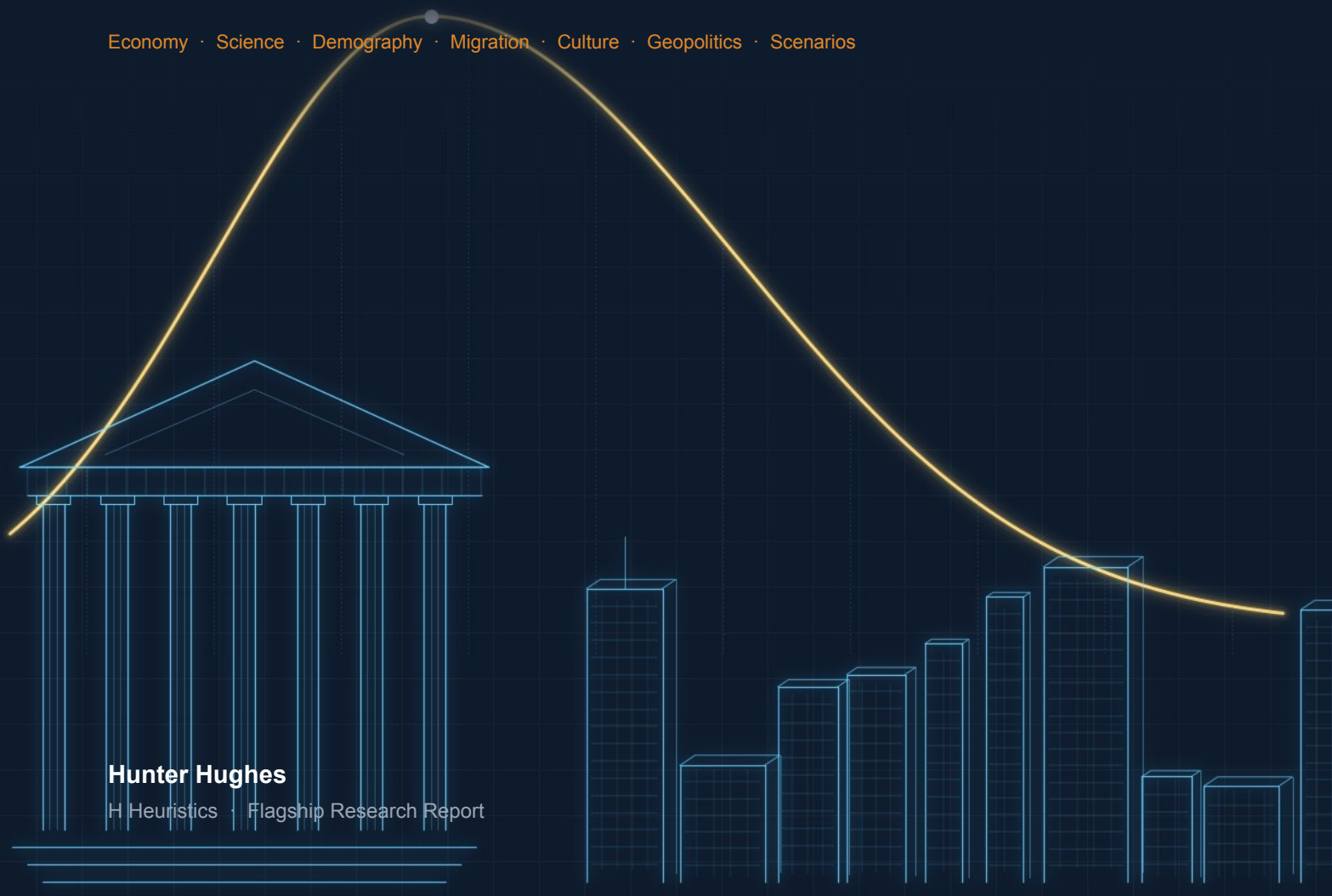
H HEURISTICS

FLAGSHIP RESEARCH REPORT · OCTOBER 2026

The Post-Peak Civilization Thesis

The End of Western Predominance and the Transition Toward a Post-Western World

Economy · Science · Demography · Migration · Culture · Geopolitics · Scenarios



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H Heuristics · Flagship Research Report

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About This Report

This report tests the **post-peak civilization thesis** in the form most often argued by historians, demographers and political economists: that the Western-led civilizational order, centred on Europe and its offshoots, passed a historic high point of relative economic, scientific, demographic and geopolitical weight during the twentieth century, and that the world is now moving into a different phase in which that order is one centre among several. The thesis has a long intellectual pedigree, from Oswald Spengler to Paul Kennedy, and is now testable with good data: the Maddison Project reconstructs two centuries of output, the UN Population Division publishes demographic estimates and projections to 2100, and the World Bank and the Nobel Foundation publish decades of comparable indicators.

The thesis is often stated in two versions. The **strong version** holds that the traditional Western world was a peak of humanity in a biological or evolutionary sense, and that immigration and ethnic blending are degrading it. The **weak version** holds that a particular civilizational centre can have a historically exceptional period of predominance, that the demographic, cultural and geopolitical foundations of that predominance are changing, and that this marks a transition into a different phase of world history. This report tests both and reaches different verdicts. The weak version is largely supported by the data and is the subject of most of the report. The strong version is not supported by the evidence, and Section 10 reviews the genetic and evolutionary evidence, which does not support it. The evidence reviewed in Section 7 likewise does not show that migration or ethnic mixing causes civilizational decline. Treating the two versions separately is what makes the weak version defensible.

The report's organizing principle is that a **relative peak is not an absolute peak**. The West's share of world output, population and published science has fallen sharply, mostly because other regions have grown faster, while Western living standards, scientific output and technological capability are in absolute terms near their highest ever.

The report builds on earlier H Heuristics work on the architecture of civilization and the polycrisis, which examined the conditions on which complex societies depend and the pressures that can erode them.

How to read this report

Each section starts on a new page and can be read on its own. Section 1 summarizes the thesis and the findings. Sections 2 to 4 set out the question, the intellectual lineage and the historical rise of the West. Sections 5 to 9 present the evidence. Sections 10 and 11 deal with the strong version of the thesis and the best arguments against the weak version. Sections 12 to 14 set out scenarios to 2100, grade each claim and conclude. Blue underlined text is a hyperlink to a source. Appendix A documents data and methods.

Evidence grades

Every claim in the assessment (Section 13) carries a grade. **Grade A**: several independent datasets or a clear scientific consensus agree. **Grade B**: good evidence, but the interpretation or causal mechanism is contested. **Grade C**: suggestive evidence that does not yet settle the question. **Grade D**: weak, contested or contradicted evidence.

How to cite

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01 SUMMARY

1. Executive Summary

1.1 The thesis

For roughly two centuries a small group of societies in Western Europe and its offshoots in North America and Oceania held a position in world affairs that no region had held before. At its height, around 1950, these societies, home to about 19 per cent of humanity, produced about 57 per cent of world output on the Maddison Project measure. They led the world in science, industry, finance, naval and then air power, and in the export of institutions, languages and ideas. The **post-peak civilization thesis** holds that this predominance has passed its high point, that the demographic and geopolitical foundations on which it rested are changing, and that the world is entering a post-Western phase in which the Western-led order is no longer its organizing centre.

> **Thesis, in one sentence.** The traditional Western world marked the high point of global predominance, in output, science, population and power; the fertility, ageing, migration and geopolitical changes now under way mean that peak is unlikely to return, and humanity is entering a post-peak, more plural phase.

The report tests this thesis against data rather than assuming it. It separates a **weak version** (a relative peak of predominance, now passed) from a **strong version** (a biological or evolutionary peak, degraded by migration and ethnic mixing). The evidence supports the first and does not support the second.

1.2 The thesis in numbers

Table 1 summarizes the Western position on the main indicators. On every measure of relative weight, the Western share has fallen from a twentieth-century high. On the measures of absolute capability reviewed in Section 5, it has not.

Table 1. The Western position in numbers: start, peak and latest value of each indicator

Indicator	Earlier value	Peak or turning point	Latest	Source
Share of world GDP (Maddison)	28.2% (1820)	≈57% (c. 1950)	31% (2022)	Maddison Project 2023
Share of world population (Maddison)	14.5% (1820)	20.9% (1900)	11% (2022)	Maddison Project 2023
Income per head relative to world average	1.95× (1820)	3.84× (2000)	2.92× (2022)	Maddison Project 2023
Share of world GDP, market rates	74.2% (1960)	74.9% (1962)	49.6% (2024)	World Bank

Indicator	Earlier value	Peak or turning point	Latest	Source
Share of world GDP, purchasing power	43.7% (1990)	falling since 1990 data	31.2% (2024)	World Bank
Share of world military spending	72.5% (1992)	falling since 1992 data	53.7% (2024)	SIPRI via World Bank
Share of resident patent filings	33.8% (2000)	falling since 2000	13.9% (2024)	World Bank
Share of science and engineering articles	67.7% (2000)	falling since 2000 data	36.3% (2022)	World Bank
Share of world population, Europe + N. America	28.8% (1950)	28.8% (1950)	13.8% (2024)	UN WPP 2024
Total fertility rate, Europe	2.7 (1950)	below 2.1 since 1975	1.4 (2024)	UN WPP 2024
Population of Europe	549 m (1950)	750 m (2020)	592 m (2100, UN medium)	UN WPP 2024

Core West = Western Europe plus Western Offshoots (the United States, Canada, Australia and New Zealand), as defined in Appendix A. 'Europe' follows UN regions and includes Eastern Europe and Russia. Falling-since entries mean the series starts at or after its high.

1.3 Principal findings

1. **The Western share of world output peaked around the middle of the twentieth century (Grade A).** On the Maddison measure the share of world GDP of Western Europe and the Western Offshoots rose from 28% in 1820 to about 57% in 1950, then fell to 31% by 2022 (Figure 4). At market exchange rates the share of the core West was about 75% in 1962 and 50% in 2024.
2. **Most of the fall reflects the rise of others, not Western decline in absolute terms (Grade A).** Western GDP per head is still about 2.92 times the world average. China's share of world GDP at market rates rose from 3.6% in 2000 to 16.6% in 2024, and India's from 1.4% to 3.3% (Figure 7).
3. **Demographic weight is falling fastest (Grade A).** Europe and North America held 28.8% of world population in 1950, hold 13.8% today, and are projected by the UN to hold 10.5% in 2100. Europe's fertility rate is 1.4 births per woman, its population peaked in 2020 at about 750 million, and Africa is projected to hold 37.5% of humanity by 2100 (Figure 10).
4. **Immigration is now the only source of European population growth, and it slows but does not reverse the decline (Grade A).** Natural change in Europe (births minus deaths) first turned negative in 1993 and has been negative in every year since 2015; net migration added about 1.55 million a year in 2015 to 2024. The UN medium projection puts Europe at 592 million in 2100, against 452 million with zero migration and about 883 million if fertility instantly returned to replacement (Figure 14).
5. **The claim that migration or ethnic mixing causes civilizational decline is not supported (Grade B).** Research finds some short-run costs to social trust in diverse neighbourhoods, and these deserve attention, but it also finds substantial gains in innovation and fiscal contribution. Western trust in government peaked in 1964, when the US foreign-born share was near its historic low (Figure 15). Roughly a third of US-based science Nobel laureates were born abroad.
6. **A biological explanation is not supported by the evidence (Grade A).** Human genetic variation lies overwhelmingly within populations; evolutionary theory defines no ranking of populations; and the gains in measured cognitive performance across the twentieth century were environmental. Section 10 reviews the evidence.

7. **The peaks are asynchronous (Grade A).** Western population share peaked around 1900, GDP share around 1950, trust in government in 1964, income relative to the world around 2000 and Europe's absolute population around 2020 (Figure 1). The thesis is better described as a sequence of peaks than as a single turning point.
8. **Scientific prestige lags and has not collapsed (Grade B).** Western institutions still account for about 88% of science Nobel laureates since 2010, though prizes lag discoveries by decades and China's share of patent filings and articles is rising fast (Figure 8, Figure 9).

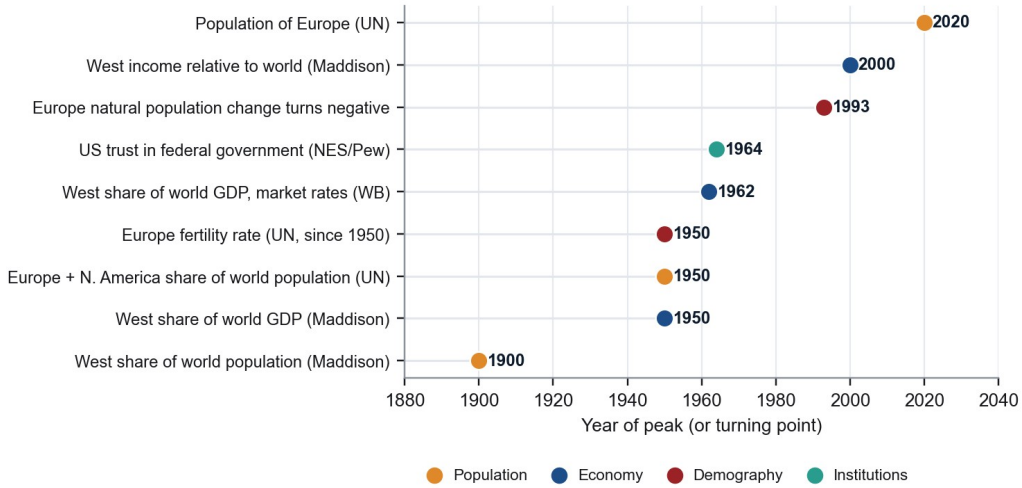
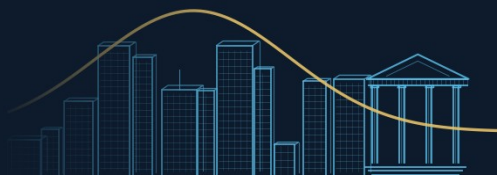


Figure 1. The peaks of the Western position arrive on different dates. Each marker is the year in which the indicator reached its maximum or turned, from the earliest to the latest.
Source: H Heuristics analysis of Maddison Project 2023, World Bank, UN WPP 2024 and Pew Research Center.

1.4 The verdict

The data support a **relative post-peak thesis** and contradict an **absolute** one. The West's share of the world has been falling for seven decades on most measures, Europe is shrinking and ageing, and the geopolitical weight of Asia is rising. These are among the best-documented structural changes of the modern era. But the West is richer, healthier, and more scientifically productive in absolute terms than at its supposed peak, the largest source of its demographic gap is low fertility rather than any change in the composition of its population, and the evidence does not support the claim that migration is eroding its capability. The thesis that survives is narrower than the one commonly advanced, and, in that narrower form, more robust: **a historically exceptional period of Western predominance is ending, and the next phase of history will be shaped by a more plural set of centres.**

02 INTRODUCTION



2. The Post-Peak Question

2.1 A question about position, not value

Few ideas are as durable, or as easily abused, as the idea that a civilization has passed its peak. Every generation of cultural critics has located the golden age one or two generations earlier than their own, and every empire has had its prophets of decline. The question this report asks is narrower and more testable than those laments. It does not ask whether the West was better or worse than other civilizations, which is a question of values. It asks whether the **relative position** of a particular group of societies, measured by their share of world output, population, scientific production and military and political power, peaked at some point in the past and has declined since.

Framed in this way the question has a clear empirical answer, and the answer is the subject of Sections 5 to 9. It is also a question on which the data have improved dramatically. Two decades ago, long-run comparisons of national output rested on a handful of benchmark years. Today the Maddison Project Database covers 169 countries and territories over two centuries and more, the UN World Population Prospects provide consistent demographic estimates and projections for every country to 2100, and agencies including the World Bank, SIPRI and the Nobel Foundation publish comparable indicators of economic, military and scientific weight.

2.2 The structure of the thesis

The thesis has four linked claims (Figure 2). **First**, the West experienced a historically exceptional period of predominance, running roughly from the early nineteenth to the late twentieth century, and its relative weight peaked during that period. **Second**, the demographic base of that predominance is changing: fertility is far below replacement across the West, populations are ageing, and immigration is changing the composition of European societies while only partly offsetting the shortfall in births. **Third**, power, population and technological capability are spreading across a wider set of regions, so the Western share of each is falling. **Fourth**, the cumulative effect is a transition to a different phase of history, in which the institutions and cultural influence associated with the Western-led order are no longer the organizing centre of humanity.

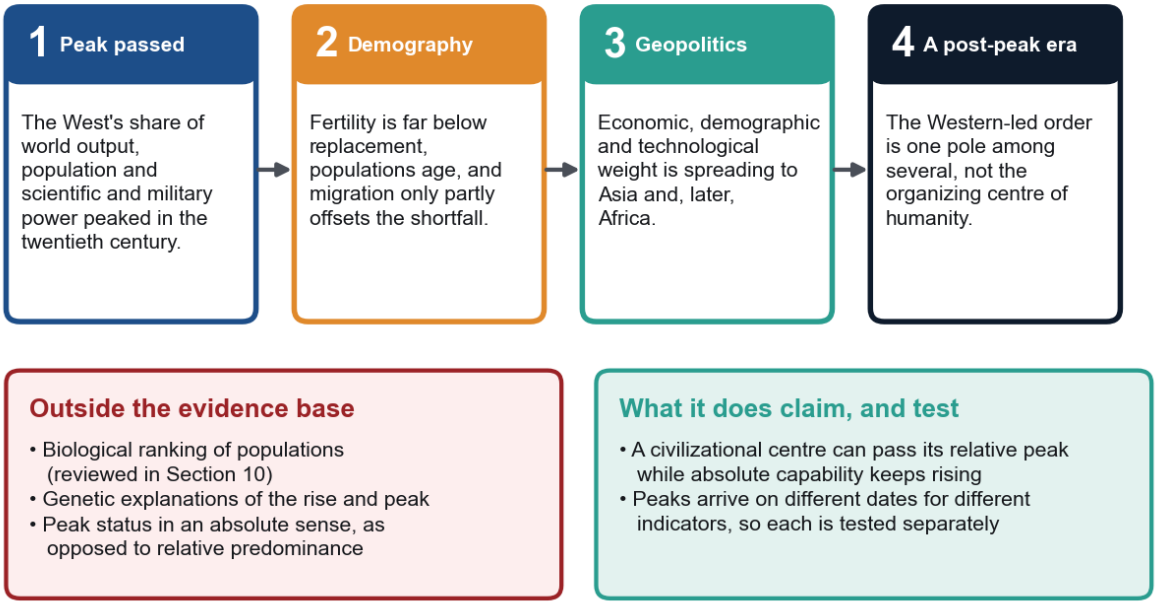


Figure 2. The four claims of the thesis and the boundary of this report. The report tests each claim empirically and states explicitly what it does not claim.
Source: H Heuristics.

Each claim is separable, and each can be true or false independently of the others. The first is a claim about the past that can be checked against historical statistics. The second is a claim about the present and near future that can be checked against demographic data. The third is a comparative claim that depends on how fast other regions grow. The fourth is an interpretive claim about what the first three add up to, and it is the one on which honest analysts differ.

2.3 What the report does not claim

Versions of the thesis circulate that go further than the data and, in some cases, further than the evidence can possibly go. Two need to be set aside at the outset. The first is the claim that Western or Northwestern European populations are **biologically** more evolved, or that the mixing of populations reduces a society's capability. Section 10 reviews the evidence on this question and finds it does not support the claim. The strongest elements of the post-peak thesis, the demographic and geopolitical ones, do not depend on it. The second is the claim that the West was the "peak of humanity" in an absolute sense. Almost every measure of human welfare, from life expectancy to literacy to extreme poverty, is better today than at any time in the nineteenth or twentieth century, and most of the improvement since 1950 has occurred outside the West. A **civilizational centre** can pass its peak of relative weight while humanity as a whole continues to advance.

> **The distinction that matters.** A relative peak is a statement about shares. An absolute peak is a statement about levels. The West's shares have fallen; its levels, on most measures, have not.

2.4 Definitions

The West. The term has no single definition, and the choice affects the results. This report uses two. For long-run economic comparisons it follows Angus Maddison and the Maddison Project: **Western Europe** (the United Kingdom, Ireland, France, Germany, Italy, Spain, Portugal, the Benelux countries, Switzerland, Austria, Scandinavia, Finland, Iceland and Greece) plus the **Western Offshoots** (the United States, Canada, Australia and New Zealand). For demographic comparisons it uses the UN regions of Europe and Northern America, which include Eastern Europe and Russia. Where the two differ, the text says which is used. The choice does not alter the direction of any finding.

Peak. The year in which an indicator reaches its maximum over the period for which data are available, or, where the series begins after its likely high, the earliest year of observation, which is flagged as a lower bound. A share peaks when a region's fraction of a world total stops rising.

Predominance. A region's combined weight in world population, output, science and technology, military expenditure and institutional reach. No single indicator captures it, which is why the report examines several and records the date of each peak separately.

2.5 Method in brief

The evidence base is open data: the Maddison Project Database 2023 for regional GDP and population from 1820; World Bank indicators for GDP, military expenditure, patents and scientific articles; the UN World Population Prospects 2024 for fertility, age structure, migration and projections including the zero-migration variant; the Nobel Foundation's laureate records for scientific prestige; Eurostat, the US Census Bureau and the World Bank for the foreign-born population; and the Pew Research Center and V-Dem for trust and democracy. Shares are computed directly from country data, regional totals are interpolated between benchmark years only where noted, and every figure states its source. The peer-reviewed literature on migration, diversity, innovation and human genetic variation is reviewed in Sections 7 and 10 and the references are verified against the DOI registry. Appendix A gives full detail.

2.6 Limits

Three limits should be stated plainly. First, share-based measures depend on how the world total is defined, and a region can see its share fall while its absolute level rises. Second, historical GDP estimates before 1950 involve extensive interpolation, so the exact timing of the pre-war peak is uncertain by a decade or more. Third, projections to 2100 are scenarios, not forecasts: fertility in particular has fallen faster than the UN expected in several recent revisions, and the Lancet fertility forecasts project lower global fertility than the UN does.

03 LITERATURE REVIEW

3. Intellectual Foundations

3.1 Four traditions of thinking about decline

The post-peak thesis draws on four distinct intellectual traditions, which are often conflated. Separating them clarifies what each contributes and where each can mislead (Figure 3).

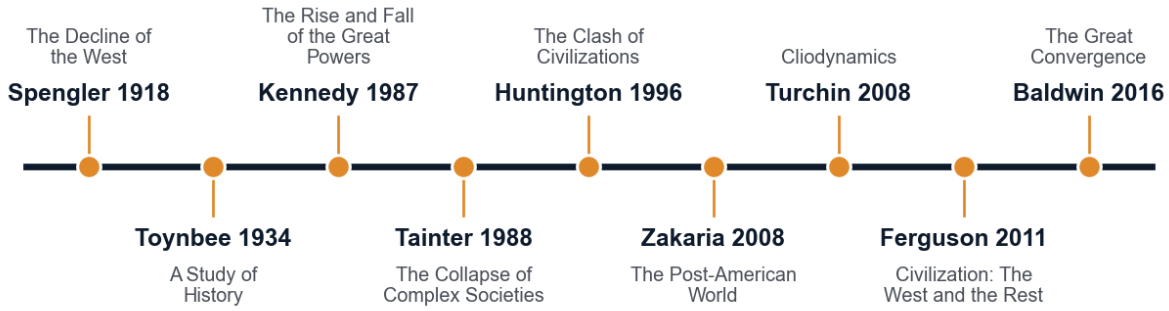


Figure 3. A century of declinist and transition writing. Works are placed in order of publication, not to scale.
Source: H Heuristics, from the works cited in the text. Links to each work are given in Section 3.

Cyclical and morphological theories

The oldest tradition treats civilizations as organisms with life cycles. Oswald Spengler argued in *The Decline of the West* (1918 to 1922) that each culture passes through youth, maturity and decline, and that the West had entered its late, "civilizational" winter. Arnold Toynbee reached a more nuanced view in *A Study of History* (1934 to 1961): civilizations break down not through fate but through failure to meet challenges creatively. The strength of this tradition is that it takes time seriously and notices that every dominant order eventually changes. Its weakness is that the analogy to living organisms is a metaphor, not a mechanism, and the predictions it makes are rarely falsifiable.

Power-transition and great-power theories

A second tradition studies the rise and fall of states. In *The Rise and Fall of the Great Powers* (1987), Paul Kennedy argued that great powers decline when their commitments exceed their economic base, a pattern he traced across five centuries. The strength of the approach is its use of economic data and its recognition that military power rests on productive capacity. It is the tradition closest to the evidence presented in Section 5. Its weakness is that it concerns the fortunes of individual states, whereas the post-peak thesis concerns a civilizational bloc.

Civilizational and cultural theories

A third tradition treats culture as the unit of analysis. In *The Clash of Civilizations* (1996), Samuel Huntington argued that the post-Cold War world would be organized around cultural blocs, with the West's relative share of population and power declining. Niall Ferguson argued in *Civilization: The West and the Rest* (2011) that the West's rise rested on six institutional "killer applications" that others have since copied. Joel Mokyr traced the origins of modern growth to a European "culture of growth" rooted in an open market for ideas. Charles Murray's *Human Accomplishment* (2003) counted the eminent figures in the sciences and arts and concluded that significant accomplishment was concentrated overwhelmingly in Europe and had peaked in per-capita terms before the late twentieth century. This tradition is the closest to the weak version of the thesis, and its strength is that institutions and culture matter. Its weakness is that cultural claims are hard to measure and easily slide from description into ranking.

Complexity and cliodynamic theories

A fourth tradition asks why complex societies fail. Joseph Tainter argued in *The Collapse of Complex Societies* (1988) that societies invest in complexity to solve problems and eventually face diminishing returns. Peter Turchin and colleagues developed cliodynamics, applying quantitative models to historical cycles, and argued in a *Nature* article that history can be studied with the tools of the natural sciences. These theories give the post-peak thesis a mechanism, but they are tested mostly on pre-modern societies, and their application to a globalized economy remains contested.

3.2 The convergence literature

A fifth body of work does not argue for decline at all, but explains why shares must fall. Fareed Zakaria argued in *The Post-American World* (2008) that the defining feature of the era is "the rise of the rest", not American decline. Richard Baldwin's *The Great Convergence* (2016) showed how the information technology revolution allowed developing countries to join global supply chains, collapsing the Western monopoly on manufacturing know-how. Branko Milanovic and Christoph Lakner's global income distribution study found that the biggest gainers between 1988 and 2008 were the Asian middle classes and the global top one per cent, and the stagnant group was the lower middle class of rich countries. For present purposes, the lesson of this literature is that falling Western shares are the arithmetical consequence of other regions catching up, which is a success story for humanity even if it reduces the West's relative weight.

3.3 Critiques and cautions

Three cautions run through the literature and shape how this report proceeds. The first is **survivorship and nostalgia bias**: past peaks are remembered through their best works, while their mediocrity is forgotten, so any era appears richer in retrospect. The second is the **WEIRD problem**. Joseph Henrich and colleagues showed in a *Behavioral and Brain Sciences* article that most behavioural science draws on samples from Western, educated, industrialized, rich and democratic societies, and that these samples are often unrepresentative of humanity. Claims that Western culture is a norm against which others fall short therefore need independent evidence. The third is **ideological capture**. Because the topic touches on race, nation and identity, it is vulnerable to both uncritical advocacy and reflexive dismissal. The way through is the discipline applied here: define each claim, find the data that would show it to be false, and report the result whichever way it falls.

04 THE RISE

4. The Western Ascendancy

4.1 A late and unusual rise

To ask whether a peak has passed, one has to establish how the peak was reached. The central finding of the economic-history literature of the last two decades is that Western predominance was **recent**. In 1820, on the Maddison regional series, East Asia produced about 33 per cent of world output and South and South-East Asia a further 20 per cent, more than half between them, while Western Europe and the Western Offshoots together produced about 28 per cent. By 1950 the Western share had roughly doubled, to about 57 per cent (Figure 4). The rise took about a century and a half; it was concentrated in the nineteenth century; and, measured as a share of world output, it was never as large before or since.

This pattern is what historians call the Great Divergence. Kenneth Pomeranz's account argued that the most advanced regions of Europe and China were comparable in living standards and commercial sophistication until about 1800, and that Europe pulled ahead thanks to coal and access to the resources of the Americas. Robert Allen's study of wages and prices found a divergence in real wages between north-western Europe and the rest of the world that opened earlier, from the late Middle Ages, but that took on a new form with the Industrial Revolution. The debate about timing and cause is unresolved, but the broad consensus is that the **West's lead over the rest of the world was largest in the twentieth century and was neither permanent nor ancient**.

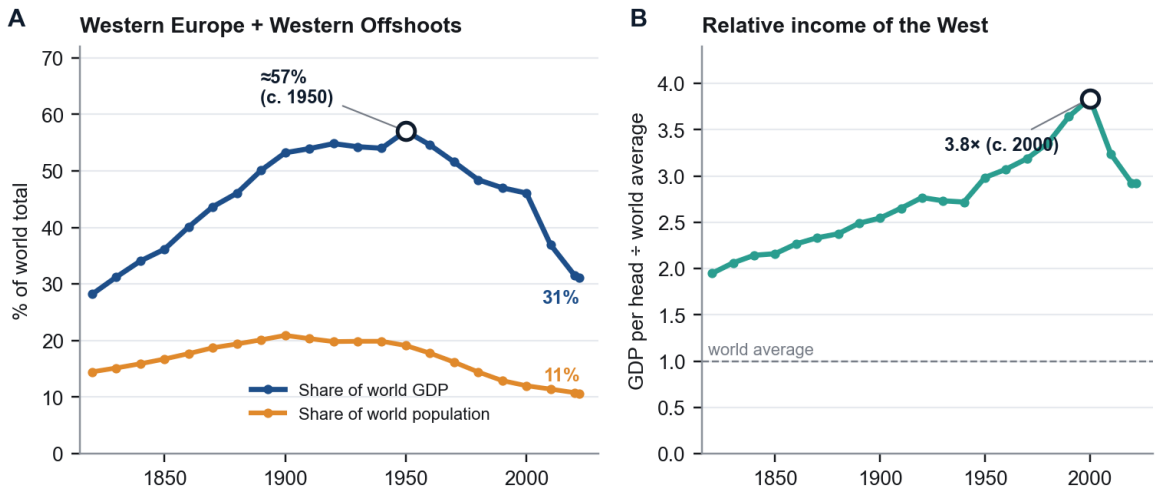


Figure 4. The West's share of world GDP and population, and its relative income, 1820 to 2022. Panel A shows that the GDP share peaked around 1950 and the population share around 1900. Panel B shows that income per head relative to the world average peaked around 2000.

Source: H Heuristics calculation from the Maddison Project Database 2023. Western Europe plus Western Offshoots; values interpolated between benchmark years; 2011 international dollars.

4.2 Six sources of predominance

Scholars have identified a number of mutually reinforcing causes of the Western rise (Figure 5). None is sufficient alone, and each was later diffused beyond the West.

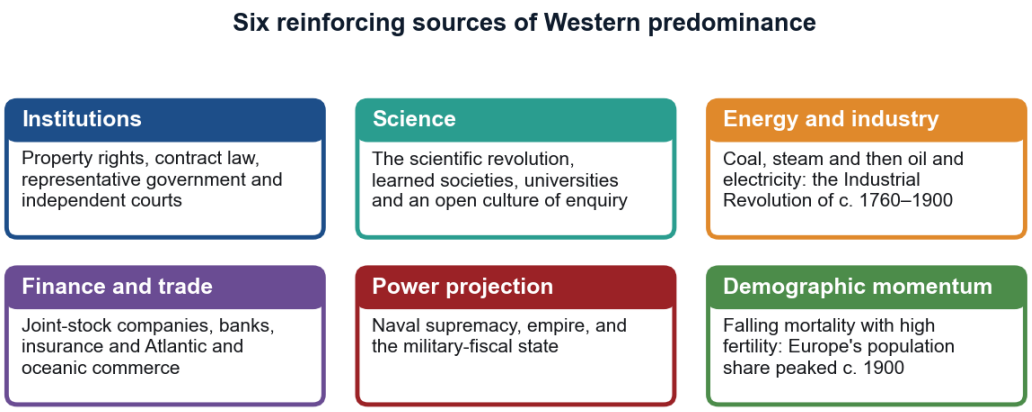


Figure 5. Six reinforcing sources of Western predominance. Each later diffused beyond the West, which is why the forces that built predominance also eroded its exclusivity.
Source: H Heuristics synthesis of the literature cited in Sections 3 and 4.

Institutions. The strongest empirical case is the one made by Daron Acemoglu, Simon Johnson and James Robinson. Their paper on the colonial origins of comparative development showed that differences in the institutions imposed by colonizers, secure property rights in settler colonies and extractive arrangements elsewhere, explain a large part of income differences today. In this view the West's advantage was not geographic or genetic but institutional, which implies it can be copied, as indeed it has been.

Science and the culture of growth. The scientific revolution of the sixteenth and seventeenth centuries created networks of experiment, publication and criticism that accelerated knowledge. Joel Mokyr argues that a competitive European market for ideas, combined with an Enlightenment belief in progress, made sustained innovation self-reinforcing.

Energy and industry. The Industrial Revolution substituted fossil energy for muscle and wood, and raised output per head for the first time in history on a sustained basis. The first countries to industrialize captured a manufacturing monopoly that lasted until other countries acquired the technology.

Finance, trade and power projection. Joint-stock companies, banks, insurance and the maritime commerce of the Atlantic funded expansion; naval supremacy and empire secured markets and resources. The same system produced the colonial extraction that scholars now treat as inseparable from the rise.

Demographic momentum. The demographic transition began in Europe. Mortality fell first, fertility followed later, and the interval produced rapid population growth. Europe and North America's share of world population rose through the nineteenth century and peaked around 1900 in the Maddison series (20.9 per cent), as the region sent millions of emigrants abroad. Economists model this as a stage in a general pattern: Galor and Weil describe a shift from Malthusian stagnation to a modern growth regime in which fertility falls as the return to human capital rises, and Kremer shows that larger populations

generate faster technological change. The same demographic sequence is now reaching every other region, with a lag.

4.3 The apex: 1945 to 2000

The Second World War left the Western world with unprecedented relative power. The Western Offshoots and Western Europe together produced about 57 per cent of world output in 1950, and the United States established the institutions that organized the postwar order: the Bretton Woods system, the Marshall Plan and a network of security alliances. The Western share of world GDP at market exchange rates was about 74 per cent in 1960, and Western Europe's recovery, together with Japan's, produced a long period of rapid growth. After 1991 the collapse of the Soviet Union produced a brief "unipolar moment", and the share of the world's population living in liberal democracies peaked in 1996.

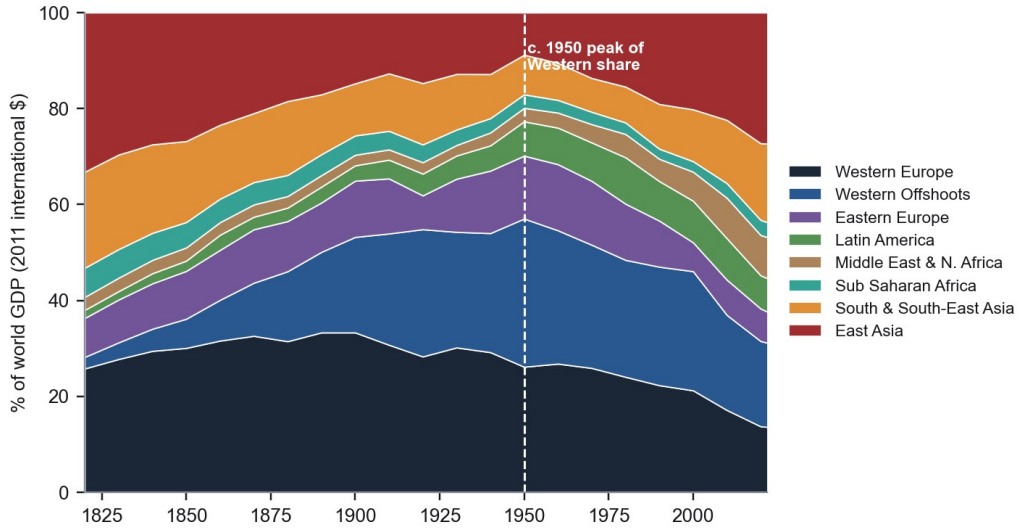
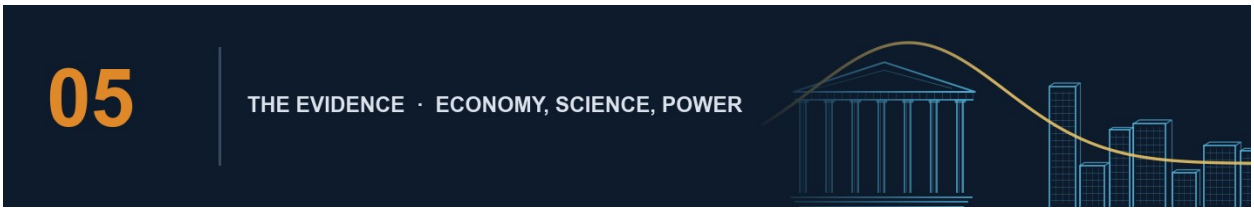


Figure 6. Regional shares of world GDP, 1820 to 2022. The Western share (the two dark blue bands) rose through the nineteenth century, peaked around 1950 and has since fallen as East Asia and South Asia recovered their earlier weight.

Source: H Heuristics calculation from the Maddison Project Database 2023 regional GDP per head and population, interpolated between benchmark years; 2011 international dollars.

Figure 6 shows the whole arc. Reading it from left to right, three things stand out. The Western shares grew steadily from 1820. Asia's share fell by about two-thirds between 1820 and 1950, the mirror image of the Western rise. And since 1950 the process has reversed: the combined share of East Asia and South and South-East Asia fell from 53 per cent in 1820 to a low of 17 per cent in 1950, and has since recovered to 44 per cent in 2022. The pattern is closer to a long **excursion** from a historical norm than to a permanent shift in the world's centre of gravity.



5. Measuring Predominance

5.1 Output: two different peaks

Figure 4 separates two quantities that are often confused. The **share** of world output produced by the West peaked around 1950 at about 57 per cent and fell to 31 per cent by 2022. The West's **relative income**, its output per head compared with the world average, kept rising until about 2000, reaching 3.84 times the world average, and then fell to 2.92 times by 2022. The share fell first because the West's share of world population was falling, from a peak of 20.9 per cent around 1900 to 11 per cent by 2022, so even constant relative income would have meant a falling output share. The fall in relative income after 2000 is the result of faster growth in East and South Asia.

These are different stories and they should not be merged. The population part of the fall is a matter of arithmetic and, as Section 6 shows, a result of the demographic transition; it would have occurred whatever Western institutions did. The income part is a matter of performance, and it is smaller. The West has not become poorer. It is simply that the rest of the world, starting from a very low base, has grown faster.

5.2 The modern shares: market rates and purchasing power

Which measure to use matters. At **market exchange rates** the core West produced about 74.2 per cent of world output in 1960, 60 per cent in 2000 and 49.6 per cent in 2024 (Figure 7). China's share rose from 3.6 per cent to 16.6 per cent over the same twenty-four years, and India's from 1.4 to 3.3. On a **purchasing-power** basis, which adjusts for lower prices in poorer countries, the core West's share was 43.7 per cent in 1990 and 31.2 per cent in 2024, while China's reached 18.7 per cent and India's 7.6 per cent.

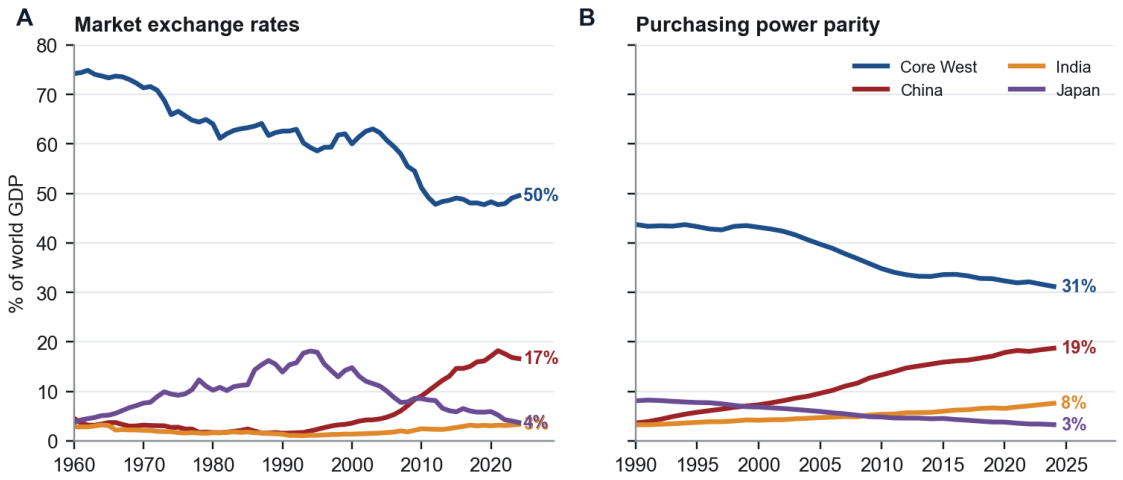


Figure 7. Shares of world GDP at market exchange rates (Panel A) and purchasing power parity (Panel B). The core West is the United States, Canada, Australia, New Zealand and Western Europe. China, India and Japan are shown individually.

Source: H Heuristics calculation from World Bank national accounts (current US dollars, 1960 to 2024; current international dollars, 1990 to 2024).

There is an important nuance. At market rates the Western share has been **broadly flat** since about 2011, at 48 to 50 per cent, largely because of the dollar's strength and the relative outperformance of the United States against Europe. At purchasing power parity the decline has continued. The fair reading is that the Western share has fallen sharply since 1960 but that the pace has slowed on the market-rate measure in the last fifteen years, and that Japan's decline is as much part of the picture as China's rise. Japan's share peaked in the mid-1990s and has since fallen to about 4 per cent, a reminder that the rise of one region does not require the fall of another: both are partly a function of how fast the whole world is growing.

5.3 Science and technology

Scientific and technological weight is harder to measure, and different indicators tell different stories (Figure 8). The share of the world's **science and engineering articles** produced in the core West fell from 67.7 per cent in 2000 to 36.3 per cent in 2022, while China's rose from 5 per cent to 26.9 per cent. The share of **resident patent filings** fell from 33.8 per cent in 2000 to 13.9 per cent in 2024, while China's rose from 3 to 64 per cent. Patent counts must be read with caution, because China's figure reflects a domestic filing system that includes utility models and has been shaped by subsidy, and article counts measure volume and not influence. But the direction is unmistakable, and the scale of the shift is large by any measure.

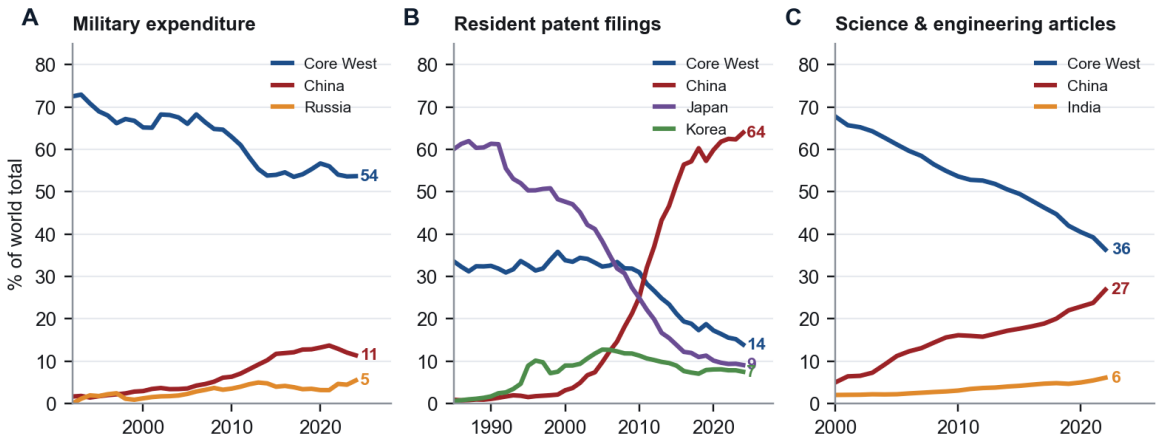


Figure 8. Western shares of military expenditure (Panel A), resident patent filings (Panel B) and science and engineering articles (Panel C), compared with China and other major economies.

Source: H Heuristics calculation from World Bank indicators (military expenditure from SIPRI; patent applications from WIPO; articles from the National Science Foundation). Articles series ends in 2022.

Scientific prestige is a lagging indicator, and here the picture is different. Of the 660 physics, chemistry and medicine Nobel laureates since 1901 with a recorded affiliation, between 85 and 100 per cent in every decade were affiliated with institutions in the core West, and the share was 88 per cent in awards since 2010 (Figure 9). Western institutions still dominate at the very top of the prestige hierarchy. But Nobel prizes recognize discoveries made decades earlier, so the figure measures the West's position in about 1990 rather than its position now. The honest summary is that **volume and filings have shifted heavily, while prestige is still concentrated in the West and will take a generation to follow the volume.**

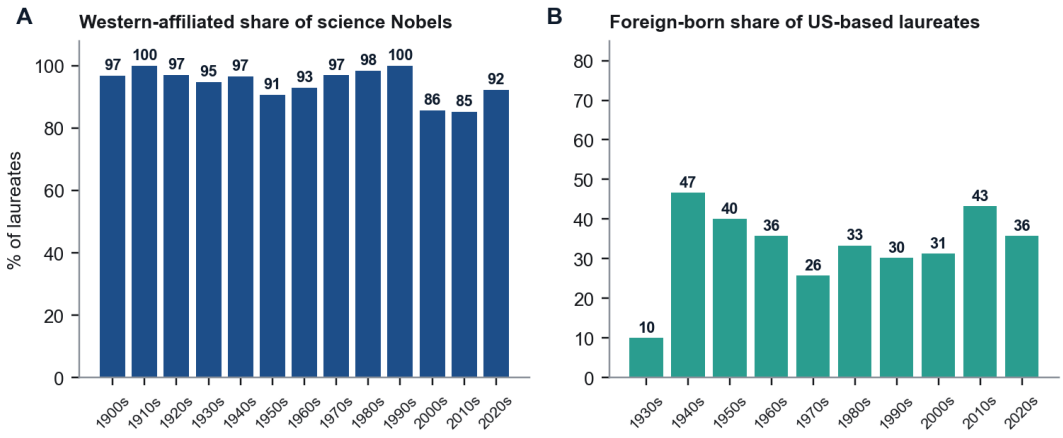


Figure 9. Science Nobel prizes by decade. Panel A shows the share of laureates in physics, chemistry and medicine affiliated with institutions in the core West. Panel B shows the share of US-affiliated laureates who were born outside the United States.

Source: H Heuristics calculation from the Nobel Foundation API, first listed affiliation at the time of the award; birthplace by present-day country. Counts per decade are shown in Appendix A; the 2020s are incomplete.

Panel B of Figure 9 carries a point that matters for Section 7. Since 1980, about 34 per cent of US-affiliated science laureates were born outside the United States. Western scientific predominance has always been in part a story of **attracting talent from elsewhere**, and the same openness that made the American share possible is now being tested by the rise of competing research systems.

5.4 Military and strategic weight

On the World Bank's measure, which draws on SIPRI, the core West accounted for 72.5 per cent of world military spending in 1992 and 53.7 per cent in 2024. The United States alone accounted for 36.6 per cent in 2024, and China for 11.4 per cent. The fall is real, but it is a fall from a very high base, and the West, with its allies, still accounts for more than half of the world's military spending. Spending is also an imperfect measure of capability. It does not capture the quality of equipment, the density of alliances or the reach of logistics, areas in which the West retains clear advantages. Military weight is therefore the dimension where the West's position has fallen **least** relative to its economic share.

> **Summary of Section 5.** On output, patents, articles and military spending, the Western share has fallen from a late-twentieth-century level to well below it, and most of the change has occurred in the last twenty-five years. Prestige indicators lag. The West is still large; it is no longer dominant in the way it was.

06 THE EVIDENCE · DEMOGRAPHY

6. The Demographic Turning Point

6.1 The shrinking Western share of humanity

Demography is where the thesis is strongest, because the quantities are large, slow-moving and well measured. According to the UN World Population Prospects 2024, Europe held 22 per cent of the world's people in 1950 and holds 9.1 per cent today; on the UN medium projection it will hold 5.8 per cent in 2100. Northern America's share, at about 4.7 per cent today, is roughly stable, because of immigration and a higher fertility rate. Together the two regions held 28.8 per cent of humanity in 1950, hold 13.8 per cent now, and are projected to hold 10.5 per cent in 2100 (Figure 10). Over the same period Africa's share rises from 9.1 per cent to 37.5 per cent, and Asia's, after peaking at about 61 per cent around 2000, falls to 45.3 per cent.

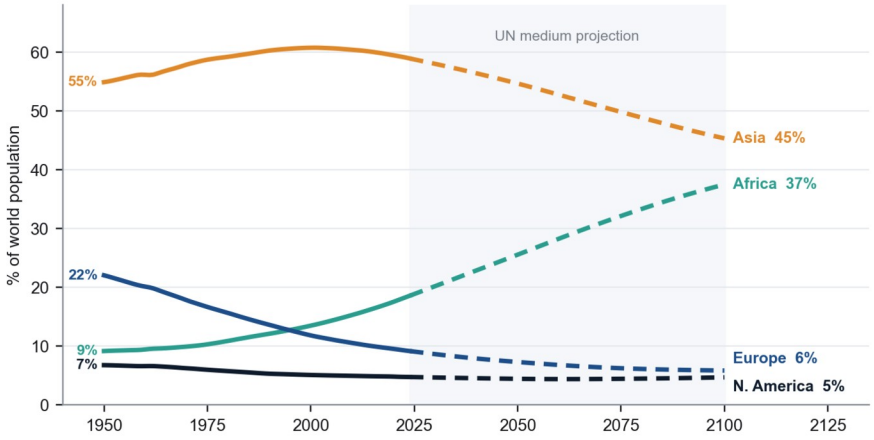


Figure 10. Regional shares of world population, 1950 to 2100. Solid lines are UN estimates, dashed lines the UN medium projection. Europe's share is falling steadily and Africa's is rising to over a third of humanity.
Source: H Heuristics calculation from UN World Population Prospects 2024, medium variant; also available through Our World in Data.

In absolute terms Europe's population peaked in 2020 at about 750 million, and the UN medium projection is for 592 million in 2100. The world as a whole will keep growing, to about 10.29 billion in 2084, but almost all of the growth will come from Africa, whose population is projected to rise from about 1.5 billion to 3.8 billion by 2100.

6.2 Fertility far below replacement

The proximate cause is fertility. The **total fertility rate** is the average number of children a woman would have over a lifetime at current age-specific birth rates, and about 2.1 is the rate that keeps a population stable in a low-mortality country. Europe's fell from 2.7 in 1950 to 1.4 in 2024, and it has been below

replacement since 1975 (Figure 11). In 2024 the rate was 1.21 in Italy, 1.22 in Spain, 1.45 in Germany, 1.55 in the United Kingdom and 1.64 in France, the highest of the large European economies. Of the 50 countries and areas the UN classes as European, 32 have a fertility rate below 1.5. Northern America's is 1.59.

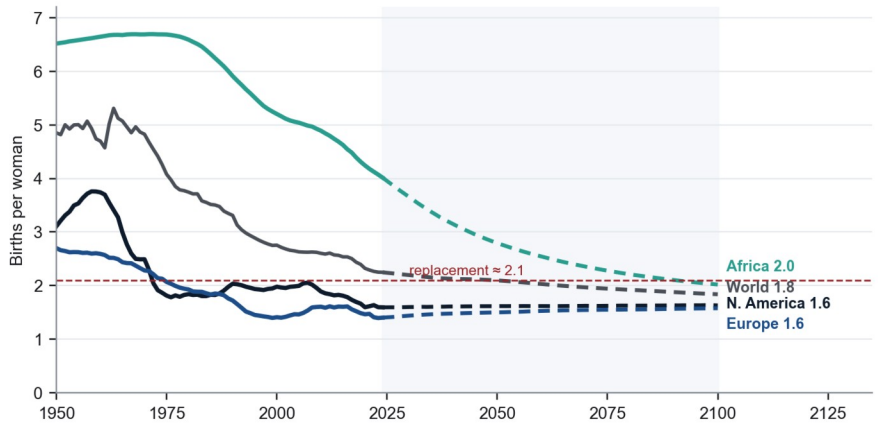


Figure 11. Total fertility rate, 1950 to 2100. Europe and Northern America have been below the replacement level for decades. Africa's rate is falling but remains far above replacement, and the UN projects that the world as a whole will fall below replacement during this century.

Source: H Heuristics calculation from UN World Population Prospects 2024, medium variant. Dashed lines are projections.

Two features of this decline matter for the thesis. **First, it is not distinctively Western.** South Korea's fertility rate is 0.73, China's 1.01, Japan's 1.22 and Thailand's 1.2, all lower than most of Europe's, while Brazil's and Turkey's, at 1.61 and 1.62, are similar to the British and French rates. The Lancet fertility study finds that 97 per cent of countries are projected to have fertility below replacement by 2100. What began as a Western pattern is now the global norm. **Second, the causes are largely not understood to be ethnic or migratory.** The decline is associated, across cultures, with rising education and employment of women, urbanization, the cost of housing and childrearing, delayed partnership and the availability of contraception. It is the same sequence that Galor and Weil model as the transition from a regime of many children to one of fewer, better-educated children, and it reaches every society as it develops.

6.3 An ageing continent

Low fertility sustained for fifty years produces an old population. Europe's median age rose from 27.6 in 1950 to 42.5 in 2024 and is projected to reach 46.2 in 2050; Africa's, by contrast, is 19.2 (Figure 12). The **old-age dependency ratio**, the number of people aged 65 and over for every 100 people aged 15 to 64, rose from 12 in 1950 to 32 in 2024 and is projected to reach 49 by 2050 and 57 by 2100. Europe's working-age population is projected to fall from about 479 million in 2024 to 327 million in 2100, while Africa's rises from about 867 million to 2.46 billion.

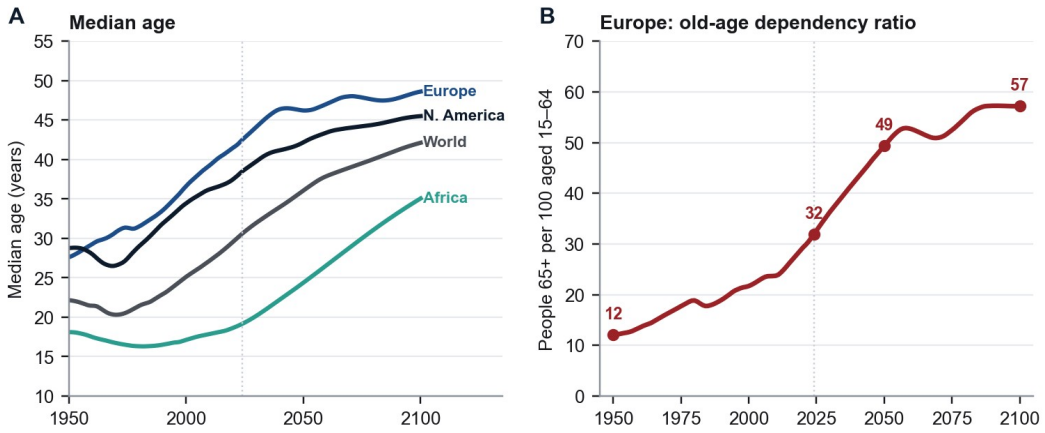


Figure 12. Median age (Panel A) and the old-age dependency ratio of Europe (Panel B), 1950 to 2100. Europe is the oldest region in the world and, on UN projections, will remain so.

Source: H Heuristics calculation from UN World Population Prospects 2024 and Our World in Data, medium variant. The dotted line marks 2024.

A smaller working population supports a larger retired one, raising the burden on pensions and health care; productivity growth and later retirement can offset much of the arithmetic, but the options of Western states are narrowed.

Table 2. Europe's demographic profile, 1950 to 2100 (UN medium projection)

Indicator	1950	2024	2050	2100
Population (millions)	549	745	703	592
Share of world population	22%	9.1%	7.3%	5.8%
Total fertility rate (births per woman)	2.7	1.4	1.5	1.58
Median age (years)	27.6	42.5	46.2	48.6
Old-age dependency ratio	12	32	49	57
Share of population aged 65+	7.9%	20.5%	28.5%	31.6%

Source: H Heuristics calculation from UN World Population Prospects 2024. Europe follows the UN region definition and includes Eastern Europe and Russia. The UN low and high variants, which differ from the medium by half a child per woman, give a 2100 population of about 413 to 824 million.

6.4 What the demographic evidence does and does not show

The demographic evidence supports the thesis on three points: the Western share of world population is falling and will fall further, populations are ageing, and Europe is shrinking. These are large and robust findings (Grade A). It does not support three conclusions often drawn from it. The decline in births is shared by almost every wealthy, educated society and began long before the recent rise in immigration, and the decline in share is mostly the result of other regions growing fast. And the projections are scenarios rather than forecasts: the range between the UN's low and high variants for Europe in 2100 runs from about 413 to 824 million, and the history of fertility projections is one of repeated downward revisions.

Summary of Section 6. Demography is the strongest evidence for the thesis and also the evidence least connected to ethnicity. The sequence in the data runs from falling fertility to population ageing and decline, with migration arriving as a partial offset, not as the cause.

07 THE EVIDENCE · MIGRATION

7. Migration, Composition and Cohesion

7.1 What has changed

Migration is the most contentious part of the thesis, and the most important to handle with care. The facts are clear. The share of residents who were born abroad has risen in every large Western country since 1990 (Figure 13). On the UN's international migrant stock measure it rose in Germany from 8.7 per cent to 19.8 per cent, in the United Kingdom from 6.4 to 17.1 per cent, in Spain from 2.1 to 18.5 per cent, in Sweden from 9.2 to 21.4 per cent and in the United States from 9.2 to 15.2 per cent. Australia, at 30.4 per cent, and Canada, at 22.2 per cent, are higher. The Census Bureau reports that the US foreign-born share fell to a historic low of 4.7 per cent in 1970 before climbing back toward its earlier peaks, while Eurostat reports that roughly one in ten people living in the European Union was born outside it. Japan, with 2.8 per cent, and Poland, with 4.5 per cent, are low by comparison.

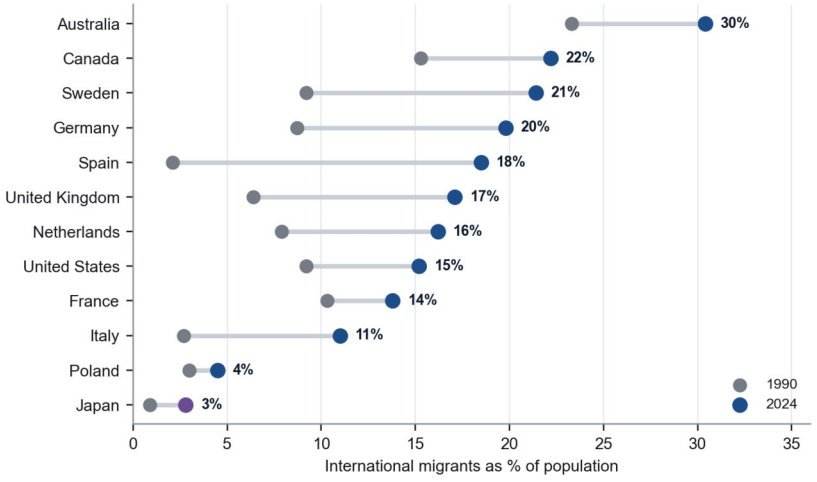


Figure 13. International migrants as a share of population, 1990 and 2024. The share has risen in every large Western country, and most sharply in southern and northern Europe. Japan, shown in purple, is the contrasting case of low migration and rapid ageing.

Source: H Heuristics calculation from the World Bank compilation of UN Population Division international migrant stock estimates. The measure counts people living in a country other than the one in which they were born.

Two cautions apply. First, the foreign-born population is not the same as ethnic composition. It excludes the children and grandchildren of migrants, who are numerous, and includes migrants from other Western countries, who are a substantial fraction of the total in Western Europe. Second, most European countries do not collect data on ethnicity at all, and those that do define it differently, so claims about the pace of ethnic change in Europe as a whole rest on estimates that are more uncertain than the demographic figures in Section 6. The report therefore speaks of **migration** and **foreign-born share**, which can be measured.

7.2 The demographic arithmetic

Section 6 showed that the population decline in Europe has come from low fertility. Migration is the offset, not the cause. According to the UN, natural change in Europe, births minus deaths, was a loss of about 2.2 million in 2024, while net migration added about 1.6 million. In the decade to 2024 net migration averaged about 1.55 million a year, and without it European population decline would have begun sooner and proceeded faster (Figure 14).

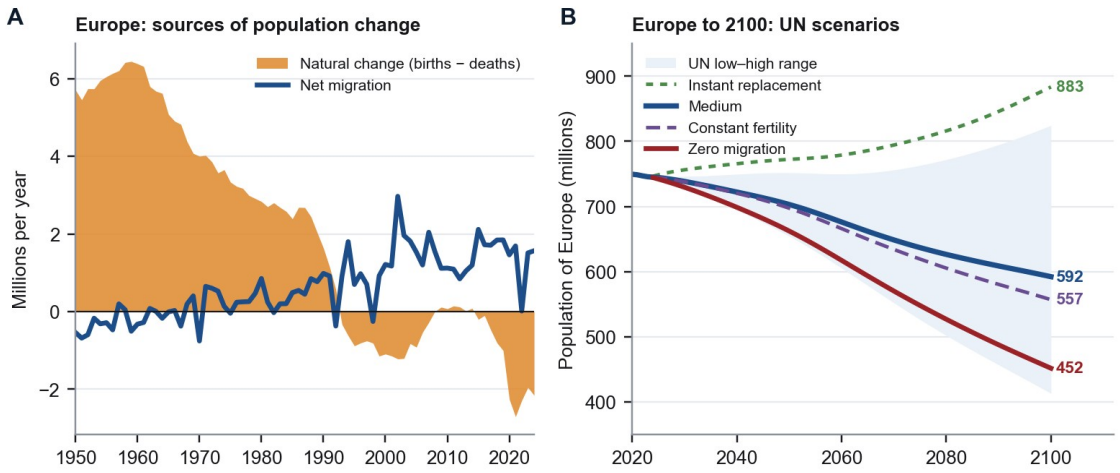


Figure 14. Sources of population change in Europe, 1950 to 2024 (Panel A), and UN scenarios for Europe's population to 2100 (Panel B). Natural change turned negative in the 1990s and has been persistently negative since 2015; net migration is now the only source of growth. The zero-migration variant is about 140 million lower than the medium by 2100.

Source: H Heuristics calculation from UN World Population Prospects 2024, including the medium, high, low, constant-fertility, instant-replacement and zero-migration variants.

Figure 14 Panel B shows the UN scenarios. The medium variant, which assumes continued modest net migration and a slight recovery in fertility, gives 592 million for Europe in 2100. With zero migration from now on the figure is 452 million, **141 million (31 per cent) lower**. If fertility were to rise immediately to replacement, which is a hypothetical rather than a forecast, the figure would be about 883 million. The implication is that migration at assumed levels slows the decline but does not reverse it, and that a return of fertility to replacement would be worth considerably more than any plausible migration policy.

Table 3. Population in 2100 under UN medium and zero-migration scenarios, selected Western countries (millions)

Country	Population 2024	2100, medium	2100, zero migration	Difference
Germany	84.6	70.9	50.1	+20.8
Italy	59.3	35.4	28.4	+7.0
Spain	47.9	33.1	24.8	+8.3
United Kingdom	69.1	74.3	49.7	+24.6
France	66.5	68.5	51.6	+16.9
United States	345.4	421.3	267.7	+153.6

Source: H Heuristics calculation from UN World Population Prospects 2024 (medium and zero-migration variants). Zero-migration holds net migration at zero from 2024 onward; existing migrants and their descendants remain in the population. The 2000 UN study Replacement Migration reached a similar conclusion: the inflows needed to prevent population ageing were far larger than any country was likely to accept.

7.3 What the research says about cohesion

The thesis claims that migration and ethnic mixing erode the cohesion on which Western predominance rested. This is a question about causation, and the research has produced a more mixed record than either side usually admits (Table 4).

The case that diversity has costs. The best-known finding is Robert Putnam's. His analysis of US communities found that people in more ethnically diverse neighbourhoods reported lower trust, including of their own group, and "hunkered down". Alesina, Baqir and Easterly found that more ethnically fragmented US cities spent a smaller share on public goods, and Alesina and La Ferrara's survey of the literature concluded that diversity is costly in some settings, particularly where institutions are weak. A meta-analysis of the diversity and trust literature by Dinesen, Schaeffer and Sønderskov found a small negative association between ethnic diversity and social trust, concentrated at the neighbourhood level and varying across contexts. Economists such as George Borjas have argued, in a widely cited study, that immigration lowers the wages of the native workers it most directly competes with.

The case that migration has benefits. Hunt and Gauthier-Loiselle found that immigrants to the United States patent at about twice the native rate, mainly because they are more likely to hold science and engineering degrees. Kerr and Lincoln found that increases in H-1B visa admissions raised ethnic invention with little evidence of crowd-out of native inventors. Peri found that a rising immigrant share in US states was associated with faster productivity growth, and Ottaviano and Peri found that US cities with greater diversity of birthplace had higher wages and productivity among native workers. The National Academies review concluded that the long-run effect on economic growth is positive, that wage effects on the native-born are small overall, and that the second generation are among the strongest economic and fiscal contributors. The same review found that first-generation immigrants cost more to state and local governments than natives.

Table 4. Evidence on migration, diversity and national capability: selected studies

Study	Setting	Finding	Direction
Putnam (2007)	US communities	Diversity associated with lower trust in the short run	Cost
Alesina et al. (1999)	US cities	More fragmented cities spend less on public goods	Cost
Dinesen et al. (2020)	Meta-analysis	Small negative association with trust, mainly at neighbourhood level	Small cost
Borjas (2003)	US labour market	Immigration lowers wages of directly competing workers	Cost
Hunt and Gauthier-Loiselle (2010)	United States	Immigrants patent at about twice the native rate	Benefit
Kerr and Lincoln (2010)	United States	H-1B admissions raise invention with little crowd-out	Benefit
Peri (2012)	US states	Immigration associated with faster productivity growth	Benefit
Ottaviano and Peri (2006)	US cities	Diversity of birthplace linked to higher native wages	Benefit
National Academies (2017)	United States	Positive long-run growth effect; small wage effects; second generation strongly positive	Mixed

Source: H Heuristics, from the studies cited. Direction records the finding as reported by the authors; it is not a measure of study quality. Most of the rigorous evidence is from the United States, and evidence from European contexts is thinner.

The evidence does not support a simple conclusion in either direction. The studies suggest that diversity can carry a short-run cost to trust and public goods provision in some places, that the benefit to innovation and growth is substantial in skilled migration, and that effects vary by migrant selection, skill level, labour-market institutions and integration policy. **None of this research shows that migration has caused a decline in a country's overall capability.** At most it points to a set of costs that policy can manage, such as segregation, slow labour-market integration and strains on local public services, and a set of benefits that it can strengthen.

7.4 The timing problem

One test of the claim that migration erodes cohesion is timing. If migration were the main cause of declining trust and institutional confidence, the decline should follow the rise in migration. It does not. American trust in the federal government peaked at 77 per cent in 1964 and had fallen to about 27 per cent by 1980 (Figure 15), according to the Pew Research Center compilation of National Election Studies data. That fall coincided with the Vietnam War, Watergate and the stagflation of the 1970s, and it took place when the foreign-born share of the population was at its lowest in American history, at 5.4 per cent in 1960 and 4.7 per cent in 1970. Trust has since fluctuated around a low level, with a post-2001 spike and a long decline, and the foreign-born share has risen roughly threefold. The decline in institutional trust across democracies has several candidate causes, and the evidence is better at ruling out single-cause accounts than at supporting any one.

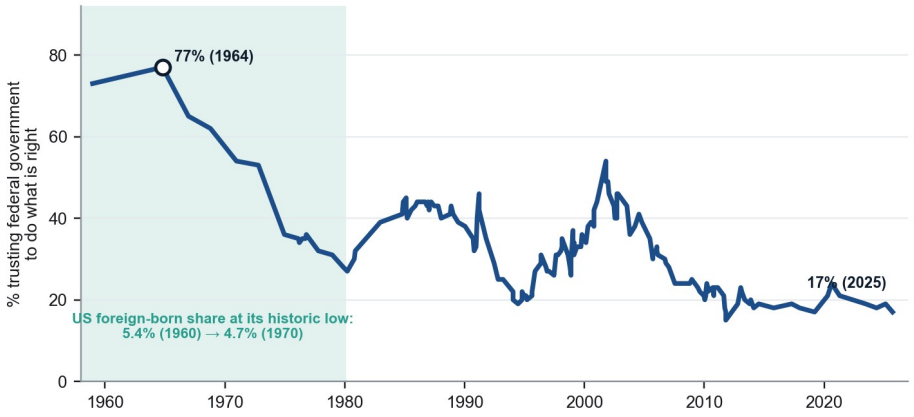


Figure 15. US trust in the federal government, 1958 to 2025. Trust peaked in 1964 and fell by about 50 points by 1980, when the foreign-born share of the US population was at its lowest in the country's history.

Source: H Heuristics calculation from Pew Research Center (National Election Studies and Pew surveys, smoothed series). Foreign-born share from the US Census Bureau.

Summary of Section 7. Migration has changed the composition of Western societies and offsets part of their demographic decline. The research shows some short-run costs to trust and public services, and larger benefits to innovation and growth in skilled migration. It does not show that migration or ethnic mixing causes civilizational decline. The timing of the decline in trust points to other causes.

8. Culture, Trust and Institutions

8.1 The hardest dimension to measure

The cultural dimension of the thesis is the one that attracts most passion and has the thinnest evidence. Claims that the traditional West was a peak of culture rest on judgements of taste, which cannot be tested, and on counts of eminent individuals, which can be, but which carry serious biases. Charles Murray's *Human Accomplishment* found that significant accomplishment in the arts and sciences was concentrated in Europe and, per capita, had peaked well before the late twentieth century. The finding is interesting, but it is subject to the problem of **survivorship**: the figures counted as eminent are those whom later scholars have chosen to remember, and the most recent decades are by definition the least sorted. Any era appears richer in hindsight than it did to those who lived in it, because mediocrity is forgotten and the best survives.

A more defensible approach is to track measurable features of institutional and civic life that earlier writers regarded as the foundations of Western culture: trust in institutions, participation in religious and civic associations, and the health of representative democracy. These are the areas in which a case for decline is strongest, and they are examined in the following sections.

8.2 Trust, religion and civic life

In the United States, the share of people who trust the federal government to do what is right most of the time fell from about 77 per cent in 1964 to 17 per cent in 2025 according to the Pew Research Center. Church membership, which was about 70 per cent of American adults in 1937 and still stood at that level through the 1990s, fell to 47 per cent in 2020 according to Gallup, the first time it had dropped below a majority. Secularization has been more advanced in much of northern and western Europe, where regular religious practice had already declined sharply in the second half of the twentieth century. These changes are real and large, and the institutions that once organized Western civic life have weakened.

It is also true that this pattern is not specific to the West. Declines in institutional trust and civic participation have been documented in many other democracies, and the causes proposed, including the decline of local community, the rise of television and then the internet, and rising inequality, are not specifically Western either. This makes it hard to interpret a decline in Western trust as a decline of Western civilization specifically.

8.3 The democratic recession

The Western contribution to the world that is most often cited is the institutional package of representative democracy, rule of law and individual rights. Here the long-run picture is more mixed. According to data from V-Dem available through Our World in Data, the share of the world's population living in **liberal**

democracies peaked in 1996 at 17.5 per cent and stood at 7.5 per cent in 2025 (Figure 16). The sharp fall between the last two years reflects regime reclassifications of populous countries in the underlying data, so the level is sensitive to a small number of judgements. But the broader pattern is that the share of the world's people living in electoral autocracies has risen since about 2010.

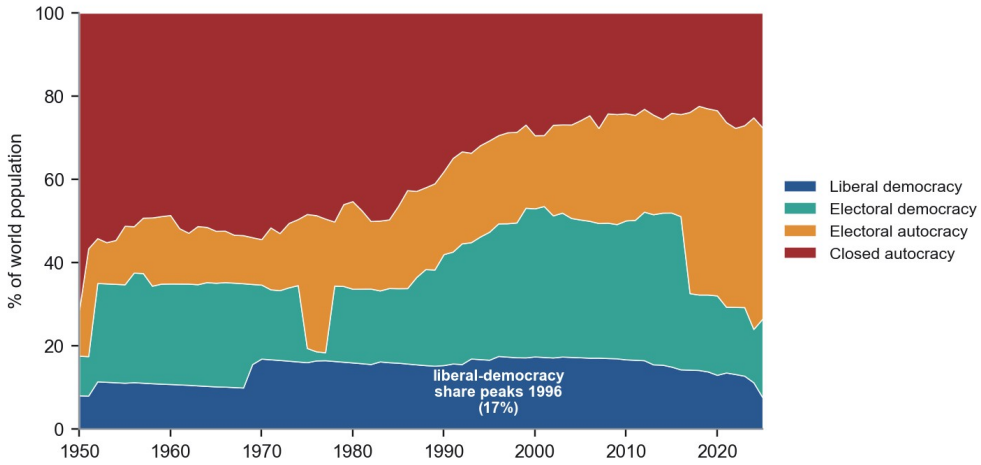


Figure 16. Share of world population by regime type, 1950 to 2025. The share living in liberal democracies peaked in the 1990s; the share in electoral democracies is larger but has also fallen from its 2010s peak.
Source: H Heuristics calculation from V-Dem regimes of the world classification via Our World in Data. The 2025 value reflects reclassifications in the source data.

The democratic recession matters for the thesis in two ways. It suggests that the institutional exports of the West have not been universally adopted, and in some places have been reversed. It also suggests that even within the West the institutions are under strain, which is a point made by the political scientists Roberto Foa and Yascha Mounk in their work on democratic disconnection and which has been echoed in the work of many others. But it would be a mistake to treat this as simple decay. Many of the world's richest and most stable democracies, including most Western ones, remain among the most secure and well-governed polities in history. The global figures are also driven by a few very populous countries, so the reclassification of a single one of them moves the world total by several percentage points.

8.4 Cultural diffusion: the West's success as its undoing

A last point complicates the thesis. Much of what was once distinctively Western has become **global**. English is the world's common language of science, aviation and commerce. The research university, the scientific journal, the joint-stock company, the constitution, the football league and the pop song have all spread across the world. Westernization and cultural diffusion have made it difficult to say what belongs to the West and what to humanity as a whole. The Western peak was in part a peak of exclusivity; as institutions have spread, the West has lost its monopoly but its ideas have not lost their influence.

> **Summary of Section 8.** Civic trust, religious participation and liberal democracy have all declined from twentieth-century peaks in the West. The evidence for decline is solid, but it is not specifically Western, and the diffusion of Western institutions complicates any claim that Western culture has lost its centrality.

9. The Geopolitical Transition

9.1 From unipolar to plural

The geopolitical claim in the thesis is that power is becoming more widely distributed. Table 5 sets out where the weight of the world now lies, using the six indicators examined so far. The core West still leads on GDP (at market rates and at purchasing power), on military expenditure and on article output, trails China on patent filings, and holds a far smaller share of world population than either China or India.

Table 5. Shares of the world in the most recent year: the core West, China and India (per cent)

Indicator	Core West	China	India	Rest of world
Population (2024)	10.4	17.4	17.8	54.4
GDP, market rates (2024)	49.6	16.6	3.3	30.5
GDP, purchasing power (2024)	31.2	18.7	7.6	42.5
Military expenditure (2024)	53.7	11.4	3.1	31.8
Resident patent filings (2024)	13.9	64.0	n/a	n/a
Science and engineering articles (2022)	36.3	26.9	6.1	30.7

Source: H Heuristics calculation from UN World Population Prospects 2024, the World Bank and SIPRI. Core West = Western Europe, the United States, Canada, Australia and New Zealand. Rows may not sum to 100 because of rounding; the patents row excludes India for lack of comparable data.

The shift has three notable features. First, it is **uneven**: the West's share of population has fallen furthest, its share of military spending least. Second, it is **not a simple transfer** from West to East. Japan, which was the second-largest economy for decades, fell from about 18 per cent of world GDP at market rates in the mid-1990s to about 4 per cent in 2024. Third, it is **partly about China**, whose share of world GDP at market rates rose from about 3.6 per cent in 2000 to 16.6 per cent in 2024. A transition that depends heavily on one country's performance is less secure than one that rests on broad-based growth.

9.2 The next centres are not the obvious ones

Demography also constrains the rising powers. China's population peaked in 2021 at about 1426 million, its fertility rate is 1.01, and the UN medium projection puts it at about 633 million in 2100, a fall of more than half. India's population is projected to peak around 2061 at about 1701 million, with a fertility rate of 1.96, already below replacement. Asia's share of world population peaked at about 60.7 per cent around 2001. The region whose population will keep growing is Africa, projected to rise from 18.6 per cent of the world's population in 2024 to 37.5 per cent in 2100, and to have a working-age population of about 2.46 billion by 2100.

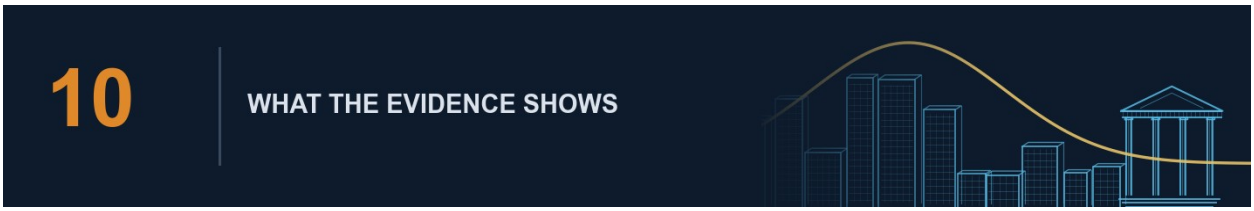
This changes the shape of the claim. The post-Western world is not simply a post-Western, Asian-led one. It is a world in which several centres rise and plateau in sequence: Europe and North America first, then East Asia, then South Asia, and later, if conditions allow, Africa. Each in turn passes through the same demographic transition, and each passes its own relative peak. The Western peak may be the first of several, rather than a unique event, and a thesis about the end of the West may be, more generally, a thesis about the end of the idea that any one region organizes the world.

9.3 Convergence and its limits

The convergence literature offers a reason for caution about extrapolating. Richard Baldwin's account of the Great Convergence emphasizes that falling communication costs let developing countries join supply chains without having to build a whole industrial base. Dani Rodrik's study of premature deindustrialization finds that many developing countries are reaching peak manufacturing employment at much lower income levels than the West did, which may limit the speed of future convergence. The rapid growth that raised Asia's share was real, but it was concentrated in a small number of economies, and it is not guaranteed to be repeated.

The upshot is that **convergence is a trend, not a law**. The Western share of world output has fallen for seven decades, and there are good reasons to expect it to keep falling as populous economies close the gap. But the pace depends on productivity growth, political stability and demographic structure in the rising regions, and on whether the West itself renews its institutions and its supply of talent. The next section turns to the version of the thesis that cannot be sustained, and Section 11 returns to the case against the version that can.

> **Summary of Section 9.** The weight of the world has shifted from a West-centred to a plural distribution. The shift is uneven, concentrated in a few countries, and constrained by the same demographic transition that the West went through first. The more accurate description is not a transfer of predominance from West to East, but the end of predominance by any one region.



10. Biological Explanations: What the Evidence Shows

10.1 The biological hypothesis

Some versions of the thesis go beyond demography, economics and institutions and propose a biological explanation: that the peak of the traditional Western world reflected the genetic endowment of the populations that built it, and that changes in the ancestry of Western societies bear on what follows. This section sets out what that hypothesis claims, reviews what genetics, evolutionary theory and the study of cognitive performance can and cannot say about it, and states what follows for the thesis. The question has a long history. Ranking populations on a hereditary scale was a feature of nineteenth- and early twentieth-century scientific racism, and the research reviewed below is largely the later scientific response to those claims.

10.2 Genetic variation within and between populations

Human populations do differ in the frequencies of many genetic variants, and the differences broadly track geography because populations separated for longer have drifted further apart. The question is how large the differences are relative to the variation among individuals. Rosenberg and colleagues' analysis of 1,056 individuals from 52 populations found that differences among individuals within populations accounted for 93 to 95 per cent of genetic variation, and that differences among major geographic groups accounted for 3 to 5 per cent. The same study found that genetic clusters correspond to geography but that variation is continuous, without sharp boundaries. Human genetic variation is therefore best described as a continuum with small average differences between regions and large differences among individuals everywhere.

10.3 Evolution and the idea of ranking

Evolutionary theory does not provide a scale on which populations can be placed higher or lower. Natural selection favours traits that suit a particular environment at a particular time, and the common ancestors of all living human populations are equally distant in time. A population adapted to the Arctic, the Andes or the Sahel is adapted to its own conditions, as is one in Northwestern Europe. For this reason the statement that one contemporary population is more evolved than another has no meaning within the theory, and the biological hypothesis cannot be framed in evolutionary terms.

10.4 Cognitive performance and environment

A further strand of the hypothesis concerns differences in average measured cognitive performance. Here two points are relevant. First, heritability, which is substantial for many traits within a population, does not by itself tell us the cause of average differences **between** populations or periods, because the environmental conditions that shape the trait can differ between groups. Second, the evidence on change over time shows how responsive measured performance is to environment. The Flynn effect is the rise in average scores of roughly three points per decade across the twentieth century in many countries, which is too rapid to be genetic. Bratsberg and Rogeberg analysed Norwegian conscripts and found that both the rise and the later reversal appear **within families**, between brothers, which indicates environmental drivers such as schooling, nutrition and the information environment. Behavioural genetics is an active field with open questions, but the evidence available does not allow a genetic ceiling to be inferred for any population.

10.5 Ancestry and population mixing

The hypothesis also touches on the effects of mixing between populations. Ancient DNA shows that the ancestry of present-day Europeans is itself the product of repeated large-scale migrations and mixings. Haak and colleagues showed that a migration from the steppe around 4,500 years ago contributed a large share of European ancestry, joining earlier farmer and hunter-gatherer populations who had arrived in earlier waves. No study reviewed for this report identifies a biological mechanism by which gene flow between human populations reduces a society's capability. Where mixed or migrant populations show different outcomes, the explanations that research has identified lie in social and economic conditions, such as segregation, discrimination and labour-market access, which are the subject of Section 7.

10.6 What follows for the thesis

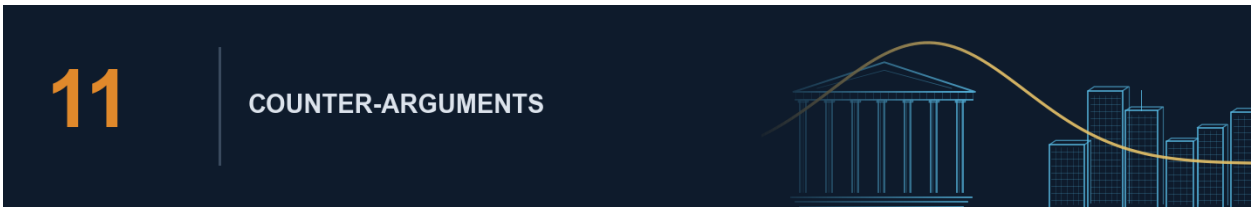
The evidence reviewed supports a clear and limited conclusion. The causes of the Western rise documented in Section 4 are institutional, economic, scientific and demographic, and the evidence available does not support a biological explanation for either the rise or the relative peak. The point is not only that the biological hypothesis lacks support but that it is not needed: the demographic, economic and geopolitical evidence in Sections 5 to 9 accounts for the relative peak without it. The thesis therefore rests on those dimensions, and this report treats them as its evidential core.

Table 6. The biological hypothesis and what the evidence shows

Claim	Evidence	Assessment
Populations can be ranked as more or less evolved	Evolutionary theory defines no such scale; all populations share the same time depth since common ancestry	Not supported
Genetic differences between populations explain civilizational achievement	93 to 95 per cent of variation lies within populations (Rosenberg et al. 2002); rapid cognitive gains within families point to environment (Bratsberg and Rogeberg 2018)	Not supported
Mixing of populations reduces a society's capability	European ancestry is itself the product of repeated migrations (Haak et al. 2015); no mechanism identified	Not supported
The Western rise was biologically determined	The rise was recent (Section 4) and was reproduced elsewhere within decades through institutions and technology	Not supported

Source: H Heuristics, from the studies cited. Assessments refer to the scientific evidence on each claim.

Summary of Section 10. The evidence reviewed does not support a biological explanation of the Western peak. The relative peak is analysed in this report as an institutional, economic and demographic fact, and the thesis does not depend on any other.



11. The Case Against the Thesis

11.1 Why the objections matter

A thesis that survives only because its critics are ignored is not worth holding. This section sets out the strongest objections to the weak version of the post-peak thesis and says how much force each retains. They fall into five groups, summarized in Table 7.

11.2 Levels keep rising

The most direct objection is that the Western position has declined only in relative terms. By absolute measures the West is at or near its highest level ever. GDP per head in Western Europe and the Western Offshoots, in 2011 international dollars, was about $10,002 in 1950, about $38,018 in 2000 and about $48,708 in 2022 on the Maddison Project series. Life expectancy in Europe rose from 62 years in 1950 to 79.3 in 2024, and in Northern America from 68.1 to 79.8 years.

This objection is correct, and it is why the report describes the thesis as a relative one. It does not, however, dispose of the thesis, because the thesis was never that the West is getting poorer. It disposes only of the version that says humanity, or even the West, is in absolute decline. **Force: strong against the absolute claim, weak against the relative claim.**

11.3 Falling shares are a success

The second objection reframes the data. The fall in the Western share of world output and population is the arithmetic consequence of the rest of the world escaping poverty. Global life expectancy rose from 46.4 in 1950 to 73.3 in 2024, and in Africa from 37.2 to 64. The scale of the improvement in human welfare outside the West is far larger than anything the West experienced in the same period. On this view a world in which most people live decently is better than one in which a few societies dominate. **Force: strong as a value judgement, but not an empirical objection.** The thesis is a claim about position; the objection is a claim about whether that position was desirable.

11.4 Renewal and the talent magnet

A third objection is that the West has repeatedly renewed itself and that its institutions still attract the world's talent. The evidence is partly supportive. Western institutions account for 88 per cent of science Nobel laureates since 2010, and about 34 per cent of US-based laureates since 1980 were born abroad, which shows the continuing pull of Western universities. But the objection is weakened by the direction of travel in volume: the Western share of science and engineering articles fell from 67.7 per cent to 36.3 per cent in twenty-two years, and of patent filings from 33.8 to 13.9 per cent. The talent magnet depends on

openness, which is a matter of policy. **Force: moderate; it identifies a real source of resilience that policy can protect or squander.**

11.5 The "West" is not a stable unit

A fourth objection concerns definition. Japan, South Korea and Taiwan share many institutions and technologies with the West, and Eastern Europe and Latin America have complex relationships with it. If Japan and South Korea are added to the core West, the share of world GDP at market rates in 2024 is 54.9 per cent rather than 49.6 per cent, and the purchasing-power share is 36 per cent rather than 31.2. The direction of change since 1990 is the same, but the level depends on the boundary. This is a sound caution about precision: if "Western" institutions have spread to East Asia, part of the shift is **within** a widened West. **Force: moderate for levels, weak for direction.**

11.6 Memory, measurement and the illusion of peaks

A fifth objection holds that peaks are partly an artefact. Cultural peaks are identified in retrospect, from the work that survives, and recent decades are always undercounted because the sorting process has not yet operated. Share-based peaks depend on the choice of indicator and the period over which it is measured, so that the date of the peak shifts depending on whether one looks at population, output, relative income or trust (Figure 1 shows a spread of more than a century). **Force: strong for cultural claims, weak for demographic and economic ones.**

Table 7. The case against the weak version of the thesis: objections, evidence and residual force

Objection	Key evidence	Force	What survives
Levels keep rising	Western GDP per head about $48,708; life expectancy at record highs	Strong against absolute decline	The thesis is a relative one
Falling shares are a success	World life expectancy 46.4 to 73.3 years; Africa 37.2 to 64	Strong as a value judgement	Position changed; desirability is separate
The West renews itself and attracts talent	Western affiliation of 88% of science Nobels since 2010; about a third foreign-born in the US	Moderate	Resilience depends on openness; volume shares are falling
The West is not a stable unit	With Japan and South Korea, 2024 market GDP share is 54.9%	Moderate for levels	Direction of change is unaffected
Peaks are an illusion of memory and measurement	Dates of peaks span more than a century across indicators	Strong for culture; weak for demography	Demographic and economic peaks stand

Source: H Heuristics assessment. 'Force' is a judgement of how much each objection weakens the weak version of the thesis, not a statistical measure.

Summary of Section 11. The strongest objections defeat an absolute version of the thesis and the cultural claims, and they require precision about boundaries. They do not defeat the central finding that the Western share of population, output and scientific volume has fallen from a twentieth-century peak and is likely to fall further.

12 SCENARIOS

12. Scenarios to 2100

12.1 Why scenarios and not forecasts

The post-peak thesis is a claim about the past and present. Its implications for the future depend on choices that have not yet been made, and on demographic and technological developments that are uncertain. This section sets out four scenarios for the Western position to 2100, organized around two uncertainties that matter most: how Western societies handle demographic change (the horizontal axis in Figure 17) and whether their institutions and capacity for innovation renew or erode (the vertical axis). The scenarios are not predictions and carry no probabilities; they show that the thesis is compatible with very different futures.

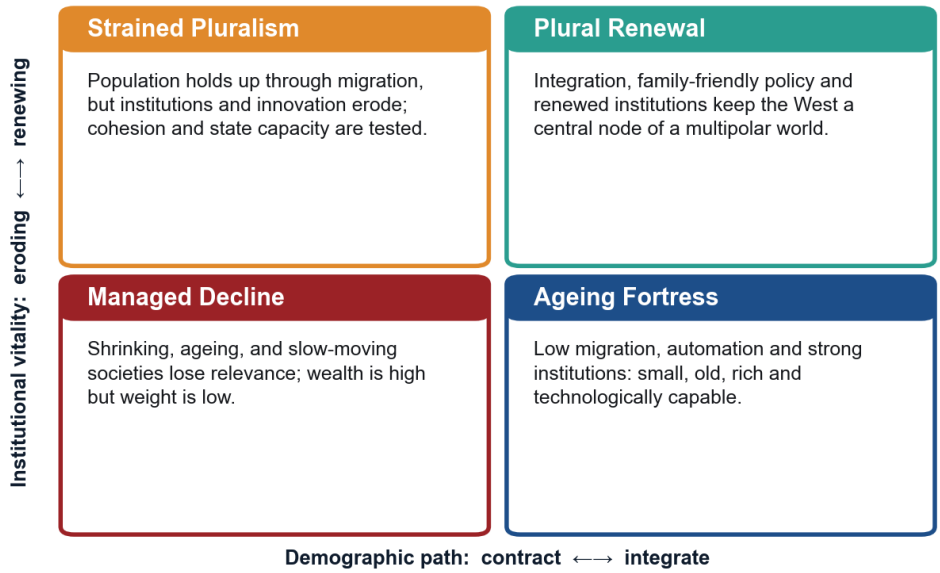


Figure 17. Four scenarios for the Western position to 2100. The axes are the two uncertainties that matter most: how Western societies handle demographic change, and whether their institutions and innovation capacity renew or erode.

Source: H Heuristics.

12.2 The four scenarios

Plural Renewal. Western societies integrate new arrivals effectively, adopt family and housing policies that lift fertility modestly, and renew their institutions and research systems. The West remains a central node of a multipolar system, with population stabilizing at a higher level. The demographic anchor is the

UN high variant, which puts Europe at about 824 million in 2100, though that path is hardly a forecast: a recovery of fertility to that degree has little precedent in countries where it has fallen below 1.5.

Ageing Fortress. Migration is restricted and fertility remains low, but automation, high productivity and strong institutions keep living standards high. The West is small, old, wealthy and technologically capable, with limited global weight. The demographic anchor is the zero-migration variant, with Europe at about 452 million in 2100.

Strained Pluralism. Migration continues and keeps the population close to the UN medium path, at about 592 million for Europe in 2100, but integration is slow, institutions erode and cohesion is tested. Capability growth is weak and political conflict over identity and distribution is persistent.

Managed Decline. Low fertility, low migration and eroding institutions combine. The demographic anchor is the UN low variant, with Europe at about 413 million. Wealth in absolute terms is retained, but relative weight and the capacity to shape outcomes fall steadily.

Table 8. Scenarios for the Western position to 2100: drivers, demographic anchors and signposts

Scenario	Demographic anchor (Europe, 2100)	Main drivers	Signposts to watch
Plural Renewal	UN high variant: about 824 million	Effective integration; family and housing policy; research renewal	Fertility rising above 1.8; immigrant wage convergence; research share stabilizing
Ageing Fortress	Zero migration: about 452 million	Restrictive migration; automation; high productivity	Net migration near zero; old-age dependency above 55; robotics adoption
Strained Pluralism	UN medium: about 592 million	Continued migration; slow integration; institutional erosion	Trust and turnout falling; segregation indicators; productivity stagnation
Managed Decline	UN low variant: about 413 million	Low fertility and migration; weak institutions; slow innovation	Fertility below 1.3; falling research output; capital flight

Source: H Heuristics, with demographic anchors from UN World Population Prospects 2024 variants. The anchors illustrate the demographic range and are not probabilistic forecasts. The scenarios are not exhaustive.

12.3 What is robust across scenarios

Three results hold across all four scenarios. **First, the Western share of world population will be lower in 2100 than today.** Even on the high variant the region's weight is a smaller fraction of a larger world: Europe's share would fall below the 9.1 per cent it holds today because the world's population is growing and Africa's in particular. **Second, ageing is built in.** The people who will be aged 65 and over in 2060 have already been born, so the old-age dependency ratio rises under every scenario that does not involve very large inflows of young adults. **Third, what varies is not whether the relative peak has passed but what comes after it.** A West that is small, old and rich, or small and strained, or small and renewing, is a very different thing, and the difference lies in institutions and policy, not in demographic destiny.

12.4 Policy implications

The scenario analysis points to levers that matter regardless of how the thesis is judged. The ones with the largest effect on the demographic path are fertility and its determinants, including housing costs, childcare and the timing of partnership, because the UN scenarios show that a hypothetical return of

fertility to replacement would add roughly twice as many people to Europe's 2100 population (about 290 million) as the migration assumed in the UN medium variant (about 140 million). The largest effects on capability come from the openness of research systems to global talent and the quality of integration policy, and on cohesion from addressing segregation, local public services and labour-market access.

13 ASSESSMENT

13. Assessment and Verdict

13.1 Scoring the claims

Figure 18 grades eight claims that make up the thesis in its strong and weak forms, using the evidence grades defined in the About section. The first four are components of the weak version, which the report finds largely supported. The last four are claims that the evidence does not support.

	Claim	Verdict	Grade
1	The West's relative share of world output, population and scientific output peaked in the twentieth century	Supported	A
2	Europe's population has peaked, is ageing, and is projected to fall; fertility is below replacement	Supported	A
3	Immigration slows but does not reverse European demographic decline	Supported	A
4	Western institutions and culture have lost some global centrality	Partly supported	B
5	Absolute Western capability and living standards have declined	Not supported	A
6	Ethnic mixing or immigration is the cause of civilizational decline	Not supported	B
7	The Western peak had a biological or evolutionary explanation	Not supported	A
8	Humanity as a whole has entered a post-peak era	Not supported	A

Figure 18. Scorecard of the claims that make up the post-peak thesis. The relative claims are supported on the data; the absolute, causal and biological claims are not.
Source: H Heuristics assessment, based on Sections 5 to 11.

13.2 The evidence behind each verdict

Table 9. The evidence behind the verdict on each claim

Claim	Principal evidence	Grade
1. Relative peak of weight in the twentieth century	Western share of world GDP about 57% around 1950, 31% in 2022; share of articles 67.7% to 36.3%; patents 33.8% to 13.9%	A
2. Europe's population peaked, is ageing and will fall	Population peak 2020; TFR 1.4; median age 42.5; 2100 medium projection 592 million	A
3. Immigration offsets but does not reverse the decline	Net migration 1.55 million per year against a natural decrease of 2.2 million; zero-migration variant 452 million, medium 592 million	A
4. Loss of global centrality of Western institutions and culture	Declining trust, church membership and liberal-democracy share; but diffusion of Western institutions complicates interpretation	B
5. Absolute Western decline	GDP per head about $48,708; life expectancy 79.3 years in Europe	A
6. Migration or mixing causes decline	Mixed evidence on trust; positive evidence on innovation; timing of trust decline inconsistent	B
7. Biological explanation of the peak	93 to 95% of genetic variation within populations; Flynn effect environmental; evolutionary theory defines no ranking	A
8. Humanity is post-peak	World life expectancy 73.3 years; world population peaks around 2084; capability rising	A

Source: H Heuristics assessment. Grades are defined in the About This Report section. The grade measures the strength of the evidence on the claim, in either direction.

13.3 The verdict

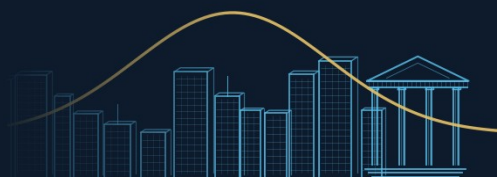
The verdict is a split one. **The relative version of the thesis is supported.** A historically exceptional period of Western predominance, peaking in output share around the middle of the twentieth century, in relative income around its end, and in population share around 1900, is demonstrably ending, and its demographic foundations are changing in ways that will not reverse on any plausible timescale. This is the finding that the weak version of the thesis advances, and it stands on solid data. **The absolute, causal and biological versions are not supported.** Humanity is not in decline, the West is not poorer or less capable than it was, there is no evidence that migration or ethnic mixing caused the changes documented, and the genetic evidence does not support a biological explanation.

A more precise statement of the thesis, in the form the evidence supports, is this: **the West has passed its relative peak in the world, a peak that was recent, was driven by institutions and demography and not by biology, and has been eroded mainly by the success of other regions and by a demographic transition that is now global.**

13.4 What would change this assessment

The assessment would be revised if the Western share of world output at market rates rose materially for a decade (weakening the first claim), if European fertility recovered to replacement without migration (weakening the demographic claims), or if rigorous studies found that migration caused large and persistent declines in productivity or institutional quality (strengthening the sixth). Only the fourth claim, on culture, lacks a rigorous test, and it is where further research is most needed.

14 CONCLUSION



14. Conclusion

14.1 What the evidence supports

The post-peak civilization thesis is best understood not as a single claim but as a bundle of claims that fall on different sides of the evidence. The part that stands is the part about **position**. For roughly a century and a half a small group of societies held a share of the world's output, population, science and power that was historically unusual and, once the rest of the world acquired the same institutions and technologies, unsustainable. That share peaked: in population around 1900, in output around 1950, in income relative to the world around 2000, and in Europe's absolute population around 2020. Fertility far below replacement, an ageing population and a geopolitical order in which power is spreading across a wider set of regions are well documented and, on any plausible assumptions, will persist through this century.

The part that does not stand is the part about **worth**. The evidence reviewed does not support a biological or evolutionary explanation of the Western peak, and the evidence on migration and cohesion shows a mix of manageable costs and substantial benefits, not a cause of civilizational decline. The same research shows that the causes of the Western rise were institutional, economic and demographic, which is why the rise could be copied and why its relative peak has passed.

14.2 What the evidence does not settle

Several questions remain open. The first is **culture**. The evidence that civic trust, religious participation and liberal democratic institutions have declined from twentieth-century highs is solid, but whether this reflects a loss of Western cultural vitality, a global pattern or a transition to new forms of association is not known. The second is **cohesion under diversity**: the research suggests costs that are small on average and context-dependent, but the long-run effect on trust and public goods in European settings, where the evidence is thinner, is not known. The third is **fertility**: the causes of the global decline are understood in outline but not in the detail that would show which policies could raise it, and the UN projections have repeatedly been revised downward. The fourth is **the next phase**. The rising regions face the same demographic transition, and there is no guarantee that their growth will be sustained.

14.3 A research agenda

- **Measure cultural output without survivorship bias.** Build indicators of cultural and scientific production that are comparable across periods and independent of later canon formation.
- **Collect comparable data on ancestry and integration in Europe.** Most European countries do not collect ethnic data, which limits the ability to test claims about composition. Voluntary, privacy-protecting surveys could fill the gap.

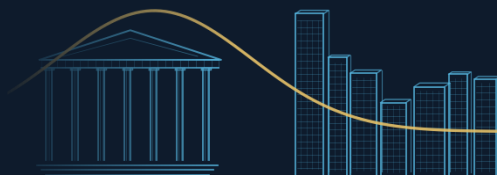
- **Study the second generation.** The evidence suggests the children of migrants are among the strongest contributors, but systematic cross-country evidence is thin.
- **Test the fertility levers.** Evaluate the effect of housing, childcare and work-time policies on completed fertility across countries.
- **Track the sequence of peaks.** Update the dates of the peaks of Western, East Asian, South Asian and African shares, and check whether each region's relative peak follows the same demographic sequence.

14.4 Closing assessment

The question the report began with was whether humanity has entered a post-peak period in which the civilization that shaped the modern world is gradually losing its historical centrality. The answer is a qualified yes to the second half and a no to the first. A civilization can lose its centrality without humanity passing a peak. The West shaped the modern world, and the modern world is now being shaped by a wider set of hands. This is a transition of position, not of worth, and it can be met with the same institutions and openness to talent that built the position in the first place.

> **Conclusion.** The era of Western predominance is ending, and its end is documented by the data. It is not evidence of a decline of humanity, and it is not caused by the changes in composition that some accounts blame. The question for the century is not whether the West will remain the centre of the world, which it will not, but what role a smaller, older and more plural West will choose to play in a world that has more than one centre.

15 APPENDIX A



15. Appendix A: Data and Methods

A.1 Data sources

Table 10. Data sources used in the report

Source	Content	Coverage	Use
Maddison Project Database 2023	GDP per head and population by country and region	1820 to 2022 (regional)	Long-run shares and relative income
World Bank: GDP	GDP, current US dollars and PPP	1960 to 2024 (market); 1990 to 2024 (PPP)	Modern economic shares
World Bank / SIPRI	Military expenditure, current US dollars	1960 to 2024	Military shares
World Bank / WIPO	Resident patent applications	1980 to 2024	Technological output
World Bank / NSF	Science and engineering journal articles	2000 to 2022	Scientific output
Nobel Foundation	Laureate affiliations and birthplaces	1901 to 2026	Scientific prestige
UN World Population Prospects 2024	Population, fertility, age, migration, variants	1950 to 2100	Demographic analysis
World Bank migrant stock	International migrants as % of population	1990 to 2024	Foreign-born share
US Census Bureau and Eurostat	Foreign-born population, historical and current	Various	Context for migration
Pew Research Center	Trust in federal government	1958 to 2025	Institutional trust
V-Dem via Our World in Data	Population by regime type	1950 to 2025	Democratic recession

All data were retrieved in October 2026. Datasets are public. World Bank aggregates (regions and income groups) were removed and shares computed directly from country data.

A.2 Definitions and calculations

- **Core West.** Western Europe (United Kingdom, Ireland, France, Germany, Italy, Spain, Portugal, Netherlands, Belgium, Luxembourg, Austria, Switzerland, Denmark, Sweden, Norway, Finland, Iceland, Greece) plus the United States, Canada, Australia and New Zealand.
- **Maddison regional series.** Regional GDP per head and population are from the Maddison Project regional sheet, which has sparse benchmark years before 1950. Values between benchmark years are interpolated log-linearly. GDP is the product of GDP per head and population, summed over regions. 'West' is the Western Europe plus Western Offshoots regions of that database.

- **World Bank shares.** For each year, the share is the sum of the group's country values divided by the world total from countries with data. Missing countries lower the total and slightly raise all shares. The Soviet Union is missing from military expenditure before 1992, so that series begins in 1992.
- **UN regions.** 'Europe' and 'Northern America' follow the UN geographic regions. 'Europe' includes Eastern Europe and Russia. Variants are those published by the UN Population Division. The zero-migration variant sets net migration to zero from the base year.
- **Nobel analysis.** Physics, chemistry and physiology or medicine, 1901 to 2026; the first listed affiliation at the time of the award is used; birth country is the present-day country of the birthplace. Laureates without a recorded affiliation (about 1 per cent) are excluded. A laureate is counted as foreign-born if the present-day country of birth differs from the country of affiliation.

A.3 Nobel counts by decade

Table 11. Science Nobel laureates by decade: counts and shares used in the figures

Decade	Laureates with affiliation	Core West share (%)	US-affiliated share (%)	Foreign-born share of US-based (%)
1900s	32	97	3	100 (n=1)
1910s	24	100	8	50 (n=2)
1920s	33	97	6	0 (n=2)
1930s	38	95	26	10 (n=10)
1940s	30	97	50	47 (n=15)
1950s	54	91	56	40 (n=30)
1960s	57	93	49	36 (n=28)
1970s	65	97	54	26 (n=35)
1980s	66	98	59	33 (n=39)
1990s	58	100	74	30 (n=43)
2000s	77	86	62	31 (n=48)
2010s	74	85	50	43 (n=37)
2020s	52	92	54	36 (n=28)

Source: H Heuristics calculation from the Nobel Foundation API. The 2020s are incomplete (awards to 2026). Foreign-born shares for decades with fewer than ten US-based laureates are not reliable and are not plotted before the 1930s.

A.4 Limitations

Three limitations should be kept in mind. First, GDP comparisons in 2011 international dollars rest on purchasing-power estimates that are revised periodically, and historical estimates before 1950 involve extensive interpolation, so the timing of peaks before that date is uncertain by a decade or more. Second, patents and articles are imperfect measures of technological capability; differences in filing practice and publication incentives affect the Chinese figures in particular. Third, projections to 2100 are scenarios rather than forecasts, and the history of UN revisions shows that fertility has repeatedly come in below projections. None of these limitations affects the direction of the main findings.

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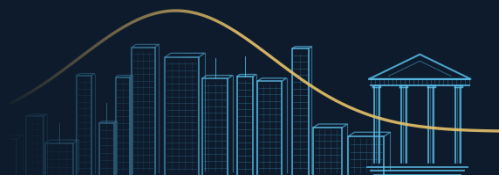

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