average percent of total Google and Baidu searches for selected countries (2019); Lowy Institute; Google trends; Baidu*
	Cultural exports	*Exports of cultural services, current dollars (2018); UN Conference on Trade and Development; UNESCO*
	Global brands	*Number of brands in the Global 500 (2020); Brand Directory*
	Prestige: Skyscrapers	*Buildings in financial capital above 150 metres in height (2019); Council on Tall Buildings and Urban Habitat*
	Status: Visa-free travel	*Number of countries that citizens can travel to visa-free (2020); Henley & Partners*
	Cultural heritage	*UNESCO World Heritage listed sites (2019); UNESCO*
Information flows	Asia-Pacific international students	*International students enrolled in tertiary education from East, South, West and Central Asia and the Pacific (2017/18); UNESCO; ICEF Monitor; Institute of International Education; Lowy Institute*
	Regional influence: News agencies	*Online interest for a given Index country's news agency in 23 other Index countries; average percent of total online searches for selected news agencies (2019); Lowy Institute; Google Trends*
	Regional influence: Newspapers	*Online interest for a given Index country's national newspaper in 24 other Index countries; average percent of total online searches for selected newspapers (2019); Lowy Institute; Google Trends*
	Regional influence: TV broadcasters	*Online interest for a given Index country's international television broadcaster(s) in 24 other Index countries; average percent of total online searches for selected television broadcasters (2019); Lowy Institute; Google Trends*
	Regional influence: Radio broadcasters	*Online interest for a given Index country's public radio broadcaster(s) in 24 other Index countries; average percent of total online searches for selected radio broadcasters (2019); Lowy Institute; Google Trends*
People exchanges	Diaspora influence	*Average share of total immigrant populations resident in 25 Index countries from the given Index country of origin (2019); Lowy Institute; UN Department of Economic and Social Affairs; Taiwan Overseas Community Affairs Council*
	Migrant drawing power	*Average share of global migrant populations from 25 Index countries of origin settled in the given Index country (2019); Lowy Institute; UN Department of Economic and Social Affairs; Taiwan Overseas Community Affairs Council*
	Regional travel destination	*Arrivals of non-resident visitors from Index countries at national borders (2018); UN World Tourism Organization; Reuters*
	Regional travel connectivity	*Direct flight connections between Index countries (2020, prior to COVID-19 pandemic); Lowy Institute; Open Flights*

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