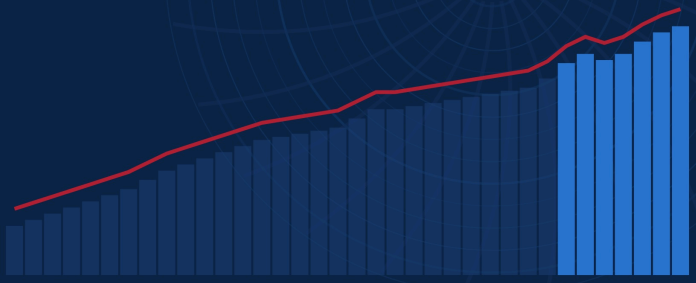
COMPETITIVENESS / PRODUCTIVITY / DEBT / 2035



THE FRONTIER ENGINE

America's Competitive Edge from 2015 to 2035, and the Strategic Shifts It Will Force

DATA, MODELS AND SCENARIOS

GLOBAL STRATEGY FILES

THE FRONTIER ENGINE

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The Frontier Engine. America's Competitive Edge from 2015 to 2035, and the Strategic Shifts It Will Force.

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Data were extracted in November 2026 from Federal Reserve Economic Data (FRED), the Bureau of Economic Analysis, the Bureau of Labor Statistics, the Census Bureau, the Congressional Budget Office, the World Bank World Development Indicators, the IMF World Economic Outlook (October 2026), the Penn World Table 11.0, the Harvard Growth Lab Atlas of Economic Complexity, the UN World Population Prospects 2024 and Our World in Data. Every figure and table names its source.

Nothing in this book constitutes investment, legal or tax advice.

First edition, November 2026.
Global Strategy Files
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The question is no longer whether America can invent. It still invents more of what matters than any other nation. The question for the next ten years is whether it can pay for, power and staff the future it is inventing.

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Preface

In the autumn of 2026 the American economy offered two pictures at once. The first was a picture of strength. Real output grew at an annual rate of 3.4 percent in the third quarter. The four largest technology companies were on course to spend more than 700 billion dollars on data centres, chips and power in a single year. The United States had become the largest producer of oil and gas on the planet and the largest exporter of liquefied natural gas. American companies accounted for more than half of the value of the world's listed equities, and output per person was further ahead of Europe and Japan than at any time in a generation.

The second picture was one of strain. Federal debt held by the public had reached about 100 percent of GDP and the government was paying more in interest than at any time since the early 1990s. A war with Iran had sent gasoline prices up by a third in a year and pushed inflation back toward 4 percent. The Supreme Court had struck down the tariffs imposed under emergency powers, and the administration had rebuilt them under other statutes. Net immigration, which had supplied most of the growth of the labour force for two decades, had fallen to around zero. And on the most demanding industrial measures of competitiveness, the United States had slipped from third to fifth among the eight economies studied in this book in less than ten years.

Both pictures are true. The purpose of this book is to show how they fit together, to measure each element with long statistical series, and to project the result to 2035 with models that make their assumptions explicit. It is a companion to our study of China, *The Scale Machine*, and it follows the same method: the same questions, the same comparison group, the same composite index and the same family of models, so that readers can set the two giants side by side.

The central argument can be stated in a few lines. America's competitive edge rests on five engines: frontier productivity, ideas and intangible capital, deep capital markets and the dollar, energy abundance and the scale of its home market. Three constraints are tightening around them: the fiscal arithmetic, the supply of labour and the cost of building and caring. Between 2015 and 2025 the engines ran faster than almost anyone expected, and the United States widened its lead over every other rich economy. Between 2025 and 2035 the constraints will bind harder. Whether the engines can keep outrunning them depends above all on one question that the data cannot yet answer with confidence: whether artificial intelligence delivers a measurable rise in productivity growth.

Our models give that question a probability rather than a verdict. In 10,000 simulations, the median path for American potential growth over 2027 to 2035 is 1.9 percent a year, close to the projections of the Congressional Budget Office. But the distribution has two humps. In the simulations where artificial intelligence lifts productivity, median growth is 2.2 percent; where it does not, it is 1.7 percent. That half-point gap, compounded over a

decade and run through the federal budget, separates a world in which the debt stabilises from one in which it does not.

This is a book about numbers, but numbers are not neutral about what they leave out. We have tried to be clear about where the data are weak, where the models simplify and where reasonable analysts disagree. Every figure and table names its source, and the appendices document the methods in enough detail for the calculations to be reproduced.

The book is a collective work of the contributors of Global Strategy Files. It is written for policymakers, investors, business strategists, students and anyone who needs a sober, quantified view of where the world's largest economy stands and where it is going.

Global Strategy Files globalstrategyfiles.com November 2026

Executive Summary

This book measures the competitiveness of the United States over two decades: the ten years from 2015 to 2025, for which we have data, and the ten years from 2025 to 2035, which we model. It asks what America is good at, where its advantages are eroding, which constraints are tightening and how the world will have to adjust to the trajectory that results. Its main findings fall under seven headings.

1. The decade of divergence

Between 2015 and 2025 American real GDP grew by 27 percent, against 17 percent for the European Union. Since 2008 the gap is larger still: the US economy is 42 percent bigger in real terms, the European Union 20 percent and Japan 9 percent. GDP per person at purchasing power parity in Germany fell from 93 percent of the American level in 2015 to 83 percent in 2024; in France from 79 to 72 percent, in Britain from 78 to 71 percent and in Japan from 69 to 63 percent. The United States produced 26 percent of world output at market prices in 2024, more than in 2015, even though its share of world population is just over 4 percent.

The engine of this divergence was productivity. Output per hour in the nonfarm business sector rose by 1.9 percent a year from 2015 to 2025 and by 2.3 percent a year after 2019, almost double the pace of the 2004 to 2019 slowdown and well ahead of Europe and Japan. Growth accounting shows total factor productivity contributing about one percentage point a year after 2019, the best performance since the late 1990s.

2. The five engines

Frontier productivity. America remains the productivity frontier against which other economies are measured. Only Germany matches its level of total factor productivity, and Germany has been falling behind since 2019.

Ideas and intangibles. The United States spends 3.4 percent of GDP on research and development, about 863 billion dollars at purchasing power parity in 2023, still slightly more than China. Business investment in intellectual property products, software and research has risen from 31 to 40 percent of all business fixed investment since 2015. America collects about 30 percent of the world's royalties for the use of intellectual property, 172 billion dollars in 2024.

Capital markets and the dollar. The market value of listed American companies reached 224 percent of GDP in 2025, and after-tax corporate profits stand near 12 percent of GDP, close to a record. The dollar still accounts for about 57 percent of the world's foreign exchange reserves, down from 71 percent in 1999 but with no challenger in sight.

Energy abundance. The shale revolution has nearly tripled American oil production since 2005 and doubled gas output. In 2025 the United States became the first country to export

more than 100 million tonnes of liquefied natural gas in a year. Mineral fuels are now America's largest goods export, at 315 billion dollars in 2024 and 13 percent of the world market.

The scale of the home market. A market of 342 million consumers with high incomes allows American firms to amortise fixed costs in software, pharmaceuticals, aircraft and artificial intelligence on a scale no rival other than China can match.

3. The three constraints

The fiscal arithmetic. Federal debt held by the public has risen from 72 percent of GDP in 2015 to 98 percent in 2026. Federal interest payments have climbed from 2.4 to almost 4 percent of GDP in the national accounts. The Congressional Budget Office projects debt of 120 percent of GDP in 2036. In our 10,000 fiscal simulations the median debt ratio in 2035 is 122 percent, with a one-in-four chance of exceeding 130 percent and a less than 3 percent chance of falling below 100 percent.

Labour supply. On the UN's medium projection, America's population aged 25 to 64 grows by about 3 percent between 2025 and 2035, while those of China, Japan, Germany and South Korea shrink by 8 to 13 percent. That demographic advantage depends on immigration, and net immigration fell to around zero in 2025, perhaps below. Without it, America's labour force stops growing.

The cost of building and caring. The United States spends 16.7 percent of GDP on health care, five points more than Germany, for a life expectancy six years shorter than Japan's. The cost of building factories, power lines and housing is high and slowed by permitting. The price level of the American economy is the highest in our comparison group: Germany's is 24 percent lower, China's 51 percent lower.

4. The industrial question

Manufacturing is where the American story is weakest. Factory employment fell from 17.2 million in 1995 to 12.6 million in 2026. Manufacturing output in 2026 was still about 6 percent below its 2007 peak, and output per hour in manufacturing has not risen since 2011. America's share of world manufacturing value added fell from 25 percent in 2000 to about 15 percent in 2021. The Economic Complexity Index for the United States fell from 1.34 in 2015 to 1.12 in 2024, below China, Japan, Korea, Germany and Britain.

The industrial policy of the 2020s has changed the picture of investment but not yet of output. Private spending on manufacturing construction tripled from 82 billion dollars in 2021 to 243 billion in 2024, led by semiconductor and battery plants, before falling back to an annual rate of about 173 billion in 2026. Semiconductor output has more than doubled since 2015. Total manufacturing output has not.

5. Trade, tariffs and China

The goods deficit reached about 1.2 trillion dollars in 2024 on the balance of payments basis, while the services surplus was close to 300 billion. The tariffs of 2025 lifted the average effective tariff rate from 2.4 percent to a peak of more than 20 percent; after the Supreme Court ruling of February 2026 and the Section 301 duties of July 2026 it settled at around 11 percent, the highest since the 1940s. Our tariff model estimates that a durable 11 percent regime raises the consumer price level by about 1.1 percent and lowers the long-run level of GDP by about 0.4 percent, while raising about 330 billion dollars a year in revenue.

Decoupling from China is real in the trade statistics. Imports from China fell from 483 billion dollars in 2015 to 309 billion in 2025 and to an annual rate of 287 billion in 2026. China's share of US goods imports fell from 20 percent in 2017 to 15 percent in 2024. Mexico has become America's largest supplier, followed by the European Union as a bloc. Vietnam and Taiwan gained the most, which means that much of the reallocation is a rerouting of supply chains in which China still participates.

6. America against its peers

On the GSF Competitiveness Index, the industrial composite used in our study of China, the United States ranked third of eight economies in 2015 and fifth in 2024, behind South Korea, China, Japan and Germany. Its weaknesses are cost, scale in goods and the complexity of its export basket. On the GSF Frontier Index, which adds services, intangibles and finance, the United States ranks second, behind South Korea, and it comes first in four of the eight variants that drop one pillar at a time. America's competitiveness is real but differently shaped: it lies in productivity, ideas, finance and services rather than in making and exporting goods.

7. Four worlds for 2035

The GSF Potential Growth Model, run 10,000 times, gives median potential growth of 1.9 percent a year over 2027 to 2035, with a 90 percent range of 1.1 to 2.8 percent. The chance of averaging more than 2.5 percent is about one in eight; the chance of averaging less than 1.5 percent is about one in five. The single largest source of uncertainty is productivity, and within it, artificial intelligence. In market dollars, the median American economy reaches about 47 trillion dollars in 2035, against about 30 trillion for China on the companion model of *The Scale Machine*.

Combining the growth and debt models gives four worlds for 2035. **Frontier Renewal** (strong growth, debt contained below 120 percent of GDP) has a probability of 44 percent. **Managed Drift** (weak growth but contained debt) has 27 percent. **The Fiscal Reckoning** (weak growth and rising debt) has 23 percent. **The Brilliant Debtor** (strong growth but rising debt) has 7 percent. The most likely outcome is continued American leadership; the second most likely is a slow erosion that would change the world economy more than any single shock.

The strategic shifts

Whatever world materialises, five shifts follow. Allies will be asked to pay for access to the American market and the American security umbrella, through investment pledges, purchases and alignment on China. Supply chains will continue to move from China to Mexico, Southeast Asia and India, but China will remain embedded in them. Energy importers will become more dependent on American gas and less on the Gulf. The dollar will remain dominant, but the rising cost of American debt will make its privilege more expensive to maintain. And the competition with China will be decided less in factories than in compute, capital markets and the ability to attract talent, the domains where America still leads and where its policies will determine whether it continues to do so.

How This Book Works: Data, Models and Conventions

This short guide explains the data on which the book rests, the models it uses and the conventions it follows. Full technical details are in the appendices, which also contain sensitivity analyses, sector and partner profiles, a chronology and a discussion of the reliability of American statistics in a period of disrupted data collection.

Why a companion volume

This book is designed to be read alongside *The Scale Machine*, our study of China's competitiveness from 2015 to 2035. The two books share a comparison group, a composite index, a potential growth model built on the same production function and the same family of trade models. Where the American story requires different tools, notably for public debt, services and finance, we have added them, and we say so. The aim is that a reader can put the two giants on the same scale.

The data

The analysis is built on more than fifty long statistical series for the United States and a group of comparison economies. Most start in 1995 and end in 2024, 2025 or 2026, depending on the release schedule of the source. The comparison group answers three questions. Who competes with America at the technological frontier? Germany, Japan, South Korea, Britain and France. Who is its principal rival for global economic leadership? China. Who is competing for the manufacturing investment that America wants to attract or that leaves it? Mexico, India and Vietnam.

Eight families of sources are used throughout.

1. **Federal Reserve Economic Data (FRED), Federal Reserve Bank of St. Louis.** Fifty-nine American series from the Bureau of Economic Analysis, the Bureau of Labor Statistics, the Census Bureau, the Treasury, the Office of Management and Budget, the Federal Reserve Board and the Congressional Budget Office, extracted in November 2026 and converted to annual averages. Values for 2026 are averages of the months or quarters published by mid-November.
2. **World Bank, World Development Indicators.** Eighty-five indicators for fifteen economies over 1995 to 2025, covering output, investment, trade, prices, finance, demography, education, energy and innovation.
3. **International Monetary Fund, World Economic Outlook, October 2026.** Real growth, nominal GDP in dollars and at purchasing power parity, inflation, unemployment, fiscal balances and debt, with projections to 2031.
4. **Penn World Table 11.0.** Capital stocks, employment, hours worked, human capital, the labour share and total factor productivity, at constant national prices and relative to the United States, to 2023.

5. **Atlas of Economic Complexity, Harvard Growth Lab.** Goods trade by product and partner from 1995 to 2024, the Economic Complexity Index and product complexity. For the United States we work with the 97 chapters of the Harmonized System at the two-digit level.
6. **United Nations, World Population Prospects 2024.** Population by age, with medium-variant projections to 2050.
7. **Energy sources.** The Energy Institute Statistical Review, Ember and the Energy Information Administration, mostly as compiled by Our World in Data.
8. **Official and institutional reports.** The Congressional Budget Office's *Budget and Economic Outlook: 2026 to 2036* and *Demographic Outlook*, the Budget Lab at Yale's tariff reports, the IMF's COFER data on reserves, company filings and the Lawrence Berkeley National Laboratory's study of data centre electricity.

Developments of 2025 and 2026 are drawn from official releases and from reporting by Reuters, the Associated Press, Bloomberg, the Financial Times, S&P Global, Brookings, the Committee for a Responsible Federal Budget and specialist trade publications, published between January 2025 and November 2026.

The models

Ten analytical tools are used, each explained where it first appears and documented in the appendices.

- **Growth accounting** (Chapter 4): decomposes real GDP growth into the contributions of physical capital, hours worked, human capital and total factor productivity, using a Cobb-Douglas production function with a time-varying capital share.
- **Unit labour cost and price level comparisons** (Chapter 5): combine Penn World Table labour shares with World Bank data to compare labour costs per unit of output in a common currency.
- **Revealed comparative advantage and complexity analysis** (Chapter 7): the Balassa index of revealed comparative advantage for nine sectors and 97 product chapters, with export-weighted product complexity.
- **The GSF debt-dynamics model** (Chapter 13): projects federal debt held by the public to 2035 with 10,000 random draws for the primary balance, real growth, inflation, the interest rate on new debt and the timing of a recession.
- **The GSF tariff model** (Chapter 18): estimates the long-run effects of four tariff regimes on imports, customs revenue, consumer prices and real GDP, with 10,000 draws over elasticities, pass-through and retaliation.
- **Constant market share analysis and a share-floor model** (Chapter 22): split the growth of American exports into world demand, product mix and competitiveness effects, and estimate the level at which the decline of the American share of world goods exports stabilises.

- **The GSF Competitiveness Index and the GSF Frontier Index** (Chapter 23): the first is the same composite of ten indicators in six pillars used in *The Scale Machine*; the second adds three indicators for services, intangibles and finance. Both are normalised to a 0 to 100 scale with weights from principal component analysis.
- **The GSF Potential Growth Model** (Chapter 24): a production function calibrated on the Penn World Table and projected to 2035 with UN labour force data, run 10,000 times with random draws for productivity growth, an artificial intelligence uplift, immigration, participation, investment, human capital and shocks.
- **A panel regression** (Chapter 25): estimates the drivers of productivity growth across fourteen economies over five-year periods from 1995 to 2024.
- **Four worlds for 2035** (Chapter 26): a joint simulation that runs each growth path through the debt model and classifies the outcomes into four scenarios with probabilities.

Conventions

Unless stated otherwise, dollars are current US dollars, "billion" means a thousand million and "trillion" a million million. Growth rates are annual averages computed as compound rates. "GDP" refers to gross domestic product. Purchasing power parity figures use the 2021 International Comparison Program benchmark. Fiscal figures from the Office of Management and Budget refer to fiscal years ending in September; national accounts figures to calendar years. Figures for 2026 are partial-year averages unless stated, and they will be revised.

Projections are scenario analysis, not forecasts. They are conditional on the assumptions stated, and the probabilities they produce are probabilities within the model, not statements about the world. Where our results differ from those of official forecasters, we say so and explain why.

Abbreviations

Abbreviation	Meaning
AI	Artificial intelligence
BEA	Bureau of Economic Analysis
BIS	Bank for International Settlements
BLS	Bureau of Labor Statistics
CBO	Congressional Budget Office
CHIPS Act	CHIPS and Science Act of 2022
CMSA	Constant market share analysis
COFER	Currency Composition of Official Foreign Exchange Reserves (IMF)
CPI	Consumer price index
ECI	Economic Complexity Index
EIA	Energy Information Administration
EU	European Union
FDI	Foreign direct investment
FRED	Federal Reserve Economic Data
GDP	Gross domestic product
GSF	Global Strategy Files
HS	Harmonized System of product classification
IEEPA	International Emergency Economic Powers Act
IMF	International Monetary Fund
IP	Intellectual property
IPP	Intellectual property products (national accounts)
IRA	Inflation Reduction Act of 2022
LNG	Liquefied natural gas
Mt	Million tonnes
OBBBA	One Big Beautiful Bill Act of 2025
OMB	Office of Management and Budget
PCA	Principal component analysis
PCE	Personal consumption expenditures
PCI	Product Complexity Index
PPP	Purchasing power parity
PWT	Penn World Table
R&D	Research and development
RCA	Revealed comparative advantage
REER	Real effective exchange rate
TFP	Total factor productivity
TIPS	Treasury Inflation-Protected Securities
TWh	Terawatt-hour
ULC	Unit labour cost
USMCA	United States-Mexico-Canada Agreement
USTR	Office of the United States Trade Representative
WDI	World Development Indicators
WPP	World Population Prospects (United Nations)

PART I

Foundations

What competitiveness means for the economy at the frontier, what thirty years of data show, and how the decade from 2015 to 2025 changed the questions that matter.

CHAPTER 1

What Competitiveness Means for the Frontier Economy

A word with two meanings

Few words in economics are used as loosely as competitiveness. In political speeches it usually means the ability to sell more goods abroad than one buys, so that a trade deficit becomes proof of decline. In business it means the capacity of a firm to win customers at a profit. In the reports of international organisations it means the set of institutions, policies and factors that determine an economy's productivity. These meanings overlap, but they are not the same, and the United States is the economy for which the gap between them is widest.

By the first definition, America has been losing for half a century. It has run a trade deficit in goods every year since 1976, and in 2024 that deficit reached about 1.2 trillion dollars on the balance of payments basis. By the second and third definitions, America is the most successful economy in the world. Its companies dominate the global rankings of market value, its workers produce more per hour than those of almost any other large economy, and the gap between American incomes and those of Europe and Japan has widened, not narrowed, over the past fifteen years.

This book uses a definition that tries to hold both truths. **Competitiveness is the capacity of an economy to sell, attract and lead in world markets while raising the living standards of its people.** The four verbs matter. To sell is to win market share in goods and services. To attract is to draw capital, talent and firms from elsewhere. To lead is to set the technological, financial and regulatory standards that others follow. And to raise living standards is the test that keeps the other three honest: an economy that gains market share by cutting wages, or attracts capital only because it pays high interest on a growing debt, is not competitive in any sense worth having.

Why the frontier changes the rules

Most studies of competitiveness are written about economies that are catching up. For them, the questions are familiar: can they absorb foreign technology, mobilise savings, move workers from farms to factories and climb the ladder of product complexity? The answers can be measured by convergence: how fast does the gap with the leader close?

The United States has no leader to converge to. It is the frontier, and economies at the frontier compete differently in at least four ways.

First, growth at the frontier depends on invention rather than imitation. A catching-up economy can grow at 6 or 8 percent a year by adopting what already exists. A frontier economy must create what does not yet exist, and the historical speed limit for doing so

has been around 1 to 2 percent a year in productivity. Small changes in that rate, a quarter of a point here or there, have enormous consequences when compounded.

Second, the frontier economy specialises in the early, high-value stages of the product cycle: design, research, finance, branding and the first production runs of new technologies. As products mature, production moves to lower-cost locations. A trade deficit in mature manufactured goods is therefore partly a symptom of success at the frontier, not of failure. But only partly: if the frontier economy loses the capacity to manufacture altogether, it may lose the ability to invent the next generation of products, because much innovation happens on the factory floor.

Third, the frontier economy issues the world's reserve assets. Since 1945 that has meant the dollar and the Treasury bond. Foreign demand for safe American assets allows the United States to borrow cheaply and to run persistent current account deficits. That privilege is also a constraint: it keeps the dollar stronger than it would otherwise be, which penalises American manufacturing exporters.

Fourth, the frontier economy faces a different kind of competitor. For China or Vietnam, competitors are other low-cost producers. For the United States, the most dangerous competitor is an economy that combines scale with a capacity to reach the frontier itself. Britain faced that challenge from Germany and the United States after 1870. The United States faced it from Japan in the 1980s and faces it from China today.

Five engines and three constraints

To organise the evidence, this book uses a simple framework, shown in Figure 1.1. American competitiveness is driven by five engines and limited by three constraints.

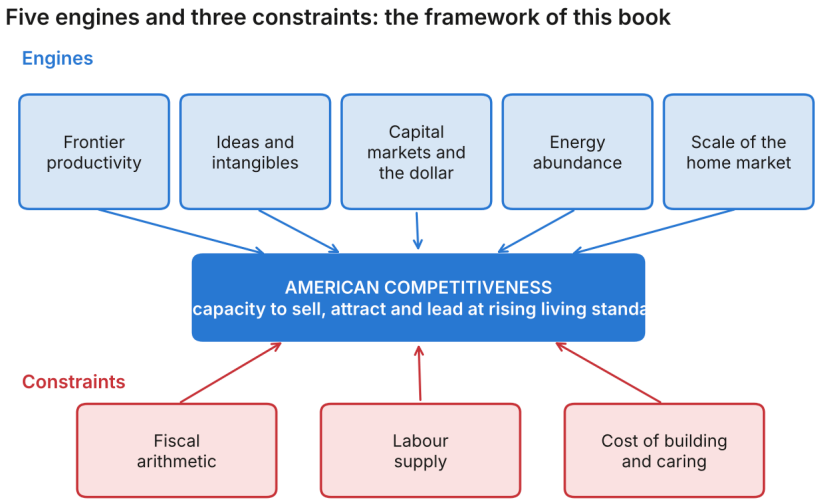


Figure 1.1. Five engines and three constraints: the framework of this book

The five engines are:

1. **Frontier productivity.** The efficiency with which American firms combine capital, labour and ideas. It is measured by output per hour and by total factor productivity, and it is the ultimate source of rising living standards.
2. **Ideas and intangibles.** Research and development, software, data, patents, brands and organisational know-how. These now account for about 40 percent of American business investment, and they are the assets in which the United States has the clearest global lead.
3. **Capital markets and the dollar.** The deepest equity and bond markets in the world, the dominant reserve currency and an ecosystem of venture capital that turns ideas into companies faster than anywhere else.
4. **Energy abundance.** Since the shale revolution, the United States has moved from being the largest energy importer to being a net exporter, with natural gas prices a fraction of those in Europe and Asia.
5. **The scale of the home market.** A unified market of 342 million people with high incomes, a common language and a common legal system, which allows firms to spread the fixed costs of innovation across many customers.

The three constraints are:

1. **The fiscal arithmetic.** Federal debt has reached about 100 percent of GDP and the government is running deficits of 6 percent of GDP outside of recession. Rising interest costs reduce the room for public investment and increase the risk that the cost of capital for the whole economy rises.
2. **Labour supply.** The native-born population is ageing and fertility is well below replacement. Growth of the labour force depends increasingly on immigration, which has become the most contested issue in American politics.
3. **The cost of building and caring.** The United States pays far more than other rich economies for health care, higher education, infrastructure and housing, and it takes far longer to build power lines, factories and transit systems. These costs reduce the share of national income available for productive investment.

Neither list is exhaustive, and the engines interact with the constraints. Energy abundance helps to contain the cost of building; the dollar's role makes the fiscal arithmetic easier; immigration is both a constraint and an engine, because immigrants found a disproportionate share of American technology firms. But the framework helps to keep the analysis honest: every chapter of Parts II and III measures one engine or one constraint, and Parts IV and V ask how they combine.

Competitiveness at three levels

The word competitiveness can refer to firms, to industries or to whole economies, and the three levels tell different stories in the American case.

At the level of **firms**, the United States has never looked stronger. Of the ten largest companies in the world by market value in 2026, at least eight were American, most of them technology firms whose revenues are global. American firms lead in cloud computing, semiconductor design, frontier artificial intelligence models, pharmaceuticals, aircraft engines, payments and entertainment.

At the level of **industries**, the picture is mixed. America leads in software and computer services, in research-intensive pharmaceuticals and medical devices, in aerospace, in oil and gas and in agriculture. It has lost ground in consumer electronics, shipbuilding, steel, textiles and, increasingly, cars, where China has become the world's largest exporter. It is trying to rebuild capacity in semiconductors, batteries and critical minerals with large public subsidies.

At the level of the **economy as a whole**, the evidence is the subject of this book. The headline measures of income and productivity show the United States pulling away from other rich economies. The measures of industrial capability and export performance show it slipping. And the measures of financial sustainability show risks accumulating.

Table 1.1. Three levels of competitiveness and how this book measures them

Level	Question	Main measures in this book	Chapters
Firm	Can American firms win customers at a profit?	Market capitalisation, profits, intellectual property receipts, R&D	8, 9, 11, 12
Industry	Which sectors gain or lose world market share?	Revealed comparative advantage, world export shares, constant market share analysis	6, 7, 10, 22
Economy	Can the economy sell, attract and lead while raising living standards?	Productivity, unit labour costs, income per person, composite indices, debt sustainability	2, 4, 5, 13, 23, 24

Source: Global Strategy Files.

Why the window from 2015 to 2035

The book covers two decades centred on 2025. The choice is not arbitrary.

The decade from 2015 to 2025 was the period in which the consensus that had governed American economic policy since the 1980s broke down. In 2015 Washington still largely believed in free trade, engagement with China, light industrial policy and fiscal restraint as a long-term goal. By 2025 every element had been reversed: tariffs at their highest level since the 1930s, a strategic rivalry with China across technology and security, hundreds of billions of dollars of subsidies for semiconductors, batteries and clean energy, and deficits of 6 percent of GDP without a recession. The same decade saw a pandemic, the fastest inflation in forty years, the rise of generative artificial intelligence and a revolution in American energy. Chapter 3 reviews these shocks.

The decade from 2025 to 2035 is the period in which the consequences will become visible. The investments in artificial intelligence made in 2024 to 2026 will either raise productivity or prove to have been one of the great misallocations of capital in history. The debt ratio will either stabilise or cross into territory never seen in peacetime. The demographic transition will reduce the growth of the working-age population in every rival economy, and America's own advantage will depend on immigration choices made now. And the compe-

tition with China will settle into a durable pattern, whether a managed coexistence or a deeper division of the world economy.

What competitiveness is not

Three common errors are worth naming at the outset.

The first is to equate competitiveness with the trade balance. A trade deficit reflects the gap between what an economy saves and what it invests. America runs a deficit because it invests more than it saves, which in turn reflects both its attractiveness to foreign capital and the low saving of its government and households. A country can be highly competitive and run a deficit, as America did in the 1990s, or uncompetitive and run a surplus, as many economies do when domestic demand collapses. The trade balance is evidence, but it is not the verdict.

The second error is to treat competitiveness as a zero-sum contest between nations, as if one country's gain were another's loss. In most of what matters for living standards, notably productivity, gains in one economy raise living standards elsewhere through trade and the diffusion of ideas. The zero-sum element is real in a few domains: shares of particular markets, the location of strategic industries and the setting of global standards. These domains have become more important in the age of rivalry with China, and this book gives them their due. But the main question for the American economy is whether it can keep raising its own productivity, not whether it can prevent others from raising theirs.

The third error is to confuse competitiveness with cheapness. Low wages and a weak currency can make an economy's exports cheaper, but they make its people poorer. The most competitive economies in the world, including the United States, Switzerland and Germany for most of its history, have high wages and strong currencies. What they offer the world is not cheapness but things that others cannot easily make.

In focus: frontier economies in history

The United States is not the first economy to sit at the frontier, and the experience of its predecessors offers both comfort and warning.

Britain led the world economy from the late eighteenth century until around 1900. It invented the factory system, dominated world trade in manufactured goods and made sterling the currency of international finance. Its industrial lead began to erode after 1870, when Germany and the United States, larger and better organised for the new industries of chemicals, electricity and steel, overtook it. Yet Britain remained the centre of world finance for another half century, and sterling remained a major reserve currency until the 1960s. Its decline was relative, slow and in some ways comfortable for its elites. It was also, eventually, profound: Britain's share of world manufacturing fell from about a quarter in 1880 to less than a tenth by 1950.

The Netherlands led an earlier age, in the seventeenth century, through shipping, trade and finance. Its decline came when larger states, Britain and France, copied its institutions

and mobilised greater resources, and when the burden of public debt from repeated wars grew heavy.

Japan approached the frontier in the 1980s, overtaking the United States in productivity in several manufacturing industries and accumulating vast external assets. A financial bubble, its collapse and a rapidly ageing population then stopped the convergence, and Japan's income per person has since fallen from about 80 percent of the American level in the mid-1990s to about 63 percent.

The common thread is that frontier positions are lost not through a single defeat but through the slow accumulation of disadvantages in scale, demography and public finance, while a rival builds capacity in the industries of the next age. America's predecessors lost their lead when they stopped investing in the new industries and when their fiscal burdens grew. Both risks are present today. So are the strengths that distinguish America from its predecessors: a larger and younger population than any rich rival, a capacity for reinvention that has repeatedly confounded predictions of decline, and leadership in the general-purpose technology of the age.

Table 1.2. Frontier economies and their challengers

Leader	Period of leadership	Main challenger	Source of challenge	What eroded the lead
Netherlands	About 1600 to 1720	Britain, France	Larger states copying Dutch institutions	War debts, smaller scale
Britain	About 1780 to 1900	Germany, United States	Scale and the second industrial revolution	Slow adoption of new industries, war costs
United States	1900 to present	Japan (1980s), China (2010s to present)	Manufacturing efficiency, then scale plus technology	Under examination in this book

Source: Global Strategy Files, drawing on economic history literature.

How the book is organised

The book has five parts. Part I sets out the foundations: the data portrait of thirty years (Chapter 2) and the shocks of the decade 2015 to 2025 (Chapter 3). Part II measures the five engines: productivity and growth (Chapter 4), costs and the dollar (Chapter 5), industrial depth (Chapter 6), capability and comparative advantage (Chapter 7), innovation (Chapter 8), artificial intelligence and compute (Chapter 9), energy (Chapter 10), services and intangibles (Chapter 11) and finance and the dollar (Chapter 12). Part III measures the constraints: debt (Chapter 13), demography and labour (Chapter 14), the cost of health, education and housing (Chapter 15), inequality and the political economy of discontent (Chapter 16) and infrastructure (Chapter 17). Part IV examines the contest: trade and tariffs (Chapter 18), China (Chapter 19), allies and nearshoring (Chapter 20), industrial policy (Chapter 21), market shares (Chapter 22) and the composite indices (Chapter 23). Part V looks to 2035: the potential growth model (Chapter 24), the drivers of productivity (Chapter 25), four worlds (Chapter 26) and the strategic shifts they will force on the rest of the world (Chapter 27). A conclusion, an epilogue of ten questions for 2035 and twenty appendices complete the book.

In focus: competitiveness and national security

Since 2018, American policymakers have increasingly framed competitiveness in terms of national security. The reasoning is that economic strength underpins military power, that dependence on a rival for critical goods creates vulnerability, and that leadership in technologies such as semiconductors and artificial intelligence confers strategic advantage. This framing has justified tariffs on steel and aluminium under national security law, export controls on chips, subsidies for domestic production and restrictions on foreign investment.

The security framing changes how competitiveness is measured. An economist focused on welfare asks whether an economy produces what it can make most efficiently and buys the rest. A strategist asks whether the economy can produce what it needs in a crisis, whether it controls the chokepoints of critical supply chains and whether it can deny those chokepoints to adversaries. The two views often conflict: the efficient solution of buying cheap batteries or rare earths from China is the vulnerable solution from a security standpoint.

This book uses both lenses. Most of its measures, of productivity, costs, trade and growth, come from the economic tradition. But it also asks, in Chapters 6, 19 and 21, where American dependence creates vulnerability and whether industrial policy is reducing it. The answer, broadly, is that the security framing has identified real vulnerabilities, in critical minerals, advanced chip manufacturing and defence production, and that the policies adopted have begun to address some of them at a high cost, while creating new economic costs through tariffs and uncertainty.

Strategic shifts: what this means for decision makers

For decision makers outside the United States, the framework of this chapter implies a change in how American competitiveness should be read. The headline indicators that dominated the debate of the 2010s, the trade deficit and the loss of factory jobs, are poor guides to the strength of the American economy. A firm deciding whether to compete with American rivals, a government negotiating with Washington or an investor allocating capital should look instead at three things: the productivity of American firms at the frontier, the cost structure that surrounds them and the policies that shape both.

Three shifts follow. First, American strength is increasingly concentrated in activities that do not show up in goods trade: software, intellectual property, finance and the design of products made elsewhere. Partners that measure their relationship with the United States by the goods balance alone will misjudge their position. Second, the security framing of economic policy is durable. Whatever the outcome of particular elections, American policy will continue to treat semiconductors, critical minerals, artificial intelligence and defence production as strategic, which means more controls, more subsidies and more pressure on partners to align. Third, the reliability of American policy has become a variable in its own right. Firms that once treated American rules as a stable background must now

price policy risk, through scenario planning, diversified supply chains and contractual protections, as they would in an emerging market.

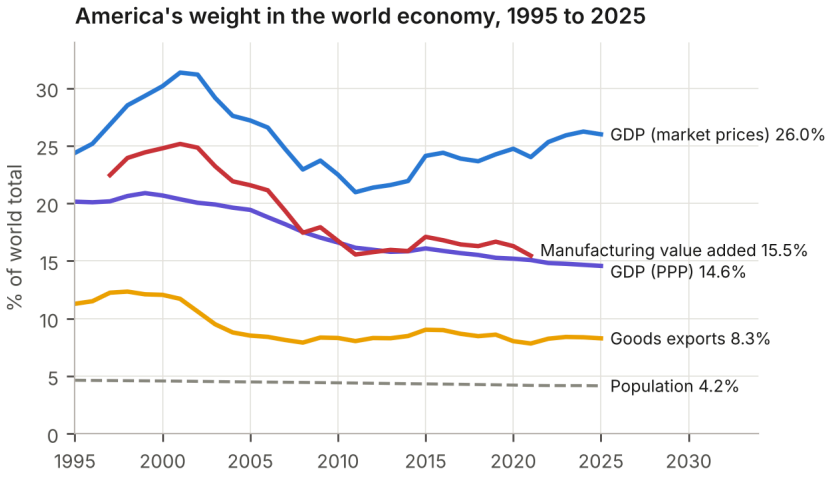
CHAPTER 2

Thirty Years in Numbers

The arc of a lead

Thirty years ago, at the start of the period covered by our data, the United States accounted for about a quarter of world output at market exchange rates. It still does. That simple fact hides a remarkable journey. American output rose to 30 percent of the world total in 2000, at the peak of the technology boom and of the strong dollar, fell to 22.5 percent in 2010 as China, the commodity exporters and a weaker dollar reshaped the world economy, and climbed back to 26 percent in 2024. Few observers in 2010 would have predicted that recovery. Many expected the American share to keep sliding as China converged. Instead, the 2010s and early 2020s turned out to be a period of American outperformance against almost every other large economy except China and India.

Figure 2.1 shows the American share of world totals on five measures. The divergence between them is the first lesson of the data.



Source: World Bank WDI; GSF calculations

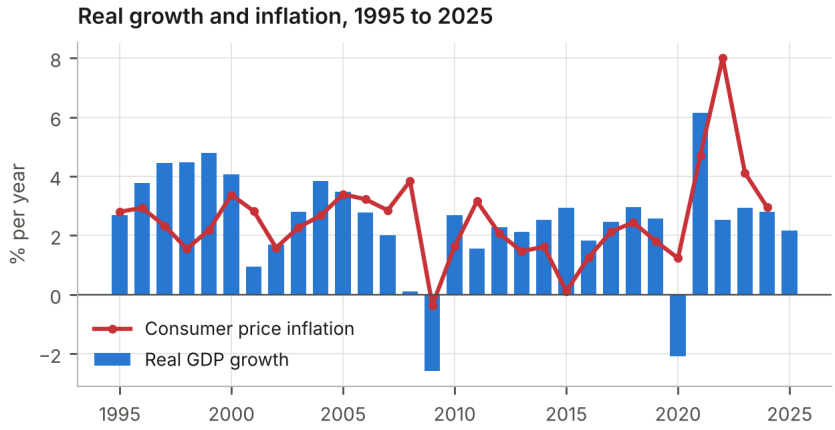
Figure 2.1. America's weight in the world economy, 1995 to 2025

At market prices, the American share of world GDP is roughly where it was in 1995. At purchasing power parity, which values output at common prices and so removes the effect of exchange rates and price levels, the American share has fallen from about 20 percent to under 15 percent. The difference reflects two things: the rise of large emerging economies, whose output is worth more at common prices than at market rates, and the high and rising price level of the United States itself, a theme we return to in Chapter 5.

On the two measures most associated with industrial strength, the decline is steeper. America's share of world goods exports fell from 12 percent in 2000 to just over 8 percent in 2024. Its share of world manufacturing value added fell from about 25 percent in 2000 to about 15 percent in 2021, the last year for which the World Bank publishes the American figure. Meanwhile China's share of world manufacturing rose from under 10 percent in 2005 to 28 percent in 2024. The world's factory floor has moved, and the world's income has not followed it in the same proportion.

Growth and prices

Over the full thirty years, real GDP grew by an average of about 2.5 percent a year. The average hides three distinct periods (Figure 2.2).



Source: World Bank WDI

Figure 2.2. Real growth and inflation, 1995 to 2025

From 1995 to 2007, growth averaged 3.2 percent, powered first by the information technology boom of the late 1990s and then by a housing and credit expansion that ended in the financial crisis. From 2008 to 2019 it averaged only 1.8 percent: the deepest recession since the 1930s was followed by the slowest recovery of the postwar era, held back by household debt repair, fiscal austerity after 2011 and weak productivity growth. From 2020 to 2025, despite the pandemic recession, growth averaged well above the previous decade, with 3.3 percent a year from 2021 to 2025, helped by enormous fiscal support, a surge in business formation and a revival of productivity.

Inflation followed a different rhythm. For a quarter century it was low and stable, averaging a little over 2 percent. The pandemic and its aftermath broke that pattern: consumer price inflation reached 8 percent in 2022, the highest since 1981, before falling back to around 3 percent. In 2026 the war with Iran pushed energy prices sharply higher, and by September consumer prices were 3.7 percent above their level a year earlier. America enters the second half of the 2020s with inflation that has exceeded the Federal Reserve's tar-

get for five consecutive years, a fact with consequences for interest rates, the debt and the dollar that Chapters 12 and 13 explore.

A dashboard of twenty-two indicators

Table 2.1 sets out twenty-two indicators for the American economy in 1995, 2005, 2015 and the latest available year. Read together, they sketch the shape of the economy.

Table 2.1. The United States in twenty-two indicators, 1995 to latest

Indicator	1995	2005	2015	Latest
Real GDP growth (%)	2.7	3.5	2.9	2.2
GDP, current US$ trillion	7.6	13.0	18.3	30.8
GDP per capita, PPP, constant 2021 int. $ thousand	47.2	59.6	64.4	76.9
Gross capital formation (% GDP)	21.3	23.4	21.4	21.5
Household consumption (% GDP)	65.0	67.3	67.2	67.9
Gross saving (% GDP)	18.8	18.1	19.7	16.6
Manufacturing value added (% GDP)	n/a	13.0	11.6	10.5 (2021)
Services value added (% GDP)	n/a	74.0	76.4	76.3 (2021)
Exports of goods and services (% GDP)	10.6	10.0	12.4	11.0
Imports of goods and services (% GDP)	11.8	15.7	15.3	14.0
Current account balance (% GDP)	-1.5	-5.6	-2.1	-3.8
FDI net inflows (% GDP)	0.9	1.1	2.8	1.0
R&D expenditure (% GDP)	n/a	2.5	2.8	3.4 (2023)
High-tech share of manufactured exports (%)	n/a	n/a	21.4	24.3
Market capitalisation (% GDP)	91.0	130.4	137.0	224.0
Unemployment rate (%)	5.7	5.1	5.3	4.2
Population, million	266.3	295.5	321.8	341.8
Population aged 65 and over (%)	12.4	12.1	14.3	18.4
Fertility rate (births per woman)	2.0	2.1	1.8	1.6
Health expenditure (% GDP)	n/a	14.6	16.4	16.7 (2023)
Electricity use per capita (MWh)	12.7	13.7	12.9	13.1
CO2 emissions (Gt)	5.3	5.9	5.1	4.6

Source: World Bank WDI, latest available year (2024 or 2025 unless shown)

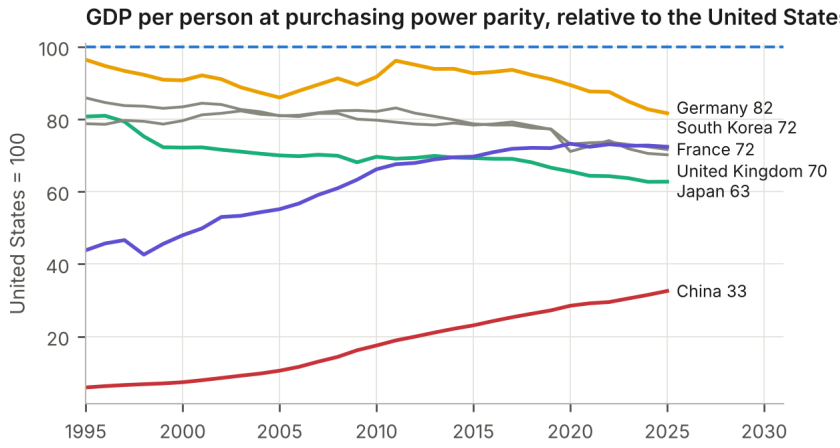
Several features stand out. The United States is a consumption economy: household consumption accounts for 68 percent of GDP, compared with about 40 percent in China and 50 to 55 percent in Germany and Japan. It is a low-saving economy: gross saving has fallen from about 19 percent of GDP to under 17 percent, while investment has held at about 21 percent. The gap between the two is the current account deficit, which stood at 3.8 percent of GDP in 2025.

It is a services economy: services account for more than three-quarters of value added, manufacturing for about 10.5 percent. It is a relatively closed economy for its size: exports of goods and services amount to only 11 percent of GDP, among the lowest ratios in the world, because the home market is so large. And it is an increasingly financial economy: the market value of listed companies has risen from 91 percent of GDP in 1995 to 224 percent in 2025.

The demographic indicators tell their own story. The population grew by 75 million over thirty years, to 342 million. The share aged 65 and over rose from 12 to 18 percent, and the fertility rate fell from about 2.0 to 1.6 births per woman. The United States remains younger than Europe, Japan or China, but it is ageing.

The great divergence with Europe and Japan

The most striking change of the past fifteen years is the widening gap between the United States and other rich economies. Figure 2.3 shows GDP per person at purchasing power parity in five economies relative to the American level.

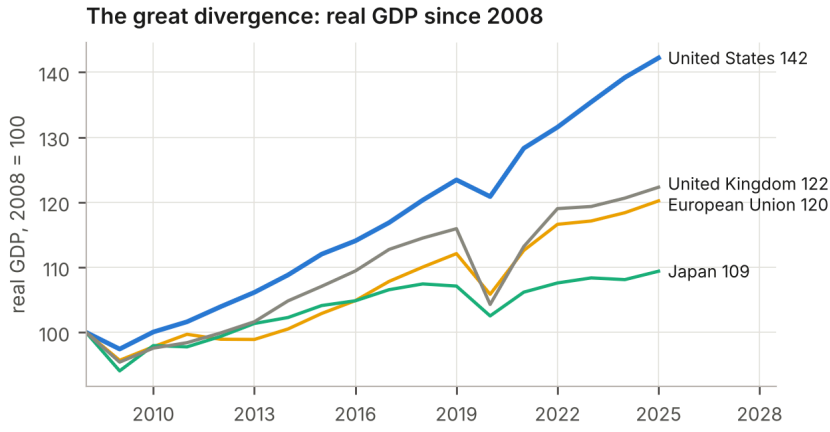


Source: World Bank WDI, constant 2021 international dollars

Figure 2.3. GDP per person at purchasing power parity, relative to the United States

In 1995 Germany's income per person was 96 percent of the American level; in 2024 it was 83 percent. France fell from 86 to 72 percent, Britain from 79 to 71 percent and Japan from 81 to 63 percent. Only South Korea and China converged, Korea from 44 to 73 percent and China from 6 to 32 percent.

Figure 2.4 shows the same divergence in real output since 2008. The American economy is 42 percent larger in real terms than it was before the financial crisis. The European Union is 20 percent larger, Britain 22 percent, Germany 15 percent and Japan only 9 percent.



Source: World Bank WDI, constant 2015 dollars

Figure 2.4. The great divergence: real GDP since 2008

Several explanations compete for this divergence, and they are not mutually exclusive. American productivity growth has been faster, especially in technology-intensive services. American population growth, driven by immigration, has been faster. American fiscal policy has been more expansionary, particularly after 2020. Europe suffered a sovereign debt crisis in 2010 to 2012 and an energy shock in 2022 that America, as an energy exporter, avoided. And American firms captured a disproportionate share of the rents from the digital economy, including from European and Japanese customers.

It is worth noting what the divergence is not. It is not mainly a story of hours worked: Americans do work longer hours than Europeans, but that gap has been roughly stable. It is not a story of exchange rates, since the comparison is at purchasing power parity. And it is not a story of inequality alone: median household income in the United States rose by 17 percent in real terms between 2015 and 2025, a faster increase than in most European economies over the same period.

Comparing the peer group

Table 2.2 compares the United States with its peers on six measures in 2024.

Table 2.2. The United States and its peers, 2024

Economy	GDP, US$ tn	GDP per capita, PPP, $000	Manufacturing, % GDP (latest)	R&D, % GDP (2022)	Current account, % GDP	Aged 65+, %
United States	29.30	75.7	10.5	3.49	-4.1	17.9
China	18.73	23.8	24.8	2.49	2.5	14.7
Japan	4.19	47.5	18.8	3.40	4.6	29.8
Germany	4.69	62.7	18.0	3.07	5.9	23.2
South Korea	1.88	55.1	26.6	4.85	5.3	19.3
United Kingdom	3.70	53.4	8.0	2.75	-3.0	19.5
France	3.16	54.8	9.6	2.22	-0.3	22.1
India	3.76	9.4	13.1	n/a	-0.9	7.1

Source: World Bank WDI

The United States has the largest economy at market prices and the highest income per person among the large economies. Its manufacturing share of GDP is the lowest in the group except for Britain and France. Its research intensity is high but below South Korea's. Its current account deficit is the largest relative to GDP among the rich economies, while Germany, Japan, Korea and China run surpluses. And its population is younger than those of Germany, Japan, Korea, France and Britain.

America in ratios

Ratios are often more revealing than levels, because they show how the structure of the economy is changing. Table 2.3 brings together twelve ratios from American official sources.

Table 2.3. America in ratios, 1995 to 2026

Ratio	1995	2005	2015	Latest
Real GDP per person, chained 2017 $	42,811	54,014	58,363	71,273 (2026)
Federal debt held by the public, % GDP	47.7	35.3	72.4	98.0 (2026)
Federal deficit, % GDP	-2.1	-2.4	-2.4	-5.8 (2025)
Net interest paid by the federal government, % GDP	4.61	2.64	2.35	3.96 (2026)
R&D investment, % GDP	1.59	1.72	2.11	2.93 (2026)
Intellectual property investment, % GDP	2.97	3.63	4.26	5.79 (2026)
Corporate profits after tax, % GDP	6.6	10.2	10.1	12.7 (2026)
Exports of goods and services, % GDP	10.6	10.0	12.4	11.4 (2026)
Imports of goods and services, % GDP	11.8	15.7	15.3	14.4 (2026)
Manufacturing jobs, % of payrolls	14.7	10.6	8.7	7.9 (2026)
Prime-age (25 to 54) participation rate, %	83.5	82.8	80.9	83.7 (2026)
Real median household income, 2024 $ thousand	67.0	72.8	74.6	87.5 (2025)

Source: FRED, St. Louis Fed (BEA, BLS, Census, Treasury series); GSF calculations. 2026 values are averages of the months available.

Six trends deserve emphasis. Real GDP per person rose from about 43,000 dollars (in 2017 prices) in 1995 to over 71,000 in 2026, an increase of two-thirds. Federal debt held by the public doubled relative to GDP, from 48 percent to 98 percent, with almost all the increase concentrated in two episodes: the financial crisis and the pandemic. Investment in intellectual property products nearly doubled as a share of GDP, from 3.0 to 5.8 percent, the clearest statistical signature of the shift to an economy of ideas. Corporate profits after tax nearly doubled as a share of GDP, from 6.6 to 12.7 percent. Manufacturing's share of pay-

roll employment halved, from 14.7 to 7.9 percent. And prime-age labour force participation, after falling sharply between 2000 and 2015, recovered to 83.7 percent in 2026, close to its all-time high.

What the numbers do not show

Statistics have limits, and three are particularly important for an economy at the frontier.

The first is the measurement of quality and new products. Much of the value created by the digital economy, from search engines to navigation apps, is provided free of charge to users and is poorly captured in GDP. Conversely, some of the measured output of finance and health care may reflect prices more than real services. Economists disagree about the net effect, but most studies suggest that GDP understates the gains from digital technologies by a modest amount, not enough to change the broad picture.

The second is the treatment of multinationals. American companies book large profits in low-tax jurisdictions such as Ireland, which inflates Irish GDP and deflates American exports of services and intellectual property. The American trade deficit is somewhat overstated, and its exports of high-value services understated, as a result.

The third is the disruption of data collection in 2025 and 2026. A federal government shutdown in late 2025 delayed or cancelled several statistical releases, budget cuts reduced survey samples at the Bureau of Labor Statistics, and lower response rates have increased the margin of error on employment and price data. The figures for 2025 and 2026 in this book are the best available, but they will be revised, and some revisions may be large.

In focus: can we trust the American numbers?

American economic statistics have long been considered the gold standard. They are produced by professional agencies with legal independence, published on a fixed calendar and revised according to transparent rules. That reputation has come under pressure. In August 2025 the President dismissed the Commissioner of the Bureau of Labor Statistics after a weak employment report, an unprecedented step. Response rates to household and business surveys have fallen for a decade. And the delays caused by shutdowns have left gaps in several series.

For the purposes of this book, three conclusions follow. First, the long-run trends documented here rest on many independent sources, from tax records to company filings to international data, and are not in doubt. Second, the precise figures for 2025 and 2026 should be treated with more caution than usual, and we flag them as partial or provisional. Third, the integrity of statistics is itself an element of competitiveness: investors pay a premium for transparency, and an erosion of trust in official data would raise the cost of capital for the whole economy.

In focus: the United States in ten numbers

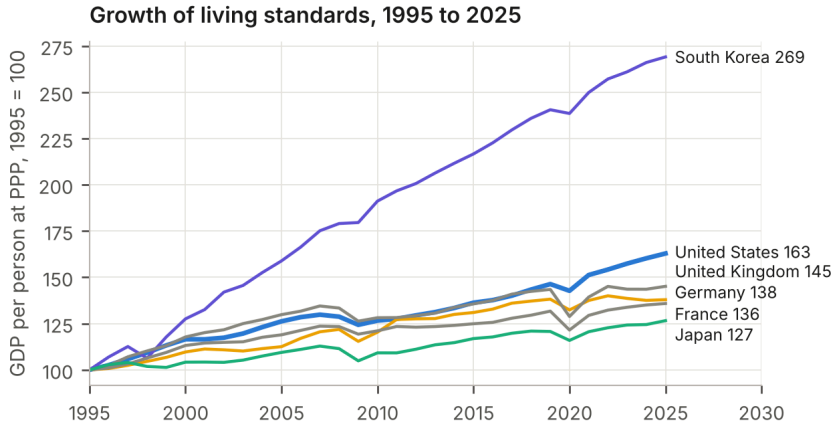
Table 2.4. The United States in ten numbers, latest available year

Measure	Value	Rank or comparison
GDP at market prices, 2025	30.9 trillion dollars	Largest in the world, about 26% of world total
GDP per person at PPP, 2024	About 77,000 international dollars	Highest among large economies
Population, 2025	342 million	Third largest after India and China
Labour productivity growth, 2019 to 2025	2.3% a year	Fastest among the rich economies in our sample
R&D spending, 2023	3.4% of GDP	Largest absolute spender, ahead of China
Share of world IP royalty receipts, 2024	About 30%	Largest in the world
Oil production, 2024	About 10,000 TWh	Largest producer in the world
Federal debt held by the public, 2026	98% of GDP	Highest since 1946
Health spending, 2023	16.7% of GDP	Highest among large economies
Share of world goods exports, 2024	8.4%	Second after China

Source: World Bank WDI; FRED; IMF WEO; Our World in Data; GSF calculations.

In focus: thirty years of living standards

Figure 2.5 shows the growth of GDP per person at purchasing power parity since 1995 in six economies, indexed to 100 in 1995.



Source: World Bank WDI, constant 2021 international dollars

Figure 2.5. Growth of living standards, 1995 to 2025

American real income per person rose by 63 percent over thirty years. Among the rich economies of our comparison group, only South Korea did better, nearly tripling its income per person as it converged toward the frontier. Britain rose by 45 percent, Germany by 38 percent, France by 36 percent and Japan by 27 percent. The comparison is striking because the United States started from the highest level: its income per person grew faster than that of economies that were poorer and therefore had more room to catch up. That is the clearest single measure of the strength of the American frontier engine over the period.

The gap also has a timing. Until the financial crisis, American growth was only moderately faster than that of Europe. The divergence opened after 2008, when the euro area endured a second recession and a debt crisis, and widened again after 2020, when the American recovery from the pandemic was faster and the European economy was hit by the energy shock of 2022. Whether the divergence continues in the next decade depends on whether American productivity growth stays ahead, the central question of Part V.

In focus: what America produces

The American economy is often described as a services economy, and the description is accurate: services account for about three-quarters of value added. But the services are of very different kinds. The largest sectors by value added are finance, insurance and real estate; professional and business services; government; health care and social assistance; and wholesale and retail trade. Manufacturing accounts for about a tenth of value added, construction for about 4 percent, mining including oil and gas for about 1 to 2 percent and agriculture for about 1 percent.

The fastest growing sectors since 2015 have been information, professional services and health care, while the share of manufacturing, retail and agriculture has fallen. Two features distinguish the American structure from that of other rich economies. The first is the weight of high-value business services, technology and finance, which reflects the global reach of American firms. The second is the weight of health care, which reflects the high prices and intensive use of medical services examined in Chapter 15. The first is a source of competitive strength; the second is largely a source of cost.

Strategic shifts: what this means for decision makers

The thirty-year record carries a clear message for strategy: bet on American dynamism, but not on American stability. The data show an economy that recovers from shocks faster than its peers, reallocates resources quickly and keeps pulling ahead of Europe and Japan in output per person. They also show recurring episodes of financial excess, sharp swings in policy and a slowly worsening fiscal position.

For firms, the implication is that the American market will remain the largest and most profitable among the rich economies, and that a strong position there is a precondition for global leadership in most technology-intensive industries. For investors, the divergence documented in this chapter explains the persistent premium of American equities over those of other rich economies, but also warns against extrapolating it indefinitely: the premium rests on profit growth that depends partly on low taxes, low interest costs and concentrated markets, all of which can change. For governments of other rich economies, the American record poses an uncomfortable question. The gap in output per person has widened mainly because of faster productivity growth in a few sectors, notably technology, and closing it would require reforms of capital markets, regulation and research systems rather than more industrial subsidies.

CHAPTER 3

The Decade That Changed the Question, 2015 to 2025

Two questions, ten years apart

In 2015 the central question about the American economy was why it was growing so slowly. Seven years after the financial crisis, growth was stuck at around 2 percent, productivity growth had fallen to its weakest pace since the 1970s, interest rates were close to zero and economists debated whether the country had entered a period of "secular stagnation" in which demand would be chronically weak. The answer most commonly given in Washington was more of the same policies: trade agreements such as the Trans-Pacific Partnership, engagement with China, gradual fiscal consolidation and patient monetary policy.

By 2025 the question had changed entirely. The economy was running above its potential, productivity growth had revived, interest rates were the highest in two decades and the debate was about overheating, not stagnation. The policy consensus had been reversed on every point: tariffs instead of trade agreements, rivalry instead of engagement with China, deficits of 6 percent of GDP in peacetime, hundreds of billions of dollars of industrial subsidies and immigration falling to zero. The question was no longer whether America could grow, but whether its growth could be sustained without inflation, without a debt crisis and without a fracture of the world trading system that America itself had built.

This chapter reviews the six shocks that produced that change. Table 3.1 summarises the decade in ten numbers.

Table 3.1. A decade in ten numbers, 2015 to 2025

Measure	Value (or 2015)	Comparison (euro area / EU, or 2025)
Real GDP, cumulative growth (%)	27.4	16.8
Real GDP per person, cumulative growth (%)	20.0	
Labour productivity, nonfarm business (% cumulative)	21.0	
Manufacturing employment (thousand, change)	324	
Total payrolls (thousand, change)	16,638	
Debt held by the public (points of GDP, change)	24.0	
Goods and services deficit (US$ bn, 2015 and 2025)	-472	-932
Imports from China (US$ bn, 2015 and 2025)	483	309
Imports from Mexico (US$ bn, 2015 and 2025)	296	534
Real median household income (2024 $, 2015 and 2025)	74,590	87,460

Source: FRED (BEA, BLS, Census, Treasury); World Bank WDI for the European Union. GSF calculations

Shock one: the America First turn

The first shock was political. The election of 2016 brought to power an administration that rejected the bipartisan consensus on trade. In 2017 the United States withdrew from the Trans-Pacific Partnership. In 2018 it imposed tariffs on steel and aluminium on national se-

curity grounds under Section 232 and, under Section 301, tariffs of 10 to 25 percent on about 370 billion dollars of imports from China. China retaliated, and the trade war ended in the Phase One agreement of January 2020, under which China committed to purchase an additional 200 billion dollars of American goods and services over two years, a commitment it fell far short of meeting.

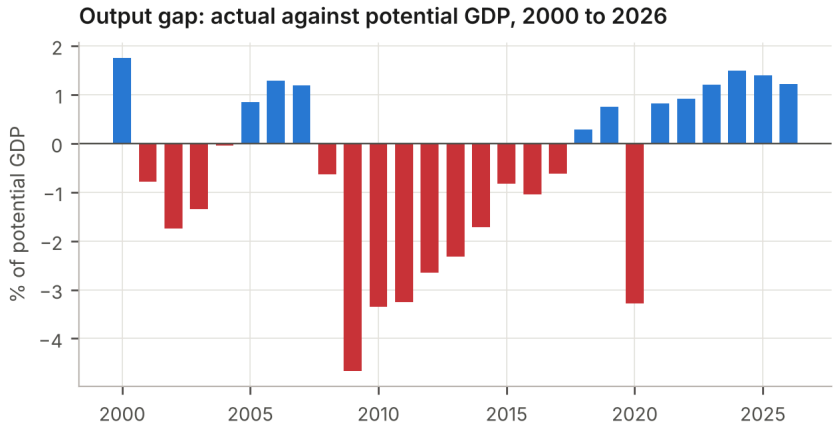
The same administration cut the corporate tax rate from 35 to 21 percent in the Tax Cuts and Jobs Act of 2017, a change intended to attract investment and bring profits home from abroad. The evidence suggests that the cut increased domestic investment modestly and led to large repatriations of foreign earnings, most of which went into share buybacks. It also widened the deficit at a time of full employment.

The turn was not reversed by the administration that took office in 2021. The tariffs on China were maintained and extended, export controls on advanced semiconductors and chipmaking equipment were introduced in October 2022 and tightened repeatedly, and the idea of a "foreign policy for the middle class" made the protection of domestic industry a bipartisan goal. The America First turn was not an interruption of the old consensus; it was its end.

Shock two: the pandemic and the fiscal surge

The second shock was the pandemic. In the second quarter of 2020 real GDP fell at an annual rate of about 30 percent and the unemployment rate reached 14.8 percent in April. The policy response was without precedent. Congress passed the CARES Act of 2.2 trillion dollars in March 2020, a further 900 billion in December 2020 and the American Rescue Plan of 1.9 trillion in March 2021. The Federal Reserve cut its policy rate to zero and bought more than 4 trillion dollars of securities. The federal deficit reached 14.7 percent of GDP in fiscal year 2020 and 11.7 percent in 2021 (Figure 3.3).

The result was the fastest recovery from any American recession. Real GDP regained its pre-pandemic level by the first quarter of 2021, and the economy returned to full employment within two years. Figure 3.1 shows the output gap, the difference between actual GDP and the potential estimated by the Congressional Budget Office. After the deep negative gap of the financial crisis, which took nearly a decade to close, the pandemic gap closed within a year, and the economy has run above potential since 2021.



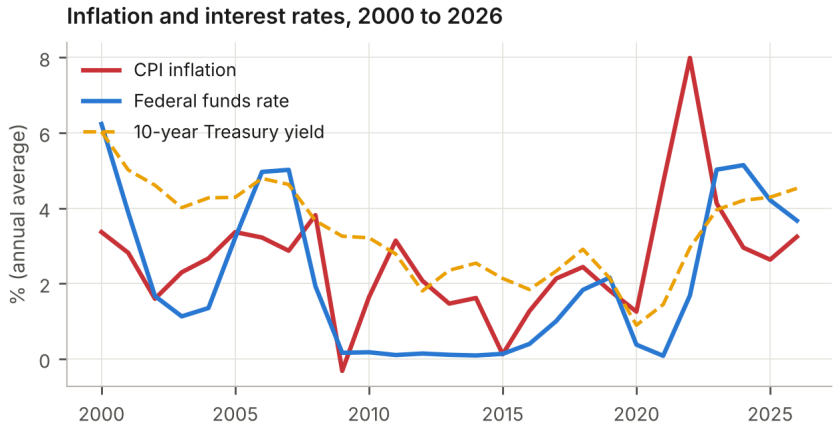
Source: FRED: BEA real GDP and CBO potential GDP; GSF calculations. 2026: first three quarters

Figure 3.1. Output gap: actual against potential GDP, 2000 to 2026

The pandemic also changed the structure of the economy in ways that matter for competitiveness. It accelerated the adoption of digital technologies, remote work and e-commerce. It triggered a surge in new business applications, which rose from about 290,000 a month in 2019 to 450,000 in 2021 and have stayed well above pre-pandemic levels since. And it exposed the fragility of supply chains for medical equipment, semiconductors and other goods, giving political force to the argument for bringing production home.

Shock three: the inflation shock

The third shock was inflation. As demand recovered faster than supply, consumer prices rose by 4.7 percent in 2021 and 8.0 percent in 2022, the highest annual rate since 1981. The Federal Reserve, which had initially described the rise as transitory, raised its policy rate from near zero in March 2022 to 5.25 to 5.5 percent by July 2023, the fastest tightening in four decades (Figure 3.2).



Source: FRED: BLS CPI, Federal Reserve. 2026: January to October average

Figure 3.2. Inflation and interest rates, 2000 to 2026

Remarkably, inflation fell back to around 3 percent by 2024 without a recession. The "soft landing" was helped by the healing of supply chains, a surge of immigration in 2022 and 2023 that eased labour shortages and strong productivity growth. But the shock left lasting marks. The consumer price level in 2026 was about 30 percent higher than in 2019, and real wages for many workers took until 2024 or 2025 to recover. Long-term interest rates, which had been below 2 percent for most of the 2010s, settled above 4 percent. The era of nearly free money, which had supported asset prices, low debt service costs and abundant venture capital for a decade, was over.

Shock four: industrial policy returns

The fourth shock was the return of industrial policy on a scale not seen since the Second World War. Three laws passed in 2021 and 2022 committed public money to reshaping the American economy. The Infrastructure Investment and Jobs Act of November 2021 authorised about 1.2 trillion dollars of spending on roads, bridges, broadband, water and the electricity grid, including 550 billion of new money. The CHIPS and Science Act of August 2022 provided 52.7 billion dollars for semiconductor manufacturing incentives and research, plus a 25 percent investment tax credit. The Inflation Reduction Act of the same month created uncapped tax credits for clean electricity, electric vehicles, batteries, hydrogen and carbon capture, initially estimated to cost about 370 billion dollars over ten years and later estimated at two or three times that amount.

The private response was immediate. Spending on the construction of manufacturing facilities, which had hovered around 80 billion dollars a year for most of the 2010s, more than doubled to 202 billion in 2023 and reached 243 billion in 2024 (Chapter 6). Companies announced hundreds of new plants for semiconductors, batteries, solar panels and electric vehicles, concentrated in the South and Midwest.

The policy was partly reversed in 2025. The One Big Beautiful Bill Act, signed in July 2025, phased out many of the clean energy tax credits, ended the credits for electric vehicles and imposed new restrictions on projects with Chinese involvement, while extending the 2017 tax cuts and creating new deductions for tips, overtime and investment. The administration also took equity stakes in companies it considered strategic, including Intel and MP Materials, a form of state capitalism unfamiliar in the United States. Industrial policy did not end; it changed its instruments and its priorities, from clean energy to semiconductors, critical minerals, shipbuilding and defence. Chapter 21 assesses its results.

Shock five: the artificial intelligence boom

The fifth shock was technological. The release of ChatGPT in November 2022 made generative artificial intelligence a mass-market technology almost overnight and set off an investment boom concentrated in the United States. The capital spending of the four largest cloud companies, Amazon, Alphabet, Microsoft and Meta, rose from about 150 billion dollars in 2023 to about 410 billion in 2025, and their guidance for 2026 exceeded 700 billion (Chapter 9). Nvidia, the leading designer of the chips used to train and run these models, became the most valuable company in the world.

By 2025 investment in information processing equipment and software was contributing a large share of American GDP growth, and the demand for electricity from data centres had ended two decades of flat power consumption. Whether the boom would raise productivity across the economy, or prove to be a bubble like the fibre-optic boom of 1999 and 2000, became the most important economic question of the decade. We return to it in Chapters 9, 24 and 26.

Shock six: 2025 and 2026, the year of rupture

The sixth shock was a cluster of events in 2025 and 2026 that together marked a rupture with the postwar order.

Tariffs. In early 2025 the administration imposed tariffs under the International Emergency Economic Powers Act on imports from Canada, Mexico and China, then on 2 April 2025 announced "reciprocal" tariffs on almost every trading partner. Tariffs on Chinese goods rose in successive steps to 145 percent before a truce in Geneva in May 2025 brought them down. The average effective tariff rate on American imports, about 2.4 percent in 2024, rose to more than 20 percent at its peak, the highest since the early 1930s. On 20 February 2026 the Supreme Court ruled that the emergency powers statute did not authorise tariffs, striking down the fentanyl-related and reciprocal duties. The administration replaced them within days with a temporary 10 percent global tariff under Section 122 of the Trade Act of 1974, and on 24 July 2026, when that authority expired, with duties of 10 or 12.5 percent on imports from sixty trading partners under Section 301, justified by findings about forced labour. Chapter 18 analyses the consequences.

Fiscal policy. The One Big Beautiful Bill Act made permanent most of the 2017 tax cuts and added new ones, offset only partly by cuts to Medicaid and food assistance. In February

2026 the Congressional Budget Office projected deficits of 5.8 percent of GDP in 2026 rising to 6.7 percent in 2036, and debt held by the public reaching 120 percent of GDP, a record.

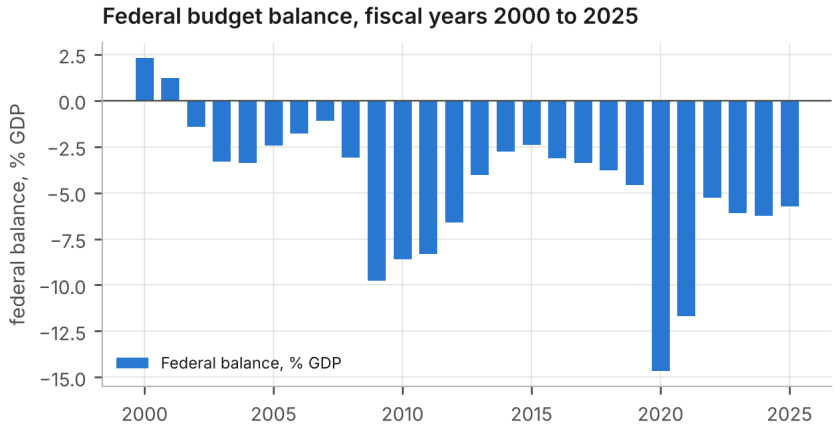
Immigration. Stricter enforcement, deportations and the near closure of the southern border reduced net immigration from more than 2 million a year in 2023 and 2024 to around zero in 2025. Economists at the Brookings Institution estimated that net migration was negative in 2025 for the first time in at least half a century. With it, the main source of labour force growth disappeared.

Energy and war. In late February 2026 the United States and Israel went to war with Iran. Shipping through the Strait of Hormuz, which carries about a fifth of the world's oil and liquefied natural gas, was severely disrupted, in what Brookings described as the largest disruption in the history of the oil market. American gasoline prices rose by more than a third in a year, and energy prices pushed consumer price inflation back to 3.7 percent by September 2026. As the world's largest oil and gas producer, America suffered less than Europe and Asia, and its energy exporters gained. But households paid a heavy price.

The Federal Reserve. In May 2026 Kevin Warsh succeeded Jerome Powell as chair of the Federal Reserve, after a period of intense public pressure from the President for lower rates. Faced with renewed inflation, the Federal Open Market Committee held its policy rate at 3.75 to 4 percent through the autumn, with some members dissenting in favour of increases.

The verdict of the decade

How did the American economy come out of this decade of shocks? The answer depends on which engine and which constraint one looks at, and the rest of the book takes them one by one. But the broad verdict is clear. On growth, productivity, income and the market value of its companies, the United States emerged stronger relative to almost every other economy. On public finances, the trade deficit, manufacturing and the openness of its economy to goods and people, it emerged weaker, or at least more exposed.



Source: FRED: Office of Management and Budget, Treasury

Figure 3.3. Federal budget balance, fiscal years 2000 to 2025

The decade also changed the risks. In 2015 the main risk to American competitiveness was stagnation: too little demand, too little investment, too little productivity growth. In 2025 the main risks are of a different kind: a fiscal path that depends on interest rates staying moderate, an investment boom that depends on artificial intelligence delivering returns, a labour market that depends on immigration that has stopped, and a trading system that depends on rules that the United States itself is rewriting.

In focus: a chronology of the decade

Table 3.2. Key events for American competitiveness, 2015 to 2026

Date	Event	Significance
January 2017	United States withdraws from the Trans-Pacific Partnership	End of the free-trade consensus
December 2017	Tax Cuts and Jobs Act	Corporate tax rate cut from 35% to 21%
March to September 2018	Section 232 and Section 301 tariffs	Trade war with China begins
January 2020	Phase One agreement with China	Truce; purchase commitments largely unmet
March 2020 to March 2021	Pandemic relief laws (about 5 trillion dollars)	Fastest recovery on record
November 2021	Infrastructure Investment and Jobs Act	About 1.2 trillion dollars over ten years
March 2022 to July 2023	Federal Reserve raises rates from 0 to 5.25 to 5.5%	Fastest tightening in four decades
August 2022	CHIPS and Science Act; Inflation Reduction Act	Return of large-scale industrial policy
October 2022	Export controls on advanced chips to China	Technology rivalry formalised
November 2022	Release of ChatGPT	Start of the generative AI investment boom
April 2025	"Liberation Day" reciprocal tariffs	Effective tariff rate above 20% at peak
July 2025	One Big Beautiful Bill Act	Tax cuts extended; clean energy credits cut
August 2025	Government equity stake in Intel	New forms of state capitalism
2025	Net immigration falls to around zero	Labour force growth stalls
20 February 2026	Supreme Court strikes down IEEPA tariffs	Temporary 10% tariff under Section 122
Late February 2026	War with Iran; Strait of Hormuz disrupted	Energy price shock
22 May 2026	Kevin Warsh sworn in as Federal Reserve chair	New leadership facing renewed inflation
24 July 2026	Section 301 tariffs of 10 to 12.5% on sixty partners	Tariff regime rebuilt on new legal basis

Source: Official sources and press reports compiled by Global Strategy Files.

In focus: scoring the decade's shocks

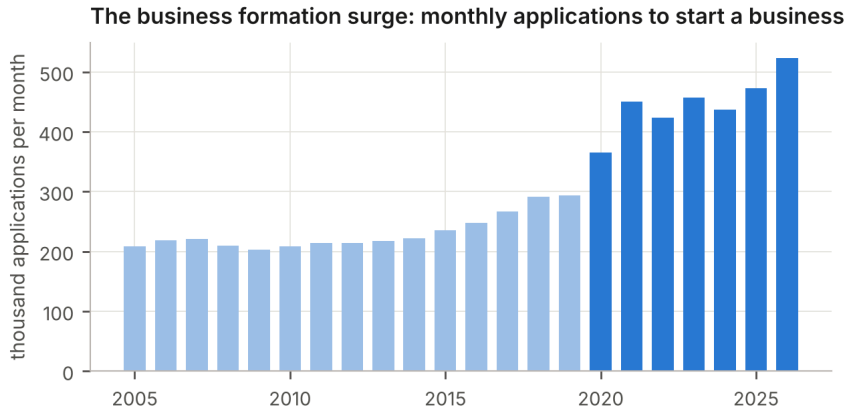
Table 3.3. How the six shocks affected the five engines and three constraints

Shock	Engines strengthened	Engines weakened	Constraints tightened
America First turn	Home market protection (short run)	Openness, alliances	Cost of inputs
Pandemic and fiscal surge	Business formation, digital adoption	None durably	Fiscal arithmetic
Inflation shock	None	Cost of capital	Fiscal arithmetic (interest costs)
Industrial policy	Manufacturing investment, energy	None directly	Fiscal arithmetic, cost of building
AI boom	Productivity (potential), intangibles, capital markets	None	Electricity, cost of building
Rupture of 2025 to 2026	Energy exporters	Openness, labour supply, policy predictability	Labour supply, fiscal arithmetic, prices

Source: Global Strategy Files assessment.

In focus: the business formation surge

One of the least expected consequences of the pandemic was a surge in the creation of new businesses. Figure 3.4 shows monthly applications to start a business, as recorded by the Census Bureau.



Source: FRED: Census Bureau Business Formation Statistics (monthly average; 2026: January to October)

Figure 3.4. The business formation surge: monthly applications to start a business

Applications averaged about 210,000 a month in 2010 and 235,000 in 2015, and rose to 293,000 in 2019. In 2021 they jumped to 451,000 a month, and instead of falling back as many expected, they have stayed high: 437,000 in 2024, 473,000 in 2025 and 523,000 in the first ten months of 2026. Not every application becomes a business with employees, and part of the surge reflects self-employment, online retail and the gig economy. But applications that are likely to lead to firms with payrolls have also risen.

New firms matter for competitiveness because they are disproportionately responsible for innovation and productivity growth: they introduce new products, adopt new technologies faster and force incumbents to improve. The decline of business dynamism in the United States after 2000, documented by many economists, was one of the suspected causes of the productivity slowdown. Its reversal after 2020 is one of the reasons to think that the productivity revival documented in Chapter 4 may be more than cyclical.

Strategic shifts: what this means for decision makers

The decade from 2015 to 2025 taught decision makers that the questions that matter about the United States have changed. In 2015 the main questions were about the pace of the recovery and the timing of interest rate rises. In 2026 they are about tariffs, the independence of institutions, the fiscal path, immigration and artificial intelligence. These are questions of political economy rather than of the business cycle, and they require different tools: scenario analysis rather than point forecasts, attention to legal and institutional detail, and monitoring of political signals.

The practical shift is from forecasting to resilience. A company that relied on a single forecast of American tariffs in early 2025 would have been wrong several times in eighteen months, as rates rose above 20 percent, emergency tariffs were struck down by the Supreme Court and replaced by temporary and then targeted duties. A better approach, used increasingly by large multinationals, is to identify the few policy variables that mat-

ter most for the business, define a small number of plausible regimes for each and design supply chains, pricing and contracts that perform acceptably across all of them. The tariff model of Chapter 18 and the four worlds of Chapter 26 offer a template.

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5th / 2nd
America's rank on the GSF Competitiveness Index and on the GSF Frontier Index in 2024

1.9%
median simulated average growth in 2027 to 2035, with a 90% range of 1.1 to 2.8%

44%
probability of Frontier Renewal, the most favourable of four worlds for 2035

$47tn
median projected nominal GDP in 2035, against about $30tn for China

122%
median simulated federal debt held by the public in 2035, from 98% of GDP in 2026

8.5%
estimated floor of America's share of world goods exports

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