



What Is Power?

And how much of it does America have?

William Inboden

What is power, and how much of it does America (still) have? In a time of great flux in the international system, and amid proliferating predictions of American decline, these questions have of late commanded more attention than usual. The reasons are several.

First, while many thought it self-evident that the West's victory in the Cold War would leave America the unrivaled global power for generations, recent geopolitical trends such as the emergence of China and resurgence

of Russia have called this preeminence into question. Second, the September 11, 2001 attacks and the frustrations of the counterinsurgency efforts in both Iraq and Afghanistan have led many to observe that the applicability of power depends on context; if the context changes, so does the value of prior investments in military force, intelligence methods, alliances and other traditional instruments of power. Third, the costs and tribulations of the Iraq and Afghanistan wars threw into sharp relief the relationship between reputation and power, and led to an apparent diminishing of America's global stature. And finally, just when many observers expected to see

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America's reputation improve with the election of Barack Obama, the bottom fell out of the American economy, precipitating a global economic crisis. Even as much of the world still looked to the United States to lead the way out of the crisis, the systemic vulnerabilities in the American economy that it exposed raised new doubts about economic power still being one of the pillars of American strength. So in the space of just two decades, this series of events have combined to erode a complacent consensus about American power—both about how much of it there is (not as much as we thought) and about how it is constituted (not the way we thought). That the subject is on our minds seems to be reflected in the Obama Administration's incantations about employing "smart power", as if the opposite

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were ever an option, let alone a conscious policy.

Once beyond slogans, one might consider seeking wisdom in modern academic scholarship, for a great deal has been written in recent decades about the nature and measurement of power. Whole university careers and multiyear research projects, not to mention large government contracts, have been erected on the premise that such work is meaningful. Not just American scholars but Chinese and others remain hard at work measuring and weighing away.¹ Surely, there are rich veins here to mine.

Not so fast. Recall that this and related scholarship consistently exaggerated Soviet power for more than forty years, failed to forecast the collapse of the Soviet Union and the end of the Cold War, failed to predict the scale and speed of the Coalition victory over Iraq in 1991, and failed to anticipate the strategic implications of terrorism and other coercive behaviors by non-state actors. Moreover, recent revisionism has suggested that much of the effort to measure power has been misconceived, partly due to an infatuation with

methodological gadgetry. A RAND study commissioned by the U.S. Army observed that previous efforts to measure power using multiple variables and complex formulas almost always produced the same country rankings as indexes using only a single variable like GDP, military expenditures or energy consumption.² As two other scholars dryly concluded after an exhaustive comparison of complex multi-variable indexes with single-variable indexes: "It appears that needless additional data and arithmetic computation have been introduced without an increase in payoff."³

It gets worse: Standard scholarly power metrics cannot even reliably predict victory or defeat in war. As Ivan Arreguin-Toft's recent study of 196 wars over the past two centuries demonstrates, the more powerful nation (measured in military strength and population) only won 71 percent of the time. And when the "weaker" nation employed an asymmetric strategy—usually insurgency or guerrilla tactics against the stronger nation's conventional forces—the "weaker" nation prevailed the *majority* of the time, in almost 64 percent of the conflicts.⁴

If most of the standard political science and international relations literature cannot

¹Measuring power quotients has become somewhat of an obsession for the Chinese government, which has commissioned five different research institutes, each of which is to produce comprehensive national power indexes. See Mark Leonard, *What Does China Think?* (PublicAffairs, 2008), pp. 83–5.

²Ashley Tellis, Janice Bially, Christopher Layne and Melissa McPherson, *Measuring National Power in the Postindustrial Age* (RAND Arroyo Center, 2000).

³Richard Merritt and Dina Zinnes, "Alternative Indexes of National Power", Richard J. Stoll and Michael D. Ward, eds., *Power in World Politics* (Lynne Rienner Publications, 1989), p. 26.

⁴Ivan Arreguin-Toft, *How the Weak Win Wars: A Theory of Asymmetric Conflict* (Cambridge University Press, 2005).

adequately explain power, then what can? The traditions of political philosophy are one place to start, for the simple if often overlooked reason that our forebears did not compartmentalize their subject matters the way we moderns have tended to do. We do know something about power from this tradition and from those who have followed it into our own time. And from this knowledge we can construct arguably more sophisticated metrics than those we have had until now.

The Essence of Power

So what, in essence, do we know? At least five things:

- Power is based on, but not tied to, material assets.
- Power is relational.
- Power is cumulative.
- Power is renewable.
- Power is a function of interacting political cultures, which includes factors such as type of government, social trust and morale (not to exclude the influence of religion), and leadership.

One of the most incisive attempts to capture this essence has stood the test of time for around five centuries. Niccolò Machiavelli titled chapter ten of *The Prince*: “How the strength of all principalities should be measured.” To explain his view he cast an envious eye toward the secure cities of Germany, describing them as

so well-fortified that everyone considers that besieging them is necessarily a tiresome and difficult undertaking. For they all possess strong walls and adequate moats, and sufficient artillery; and they always ensure that their public storehouses contain enough food, drink, and fuel to last for a year. Moreover, in order to maintain the common people without public expense, they always have enough raw materials to keep the people engaged for a year in those occupations essential to the life of a the city, and which sustain the common people. They also consider military exercises

to be very important, and have many regulations for maintaining them.

From this Machiavelli concludes that, “therefore, a ruler who possesses a strong city and does not make himself hated is safe from attack.”

Here, then, are the basic ingredients of national power, combined in a simple enough recipe: material wealth and resources; an economy that can sustain high levels of employment and productivity; a strong and well-equipped military; social capital from a supportive population; an effective government; and even some measure of that elusive concept of “soft power”, at least insofar as the ruler “does not make himself hated.” Machiavelli may not have included every element of importance; he says little about offensive as opposed to defensive uses of power, for example. But he recognized, explicitly or implicitly, the vast majority of them.

Turning from Machiavelli to the modern context, before attempting to measure power it is useful to have some working definition of it, and one of the most straightforward comes from Joseph Nye, who defines power as “the ability to influence the behavior of others to get the outcome one wants.”⁵ In this capacious meaning, influence can include the use of force to coerce, deter or reassure, as well as the use of “soft power” to create incentives, inducements and attraction. Nye’s definition also correctly links power with outcomes. It is not enough for a nation to have considerable strength if the resources that comprise that strength cannot be translated into achieving desired goals. Nuclear weapons furnish an excellent illustration: They are incomparably destructive and thus evince profound strength, yet are of only limited use as a national security instrument beyond deterring other potential nuclear aggressors.

It is also important to tease out the central implications of the *relative* nature of power. To say that power is relative means that it is also inherently zero-sum in nature. Wealth,

⁵Nye, *Soft Power: The Means to Success in World Politics* (PublicAffairs, 2004), p. 2.

happiness and social capital are multiple-sum concepts, so that we can generally treat economic growth, social trust and human capital as intrinsic goods. Other societies can become rich and happy without doing so at American expense, and indeed in some circumstances their good fortunes can boost our own. But while it is possible to imagine a world in which everyone is rich and happy in some absolute sense, there can be no ideal world in which everyone is powerful—except perhaps in some Platonic fantasy or

The reputational aspects of power often continue even after a state's other power metrics diminish.

Hobbesian nightmare. That impossibility inheres in the definition of the concept as a relational one.

It follows, too, that a nation's wealth and social capital can shift from being intrinsic goods to being relative ones if they are harnessed to national policies that seek outcomes inimical to another nation's interests. Thus, to say that power is relational is also to say that it is a function of human agency and intent, which is why a statement that America is "x" powerful, where "x" is some absolute measure or amount, is literally nonsensical. It is impossible to say how powerful the United States is without taking into consideration the assets and intentions of others.

Moreover, nations clearly do not become powerful overnight, and the states that rule them are capable of purposeful behavior that can increase power over time. The accumulation of resources multiplies through the "compound interest" effect familiar to any reader of money-market fund brochures, at least prior to 2008. States that become powerful also develop the institutional memory and habits of wielding and maintaining power, such that even a nation in decline can "punch above its weight", so to speak. The reputational and relational aspects of power often continue even after a state's other power metrics diminish: If other nations still think a nation is powerful, and if its allies

continue to stick by it, it can maintain the illusion (and in some ways even the reality) of its power.

Another prerequisite for power is that it be renewable. A nation's static possession of resources and assets—whether economic or military—will not keep pace with competitor nations that are perpetually refining and renewing their power base. In this regard, a key factor in state power is the extent to which the economy encourages innovation, and that this innovation is captured and utilized by the government, particularly for advances in national security. For both innovation and state utilization to occur demands a flexible, entrepreneurial economy and

an adaptive, capable government. This aspect of state-society relations defines how well a nation can respond to opportunities, maintain its edge, and produce and utilize new quotients of power.

This ability is partly a function of political culture in the sense that not all nations attract their best and brightest to positions of political authority, or are able to appreciate and empower the private sector while glean-ing its outputs for state power. But political culture works both ways. Nations that quickly increase in power metrics and international prominence may lack leadership willing and able to wield it effectively. The United States in the interwar years furnishes a clear example. Sudden increases in power can also produce instability and provoke threats, as well. Germany's rapid growth in the 19th century, and its foolish decision to bolster its sea-power in the face of British supremacy, exemplifies that.

To raise the issue of political culture is to note that power can vary depending on the type of government possessing it. For example, Tocqueville argued that the militaries of democratic nations are stronger, but only in protracted conflicts. While Tocqueville's overall views on democracies and war are laden with ambiguities, his insights on the short-term constraints of democracy as well as the long-term strengths of democratic citizenship in encouraging

enterprise, innovation and prosperity remain prescient.

Aside from democracy, religion can increase a nation's power if it contributes to social trust, character and morale. Stalin once scoffed, "The Pope? How many divisions has he got?" Considering the roles played in the demise of Soviet communism by religious actors, including Catholics inspired by the first Polish Pope, Jewish refuseniks within the Soviet Union, Muslim *mujaheddin* in Afghanistan and American Evangelicals who helped elect Ronald Reagan, Stalin probably should have asked a different question.

Pillars of a Power Index

If power is this complex, elusive and often transitory, can it ever be expressed in a partly quantitative index? It is worth a try, especially since the mere effort itself can be a revealing inquiry into the sources and nature of power. Perhaps some of the inadequacies of past power measurements lay mainly in their failure to assess power in a sufficiently holistic and dynamic framework. If so, it would mirror past failures to properly assess another elusive concept, prosperity. At the Legatum Institute, we employed such a framework to develop the *Prosperity Index* (www.prosperity.com), which measures economic competitiveness and quality of life in 104 countries. Five lessons learned from building the Prosperity Index may inform the development of a Power Index.

First, we begin with a holistic definition, which in the case of "prosperity" means not just wealth but also well-being and quality of life. Second, we assess not just *outcomes* (for example, GDP levels) but also *drivers*, or the various factors that seem to help produce and sustain economic growth and quality of life. Third, we include both objective and subjective data, such as economic and health figures as well as polling results on citizen perceptions of the quality of their lives. Fourth, we look for patterns and changes over time, rather than just compiling a static snapshot. Fifth, we explore relationships among different indicators, such as how democratic

governance promotes economic growth as well as quality of life, or how improved health and increases in income can be mutually reinforcing. If we apply these five principles to an attempt to measure power, as we have defined its essence, we can discern four main pillars: *social capital*, *governance*, *military strength* and *economic strength*. Yet while each pillar is essential, each is not equal. Below I suggest the percentage weightings that should be given to each pillar in the overall index, relative to its importance in determining a nation's power.

The first two indicator categories, social capital and governance, form the building blocks of a successful nation and are essential predicates for the remaining pillars, economic growth and effective military strength. They have the most predictive power for how nations will perform over time in gaining or losing power. They are also the categories most neglected by traditional power rankings. Yet these two categories command a combined weighting of only 35 percent because by themselves they do not constitute power. A nation can conceivably have happy, socially involved citizens and be well governed, yet have little in the way of economic resources or military might. (Bhutan comes to mind, with its winsome, idiosyncratic focus on "Gross National Happiness", yet meager economy and miniscule army.) The other two categories, military and economic strength, have the heaviest weightings (40 percent and 25 percent respectively) because they are still the primary determinants of a nation's power at any given time.⁶

⁶A few disclaimers: the indicators and specific metrics listed below are intended to be more suggestive than exhaustive; they highlight some important factors, but by no means purport to capture in totality the almost infinite array of elements that contribute to each pillar. Likewise, in a few places suggested metrics draw on pre-existing ratings or indicators. For example, military and economic strength draw on conventional power indexes such as the Global Firepower rankings, which compare military strength and economic capacity of the 42 most "powerful" nations in the world. See www.globalfirepower.com.

Economic Strength

ECONOMIC FUNDAMENTALS

Economic Output

GDP; GDP per capita; national GDP as % of global GDP

Invested Capital

total capital stock; capital stock per worker

Public Debt

total public debt (sub-indicator: debt held by foreign governments); public debt as % of GDP (sub-indicator: % held by foreign governments)

Economic Openness

trade-weighted average tariff rate; non-tariff trade barriers; number of bilateral and regional free trade agreements.

Employment

unemployment rate



25%

ENTREPRENEURSHIP AND INNOVATION

Research and Development

gross public and private R&D spending ; R&D spending as % of GDP; R&D spending as % of global total; number of patents per annum; protection of intellectual property rights

Technological Connectivity

Internet bandwidth; cell phones per capita; PCs per capita

Entrepreneurship

ease of starting a business; cost of starting a business; access to capital; availability of credit information

Governance

GOVERNMENT CAPACITY AND LEADERSHIP

Transparency and Accountability

Global Integrity rankings

Democracy and Human Rights

Freedom House rankings

Durability

number of years that the current form of government has ruled the country; number of years that current constitution has been in effect

Effectiveness and Bandwidth

trade-weighted average tariff rate; non-tariff trade barriers; number of bilateral and regional free trade agreements



20%

FOREIGN RELATIONS

Relationships

bilateral treaty alliances; multilateral treaty alliances; formal intelligence-sharing agreements; number of other nations with same first language; % of people in the world speaking the nation's first language

Influence in Multilateral Institutions

voting strength in UN Security Council; voting strength at IMF; shareholder & voting rights at World Bank Group

Warfighting Reputation

wars fought and won in past 25 years; wars fought and lost in past 25 years; conflicts withdrawn from in past 25 years

Foreign Behavior

visa applications; number of foreign students; FDI flows; emigration flows; international polling perceptions about a nation's policies

Social Capital

HUMAN CAPITAL

Education

average years of secondary education;
average student performance on international
achievement tests; average years of tertiary education;
% of citizens with graduate degrees

Health

infant mortality; health-adjusted life expectancy

Population

total size of population; population growth/decline rates;
average number of children per couple; emigration rates

Marriage and Family

marriage levels; divorce levels

SOCIAL TRUST

Voluntary Organizations

number of citizens belonging to civic organizations; hours per week spent in civic activities

Trust

% of citizens who say others can be trusted; % of citizens who say they have friends
or family to rely on; % of citizens who “helped a stranger” that month; number of
hours spent doing volunteer work, % of citizens who attend weekly religious services

Religious Engagement

% of citizens who believe in God

Subjective Well-Being

% of citizens who report themselves to be
happy and/or satisfied with their lives

Military Strength

Defense Budget

absolute defense expenditures;
defense expenditures as % of GDP;
defense expenditures as % of global share

Manpower

total numbers of enlistees and officers;
average education levels of enlisted ranks and officers

Conventional Force Systems

Number of land-based weapon systems;
number of naval ships (sub-indicators for
aircraft carriers and submarines); number of aircraft
(sub-indicators for stealth aircraft);
% of precision-guided munitions

Nuclear Force

total warheads; number of delivery platforms;
range of delivery platforms; diversity of delivery systems
(sub-indicators for ICBMs and submarines)



15%



40%



Social Capital (weighting: 15 percent)

The social capital category encompasses the character and capacity of a nation's citizens. It includes *human capital* (the health, education and capabilities of individual citizens) and *social trust* (the quality of relationships between citizens as well as between the citizens and their government), both of which define how well the body politic can perform and function for common purposes. This also affects the military, as the personnel of a nation's armed forces will reflect that country's overall social capital. A military culture is most robust when its members come from strong families and communities, and bring ingrained virtues of honesty, citizenship, self-sacrifice, delayed gratification and social involvement to the martial endeavor.

Human Capital

—*Education*. Metrics: average years of secondary education; average student performances on international achievement tests; average years of tertiary education; percentage of citizens with graduate degrees.

Few would dispute that education is indispensable to developing human capital, and also a key driver of economic growth. For example, in the Legatum Prosperity Index, the top three nations in the education ranking (Germany, Austria, Australia) are also three out of the top four countries in the overall Index—making education virtually a proxy for overall prosperity.

—*Health*. Metrics: infant mortality, and health-adjusted life expectancy.

The physical health of citizens is often a

leading indicator of the country's human capital and future prospects.

—*Population*. Metrics: total size of population; population growth/decline rates; average number of children per couple; emigration rates.

Thomas Malthus and Paul Ehrlich notwithstanding, a country's overall population size has long been included in traditional power assessments for the obvious reason that the more people a country has, the larger potential workforce and military personnel it has available. However, this indicator should also assess population trends, and do so in context. In developed nations, growing populations often indicate dynamism and opportunity—they are the countries whose own citizens are optimistic about the future, and where emigrants seek to move. Advanced and some still-modernizing nations facing demographic decline are likely to see their power diminish. A combination of aging populations (with decreasing numbers of workers being available to support welfare programs for increasing numbers of retirees) in places like China and Europe, as well as precipitous population declines in places like Russia and Japan, bode ill for their future economic performance and military potential. Developing countries, on the other hand, may be aided by achieving slower population growth rates.

Social Trust

—*Marriage and Family*. Metrics: marriage levels; divorce levels.

Despite the buffeting of recent decades, strong marriages and stable families are still foundational to social stability and health.

—*Voluntary Organizations*. Metrics: number of citizens belonging to civic organizations; hours per week spent in civic activities.

The lifeblood of a community and the leading indicator of social capital, these groups are the charities, religious organizations, Rotary and Kiwanis Clubs, and, yes, bowling leagues that form the mediating institutions between government and citizen. They both reflect and reinforce the values of citizenship and personal character in taking initiative, developing social trust, forming durable communities, and uniting around common purposes.

—*Trust*. Metrics: percentage of citizens who say others can be trusted; percentage of

citizens who say they have friends or family to rely on; percentage of citizens who “helped a stranger” that month; number of hours spent doing volunteer work.

Trust is another essential lubricant for an effective and prosperous society. High-trust countries flourish under limited government and encourage entrepreneurship, innovation, cooperative efforts for common purposes and economic growth. Low-trust societies require more extensive and often-stifling government control, have higher levels of corruption, crime and inefficiencies, and lower rates of innovation and growth.⁷ Moreover, trust is indispensable for an effective military—for relations between the officer corps and enlisted ranks, and especially for relations between the military and the foreign populations where it is deployed.

—*Religious Engagement*. Metrics: percentage of citizens who attend weekly religious services; percentage of citizens who believe in God.

Studies of happiness levels, or subjective well-being, consistently find that religious people are generally happier than the non-religious. A forthcoming study by Robert Putnam finds that in the American context people who attend regular religious services have higher levels of civic involvement, volunteer more often, donate more money, are more likely to vote, are more likely to assist strangers, and are happier. Most important, the relationship is *causal*: Attending religious services and forming friendships within faith communities drives increases in happiness and civic engagement.

—*Subjective Well-Being (SWB)*. Metric: percentage of citizens who report themselves to be happy and/or satisfied with their lives.

Though subjective by definition, SWB still has value in helping assess the quality of life in the body politic. While economists, psychologists, and sociologists continue to unravel knotty questions of causality (for example, does marriage make people happy, or are happy people just more likely to get married?), at a minimum the correlations are clear between levels of SWB and other factors such as physical health, family strength, economic productivity, social trust, physical security, community involvement and civic participation. Happy citizens help make powerful nations.



Governance (weighting: 20 percent)

The governance category encompasses the institutional aspects of how a nation is run, both in relation to its own citizens and in its relations with other nations. The first sub-pillar, *government capacity and leadership*, describes a national government’s legitimacy and capability to actually wield the power ostensibly at its disposal. Government capacity includes things like the nature of the government, its relationship with the private sector, the smooth functioning of the various departments and agencies, the capability of cabinet principals and the head of government to handle information flows and make decisions, and the efficiency with which those decisions are carried out.

The second sub-pillar, *foreign relations*, encompasses the strength of a government’s relationships with the rest of the world, particularly through its alliances as well as the demonstrated behavior of other nations. The latter is a much more durable indicator of soft power than mere attitudes expressed in opinion polls. What matters for international power is not what other populations *say*, but what they and their government *do*. Their behavior reveals their soft power preferences more than whatever they might say to a Pew Global Attitudes survey pollster.

The two sub-pillars of the governance category also bring together another neglected aspect of national power: the power of allies, and

⁷For the most extensive and innovative discussion of the role of trust in economic growth and civil society, see Francis Fukuyama, *Trust: The Social Virtues and the Creation of Prosperity* (Free Press, 1996).

the advantages democracies have in maintaining them. Strong relationships with other nations multiply a nation's power through everything from basing rights, intelligence sharing, weapons system collaborations and purchases, and shared military deployments to support in multilateral institutions, mutual trade benefits and mutual security guarantees. Nations with a record of peaceful leadership transitions under rule of law (that is, democracies) are also better able to maintain the credibility of their alliance commitments by demonstrating that these relationships are not subject to the whim of a particular autocrat but rather are embedded in their political and legal order. Moreover, strong relationships (like power itself) have an accumulated value over time, as multi-generational habits and institutional memories take hold and transcend the vagaries of personality. Thus the U.S.-German relationship survived well the momentary personal chill between President George W. Bush and Chancellor Gerhard Schröder, whereas the comparatively warm initial personal relationship between Bush and then-Russian President Vladimir Putin did not translate into an improved structural relationship between the United States and Russia.

Government Capacity and Leadership

—*Transparency and Accountability.* Metrics: Global Integrity rankings (report.globalintegrity.org).

Nations with transparent and accountable governments resist corruption, have more vibrant and prosperous private sectors, attract higher levels of investment capital and create more fertile environments for innovation. Such governments can also much more efficiently take advantage of private sector innovation without parasitic (and power-sapping) rent-seeking.

—*Democracy and Human Rights.* Metrics: Freedom House ratings (www.freedomhouse.org).

Including democratic values in a study of power faces the obvious question about the evident power of non-democratic nations such as China today, or in the past, Nazi Germany or the Soviet Union. But as democracy is just one indicator within one pillar, it is not a dispositive

determinant of power. More importantly, democratic values merit inclusion because a viable power index needs to assess the durability and growth of power over time—and in the modern era, democracy has emerged as the most sustainable, adaptable, legitimate and resilient form of government.

—*Durability.* Metrics: number of years that the current form of government has ruled the country; number of years that current constitution has been in effect.

Durability reflects the cumulative nature of power as well as the habits, culture and stability cultivated over time, increasing the confidence of both citizens and international actors in the reliability of a nation.

—*Effectiveness and Bandwidth.* Metrics: government effectiveness rating according to the World Bank Governance Indicators; number of wars/crises taking place where the nation has significant interests.

This indicator, while hard to quantify, is indispensable for translating potential power into actual power. It refers to a government's "power to wield power" and will be painfully familiar to anyone who has worked in government. At the broader government effectiveness level, it incorporates the quality of the civil service, the integrity of policymaking processes and the capacity of the government to deliver on its commitments. At the "bandwidth" level, it describes the capacity of the top leaders to handle policy and decision-making on crises and new initiatives. It is a fact of human nature that there is only so much information a leader can absorb, and only so many matters to which he or she and cabinet principals can devote attention. If three or four front-burner issues such as Iraq, Afghanistan-Pakistan, North Korea and Iran are consuming all of the limited time of senior decision-makers, the bottleneck at the top will severely constrain how much a nation's remaining power quotient can be allocated in other areas.

Foreign Relations

—*Relationships.* Metrics: bilateral treaty alliances; multilateral treaty alliances; formal intelligence-sharing agreements; number of other nations with same first-language; percentage of people in the world speaking the nation's first language.

The importance of alliances has already been noted. The metric about the number of speakers of a nation's language recalls the observation that Bismarck made (as reported by Churchill) shortly before his death: the greatest geopolitical fact of the modern era would be that the Americans speak English.

—*Influence in Multilateral Institutions.* Metrics: voting strength in United Nations Security Council; voting strength at International Monetary Fund; shareholder and voting rights at World Bank Group.

For all of their manifest deficiencies, global multilateral institutions still matter, and a nation cannot be a great power without at least having a significant voice at the UNSC, the IMF and the World Bank.

—*Warfighting Reputation.* Metrics: wars fought and won in last 25 years; wars fought and lost in last 25 years; conflicts withdrawn from in last 25 years.

Power is in part reputational, and there is no more compelling a measure than a nation's performance in war. A victory sends a potent signal and can increase a nation's power (witness Libya's voluntary cessation of its nuclear program in 2003 when the United States had appeared to win decisively in Iraq), whereas a perceived loss can embolden adversaries (such as increased Soviet adventurism in the Third World after the United States withdrew from Vietnam).

—*Foreign Behavior.* Metrics: visa applications; number of foreign students; foreign direct investment flows; emigration flows; international polling perceptions about a nation's policies.

In other words, soft power. Assessing the behavior of foreign populations toward a particular nation is much more revealing about the attractiveness (or revulsion) of that nation in the world than the vicissitudes of opinion polling. People vote with their feet and their wallets, and these metrics assess which nations are the most attractive destinations for tourism, study and employment, as well as finance and investment. Nations that score well on these metrics are more attractive and thus more influential.

Public opinion polling should not be discounted entirely, hence the inclusion of polling on international attitudes toward a nation's

policies. These perceptions matter because they can shape the political environment and constitute autonomous constraints that leaders face. An obvious current example would be the anemic support (and often opposition) in Western Europe toward the U.S.-led NATO mission in Afghanistan and the resulting difficulties sustaining allied contributions to the war effort.



Economic Strength (weighting: 25 percent)

Economic strength helps define a nation's power in three primary ways. First, wealth in its own right, especially when it constitutes a significant share of the global economy, gives a nation considerable influence in shaping global affairs. Second, as the primary domain of the private sector, the creation of wealth helps reinforce and sustain human and social capital by providing resources for personal development as well as through providing constructive pathways for human endeavor. Third, wealth provides resources to the state to build a strong military. The economic strength pillar is far from an exhaustive measure of what drives economic growth, but rather highlights a few particular indicators—within the sub-categories of *Economic Fundamentals* and *Entrepreneurship and Innovation*—that are especially salient in the context of national power.

Economic Fundamentals

—*Economic Output.* Metrics: Gross Domestic Product; GDP per capita; national GDP as percentage of global GDP.

Imperfect though it may be, GDP still provides the best snapshot of a nation's overall

economic performance. GDP per capita helps depict the relative economic power of each citizen, and GDP as a percentage of the global share shows how a nation's output stacks up relative to the rest of the world.

—*Invested Capital*. Metrics: total capital stock; capital stock per worker.

Still some of the basic building blocks of an economy, the value of capital stock indicates how much a nation has invested its wealth in growth-producing instruments, and capital stock per worker helps identify their efficiency.

—*Public Debt*. Metrics: total amount of public debt (sub-indicator of amount of debt held by foreign governments); public debt as percentage of GDP (sub-indicator of percentage held by foreign governments).

Economists debate whether and how much government debt affects economic growth, but any factor that gives one nation substantial leverage over another also impacts their relative power levels. Just ask any American official involved in negotiations with China on bilateral issues, where China's massive U.S. debt holdings lurk as the 800-pound panda in the room.

—*Economic Openness*. Metrics: trade-weighted average tariff rate; non-tariff trade barriers; number of bilateral and regional free trade agreements.

Besides being indispensable for innovation and sustainable economic growth, levels of economic openness also portray the extent of a nation's international relationships, a key factor in power.

—*Employment*. Metric: unemployment rate.

In addition to helping depict the levels of efficiency and productivity in an economy, the unemployment rate also shows one dimension of how well a nation's human capital is being used.

Entrepreneurship and Innovation

—*Research and Development*. Metrics: gross public and private R&D spending; R&D spending as percentage of GDP; R&D spending as percentage of global total; number of patents per annum; level of protection of intellectual property rights.

Innovation cannot occur without the development of new technologies, and resources devoted to R&D constitute a core component of this development. The number of patents

granted provides an “output check” on the fruits of R&D spending, and protection of intellectual property rights helps create a sustainable and fertile environment for innovation as well as strengthening the rule of law. R&D expenditures are also vital for the development of new military technologies and weapons systems.

—*Technological connectivity*. Metrics: Internet bandwidth; cellular phones per capita; number of personal computers per capita.

These measures quantify how widespread and how accessible are the modern channels of entrepreneurship and innovation.

—*Entrepreneurship*. Metrics: ease of starting a business; cost of starting a business; access to capital; availability of credit information.

For innovation to be commercialized, it needs an entrepreneurial class willing to take risks, able to access seed capital and equipped to start a new enterprise with a minimum of regulatory hurdles. Entrepreneurship is also connected with the paths of opportunity available to citizens, as an entrepreneurial environment provides channels for their creative outlets and the full realization of human capital potential.



Military Strength (weighting: 40 percent)

Mmilitary strength gets the strongest weighting because it is still the *sine qua non* of power. In other words, it is possible for a nation to be “powerful” by having a formidable military yet weak governance, economy and social capital—think of the Soviet Union in the early 1980s. But a nation that is strong on governance, foreign relations, the economy

and social capital, yet lacks a proportionately capable military, would not be able to punch at its proverbial weight. Think of Germany or Japan today.

—*Defense Budget*. Metrics: absolute defense expenditures; defense expenditures as percentage of GDP; defense expenditures as percentage of global share.

Though money alone cannot guarantee strong armed forces, it is impossible to have a capable military without devoting adequate resources.

—*Manpower*. Metrics: total numbers of enlistees and officers; average education levels of enlisted ranks and officers.

As with money, high personnel numbers do not necessarily equate to a potent military; think of China's archaic yet numerically expansive four million-plus army in the 1970s. Yet as America's current conflicts in Iraq and Afghanistan demonstrate, adequate force levels are indispensable to power projection and mission responsibilities. Education levels can help to determine the overall quality of the force.

—*Conventional Force Systems*. Metrics: number of land-based weapon systems; number of naval ships (sub-indicators for aircraft carriers and submarines); number of aircraft (sub-indicators for stealth aircraft); percentage of precision-guided munitions.

These numbers get at the bread-and-butter of military strength, specifically the numbers and varieties of weaponry and weapons platforms, with special attention to unique assets such as aircraft carriers and submarines, and technological game-changers such as stealth aircraft and precision-guided munitions.

—*Nuclear Force*. Metrics: total warheads; number of delivery platforms; range of delivery platforms; diversity of delivery systems (sub-indicators for ICBMs and submarines).

Though the limited utility of nuclear weapons has already been mentioned, the fact remains that a nuclear force is still indispensable for a great power, if for no other reason than the deterrent effect of second-strike capability against other nuclear-armed nations.

—*Training and Innovation*. Metrics: number of advanced training facilities; percentage of personnel with training from advanced

facilities; number of high-level joint military exercises.

These metrics assess the various means available to a military to learn, refine, tap into recent innovations and prepare for future contingencies.

—*Geographic Posture*. Metrics: number of time zones/latitudes with military base presence.

Though as anyone familiar with the domestic politics of base closures knows, the sheer numbers of bases can tell a misleading story about military strength. The geographic range and reach of a nation's military bases can be a more reliable indicator of its force projection capabilities.

The Limits of Power

For American leaders, or those of any other nation, contemplating the acquisition and preservation of power, two caveats should be borne in mind. First, many of the metrics of power can exist in tension with each other, or even work against each other. Excessive military spending can sap a nation's economic strength; an overly dominant government can erode civil society. Related to this, the projection of power can create its own new burdens, as with Paul Kennedy's famous warning, in the form of "imperial overstretch" in which a nation's international commitments exceed its capabilities.

Second, power by itself is amoral, a fact of international life that is neither intrinsically good nor evil. When wielded for the right purpose (as has often been the case for America) power can be a good, and is a responsible aspiration for a nation's leaders. But as America's greatest philosopher of power, Reinhold Niebuhr, observed, noble intentions in the use of power cannot be divorced from humility and wisdom about the limits of power. "Our moral perils are not those of conscious malice or the explicit lust for power. They are the ironic perils which can be understood only if we realize the ironic tendency . . . of power to become vexatious if the wisdom which directs it is trusted too confidently." That is a danger that no power index can measure. 🌐