



AUDIT OF GEOPOLITICAL CAPABILITY: SOUTH AMERICA

Assessing the Neighbourhood of Chile - Part One

The Henry Jackson Society

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About the compiler

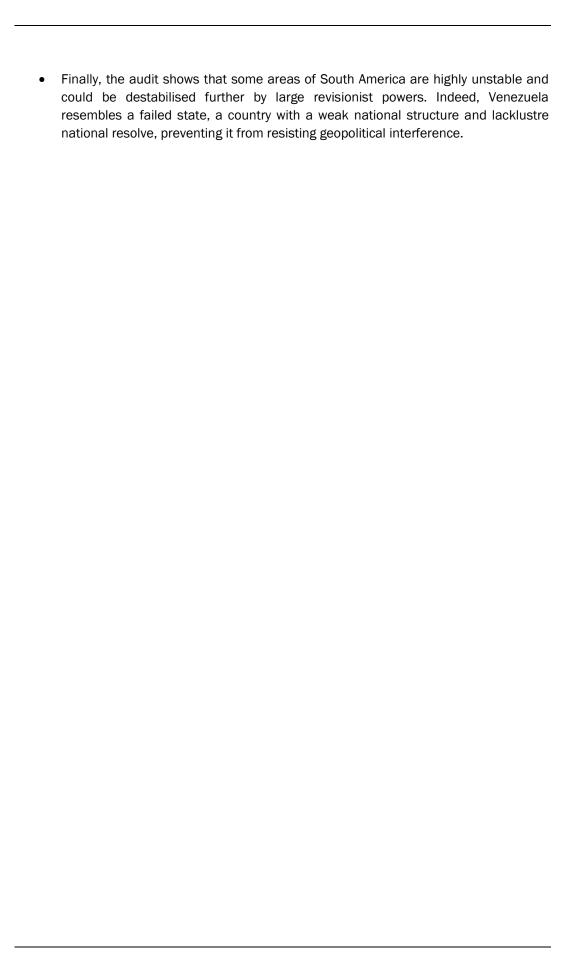
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Executive Summary

- As the global balance of economic and geopolitical power changes, Chile's economic and political interests are likely to be affected – as they have in the past – by the interests of the major powers.
- This study the first in a two-part series focusing on Chile's geographic neighbourhood – uses the Henry Jackson Society's 'Audit of Geopolitical Capability' to assess the geopolitical capabilities of Chile's immediate neighbours, namely the countries and 'extra-continental' powers (France, the United Kingdom (UK) and United States (US)) of South America.
- 'Geopolitical capability' is defined as the potential ability of a country to use a broad range of resources, structures, instruments and resolve to overcome the 'tyranny of distance' and influence physical space, including counterparts located within that space.
- The audit is predicated on a framework with four central attributes: 'national base', 'national structure', 'national instruments' and 'national resolve'. These organise five 'pillars' 'economic clout', 'technological prowess', 'cultural prestige', 'diplomatic leverage' and 'military might' comprised of 33 indicators, which together form the building blocks of national geopolitical capability.
- The resulting geopolitical audit of South America reveals that there are substantial differences between the countries and extra-continental powers in terms of geopolitical capability, both overall and in terms of specific attributes.
- Of the extra-continental powers, the US remains by some margin the only superpower: it maintains the largest national base, the most extensive national structure, and has access to overwhelming national instruments, not least aweinspiring economic clout and military might. The UK and France are also highly capable powers.
- Brazil is the leading South American power, but faces significant shortcomings in terms of national resolve, particularly relating to stability and the rule of law.
- Chile and Uruguay although far smaller than Brazil are more developed, with far stronger national resolve. Indeed, the two are the only countries in South America that are closest to mirroring the liberal democracies of the West. Of the two, Chile achieves the highest rank overall, scoring particularly highly for the attribute national structure. The audit shows that Chile and Uruguay are both well placed to act as economic magnets and dynamos on the south-eastern rim of the Pacific and on South America's mid-Atlantic coast, respectively.

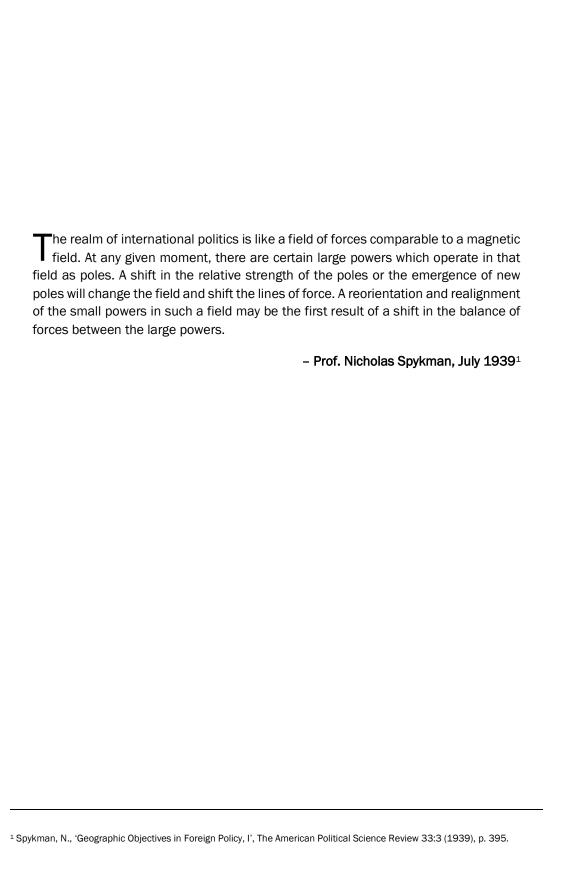


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Foreword

Introduction: Chile and South America in a Period of Global Change

Since Chile's independence in the early 19th century, from both an economic and political perspective South America has faced the Euro-Atlantic world. But South America's place has been changing fast, just as a profound transformation in the global balance of power – particularly economic – has taken place. In 1989, at the end of the Cold War, the Euro-Atlantic region – Canada, the United States, the 12 countries of the European Community, along with Norway, Sweden and Finland – accounted for just over 60% of global Gross National Income (GNI); however, by 2017, marginally under 30 years later, their relative share had fallen to just over 46%. Just as the Cold War ended, significant developments were taking place on the other side of the world. In 1989, the countries flanking either side of the Pacific Ocean formed Asia-Pacific Economic Cooperation (APEC). In 1989 they held 53% of global GNI (with the US and Japan holding the lion's share). But by 2017, their share had increased to just over 59%.² So, as the Euro-Atlantic region went into relative economic decline, the Asia-Pacific began to grow.

According to long-term economic projections by PricewaterhouseCoopers and the London-based Centre for Economics and Business Research, the gulf between the Euro-Atlantic region and the rest of the world, not least the Asia-Pacific region, is likely to become wider still.³ In 1989, China's economy, in terms of GNI, was just two-thirds the size of the United Kingdom's (UK); in 2017, it was over four times larger, and may even overtake the United States (US) in the coming decades.⁴ If it can initiate further political and economic reforms, China may be able to out-produce all of Western Europe's big economies put together by the 2030s.⁵ The Asia-Pacific region now forms the core of the global economy, in the same way that the Euro-Atlantic zone has dominated the past two centuries.

The changing global balance of power is important as it is affecting all countries in South America. For Chile, these changes have been pronounced. In no other area can it be seen so

² Global Gross National Income (GNI, Atlas Method) in 1989 was US\$21.1 trillion. In 2017 it was US\$78.4 trillion. See 'GNI, Atlas method (total US\$)'. World Bank. 2019. available at:

https://data.worldbank.org/indicator/NY.GNP.ATLS.CD?end=2017&start=1989, last visited: 23 May 2019. In 1989, the GNI of the 12 countries of the European Community, the US, Canada, Finland, Sweden, Norway was US\$12.7 trillion. In 2017 it was US\$36.3 trillion See: 'GNI, Atlas method (total US\$)', World Bank, 2019, available at:

https://data.worldbank.org/indicator/NY.GNP.ATLS.CD?end=2017&locations=BE-DK-FR-DE-GR-IE-IT-LU-NL-PT-ES-GB-CA-US&start=1989, last visited: 23 May 2019. In 1989 the GNI of all current members of APEC (excluding Taiwan, and Russia in 1989) was US\$11.2 trillion. In 2017 it was US\$46.5 trillion. See: 'GNI, Atlas method (total US\$)', World Bank, 2019, available at: https://data.worldbank.org/indicator/NY.GNP.ATLS.CD?end=2017&locations=AU-BN-ID-KR-MY-NZ-PH-SG-TH-HK-MX-PG-CL-PE-VN-JP-CN-US-CA&start=1989, last visited: 23 May 2019.

³ 'The World in 2050', *PriceWaterhouseCoopers*, February 2017, available at:

https://www.pwc.com/gx/en/issues/economy/the-world-in-2050.html, last visited: 23 May 2019 and 'World Economic League Table', Centre for Economic and Business Research, December 2018, available at: https://cebr.com/welt-2019/, last visited: 23 May 2019.

⁴ See 'GNI, Atlas method (total US\$), World Bank, 2017, available at:

https://data.worldbank.org/indicator/NY.GNP.ATLS.CD?locations=GB-CN, last visited: 23 May 2019.

⁵ 'Global Economics Analyst: Landing the Plane', Goldman Sachs (2018), available at:

https://www.goldmansachs.com/insights/pages/outlook-2019/global-outlook/report.pdf, last visited: 3 December 2018, and 'The World in 2050' *PwC*, February 2017, available at: https://www.pwc.com/gx/en/issues/economy/the-world-in-2050.html, last visited: 23 May 2019.

strongly as Chile's trade patterns. Even as late as 1989, Europe consumed almost 39% of Chile's exports – more than double what it exported to North America, Chile's next-largest export market. However, since then, Chile's economic fortunes have been progressively reshaped by the rise of the vast maritime space to the west. As shown in Appendix A, the Asian and Oceanian members of APEC have grown from consuming 28% of Chilean exports in 1989 to 48% in 2016. Indeed, Chile exported more to China than it did to the whole of Europe in 2016 and more to Japan and South Korea than it did to the whole of South America. Moreover, as also shown in Appendix A, the Asian and Oceanian APEC members have become an increasingly important source for Chile's imports: over 32% of the country's imports came from those members in 2016, up from just 19% in 1989. Indeed, the economic rise of the Asia-Pacific is likely to further compound Chile's economic transition from a South American country with a European perspective to a fundamentally Asia-Pacific nation.

However, although these international economic changes initially offered Chile new economic opportunities, they are also beginning to present new strategic challenges. It is possible that the structural changes in the global economy that have facilitated Chile's economic realignment and development in recent years are likely to come increasingly into question. As countries like China attempt to translate their economic weight into strategic heft, and ultimately geopolitical reach, the Euro-Atlantic powers – the traditional custodians of the rules-based international order – have been caught by surprise, and not only because of their relative economic decline. Imagining a more peaceful and prosperous world in the aftermath of the Cold War, the Euro-Atlantic countries disarmed themselves and turned increasingly inward.⁸ The prevailing consensus in most developed Euro-Atlantic countries was that the emerging Asia-Pacific economies (including Russia) would gradually integrate into the pre-existing rules-based international system as 'responsible stakeholders'.⁹ In recent years, however, this perspective has been put to the test. While some countries have become increasingly responsible and integrated, others have indulged in revisionist geopolitics – a word and idea that had all but gone out of fashion by the early 2000s.¹⁰

In particular, the economic rise of China has unnerved many surrounding countries, as well as the US, where a bipartisan consensus is emerging that sees China as a long-term strategic competitor to American interests.¹¹ Besides China's deeply authoritarian tendencies,

⁶ 'Where did Chile export to in 1989?', Atlas of Economic Complexity, 2019, available at:

http://atlas.cid.harvard.edu/explore/?country=42&partner=undefined&product=undefined&productClass=SITC&startYear=undefined&target=Partner&year=1989, last visited: 23 May 2019.

⁷ 'Where did Chile export to in 2016?', Atlas of Economic Complexity, 2019, available at:

http://atlas.cid.harvard.edu/explore/?country=42&partner=undefined&product=undefined&productClass=SITC&startYear=undefined&target=Partner&year=2016, last visited: 23 May 2019.

⁸ Cooper, R., 'The long peace', Prospect, 20 April 1999, available at:

https://www.prospectmagazine.co.uk/magazine/thelongpeace, last visited: 30 November 2018.

^{**}For the first use of this term, see: 'Whither China? From Membership to Responsibility', *National Committee on United States – China Relations: Newsletter*, 21 September 2005, available at:

https://www.ncuscr.org/sites/default/files/migration/Zoellick_remarks_notes06_winter_spring.pdf, last visited: 23 May 2019.

¹⁰ For a good example of this kind of thinking, see: Leonard, M., *Why Europe will run the 21st Century* (London: Fourth Estate, 2005) and Fettweis, C., 'Revisiting Mackinder and Angell: The Obsolescence of Great Power Geopolitics', Comparative Strategy 22:2 (2003).

¹¹ See: Campbell, K.M. and Ratner, E., 'The China Reckoning: How Beijing Defied American Expectations', *Foreign Affairs*, March/April 2018, available at: https://www.foreignaffairs.com/articles/china/2018-02-13/china-reckoning, last visited: 23 May 2019.

concerns have grown about Beijing's global agenda, not least due to its US\$1 trillion 'Belt and Road Initiative', attempts to 'continentalise' the South China Sea, and naval build-up. 12 The re-emergence of traditional geopolitics is indicative of the emergence of a more contested and competitive international environment. 13 Indeed, should China challenge the US for regional primacy in the coming decades, the two giants may 'decouple' economically from one another, sending shockwaves through the entire Asia-Pacific region, as well as the wider global economy. 14 Here, the looming trade conflict between Beijing and Washington, perhaps most visible in America's decision to place the Chinese telecoms company Huawei on its 'Special Entities' list, is indicative of the shape of things to come. 15 This emerging environment – including South America – is increasingly ripe both for full-blown geoeconomic and geopolitical competition.

Chile's proposed (but unapproved) *National Strategy for Security and Defence (2012-2024)* captured the beginning of these trends over seven years ago:

Regional economic growth, the emergence of Brazil as a global player and the transfer of the axis of global economic activity from the Atlantic to the Pacific have changed the geostrategic valuation of Latin America. Its western coast is one of the shores of the most important maritime basins for commercial exchange in the twenty-first century. [...]

It went on:

Latin America is a region with a great biodiversity and abundance of natural resources. The growing international pressure on them is becoming an issue on the South American security agenda. It is foreseeable that in the near future there will be tensions due to the depredation of these resources and differences between the countries that own them and those that demand them.¹⁶

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¹² Andrew Lambert, the Laughton Professor of Naval History in the Department of War Studies, King's College London, describes "continentalisation" as the attempt made by continental powers – such as China – to generate overlapping land-based military infrastructure to gain control over adjacent maritime spaces, such as the South and East China seas. See: Lambert, A., Seapower States: Maritime Culture, Continental Empires and the Conflict that Made the Modern World (New Haven: Connecticut, 2018), p. 318.

¹³ Penny Mordaunt, the UK Secretary of State for Defence, explained in her keynote speech in May 2019 that we live in an increasingly "uncertain and a challenging world...a world that is becoming increasingly complex...the challenge of China rising...the threat from a Russia resurgent...the ever-changing shape of violent extremism and terrorism...the growth of cyber threats...and organised crime. The grey areas of new weapons and new theatres. There are huge challenges ahead of us, and there will be many demands made of us." For the full speech see: Mordaunt, P., 'Defence Secretary keynote speech at the Sea Power Conference 2019', Gov.uk, 15 May 2019, available at: https://www.gov.uk/government/speeches/defence-secretary-keynote-speech-at-the-sea-power-conference-2019, last visited: 23 May 2019.

¹⁴ For more on this concept, see: 'China and America – The Great Decoupling?', *Enodo Economics*, 2019, available at: https://enodoeconomics.com/thegreatdecoupling, last visited: 23 May 2019.

¹⁵ See: Sevastopulo, D., Stacey, K. and Liu, N., 'Donald Trump issues executive order laying ground for Huawei ban', *Financial Times*, 15 May 2019, available at: https://www.ft.com/content/c8d6ca6a-76ab-11e9-be7d-6d846537acab, last visited: 23 May 2019. See also: Seely, B., Varnish, P. and Hemmings, J., 'Defending our data: Huawei, 5G and the Five Eyes', The Henry Jackson Society (2019), available at: https://henryjacksonsociety.org/wp-content/uploads/2019/05/HJS-Huawei-Report-A1.pdf, last visited: 23 May 2019.

¹⁶ Translated using Google Translate on 13 May 2019. The original in Spanish: "El crecimiento económico regional, la irrupción de Brasil como actor global y el traslado del eje de la actividad económica mundial desde el Atlántico al Pacífico, han cambiado la valoración geoestratégica de América Latina. Su costa occidental es una de las orillas de la cuenca marítima más importante para el intercambio comercial en el siglo XXI. Los actuales esfuerzos de los países miembros de la Alianza del Pacífico en términos de gestar mecanismos de integración avanzada y el interés de otras naciones por participar en tales

The rise of economically-strong revisionists, combined with their insatiable demand for raw materials, means that South America – abundant in energy and minerals, and close to the US – is unlikely to be immune from the new geopolitics. Therefore, it is necessary to assess the strengths and weaknesses of the countries of South America, not least to ascertain which might be strong enough to resist the new geopolitics, as well as those that might succumb to its potential malignancy.

1.2 Objectives

This is the first part of a two-part series designed to 'audit' the geopolitical capabilities of the countries within Chile's geographic neighbourhood, which comprises everything on either side of the Pacific Ocean. Geopolitical capability is defined as the ability to overcome the 'tyranny of distance' and influence physical space, including counterparts located within that space – both state and non-state actors.

This first study focuses on Chile's more immediate neighbourhood, in the form of the Eastern Pacific, namely South America. As Figure 1 shows, South America includes 12 countries and three 'extra-continental' powers, which have either pervasive influence due to their superpower status or have territories on or around the South American landmass. Given the British and French footholds in South America – through French Guiana and the Falkland Islands – as well as the influence of the US as a global superpower, it is necessary to include these three extra-continental powers. Indeed, doing so has an additional advantage: it allows South America's nations to be compared to an international standard, providing an insight into how far they might need to travel to reach three of the leading countries of the developed world.

From this, the second part of the study follows, focusing on Chile's 'extended' neighbourhood, in the form of the Western Pacific, namely the members of APEC.

Figure 1: Countries of South America

Argentina	Bolivia	Brazil	Chile
Colombia	Ecuador	France	Guyana
Paraguay	Peru	Suriname	United Kingdom
United States	Uruguay	Venezuela	

iniciativas dan cuenta de la importancia de dicha área. América Latina es una región con una gran biodiversidad y abundancia de recursos naturales. La creciente presión internacional sobre ellos se está convirtiendo en un tema en la agenda de seguridad sudamericana. Es previsible que en un futuro próximo surjan tensiones por la depredación de dichos recursos y por diferencias entre los países que los poseen y aquellos que los demanden." See: Consulta De S.E. El Presidente De La República, Sebastián Piñera Echenique, Al Honorable Senado De La República Sobre La 'Estrategia Nacional De Seguridad Y Defensa' 2012-2024.

Aside from this first section – the introduction – and the appendixes at the end, this report contains seven key sections. The next section, Section 2, reviews and critiques 'established' methods for assessing the types of capability of various countries, before explaining the reasoning behind the Audit of Geopolitical Capability. Sections 3 and 4 provide the framework and outline the methodology used by the audit. Section 5 classifies each of the countries and extra-continental powers of South America, before reviewing their relative performance and position using the framework and methodology. And the final section offers a number of conclusions.

2. The Challenge of Assessing National Capability

The relative strength of geopolitical entities – city states, empires, nation-states, and so on – in the global system has long preoccupied strategic analysts. It was not, however, until the nineteenth century that a more systematic attempt was made to explain the differences in national power. Although Lord Castlereagh, the British Foreign Secretary, was the first to use the term 'great power', it was Leopold von Ranke, the German historian, who first attempted to explain how some countries are qualitatively different to others in terms of national capability.¹⁷ Von Ranke argued that the most important distinction was between those countries that could "maintain" themselves "against all others, even when they are united". and those that could not.18 This was his test of whether or not a country could claim great power status, or be recognised as such by other countries. Granted, this was an exceptional trial, but not unreasonable given the context of the time - a period of extreme geopolitical struggle. Indeed, all the pretenders to great power status were put to von Ranke's test during the late nineteenth and early twentieth centuries, with most found wanting: France failed in 1871; the Austro-Hungarian, Russian, German and Ottoman empires were all dissolved during the First World War; and the Third Reich and Japan were in ruins by the end of the Second.

2.1 The Impact of 'Gadget' (1945-)

In 1945, only three powers were left in the ring: the Soviet Union (USSR), the UK and the US. The year before, Nicholas Spykman and William Fox, both scholars at the Yale Institute of International Studies, described the three countries as "super-powers" – countries with the capacity to mobilise resources on a truly vast scale and deploy them globally in pursuit of their interests – setting them apart from other great powers in a historical context. ¹⁹ The acquisition of atomic weapons by the US in 1945, followed by the USSR in 1949 and the UK in 1952, only appeared to compound the trio's position. Automatically, this gave their owners the means to defend themselves 'against all others, even when they are united' in a way that no other weapon had ever done. However, as the yields of nuclear weapons grew ever larger, and as arsenals grew in size, strategic analysts came to believe that only large continental states would be able to defend themselves and their interests in the event of superpower war, meaning that geographically smaller nuclear powers like the UK would slip into a second tier. ²⁰

In no small way, this perception seems to have given impetus to one of the first 'scientific' attempts to study national capability, by the Correlates of War Project at the University of

¹⁷ Lord Castlereagh, a former British Foreign Secretary, is widely credited with having first used the term "great Power" in diplomatic correspondence in 1814. See: Webster, C. (ed.), *British Diplomacy* 1813–1815: Selected Documents Dealing with the Reconciliation of Europe (London: G. Bell and Sons Ltd., 1921), p. 307.

¹⁸ Cited in: Von Laue, T.H., *Leopold von Ranke: The Formative Years* (Princeton: Princeton University Press, 1950), p. 203. ¹⁹ Spykman, N., *Geography of the Peace* (New York City: Harcourt Brace and Company, Inc., 1944), Fox, W.T.R., *The Super-Powers: The United States, Britain, and the Soviet Union – Their Responsibility for Peace* (New York City: Harcourt Brace and Company, Inc., 1944) and Fox, W.T.R., 'The super-powers then and now', International Journal 35:3 (1980).

²⁰ Baylis, J., British Defence Policy: Striking The Right Balance (New York: Palgrave Macmillan, 1989).

Michigan in the early 1960s.²¹ This resulted in the 'Composite Index of National Capability' (CINC), comprised of six key indicators – Population (PO), Urban Population (UP), Iron and Steel Production (ISP), Primary Energy Production (PEP), Military Expenditure (ME) and Military Personnel (MP) – that ascertain each country's power, expressed using the following formula:

$$Power = \frac{PO + UP + ISP + PEP + ME + MP}{6}$$

Despite its theoretical elegance, it remains an open question as to whether this system manages to accurately 'capture' the capability of nations (see Appendix B). Less importantly, the CINC equates national capability with power, ignoring the importance of national resolve and national strategy, which are needed to transform national capabilities into strategic effect. More importantly, the CINC focuses on the foundations of national capability and tends to ignore national structures, thus prioritising the latent capability of large continental states to the detriment of smaller but nimbler powers (for example, the latest Composite Index of National Capability ranks China as the world's leading power – see Appendix B). Moreover, the CINC places undue emphasis on military capability, while ignoring other tools and instruments, which increased in importance in the context of nuclear conditions.

This is problematic, counter-intuitively, because it became clearer during the 1970s that a new generation of nuclear delivery systems might reduce the initial advantages afforded to the American and Soviet superpowers. The advent of submarine-launched ballistic missiles with intercontinental range, armed with multiple independent re-entry vehicles (MIRVs), gave their holders – no matter how large their nuclear weapons inventory – the ability to inflict near-certain and long-lasting destruction on any potential enemy.²² Accordingly, with guaranteed 'second-strike' systems, smaller nuclear powers – such as the UK and France – gained a strategic capability (the ability to deter) that reduced the superpowers' geographic depth and strategic mass.²³

2.2 The Emergence of 'Cold War'

But, more significantly, while rendering 'vertical' escalation – and thus, major war – increasingly perilous, the *Pax Atomica* did not prevent (indeed, it may have even facilitated) 'horizontal' escalation.²⁴ This had two important implications: firstly, under nuclear conditions, countries – especially the major powers – looked for new ways to compete for

²¹ Singer, J.D., Stuart Bremer and John Stuckey, 'Capability Distribution, Uncertainty, and Major Power War, 1820–1965', in Russett, B. (ed.), *Peace, War, and Numbers* (Beverly Hills, California: Sage, 1972).

²² As Kenneth Waltz, then Ford Professor of Political Science at the University of California, Berkeley, explained: "the question is not whether one country has more [warheads] than another but whether it has the capability of inflicting 'unacceptable damage' on another, with unacceptable damage sensibly defined. Once that capability is assured, additional strategic weapons are useless. More is not better if less is enough." See: Waltz, K., 'The Spread of Nuclear Weapons: More May Be Better', Adelphi Papers 21:171 (1981).

²³ Baylis, J., *British Defence Policy: Striking the Right Balance* (New York City: St. Martin's Press, 1989), p. 122.

²⁴ Notably, Bernard Brodie, Associate Professor of International Relations at Yale University, appears to have understood the long-term implications of nuclear proliferation and development as early as 1946 when he declared that: "Thus far the chief purpose of our military establishment has been to win wars. From now on its chief purpose must be to avert them. It can have almost no other useful purpose." See: Brodie, B., *The Absolute Weapon: Atomic Power and the World Order* (New York City: Harcourt, Brace and Co., 1946), p. 76.

influence, meaning that other forms of national capability besides those of warfighting grew steadily in importance. These included economic, political, ideological and cultural instruments, as well as military tools for the support of allies and the encirclement of rivals. Secondly, rather than moving from periods of 'peace' to phases of 'war', confrontation grew 'colder', waged through a plethora of proxy conflicts involving smaller powers and non-state actors in such a way as to avoid ascending the escalatory ladder.²⁵ Consequently, the strategic environment envisaged for national engagement and competition should not be conventional war, as envisaged by the CINC, but rather a different but more long-lasting form of strategic confrontation – a 'cold war' – in which a far broader array of national capabilities come into play. Strategic interaction becomes increasingly 'hybrid' and 'non-linear', potentially without end.²⁶

Rightly, attempts to assess the overall capability available to various countries have evolved since the development of the CINC. Two notable systems have been developed over the past decade, based on a range of different indicators. The Madrid-based think tank Elcano Royal Institute's annual 'Global Presence Index' is one such example, while the London-based political consultancy and public relations agency Portland's annual 'Soft Power Index' is another (see Appendix B).²⁷ The former aims to measure each country's 'global presence', while the latter seeks to assess the so-called 'soft power' (i.e. the ability to attract) of thirty different countries.²⁸

However, while both the 'Soft Power' and 'Global Presence' indexes solve, albeit partially, the first problem with the CINC (i.e. that other forms of capability are important), neither is useful for solving the second. Both pay little attention to the nature of the strategic environment in which countries are located.²⁹ This is increasingly problematic because 'cold war' appears to be emerging once again, particularly in the Asia-Pacific region. China's regional expansion through the 'Belt and Road Initiative' and ongoing attempts to 'continentalise' the South China Sea, along with the respective responses of countries like the US, Japan and Australia, shows that geopolitics has not subsided. Indeed, 'cold war' may be re-emerging once again.

²⁵ The words of General Sir Nicholas Carter, Chief of the UK Defence Staff, have some resonance here: "States have become masters at exploiting the seams between peace and war. What constitutes a weapon in this grey area no longer has to go 'bang'. Energy, cash – as bribes – corrupt business practices, cyber-attacks, assassination, fake news, propaganda and indeed military intimidation are all examples of the weapons used to gain advantage in this era of 'constant competition'... The deduction we should draw from this is that there is no longer two clear and distinct states of 'peace' and 'war'; we now have several forms." See: Carter, N., 'Dynamic Security Threats and the British Army', *Royal United Services Institute*, 22 January 2018, https://rusi.org/event/dynamic-security-threats-and-british-army, last visited: 23 May 2019.

²⁶ For examples of such confrontation, see: Rogers, J. and Andriy Tyushka, 'Hacking in the West: Russia's "anti-hegemonic drive" and the strategic narrative offensive', *Defence Strategic Communications*, 2:1 (2017); Rogers, J. and Andriy Tyushka, 'Russia's "Anti-hegemonic" Offensive: A New Strategy in Action', *Diplomaatia*, December 2016, available at: https://www.diplomaatia.ee/en/article/russias-anti-hegemonic-offensive-a-new-strategy-in-action, last visited: 23 May 2019.

²⁷ For the Global Presence Index, see: 'Elcano Global Presence Index', *Elcano Royal Institute*, 2018, available at: http://www.globalpresence.realinstitutoelcano.org/en/, last visited: 23 May 2019. For the Soft Power Index, see: 'The Soft Power 30', *Portland Communications*, 2018, available at: http://softpower30.com, last visited: 23 May 2019.

²⁹ For example, the Soft Power Index ignores 'hard' (coercive) power altogether, while the Global Presence Index merely counts various forms of military equipment – warships, aircraft, etc. – to indicate military presence. However, although one country might have ten more frigates than another, for example, it does not mean it has greater presence. Those vessels may be smaller, technologically inferior, and/or unable to operate at range. See: 'Methodology: What is the Elcano Global Presence Index?', *Elcano Royal Institut*e, 2018, available at: http://www.globalpresence.realinstitutoelcano.org/en/methodologic, last visited: 23 May 2019.

3. The Audit of Geopolitical Capability

The problems with existing indices provide the backdrop for the development of the Henry Jackson Society's Audit of Geopolitical Capability.³⁰ Developed during 2018, the audit was designed to provide an improved system to measure and assess comprehensively the relative geopolitical capability of any country, not least under prevailing international conditions.³¹ The audit defines 'geopolitical capability' as the potential ability of a country to overcome the 'tyranny of distance' and influence physical space, including counterparts located within that space.³² An initial audit of the countries of the Group of Twenty (G20) was undertaken, with the addition of Nigeria, the largest economy and most populous country in Africa. With minor modifications, the audit's assessment system can be applied to other groups of countries, such as the countries and extra-continental powers of South America.

3.1 The Audit's Framework

pp. 53-76.

As Figure 2 shows, the Audit of Geopolitical Capability is organised around four functional 'attributes': 'national base', 'national structure', 'national instruments' and 'national resolve', which organise, in turn, a plethora of pillars and indicators.

These attributes have been constructed to define the building blocks of geopolitical capability for any country:

- National base captures the underlying and largely unchangeable foundations of national capability, from which any country must draw to generate the structures and instruments to protect and/or extend both itself and its interests;
- National structure captures the 'infrastructure' of national capability, i.e. those structures developed to draw off the national base, to generate deployable capabilities and instruments;
- 3. **National instruments** capture the diplomatic and military tools generated by the national structure for self-defence and to facilitate engagement with the wider world;
- 4. **National resolve** captures the largely 'intangible' dimension of geopolitical capability, in terms of the overall efficacy of each central government, as well as its willingness

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³⁰ Rogers, J., 'Audit of Geopolitical Capability: An Assessment of Twenty Major Powers', *The Henry Jackson Society*, January 2019, available at: https://henryjacksonsociety.org/audit/, last visited: 23 May 2019.

³¹ The 2018 iteration of the Audit of Geopolitical Capability was predicated on an earlier format developed in 2017. This 'pilot' audit divided geopolitical capability into seven different conceptual 'baskets' – 'Geographic Integration', 'Demographic Condition', 'Economic Clout', 'Technological Prowess', 'Diplomatic Leverage', 'Military Strength' and 'Cultural Prestige' – in order to measure the South American countries' and extra-continental powers' overall geopolitical potential. These seven baskets each included five indicators, themselves comprised of over fifty different components. This early audit included eight major powers: the Permanent Five members of the United Nations Security Council – China, France, Russia, the United Kingdom and United States – alongside three other important countries, namely Germany, India and Japan.

³² For an overview of the tyranny of distance, see: Boulding, K., *Conflict and Defence: A General Theory* (New York City: Harper Torchbooks, 1962), pp. 261-263; Webb, K., 'The Continued Importance of Geographic Distance and Boulding's Loss of Strength Gradient', Comparative Strategy 26:4 (2007). See also: O'Sullivan, P., *Geopolitics* (London: Croom Helm Ltd., 1986),

to uphold specific capabilities to defend itself and affect change at the international level.

Figure 2: The Framework of Geopolitical Capability (Weights in Percentages)

	ATTRIBUTE 4: NATIONAL RESOLVE (10%)																							
1. Government efficacy 2. Economic resolve (1%)								3. Strategic resolve (1%) 4. Altruistic resolve (1%)																
ATTRIBUTE 2: NATIONAL STRUCTURE (40%)											NA	TION	ATT AL IN	RIBU ISTRI			(30	%)						
	Ec	LAR onon Clou	nic t			PILLAR 2: PILLAT Technological Cult Prowess Pres (10%) (15				ultui	iral Diplomatic ige Leverage					atic ge	PILLAR 2: Military Might (15%)							
5. Gravitational pull (1%)	4. Commercial reach (1%)	3. Financial control (1%)	2. Corporate size (2%)	1. National income (10%)	5. Health (1%)	4. Innovativeness (1%)	3. Research outlay (1%)	2. Infrastructure (3%)	1. Knowledge base (4%)	5. Economic allure (1%)	4. Sporting attainment (1%)	3. National appeal (1%)	2. Discursive dominance (2%)	1. Freedom to create (10%)	5. Passport power (1.5%)	4. Developmental capacity (1.5%)	3. Organisational penetration (3%)	2. Diplomatic centrality (3%)	1. Overseas missions (6%)	5. Global reach (1.5%)	4. Military-industrial base (1.5%)	3. Projection forces (3%)	2. Nuclear arsenal (3%)	1. Defence spending (6%)
ATTRIBUTE 1: NATIONAL BASE (20%)																								
1. National wealth 2. Population structu (10%) (6%)					ture		3. National spread 4. Self-sufficier (3%) (1%)						ncy											

As shown in Figure 2, both national base and national resolve are each comprised of four different indicators, while national structure and national instruments are ordered by five different pillars. The three pillars of national structure are:

- 1. **Economic clout**, which captures the size and strength of the national economic structure;
- 2. **Technological prowess**, which captures the capacity and sophistication of the national structures for research and development;
- 3. **Cultural prestige**, which captures the ability of the national structure to facilitate creativity and attract other people to the national cause.

Meanwhile, the two pillars of national instruments are:

- 1. **Diplomatic leverage**, which captures the diplomatic tools available to the nation to engage with the wider world;
- 2. **Military might**, which captures the strategic tools available to influence, intervene, dissuade and deter.

Each pillar is then further divided into specific indicators, some of which are then divided into component parts, with each indicator being allocated a specific weight depending on its significance in the generation of national geopolitical capability (see Appendix C for a list of sources).

3.2 Indicators

3.2.1 National Base (Equivalent to 20% of the Total)

This attribute is divided into four indicators:

Indicat	tors (weight)	Justification
a. Nati	onal wealth (10%) Net wealth (total, US\$)	A high level of net total wealth indicates previous economic dynamism and technological ingenuity. It also indicates a robust base from which to draw
	Not Wedner (total, σοφ)	in the event of emergency conditions, such as geopolitical confrontation.
b. Pop	ulation structure (6%)	A large and well-structured population indicates the availability of citizens ready for work, both in
•	Population size (total)	the economy as well as government and the
•	Median age (years)	armed forces.
c. Nati	onal spread (3%)	The national spread of the country – measured both in terms of its land area and its Exclusive
•	Land area (total, km²)	Economic Zone - indicates the size of the
•	Exclusive Economic Zone (total, km²)	resource yield that can be extracted and unleashed to fuel the national structure, particularly the economy.
d. Res	ource self-sufficiency (1%)	A high degree of self-sufficiency in terms of key resources – energy and food – indicates an
•	Energy self-sufficiency (percentage) Food energy supply adequacy (percentage)	advanced energy and/or agricultural sector, as well as autonomy in the production of essential resources, and the capacity to avoid coming under the influence of foreign suppliers.

3.2.2 National Structure (Equivalent to 40% of the Total)

This attribute is divided into three pillars:

3.2.2.1 Economic Clout (Equivalent to 15% of the Total)

This pillar is divided into five indicators:

Indicators (weight)	Justification
 a. National income (10%) Gross National Income (total, US\$, Atlas Method) 	The size of the national income indicates the overall size and performance of national economic – and to an extent, technological – structures. Gross National Income incorporates both domestic and foreign earnings, better reflecting the total economic yield.
 b. Corporate size (2%) Forbes 2000 companies (total) Forbes 2000 companies (average position) 	A large number of the most successful corporations in the world headquartered in a country indicates not only the health of its business environment, but also its overall economic strength.
 c. Financial control (1%) Global rank of the capital/primate city (score) Foreign Direct Investment (Total net outflows, US\$) 	Possession of one of the global economy's leading 'command centres' indicates the existence of both an extensive financial sector (and attendant educational and legal services) and an advanced economy. Meanwhile, a high quantity of outward net foreign direct investment indicates significant control over the economic fortunes of foreign lands.
 d. Commercial reach (1%) Merchandise and service exports (total, US\$) 	A large quantity of merchandise exports indicates a well-developed industrial sector, while a large amount of service exports indicates the existence of a robust financial sector. In turn, both indicate a country's global commercial reach.
 e. Gravitational pull (1%) Net positive migration (total, 2017-2013) 	A high level of net positive migration indicates the existence of a powerful and expanding economy, demanding additional new workers. In turn, this results in large remittance flows back to the migrants' homelands, drawing them into the orbit of the migrants' country of residence.

3.2.2.2 Technological Prowess (Equivalent to 10% of the Total)

This pillar is divided into five indicators:

Indicators (weight) Justification

a. Knowledge base (4%)

- Education Index (score)
- Top 200 universities (total number and average position)
- Think tanks (total)

A country's performance in relation to the Education Index - calculated by the population's mean years of schooling and the expected years of schooling - indicates its overall level of educational attainment. Likewise, a large concentration of the world's top 200 universities indicates the reach and success of a country's tertiary education sector. Meanwhile, a large number of think tanks indicates not only the level of specialist knowledge a country can generate, but also its ability to spread knowledge.

b. Infrastructure (3%)

- Level of urbanisation (percentage)
- Transport system
 - Railway density (railways per km²)
 - Merchant marine (gross tonnage, total)
 - o Commercial air system (passengers carried by national carriers, total)
- Access to communication (score)
- Usage of communication (score)

A 'dense' infrastructure of modern cities and transport systems indicates a high level of technological development. Equally, availability and sophistication of modern communications systems - 4G and broadband services, etc., and the ability of citizens to use them - indicates the level of development of a country's 'knowledge economy', which is widely understood to be critical to its future economic success.

c. Research outlay (1%)33

Research and Development Spending (average, US\$, 2016-2012)

The size of Research and Development spending over a five year period indicates the likely scale and dynamism of a country's industrial and technological base.

d. Innovativeness (1%)

- Nobel Prizes received in physics. chemistry, medicine and
- Patent applications (average, 2016-2012)
- 2016-2012)

Numerous resident Nobel Prize winners (in chemistry, physics, and medicine and physiotherapy) over a sustained period (five years) indicates the degree to which a country physiotherapy (total, 2017-2013) can generate potentially revolutionary new knowledge. Meanwhile, the number of patent and trademarks applied for over a similar period Trademark applications (average, indicates the size and sophistication of its engineers and industrial designers.

³³ Given that the data for several countries for this indicator was unavailable for the latest year for which it is produced (2016), an important change has been applied in relation to the original audit methodology. For this indicator, the geopolitical audit of the countries and extra-continental powers of South America is based on a five-year average of research and development spending (averaged across the years of available data). This reduces the negative impact on those countries for which data for the latest year was unavailable, while remaining in alignment with the methodological aspect for other indicators (defence spending, etc.).

e. Health (1%)

Healthy life expectancy (years)

A long, healthy life expectancy among the national population indicates the existence of an advanced and comprehensive apparatus of sanitation, an extensive system of public health education, and sophisticated and universal health provision.

3.2.2.3 Cultural Prestige (Equivalent to 15% of the Total)

This pillar is divided into five indicators:

Indicators (weight)

Justification

a. Freedom to create (10%)34

- Personal freedom (score)
- Press freedom (score)

The presence of a free and open society – across all levels – indicates the existence of political stability, as well as an environment conducive to the formation of economic wealth, technological innovation and cultural creativity.

b. Discursive dominance (2%)

- Top 54 Publishers (total revenue, US\$)
- Top 10 Million websites using the official or national language (total)
- International organisations using the official or national language (total)

The ability to communicate ideas indicates the capacity to spread knowledge and participate in the global competition over ideas and values. Equally, the number of forums – such as websites and international organisations – using the primary national language indicates discursive dominance over the means of communication at the global level.

c. National appeal (1%)

- Overseas tourist arrivals (total)
- International students from overseas in tertiary educational institutions (total)

A high number of tourists and foreign students traveling to the national homeland indicates the level of appeal a country possesses at the international level.

d. Sporting attainment (1%)

- FIFA ranking (score)
- Olympic medals (Gold, Silver, Bronze) 2016 (score)

A high FIFA score and, therefore, ranking, and a large take of Gold, Silver and Bronze medals at the latest Summer Olympic Games indicates a well-resourced and competitive sports community, ready to capture global attention.

³⁴ Another methodological innovation has been applied to this indicator. In the original methodology developed by the Henry Jackson Society, this indicator included a component called 'Internet Freedom'. This component has been removed from the South American geopolitical audit for the simple reason that one third of the data was unavailable.

e. Economic allure (1%)

Top 100 Brands (total value, US\$)

A large concentration of the world's Top 100 brands suggests – aside from economic dynamism – a strong national reputation for industrial design and/or commercial success.

3.2.3 National Instruments (Equivalent to 30% of the Total)

This attribute is divided into two pillars:

3.2.3.1 Diplomatic Leverage (Equivalent to 15% of the Total)

This pillar is divided into five indicators:

Indicators (weight)

Justification

a. Overseas missions (6%)

 Overseas resident embassies (and high commissions) (total) The existence of numerous diplomatic missions – embassies and/or high commissions (resident in foreign countries) – indicates an extensive diplomatic portfolio, built up to influence and shape the preferences of other countries.

b. Diplomatic centrality (3%)

 Membership of the UN Security Council (score, 2018-2014) A permanent seat on the United Nations Security Council indicates an elite level of diplomatic standing and the ability to 'veto' unfavourable draft resolutions, irrespective of their international support. Meanwhile, for those non-permanent members, the ability to win an election to sit on the Security Council indicates a high level of diplomatic dexterity and reach.

c. Organisational penetration (3%)

 Membership of intergovernmental organisations (totals)

Membership of or participation in intergovernmental organisations – federations of organisations, universal membership organisations, intercontinental organisations and regional organisations – reflects a robust desire and ability to reach into the system of global governance.

d. Developmental capacity (1.5%)

 Official Development Assistance (2017-2013, average, US\$) A large Official Development Assistance (ODA) budget allocated to international development over a sustained period (five years) not only indicates a high level of economic development (only advanced economies may join the Organisation for Economic Cooperation and Development's (OECD) Development Assistance Committee (DAC)), but also a willingness and capacity to shape the goals of international development and alleviate poverty, with potential

positive feedback in terms of global influence and reputation.³⁵

e. Passport power (1.5%)

 Countries to which a citizen can travel without needing a visa (total) The ability of a country's citizens to travel visa-free to foreign countries indicates an active diplomatic service, as well as a high level of international reach and a solid national reputation.

3.2.3.2 Military Might (Equivalent to 15% of the Total)

This pillar is divided into five indicators:

Indicators (weight)

Justification

a. Defence spending (6%)

 Defence spending (2017-2013, average, US\$) The amount of money a nation has spent on defence over a sustained period (five years) indicates the likely strength of its armed forces, particularly when viewed alongside other indicators, such as whether it holds a nuclear arsenal and sizeable projection forces (a corresponding and sizeable nuclear arsenal and projection forces indicate the degree to which defence outlay was well-spent or used to quell domestic security problems).

b. Nuclear arsenal (3%)

- Deployed warheads (total)
- Reserve warheads (total)
- Second-strike capability (score)
- Striking range (score)
- Delivery platforms (score)
- Nuclear reputation (years)

A nuclear arsenal indicates a country's willingness and ability to take all necessary measures to defend itself and its national interests. A guaranteed second-strike capability indicates not only technical sophistication, but also a robust ability to both dissuade potential opponents and deter enemies.

c. Projection forces (3%)³⁶

- Major combatants (total displacement, tonnes)
- Large auxiliary vessels (total displacement, tonnes)

A sizeable naval fleet of large surface combatants indicates whether a country is willing and able to operate 'long-throw' expeditionary operations, while a hefty auxiliary fleet indicates an extensive degree of global mobility. Without the means to move military equipment, a country lacks the ability to take war to potential enemies, meaning

³⁵ Of the South American countries and extra-continental powers, only three are members of the OECD's DAC: France, the UK, and the US.

³⁶ As indicators of military cyber power are developed, it is intended that future iterations of the Audit will include this increasingly important dimension of military capability. For a good analysis of the need for such an indicator, see: Inkster, N., 'Measuring Military Cyber Power', Survival 59:4 (2017), pp. 27-34.

• Average displacement (tonnes)

its service personnel – no matter how extensive – have little role beyond that of static defence or for the purposes of internal security.

d. Military-Industrial base (1.5%)

 Top 100 Arms and Military Service Companies (total revenue, US\$) Large annual revenues from the manufacture of military apparatus and equipment indicates the existence of an extensive military-industrial base. A well-oiled military-industrial base indicates a country's ability to defend itself and/or provide its allies with military supplies – potentially locking them into lasting and institutionalised strategic relationships.

e. Global reach (1.5%)

- Total overseas military facilities by type (score)
- Spread of overseas military facilities (score)

The existence and upkeep of military bases and logistical facilities in overseas territories and/or foreign countries indicates a country's ability to overcome the 'tyranny of distance' and to project itself around the world. A pervasive military presence in foreign lands indicates, in turn, geopolitical and diplomatic influence over their strategic decisions and autonomy.

3.2.4 National Resolve (Equivalent to 10% of the Total)

This attribute is divided into four indicators:

Indicators (weight)

Justification

a. Government efficacy (7%)

- Effectiveness (score)
 - Stability (score)
 - Rule of Law (score)
 - Lack of Corruption (score)

Government effectiveness and stability, combined with the rule of law and low levels of corruption, indicates a well-designed and durable domestic political architecture. Together, these characteristics indicate a high degree of government efficacy and the ability to implement and execute political decisions.

b. Economic resolve (1%)

 Outward Foreign Direct Investment (% of GDP) The quantity of money (when defined as a percentage of national output) a country is prepared to invest overseas is indicative of its resolve to shape and influence the global economic infrastructure and the economic fortunes of foreign nations.

c. Strategic resolve (1%)

• Defence spending (% of GDP)

The sum of money (when defined as a percentage of national output) a country is prepared to spend on its defence posture is indicative of the degree of strategic influence it seeks in upholding its national interests and in shaping the international order.

d. Altruistic resolve (1%)

(% of GNI)

The amount of money (when defined as a percentage of national income) a country is willing Official Development Assistance to spend on international development is indicative of its altruism at the international level.

3.3 Composite Score

The purpose of this framework - comprised of attributes and pillars - is to organise the indicators to provide a composite score for each country and extra-continental power in South America to indicate their overall geopolitical capability. For the purposes of comparison between each country, scores are also provided for each attribute and pillar.

Insofar as it is not possible to determine the absolute geopolitical capability a country could obtain - even a world state could expand its capabilities within its geographic domain (i.e. the Earth) over time - the Audit is predicated on a relative scale. This scale is achieved through a system of 'distance to a referent country', in this case the best-performing country in South America for each component, indicator, pillar and attribute of geopolitical capability, as well as the final score.

Moreover, it is important to reiterate that the overall score does not represent the potential 'warfighting capability' of South America's countries. The weights of the indicators would need to be adjusted to accommodate this kind of geopolitical setting, even if - under the conditions of Pax Atomica - such an environment could actually exist. Instead, the indicators are ranked in importance (see Appendix D), based on a series of consultations held during Autumn 2018, culminating in a workshop at the Forum on Geopolitics at the University of Cambridge in December 2018. Specific weights have been applied to each indicator to capture the importance of that metric under prevailing international conditions, where countries are engaging and competing using a range of different means and tools.

Further, as a gauge of capability and not power, the audit assesses only the potential assets (i.e. capabilities) available to each country: it does not aim to evaluate the resulting power, which can only be measured if understood in relation to a country's strategic national objectives - something that is almost impossible to measure uniformly.

4. Methodology

The audit assesses the geopolitical capability available to each country in South America, as well as three extra-continental powers (France, UK and US). It is critical to point out that, owing to a lack of sources, these countries' overseas territories – unless otherwise stated – are generally *not* included in the audit (see Appendix E to see where they *have* been included, and why).³⁷

To recap, the audit includes four different attributes, five pillars (which have no relevance for the computation of the scores, but merely act to organise indicators into a defined framework), 33 different indicators and 61 different components to 'frame' and 'capture' each South American country's geopolitical standing in the early 21st century:

- Attributes represent the foundations of the geopolitical capability of each country in the early twenty-first century, including: national base, national structure, national instruments and national resolve.
- Two attributes national structure and national instruments are subdivided into five pillars, with each being comprised of five indicators. national structure is comprised of the pillars economic clout, technological prowess and cultural prestige, while national instruments is made up of diplomatic leverage and military might. The remaining two attributes national base and national resolve are comprised of four indicators each (see Figure 1). Critically, all indicators are afforded a specific weight (see Appendix D).
- All indicators are based on at least one component, although some indicators are composites of several. A component is based on data from a range of official or scholarly sources (see Appendix C) and reflects a country's relative position for the respective measure (e.g. Gross National Income, population size, etc.).

4.1 Data

The indicators are derived from 915 components (i.e. 33 indicators, comprised of 61 different components for each of the 12 South American countries and three extracontinental powers) from in excess of 30 official, academic or professional sources, all of which were consulted during March and April 2019.

4.1.1 Data Availability

Of the 915 components within the Audit, complete data for 102 (11.1%) was unavailable or missing at the time of reference (see Appendix F for an overview). Of these, 80 (8.7%) may be considered 'legitimate' omissions, while 22 (2.4%) might be considered 'illegitimate'.

³⁷ However, it is important to stress that, in some cases, the inclusion of overseas territories boosts the capability of the national homeland, if only marginally.

Omissions that are legitimate include data for which certain countries are excluded because they lack assets within a specific field of indication (e.g. they have no top universities, brands, publishers or corporations, etc.). Illegitimate omissions occur where there is simply no available data for the relevant country, even though there should be. If data for a South American country or extra-continental power was unavailable, it was given a score of zero.

4.1.2 Data Quality and Format

Data was drawn from reputable sources, such as international organisations or professional and academic sources with an established reputation, such as the World Bank, the Organisation for Economic Cooperation and Development, and agencies of the United Nations, among others.

Both 'extensive' data (e.g. total population; total number of Forbes 2000 companies; total tonnage of the major combatants in the naval fleet, etc.) and 'intensive' data (e.g. degree of government cohesion; average size of the warships in a naval fleet, median age, etc.) are used in the audit, with the former indicating the overall sum of geopolitical capability and the latter signifying the qualitative aspects. Wherever intensive data has inserted, care has been taken to ensure that the composite score is not skewed heavily against extensive components, which indicate the degree of 'mass' behind each country or extra-continental power in South America.

Of all the data, only seven sources can be considered 'subjective'. These include the World Bank's 'Governance Indicators' and Freedom House's indicators for 'Political Freedom' and 'Press Freedom'. Some indicators – such as the 'Global Power Cities Index' – use a combination of 'objective' and subjective data. All other indicators are objective.

4.2 Formula for Computing Geopolitical Capability

The audit is predicated on the following formula:

c = a country (i.e. in South America);

 $S_k(c)$ = a score of national capability attribute k for a country c, k = 1, ..., 4;

 $CI_{kj}(c) =$ a capability indicator j of an attribute k for a country $c, j = 1, ..., n_k$ (here n_k denotes the total number of indicators within an attribute k):

 $x_{kji}(c) =$ a component i of a capability indicator j of an attribute k for a country c; $i = 1, ..., n_{kj}$ (here n_{kj} denotes the total number of components of an indicator j of an attribute k).

Each component $x_{kji}(c)$ is an input from a data source. As every component has a different scale, each must be rescaled for the purposes of comparability across countries for attributes, pillars, indicators and components.

Components are scaled with respect to the best-performing country by dividing each country's raw value with that of the best performing country for that component, so that the latter is afforded a value of 100.³⁸

$$x_{kji}^*(c) = \frac{x_{kji}(c)}{\max_{c} x_{kji}(c)} \times 100.$$

The capability indicator j of attribute k for country c can then be calculated as the sum of all its components. As the indicators are of different importance, each is afforded a specific weight (see Appendix D) reflecting their significance relative to the total capability score:

$$CI_{kj}(c) = w_{kj} \times \sum_{i=1}^{n_{kj}} x_{kji}^*(c).$$

Each of the four attributes can then be scored for a country c:39

$$S_k(c) = \sum_{j=1}^{n_k} CI_{kj}(c).$$

For the purposes of presentation, the intermediate results for each pillar are presented separately in Section 5.2 as the sum of the scores of the corresponding indicators.

Based on the scores of the attributes, the total geopolitical capability of each country c is calculated as:

$$GC(c) = \sum_{k=1}^{4} S_k(c)$$

This sum indicates the total geopolitical capability available to each country.

To facilitate comparisons, the geopolitical capability scores are then re-scaled relative to the best performing country:

$$GC^*(c) = \frac{GC(c)}{\max_{c} GC(c)}$$

This delivers the final result. By scoring the countries on a relative 0-100 scale, it becomes easier to compare each country to the leading power, while simultaneously avoiding an abstract and therefore meaningless scale. Therefore, the audit provides a benchmark that can be used to compare all South American countries with one another and to identify their

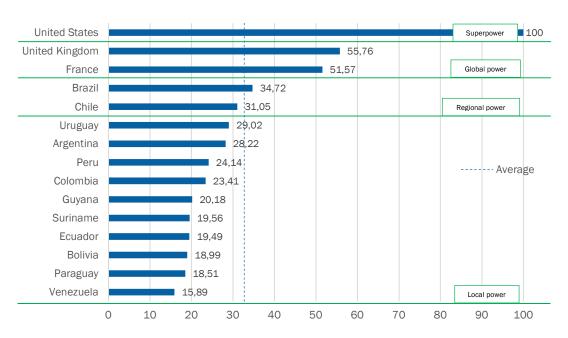
³⁸ Where a lesser value within the raw data indicates *better* performance for a country (for example, for 'Median age', the lower the value, the higher the score), the raw value is 'inverted' before rescaling with respect to the best-performing country.

³⁹ Where data for a particular country is unavailable (i.e. if a country does not score anything for a particular component), it is awarded 0 for that component.



5. Classifying Geopolitical Capability in South America

Graph 1: The Countries and Extra-Continental Powers of South America Ranked by Overall Score



As Graph 1 shows (see Appendix G for the complete data tables), in terms of geopolitical capability, the average (mean) score for South America's nations and extra-continental powers is 32.7% of the leading country. Should this threshold be rounded down to 30%, it might be understood to distinguish those powers with the means to influence other countries beyond their own immediate vicinage (i.e. regional power status) from smaller powers.

The graph also demonstrates the existence of three 'clusters' of South American countries and extra-continental powers in terms of overall geopolitical capability:

- 1. Those holding in excess of 50% of the leader's geopolitical capability;
- 2. Those holding less than 50%, but more than 30%, of the leader's geopolitical capability;
- 3. Those holding less than 30% of the leader's geopolitical capability.

Consequently, the relative performance of the 12 South American countries and three extracontinental powers can be classified using the following categories:

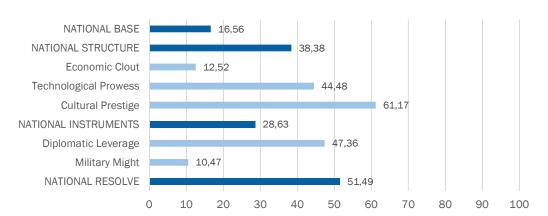
 Superpower (80%-100%) – A country with a vast national base and enormous national structure, from which to generate overwhelming national instruments and resolve to project and extend itself and its interests – often comprehensively – around the world.

- **Global Power** (50%-79.9%) A country with a large national base and/or structure, from which to generate extensive instruments and resolve to project and extend itself and its interests sometimes selectively around the world.
- **Hemispheric Power** (40%-49.9%) A country with a significant national base and/or structure, from which to generate substantial instruments and resolve to defend itself and its interests, primarily within its own hemisphere.
- Regional Power (30%-39.9%) A country with a moderate national base and/or structure, from which to develop modest instruments and resolve to defend itself and its interests, primarily within its own region.
- Local Power (below 30%) A country with a lacking or unharnessed national base and/or structure, from which only weak or uneven instruments and resolve can be generated to try to defend itself and its interests, primarily within its own neighbouring areas.

In terms of overall geopolitical capability, the most capable country in South America is Brazil, followed closely by Chile. Both are regional powers. Of the three extra-continental powers, the US has an enormous lead, followed by the UK and France. Significantly, besides South America's two regional powers and extra-continental powers all remaining countries remain little more than local powers.

5.1 Average scores

Besides providing an overall score and rank for the 12 countries and three extra-continental powers in South America, the audit also offers the ability to compare the performance of countries across every attribute and pillar. Before outlining these results in more detail, it is necessary to point out that performance across the different attributes and pillars is not uniform.



Graph 2: Average Performance across Attributes and Pillars

As Graph 2 shows, the average (mean) level of performance differs quite substantially, with the greatest variation within the attribute national structure, where the average performance is 61.17% for cultural prestige and 12.52% for economic clout. There is also a large average performance different among the South American countries in national instruments, i.e. between diplomatic leverage and military might.

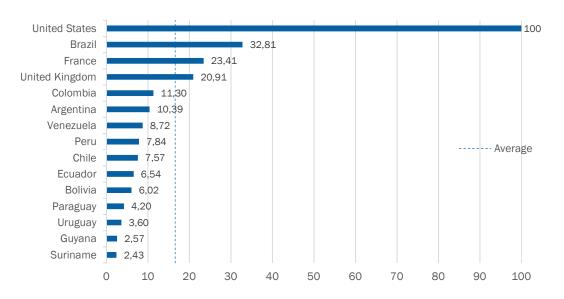
Indeed, there appears to be a correlation between average performance for economic clout and military might, with these two attributes being the hardest for South America's countries to develop and harness.

Consequently, it makes sense to view the performance of each country in relation both to the 'frontier' (i.e. the leader, which is the US for all attributes and pillars except national resolve, where the UK is the referent country) and the average score for each attribute and pillar of geopolitical capability.

5.2 Attributes and Pillars

5.2.1 National Base

Graph 3: Countries and Extra-Continental Powers of South America Ranked by National Base

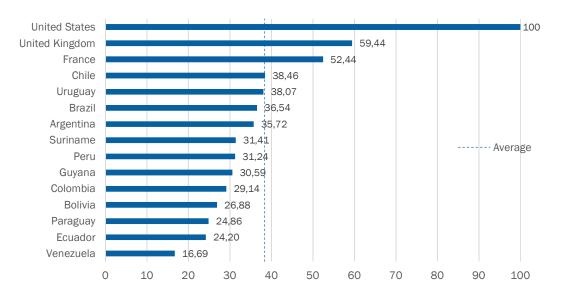


Average Score: 16.6%

As shown by Graph 3, only one of South America's countries – Brazil – exceeds the average score for national base. This attribute captures potential or latent capability, as granted by each country's physical environment, as well as its value. As expected, the extra-continental powers – especially the US – perform strongly in this attribute, although Brazil holds significant advantages over both France and the UK. While falling significantly below the average score for this attribute, the other large South American countries – Columbia, Argentina, Venezuela and Peru – show their potential. In part, the below-average scores for most South American countries reflects their ongoing failure to effectively harness their national base and unleash its full (or even, partial) potential. In the long run, if Brazil manages to build-up its national structure, it could use this to exploit and develop its large national base. This would render Brazil not only a significant lead over its South American peers, but also the means to move beyond regional power status, and emerge as a hemispheric or even global power.

5.2.2 National Structure

Graph 4: Countries and Extra-Continental Powers of South America Ranked by National Structure



Average score: 38.4%

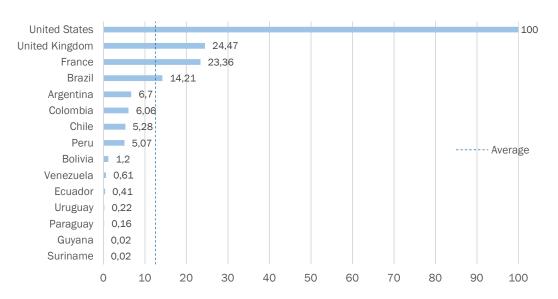
As Graph 4 shows, only one of the South American countries reaches the average level of performance for national structure. Chile has South America's most developed and sophisticated national structure, although Uruguay also comes close to reaching the frontier. Most countries in South America – not least Brazil, given its size in terms of area and population – have failed to develop national structures with which to unleash their full potential, infringing on their ability to cultivate the national instruments with which to project influence around the world.

It is clear that the US has developed *by far* the most extensive national structure among both the South American and extra-continental powers, looming over all its counterparts. This vast national structure confirms America's status as a superpower: drawing off its vast national base, it provides the industrial, technological and cultural capacity from which it can generate overwhelming national instruments.

Meanwhile, despite its relatively large physical size and population, Venezuela languishes at the bottom of the ranking for national structure. Wracked by authoritarianism, corruption and civil unrest, Venezuela is in a sorry state. It fails to reach even half of the average for this attribute of geopolitical capability.

a. Economic Clout

Graph 5: Countries and Extra-Continental Powers of South America Ranked by Economic Clout



Average score: 12.5%

As Graph 5 shows, the average score for economic clout is far lower than for most other pillars or attributes. Not only does this reconfirm America's enormous economic clout (it looms also over France and the UK), but it also suggests that much of South America's economic potential remains unfulfilled. Within South America, only Brazil can lay claim to its place in the global league of Group of 20 (G20) powers; Argentina, also a G20 member, fails to reach the average.⁴⁰

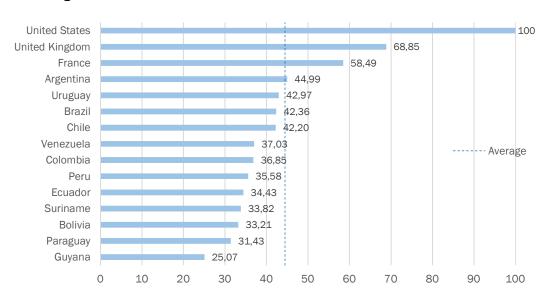
Although Chile is mid-ranking in terms of economic clout, it performs well in relation to its South American peers given that it is far smaller in terms of population. With a comparable population to Ecuador, it nonetheless has equivalent economic clout to both Argentina and Colombia – countries with more than double Chile's population.

Venezuela – South America's fifth-most-populous country – again languishes towards the bottom of the rankings, which is peculiar given it is one of the continent's largest nations.

⁴⁰ The G20 was founded in 1999. It includes those countries commonly understood to be among the world's 20 largest economies.

b. Technological Prowess

Graph 6: Countries and Extra-Continental Powers of South America Ranked by Technological Prowess

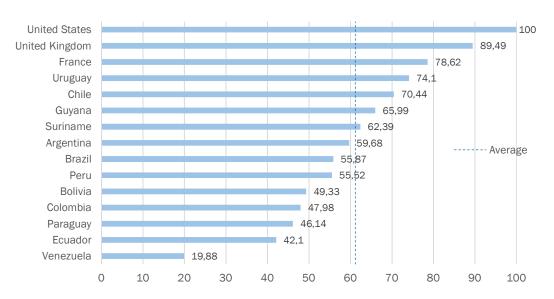


Average score: 44.5%

As Graph 6 shows, the average score for this pillar – technological prowess – is significantly higher than for economic clout, although only one South American country, Argentina, manages to reach it. Again, the extra-continental powers, led by the US, lead in terms of technological prowess. Although Argentina may lay claim to the crown as South America's technological powerhouse, it only just exceeds the average for this pillar. Uruguay, Brazil and Chile all come within a hair's width of reaching the average. In a relative sense, then, both Uruguay and Chile – with populations of 3.5 million and 18 million, respectively – perform far better than Argentina, and even more so than Brazil. This is because Argentina has over 44 million inhabitants and Brazil's population almost reaches 210 million people. Consequently, Uruguay and Chile might be considered as South America's most technologically-developed nations.

c. Cultural Prestige

Graph 7: Countries and Extra-Continental Powers of South America Ranked by Cultural Prestige



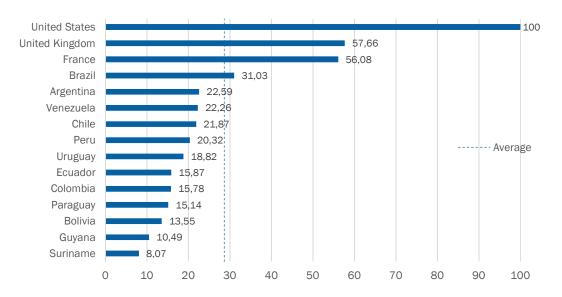
Average score: 61.2%

As shown by Graph 7, only a third of the countries of South America exceed the average score for cultural prestige, a pillar where the difference between the continental and extracontinental countries is far more pronounced. The distinction is between those countries that have high levels of political freedom and cultural creativity, and those that do not. Uruguay and Chile are South America's cultural giants, although Guyana and Suriname rank only marginally behind. Indeed, the cultural indicators – particularly discursive dominance – reveal that countries connected to both the 'Anglosphere' and 'Hispanosphere' are bolstered due to their connections and hold over two of the primary means of global communication. This can be seen in relation to Brazil, mainly a Portuguese-speaking country, which ranks towards the middle of South America's countries in terms of cultural prestige.

Conversely, the authoritarian and partially-free countries – headed by Venezuela, but followed by Ecuador, Paraguay, Colombia and Bolivia – languish at the bottom of the ranking for cultural prestige, despite their linkages to other Hispanophone countries. It is also not surprising that Venezuela performs particularly poorly given its recent domestic convulsions and bubbling civil unrest.

5.2.3 National Instruments

Graph 8: Countries and Extra-Continental Powers of South America Ranked by National Instruments



Average score: 28.6%

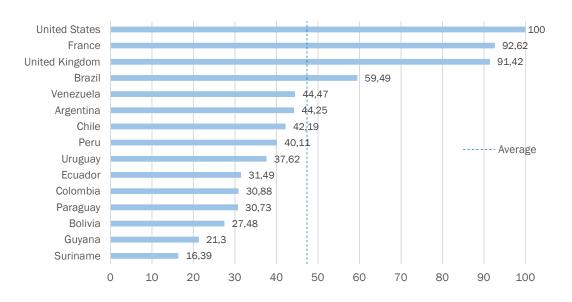
As Graph 8 shows, with the exception of Brazil, all countries in South America appear to have either great difficulty in utilising their national structures to generate national instruments, or simply lack the size to rank on a scale set, in part, by the capacity of the extra-continental powers. This should come as no surprise: most countries in South America are either relatively small or are still developing countries, meaning that any available national resources are often simply utilised to build-up their national bases or improve their national structures.

The partial outlier with respect to this attribute is Venezuela: despite performing poorly for most other attributes and pillars in the audit, Caracas performs better in terms of national instruments. In part, this is because many national instruments can remain in place even when a country goes into decline. Unless Venezuela can recover from its current period of civil unrest and political instability, it may see reductions in these tools in the years ahead.

Again, despite their smaller populations, Chile and Uruguay – with 18 million and 3.5 million people, respectively – perform similarly for this attribute to far larger South American countries, not least Brazil and Argentina.

a. Diplomatic Leverage

Graph 9: Countries and Extra-Continental Powers of South America Ranked by Diplomatic Leverage



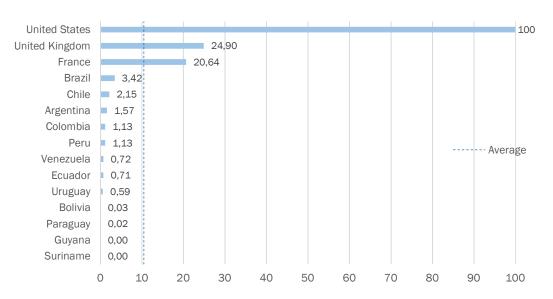
Average score: 47.3%

As shown by Graph 9, only one country in South America – Brazil – manages to perform better than the average for diplomatic leverage. Again, unsurprisingly, the extra-continental powers diplomatically tower over all countries in South America, reflecting their long-established diplomatic portfolios and status as permanent members of the United Nations Security Council. While lacking in the same degree of diplomatic heft, Brazil also looms over its South American peers, although it remains closer to them than to France, the UK and US. Brasilia's cultivation of many overseas missions and its penetration of numerous international organisations give it a lead over other capitals in South America.

Venezuela, Argentina and Chile all perform close to the average, with Chile again standing out given that its population is considerably smaller than both. Likewise, Uruguay, despite having a smaller population than Ecuador, Colombia and Paraguay, performs better than each of them.

b. Military Might

Graph 10: Countries and Extra-Continental Powers of South America Ranked by Military Might



Average score: 10.5%

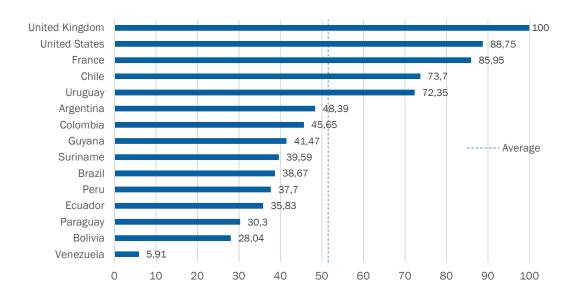
As Graph 10 shows, all of South America's countries fail – by a very large margin – to reach even what is a very low average score in terms of military might. The US lead is so overwhelming that all other countries, including even other extra-continental powers like France and the UK, cannot hope to catch up. In no other area does America – with its vast 'defence budget', 'projection forces' and 'global reach' – tower so far over its South American and extra-continental peers. However, it should not be forgotten that both France and especially the UK have military reach into South America; indeed, through its military facilities in the South Atlantic, the UK has established a permanent military presence.

Brazil and Chile are the only two countries in South America to field military forces with some form of 'expeditionary' capacity: while Brazil is slightly more capable overall, Chile can put to sea a stronger navy, with potentially greater reach. Again, in relation to Brazil for military might, Chile's position in the rankings is remarkable given that its population and GNI are ten and seven times smaller, respectively.

At the other end of the scale, Guyana and Suriname have such inconsequential military capabilities as to render them without a score, while Bolivia and landlocked Paraguay – unable also to muster much of military substance – score only fractions of a percent.

5.2.4 National Resolve

Graph 11: Countries and Extra-Continental Powers of South America Ranked by National Resolve



Average score: 51.5%

As Graph 11 shows, only two countries in South America – Chile and Uruguay – exceed the average score for national resolve. While the US performs well, it not only loses its commanding lead over some South American countries, but also over the other extracontinental powers – to which it hands over its crown. The leader for this attribute is the UK, due to its established political system and willingness to allocate resources to the instruments of international influence, such as expenditure on ODA and the armed forces.

Among the South American countries, Chile and Uruguay lead, and by some margin. This is because they have developed stable and transparent political structures, which provide the environment necessary to develop the means to invest in the tools of influence to engage with the international level. In terms of national resolve, both Chile and Uruguay stand closer to the extra-continental powers than to their South American peers.

The country that stands out most is Venezuela: it languishes far at the bottom in terms of national resolve. Given its lack of government efficiency and dysfunctional national structure, it is unsurprising that it performs so poorly.

5.3 Profiles for Six Selected Countries in South America

Through the use of radar charts, it is possible to better identify and compare the geopolitical performance of the countries of South America. Six South American countries – Argentina, Brazil, Chile, Peru, Uruguay and Venezuela – have been chosen due to their individuality in terms of geopolitical capability.

5.3.2 Brazil



RANK 1 | SCORE 34.7 – By some margin South America's largest and most populous nation, it is no surprise that Brazil has the continent's biggest national base and second largest national structure. However, despite its status as a member of the G20, Brazil has some way to go until it reaches the bar set by the extra-continental powers, not least France and the UK. If Brazil manages to improve its national resolve in the years ahead, it may provide an environment for the development of its national base, providing the means to move towards the status of a hemispheric power.

5.3.3 Chile



RANK 2 | SCORE 31.1 - Despite its relatively small national base, Chile has the most advanced national structure in South America, from which it manages to 'squeeze' out a lot of capability, particularly in terms of technological prowess and cultural prestige. Chile also has the second-strongest degree of national resolve on the continent, which provides a stable political environment for the creation of additional economic clout. Alongside Uruguay, Chile has, within a generation, the potential to become South America's first fully developed nation. This will provision Chile with the means to develop a wider array of national instruments – both diplomatic and military – with which to make its voice heard, consolidating its position as a fully-fledged regional power.

5.3.5 Uruguay



RANK 3 | SCORE 29.0 – Although it has a population of just 3.5 million, Uruguay ranks third on the continent for 'geopolitical capability'. Despite a compact national base, the country possesses second most developed national structure in South America, with particularly strong cultural prestige. Uruguay is South America's freest country, both in terms of political and press freedom, providing an environment ripe for creativity. Moreover, Uruguay's national resolve – particularly in terms of 'government efficacy' – is, alongside that of Chile, the most advanced on the continent. Because of its small size, Uruguay is never going to become a major South American power, but it may well become the continent's first fully developed country.

5.3.1 Argentina



RANK 4 | SCORE 28.2 - Argentina is South America's second-largest country in terms of land area and third with respect to population. However, despite its status as a member of the G20, it has failed to draw out much of its national base to develop a national structure comparable to those of neighbouring countries like Chile and Uruguay. This failure has undoubtedly been exacerbated by a lack of national resolve – especially in terms of political stability, rule of law and moderate corruption. Until Argentina manages to address these failings, it seems likely that it will fall behind its north-eastern and western neighbours in terms of development, remaining little more than a local power in South America.

5.3.4 Peru



RANK 5 | SCORE 24.1 – Located at the centre of South America's Pacific coast, Peru is the continent's third-largest and fourth-most-populous country. This does not mean that Peru has a large national base. Peru has potential, but to reach it the country needs to build-up its national structure, particularly in terms of economic clout. In addition, Peru is held back by a lack of national resolve, particularly in terms of stability, governance efficiency and issues surrounding the rule of law. Should the country manage to move towards the kind of political and press freedoms enjoyed in nearby Chile and Uruguay, it may be able to develop in the years ahead.

5.3.6 Venezuela



RANK 12 | SCORE 15.9 – Despite having the second highest energy self-sufficiency and being both the fifth-largest and fifth most-populous country in South America, Venezuela has the weakest and least-developed national structure on the continent. Ravaged by a decline in political and press freedoms and a severe lack of national resolve – not least in terms of stability, the rule of law and governance efficiency – Venezuela's political environment is not suited to economic growth. With severe civil unrest and declining living standards, Venezuela is practically a failed state, a zone of chaos ready to draw in malevolent forces interested in exploiting the country's unstable situation.

Conclusion

The Audit of Geopolitical Capability – based on its four attributes, five pillars, 33 indicators, 61 components (915 components in total) – provides a potent tool to compare the geopolitical capabilities of all countries in South America, shedding light on the character and relative size of their national bases, structures, instruments and resolve. By including extracontinental powers – France, the UK and US – it also becomes possible to assess the 12 South American nations against an international standard.

More importantly, the audit offers an instrument to identify the various strengths and weaknesses of the countries, both in an internal and external context, under prevailing geopolitical conditions. Indeed, due to its unique framework and methodology, the audit is constructed to account for the increasingly comprehensive nature of geopolitical competition, waged in the 'grey zone' between 'peace' and 'war', utilising a wide array of national capabilities. As such, the audit serves another function: to assist with the identification of those countries – like Venezuela – that may be open to interference by outside powers, either those in search of resources, or those seeking to indulge in proxy conflicts with other major powers.

At the other end of the spectrum, the audit shows which countries have strong and resilient national structures and resolve. Here, Chile and Uruguay are the most advanced and resilient countries in South America. Whereas Uruguay has built up a slightly greater degree of complexity in relation to its national structure, Chile has an advantage in scale and size. The duo are the only nations in South America that come close to mirroring the economically developed liberal democracies of the West. The question is: how long will it take for both Chile and Uruguay to leap into the group of the world's wealthiest nations?

In relation to South America's largest country, the audit shows the extent to which Brazil is a giant in terms of land area and population. It is almost as populous as all the other South American nations put together. However, the audit reveals that Brazil must overcome serious problems if it is to move beyond the status of a mid-ranking regional power and transition into the category of a hemispheric power, let alone global power, in the years or decades to come. The audit illustrates that, should Brazil manage to develop a national structure advanced enough to unleash the full potential of its national base, it may be able to close the gap in capability and become more like the extra-continental powers, especially France and the UK. The question is: how will Brazil face down its internal challenges and draw together and cultivate its capabilities to grow in strength?

The audit also reveals the sizeable gap that still exists between the South American countries and the extra-continental powers, namely France, the UK and US. The last time a South American country – Argentina – directly challenged one of these was in 1982 when Buenos Aires decided annex the Falkland Islands with military force. Despite the main base of UK power residing over 13,000 kilometres away in the North Atlantic, the British used their superior diplomatic leverage and military might to push into the South Atlantic and end the dreams of the Argentine junta. But as the balance of global power changes, will these three

extra-continental powers retain their reach or decline in relative capability? Or will they even be joined by other extra-continental powers, such as China?

Unfortunately, the audit cannot answer these questions, for it does not – and cannot – account for the changed circumstances in which the countries of South America might be forced to act. Nor can it measure the way in which South American countries might develop strategies to transform their geopolitical capabilities into national power. What it can do – and does do – is provide an instrument to help to explain what capabilities the countries in Chile's immediate neighbourhood might have access to as they seek to develop their homelands, engage with one another, and interact with extra-continental powers – as well as those in other regions – that might have interests in South America itself.

In conclusion, the Audit of Geopolitical Capability provides a useful instrument to assess the capability of Chile's immediate neighbourhood and home continent. In future years, it could be used to track and monitor the performance of the countries of South America, allowing for comparison across and between four essential attributes of national capability. It also offers a device to understand how the South American nations and extra-continental powers are likely to wax and wane in relation to one another, how some countries can compensate for their comparatively limited national bases by developing deep and integrated national structures, and how these structures can be used to generate national instruments with which to pursue national interests.

Appendix

A. Chile's Trade with Other APEC Members, 1989-2016

Exports, 1989-2016⁴¹

Partner	Exports 1989 (percentages)	Exports 2016 (percentages)
Australia	0.49	0.57
Brunei	0.00	0.00
Canada	1.60	1.58
China	1.95	28.07
Hong Kong	0.53	1.27
Indonesia	0.75	0.11
Japan	13.81	8.21
Malaysia	0.63	0.18
Mexico	0.51	1.98
New Zealand	0.10	0.12
Papua New Guinea	0.04	0.00
Peru	0.58	2.50
Philippines	0.42	0.09
Russia	N/A	0.86
Singapore	0.94	0.19
South Korea	3.30	6.09
Taiwan	4.73	1.81
Thailand	0.27	0.52
United States	15.84	14.24
Vietnam	0.00	0.33
APEC total	46.49	68.72
APEC Asia total	27.96	48.42

Imports, 1989-2016⁴²

Partner	Imports 1989 (percentages)	Imports 2016 (percentages)
Australia	0.38	0.57
Brunei	N/A	N/A
Canada	1.52	0.95
China	0.95	22.16
Hong Kong	1.37	0.11
Indonesia	0.09	0.25
Japan	10.14	2.89
Malaysia	0.81	0.30
Mexico	1.72	3.10
New Zealand	0.10	0.15
Papua New Guinea	N/A	N/A
Peru	0.96	1.69
Philippines	0.06	0.07
Russia	N/A	0.08
Singapore	0.39	0.12
South Korea	2.69	2.75
Taiwan	1.77	0.45
Thailand	0.05	0.98
United States	21.44	21.81
Vietnam	0.00	1.28
APEC total	44.44	59.71
APEC Asia total	18.80	32.16

⁴¹ 'Where did Chile export to in 1989?', Atlas of Economic Complexity, 2019, available at:

http://atlas.cid.harvard.edu/explore/?country=42&partner=undefined&product=undefined&productClass=SITC&startYear=undefined&target=Partner&year=1989, last visited: 23 May 2019 and 'Where did Chile export to in 2016?', Atlas of Economic Complexity, 2019, available at:

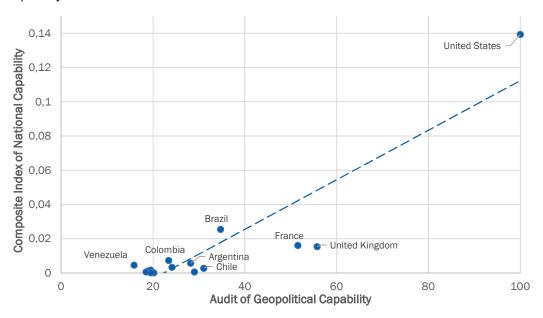
http://atlas.cid.harvard.edu/explore/?country=42&partner=undefined&product=undefined&productClass=SITC&startYear=undefined&target=Partner&year=2016, last visited: 23 May 2019.

⁴² 'Where did Chile import from in 1989?', Atlas of Economic Complexity, 2019 and 'Where did Chile import from in 2016?', Atlas of Economic Complexity, 2019.

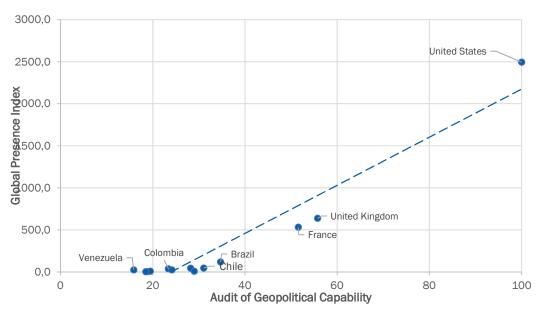
B. Comparison of Different Capability and Power Indices

Charts A.1, A.2 and A.3 depict each of the major established indices (outlined in Section 1) for measuring or ascertaining the 'national capability', 'global presence' and 'soft power' of the countries and extra-continental powers in South America in relation to the Audit of Geopolitical Capability. These are included to show the similarities and differences between those indices and the Audit.

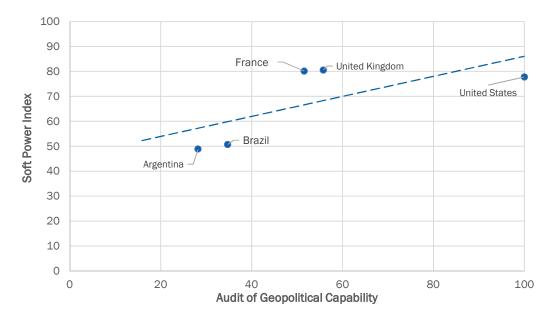
A.1 The Composite Index of National Capability compared to the Audit of Geopolitical Capability



A.2 The Global Presence Index compared to the Audit of Geopolitical Capability



A.3 The Soft Power Index compared to the Audit of Geopolitical Capability



C. Attributes, Pillars, Indicators and Components

1. NATIONAL BASE (Weight: 20%)			
Indicator	Components	Source	Date
National wealth	Net wealth (total, US\$)	Credit Suisse	2018
Population structure	Population size (total)	World Bank	2017
	Median age (years)	CIA World Factbook	2018
National spread	Land area (total, km²)	CIA World Factbook	2019
	Exclusive Economic Zone (total, km²)	Marine Regions	2018
Resource self-sufficiency	Energy self-sufficiency (percentage)	International Energy Authority	2016
	Food energy supply adequacy (percentage)	Food and Agriculture Organisation	2017

2. NATIONAL STRUCTURE (Weight: 40%)			
2.1 Economic clout (Wei	ght: 15%)		
Indicator	Components	Source	Date
National income	Gross National Income (total, US\$, Atlas method)	World Bank	2017
Corporate size	Forbes 2000 companies (total)	Forbes	2018
	Forbes 2000 companies (average position)	Forbes	2018
Financial control	Global rank of the capital/primate city (score)	Institute for Urban Strategies	2018
	Foreign Direct Investment (Total net outflows, US\$)	World Bank	2017
Commercial reach	Merchandise and service exports (total, US\$)	United Nations Conference on Trade and Development	2017
Gravitational pull	Net positive migration (total, 2017-2013)	World Bank	2017

2.2. Technological Prowess (Weight: 10%)			
Indicator	Components	Source	Date
Knowledge base	Education Index (score)	United Nations Education, Science and Culture Organisation	2017
	Top 200 universities (total number and average position)	Times Higher Education	2019
	Number of think tanks (total)	Think Tanks and Civil Societies Programme	2018
Infrastructure	Level of urbanisation (percentage)	CIA World Factbook	2018
	Transport system (Railway density (railways per km²), Merchant marine (gross tonnage, total), Commercial air system (passengers carried by national carriers, total))	CIA World Factbook, United Nations Conference on Trade and Development, World Bank	2018-2017

	Access to communication (score)	International Telecommunication Union	2017
	Usage of communication (score)	International Telecommunication Union	2017
Research outlay	Research and Development Spending (average, US\$, 2016-2012)	United Nations Education, Scientific and Cultural Organisation	2016
Innovativeness	Nobel Prizes received in chemistry, physics, medicine and physiology (total, 2017-2013)	Nobel Foundation	2018-2013
	Patent applications (average, 2016-2012)	World Intellectual Property Organisation	2016-2012
	Trademark applications (average, 2016-2012)	World Intellectual Property Organisation	2016-2012
Health	Healthy life expectancy (years)	World Health Organisation	2016

2.3 Cultural Prestige (Weight: 15%)			
Indicator	Components	Source	Date
Freedom to create	Political freedom (score)	Freedom House	2019
	Press freedom (score)	Freedom House	2017
Discursive dominance	Top 54 Publishers (total revenue, US\$)	Publisher's Weekly	2017
	Top 10 million websites using the official or national language (total)	W3Techs	2019
	International organisations using the official or national language (total)	Yearbook of International Associations 2018/2019	2018
National appeal	Overseas tourist arrivals (total)	World Bank	2017
	International students from overseas in tertiary educational institutions (total)	United Nations Education, Science and Cultural Organisation	2016
Sporting attainment	FIFA Ranking (score)	FIFA/Coca-Cola World Ranking	2019
	Olympic medals (Gold, Silver, Bronze) 2016 (score)	British Broadcasting Cooperation	2016
Economic allure	Top 100 Brands (total value, US\$)	Interbrand	2018

3. NATIONAL INSTRUMENTS (Weight 30%)				
3.1 Diplomatic Leverage	e (Weight: 0.15)			
Indicator	Components Source Date			
Overseas missions	Overseas resident embassies (and high commissions) (total)	National diplomatic services	2019	
Diplomatic centrality	Membership of the UN Security Council (score, 2018-2014)	United Nations Security Council	2019-2015	
Organisational penetration	Membership of intergovernmental organisations (total)	Yearbook of International Associations 2018/2019	2018	
Developmental capacity	Official Development Assistance (2017-2013, average, US\$)	Organisation for Economic Cooperation and Development	2017-2013	

Passport power	Countries to which a citizen can travel visa-free (total)	Henley and Partners	2018
	visa-iree (totai)		

3.2 Military strength (Weight: 15%)			
Indicator	Components	Source	Date
Defence spending	Defence spending (2017-2013, average, US\$)	The Military Balance 2018, 2017, 2016, 2015, 2014	2018-2013
Nuclear arsenal	Deployed warheads (total)	Federation of American Scientists	2019
	Reserve warheads (total)	Federation of American Scientists	2019
	Second-strike capability (score)	Various	2019
	Striking range (score)	Various	2019
	Delivery platforms (score)	Various	2019
	Nuclear reputation (years)	Various	2019
Projection forces	Major combatants (total displacement, tonnes)	Jane's Fighting Ships 2018-2019	2018
	Large auxiliary vessels (total displacement, tonnes)	Jane's Fighting Ships 2018-2019	2018
	Average displacement (tonnes)	Jane's Fighting Ships 2018-2019	2018
Military-industrial base	Top 100 Arms and Military Service Companies (total revenue, US\$)	Stockholm International Peace Research Institute	2017
Global reach	Total overseas military facilities by type (score)	Various	2019
	Spread of overseas military facilities (score)	Various	2019

4. NATIONAL RESOLVE (Weight: 10%)			
Indicator	Components	Source	Date
Government efficacy	Effectiveness (score)	World Bank	2018
	Stability (score)	World Bank	2018
	Rule of law (score)	World Bank	2018
	Lack of corruption (score)	World Bank	2018
Economic resolve	Outward Foreign Direct Investment (% of GDP)	World Bank	2018
Strategic resolve	Defence spending (% of GDP)	The Military Balance 2018	2018
Altruistic resolve	Official Development Assistance spending (% of GNI)	Organisation for Economic Cooperation and Development	2018

D. Table of Indicators by Weight

Indicator	Weighting (%)
National wealth	10
National income	10
Freedom to create	10
Government efficacy	7
Population structure	6
Overseas missions	6
Defence spending	6
Knowledge base	4
National spread	3
Infrastructure	3
Diplomatic centrality	3
Organisational penetration	3
Nuclear arsenal	3
Projection forces	3
Corporate size	2
Discursive dominance	2
Developmental capacity	1.5
Passport power	1.5
Military-industrial base	1.5
Global reach	1.5
Resource self-sufficiency	1
Financial control	1
Commercial reach	1
Gravitational pull	1
Research outlay	1
Innovativeness	1
Health	1
National appeal	1
Sporting attainment	1
Economic allure	1
Economic resolve	1
Strategic resolve	1
Altruistic resolve	1
Total	100

E. Statement on Overseas Territories

Several of the countries and extra-continental powers in South America hold overseas territories, including: 43

Overseas territories of Brazil						
Trinidade						
Overseas territories of Chile						
Easter Island	Islas San Felix and San Ambrosio					
Overseas territories of Colombia						
Bajo Nuevo Bank	Quitasueno Bank Serrana Bank					
Serranilla Bank						
Overseas territories of Ecuador						
Galapagos (including joint regime with Costa Rica)						
Overseas territories of France						
Clipperton Island	French Guiana	French Polynesia				
Guadeloupe	Martinique	Mayotte (and minor islands)				
New Caledonia	Reunion (and Tromelin)	Saint Barthelemy				
Saint Martin	Saint Pierre and Miquelon	Southern and Antarctic Islands				
Wallis and Fortuna						
Overseas territories of the United	Kingdom					
Anguilla	Bermuda	British Indian Ocean Territory				
British Virgin Islands	Cayman Islands	Falkland Islands				
Gibraltar	Montserrat	Pitcairn				
South Georgia and the South Sandwich Islands	Sovereign Bases (Cyprus)	St Helena, Ascension and Tristan da Cunha				
Turks and Caicos Islands						
Overseas territories of the United	States					
American Samoa	Guam	Howland Island				
Jarvis Island	Johnston Atoll	Midway Atoll				
Navassa Island	Northern Mariana Islands	Palmyra Atoll/Kingman Reef				
Puerto Rico	United States Virgin Islands	Wake Island				

However, in most cases, the data is simply lacking or incomplete for each overseas territory for each component, meaning that they cannot be included. In any case, with few exceptions, the South American countries' and extra-continental powers' overseas territories are so small that they would be largely inconsequential if added to overall performance.

 $^{^{\}rm 43}$ Any sovereign territories in Antarctica are excluded in all cases.

That said, in those cases where the data is largely available or where it makes specific sense to include the overseas territories – for example, in 'niche' areas where they add significant value to each country's or extra-continental power's geopolitical capability – they have been included. The table below explains where they have been included, and why:

Component	Territories included	Notes		
Net wealth (Total, US\$)	France: French Guiana, French Polynesia, Guadeloupe, Martinique, New Caledonia, Reunion	Only sizeable overseas territories have been included in the ranking produced by Credit Suisse. Included to improve understanding of the relevant countries'		
	United Kingdom: Bermuda, Cayman Islands	overall score.		
	United States: American Samoa, Guam, Northern Mariana Islands, Puerto Rico, United States Virgin Islands			
Population (Total)	France: French Polynesia, New Caledonia, Saint Martin	Only sizeable overseas territories have been included in the ranking produced by		
	United Kingdom: Bermuda, British Virgin Islands, Cayman Islands, Gibraltar, Turks and Caicos Islands	the World Bank. Included to improve understanding of the relevant countries' overall score.		
	United States: American Samoa, Guam, Northern Mariana Islands, Puerto Rico, United States Virgin Islands	France already includes overseas departments.		
Land Area (Total, km²)	France: Clipperton Island, French Polynesia, New Caledonia, Saint Barthelemy, Saint Martin, Saint Pierre and Miquelon, Southern and Antarctic Islands, Wallis and Fortuna	Included to improve understanding of the relevant countries' overall score.		
	United Kingdom: Anguilla, Bermuda, British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Falkland Islands, Gibraltar, Montserrat, Pitcairn, South Georgia and the South Sandwich Islands, Sovereign Bases (Cyprus), St Helena, Ascension, Tristan da Cunha, Turks and Caicos Islands			
	United States: American Samoa, Guam, Howland Island, Jarvis Island, Johnston Atoll, Midway Atoll, Navassa Island, Northern Mariana Islands, Puerto Rico, United States Virgin Islands, Wake Island			
Exclusive Economic	Brazil: Trinidade	Included to improve understanding of the		
Zone (Total, km²)	Chile: Easter Island, Islas San Felix and San Ambrosio	relevant countries' overall score.		
	Colombia: Bajo Nuevo Bank, Quitasueno Bank, Serrana Bank, Serranilla Bank			
	Ecuador: Galapagos (inc. joint regime with Costa Rica)			
	France: Clipperton Island, French Guiana, French Polynesia, Guadeloupe, Martinique, Mayotte, New Caledonia, Reunion, Saint Barthelemy, Saint Martin,			

	Saint Pierre and Miquelon, Southern and Antarctic Islands, Wallis and Fortuna	
	United Kingdom: Anguilla, Bermuda, British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Falkland Islands, Gibraltar, Montserrat, Pitcairn, South Georgia and the South Sandwich Islands, St Helena, Ascension, Tristan da Cunha, Turks and Caicos Islands	
	United States: Alaska, American Samoa, Guam, Hawaii, Howland Island, Jarvis Island, Johnston Atoll, Navassa Island, Northern Mariana Islands, Palmya Atoll/Kingman Reef, Puerto Rico, United States Virgin Islands, Wake Island	
Forbes 2000 Companies (Total)	United Kingdom: Bermuda	All Forbes 2000 companies listed in overseas territories for respective countries have been included. Included to
	United States: Puerto Rico	improve understanding of the relevant countries' overall score.
Think Tanks (Total)	France: Guadeloupe, Martinique	All think tanks listed in overseas territories for respective countries have been included. Included to improve
	United Kingdom: Bermuda, Montserrat	understanding of the relevant countries' overall score.
Merchant Marine (Total, gross tonnage)	France: French Polynesia, New Caledonia	Only sizeable overseas territories included in the ranking produced by the United Nations Conference on Trade and Development. Included to improve understanding of the relevant countries' overall score.
	United Kingdom: Bermuda, British Virgin Islands, Cayman Islands, Falkland Islands, Gibraltar, Turks and Caicos Islands	
	United States: Guam	
Olympic Medals (Score)	US: Puerto Rico	All medal winners listed in overseas territories for respective countries have been included. Included to improve understanding of the relevant countries' overall score.

F. Omissions of Data

The following tables provide an overview of the data omissions: Table 1 outlines 'legitimate' omissions, and Table 2 outlines 'illegitimate' omissions.

Indicator/Component	Country	Reason
Forbes 2000 Companies (Total)	Bolivia	Countries do not contain any of the world's top 2000 corporations, as
	Ecuador	specified by Forbes.
	Guyana	
	Paraguay	
	Suriname	
	Uruguay	
Forbes 2000 Companies (Average)	Bolivia	Countries do not contain any of the world's top 2000 corporations, as
(Average)	Ecuador	specified by Forbes.
	Guyana	
	Paraguay	
	Suriname	
	Uruguay	
Financial Control	Bolivia	Capital/primate cities not large
Capital/Primate City	Chile	enough to feature on the Institute for Urban Strategies' Global Power City Index.
	Colombia	mdex.
	Ecuador	
	Guyana	
	Paraguay	
	Peru	
	Suriname	
	Uruguay	
	Venezuela	
Knowledge Base	Argentina	Countries do not contain any of the
Top 200 Universities	Bolivia	world's Top 200 Universities, as specified by <i>Times Higher Education</i> .
	Brazil	
	Chile	

	Colombia	
	Ecuador	
	Guyana	
	Paraguay	
	Peru	
	Suriname	
	Uruguay	
	Venezuela	
Discursive Dominance	Argentina	National publishers are not big enough
Top 54 Publishers (Total revenue, US\$)	Bolivia	to feature alongside the world's Top 54 Publishers, as specified by Publisher's Weekly.
	Chile	Publisher's Weekly.
	Colombia	
	Ecuador	
	Guyana	
	Paraguay	
	Peru	
	Suriname	
	Uruguay	
	Venezuela	
Economic Allure Top 100 Brands (Total value,	Argentina	National brands are not big enough to feature alongside the world's Top 100
US\$)	Bolivia	Brands, as specified by Interbrand.
	Brazil	
	Chile	
	Colombia	
	Ecuador	
	Guyana	
	Paraguay	
	Peru	
	Suriname	
	Uruguay	
	Venezuela	
Developmental Capacity	Argentina	

Official Development	Bolivia	Countries are not members of the
Assistance (ODA) (Total, US\$ 2017-2013)	Brazil	Organisation for Economic Cooperation and Development's
,	Chile	Development Assistance Committee, meaning that they do not provide
		Official Development Assistance
	Colombia	(ODA).
	Ecuador	
	Guyana	
	Paraguay	
	Peru	
	Suriname	
	Uruguay	
	Venezuela	
Military-Industrial Base Top 100 Arms and Military	Argentina	Countries do not contain any of the world's Top 100 Arms and Military
Service Companies (Total revenue, US\$)	Bolivia	Service Companies, as specified by the Stockholm International Peace
Τονοπαο, σοφ)	Chile	Research Institute.
	Colombia	
	Ecuador	
	Guyana	
	Paraguay	
	Peru	
	Suriname	
	Uruguay	
	Venezuela	

Table 2: Illegitimate Omissions						
Indicator	Country					
Energy Self-Sufficiency	Guyana	Data not available.				
(percentage)	Suriname					
Gross National Income (Total, US\$, Atlas Method)	Venezuela	Data not available.				
Foreign Direct Investment (Net outflows, US\$)	Guyana	Data not available.				
Service Exports (Total. US\$)	Venezuela	Data not available.				
Air Passengers Carried	Guyana	Data not available.				

	Uruguay				
Research and Development	Bolivia	Data not available.			
Spending (US\$, average, 2012-2016)	Ecuador	Data not available (2015/2016).			
	Guyana	Data not available.			
	Paraguay	Data not available (2013).			
	Suriname	Data not available.			
	Venezuela	Data not available (2015/2016).			
Patent Applications	Bolivia	Data not available (2013/2015).			
(Average 2013-2017)	Paraguay	Data not available.			
	Uruguay	Data not available (2013/2016).			
Trademark Applications	Bolivia	Data not available (2016).			
(Average 2013-2017)	Paraguay	Data not available.			
	Uruguay	Data not available (2016).			
Overseas Tourist Arrivals (Total)	Papa New Guinea	Data not available.			
(Total)	Taiwan	1			
International Students from	Bolivia	Data not available			
Overseas in Tertiary Educational Institutions	Guyana	- -			
(Total)	Paraguay				
	Peru				
	Suriname				
	Uruguay				
	Venezuela				
Defence Spending (US\$, average, 2014-2018)	Suriname	Data not available.			

G. Data Tables

F.1 Geopolitical Capability of the Countries of South America (Scores)

South American Country or Extra- Continental Power	National Base	National Structure	Economic Clout	Technological Prowess	Cultural Prestige	National Instruments	Diplomatic Leverage	Military Might	National Resolve	TOTAL SCORE
Argentina	0.0205	0.1395	0.0101	0.0432	0.0862	0.0667	0.0644	0.0024	0.0466	0.2733
Bolivia	0.0118	0.1050	0.0018	0.0319	0.0713	0.0400	0.0400	0.0000	0.0270	0.1838
Brazil	0.0646	0.1427	0.0213	0.0407	0.0807	0.0917	0.0866	0.0051	0.0373	0.3362
Chile	0.0149	0.1502	0.0079	0.0405	0.1018	0.0646	0.0614	0.0032	0.0710	0.3007
Colombia	0.0223	0.1138	0.0091	0.0354	0.0693	0.0466	0.0449	0.0017	0.0440	0.2266
Ecuador	0.0129	0.0945	0.0006	0.0330	0.0608	0.0469	0.0458	0.0011	0.0345	0.1888
France	0.0461	0.2048	0.0350	0.0561	0.1136	0.1657	0.1348	0.0310	0.0828	0.4994
Guyana	0.0051	0.1194	0.0000	0.0241	0.0953	0.0310	0.0310	0.0000	0.0399	0.1954
Paraguay	0.0083	0.0971	0.0002	0.0302	0.0667	0.0447	0.0447	0.0000	0.0292	0.1793
Peru	0.0154	0.1220	0.0076	0.0341	0.0802	0.0601	0.0584	0.0017	0.0363	0.2338
Suriname	0.0048	0.1226	0.0000	0.0325	0.0901	0.0238	0.0238	0.0000	0.0381	0.1894
UK	0.0412	0.2321	0.0367	0.0661	0.1293	0.1704	0.1330	0.0374	0.0963	0.5400
US	0.1969	0.3905	0.1500	0.0960	0.1445	0.2955	0.1455	0.1500	0.0855	0.9683
Uruguay	0.0071	0.1486	0.0003	0.0412	0.1071	0.0556	0.0547	0.0009	0.0697	0.2810
Venezuela	0.0172	0.0652	0.0009	0.0355	0.0287	0.0658	0.0647	0.0011	0.0057	0.1538

F.2 Geopolitical Capability of the Countries of South America (Relative Scores)

South American Country or Extra- Continental Power	National Base	National Structure	Economic Clout	Technological Prowess	Cultural Prestige	National Instruments	Diplomatic Leverage	Military Might	National Resolve	TOTAL SCORE
Argentina	10.39	35.72	6.70	44.99	59.68	22.59	44.25	1.57	48.39	28.22
Bolivia	6.02	26.88	1.20	33.21	49.33	13.55	27.48	0.03	28.04	18.99
Brazil	32.81	36.54	14.21	42.36	55.87	31.03	59.49	3.42	38.67	34.72
Chile	7.57	38.46	5.28	42.20	70.44	21.87	42.19	2.15	73.70	31.05
Colombia	11.30	29.14	6.06	36.85	47.98	15.78	30.88	1.13	45.65	23.41
Ecuador	6.54	24.20	0.41	34.43	42.10	15.87	31.49	0.71	35.83	19.49
France	23.41	52.44	23.36	58.49	78.62	56.08	92.62	20.64	85.95	51.57
Guyana	2.57	30.59	0.02	25.07	65.99	10.49	21.30	0.00	41.47	20.18
Paraguay	4.20	24.86	0.16	31.43	46.14	15.14	30.73	0.02	30.30	18.51
Peru	7.84	31.24	5.07	35.58	55.52	20.32	40.11	1.13	37.70	24.14
Suriname	2.43	31.41	0.02	33.82	62.39	8.07	16.39	0.00	39.59	19.56
UK	20.91	59.44	24.47	68.85	89.49	57.66	91.42	24.90	100.00	55.76
US	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	88.75	100.00
Uruguay	3.60	38.07	0.22	42.97	74.10	18.82	37.62	0.59	72.35	29.02
Venezuela	8.72	16.69	0.61	37.03	19.88	22.26	44.47	0.72	5.91	15.89

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