Making America More Competitive

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Key parts to the puzzle

- ✓Work force development and related programs
- ✓Targeted improvements in education
- ✓Support for innovation and entrepreneurship
- ✓Infrastructure renewal
- ✓Corporate tax reform
- ✓Revitalized trade and investment policies and tools
- ✓Using our Diplomacy and Embassies well
- ✓Systematic review of regulations
- ✓Immigration reform to boost the economy
- ✓Handling national debt wisely


Worker retraining
and support for the
long-term unemployed

Where have the jobs gone?

Competition from China

2.4 million

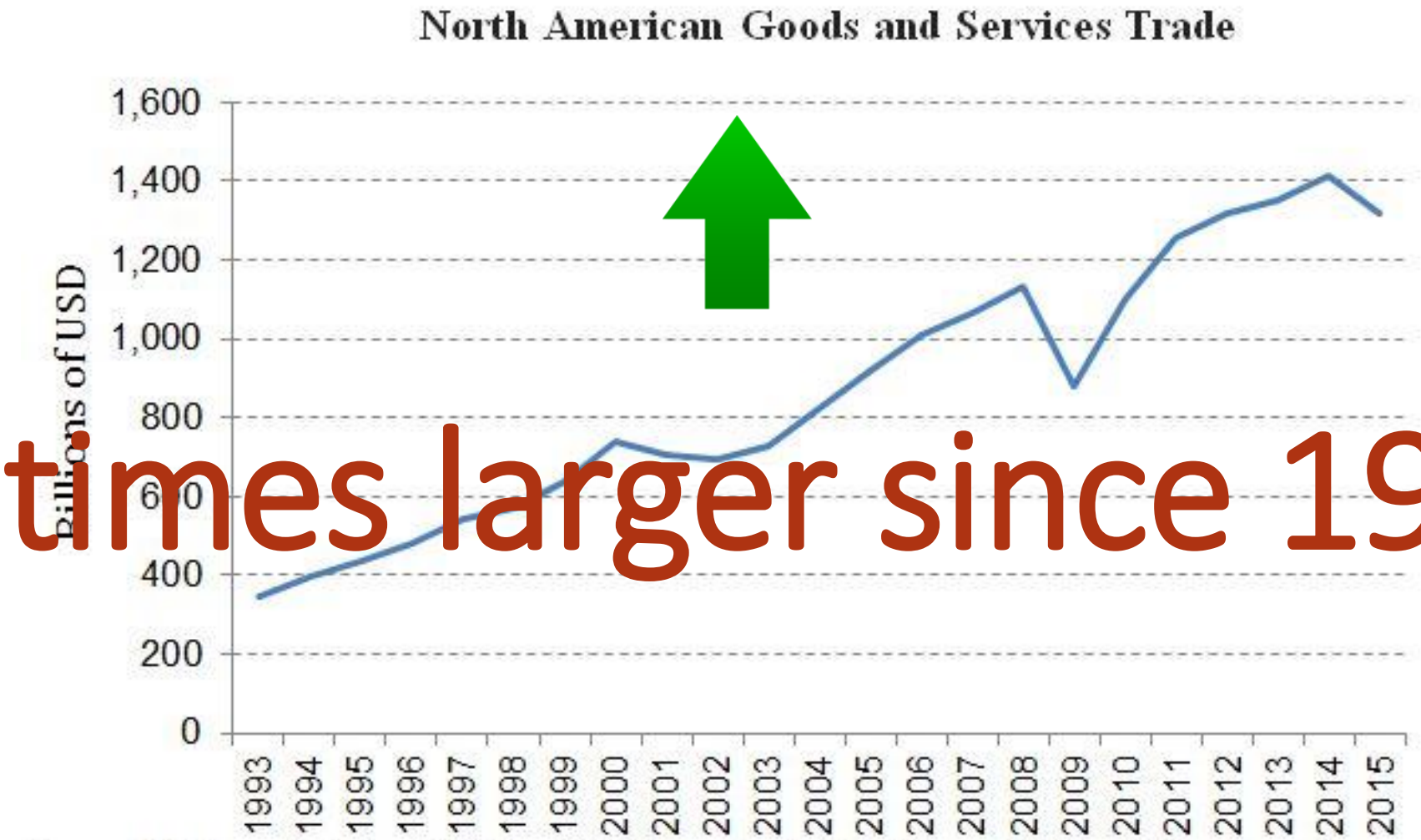
New technology

4.7 million

Source: Autor et. al (2016); Hicks and Devaraj (2015)


North American
Free Trade Agreement
NAFTA

North America's trade in goods and services



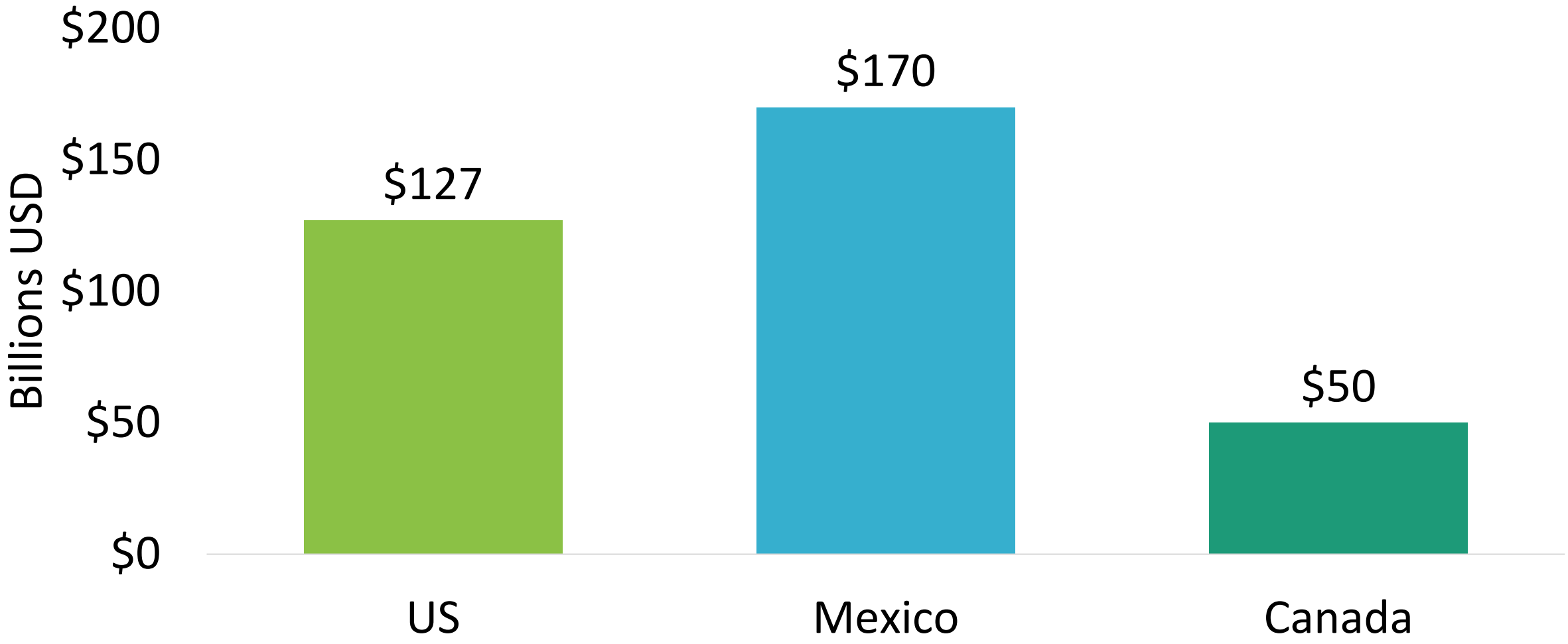
4 times larger since 1993

Sources: IMF for goods trade and OECD and BEA for services **trade in billions of dollars**. 2015 services values repeat 2014 values, as 2015 figures were not available. Mexican services export data is substituted by U.S. and Canadian services import data.

Over 13 million U.S. jobs

are estimated to be supported by U.S.-MEX-CAN trade and investment

NAFTA Countries are richer each year due to “extra” trade growth



Source: NAFTA 20 Years Later. *Petersen Institute for International Economics*. (2014)

Effects of “extra” trade growth on the US

The U.S. is $127 billion richer each year thanks to “extra” trade growth

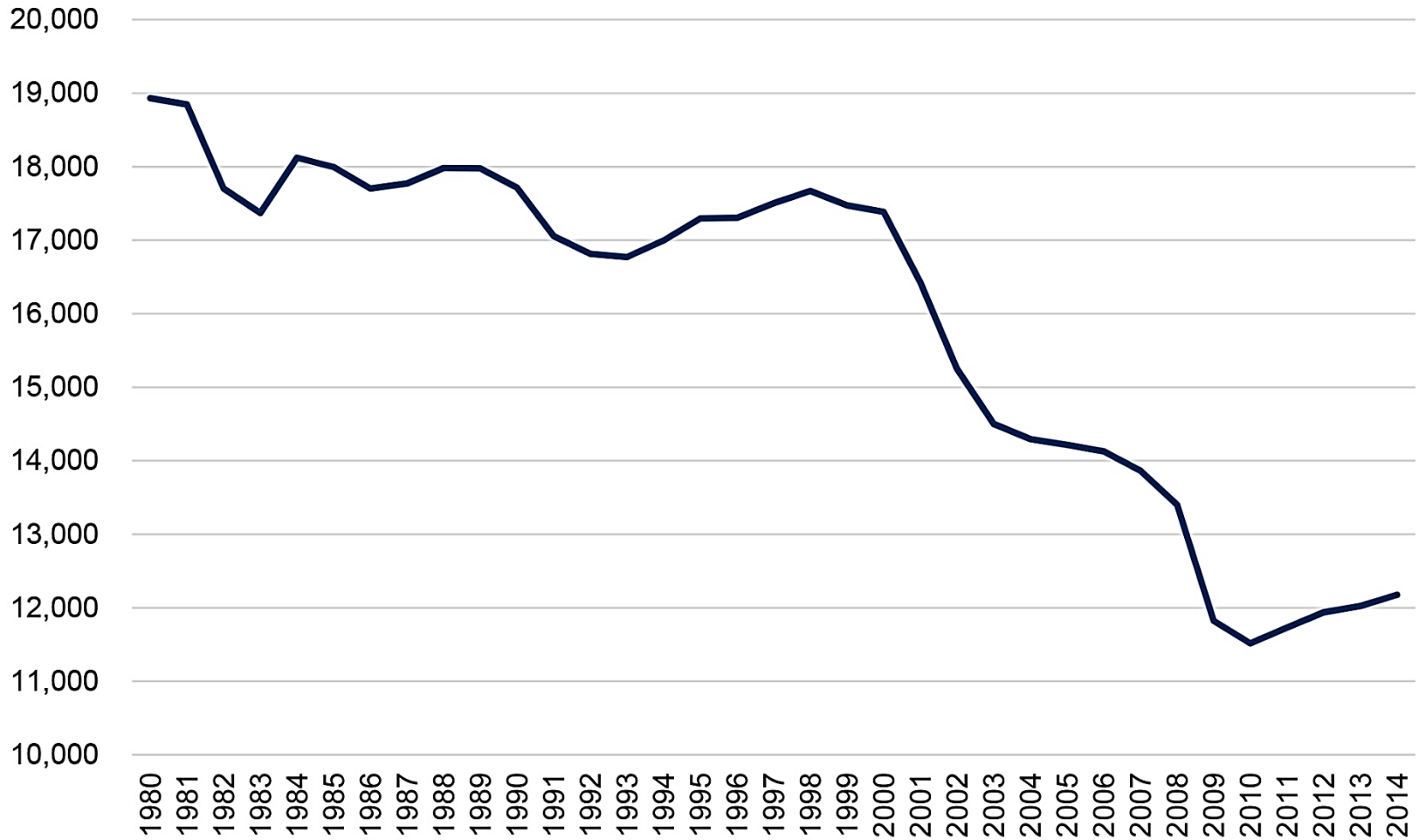
With a population of 320 million

The pure economic payoff is $400 per person

Source: NAFTA 20 Years Later. *Petersen Institute for International Economics*. (2014)

U.S. Employment in Manufacturing Industries

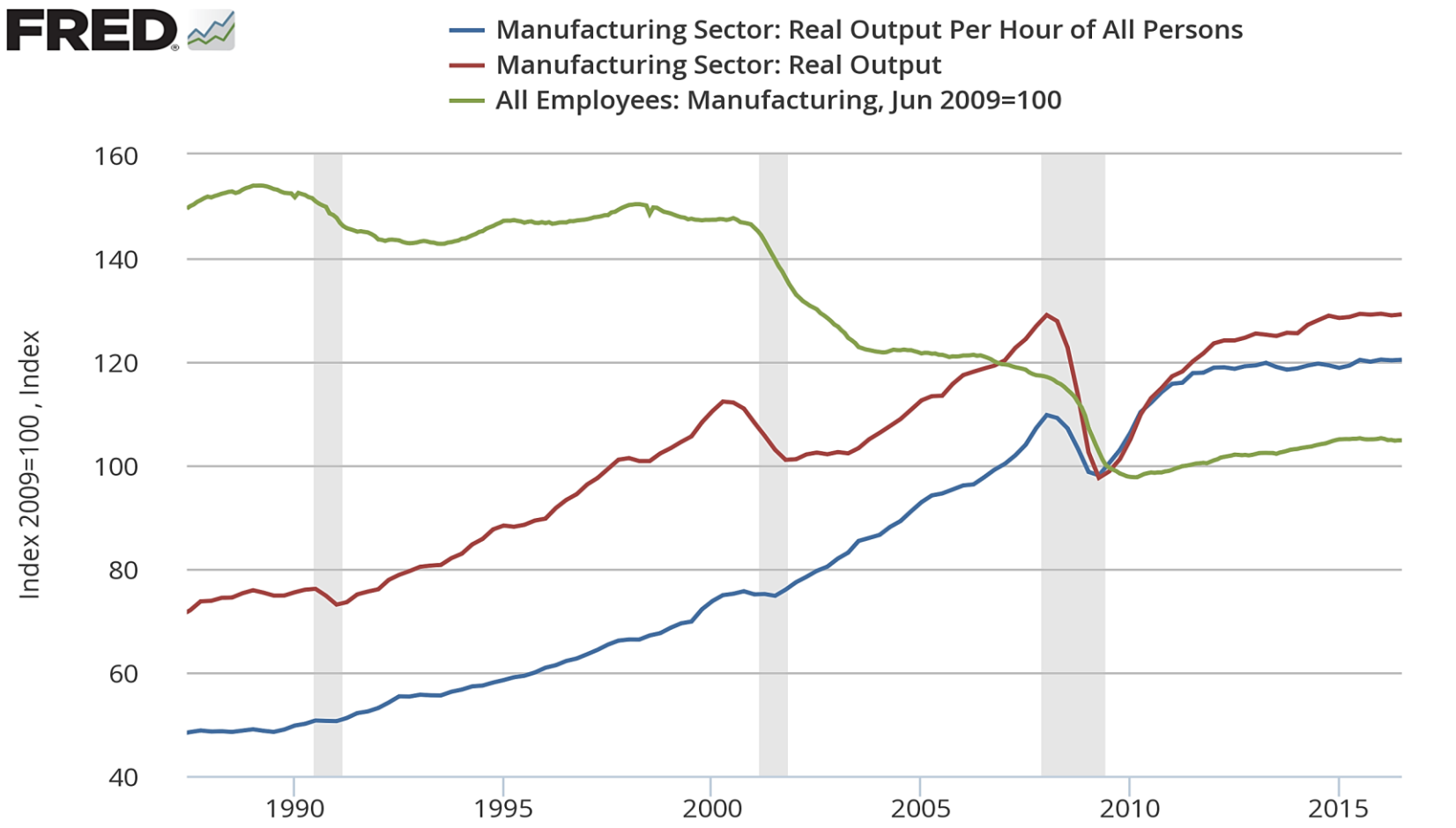
Thousands of Jobs, 1980-2014



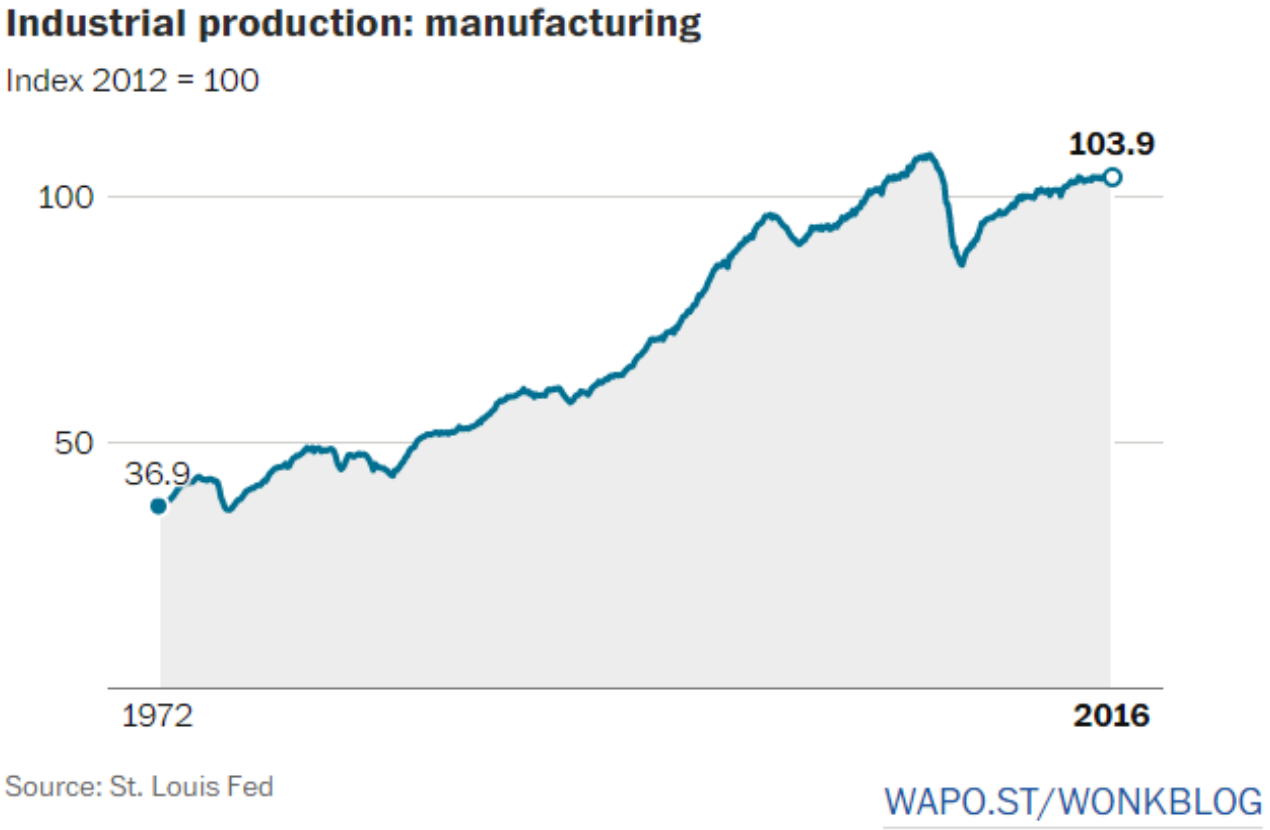
Source: Brookings Analysis of Moody's Analytics Data

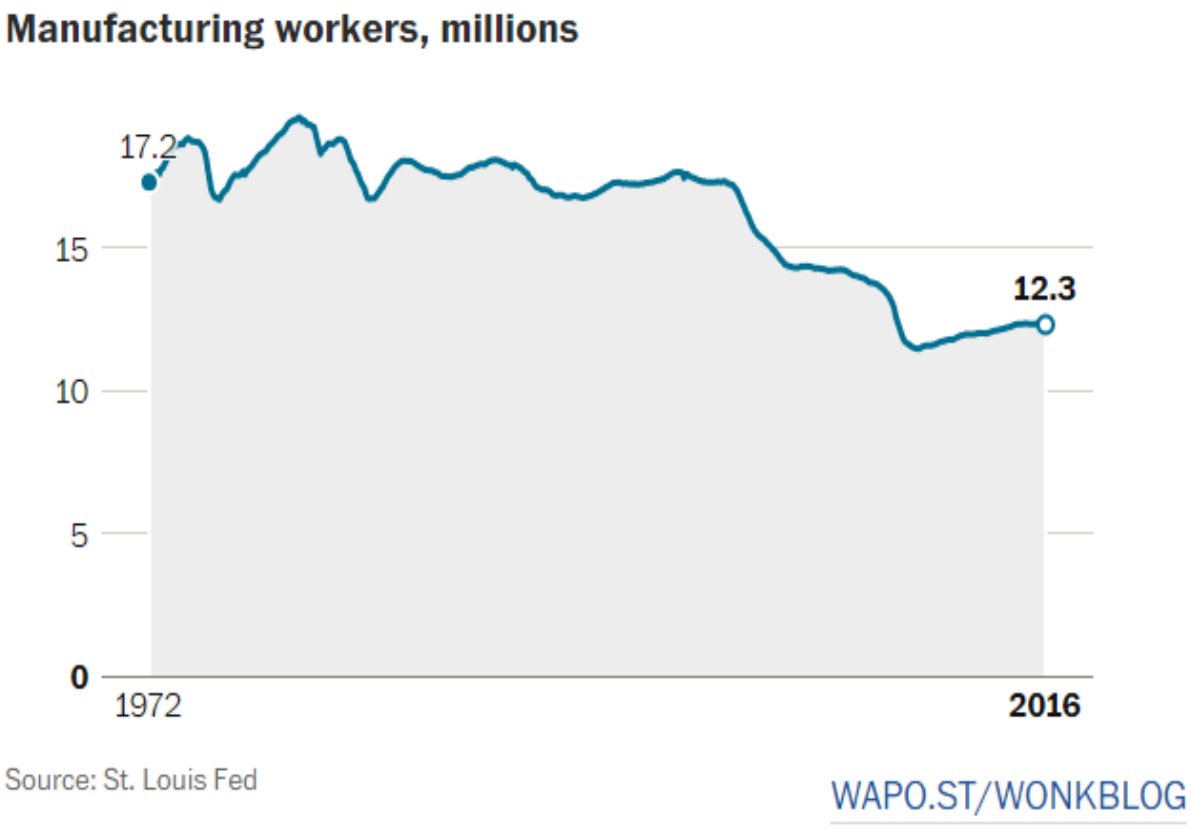
Metropolitan Policy Program at BROOKINGS

U.S. Manufacturing employment and output



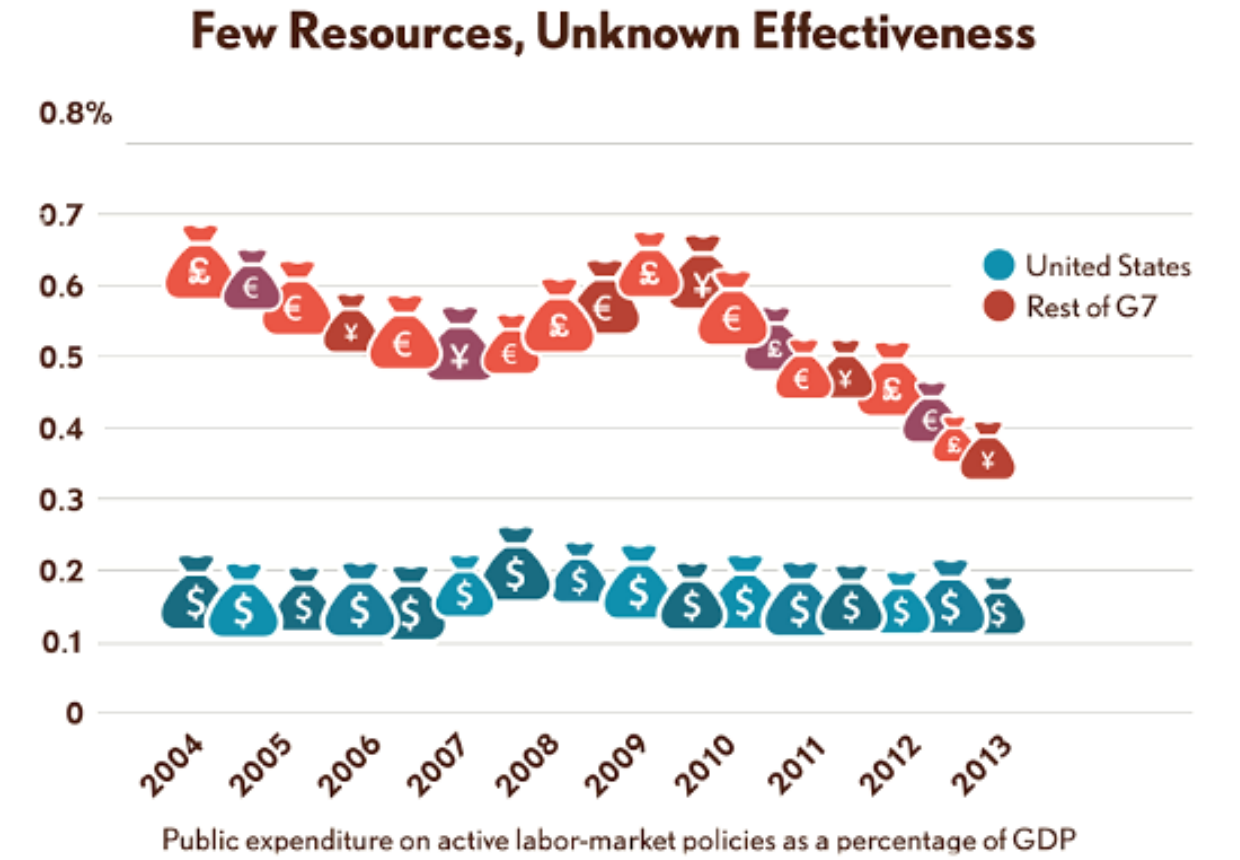
U.S. Manufacturing: Production vs. jobs





Source: The Washington Post “What Republicans and Democrats get wrong about American manufacturing”

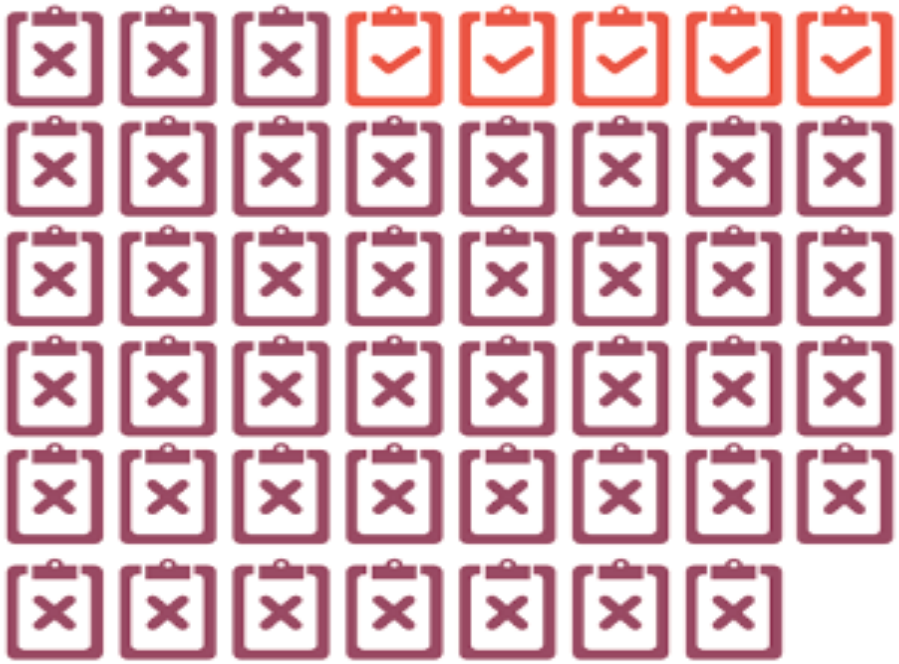
Less spending for unemployed and few programs checked for impact



Compared with other rich countries, the United States devotes far fewer resources to help the unemployed find jobs.

Source: Alden, Edward & Strauss, Rebecca. “How America Stacks Up: Economic Competitiveness and U.S. Policy” (2016)

Less spending for unemployed and few programs checked for impact



5 programs completed a comprehensive impact study

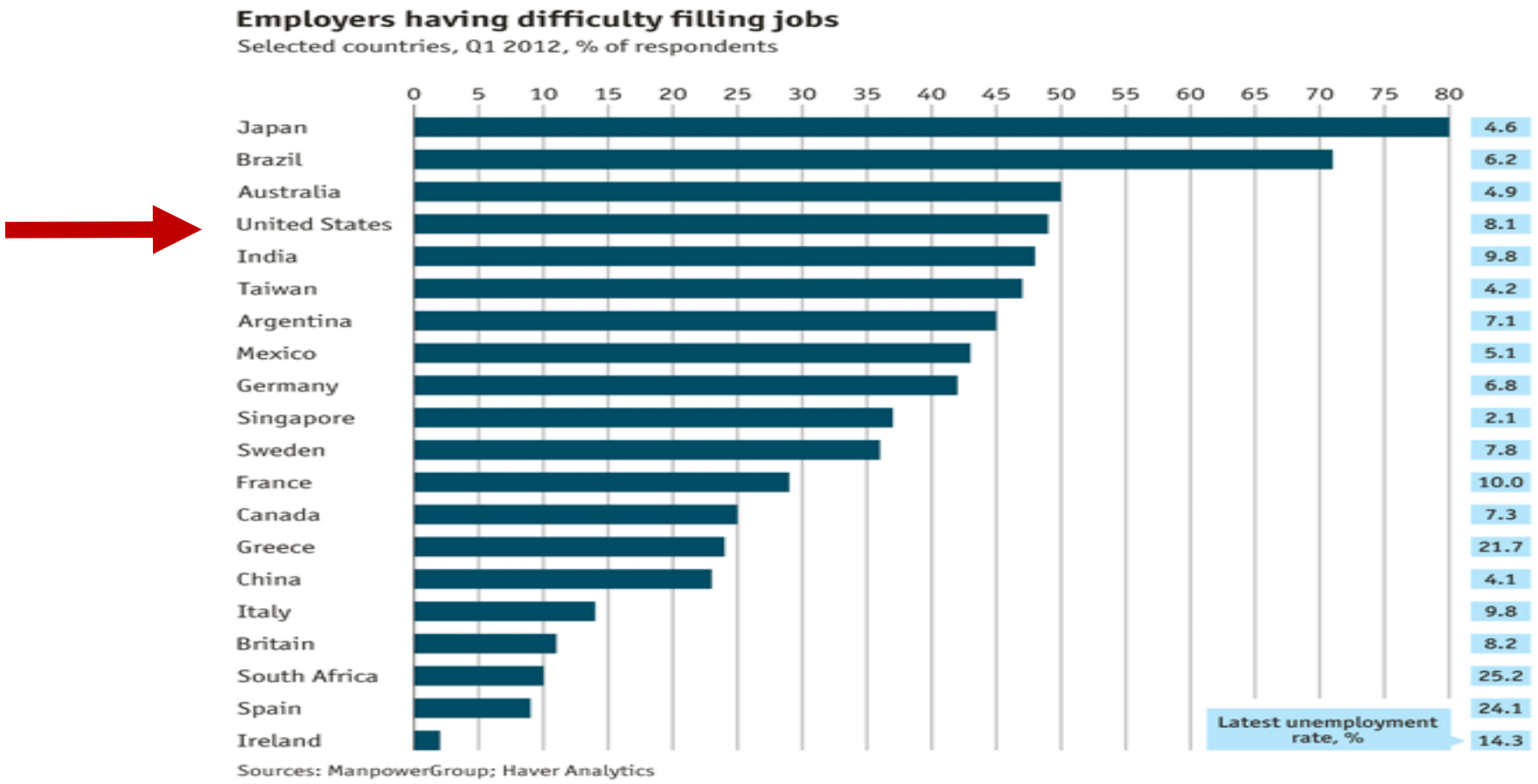
42 programs have not

For the period 2004 to 2011

The effectiveness of many U.S. worker-assistance programs remains unknown.

Source: Alden, Edward & Strauss, Rebecca. “How America Stacks Up: Economic Competitiveness and U.S. Policy” (2016)

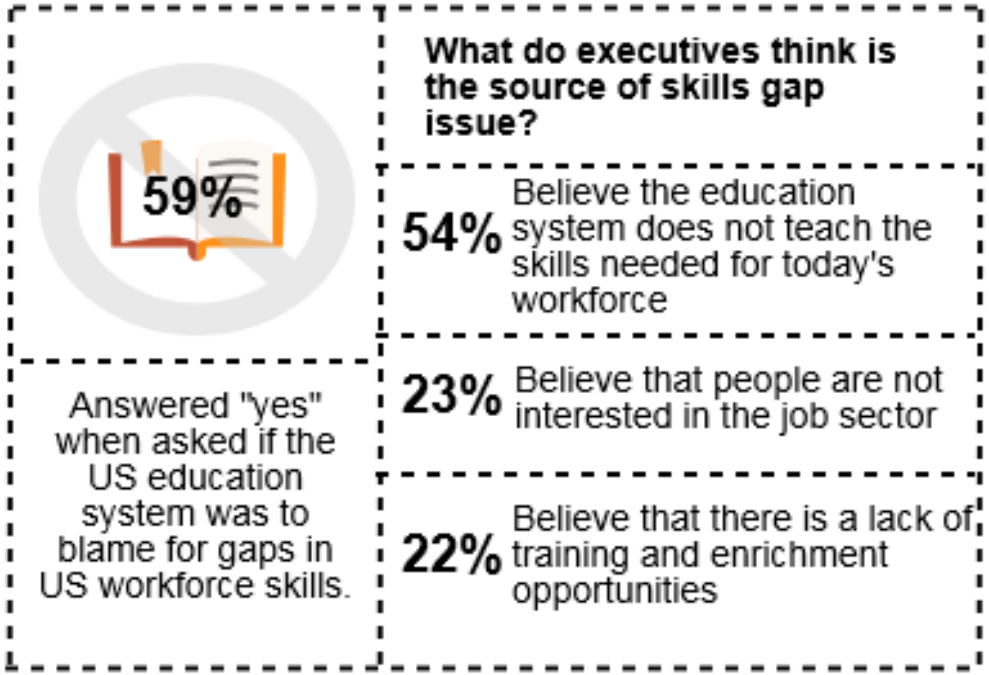
Skills shortages 2012

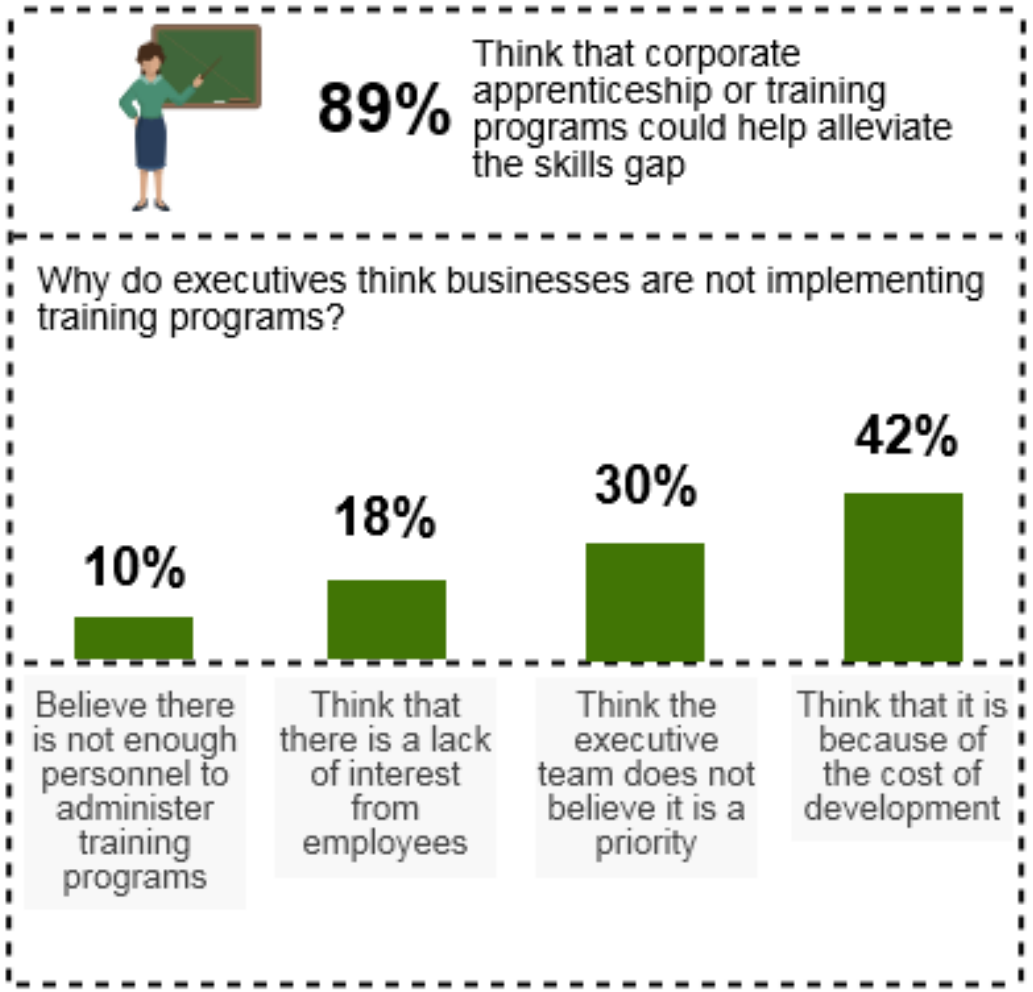


Skills shortages 2013

Source: International Business Report 2013

Skills gap





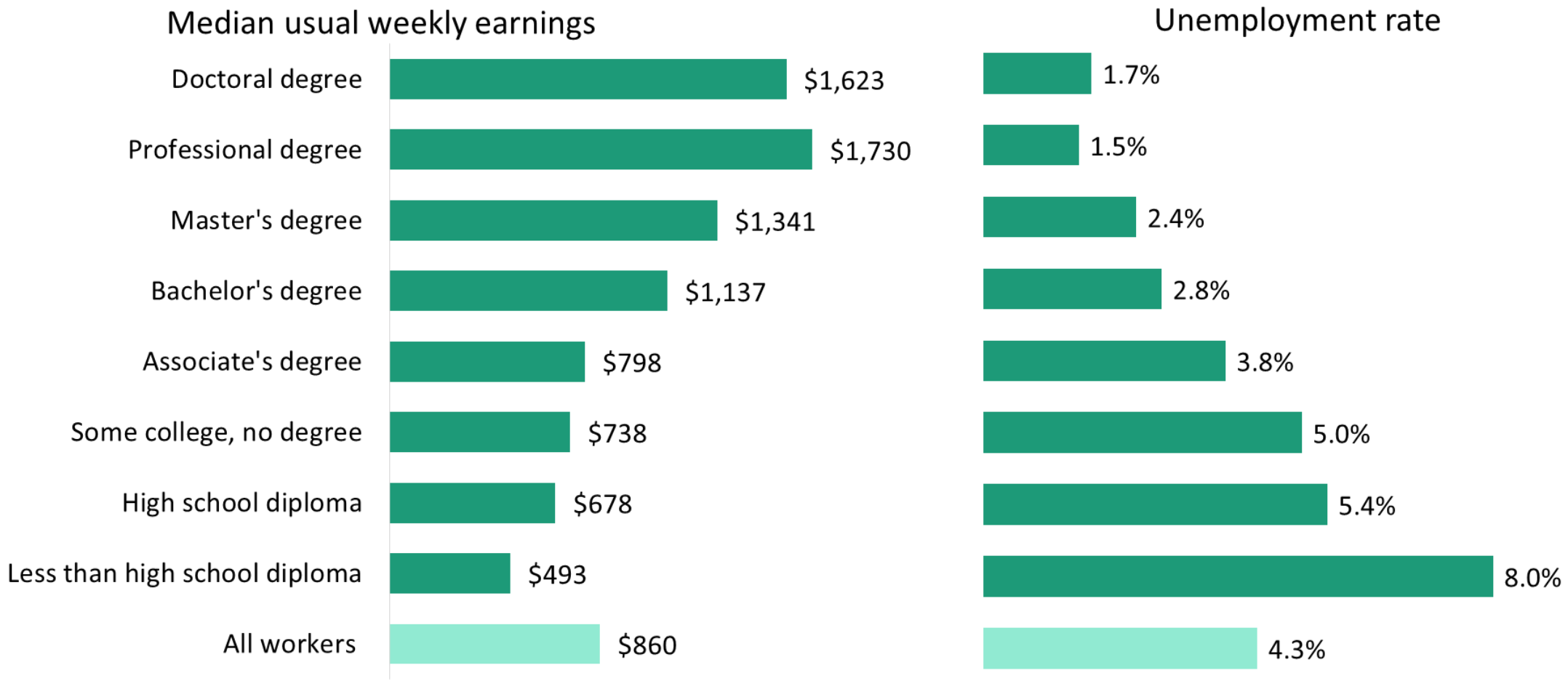
Source: “Skills Gap in the American Workforce”, www.adeccousa.com

Improvements?

- ✓Programs for workers laid of by tech or trade
- ✓Tax breaks for apprenticeship and retraining programs
- ✓Learn from other countries who do this well
- ✓Buffer programs from annual appropriations process
- ✓Consider ways to support workers who are not easily rehired


Education

Earnings and unemployment rates by educational attainment, 2015

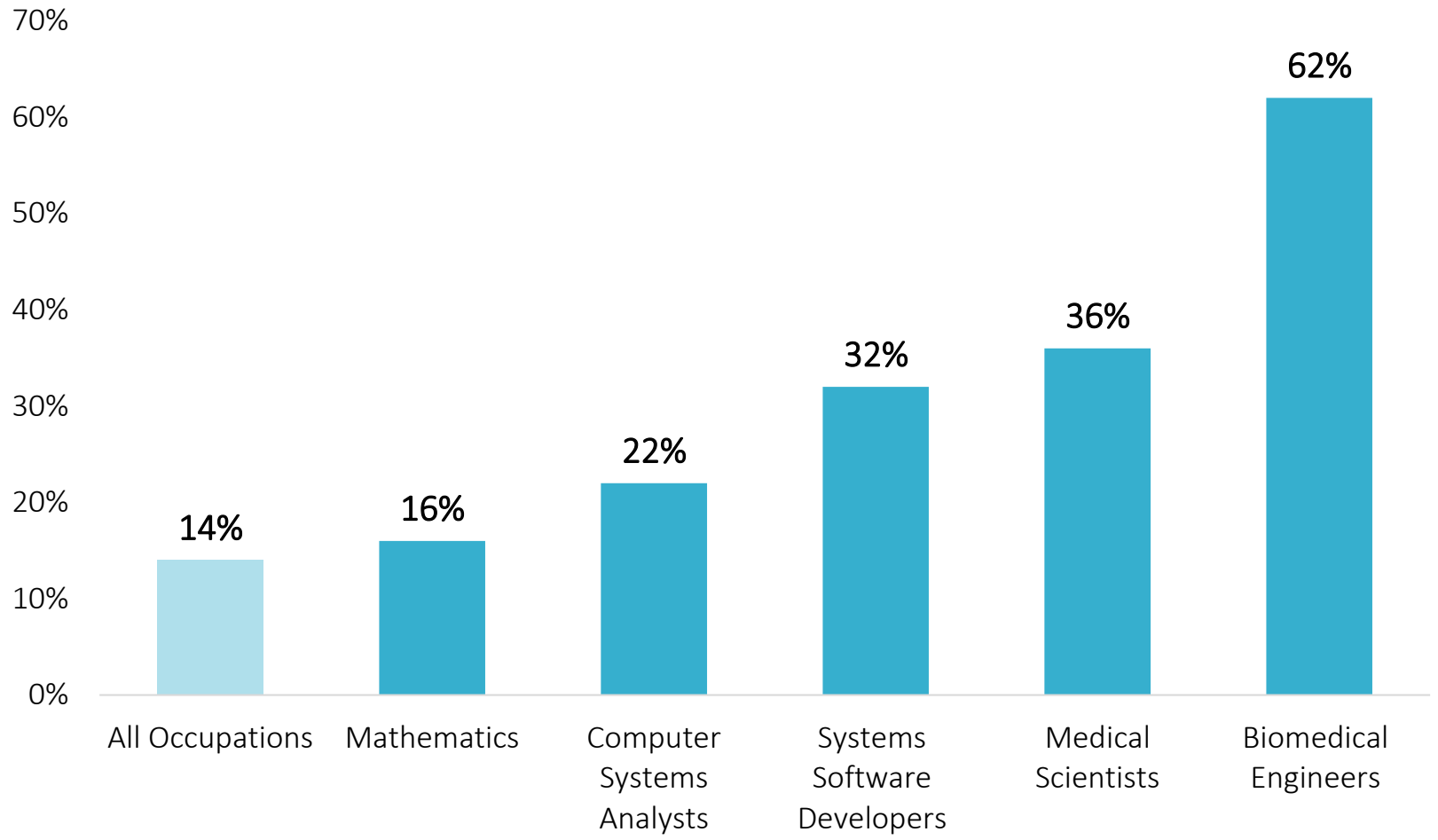


Note: Data for persons age 25 and over. Earnings are for full time wage and salary workers
Source: U.S. Bureau of Labor Statistics, Current Population Survey

Projected percentage increases in STEM jobs: 2010-2020

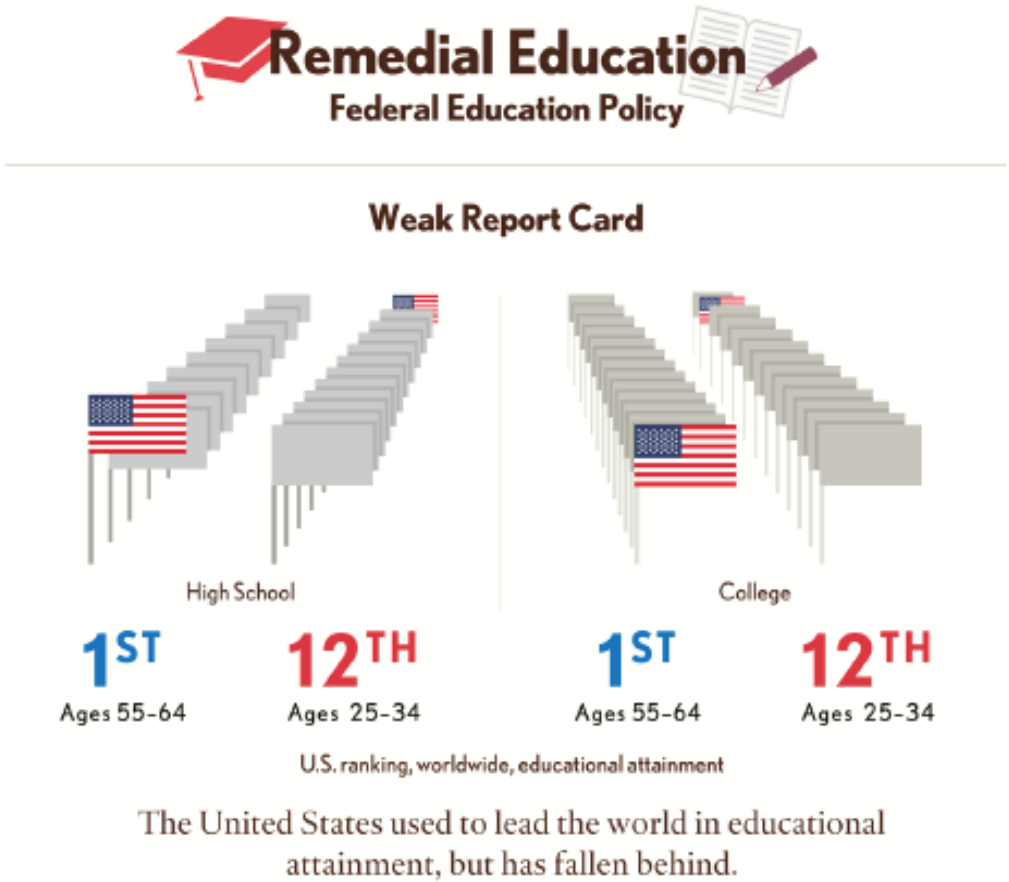
According to the U.S. Department of Education, only a small percentage of students are seeking careers in STEM (science, technology, engineering, and mathematics).

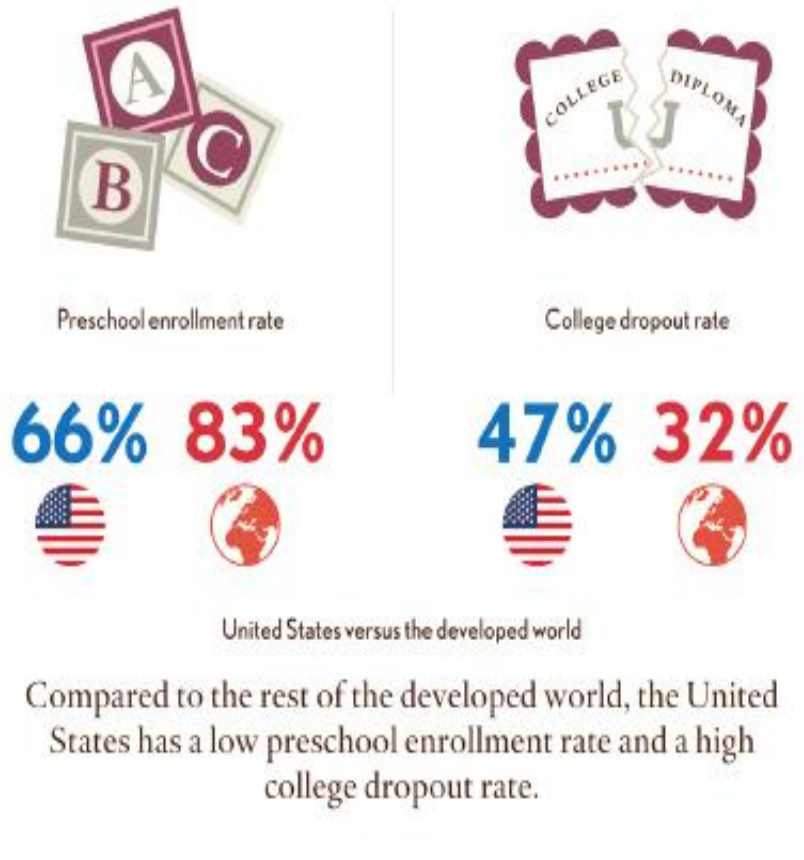
The U.S. also needs more teachers in STEM fields.



Source: U.S. Department of Education

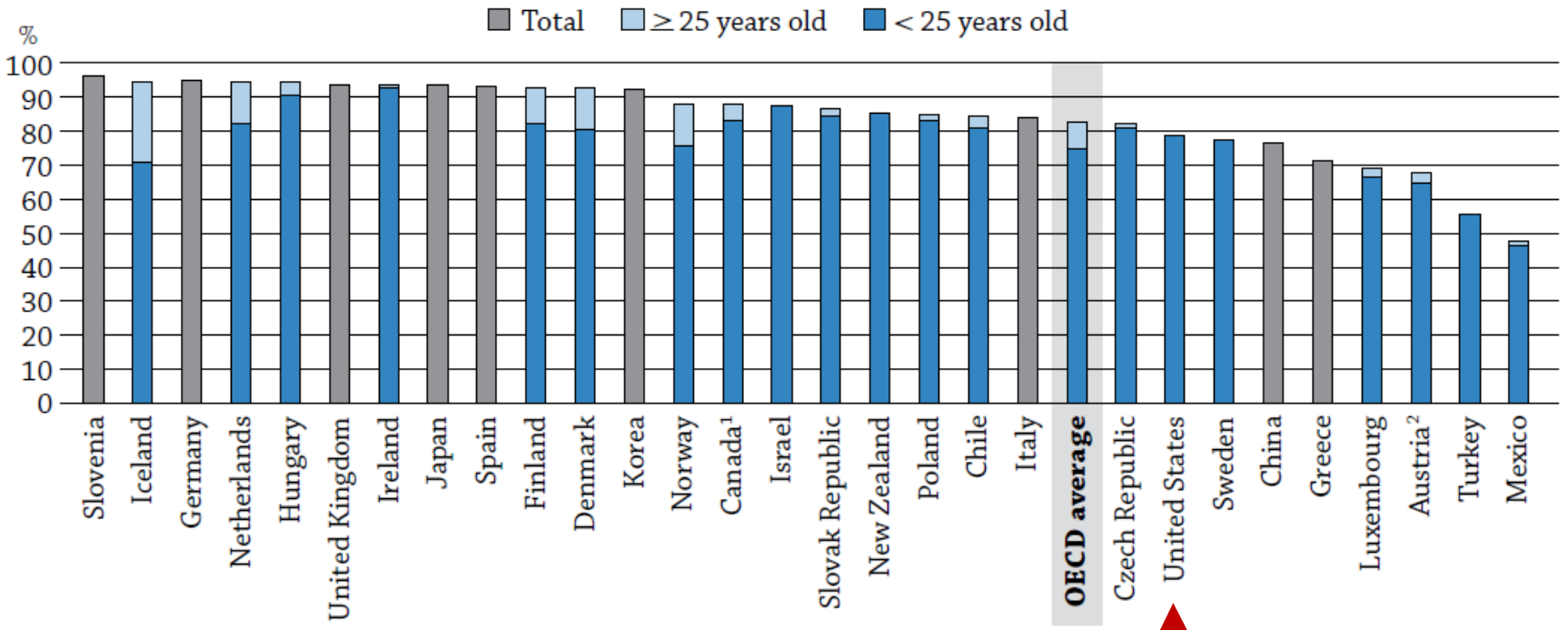
US falling behind in training students to acquire mid-level skills





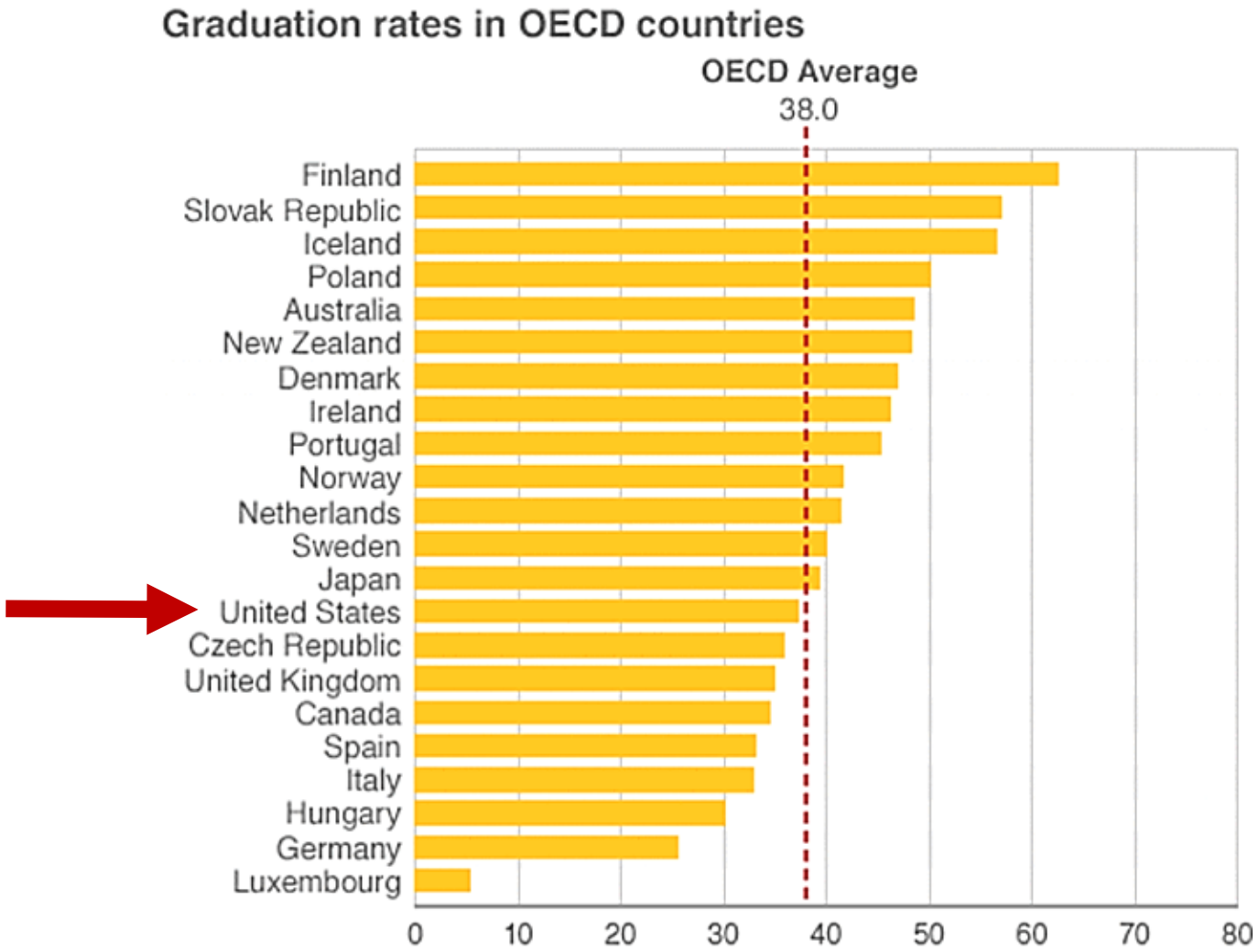
Source: Alden, Edward & Strauss, Rebecca. “How America Stacks Up: Economic Competitiveness and U.S. Policy” (2016)

Upper secondary graduation rates 2012



Note: Only first-time graduates in upper secondary programmes are reported in this chart.
1. Year of reference 2011.
2. Programmes spanning ISCED levels 3 and 4 (*Höhere berufsbildende Schule*) not included.
Countries are ranked in descending order of the upper secondary graduation rates in 2012.
Source: OECD. Tables A2.1a and A2.1b. See Annex 3 for notes (*www.oecd.org/edu/eag.htm*).
StatLink http://dx.doi.org/10.1787/888933115255

College Degree

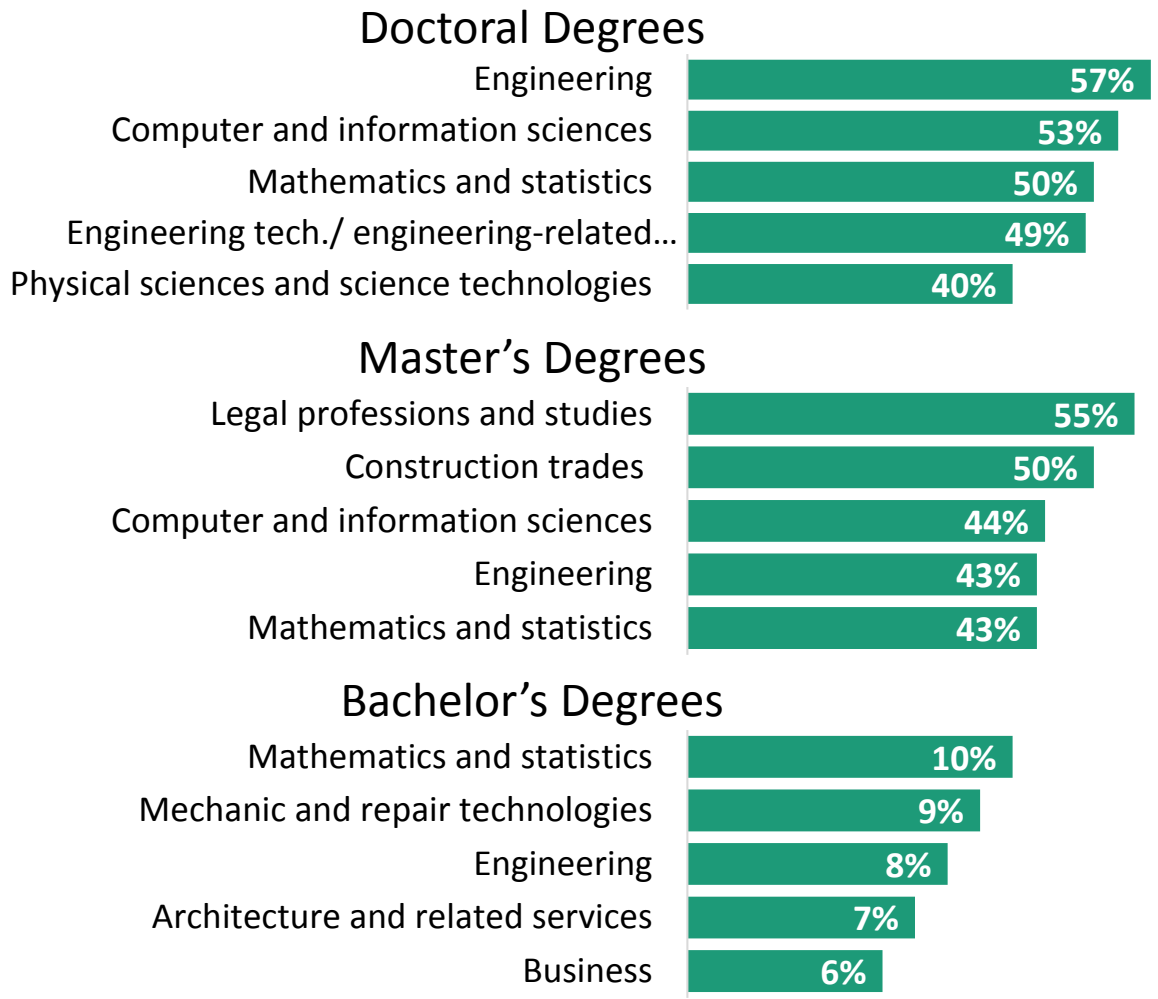


Estimated percentages of 2008 age cohort which will complete first-time academic degrees in universities

Source: OECD

Foreign students earn large share of advanced degrees in STEM fields

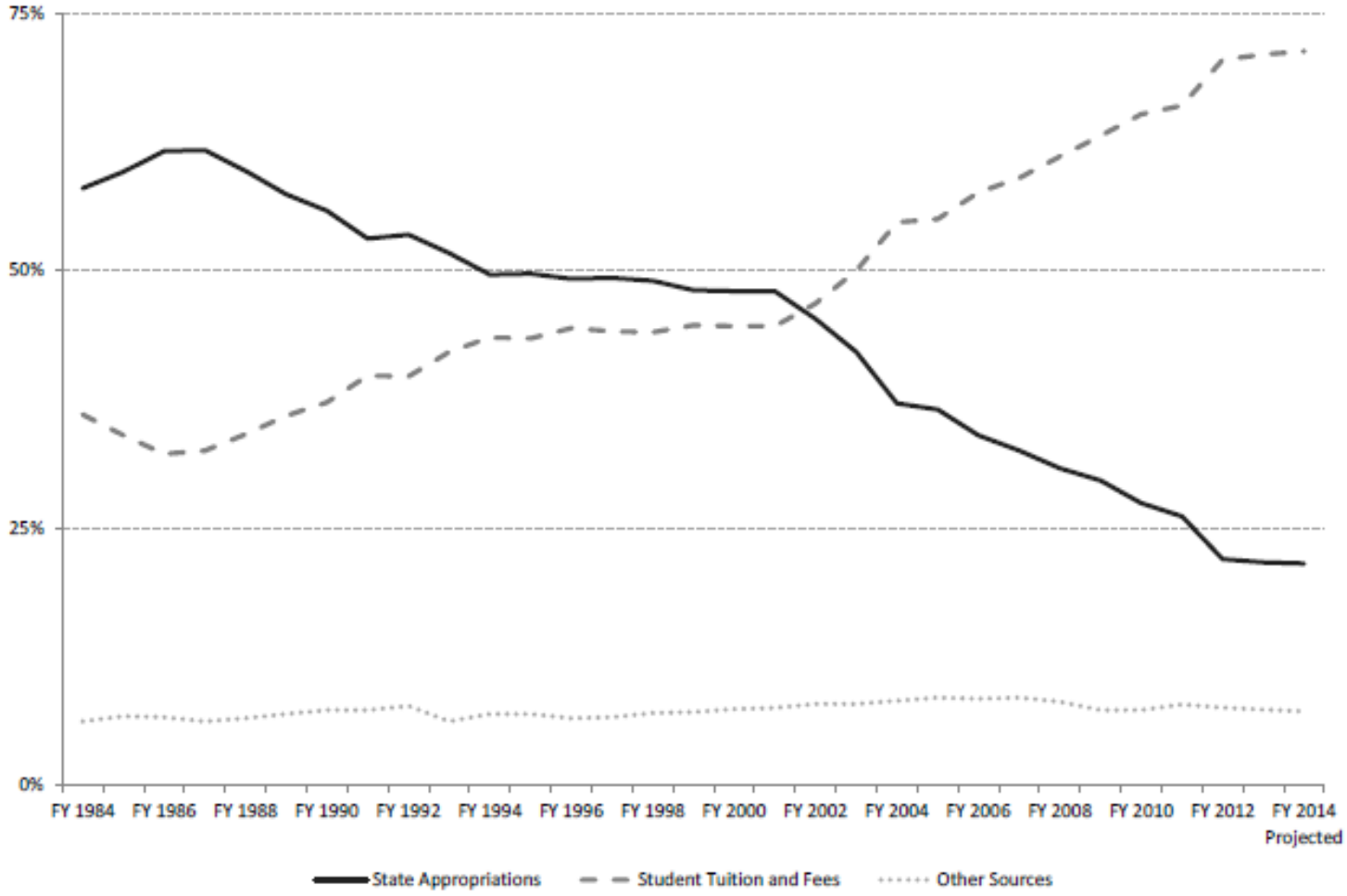
Top fields of study by share of degrees earned by foreign students, 2012-13



Source: National center for Education Statistics, Pew Research Center

High Cost

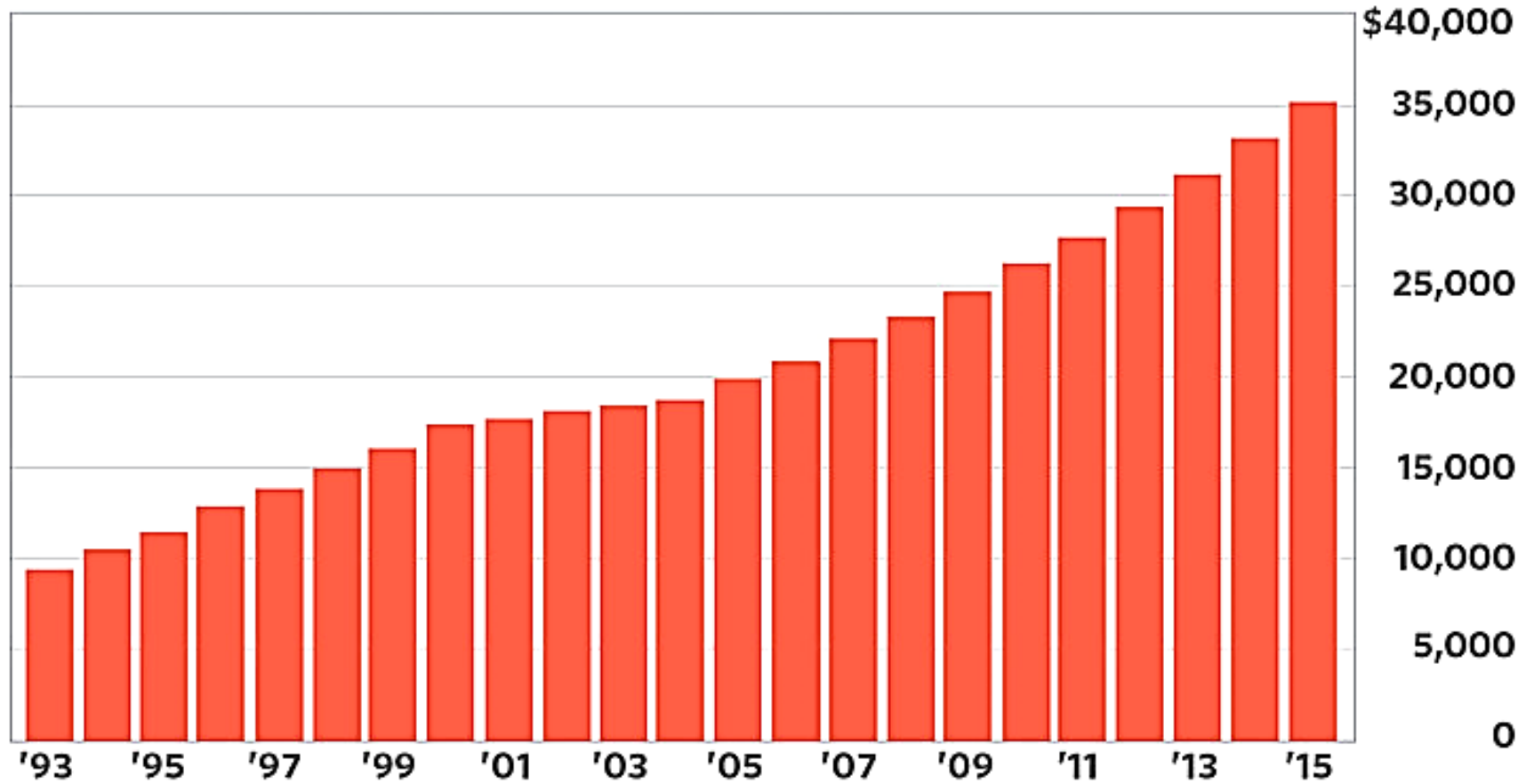
State appropriations per full-time student versus tuition and fees at four-year public colleges



Source: House Fiscal Agency, “Fiscal Focus: State Appropriations, Tuition, and Public University Operating Costs.” December 2013

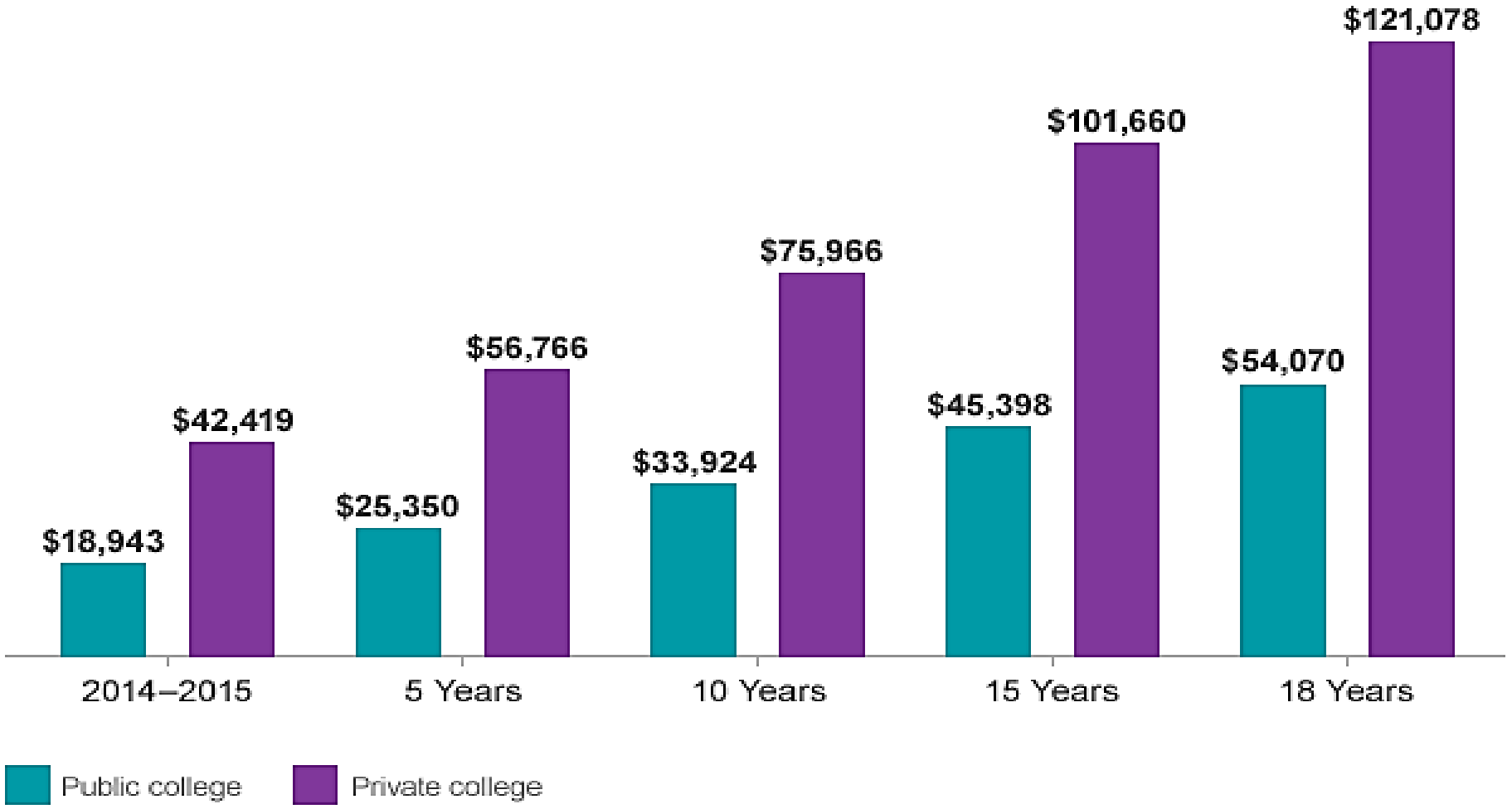
Millennials graduate with more student loan debt

Average amount of debt, per borrower, by year of graduation



Source: Mark Kantrowitz/WSJ.com

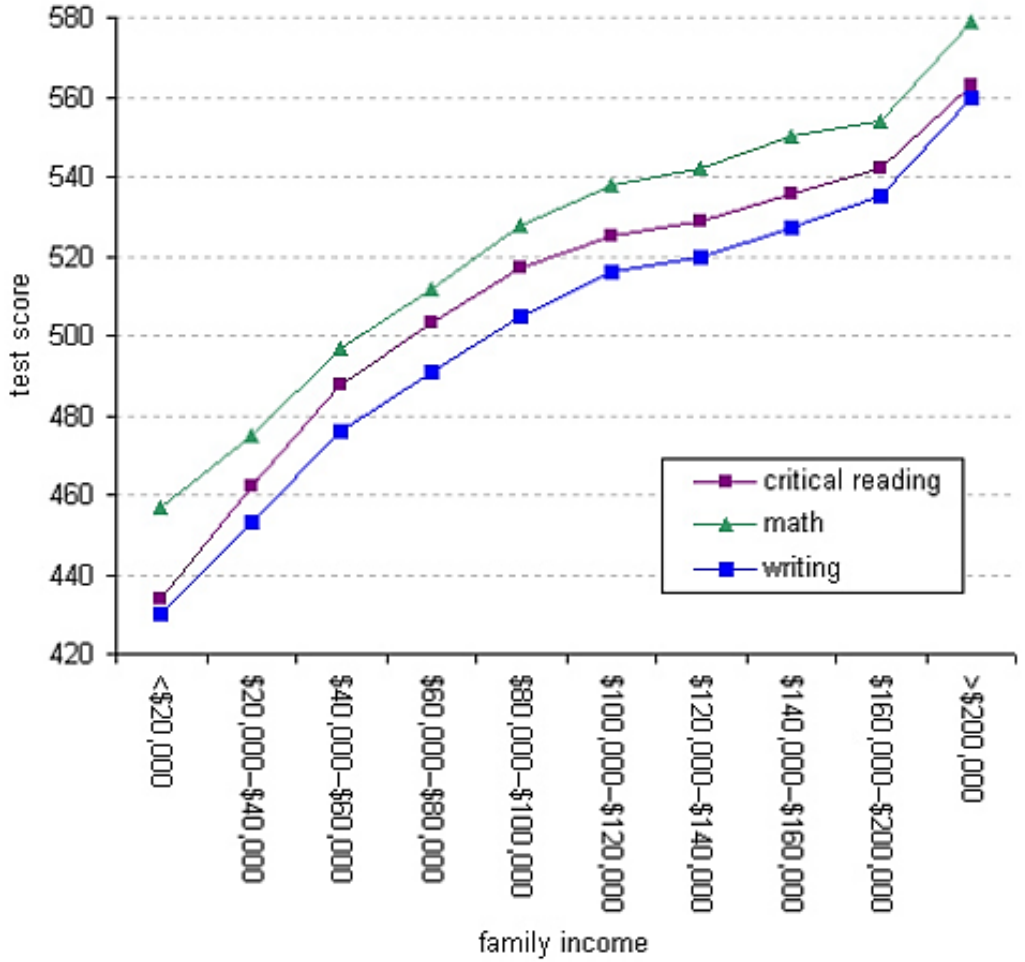
How much will a year of college cost in the future?



Vanguard / Via investor.vanguard.com

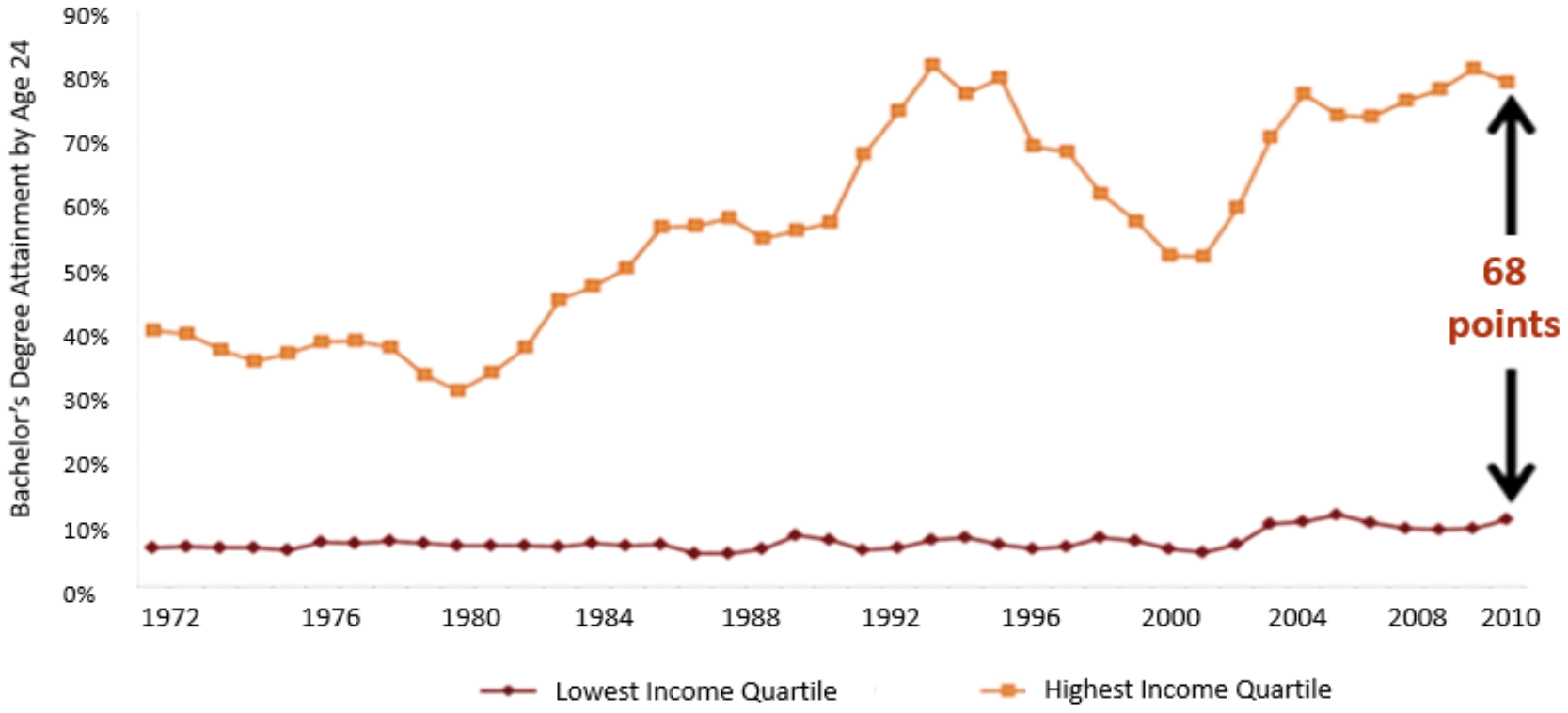
Educational achievements between the wealthy and the poor

All tests scores from SATS in 2009



Source: College Board

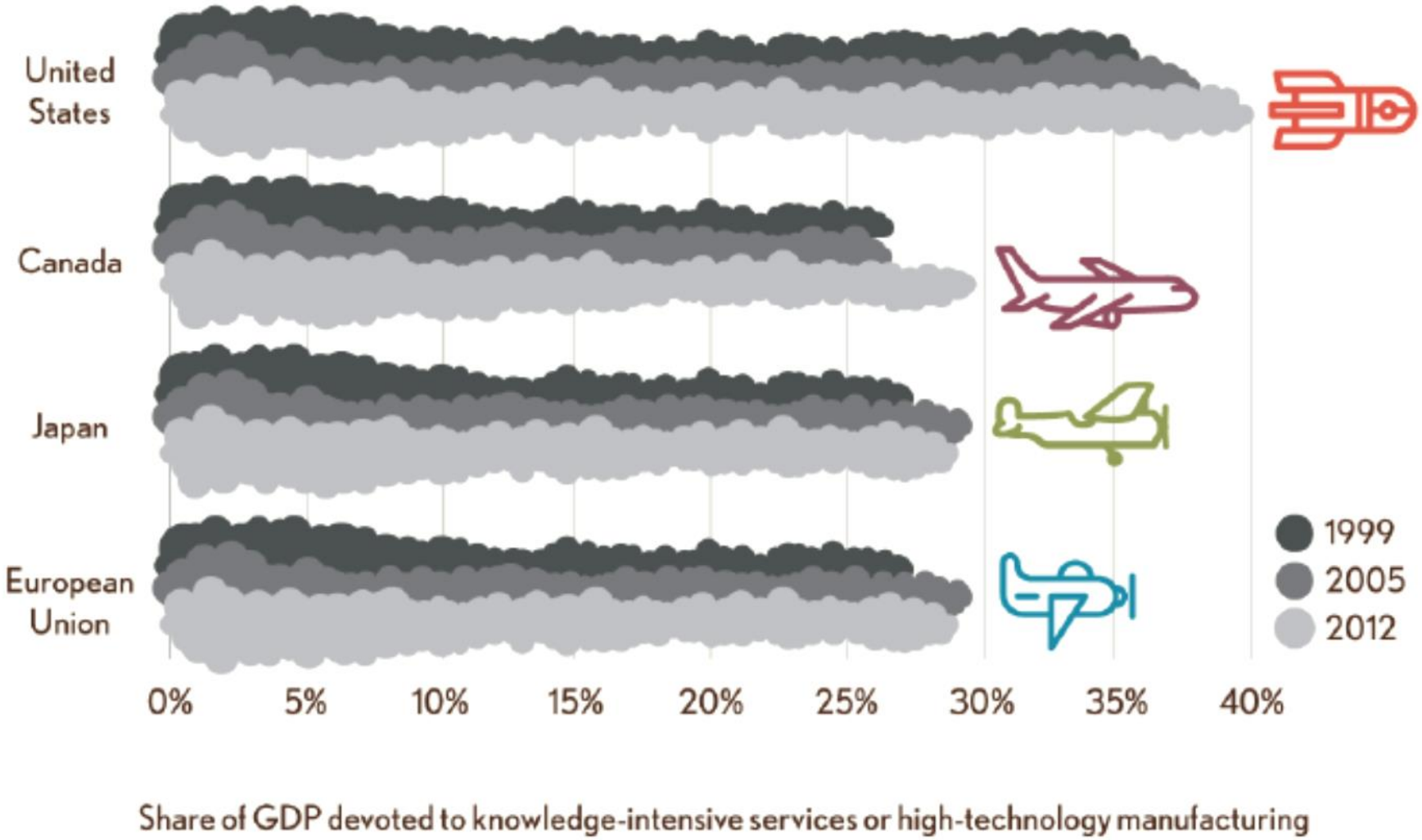
Wealth gap in getting a B.A.



The wealthiest 25%
vs.
the poorest 25%

Source: "Bachelor's Degree Attainment by Age 24 by Family Income Quartiles, 1970 to 2010". Graphic: The Education Trust

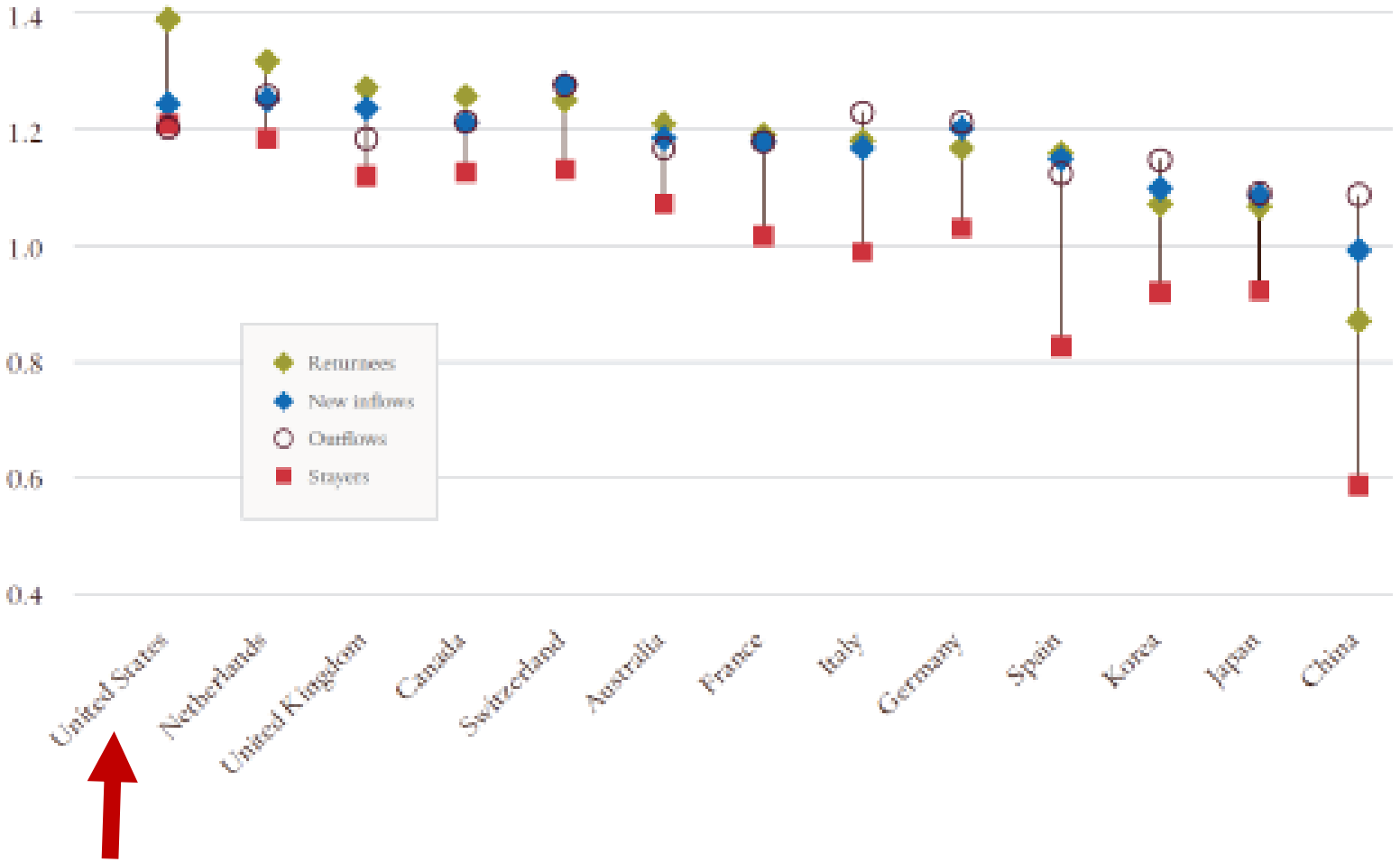

Innovation



The U.S. economy is more knowledge-intensive than its competitors and no one is catching up.

Source: Alden, Edward & Strauss, Rebecca. “How America Stacks Up: Economic Competitiveness and U.S. Policy” (2016)

Impact of scientific authors by category of mobility (1996-2011)



Source: OECD, 2013

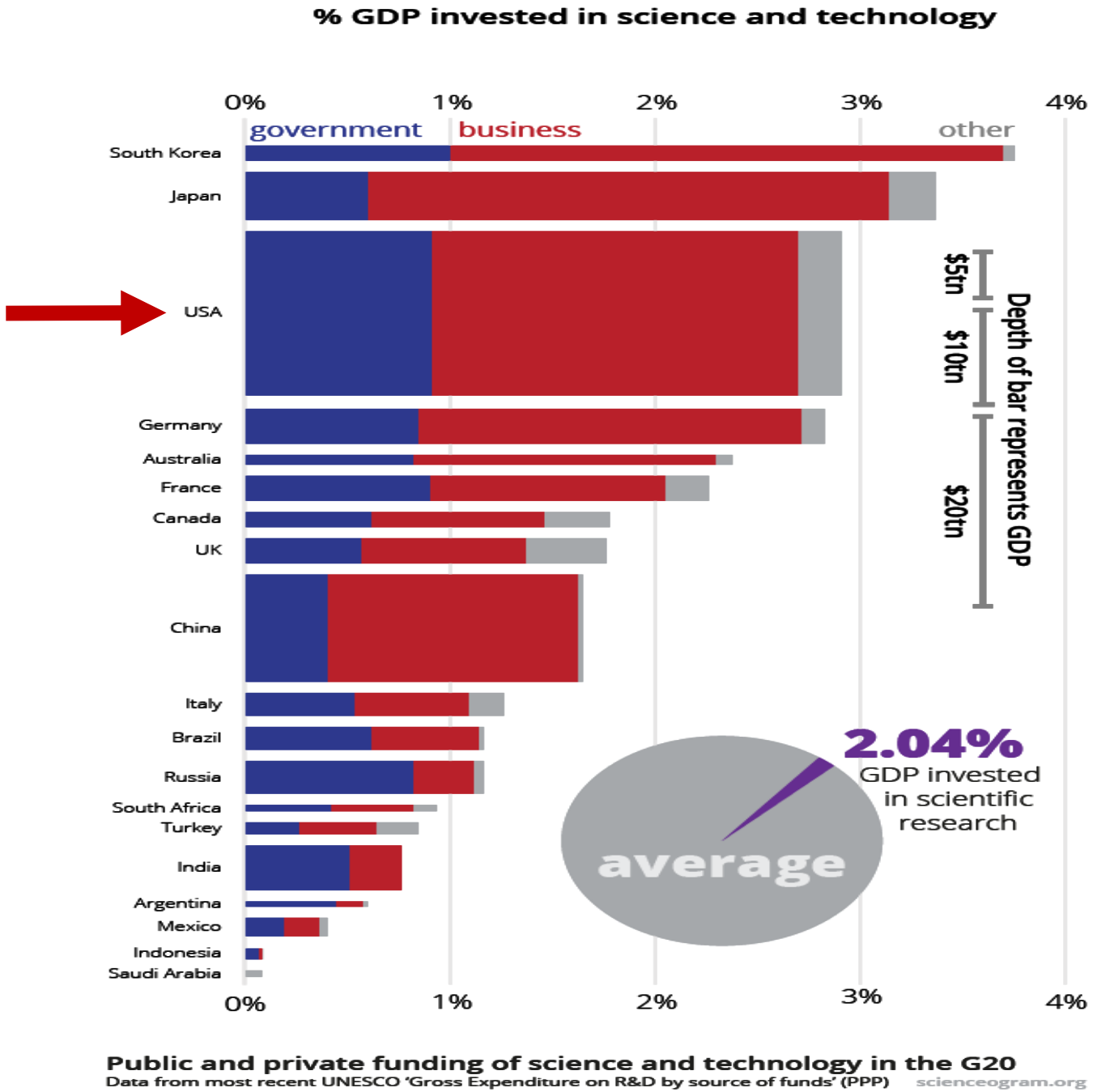
Bloomberg 2017 Innovation Index

2017 rank	2016 rank	YoY change	Economy	Total score	R&D intensity	Manufacturing value-added	Productivity	High-tech density	Tertiary efficiency	Researcher concentration	Patent activity
1	1	0	S. Korea	**89.00**	1	1	32	4	2	4	1
2	3	+1	Sweden	**83.98**	5	11	15	7	18	5	6
3	2	-1	Germany	**83.92**	9	3	16	5	12	16	9
4	5	+1	Switzerland	**83.64**	8	6	2	11	16	14	4
5	7	+2	Finland	**83.26**	4	13	20	15	5	3	5
6	6	0	Singapore	**83.22**	14	5	12	17	1	6	12
7	4	-3	Japan	**82.64**	3	9	28	8	27	9	3
8	9	+1	Denmark	**81.93**	6	17	5	13	22	2	11
9	8	-1	U.S.	**81.44**	10	22	10	1	34	20	2
10	11	+1	Israel	**81.23**	2	30	30	3	20	1	18
11	10	-1	France	**80.99**	12	34	18	2	10	18	10
12	13	+1	Austria	**80.46**	7	7	11	23	6	10	17
13	16	+3	Belgium	**77.18**	11	21	9	10	19	19	25
14	14	0	Norway	**76.89**	19	36	3	12	25	8	15
15	18	+3	Netherlands	**75.23**	17	24	19	6	44	15	19
16	15	-1	Ireland	**74.94**	22	2	6	16	13	22	31
17	17	0	U.K.	**74.52**	20	38	21	14	7	17	14
18	20	+2	Australia	**73.33**	13	44	1	20	21	12	21

SOURCE(S): Bloomberg, International Labour Organization, International Monetary Fund, World Bank, Organization for Economic Co-operation and Development, World Intellectual Property Organization, United Nations Educational, Scientific, and Cultural Organization

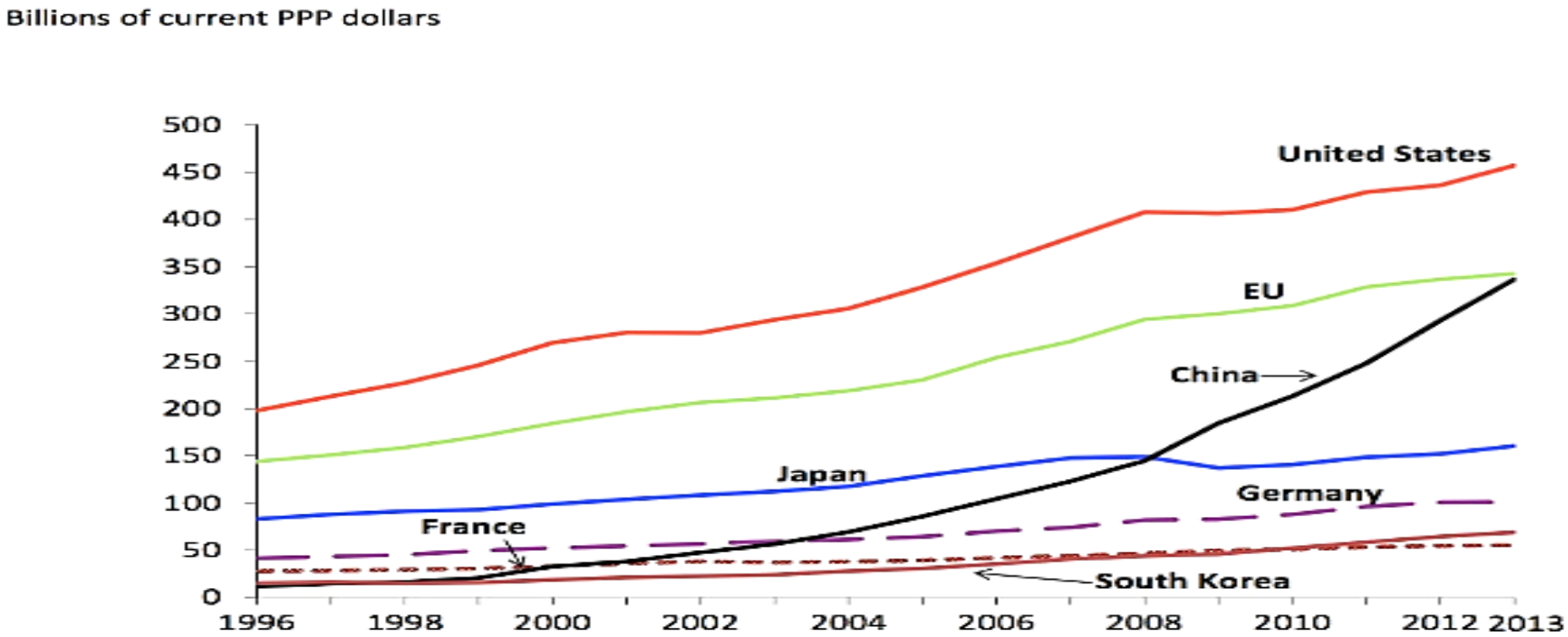
Bloomberg

Public R&D Expenditures as a Percentage of GDP - 2013



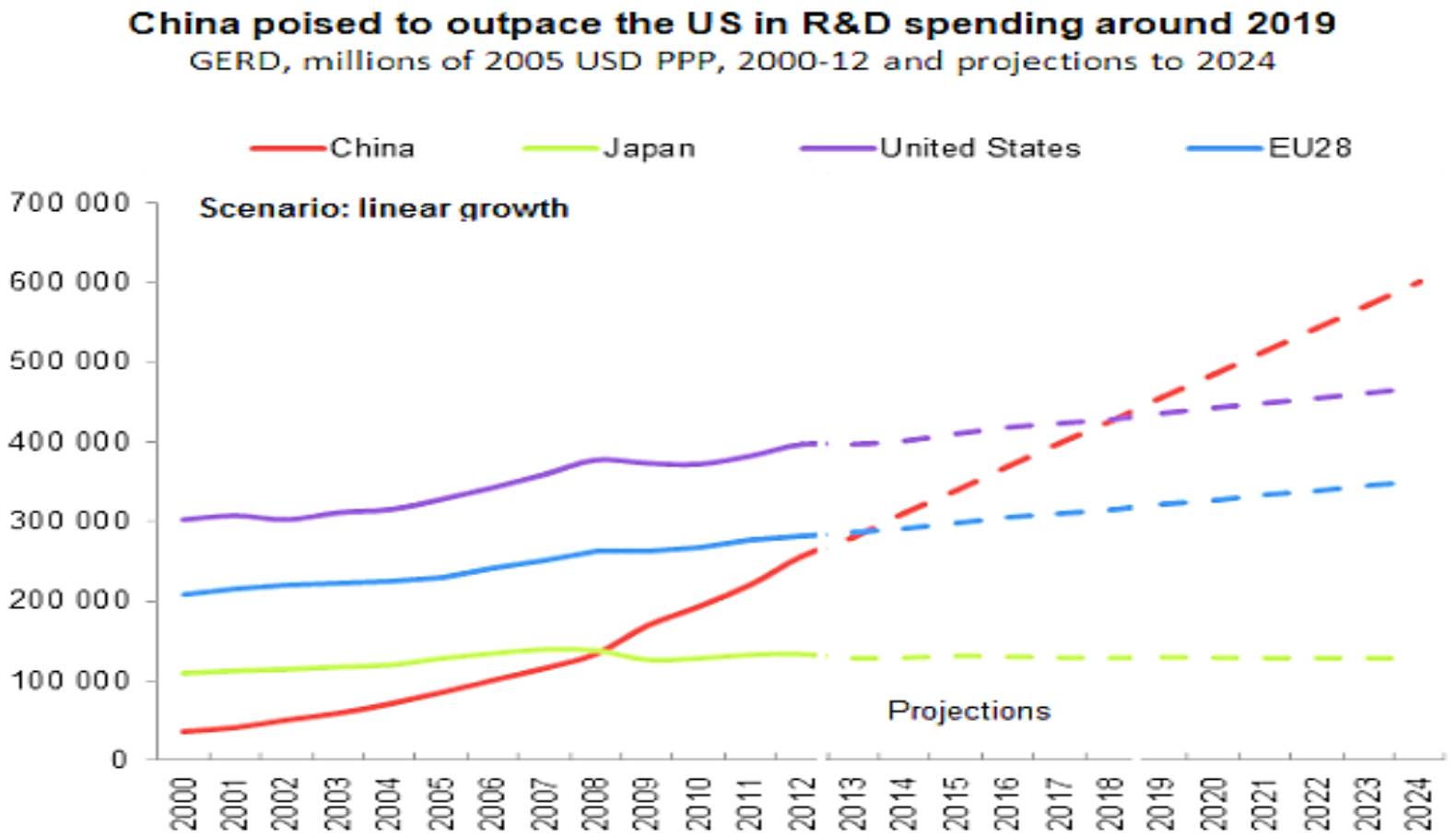
R&D: Gross domestic expenditures, 1996-2013

U.S. still world leader, but China catching up



*PPP=Purchasing Power Parity, an adjustment in currency amount based on the ability to purchase a basket of goods in that country

Source: AIP.org; "Report: U.S. Global Lead in R&D at Risk as China Rises"

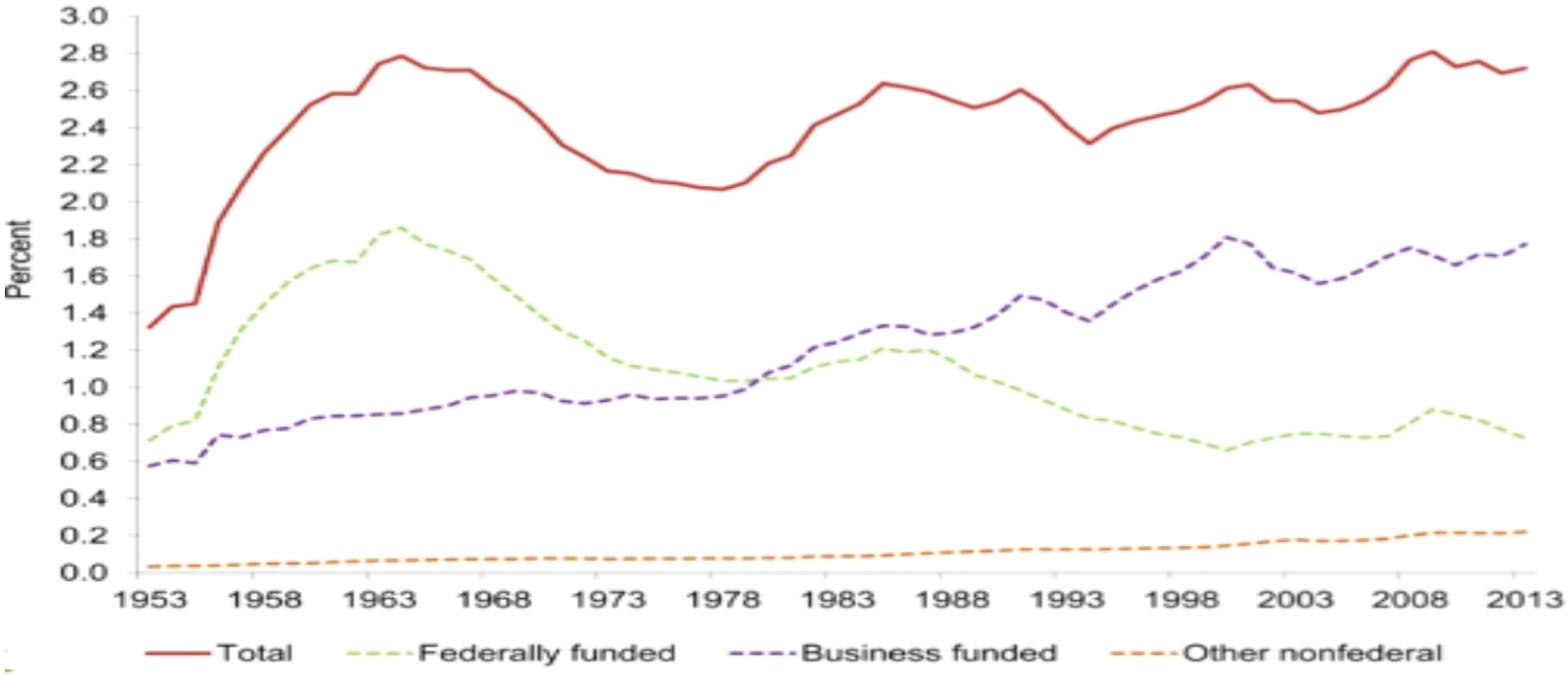


China is likely to surpass US in gross R&D spending soon

Source: OECD

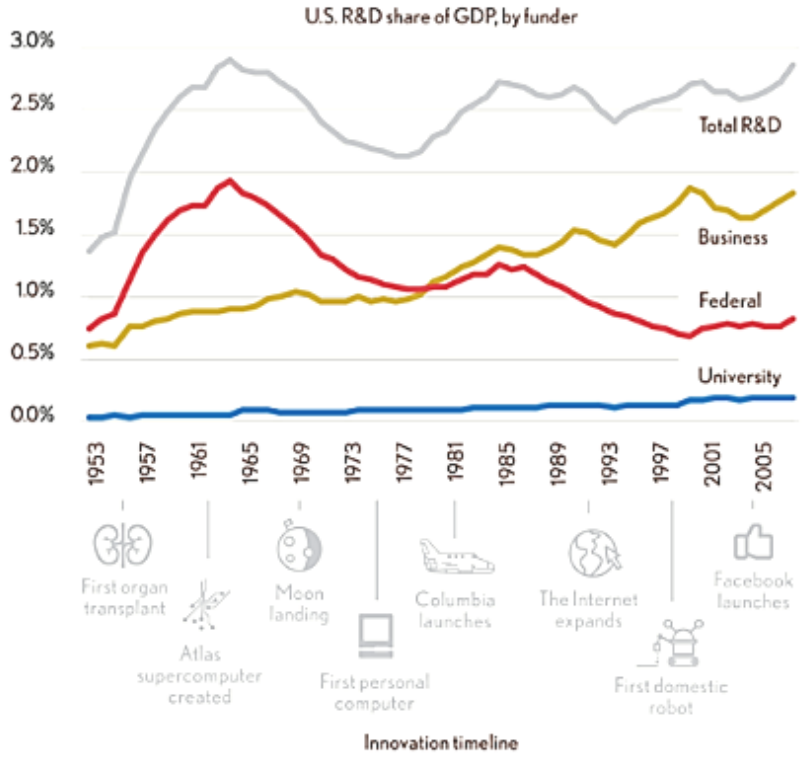
Federal R&D support

Ratio of U.S. R&D to GDP, by funders: 1953-2013

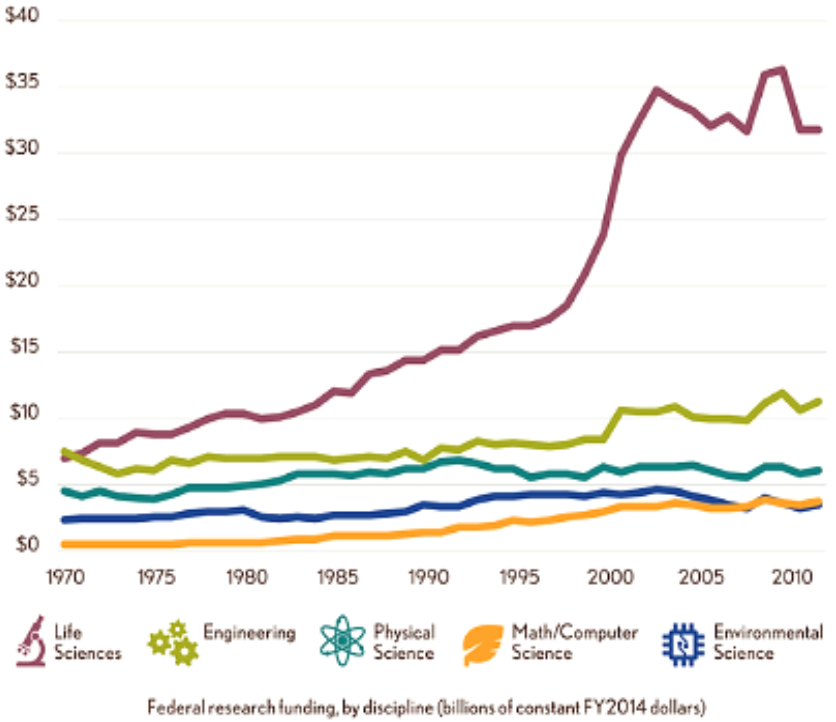


Source: AIP.org; “Report: U.S. Global Lead in R&D at Risk as China Rises”

R&D Priorities?



While government R&D as a percentage of GDP has declined over time, business R&D has risen.

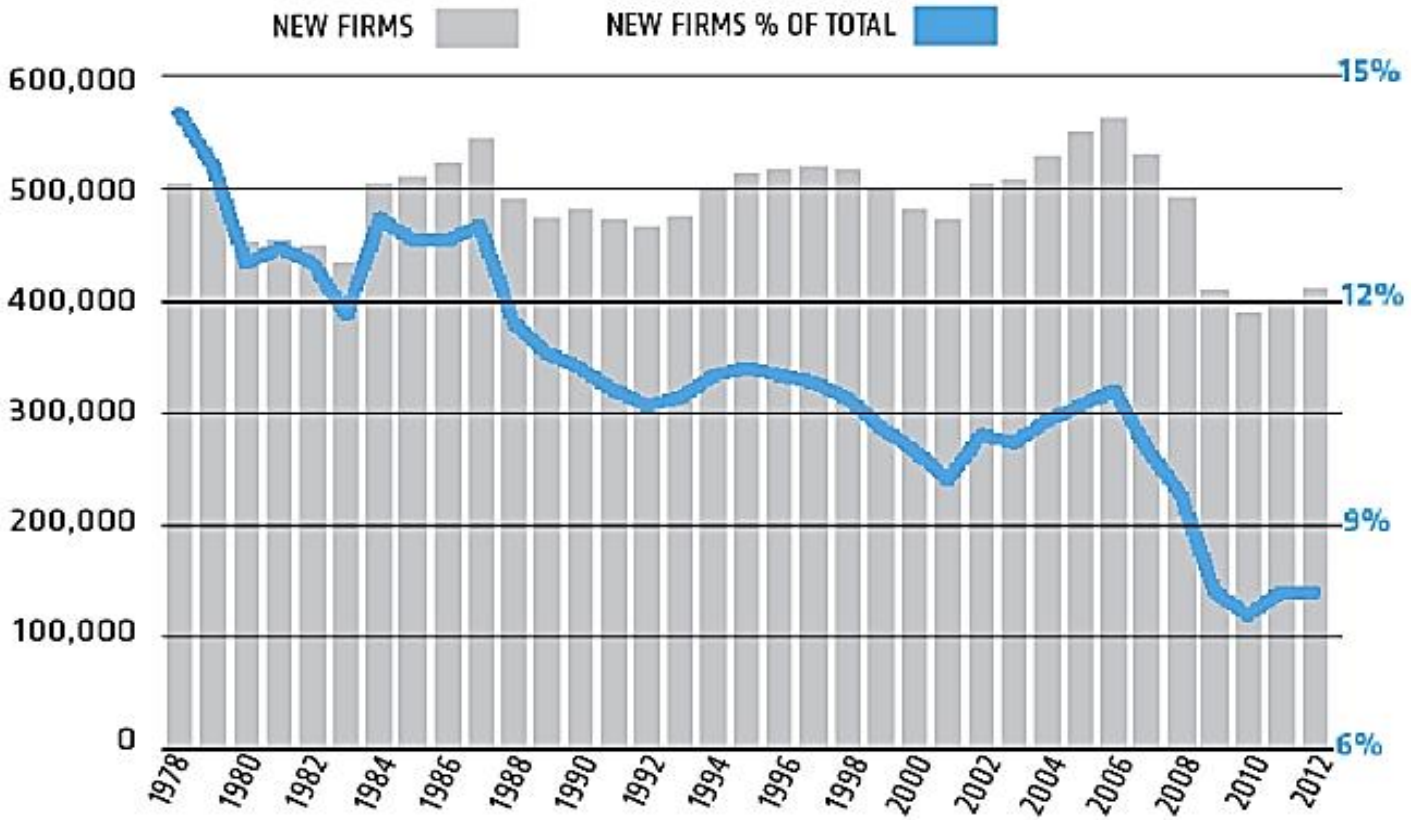


Federal research-funding priorities have become unbalanced, skewing toward the life sciences and away from the physical sciences.

Source: Alden, Edward & Strauss, Rebecca. “How America Stacks Up: Economic Competitiveness and U.S. Policy” (2016)

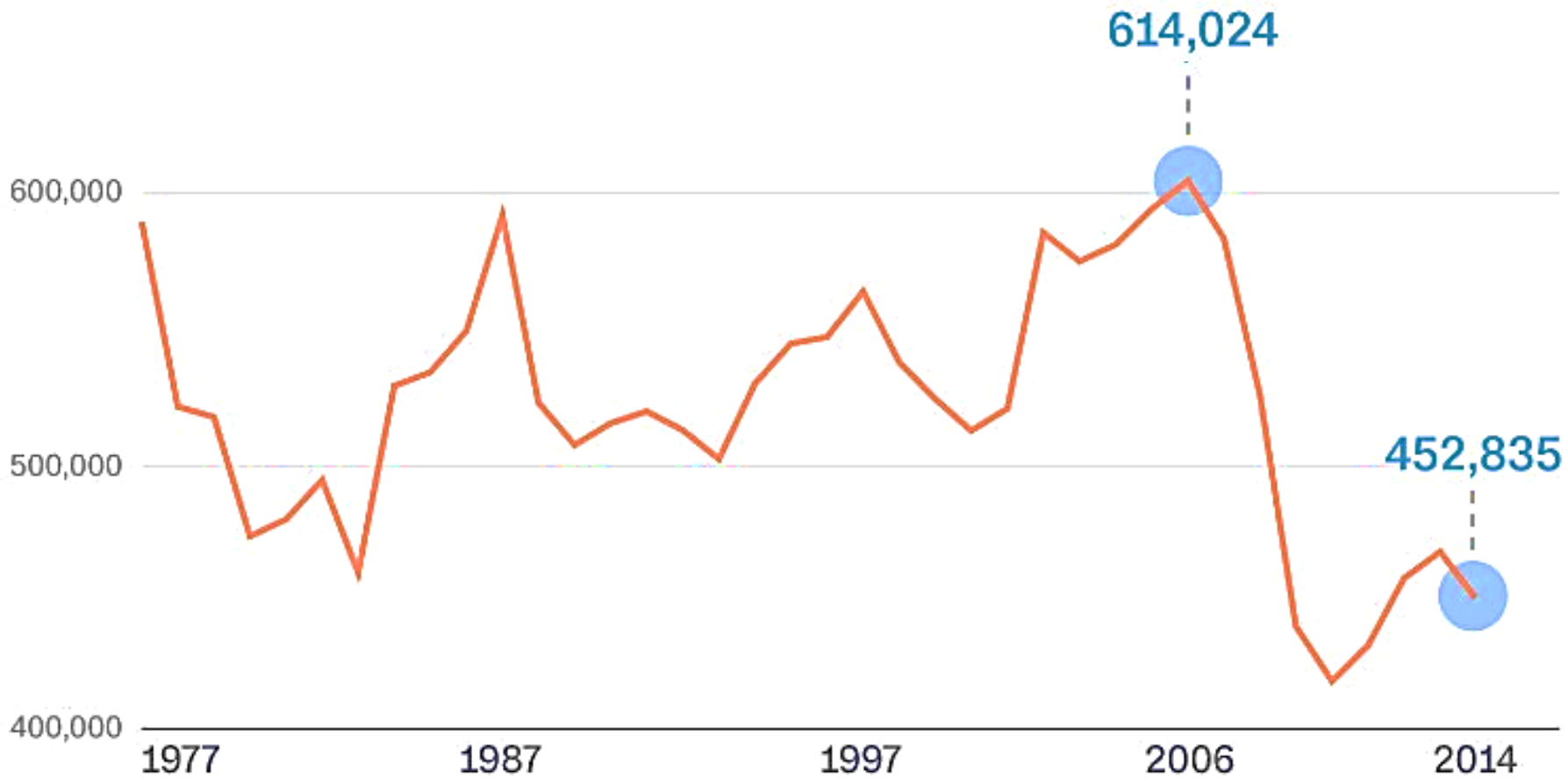
CHARTING THE STARTUP DECLINE

According to Census Bureau data reported by the Kauffman Foundation and the Brookings Institution, the number of new companies as a share of all U.S. businesses has dropped 44 percent since 1978.



Source: Inc.com; “American Entrepreneurship is Actually Vanishing. Here’s Why.”

New US businesses created each year



Source: US Census


Infrastructure

America's infrastructure scores a

D+

CATEGORY	1988*	1998	2001	2005	2009	2013	2017
Aviation	B-	C-	D	D+	D	D	D
Bridges	–	C-	C	C	C	C+	C+
Dams	–	D	D	D+	D	D	D
Drinking Water	B-	D	D	D-	D-	D	D
Energy	–	–	D+	D	D+	D+	D+
Hazardous Waste	D	D-	D+	D	D	D	D+
Inland Waterways	B-	–	D+	D-	D-	D-	D
Levees	–	–	–	–	D-	D-	D
Ports	–	–	–	–	–	C	C+
Public Parks & Recreation	–	–	–	C-	C-	C-	D+
Rail	–	–	–	C-	C-	C+	B
Roads	C+	D-	D+	D	D-	D	D
Schools	D	F	D-	D	D	D	D+
Solid Waste	C-	C-	C+	C+	C+	B-	C+
Transit	C-	C-	C-	D+	D	D	D-
Wastewater	C	D+	D	D-	D-	D	D+
GPA	**C**	**D**	**D+**	**D**	**D**	**D+**	**D+**
Cost to Improve**	**–**	**–**	**$1.3T**	**$1.6T**	**$2.2T**	**$3.6T**	**$4.59T**

Source: ASCE's 2017 Infrastructure Report Card

Road to Nowhere

Failing U.S. Transportation Infrastructure

Falling Behind

2015 ranking of U.S. infrastructure quality, worldwide

The United States lapped by eleven countries in the last decade:
UAE, Finland, Netherlands, Austria, Iceland, Japan, France, Portugal, Spain, Luxembourg, and Denmark

2002 ranking of U.S. infrastructure quality, worldwide

The United States has fallen in international rankings of infrastructure quality.

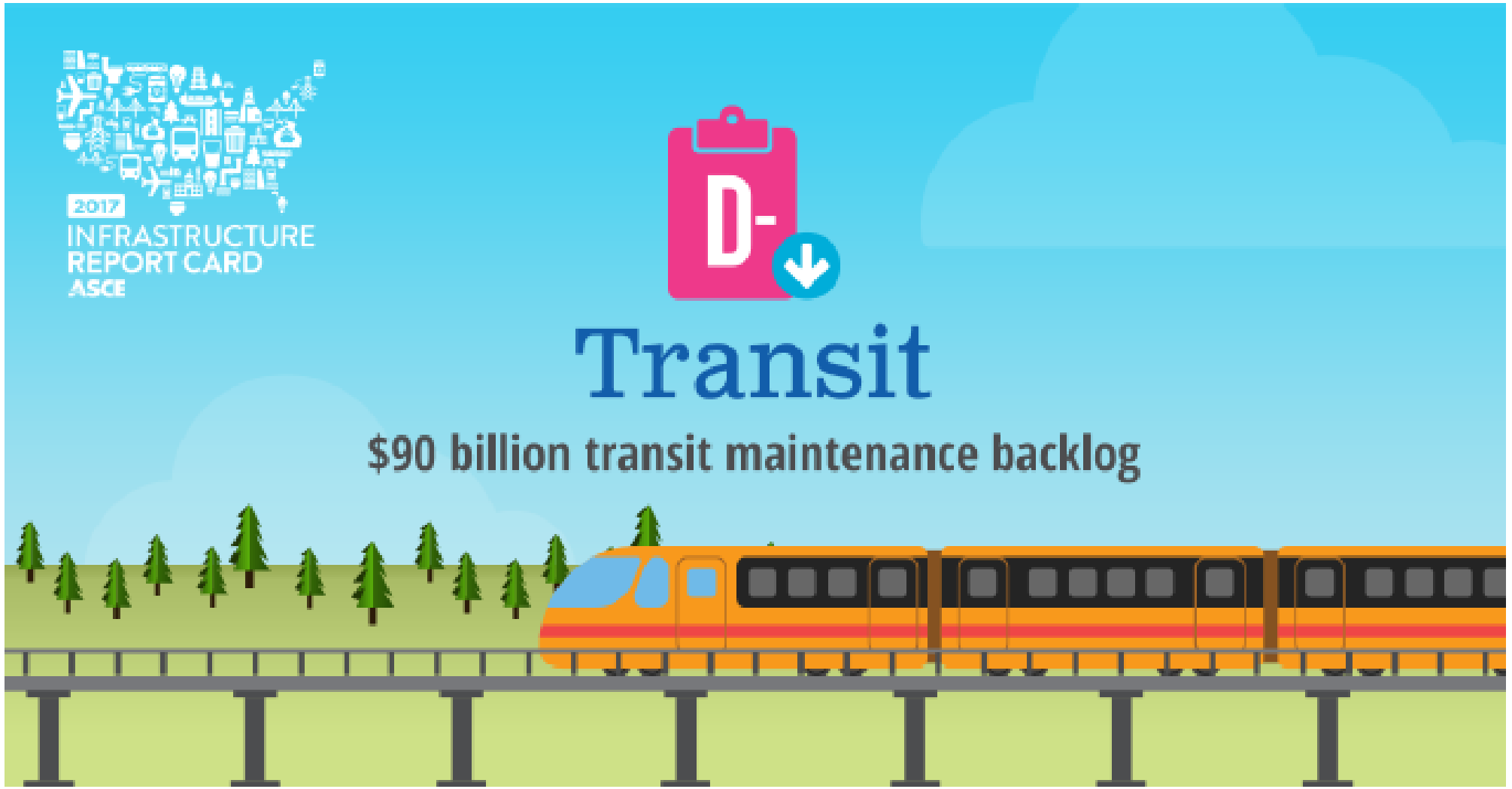
Highway miles traveled by U.S. drivers:
UP 96%

New highway miles to travel on:
UP 9%

1980
TO
2013

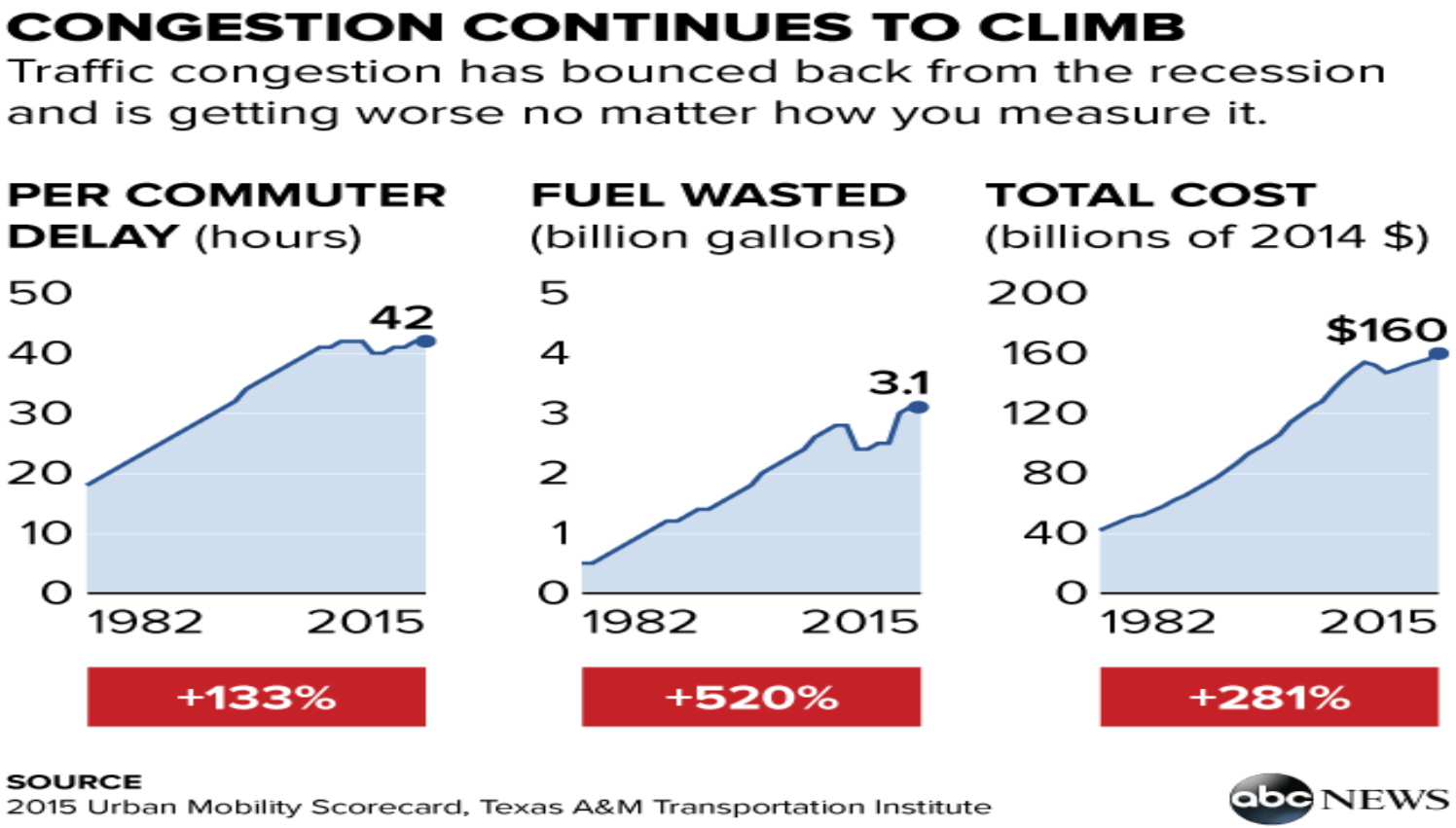
New highway construction has not kept pace with highway use.

Source: Alden, Edward & Strauss, Rebecca. “How America Stacks Up: Economic Competitiveness and U.S. Policy” (2016)

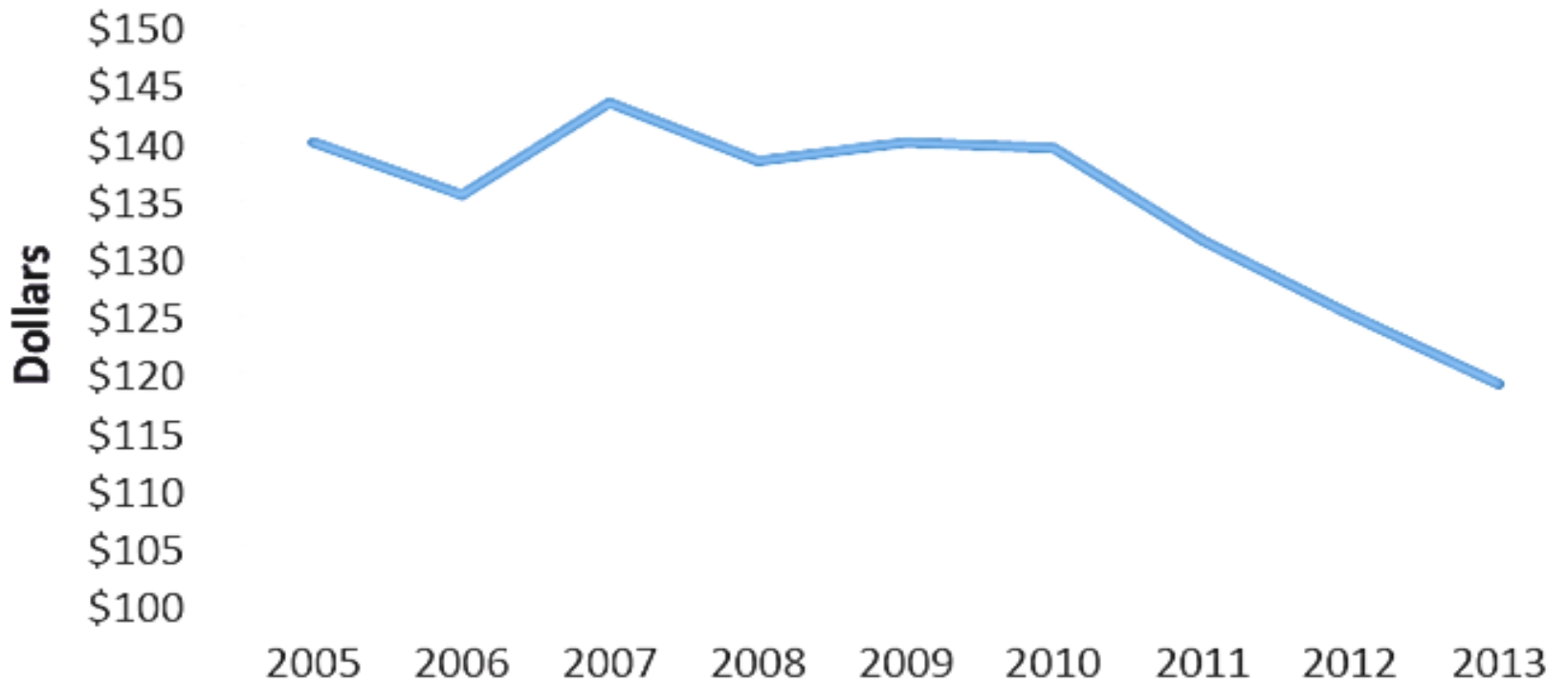


Source: ASCE's 2017 Infrastructure Report Card

Hours spent in traffic per commuter per year and economic cost of congestion



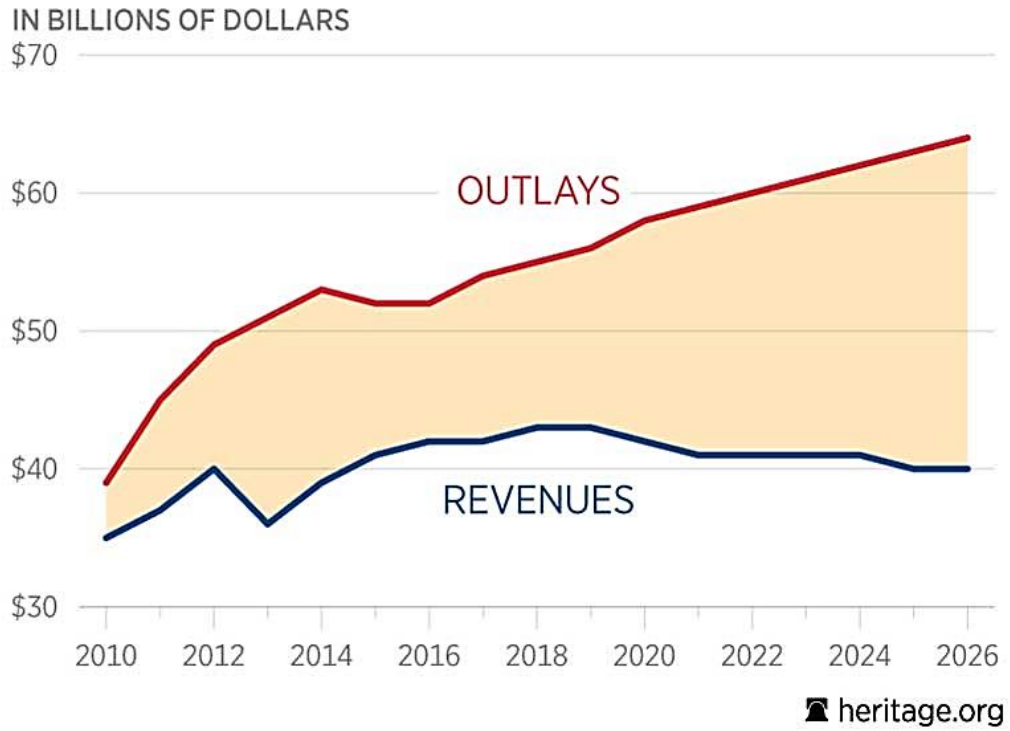
Real federal highway funding per capita



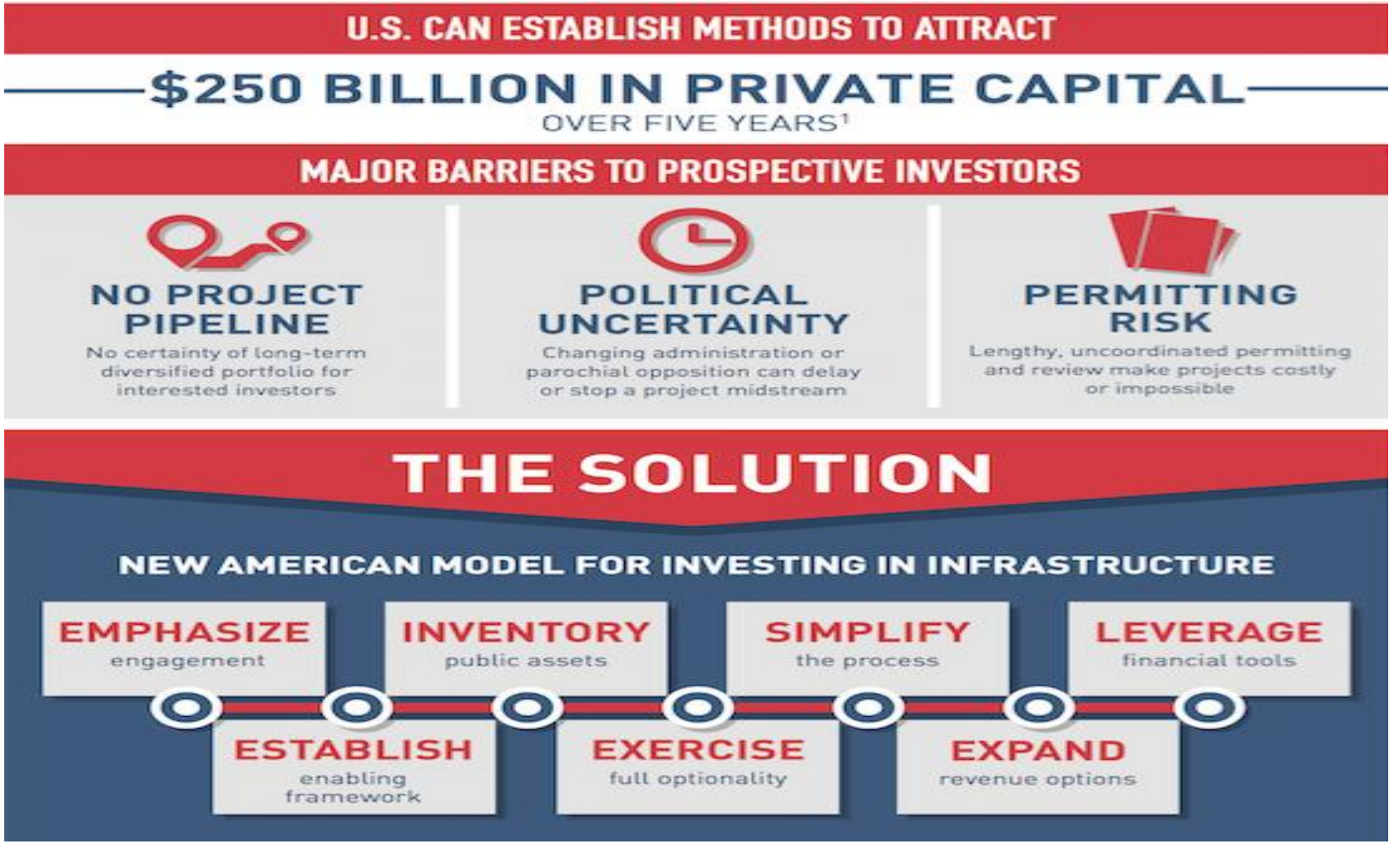
Source: Bloomberg Law: “U.S. Business Loses Big From Lack of Transportation Infrastructure Investment”

Road to Nowhere:
Falling U.S. Transportation Infrastructure

Highway Trust Fund Runs Growing Deficits



Source: Alden, Edward & Strauss, Rebecca. “How America Stacks Up: Economic Competitiveness and U.S. Policy” (2016)



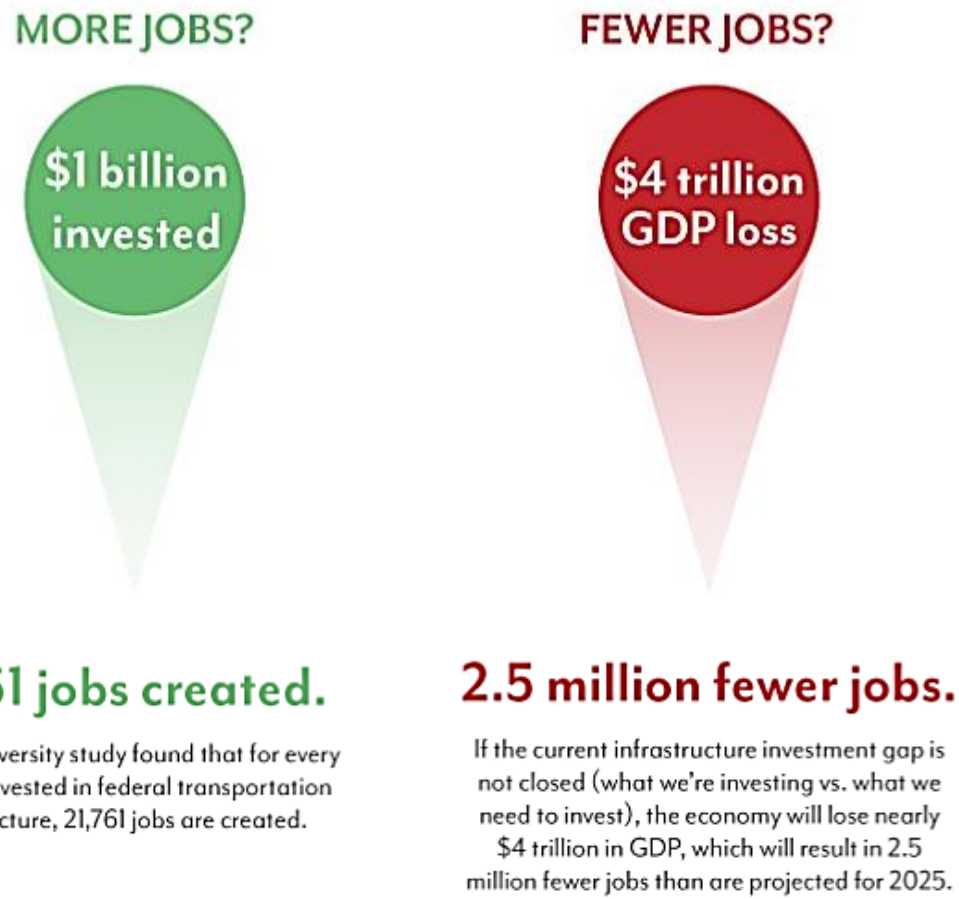
Source: http://www.infrastructureusa.org

Each American household could lose $3,400

According to the American Society of civil Engineers, between 2016 and 2025 each American household will lose $3,400 in disposable income due to infrastructure inefficiencies. Inefficient roadways and airports will raise the cost of doing business compared to what it would cost with optimized infrastructure, and businesses will pass that cost along to consumers.

Source: American Society of Civil Engineers

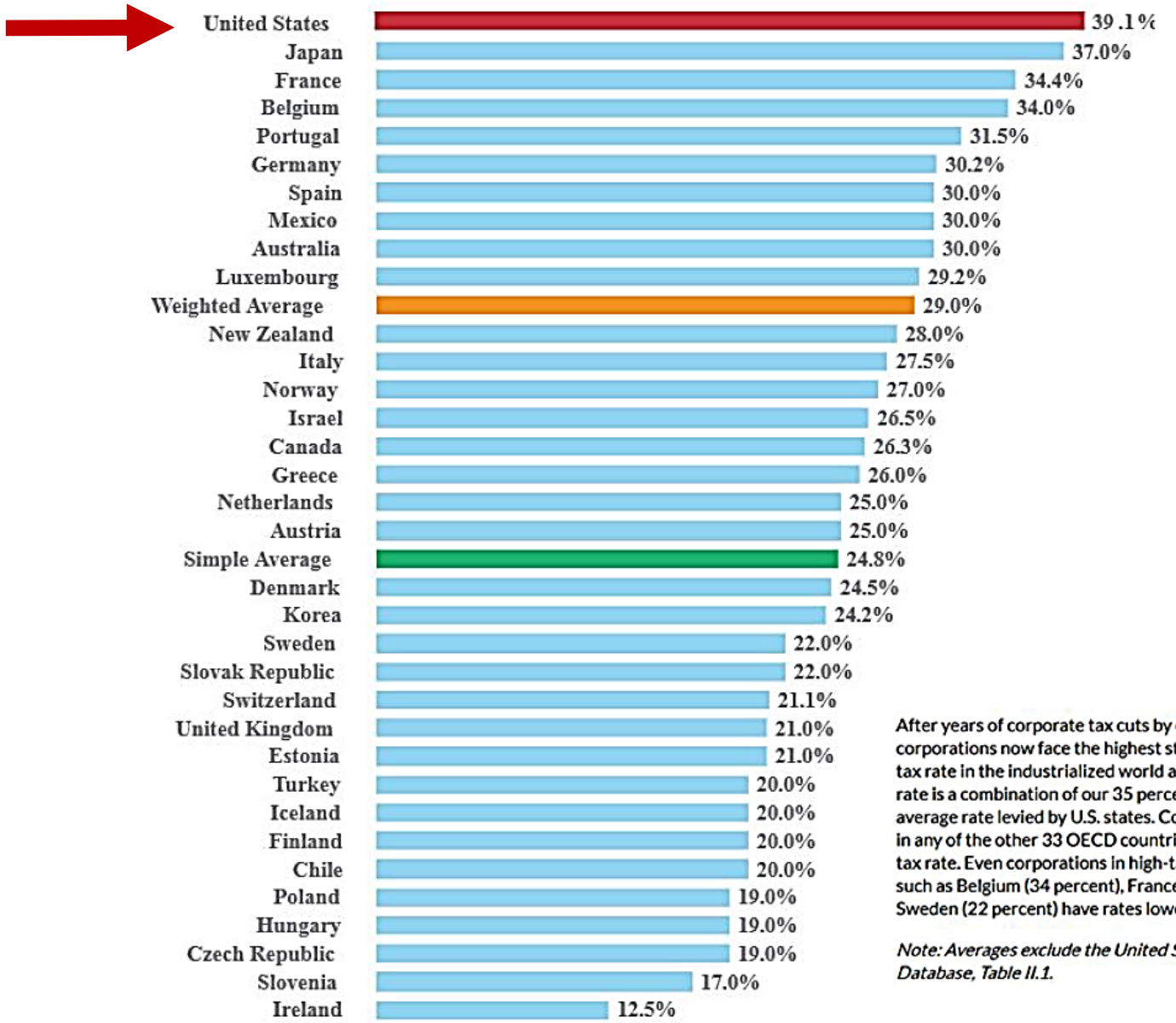
What the future holds




Corporate
Taxes

The U.S. Has the Least Competitive Corporate Tax Rate in the OECD

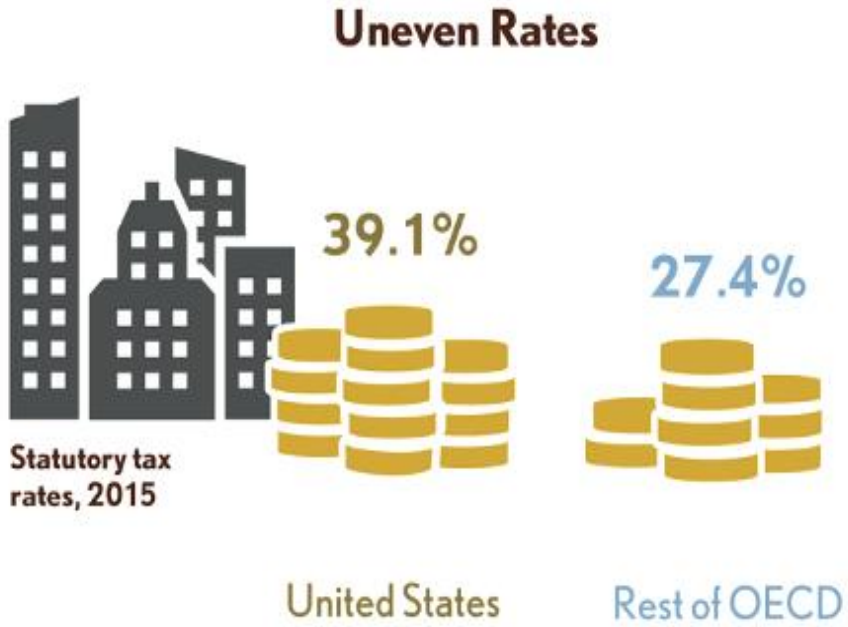
Top Marginal Corporate Tax Rates by OECD Country, 2014



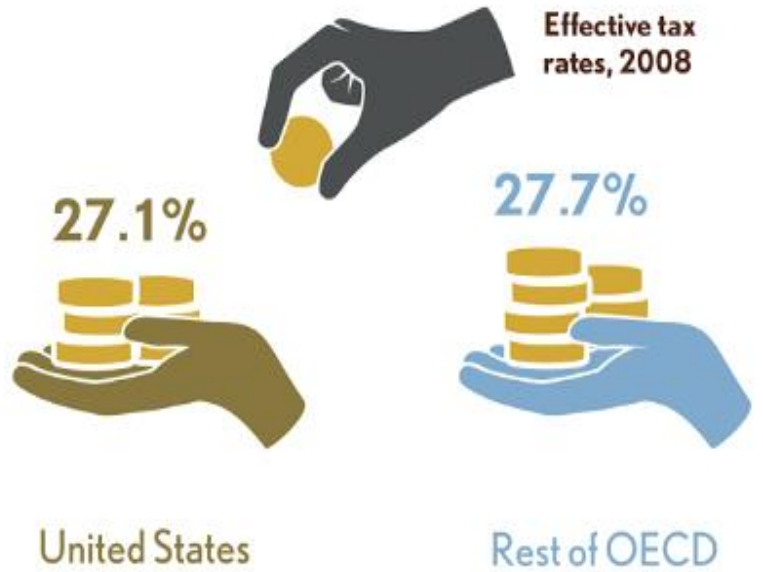
After years of corporate tax cuts by our trading partners, U.S. corporations now face the highest statutory corporate income tax rate in the industrialized world at 39.1 percent. This overall rate is a combination of our 35 percent federal rate and the average rate levied by U.S. states. Corporations headquartered in any of the other 33 OECD countries face a lower corporate tax rate. Even corporations in high-tax European countries such as Belgium (34 percent), France (34.4 percent), and Sweden (22 percent) have rates lower than the United States.

Note: Averages exclude the United States. Source: OECD Tax Database, Table II.1.

Effective tax rate lower



The United States has the highest corporate tax rate in the developed world before tax breaks are taken into account.



But because of tax breaks approved by Congress, U.S. corporations pay an effective tax rate similar to what their international competitors pay.

Source: Alden, Edward & Strauss, Rebecca. “How America Stacks Up: Economic Competitiveness and U.S. Policy” (2016)

Corporate profits overseas

$2 trillion

The amount kept overseas by U.S. companies

Source: ASCE's 2017 Infrastructure Report Card

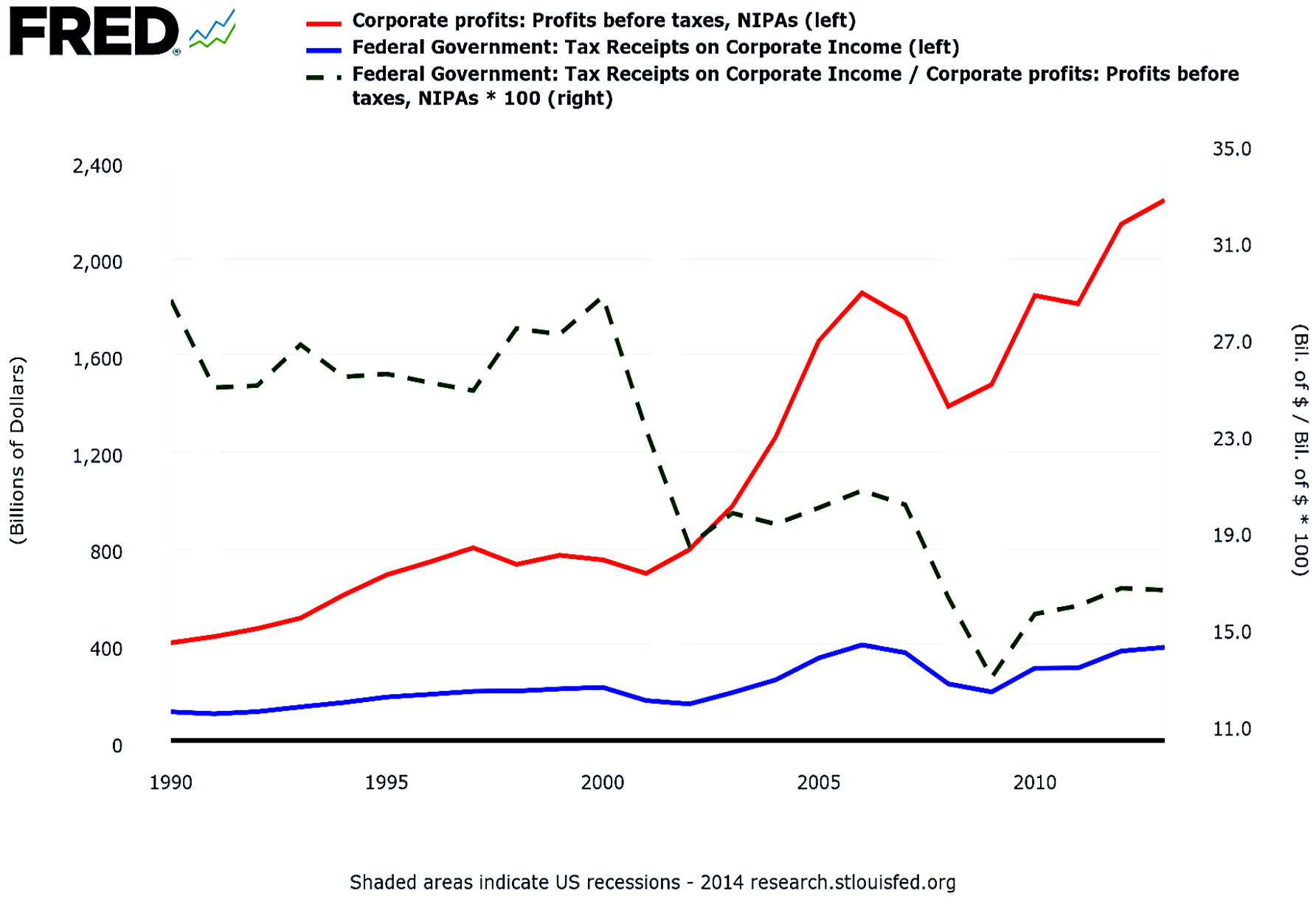
Declining federal tax income

U.S. Corporate Income Tax as a Share of GDP, 1946-2012

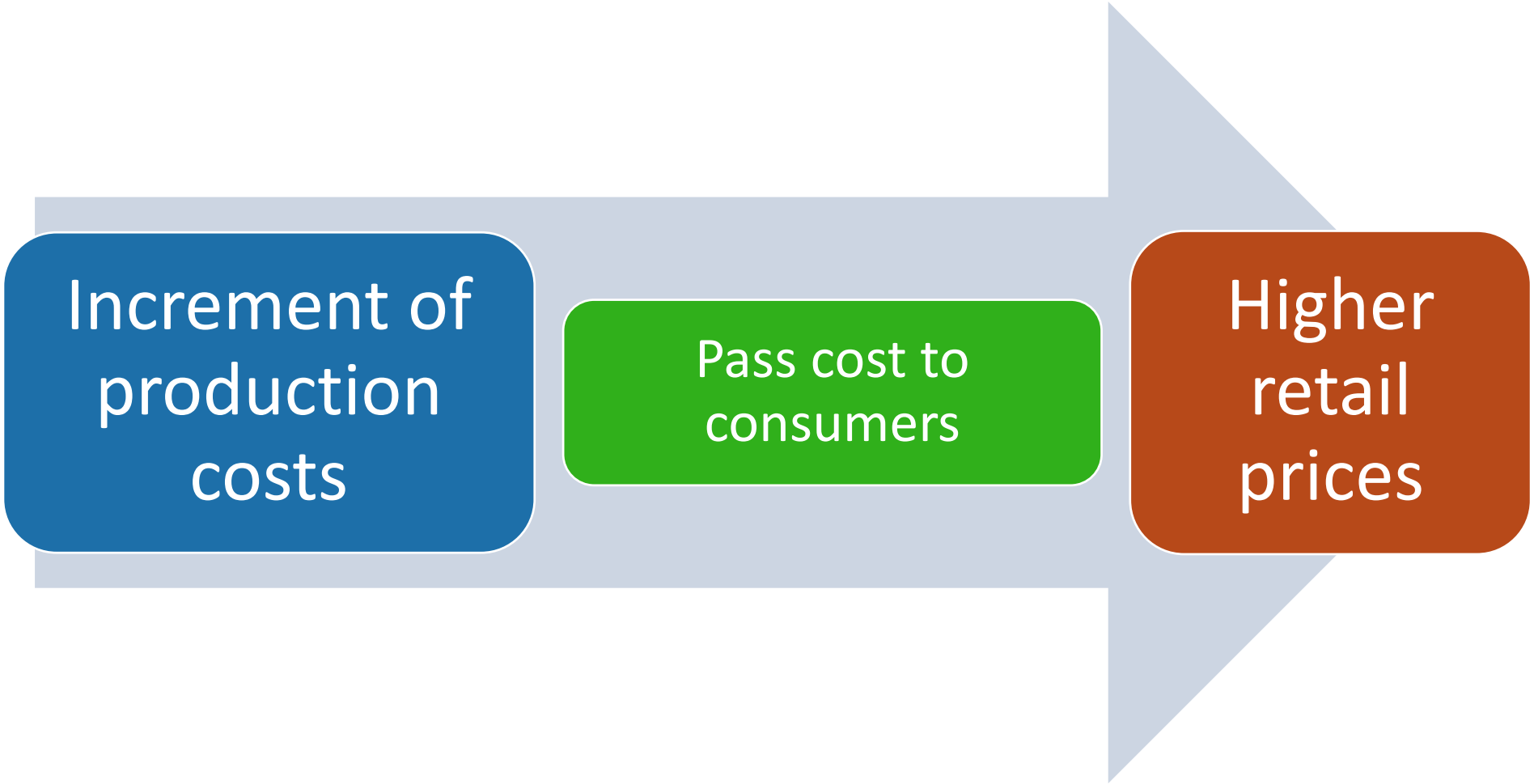
Notes: Shaded areas represent recessionary periods as recorded by the National Bureau of Economic Research. Miscellaneous taxes such as estate and gift taxes are omitted for the sake of clarity, and comprise a very small fraction of total revenues in any case.

Source: Budget of the United States Government, Historical Tables, Table 2.3
Based on Adam Carasso, "The Corporate Income Tax in the Post-War Era," Tax Facts Column, Tax Notes Magazine, March 03, 2003

Federal corporate income tax receipts have declined relative to corporate profits.



Border tax


Increment of production costs
Pass cost to consumers
Higher retail prices

How much would families pay?

At the bottom of the income latter	Middle-class	At the top of the income latter
• 5%-8% of their income • $300-$500 a year	• 1.3%-2% of their income • $700-$1000 a year	• 1% of their income • $1800-$2500 a year

Source: The Washington Post “The hottest tax idea in Washington right now would cost average families 1000 a year” (2017)

Potential violation of WTO rules

Restricting US imports	Implicitly subsidize exports
• Partners retaliation $220 billion USD annually	• Partners retaliation $165 billion USD annually

Total=$385 billion USD annually

Source: Peterson Institute for International Economics “Will the Proposed US Border Tax Provoke WTO Retaliation from Trading Partners” (2017)

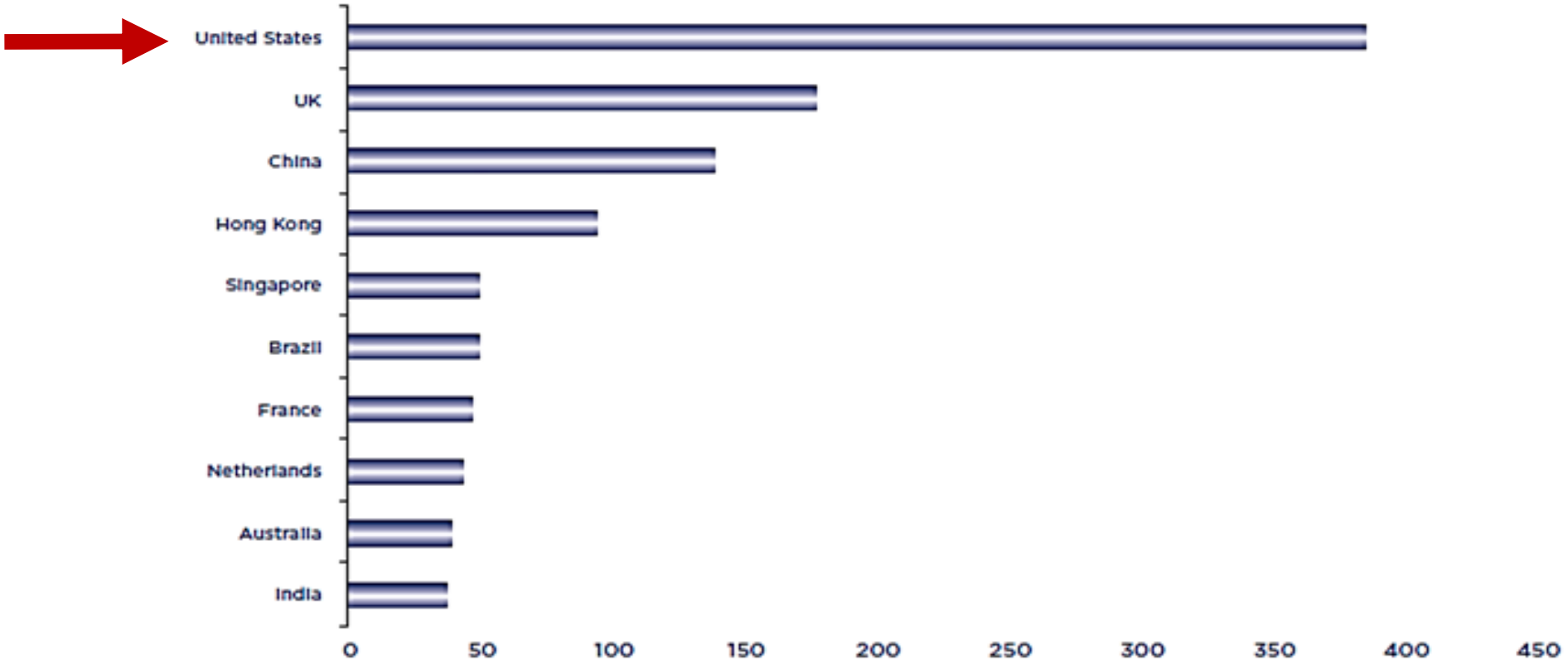
Cumulative investment inflows 1980-2016 rankings

Rank	Country	Cumulative flows (billions of US $)	Percent of world total
1	United States	4,671.5	17.9%
2	China	1,879.9	7.2%
3	UK	1,840.9	7.0%
4	Hong Kong	1,189.4	4.5%
5	Canada	873.7	3.3%
6	Germany	868.9	3.3%
7	Brazil	852.8	3.3%
8	Netherlands	844.5	3.2%
9	Belgium	816.4	3.1%
10	France	741.7	2.8%

Source: United Nations Conference on Trade and Development (UNCTAD). Data as of 2017.

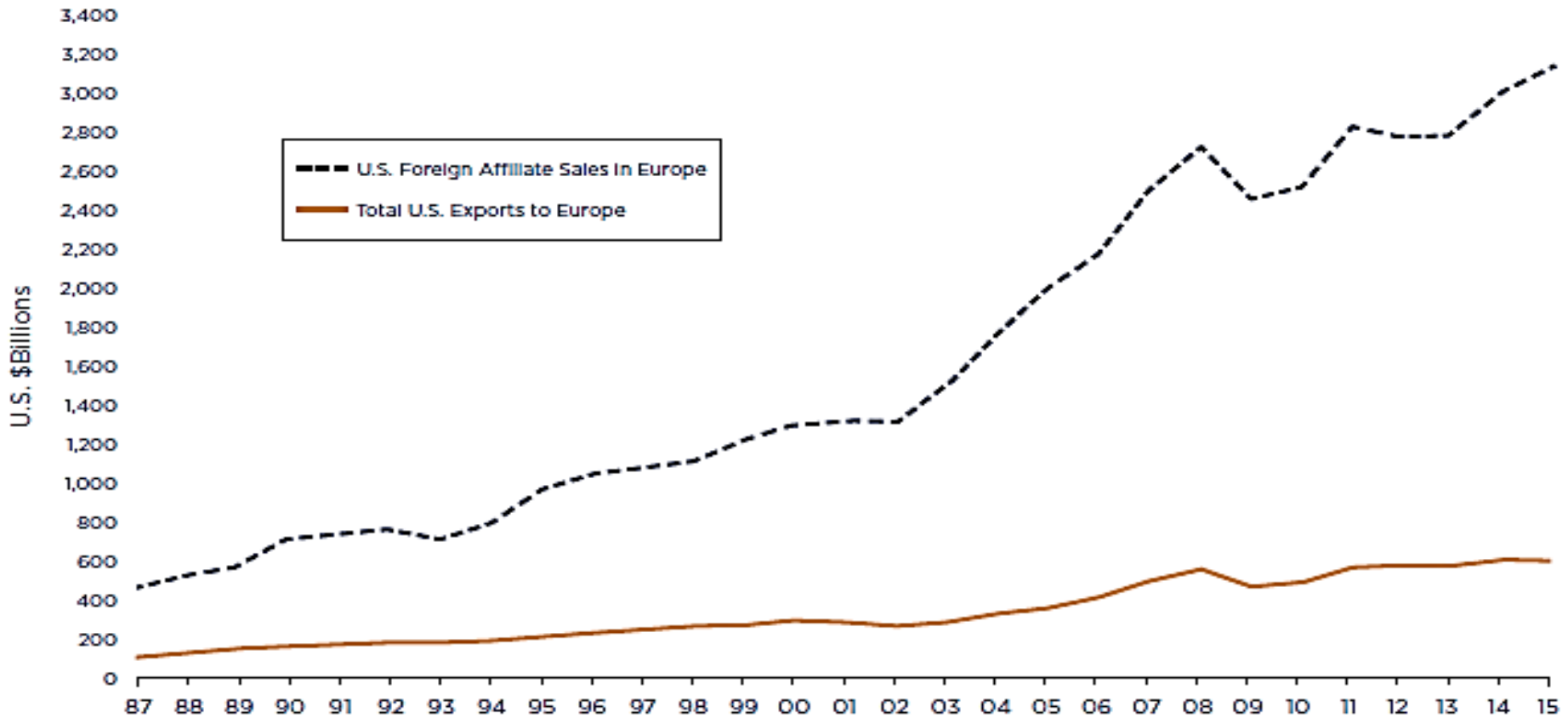
FDI Inflows

Top 10 host economies, 2016 (Billions of $)



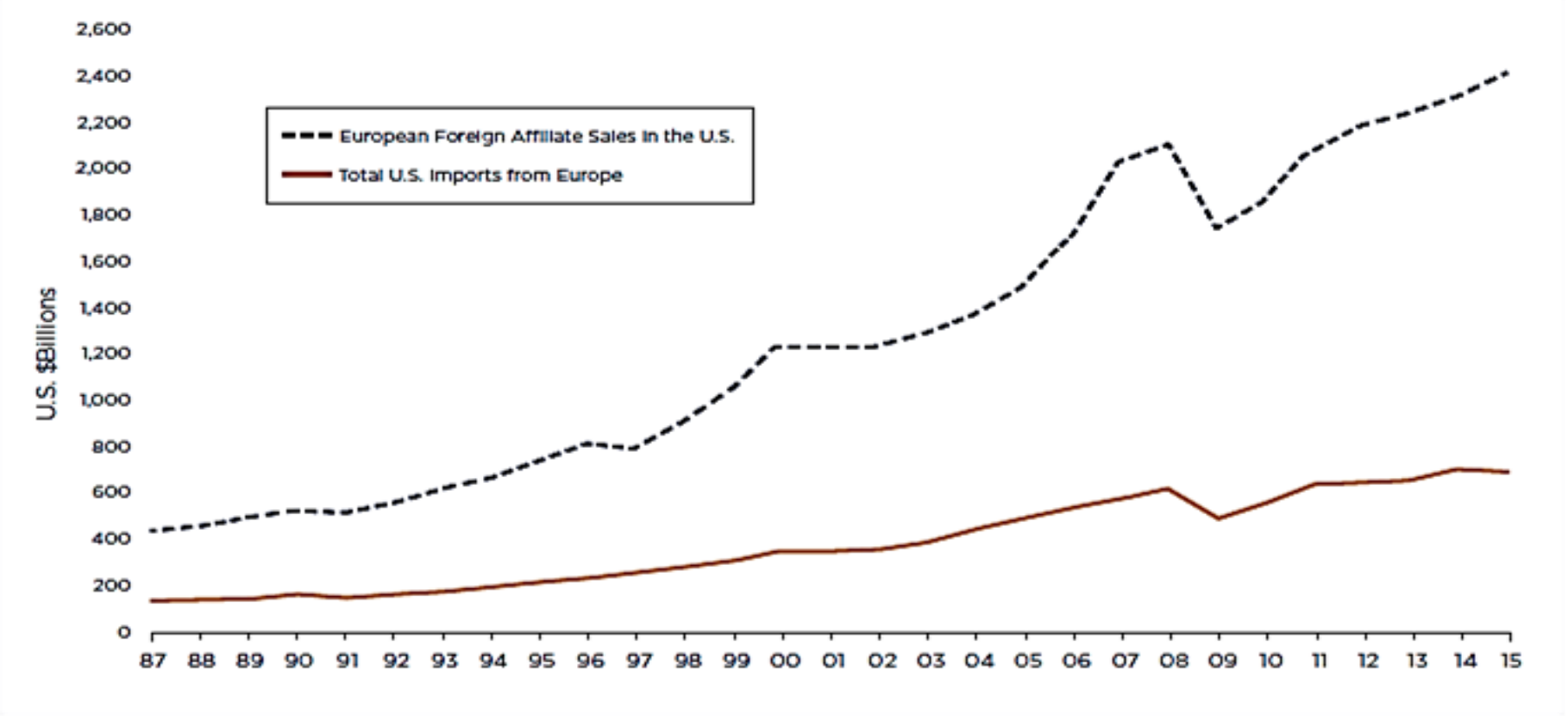
Source: United Nations Conference on Trade and Development (UNCTAD), Global Investment Trends Monitor No. 22. Data as January 2016

Sales of U.S. affiliates in Europe vs. U.S. exports to Europe



Source: Bureau of Economic Analysis. Majority-owned non-bank affiliates data: 1987-2008. Majority-owned bank and non-bank affiliates: 2009-2015. Foreign Affiliate Sales: Estimates for 2015.

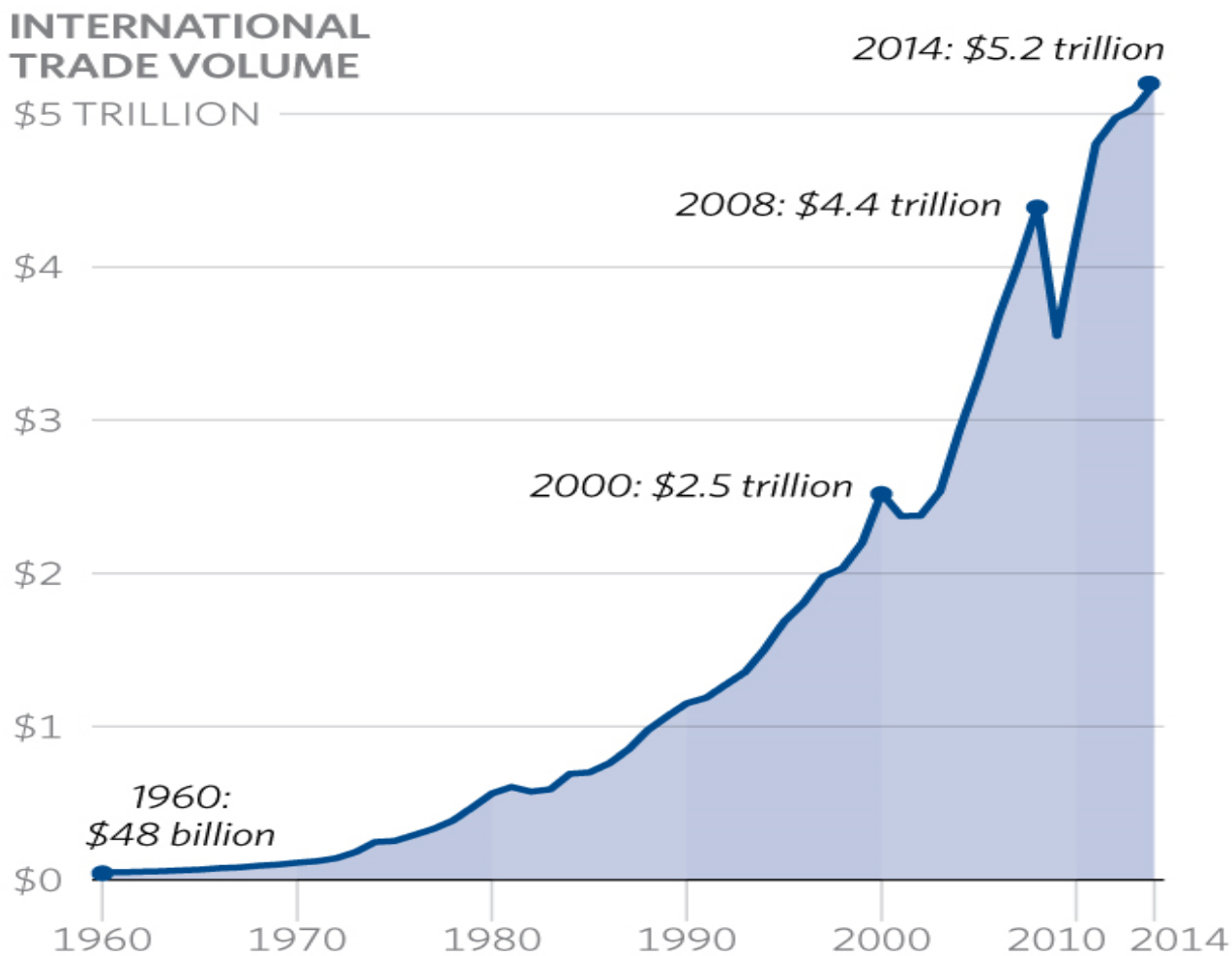
Sales of European affiliates in the U.S. vs. U.S. imports from Europe



Source: Bureau of Economic Analysis. Majority-owned non-bank affiliates data: 1987-2006. Majority-owned bank and non-bank affiliates: 2007-2015. Foreign Affiliate Sales: Estimates for 2015.

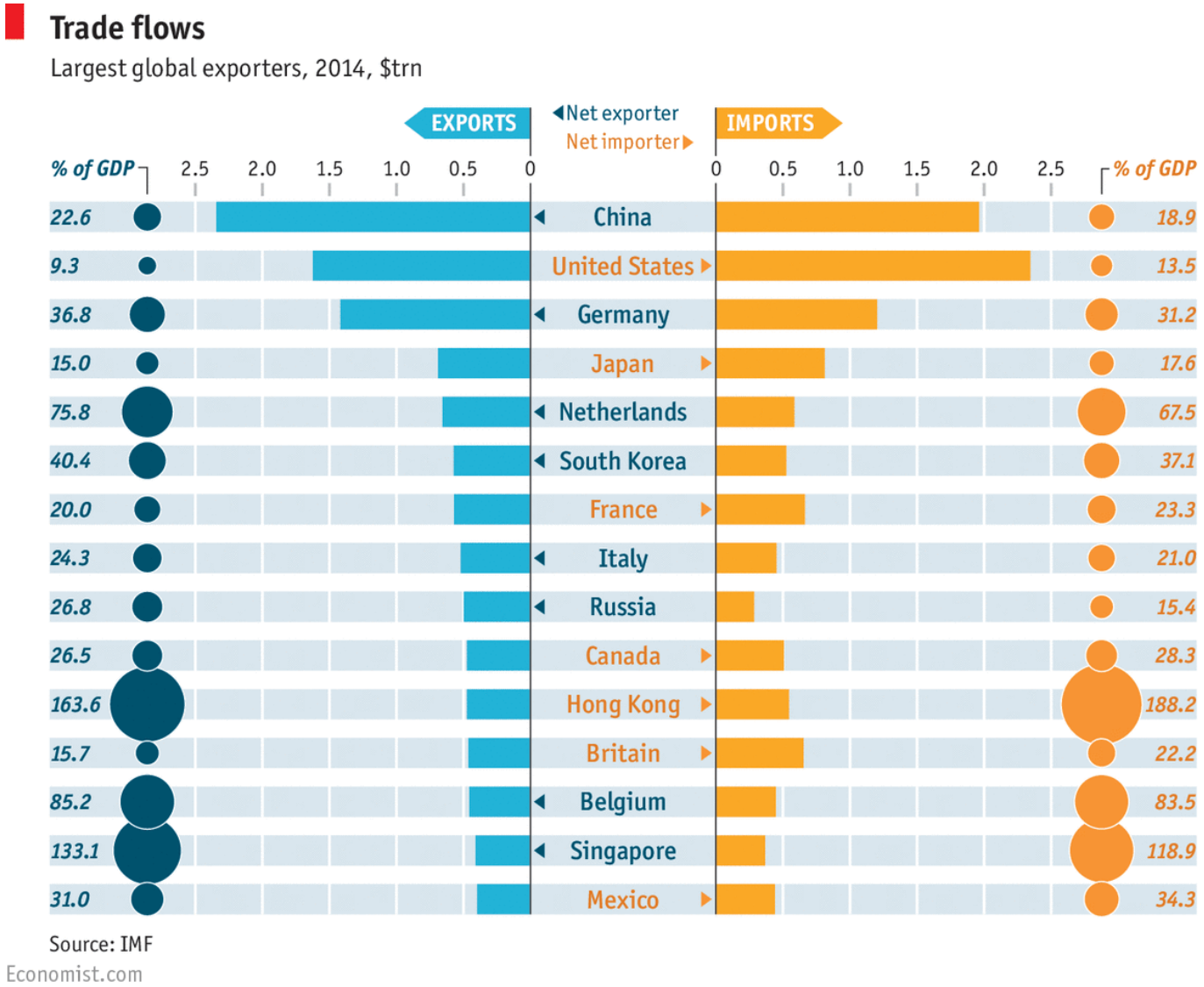
International Trade and Commerce

U.S. International Trade Growth

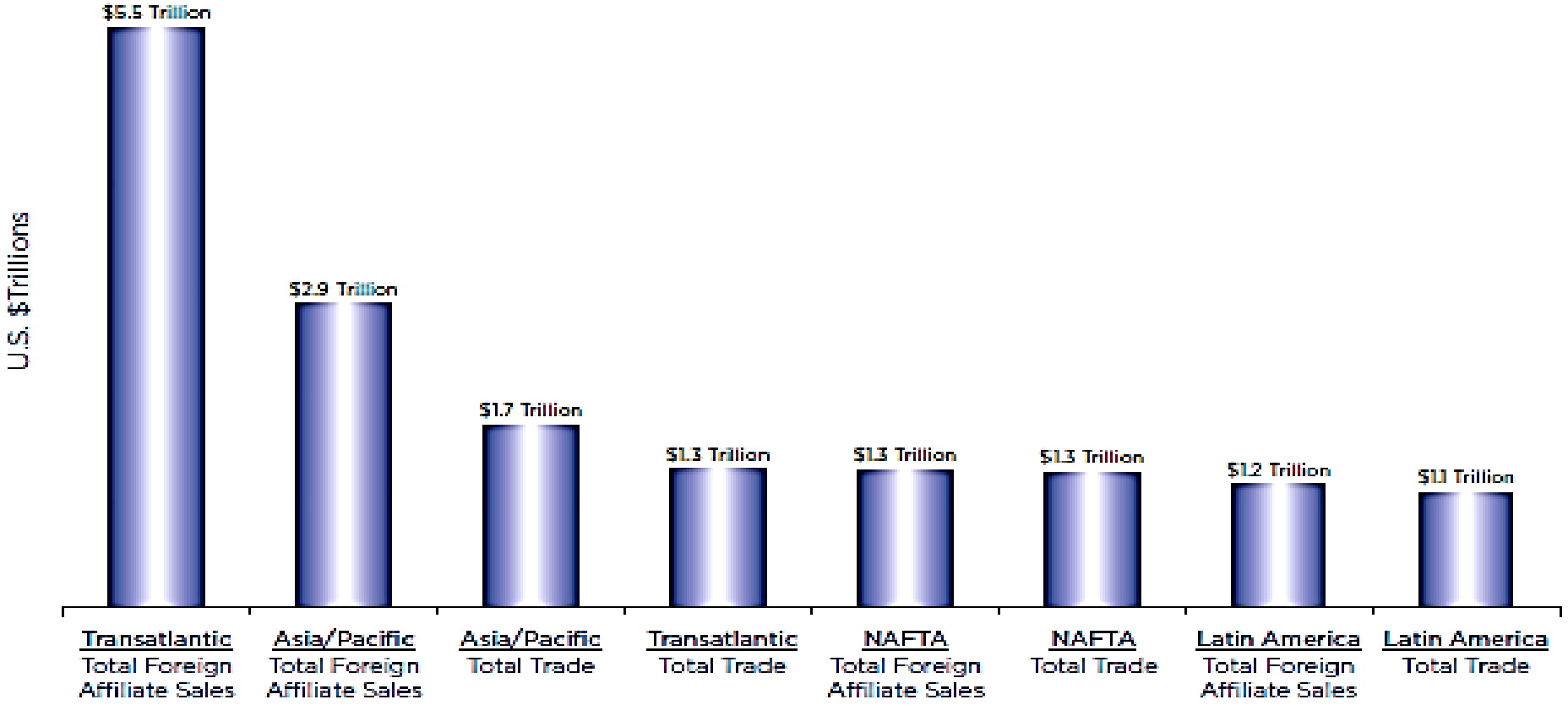


Source: U.S. Department of Commerce, Bureau of Economic Analysis, International Data, Table 1.1, http://www.bea.gov/iTable/index_ita.cfm (accessed October 9, 2014).

Trading Up:
U.S. Trade and Investment Policy

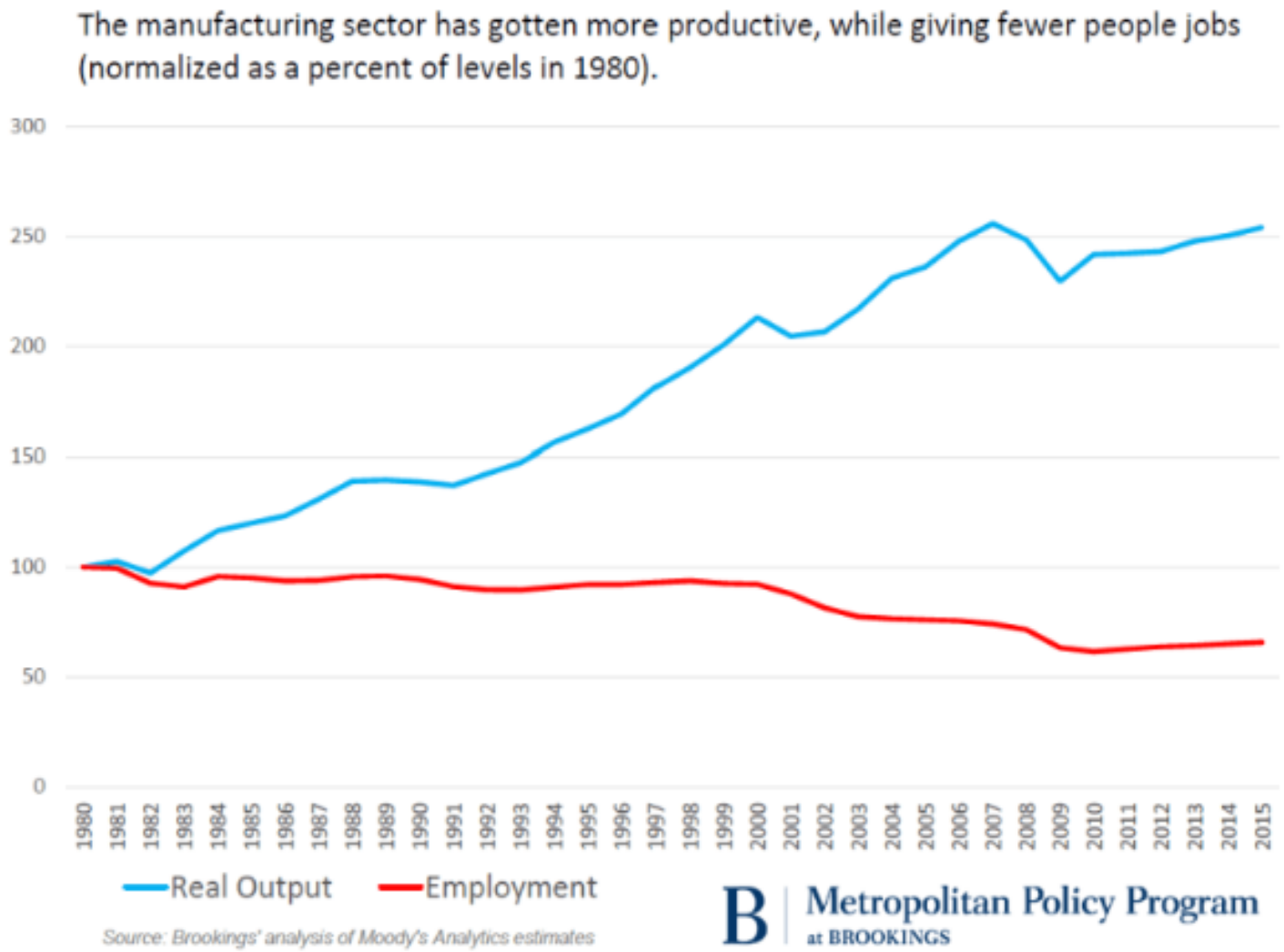


America’s major commercial arteries

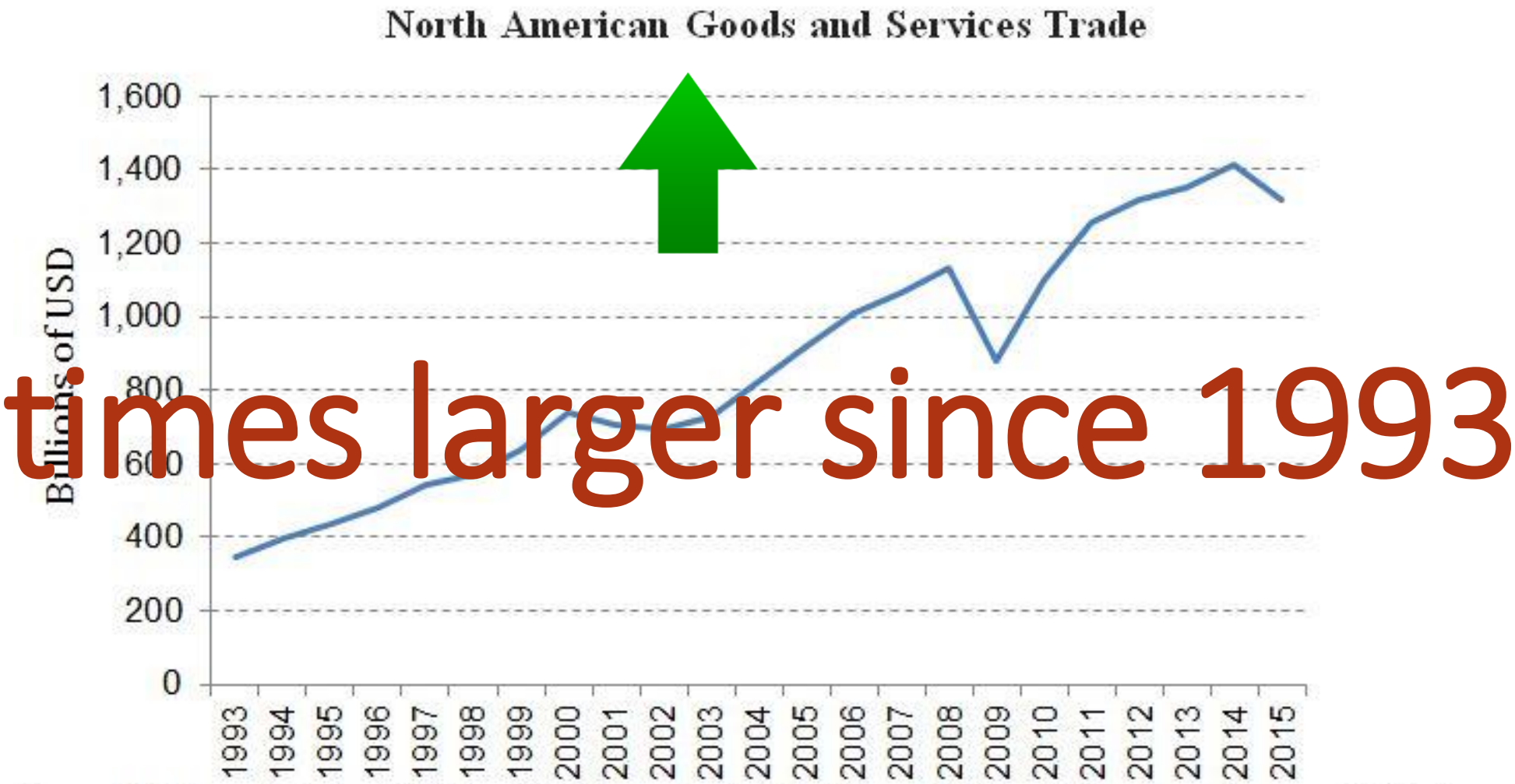


Foreign Affiliate Sales: Estimates for 2015. Total Trade: Data for goods and services, 2015. Source: Bureau of Economic Analysis.

More output, less employment



North America's trade in goods and services



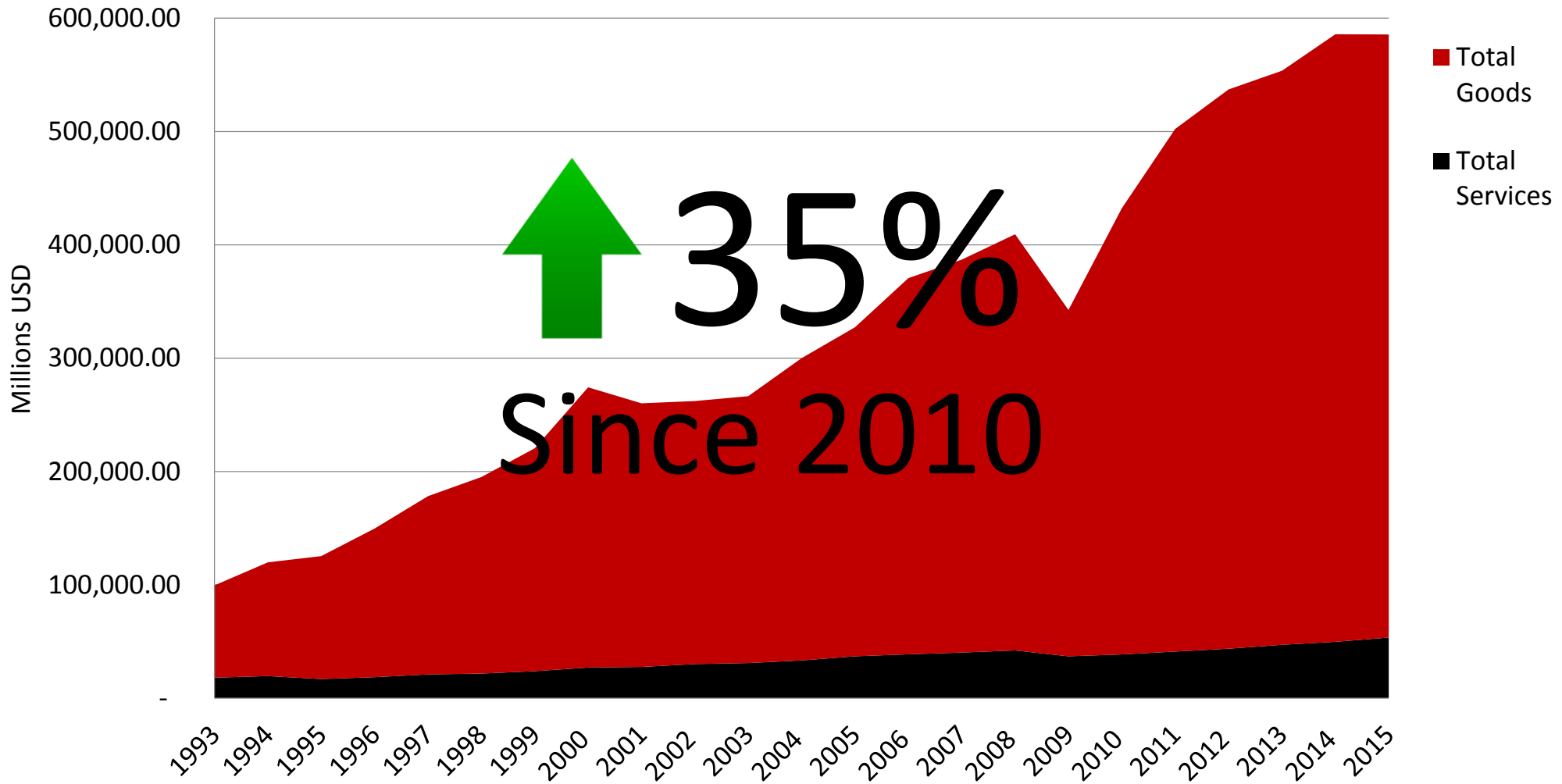
4 times larger since 1993

Sources: IMF for goods trade and OECD and BEA for services **trade in billions of dollars**. 2015 services values repeat 2014 values, as 2015 figures were not available. Mexican services export data is substituted by U.S. and Canadian services import data.

Over 13 million U.S. jobs

are estimated to be supported by U.S.-MEX-CAN trade and investment

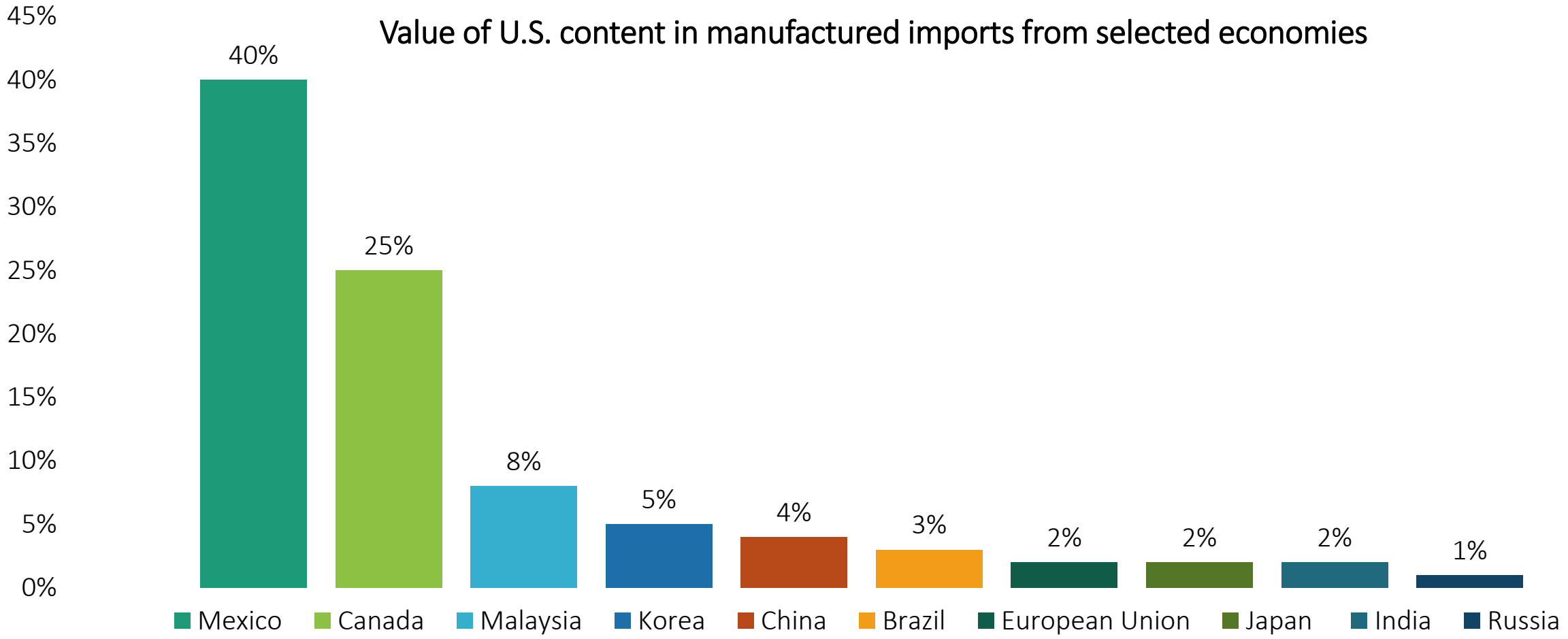
United States trade with Mexico, 1993-2015



Some 4.9 million U.S. jobs are supported by sales to Mexico

57,000 U.S. companies sell to Mexico; 18,000 operate there

More U.S. content in imports from Mexico than other countries



Source: Robert Koopman et al. “Give Credit Where Credit is Due: Tracing Value Added in Global Production Chains”. NBER Working Paper No 16426.

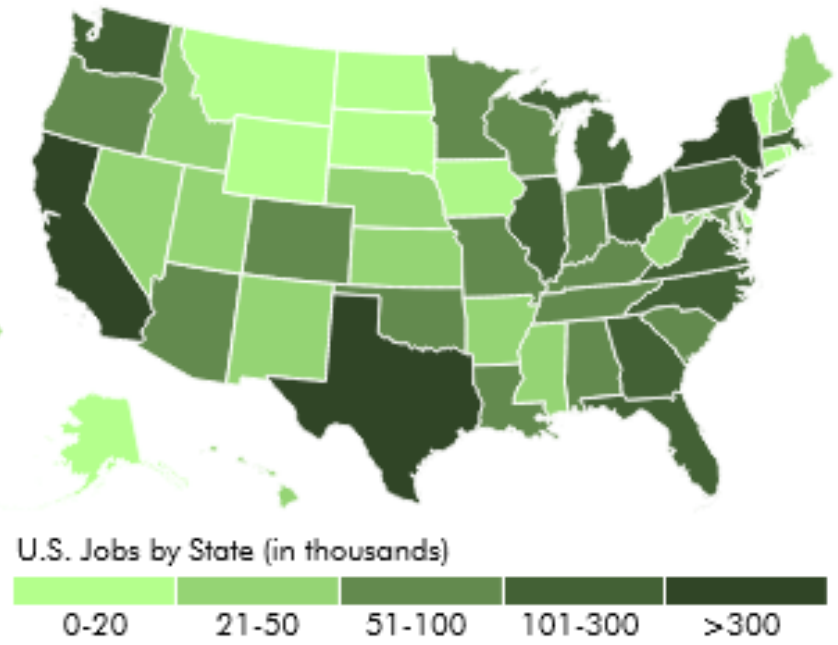
5 WAYS TO IMPROVE NAFTA

U.S. withdrawal from NAFTA would be incredibly costly.

4.9 MILLION

American jobs would be at risk if the U.S. withdrew from NAFTA.

That's 1 out of every 29 jobs.



However, these 5 updates to the agreement could favor both U.S. competitiveness and American workers:

1 Account for recent technological advances.

Now that the Internet and smartphones are everyday tools of business and commerce, issues such as cross-border data flows and exports of digital products should be included in updates of the agreement.

2 Revise customs processes and requirements.

Simplifying customs rules and paperwork would make it easier for small U.S. businesses to take advantage of new online platforms, like Amazon and Etsy, that have make it easier to venture into foreign trade and find buyers abroad.

3 Update NAFTA's rules of origin.

NAFTA includes rules about what percentage of a product must be produced within North America in order to enter the U.S., Mexico, or Canada tariff-free. A detailed analysis should be done to determine how these rules could be strengthened to incentivize investment and job growth in the U.S.

4 Strengthen the NAFTA side agreement on labor rights.

While the countries of North America have already agreed to abide by their own labor laws in a NAFTA side agreement, incorporating labor issues into NAFTA itself could better ensure that companies don't leave the U.S. in an effort to avoid the cost of respecting workers' rights.

5 Eliminate obstacles to service exports.

Since the U.S. has an advantage in the high skill industries that make up much of services trade, like financial and educational services, special emphasis should be placed on eliminating obstacles to these exports.

Further protection of U.S. workers requires investment in workforce development:

Improving basic education

Aligning higher education with labor market demand

Strengthening worker retraining programs

Wilson Center

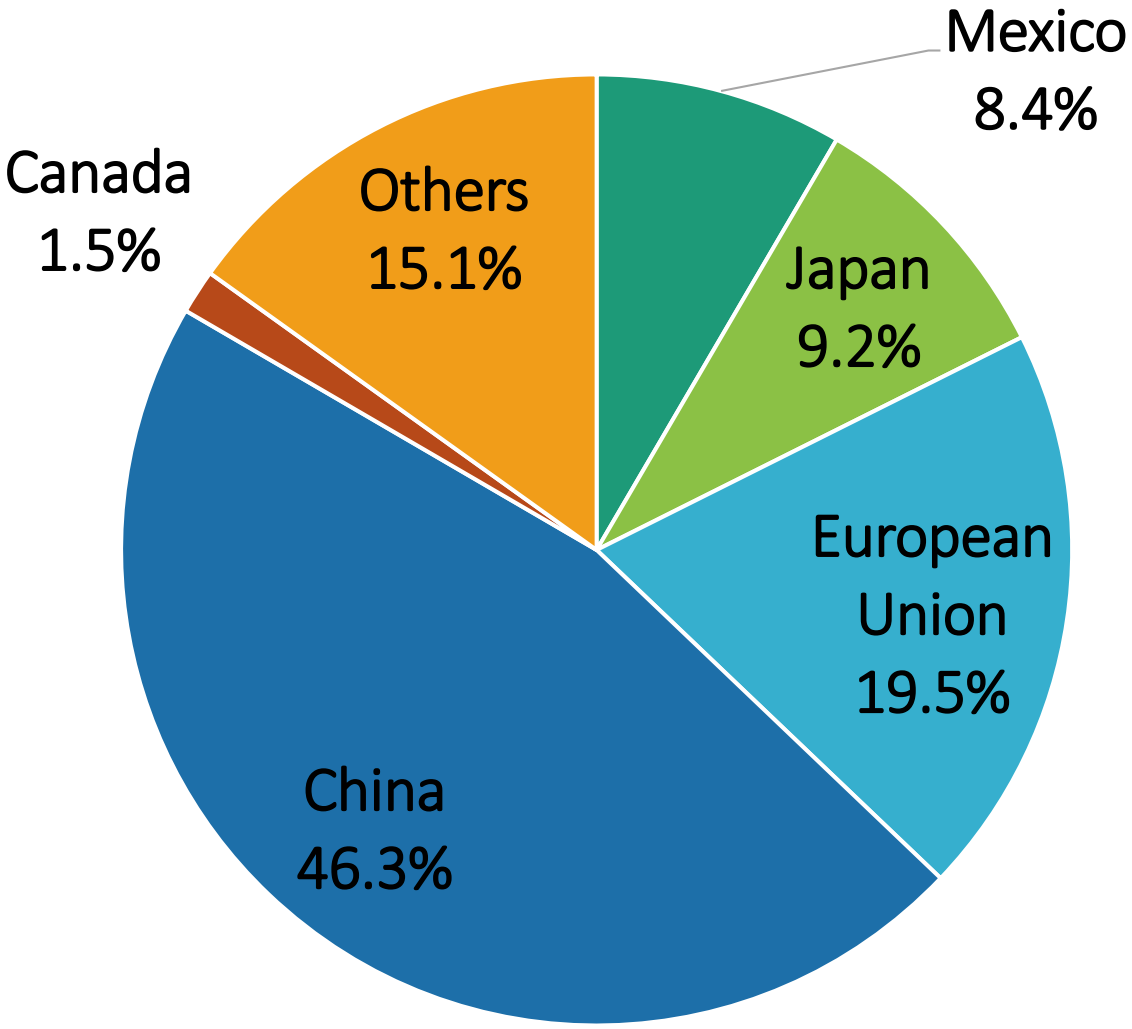
MEXICO INSTITUTE

Trump to Announce Plans for Renegotiation of NAFTA: Five Ways to Improve the Agreement

Support for trade and investment

- ✓Aggressively go after measures by others that distort trade and investment
- ✓Aggressively and smartly try to open markets and sectors for U.S. companies
- ✓Aggressively use Export-Import Bank, Overseas Private Investment Corporation and other mechanisms to support U.S. companies
- ✓Aggressively use U.S. diplomacy and embassies to support commerce

US Trade in Goods Deficit 2016



Only **8.4%** of US trade in goods deficit is attributed to Mexico

Source: United States Census Bureau (2016)

The Disappearing Trade Deficit

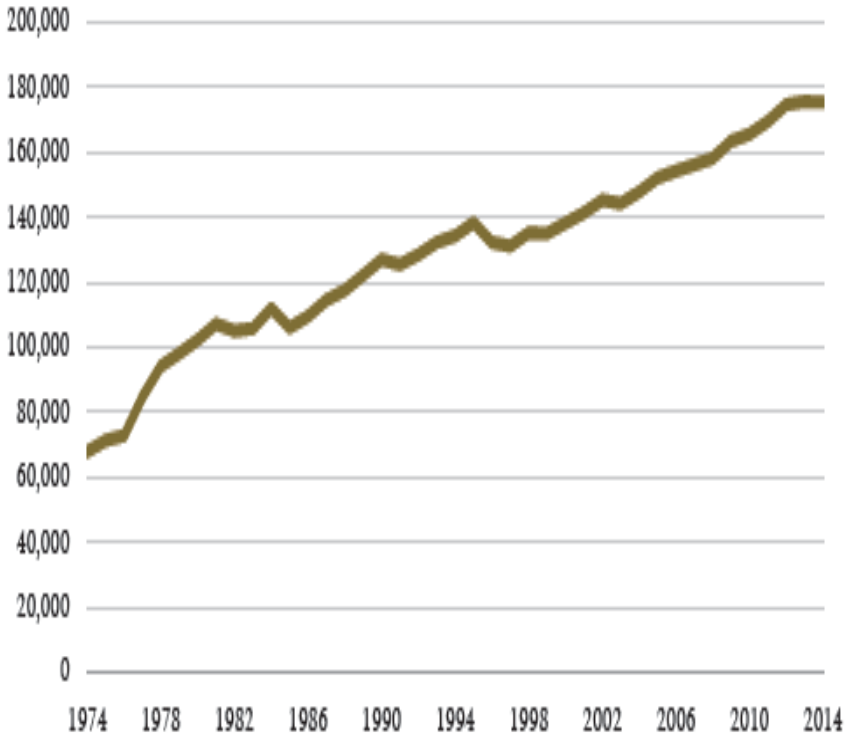
2011

U.S. trade with Mexico

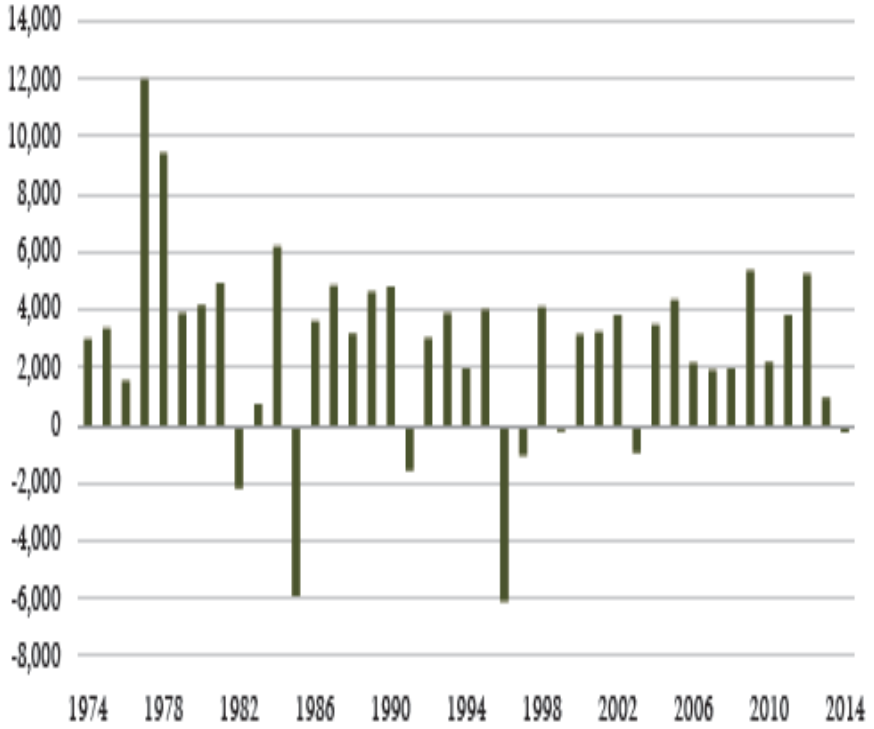
Source: Tradevistas.csis.org - “A Deficit Good Trade Data”


Regulation

Number of pages in the code of federal regulations (1974-2014)

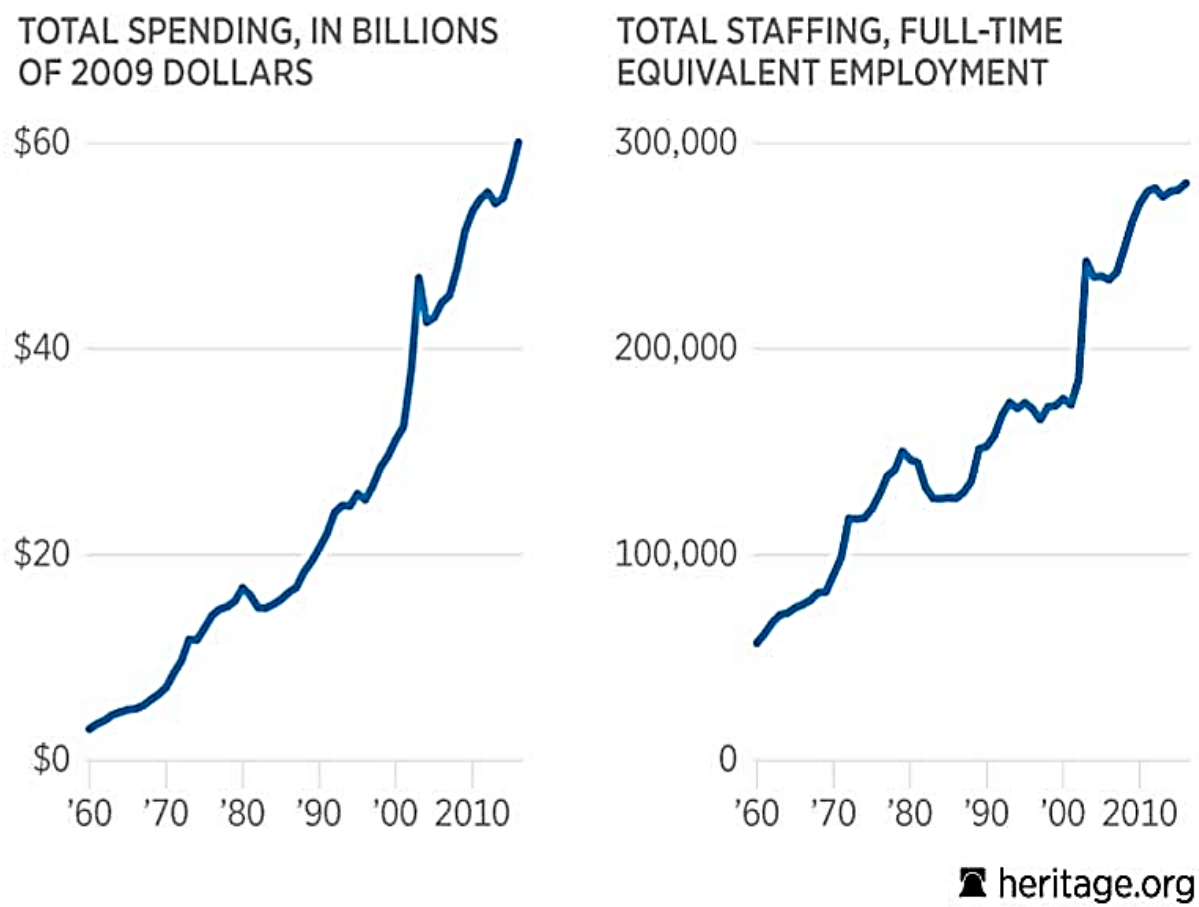


Change in the number of pages in the code of federal regulations (1974-2014)



Source: Office of the Federal Register (2015).

Federal Regulatory Activity: Spending and Staffing



The top 10 most competitive global economies

Rank	Country
1	Switzerland
2	Singapore
3	**United States**
4	Germany
5	Netherlands
6	Japan
7	Hong Kong SAR
8	Finland
9	Sweden
10	United Kingdom

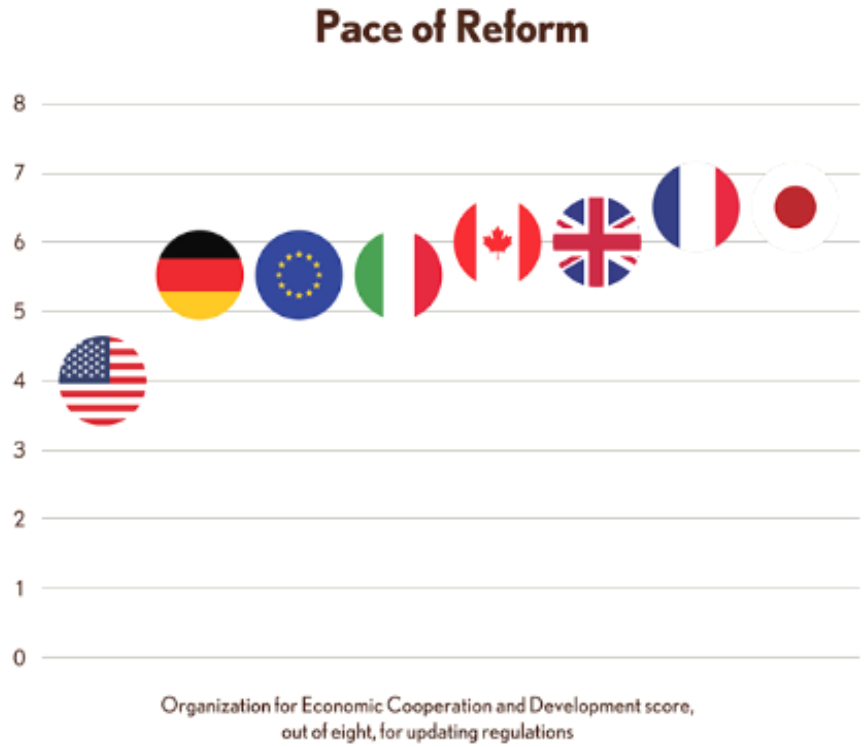
Source: The Global Competitiveness Report, 2015-2016.

Ease of doing business: World Bank's Doing Business Report 2016

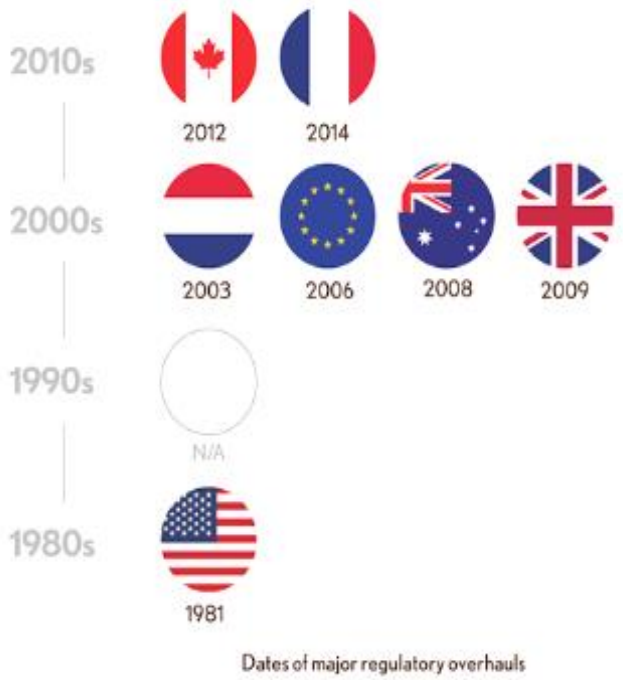
Rank	Rank
1 Singapore	27 France
2 New Zealand	28 Netherlands
3 Denmark	31 UAE
4 South Korea	33 Spain
5 Hong Kong	38 Mexico
6 United Kingdom	49 Thailand
7 United States	51 Russia
8 Sweden	53 Israel
9 Norway	55 Turkey
10 Finland	73 South Africa
11 Taiwan	82 Saudi Arabia
13 Australia	84 China
14 Canada	116 Brazil
15 Germany	130 India
18 Malaysia	131 Egypt
26 Switzerland	138 Pakistan

Source: World Bank Doing Business Report, 2016.

Quality control:
Federal regulation policy



Many other developed countries, however, are doing a better job at following OECD best practices in regulatory quality management.

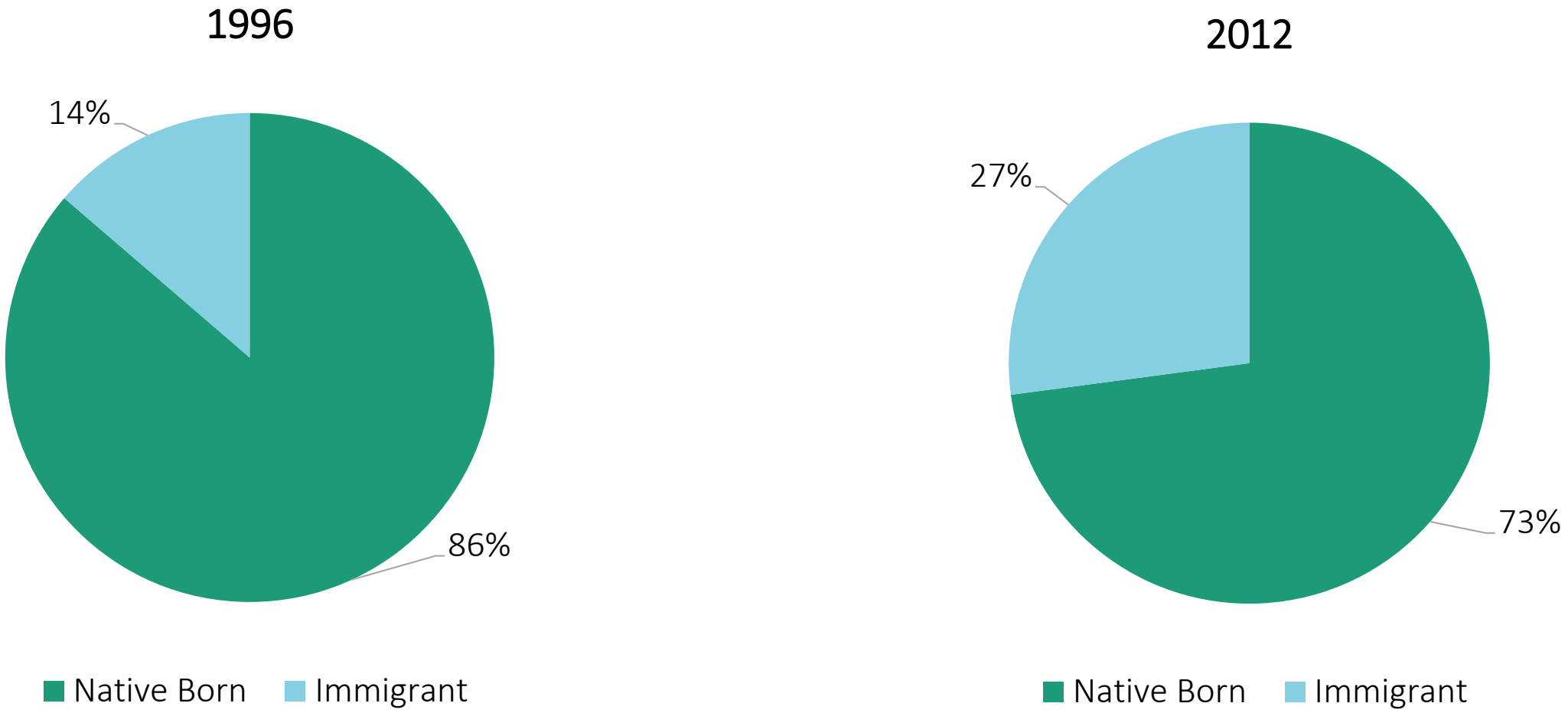


And other developed countries have been overhauling and modernizing their regulatory management systems, while the U.S. system has changed little in more than thirty years.

Source: Alden, Edward & Strauss, Rebecca. “How America Stacks Up: Economic Competitiveness and U.S. Policy” (2016)

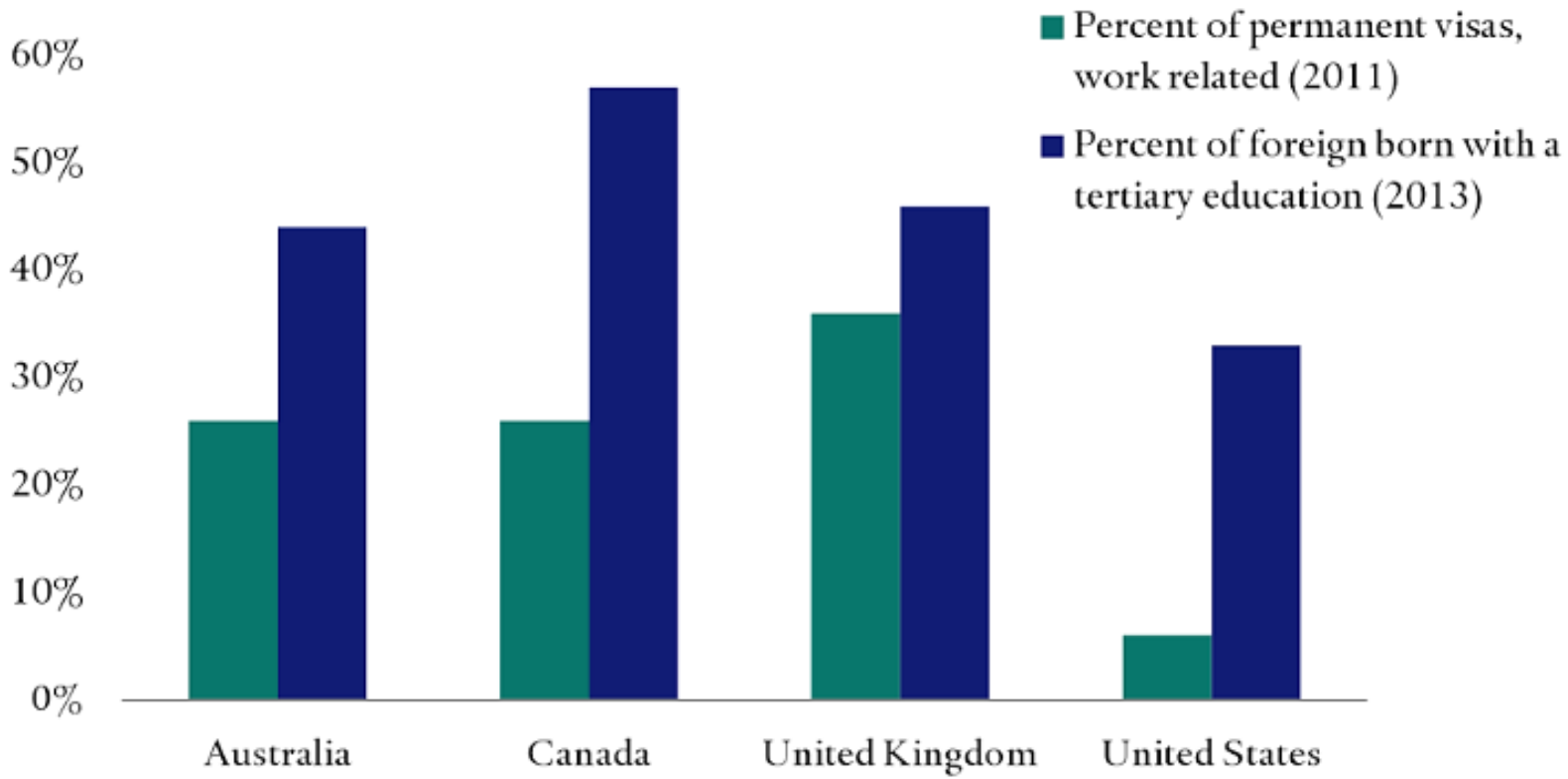

Immigration
Reform

Rising contributions of immigrants to U.S. entrepreneurship



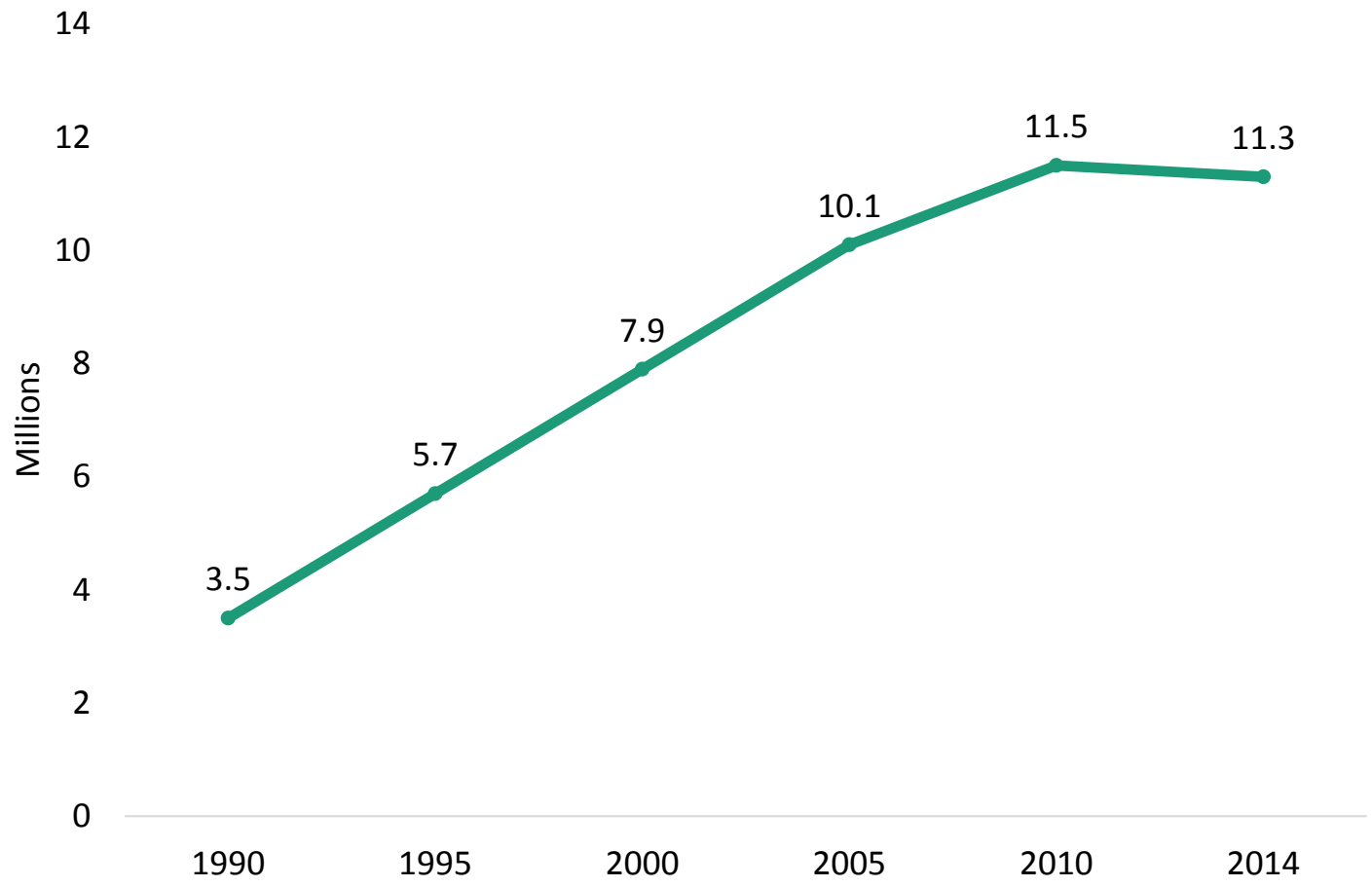
Source: The White House: “The Economic Benefits of Fixing our Broken Immigration System” (2013)

Share of permanent Visas for work and foreign born with a tertiary education



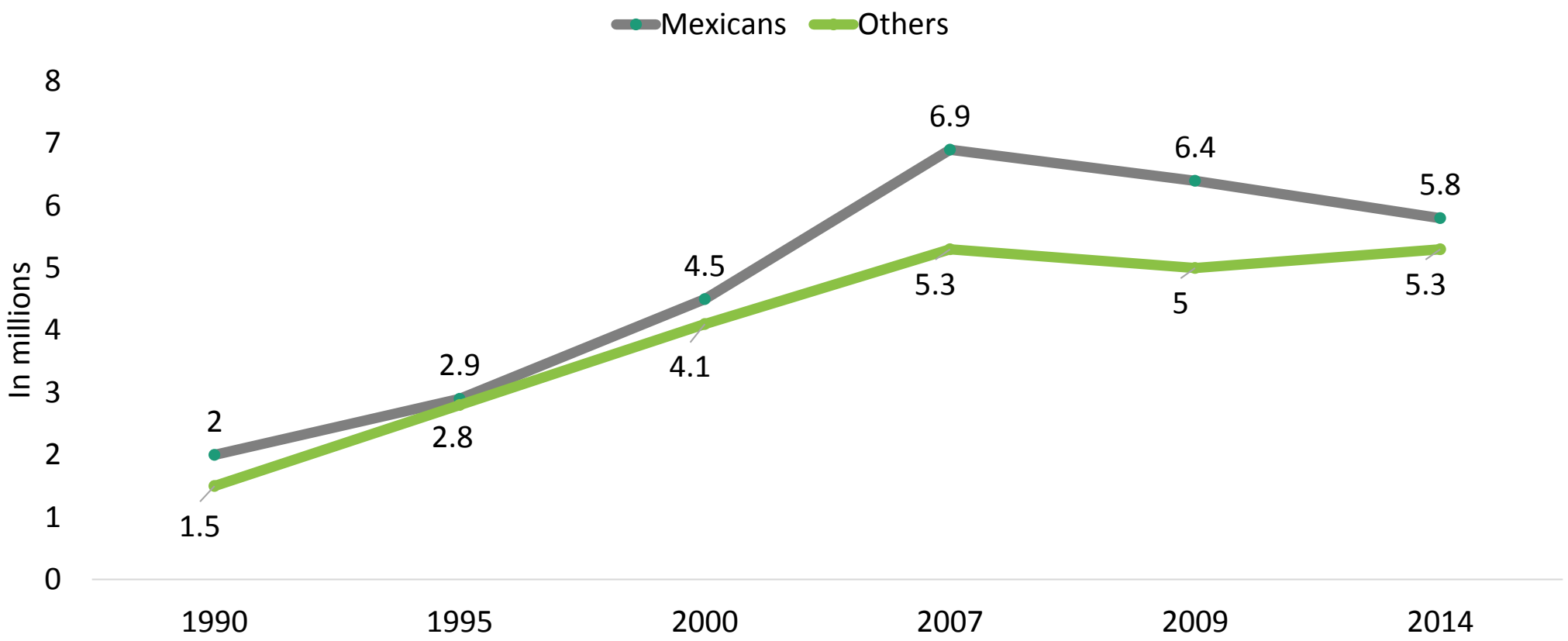
Source: Alden, Edward & Strauss, Rebecca. “How America Stacks Up: Economic Competitiveness and U.S. Policy” (2016)

Unauthorized immigrant population levels off



Source: PEW Research Center (2014)

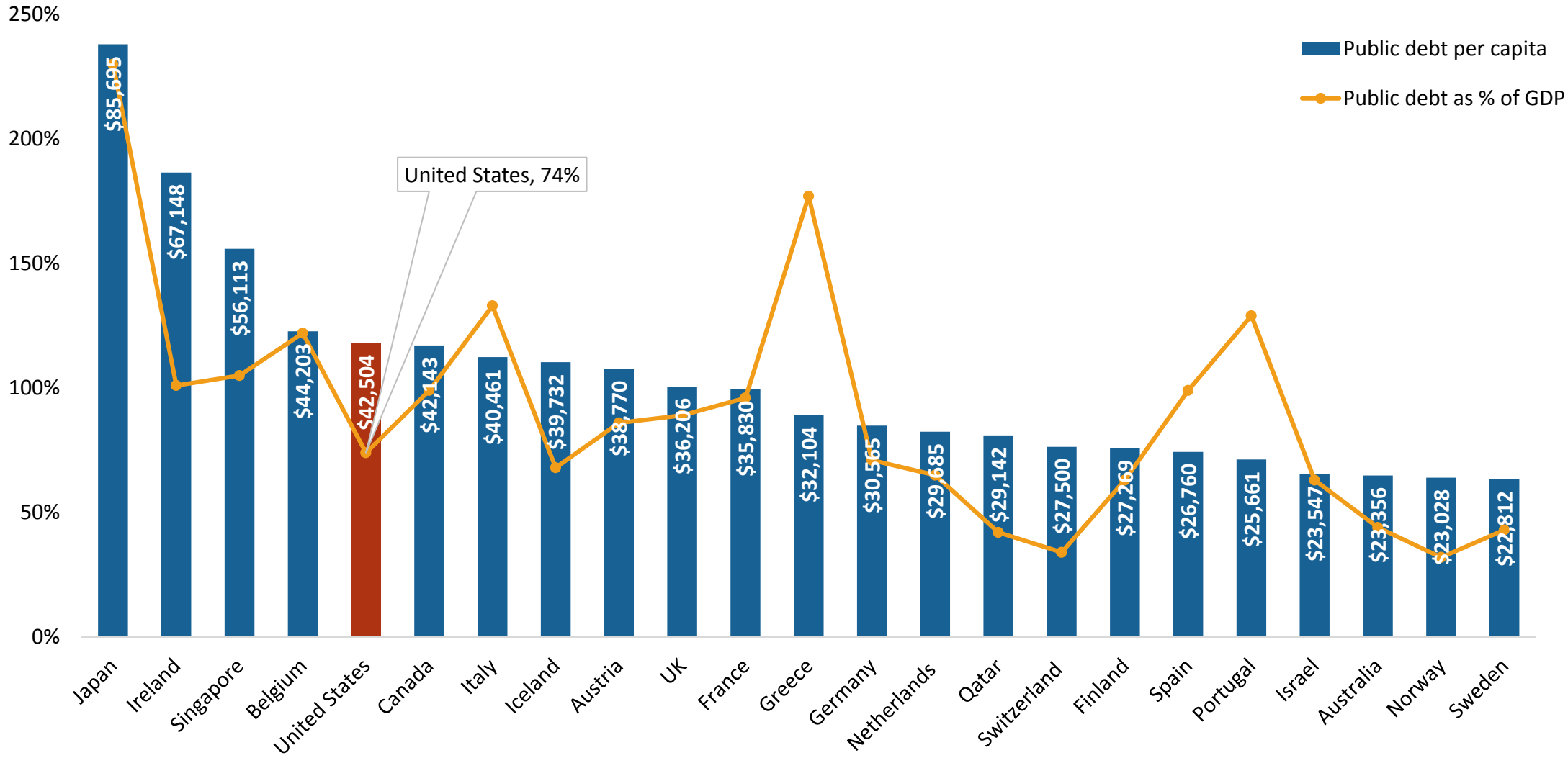
Number of unauthorized immigrants in the US drop since 2007



Source: Overall Number of U.S. Unauthorized Immigrants Holds Steady Since 2009.. PEW Research Center (2016)

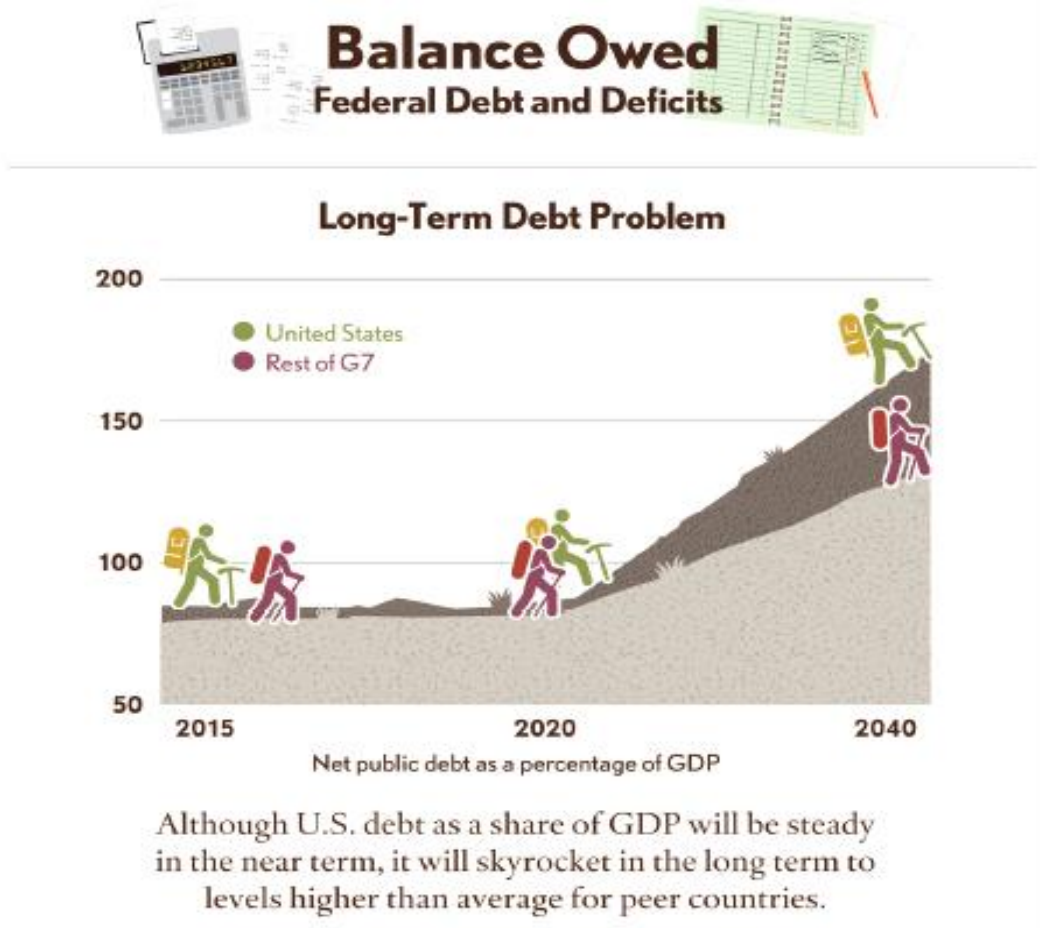
Government Debt and Deficits

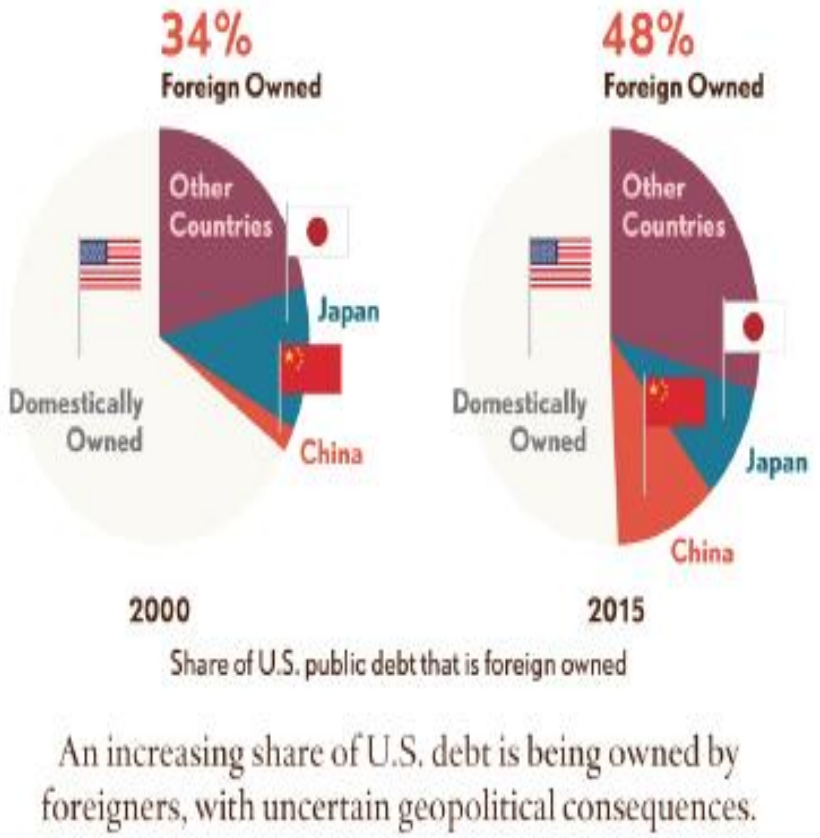
National debt per person



Source: How Much, International Monetary Fund, World Bank, CIA The World Factbook
Jacob Turcotte/Staff

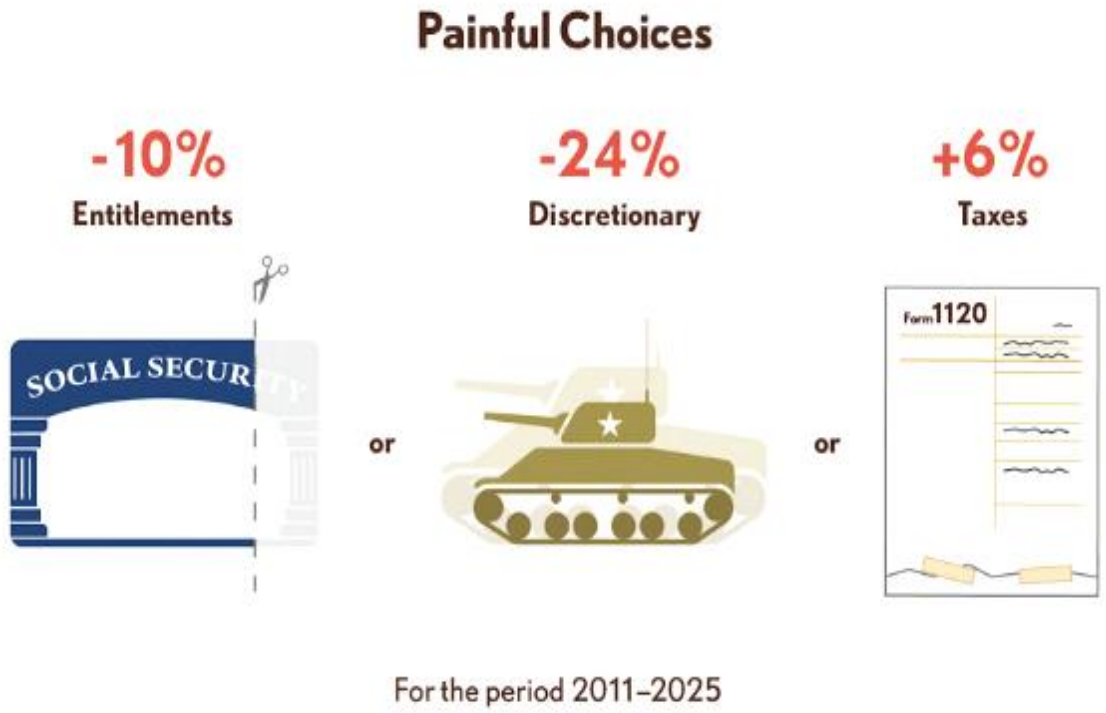
Balance owed:
Federal debt and deficits



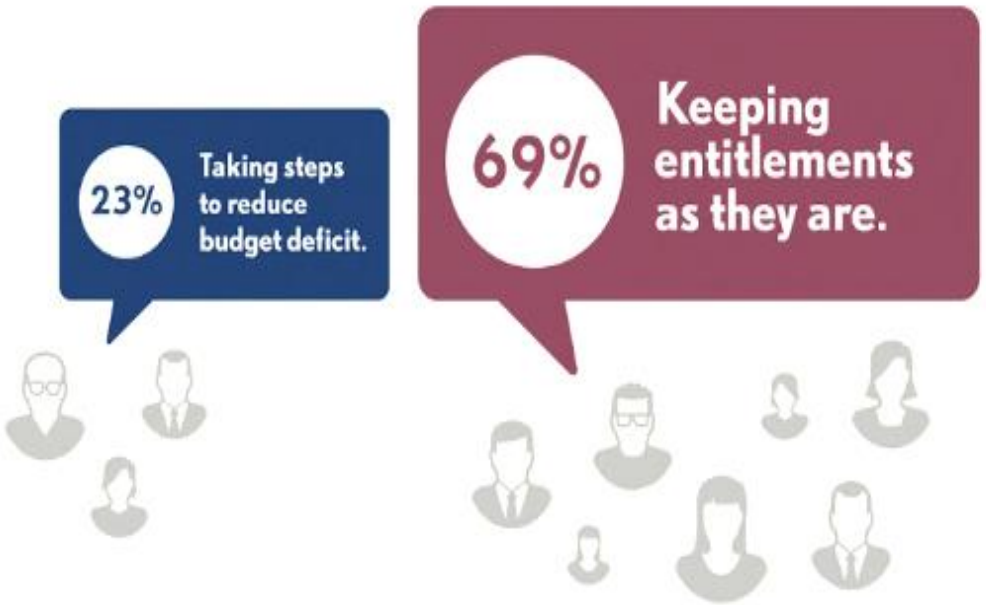


Source: Alden, Edward & Strauss, Rebecca. “How America Stacks Up: Economic Competitiveness and U.S. Policy” (2016)

Balance owed:
Federal debt and deficits



To keep the current level of debt steady as a share of GDP through 2024, policy changes today would have to be dramatic.



But such policy changes will be difficult, since Americans prefer keeping the status quo.

Source: Alden, Edward & Strauss, Rebecca. “How America Stacks Up: Economic Competitiveness and U.S. Policy” (2016)

Making America More Competitive

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