



Para ser relevante.



THE GLOBAL ECONOMY AND THE FUTURE OF THE GLOBAL TRADE ORDER

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JUNE 2018

OUTLINE

- The age of anxiety;
- The Global Financial Crisis (GFC) and reactions to globalization;
- Globalization: the role of geopolitical shocks, technology, macroeconomic disruptions, and changes in the rules-of-the-game;
- “Peak globalization” and the trade slow-down;
- The protectionist threat and the global trade order;
- Future scenarios.

CHANGE



REALITY?

SOURCE: WWW.DESVIANTES.COM.BR

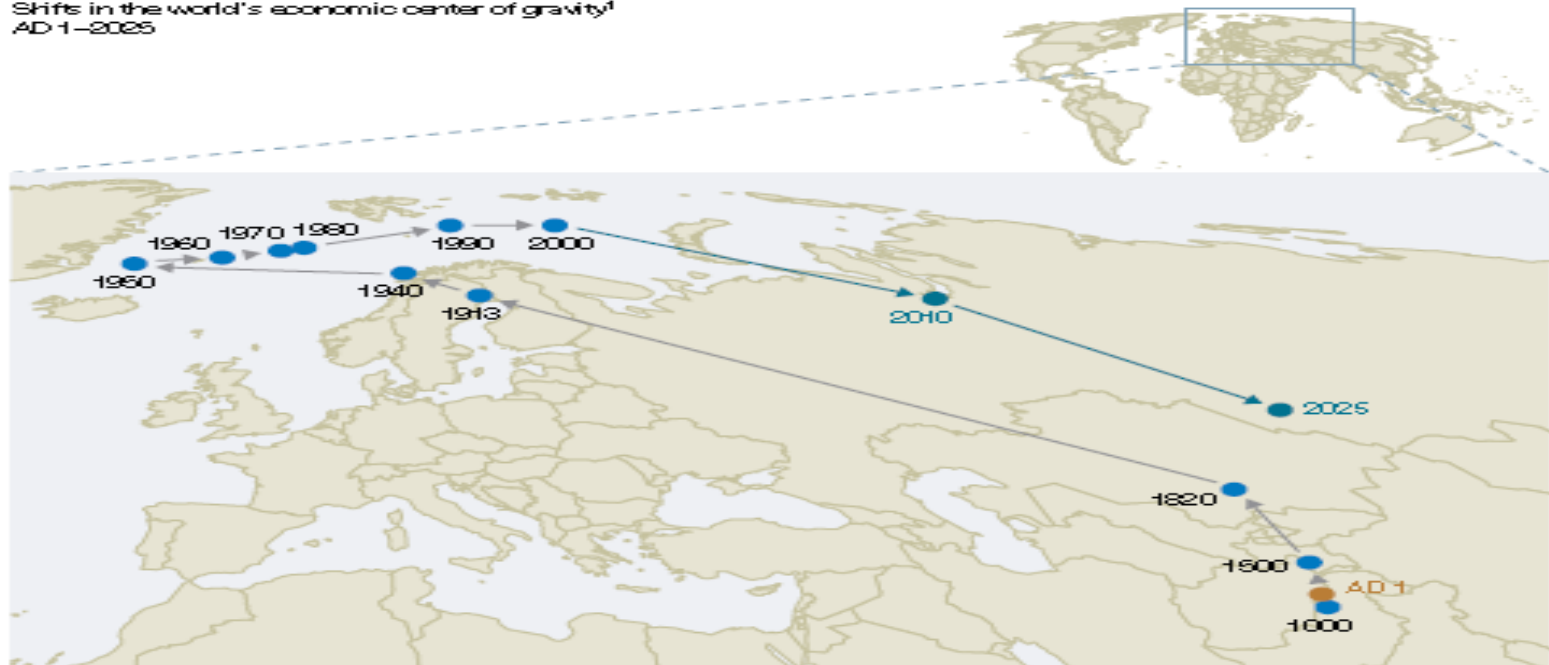


“MAY YOU LIVE IN INTERESTING TIMES...”: SHIFTING CENTER OF ECONOMIC GRAVITY

SOURCE: ABLETT AND ERDMANN (2013)

The ten years from 2000 to 2010 saw the fastest-ever shift in the world's economic center of gravity.

Shifts in the world's economic center of gravity¹
AD 1–2025



¹ Calculated by weighting national GDP by each nation's geographic center of gravity; a line drawn from the center of the earth through the economic center of gravity locates it on the earth's surface. For detailed analysis, see Richard Dobbs et al., *Urban World: Cities and the Rise of the Consuming Class*, McKinsey Global Institute, June 2012, pp. 61–72.

Source: University of Groningen; McKinsey Global Institute analysis of data compiled by Angus Maddison

THE CHINESE JUGGERNAUT

SOURCE: SMIL (2014)

China used more cement in the last three years than the U.S. used in the entire 20th century.

U.S.
in 100 years



4.5 gigatons
(1901-2000)

CHINA
in 3 years



6.6 gigatons
(2011-2013)

SOURCES: USGS, Cement Statistics 1900-2012; USGS, Mineral Industry of China 1990-2013

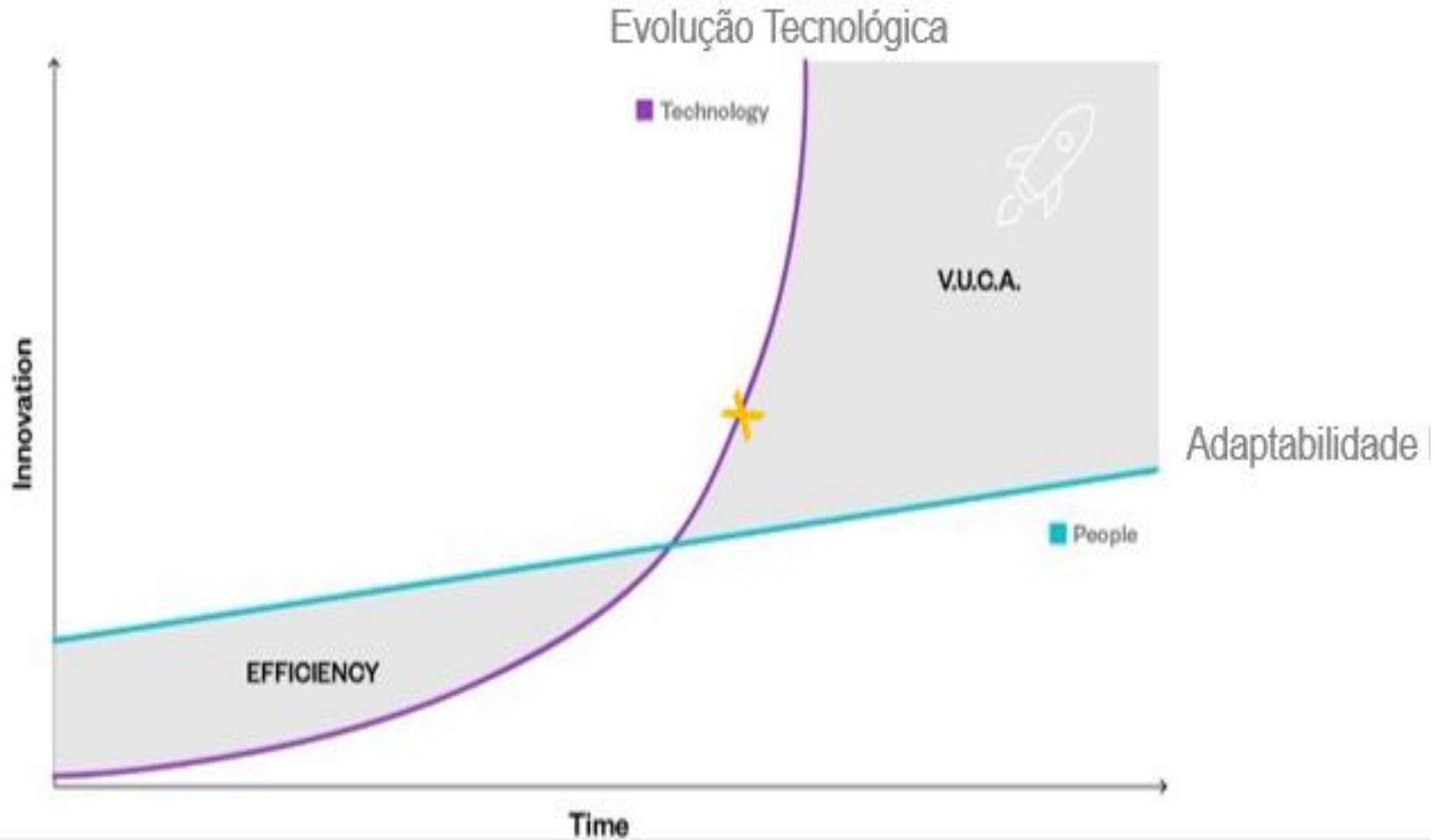
COMPUTATIONAL CAPACITY

“The Pentium IIs we used in the first year of Google performed about 100 million floating point operations per second. The GPUs we use today perform about 20 trillion such operations — a factor of about 200,000 difference — and our very own TPUs are now capable of 180 trillion (180,000,000,000,000) floating point operations per second.”

Sergey Brin

TECHNOLOGICAL EVOLUTION VS. HUMAN ADAPTABILITY

SOURCE: ANALYSIS OF ERIC 'ASTRO' TELLER AS DESCRIBED IN FRIEDMAN (2016)



THE AGE OF ANXIETY

(complexity vs. cognitive capacity)

Source: Primo Braga (2016)

	Known Unknowns	Unknown unknowns
Risks	Probabilities (Brexit, Chinese hard-landing...)	...
Uncertainty	Black elephants (Technological disruption, Ebola, Zika, Trump, corruption...)	Black swans (geopolitical shocks, terrorism, ...)

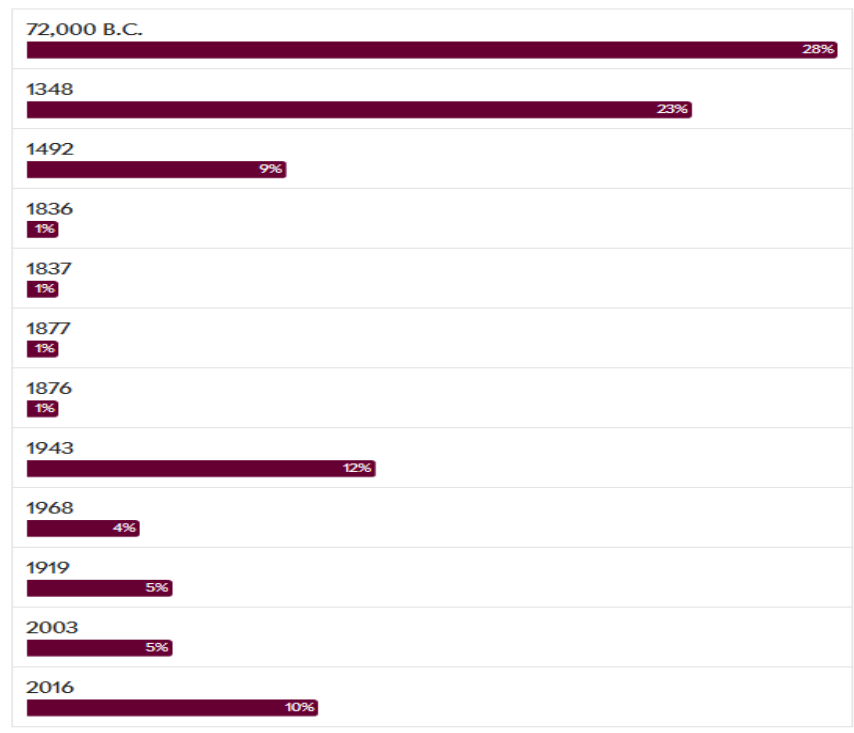
PERCEPTIONS...

SOURCE: ONION (2016)

INTERNET SURVEYS -- SEPTEMBER 2016 VS MAY 2018

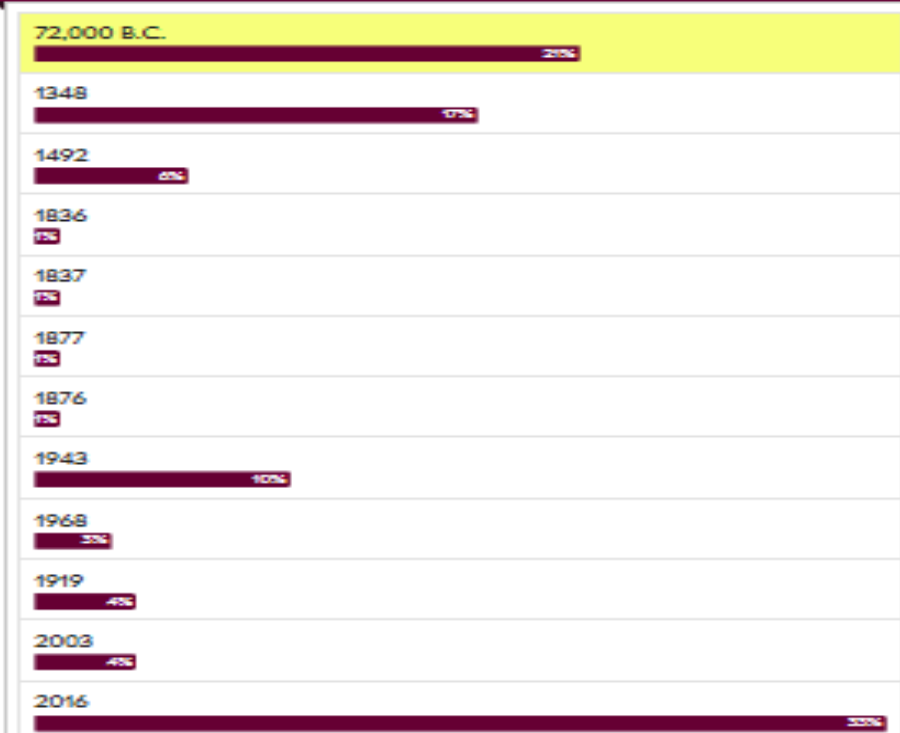
POLL

What was the worst year?



POLL

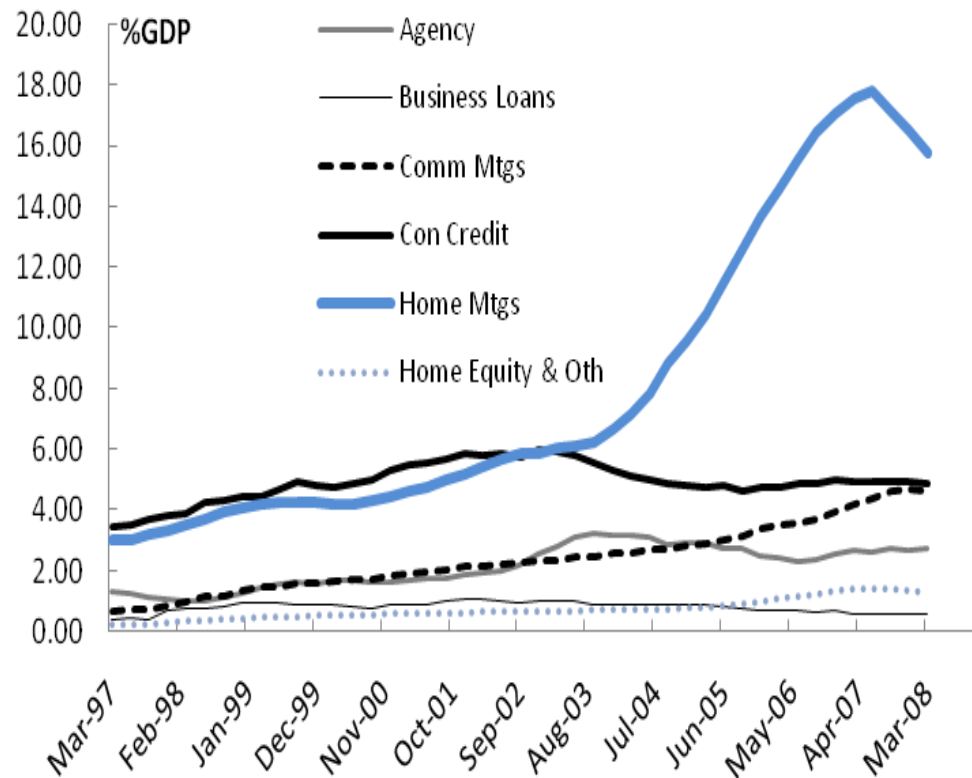
What was the worst year?



THE WORLD ECONOMY “POST” GLOBAL FINANCIAL CRISIS

THE CRISIS IN ONE GRAPH: FINANCIAL ASSETS IN THE USA

SOURCES: BLUNDELL-WIGNALL, ATKINSON AND LEE (2008), FEDERAL RESERVE, DATASTEAM, OECD.

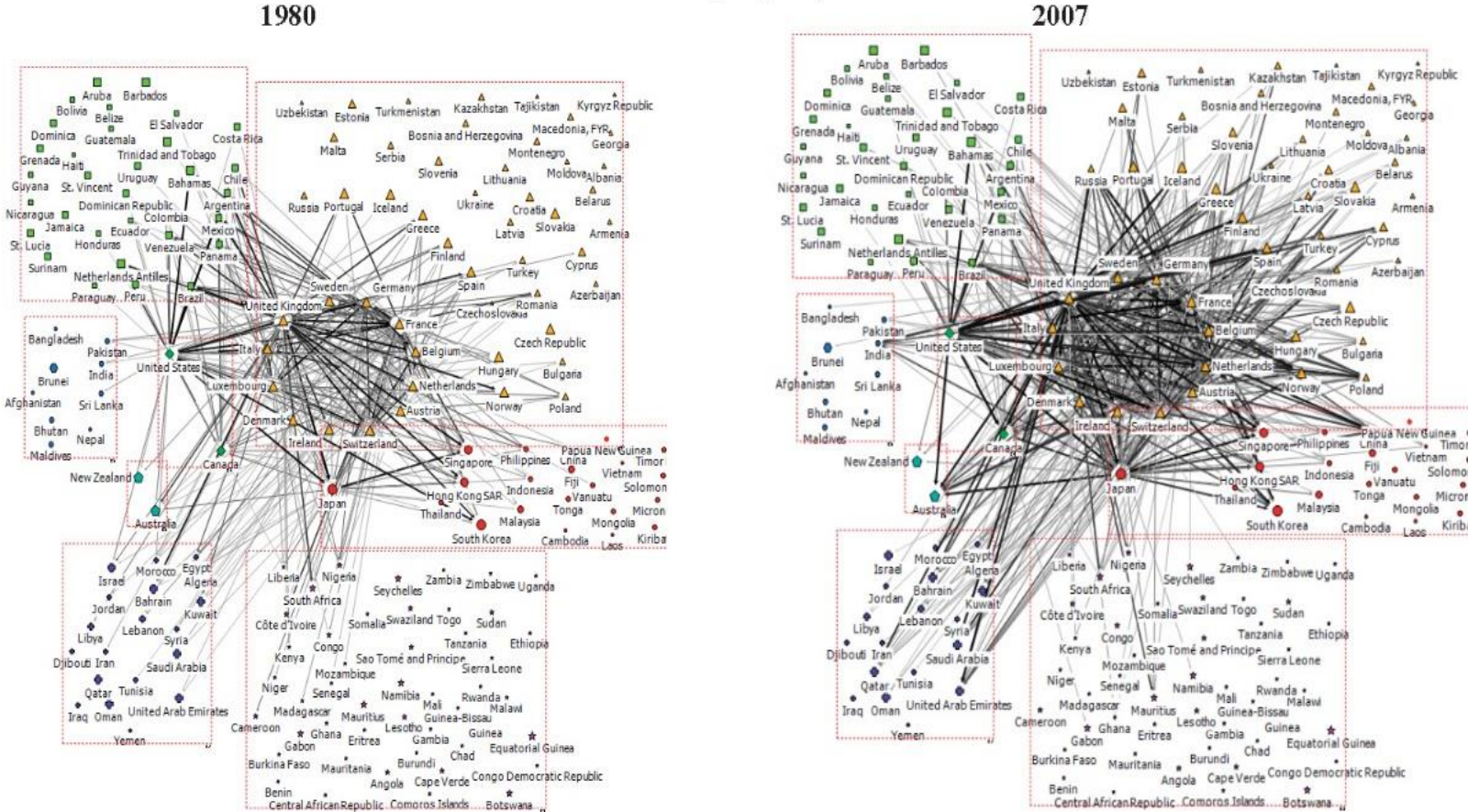


GROWING INTERDEPENDENCE OF FINANCIAL MARKETS

SOURCE: MINOIU AND REYES (2011)

Figure 3. Network view of cross-border banking, 1980 and 2007

Panel A. Core-periphery

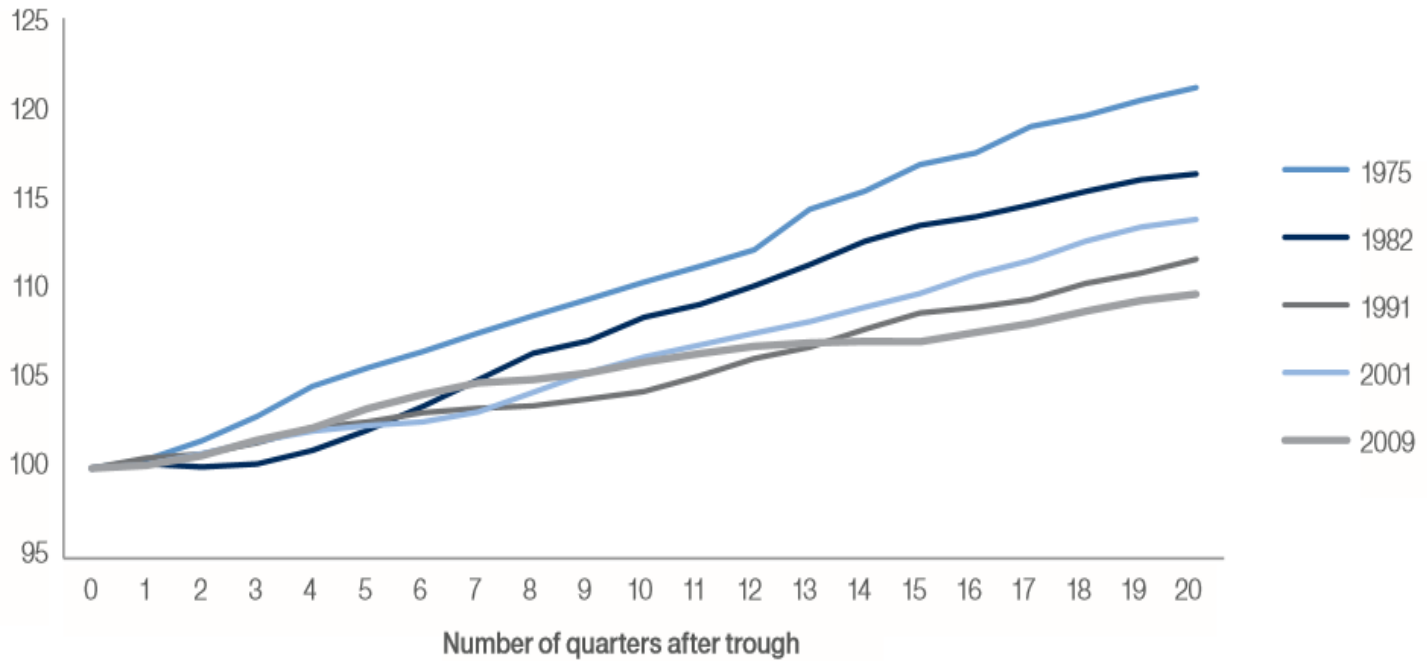


CRISES AND RECOVERY

SOURCE: WEF (2017)

Figure 1.1: The Pace of Global Recoveries since 1975
 OECD real GDP; seasonally adjusted; rebased to 100 at trough of each slowdown

● Rectangular Snip



Source: OECD Quarterly National Accounts Dataset.

THE AGE OF EASY MONETARY POLICIES

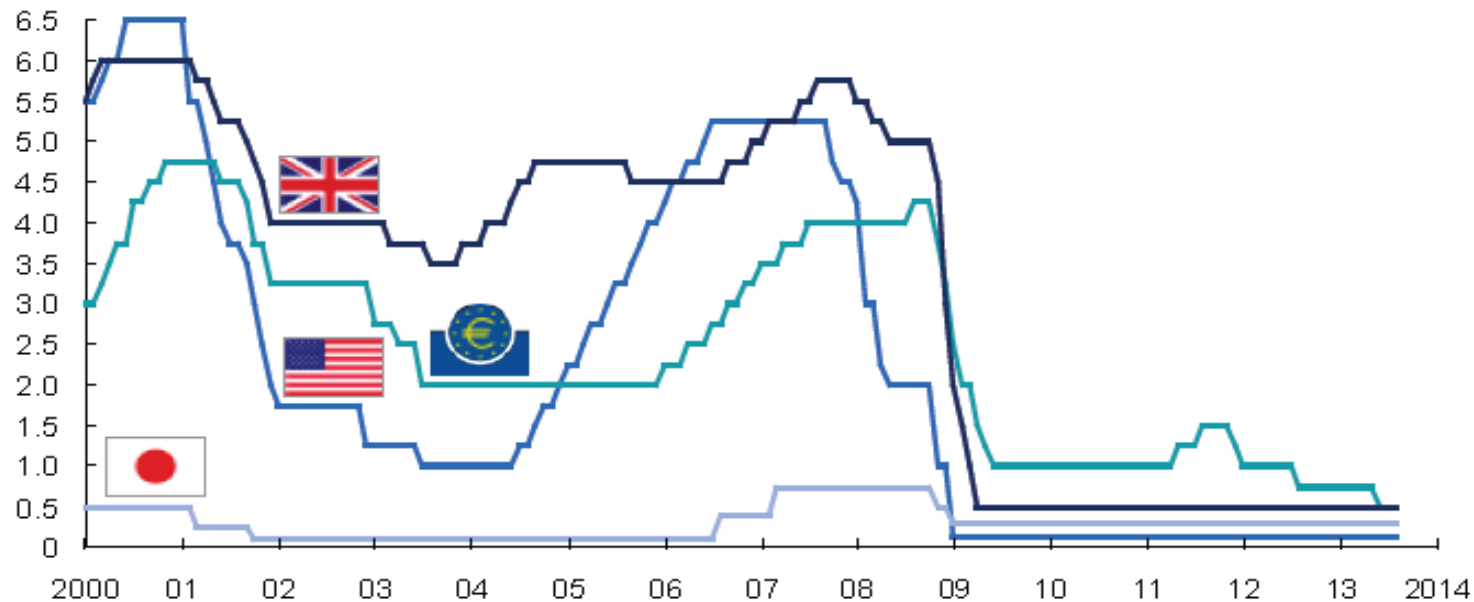
Source: McKinsey (2013b)

Exhibit 1

Central banks pushed policy rates to ultra-low levels in 2009 and have held them there since

Main policy rates
%

- United States
- Eurozone
- United Kingdom
- Japan



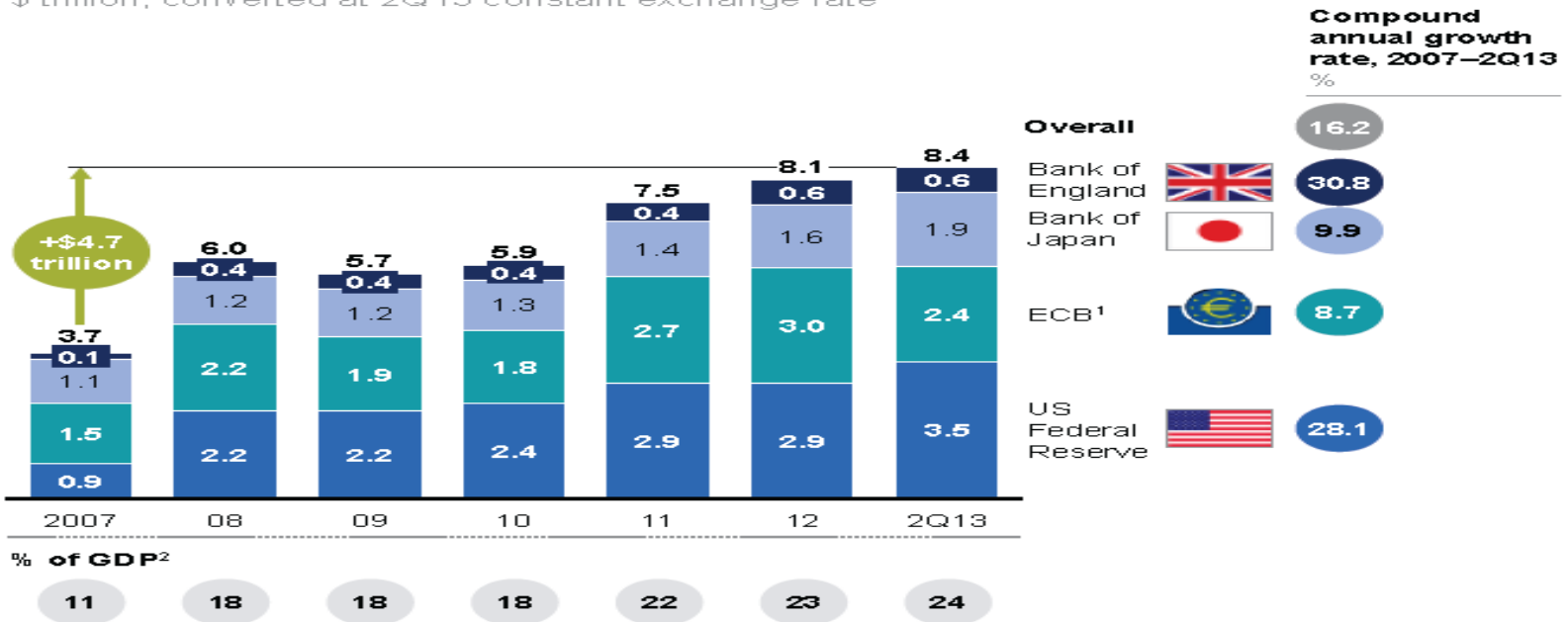
SOURCE: US Federal Reserve; European Central Bank; Bank of England; Bank of Japan; McKinsey Global Institute analysis

EXPANSION OF BALANCE SHEETS: AN ACCIDENT WAITING TO HAPPEN??

Source: McKinsey (2013b)

Central bank balance sheets in the United States, the United Kingdom, the Eurozone, and Japan have expanded by \$4.7 trillion since 2007

Total assets on central bank balance sheets (end-of-period values)
\$ trillion, converted at 2Q13 constant exchange rate



1 European Central Bank; excludes gold and foreign currency.

2 Total assets as share of combined GDP.

NOTE: Numbers may not sum due to rounding.

SOURCE: US Federal Reserve; European Central Bank; Bank of England; Bank of Japan; McKinsey Global Institute analysis

THE EURO: HAVE THE REPORTS OF ITS DEATH BEEN GREATLY EXAGGERATED?



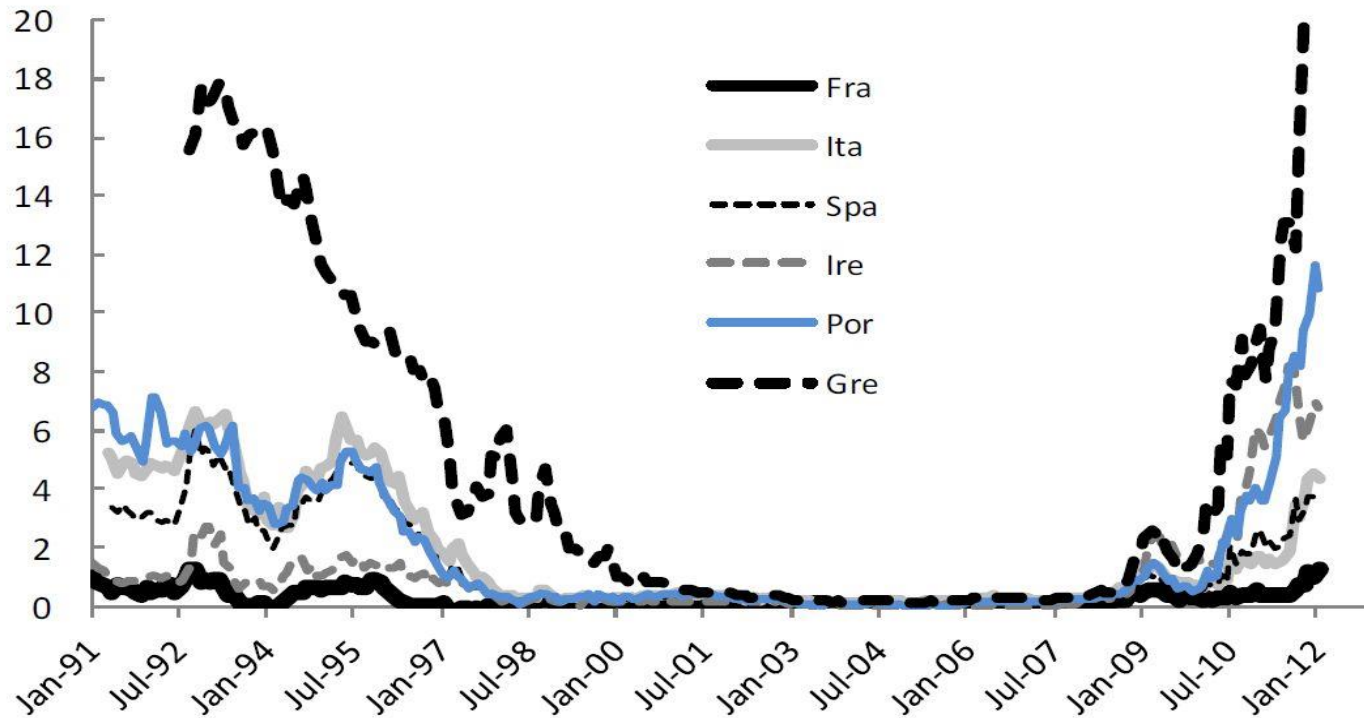
A POLITICAL PROCESS



RISK "ILLUSION"

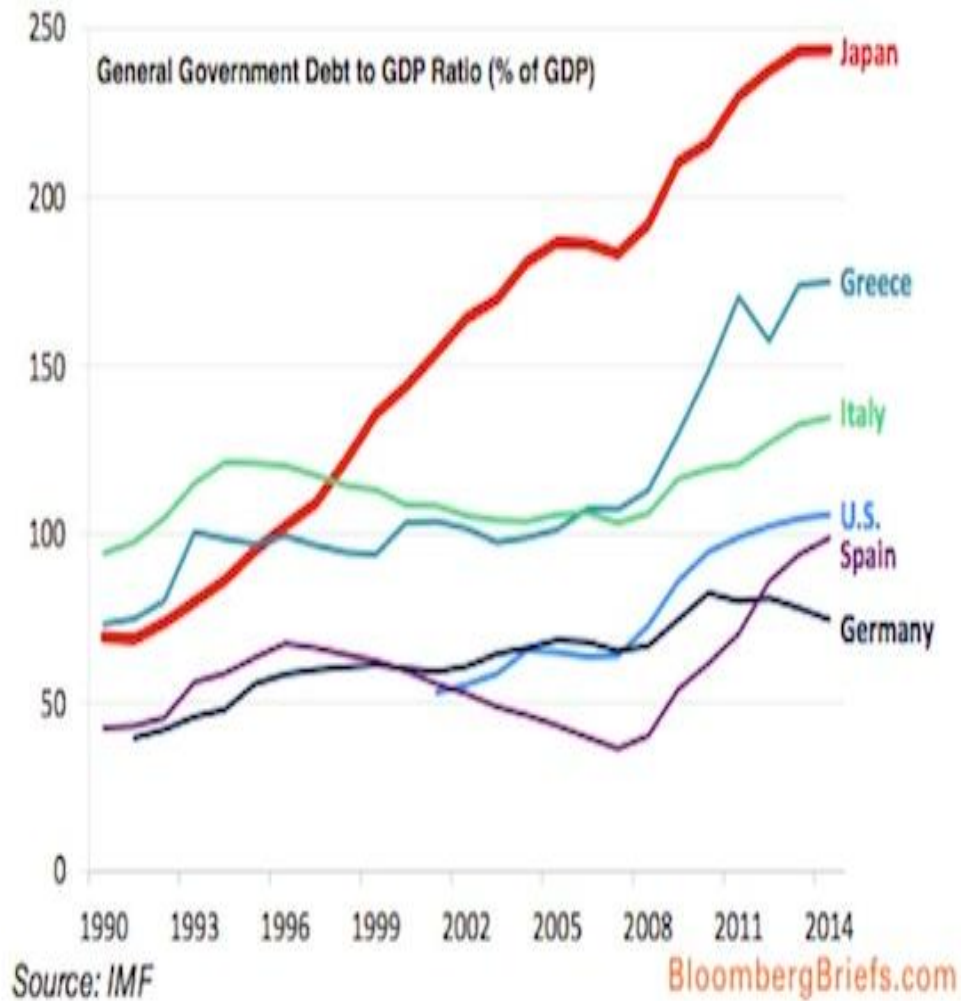
Source: Blundell-Wignall (2012)

Figure 5. Spreads before and after Monetary Union



Sources: Datastream, OECD.

DEBT TO GDP RATIOS

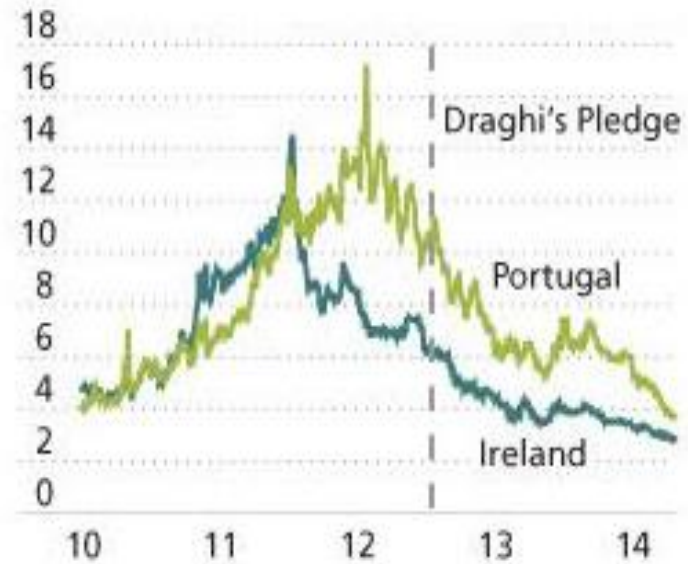
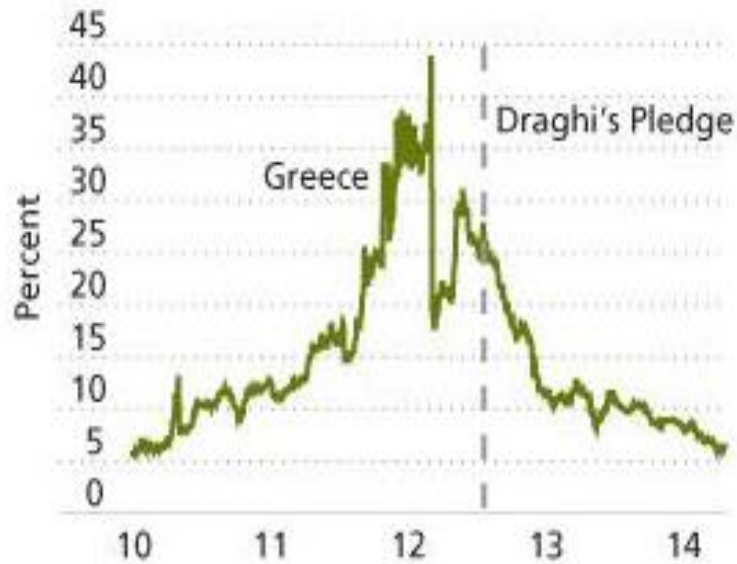


SOME «INTERESTING» QUOTES IN THE CONTEXT OF THE EUROZONE CRISIS

- "Spain is not Greece." Elena Salgado, Spanish Finance minister, February 2010.
"Portugal is not Greece." The Economist, April 2010.
"Greece is not Ireland." George Papaconstantinou, Greek Finance minister, November 2010.
"Spain is neither Ireland nor Portugal." Elena Salgado, Spanish Finance minister, November 2010.
"Ireland is not in 'Greek Territory.'" Irish Finance Minister Brian Lenihan. November 2010.
"Neither Spain nor Portugal is Ireland." Angel Gurría, Secretary-general OECD, November 2010.
"Italy is not Spain" - Ed Parker, Fitch MD, 12 June 2012.
- "Spain is not Uganda" Spanish PM Rajoy. June 2012.
"Uganda does not want to be Spain" (Ugandan foreign minister) June 13, 2012.

THE ECB'S CALMING EFFECT

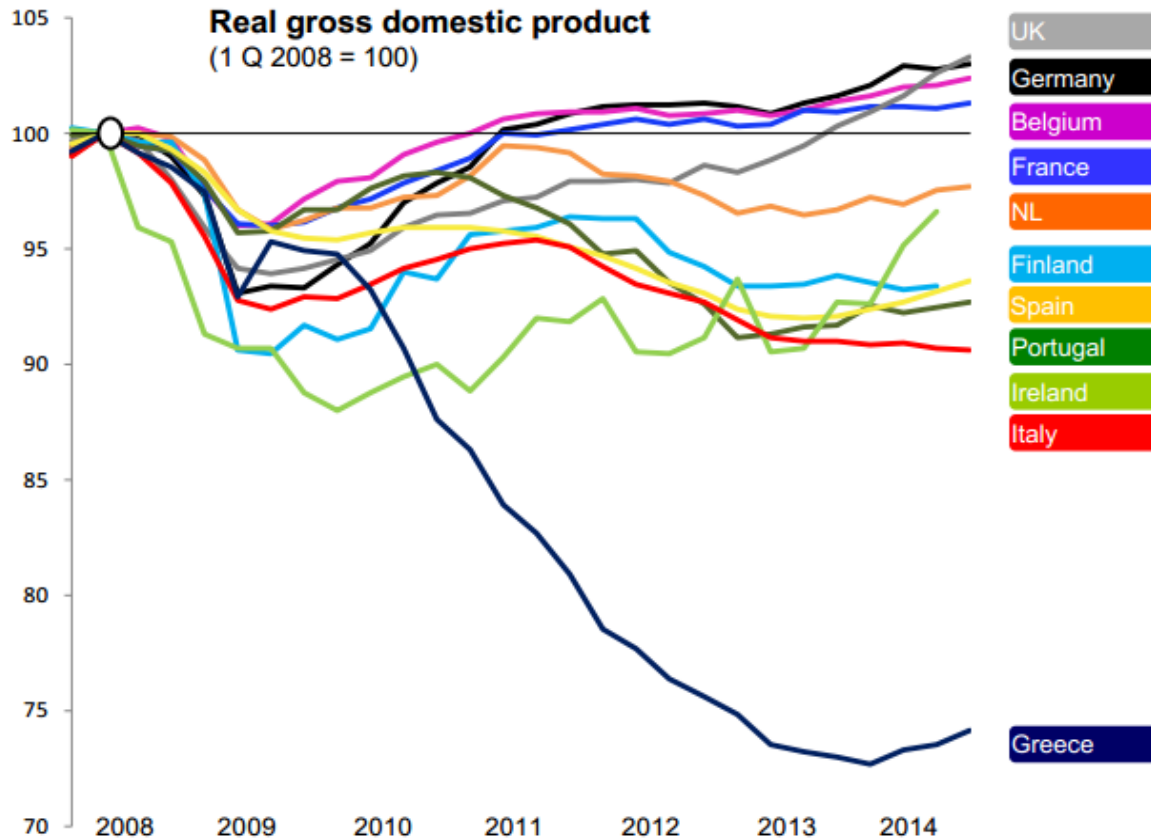
Recovery in Peripheral Bond Yields
10-Year Government Bond Yield



As of April 28, 2014
Source: Financial Times

GREEK ECONOMIC COLLAPSE

Source: FT



STEREOTYPES

Source: PEW (2013)

Stereotyping in Europe

Who Is Trustworthy, Arrogant and Compassionate

EU nation most likely to be named...

<u>Views in:</u>	Most Trustworthy	Least Trustworthy	Most Arrogant	Least Arrogant	Most Compassionate	Least Compassionate
Britain	Germany	France	France	Britain	Britain	Germany
France	Germany	Greece	France	France	France	Britain
Germany	Germany	Greece/Italy	France	Germany	Germany	Britain
Italy	Germany	Italy	Germany	Spain	Italy	Germany
Spain	Germany	Italy	Germany	Spain	Spain	Germany
Greece	Greece	Germany	Germany	Greece	Greece	Germany
Poland	Germany	Germany	Germany	Poland	Poland	Germany
Czech Rep.	Germany	Greece	Germany	Slovakia	Czech Rep.	Germany

PEW RESEARCH CENTER Q44a-Q46b.

G8 SUMMIT, NORTHERN IRELAND, 2013: AN OMEN...?

Source: International Herald Tribune (2013)

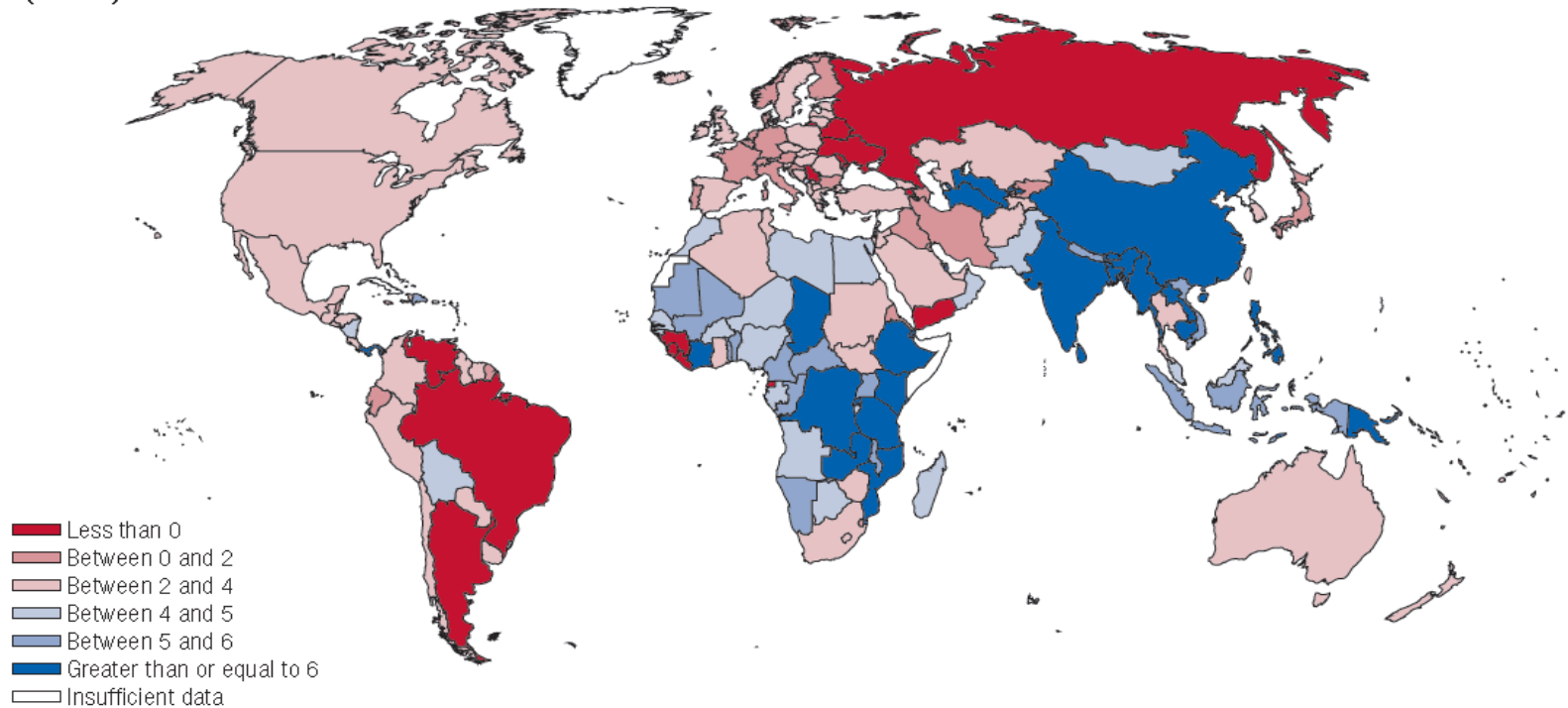


THE WORLD ECONOMY IN 2015

Source: IMF (2015)

Figure 2.1. 2015 GDP Growth Forecasts and the Effects of an Oil Supply Shock

1. 2015 GDP Growth Forecasts¹
(Percent)

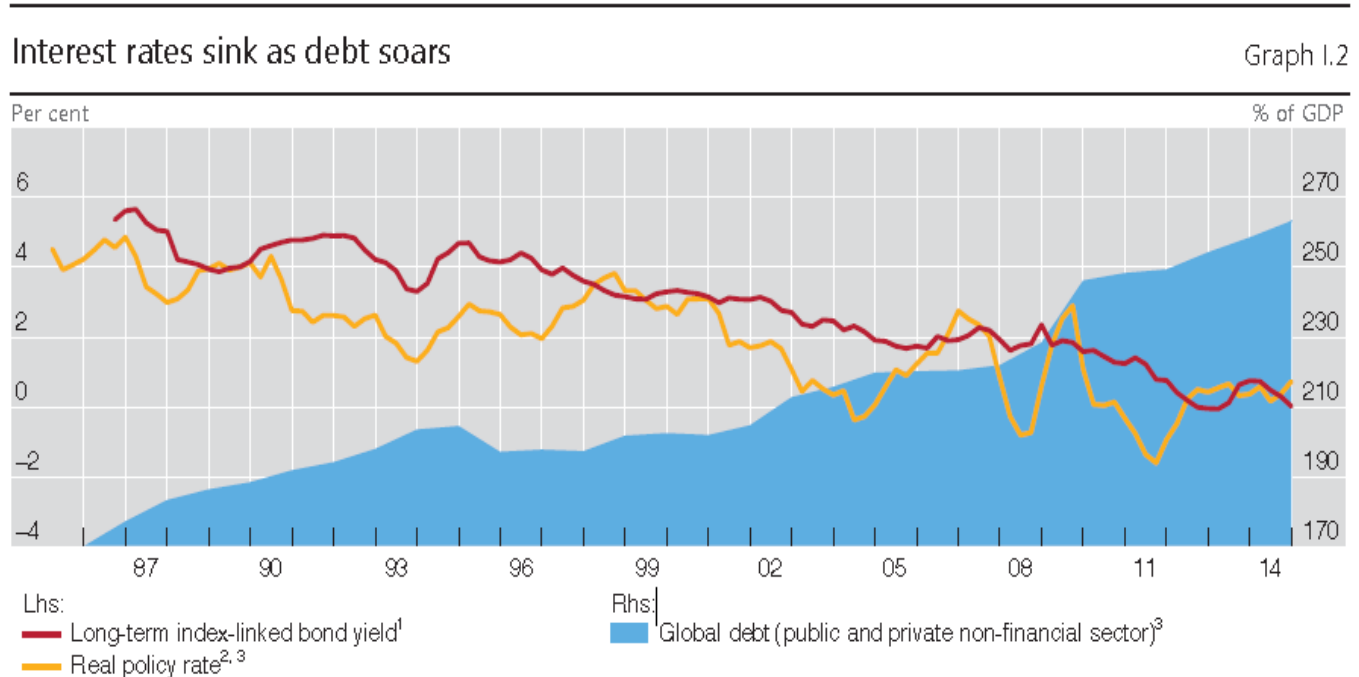


AN UPSIDE DOWN WORLD...

- Response to financial crisis (very low interest rates; several countries pursuing ZIRP);
- Non-conventional monetary policies:
 - Quantitative easing (purchase of long-term G bonds)
 - Heterodox credit easing (central banks purchase of private assets)
 - Forward guidance (commitment to maintain low policy rates over the medium term)
 - Negative interest rates
- According to some estimates more than \$7 trillion in bonds all over the world now carry negative yield...
- Theory: (1) incentive for commercial banks to lend more; (2) expectation that costumers will borrow more, increasing spending and saving less; (3) to narrow credit spreads on private assets; (4) to foster inflation (helping to diminish real debt burden); and (5) to promote competitive exchange rate depreciation;
- Danger: if there is no transmission to the wider economy, negative rates lose their rationale; if there is transmission, then banks profitability and/or business model compromised...

INTEREST RATES AND DEBT

Source: BIS (2015)



¹ From 1998, simple average of France, the United Kingdom and the United States; otherwise only the United Kingdom. ² Nominal policy rate less consumer price inflation. ³ Aggregate based on weighted averages for G7 economies plus China based on rolling GDP and PPP exchange rates.

Sources: IMF, *World Economic Outlook*; OECD, *Economic Outlook*; national data; BIS calculations.

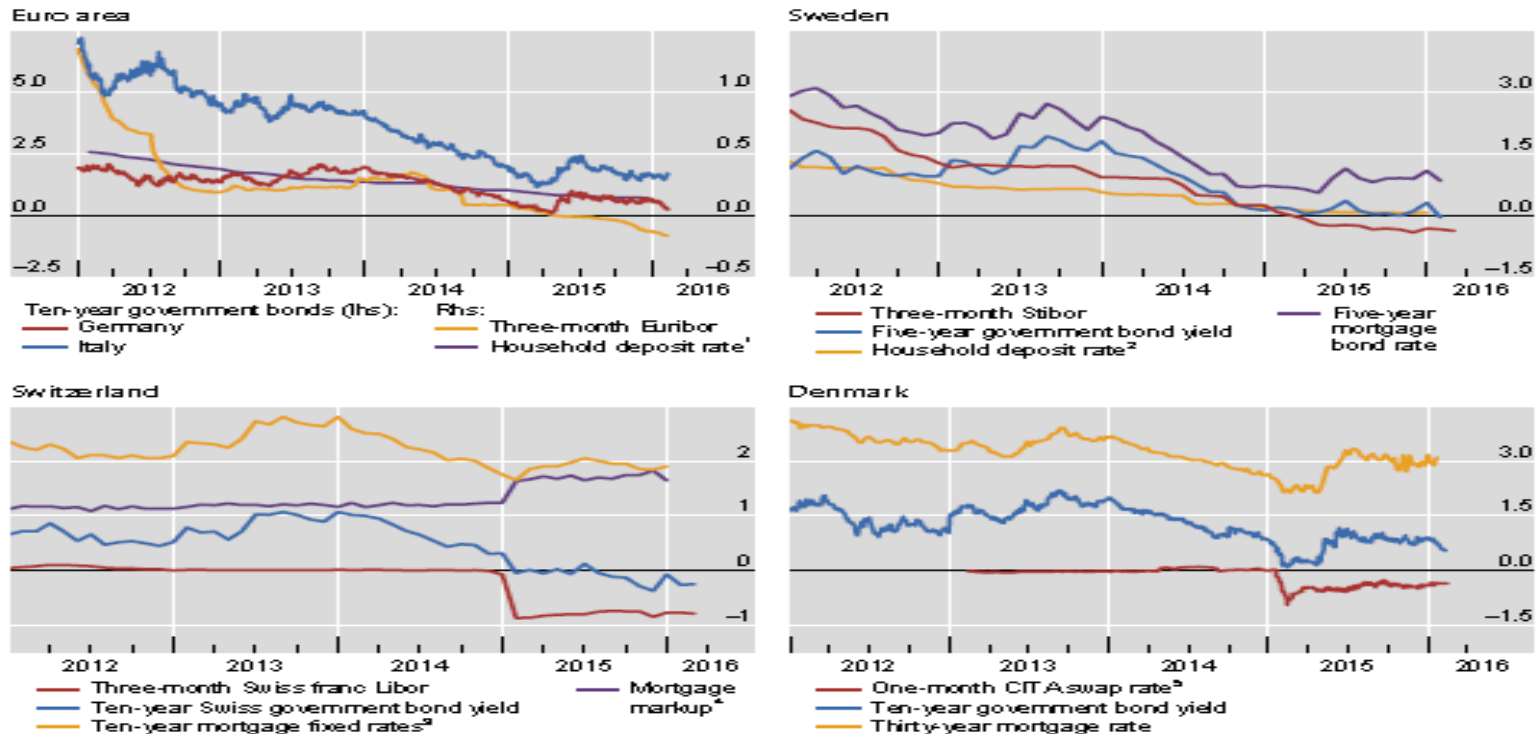
THE EUROPEAN EXPERIENCE WITH NEGATIVE RATES

Source: Belch and Malkhozov (2016)

Pass-through beyond money markets

In percent

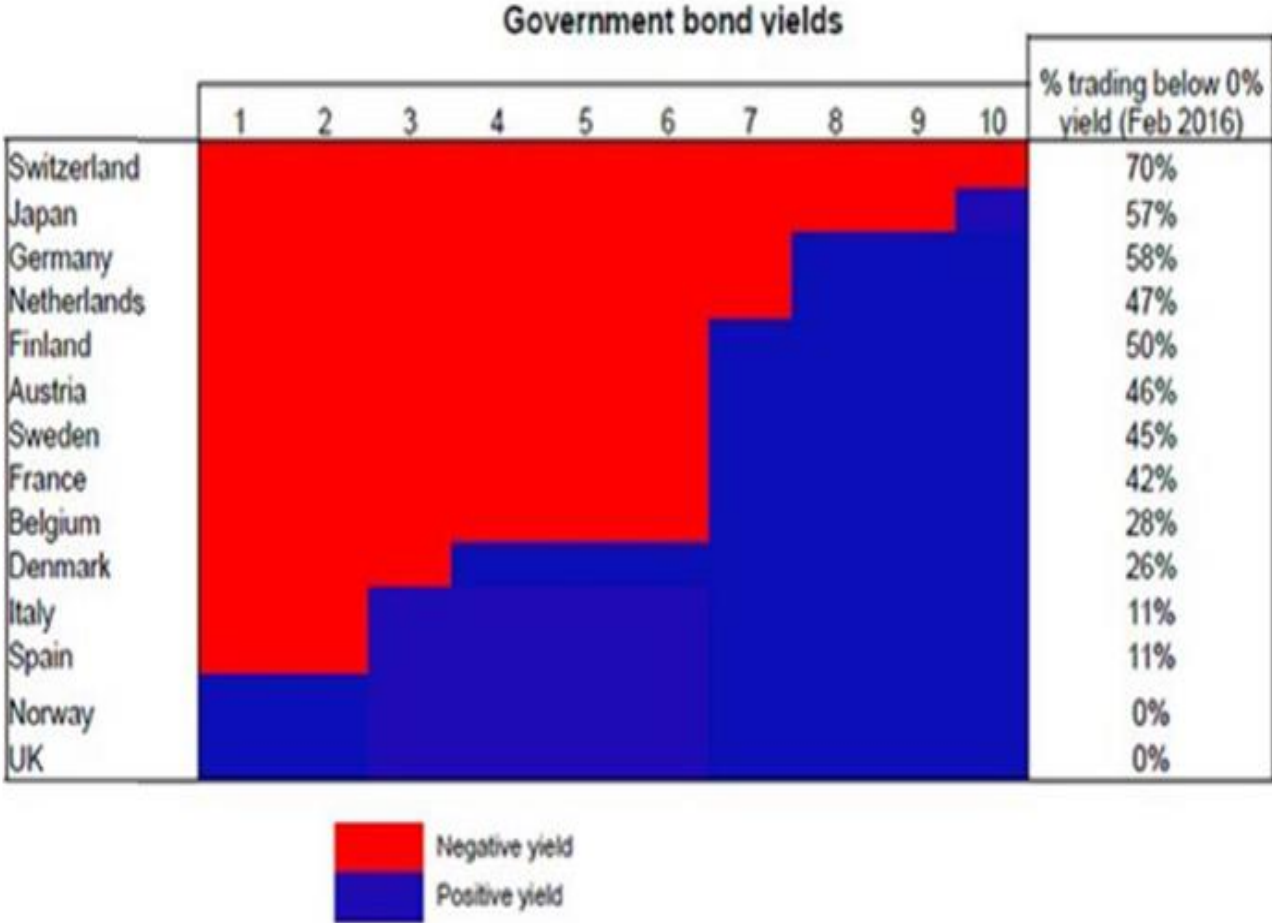
Graph 4



¹ Deposit rates for overnight loans on new deposits. ² Deposit rates offered by banks on new deposits, all accounts. ³ Rates on new loans. ⁴ Ten-year fixed mortgage rate minus 10-year interest rate swap. ⁵ Copenhagen interest T/N average (CITA) swap rates replaced Cibar in December 2012.

Sources: Bloomberg; national data.

NEGATIVE YIELDS...



Source: Bloomberg Finance LP, DB Global Markets Research

GROWTH FORECASTS (%)

SOURCES: WEO/IMF, several years.



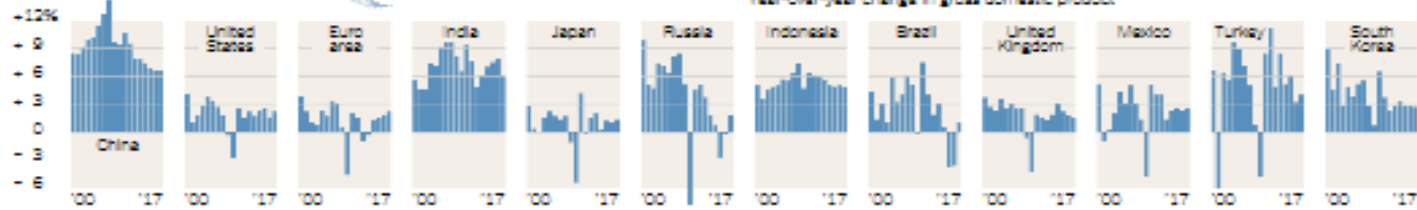
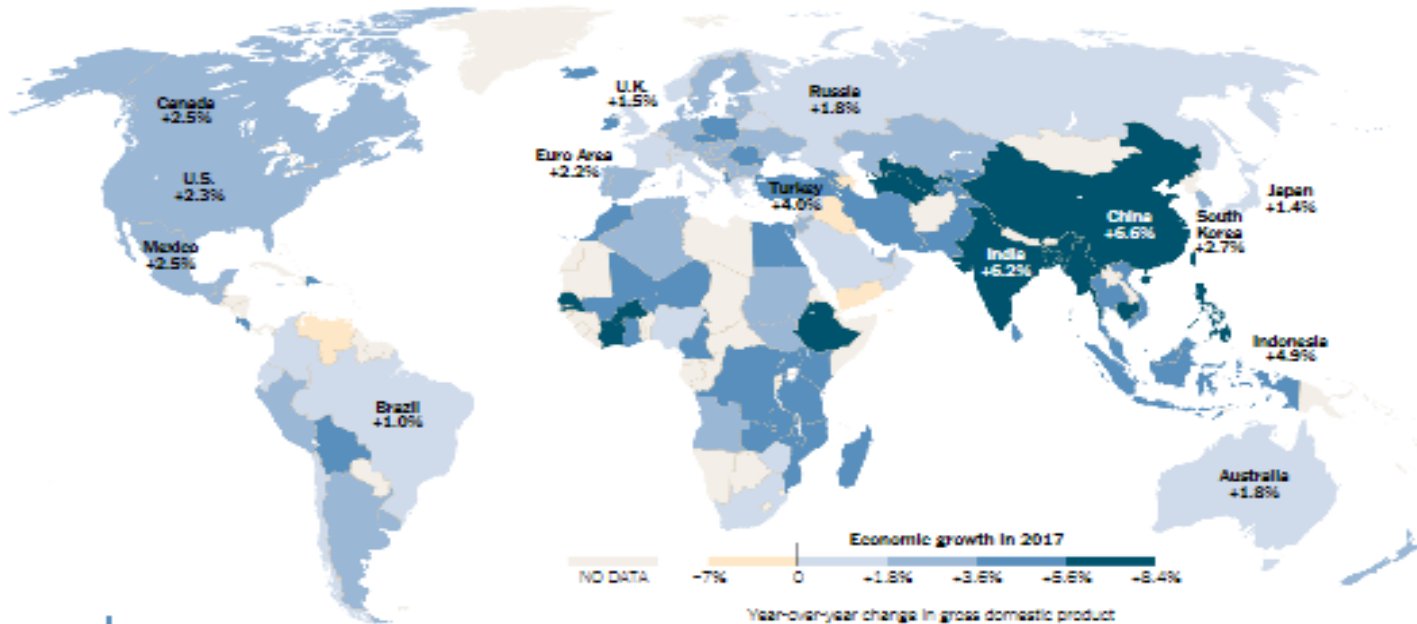
	World	USA	UK	Euro	Japan	Brazil	Russia	India	China	South Africa
2019 (forecast)	3.9	2.7	1.5	2.0	0.9	2.5	1.5	7.8	6.4	1.7
2018 (forecast)	3.9	2.9	1.6	2.4	1.2	2.3	1.7	7.4	6.6	1.5
2017	3.8	2.3	1.8	2.3	1.7	1.0	1.5	6.7	6.9	1.3
2016	3.2	1.5	1.9	1.8	0.9	-3.5	-0.2	7.1	6.7	0.3
2015	3.2	2.6	2.2	2.0	1.2	-3.8	-3.7	7.6	6.9	1.3

REASONS FOR OPTIMISM?

SOURCE: GOODMAN (2018)

Growth Across the Globe

For the first time since the financial crisis a decade ago, all of the world's major economies are growing.



Some figures are estimates

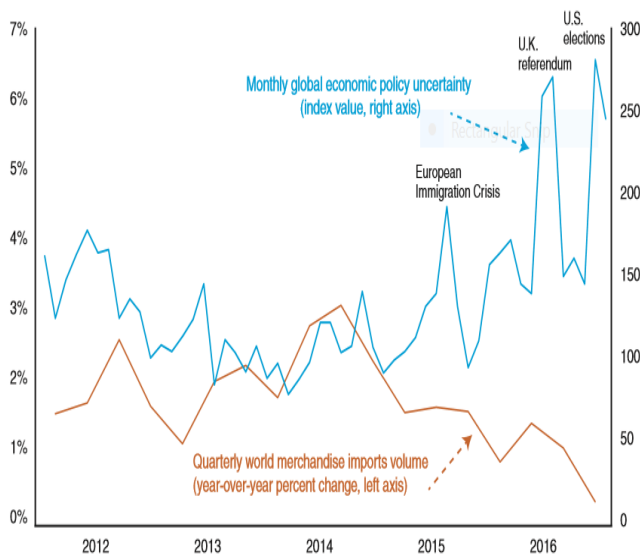
Source: The Conference Board; Bureau of Labor Statistics | By Karl Russell

THE PARADOX: INTERNATIONAL FINANCIAL MARKETS AND UNCERTAINTY...

SOURCES: PRIMO BRAGA (2017A); CONSTANTINESCU, MATTOO AND RUTA (2017); IRWIN (2017).

GROWING POLITICAL UNCERTAINTY

FIGURE ES3: World import growth and policy uncertainty, from mid-2012 to 2016

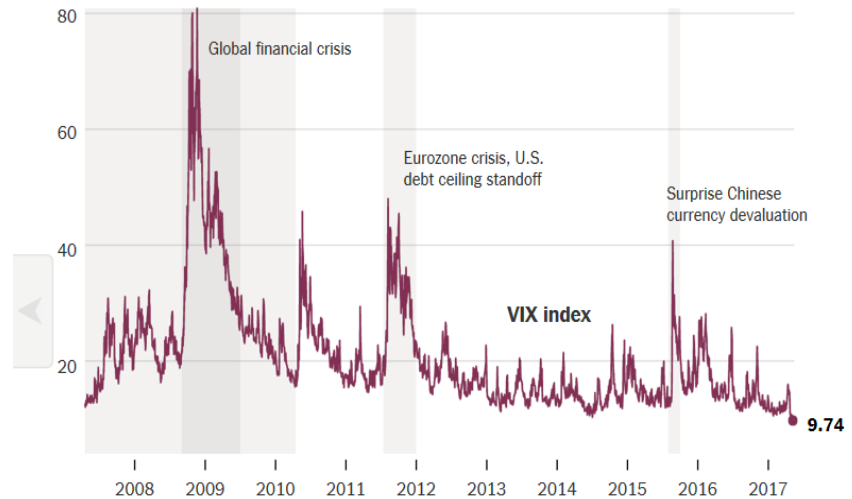


Source: CPB Netherlands Bureau of Economic Policy Analysis, www.PolicyUncertainty.com, Baker, Bloom and Davis (forthcoming), and authors' calculations.

LOW VOLATILITY IN FINANCIAL MARKETS

The Least Volatile Stock Market in Years

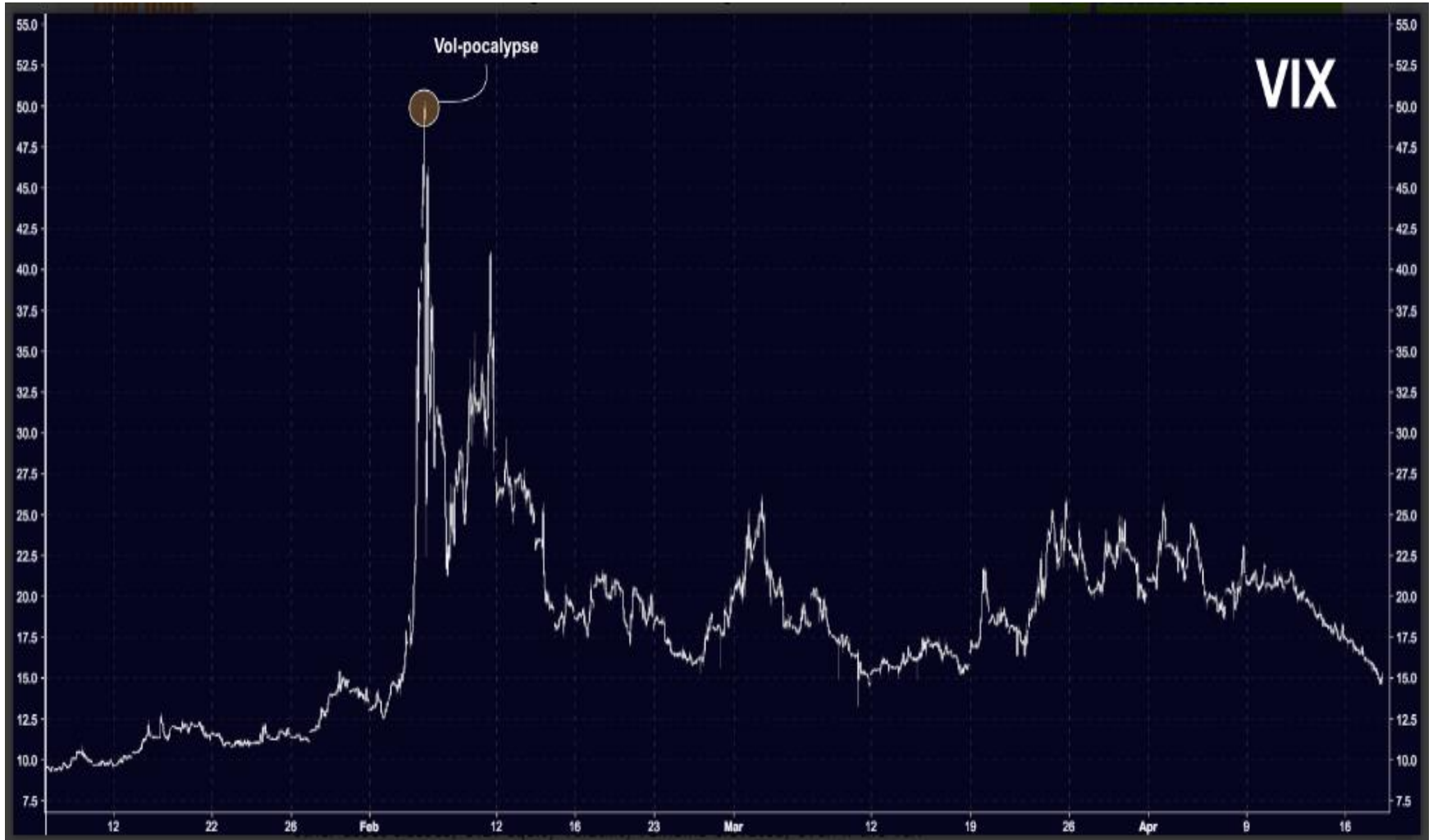
Rarely have stock prices been as stable as they have been in 2017, according to a commonly used measure of expected stock market volatility.



Source: CBOE

VIX: THE RETURN OF VOLATILITY IN 2018...

SOURCES: HEISENBERG (2018); PRIMO BRAGA (2018)



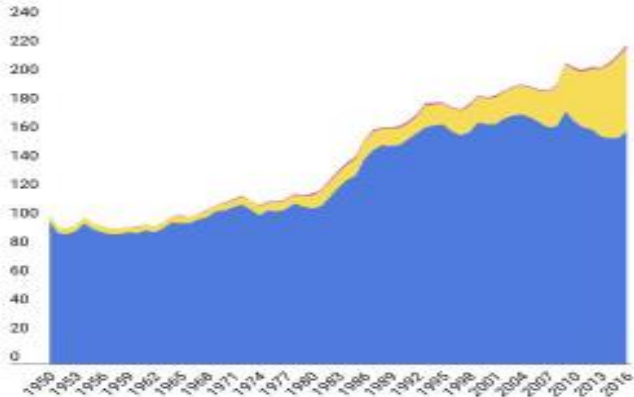
SIN AND DEBT

SOURCE: GASPAR E JARAMILLO (2018)

Global debt continues to grow

Global debt at new record high
Advanced economies are responsible for most global debt, and emerging market economies for the recent increase.

(Percent of global GDP)



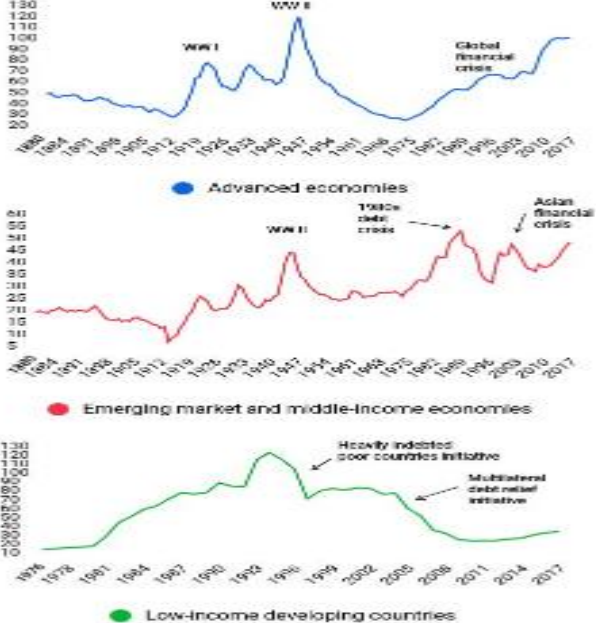
- Advanced economies
- Emerging economies
- Low-income developing countries

Sources: Mbaye, Moreno Badia and Chae forthcoming; Global Debt Database, and IMF staff estimates.
Note: Global debt refers to the sum of gross debt of the public and nonfinancial private sectors. The weighted average is calculated using the annual nominal GDP converted to US dollars for an unbalanced sample comprising 190 countries.

Public sector debt

Government Debt
Average debt-to-GDP ratios are at historic highs.

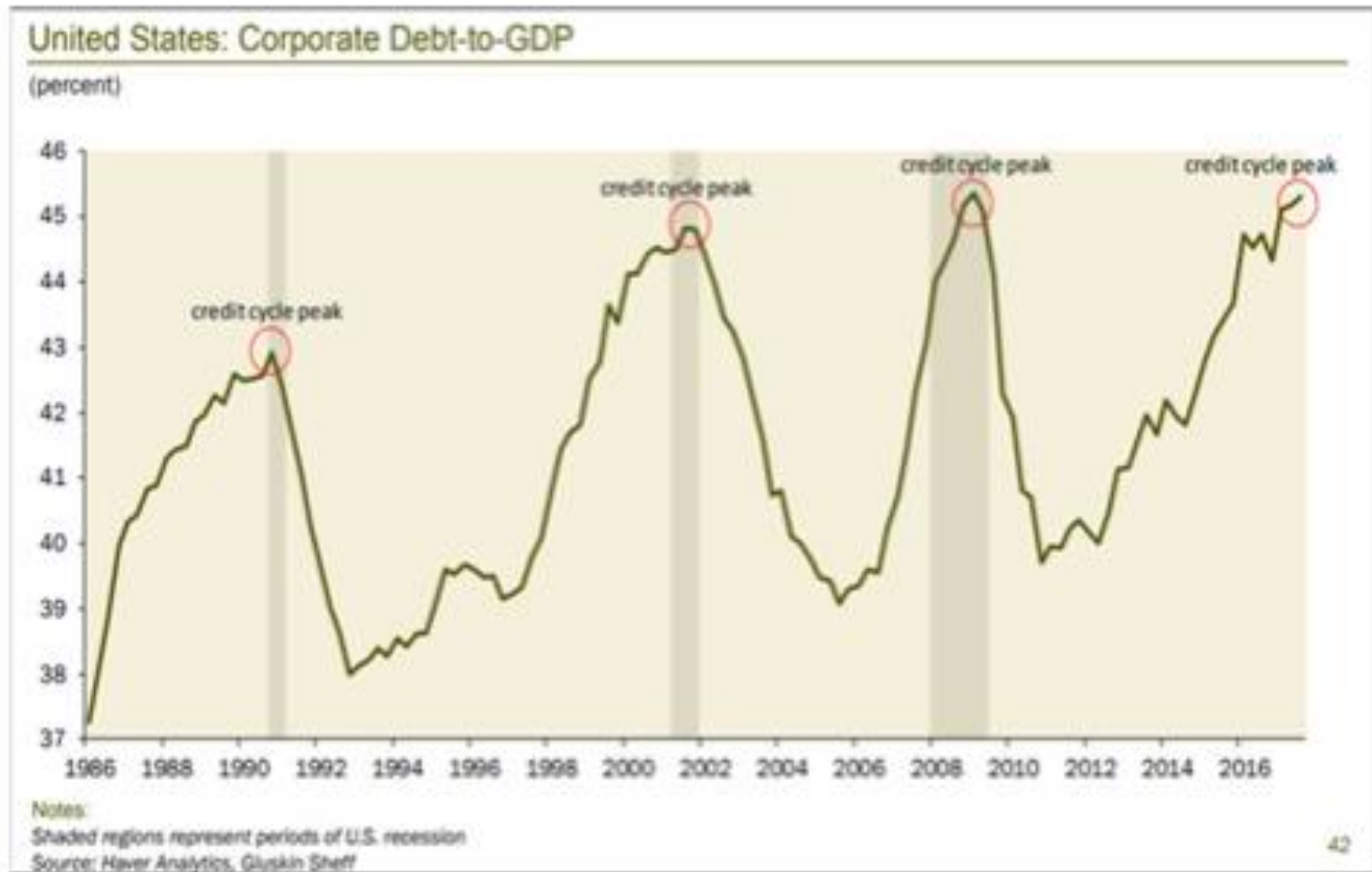
(Percent of GDP)



Sources: April 2018 Fiscal Monitor
Note: Average is calculated using GDP of purchasing power parity. Dashed lines refer to the debt level in 2017.

CORPORATE DEBT IN THE USA

SOURCE: MAULDIN (2018)



“THEORY IS WHEN YOU UNDERSTAND EVERYTHING, BUT NOTHING WORKS. PRACTICE IS WHEN EVERYTHING WORKS, BUT NOBODY UNDERSTANDS WHY. AT THIS STATION, THEORY AND PRACTICE ARE UNITED, SO NOTHING WORKS AND NOBODY UNDERSTANDS WHY.” (SOURCE: FISHER, 2011)



GLOBALIZATION: PERCEPTIONS, FACTS, AND TRENDS

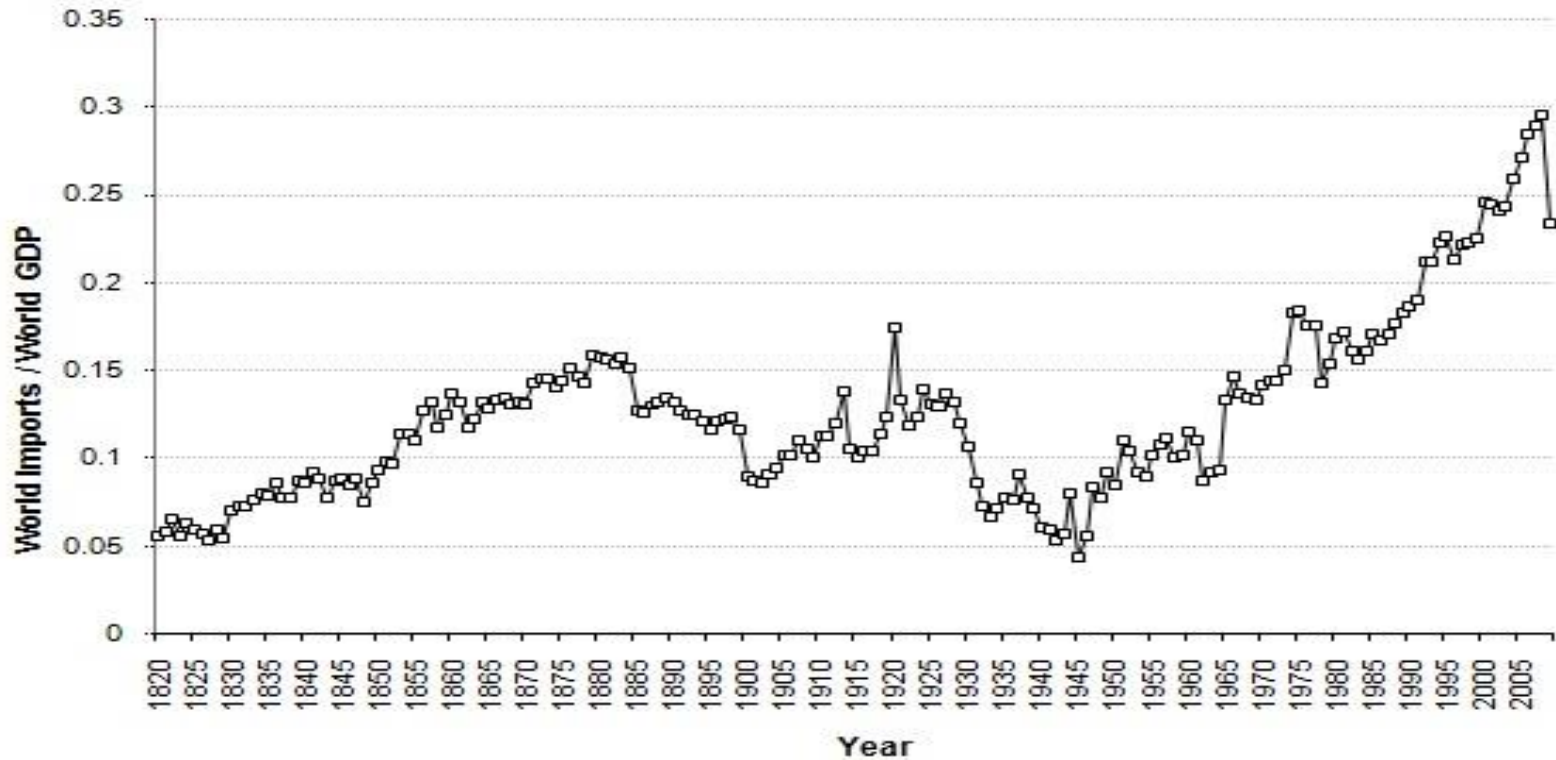
GLOBALIZATION: AN EARLY OBSERVATION

“Before, the events that took place in the world were not linked. Now, they are all dependent on each other”

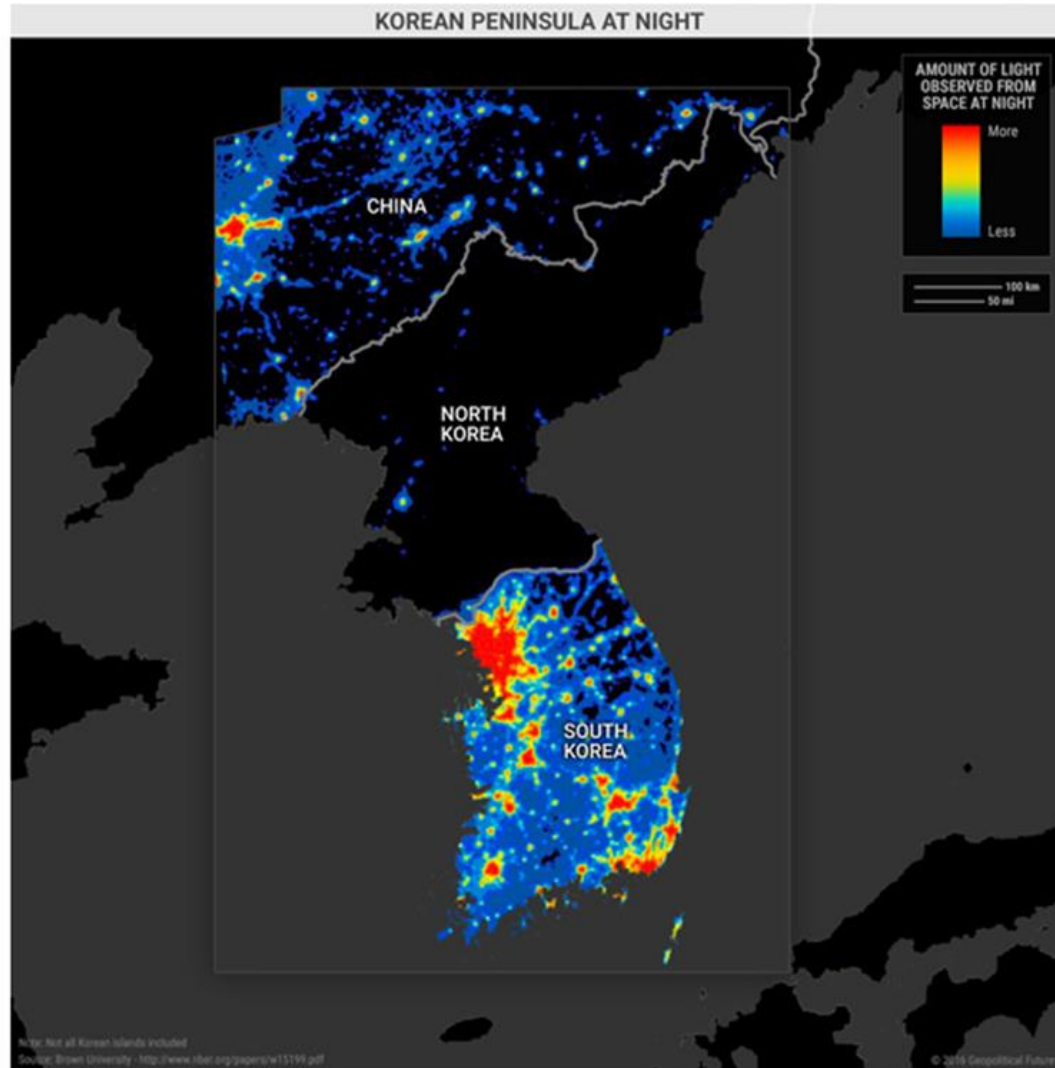
Polybius, Greek historian, in the 2nd century BC

INTERNATIONAL TRADE AND ECONOMIC GLOBALIZATION: LONG-TERM TRENDS

SOURCES: CHASE-DUNN AND KWON (2010); WORLD DEVELOPMENT INDICATORS (2011)



THE KOREAN PENINSULA AS A METAPHOR



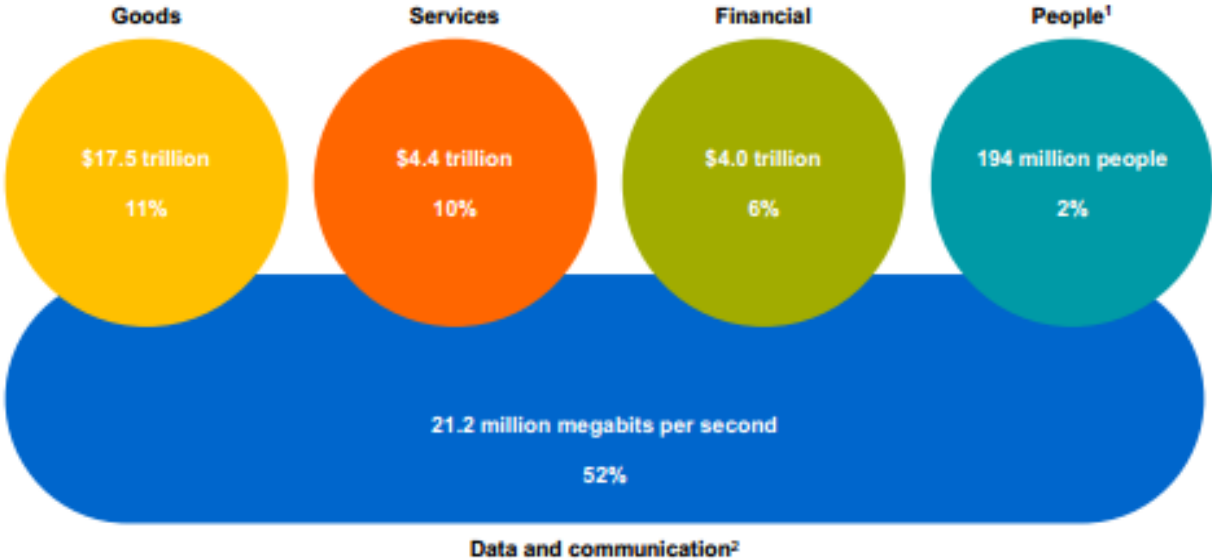
GLOBALIZATION 21ST CENTURY STYLE

SOURCE: MCKENZIE (2014)

We examine flows of goods, services, finance, and people, and data and communication that underlies them all

Value and growth of cross-border flows

2012 value
Compound
annual growth
rate, 2002–12



¹ Measured by cross-border migrants; values from 2000 and 2010.

² Measured by cross-border Internet stock traffic; values from 2005 and 2013.

SOURCE: Comtrade; IHS Economics & Country Risk; World Bank; Bank for International Settlements; IMF Balance of Payments; Telegeography; Web of Science, Thomson Innovation; McKinsey Global Institute analysis

INTERNATIONAL CONNECTIVITY

SOURCE: MCKINSEY (2016B)

Country connectedness index and overall flows data, 2014

Rank of participation by flow as measured by flow intensity and share of world total

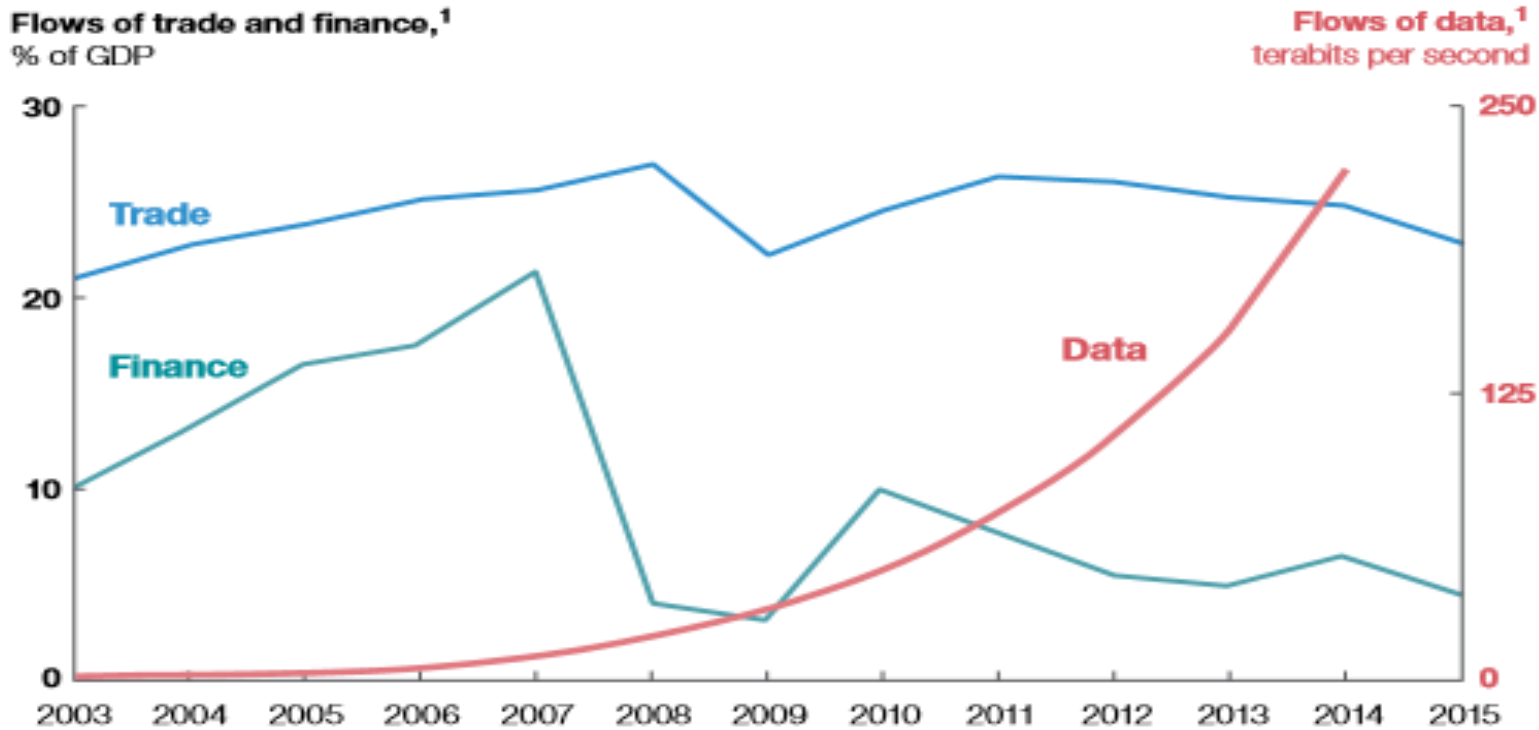
Connectedness index rank: 1-10 (dark blue), 11-25 (medium blue), 26-50 (light blue), >50 (grey) | Flow intensity: 100+ (orange), 70-99 (yellow), <70 (light yellow)

Rank	Country	Score	Connectedness Index rank					Flow value ¹ \$ billion	Flow intensity ² % of GDP
			Goods	Services	Finance	People	Data		
1	Singapore	64.2	1	2	2	12	6	1,392	452
2	Netherlands	54.3	3	3	6	21	1	1,834	211
3	United States	52.7	7	7	3	1	7	6,832	39
4	Germany	51.9	2	4	8	3	2	3,798	99
5	Ireland	45.9	32	1	1	28	9	559	227
6	United Kingdom	40.8	13	5	5	6	3	2,336	79
7	China	34.2	4	16	4	82	38	6,480	63
8	France	30.1	11	8	9	7	4	2,262	80
9	Belgium	28.0	5	6	33	33	8	1,313	246
10	Saudi Arabia	22.6	20	28	27	2	53	790	106
11	United Arab Emirates	22.2	6	23	17	4	46	789	196
12	Switzerland	18.0	12	11	10	17	13	848	115
13	Canada	17.3	16	22	11	11	18	1,403	79
14	Russia	16.1	21	25	18	5	25	1,059	57
15	Spain	14.4	25	13	19	14	16	1,105	79
16	Korea	14.0	8	12	28	50	44	1,510	107
17	Italy	13.4	17	18	24	16	19	1,587	74
18	Sweden	13.0	29	14	22	31	5	572	100
19	Austria	11.7	26	17	31	20	12	470	108
20	Malaysia	11.6	9	19	25	26	43	610	187
21	Mexico	10.7	14	63	34	18	41	1,022	80
22	Thailand	10.7	10	15	36	44	64	605	162
23	Kuwait	10.6	37	46	13	13	75	306	153
24	Japan	10.5	15	20	12	81	20	2,498	54
25	Kazakhstan	10.0	48	73	41	8	57	176	83
26	Ukraine	9.8	38	39	87	10	34	133	101
27	Australia	9.7	30	34	21	15	33	825	57
28	Denmark	8.9	35	9	32	41	11	369	108
29	Jordan	8.8	73	50	75	9	83	50	138
30	India	8.5	24	10	35	58	70	1,316	64
32	Czech Republic	7.5	18	33	57	59	15	397	193
34	Poland	7.0	23	31	47	34	22	585	107
35	Hungary	6.8	22	30	26	62	17	287	209
36	Norway	6.0	36	24	20	46	24	458	92
37	Vietnam	5.7	19	54	45	103	61	350	188
39	Finland	5.5	46	27	23	70	10	390	144
40	Portugal	5.5	47	36	30	23	31	255	111
41	Turkey	5.1	28	40	53	38	29	521	65
43	Israel	4.9	51	32	49	24	56	248	82
44	Brazil	4.5	41	38	14	125	30	869	37
45	Chile	4.1	45	58	16	102	27	239	92
47	Greece	4.1	60	29	54	35	42	160	67
48	New Zealand	3.9	67	48	61	25	51	130	63
51	Indonesia	3.4	31	49	38	106	76	504	57
53	South Africa	3.3	34	57	52	64	80	277	79
54	Philippines	3.2	54	41	44	52	67	230	81

DISTINCT VECTORS OF GLOBALIZATION

SOURCE: GREENBERG, HIRT, AND SMIT (2017)

Global flows of data have outpaced traditional trade and financial flows.

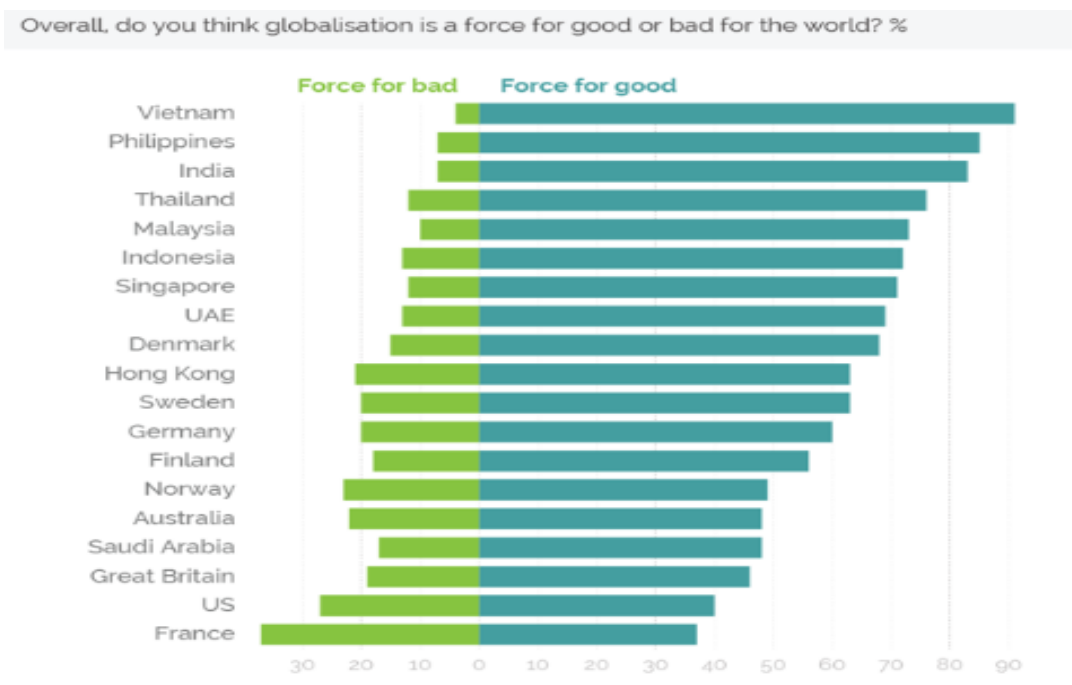


¹ Trade and finance are inflows; data flows are a proxy to inflows, based on total flows of data.

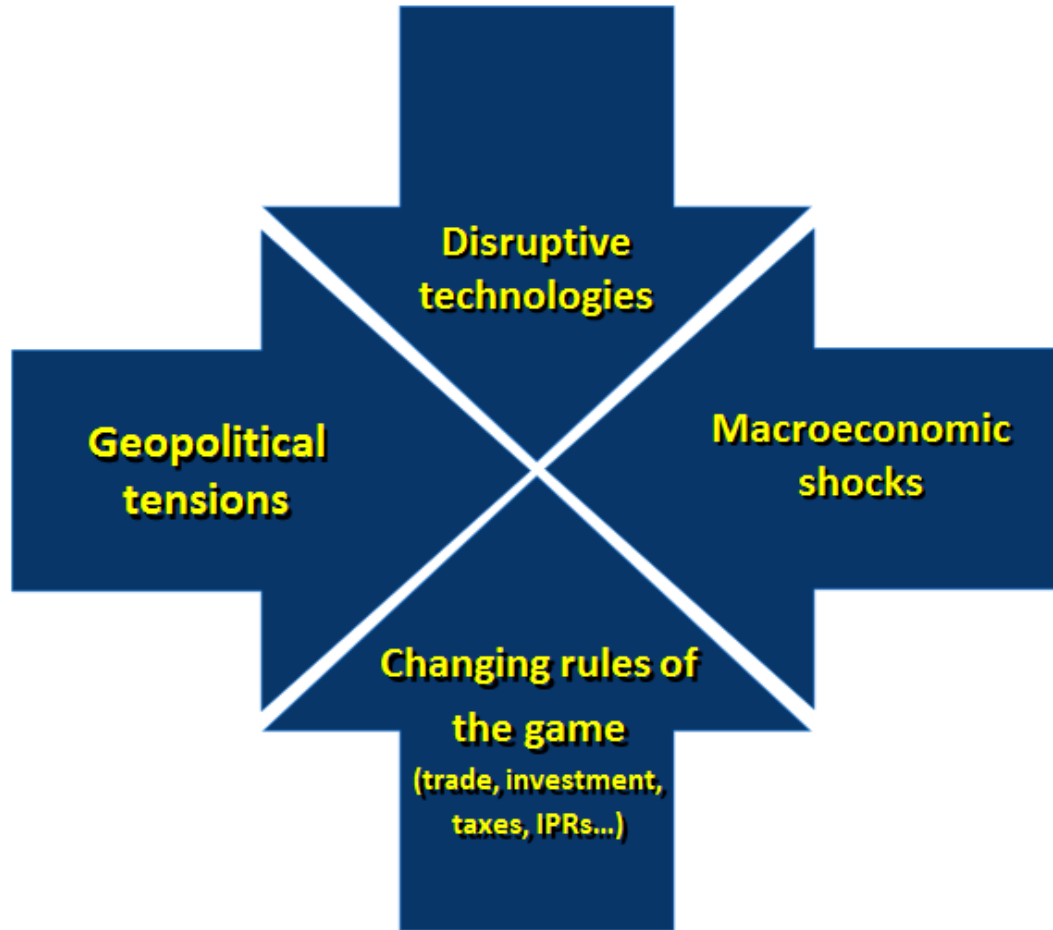
Source: IMF Balance of Payments Statistics; TeleGeography, Global Bandwidth Forecast Service; UNCTAD; World Bank; McKinsey Global Institute analysis

PERCEPTIONS ABOUT GLOBALIZATION

SOURCE: SMITH (2016)



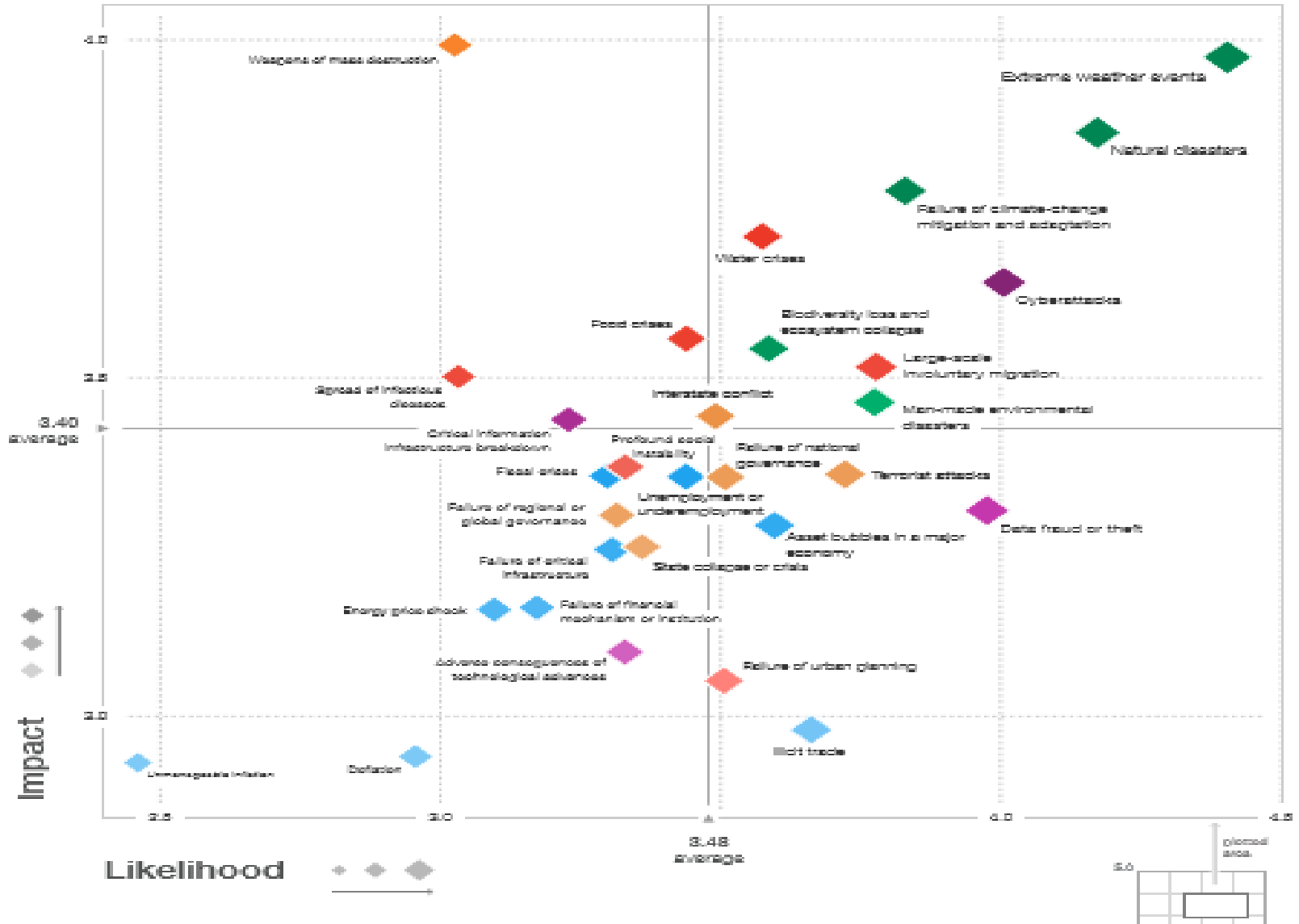
GLOBALIZATION IN MOTION



GEOPOLITICAL SHOCKS

GLOBAL RISKS, 2018

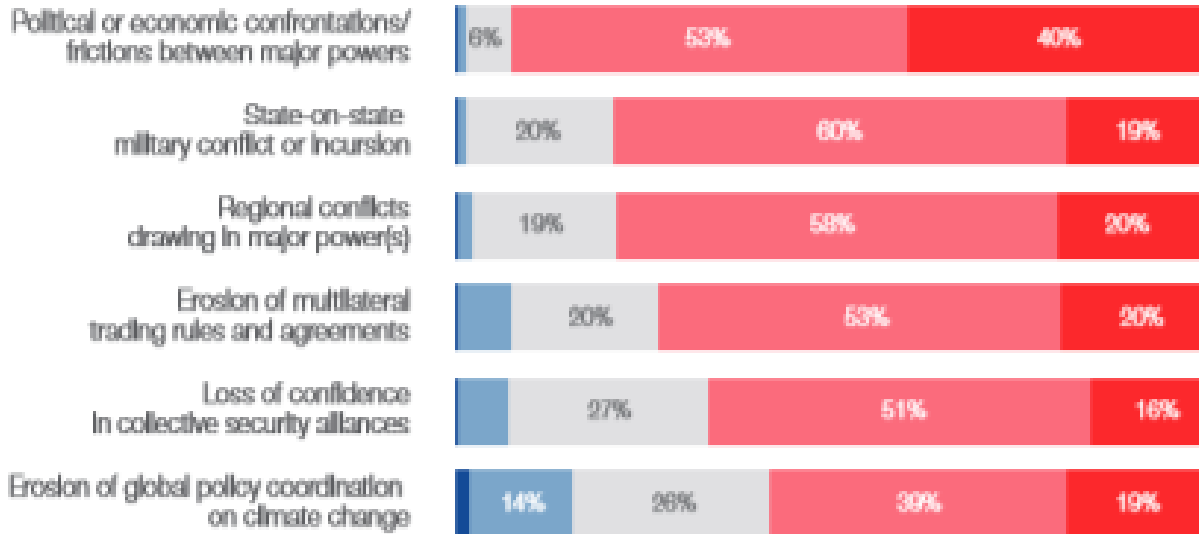
SOURCE: WEF (2018)



RISK PERCEPTIONS: 2018 VS. 2017

SOURCE: WEF (2018)

Do you think that, in 2018, the risks presented by the following issues will **decrease** or **increase** compared to 2017?



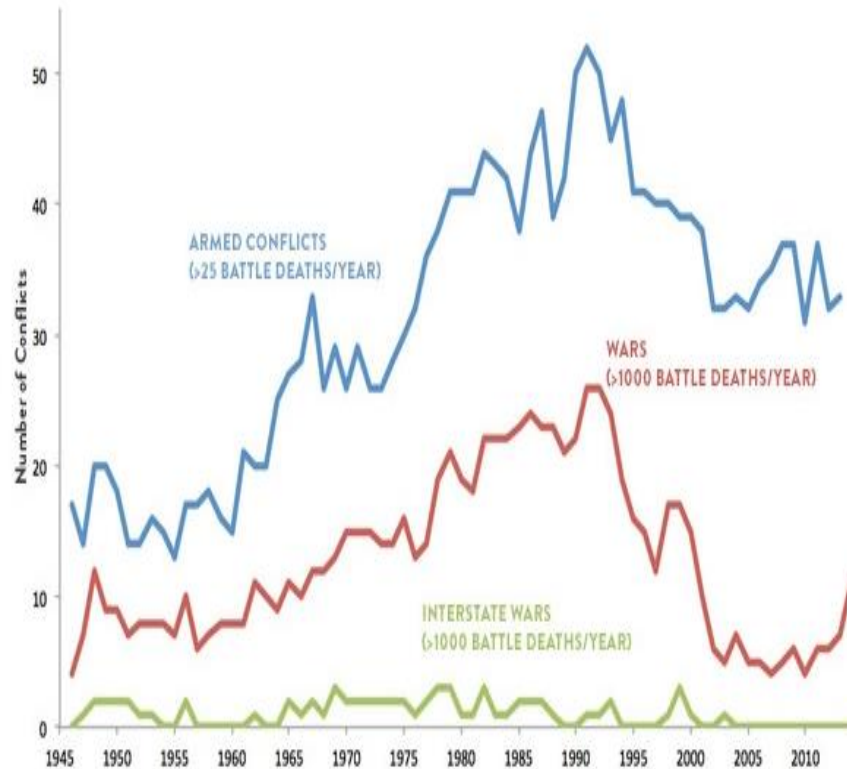
Percentage of respondents



WARS AND DEATHS...

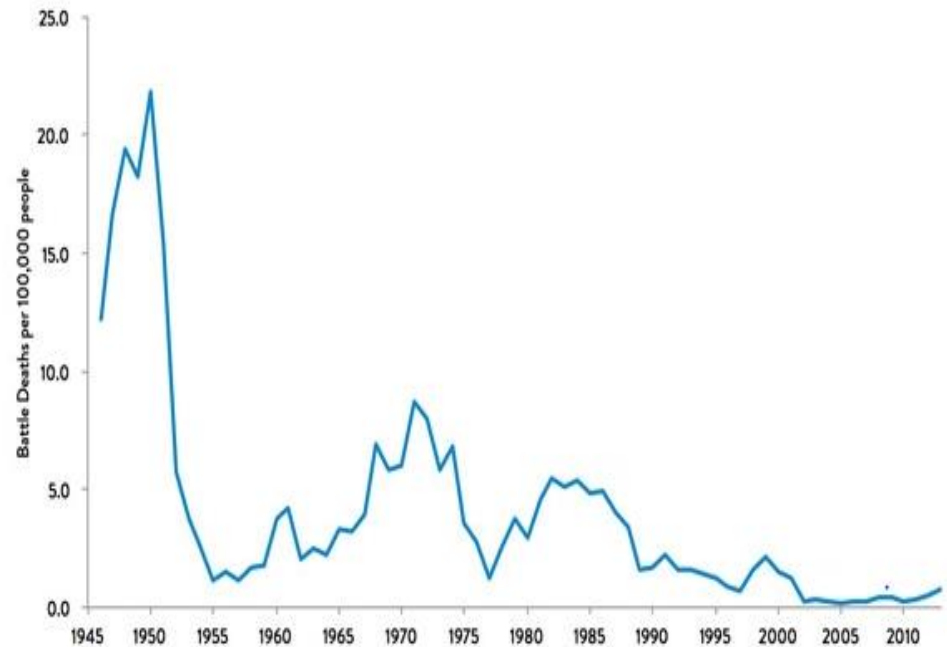
Source: Pinker and Mack (2014)

NUMBER OF ARMED CONFLICTS AND WARS
1946-2014



Source: Uppsala Data Conflict Program/Peace Research Institute Oslo Armed Conflict Dataset.

RATE OF BATTLE DEATHS IN ARMED CONFLICTS
1946-2013



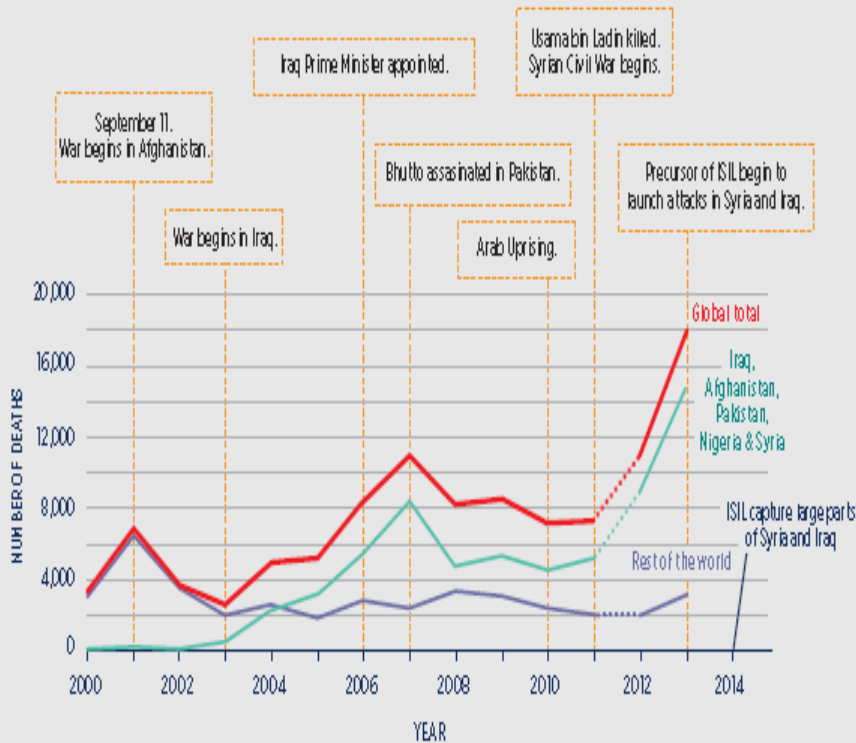
Source: Uppsala Conflict Data Program Battle-Related Deaths Dataset v.5-2014, 1989-2013, "Best Estimates." Missing estimate for 2013 for the Syrian civil war calculated from a revised UCDP "Low Estimate" and a "High Estimate" from the Peace Research Institute Oslo (both obtained in consultation with Erik Melander of UCDP). The "High Estimate" is for May 2013-April 2014, rather than calendar year 2013, and comes from Page 9 of M. Price, A. Gohdes, & P. Ball, "Updated Statistical Analysis of Documentation of Killings in the Syrian Arab Republic," Human Rights Data Analysis Group, <http://www.ohchr.org/Documents/Countries/SY/HRDAGUpdatedReportAug2014.pdf>. World population figures from U.S. Census Bureau, http://www.census.gov/population/international/data/worldpop/table_population.php

TERRORISM

Source: Institute for Economics & Peace (2014)

FIGURE 1 DEATHS FROM TERRORISM, 2000–2013

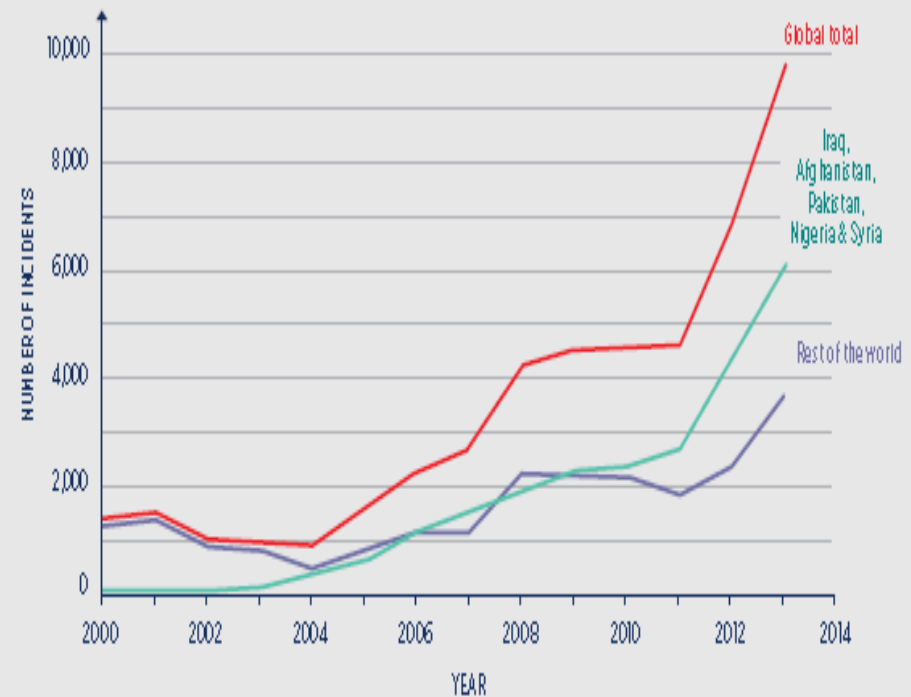
The number people who have died from terrorist activity has increased fivefold since the year 2000.



Source: GTD Notes: The dashed part of the trend line represents a change in data collection methodology for terrorist acts. The methodology change did not materially alter the results as the increase in terrorism is verifiable, see methodological note in Appendix C for further details.

FIGURE 2 TERRORIST INCIDENTS, 2000–2013

In 2013, 60 percent of all attacks occurred in five countries; Iraq, Afghanistan, Pakistan, Nigeria and Syria. However the rest of the world suffered a 54 percent increase in terrorist incidents in 2013.



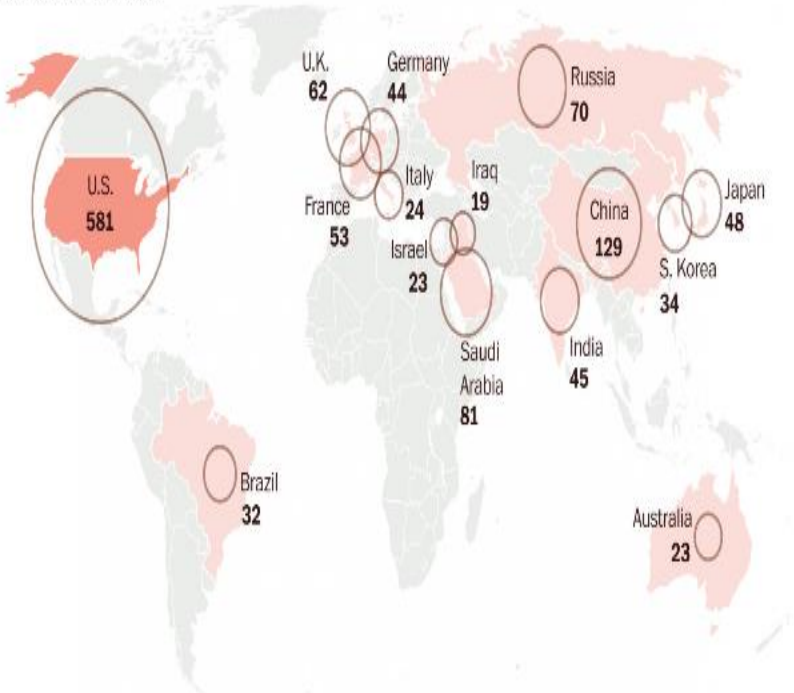
Source: GTD

MILITARY BUDGETS

Source: Taylor (2015)

Largest defense budgets in 2014

in billions of dollars

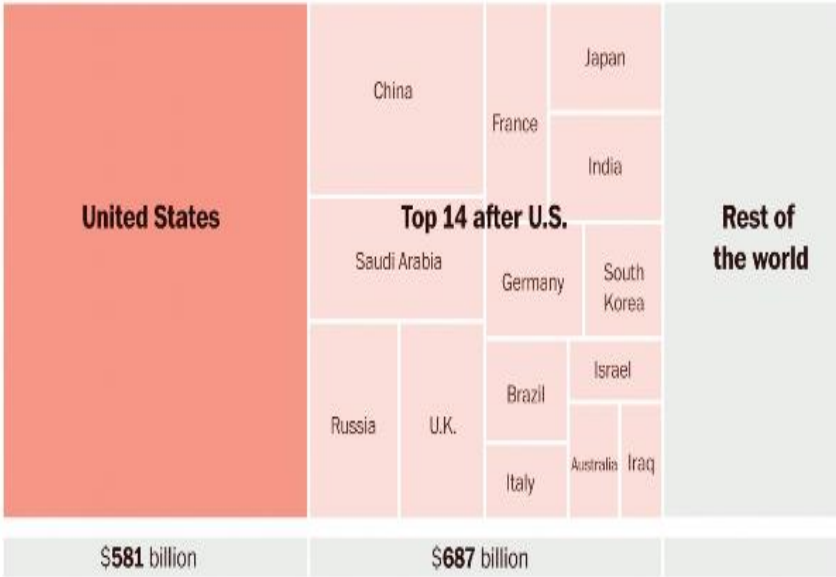


Source: The Military Balance 2015/International Institute for Strategic Studies

VESKO CHOLAKOV / THE WASHINGTON POST

The U.S. spends more than a third of the world

In 2014, United States' defense budget was 4.5 times bigger than the next largest - China's. In fact, the U.S. accounted for more than a third of the total defense spending worldwide.

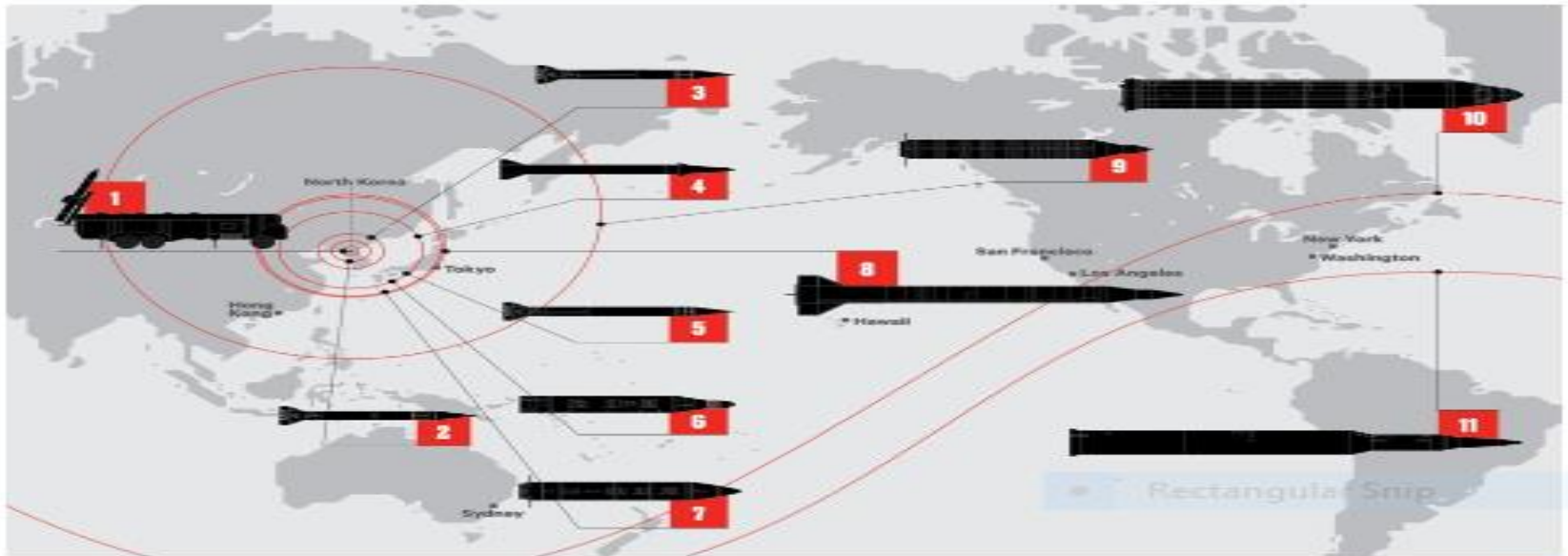


Note: U.S. dollar totals are calculated using IMF's average exchange rates in 2014. Israel's spending includes U.S. Foreign Military Aid.
Source: The Military Balance 2015/International Institute for Strategic Studies

VESKO CHOLAKOV / THE WASHINGTON POST

THE NORTH KOREAN THREAT

SOURCE: THE ATLANTIC (2017)



StoryTel

#	Name of Missile	Estimated Range
1	KN-02	120 km
2	Scud B	300 km
3	Scud C	500 km
4	KN-17	1,000 km
5	ER Scud	1,000 km
6	KN-11	1,000 km (Submarine-Launched)
7	KN-15	1,250 km
8	No-dong	1,300 km
9	Musudan	3,500 km
10	KN-14	10,000 km
11	KN-08	11,500 km

RUSSIA: THE ROLE OF GEOPOLITICS

Source: Treisman (2016)



- The quest for restoring Russia's rightful place in the world order;
- From the Reagan/Baker-Gorbachev detent to the Wolfowitz "doctrine";
- Crimea/Ukraine crisis:
 - Response to NATO's threat (Yanukovych's ouster...); concerns about Sevastopol;
 - Imperial delusions (response to "the greatest geopolitical catastrophe of the century" ...);
 - Improvisation (Putin as a gambler): no consistent plan for the region's political future.

RUSSIA: THE ENERGY VARIABLE

Source: Husain et al. (2014)

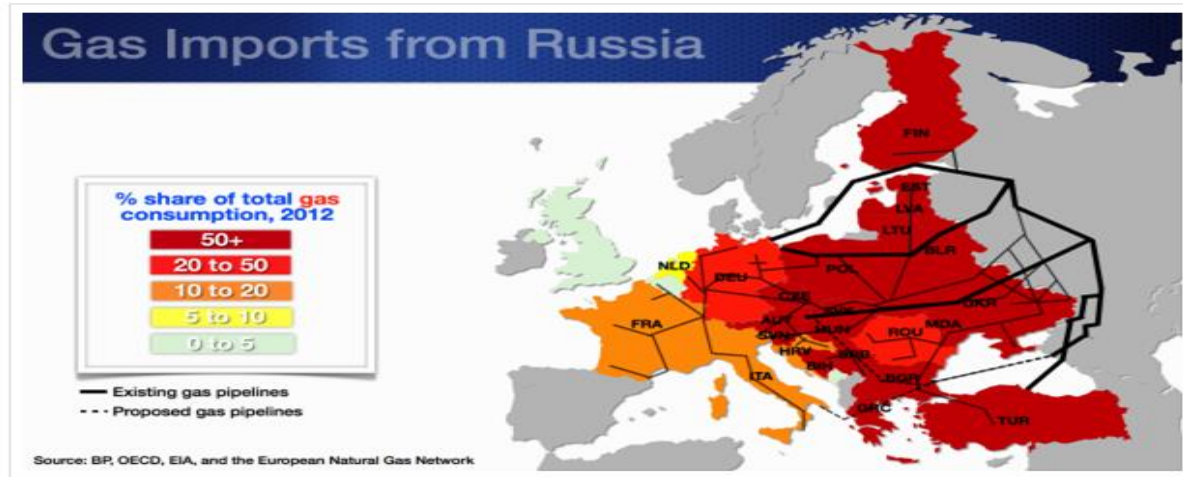
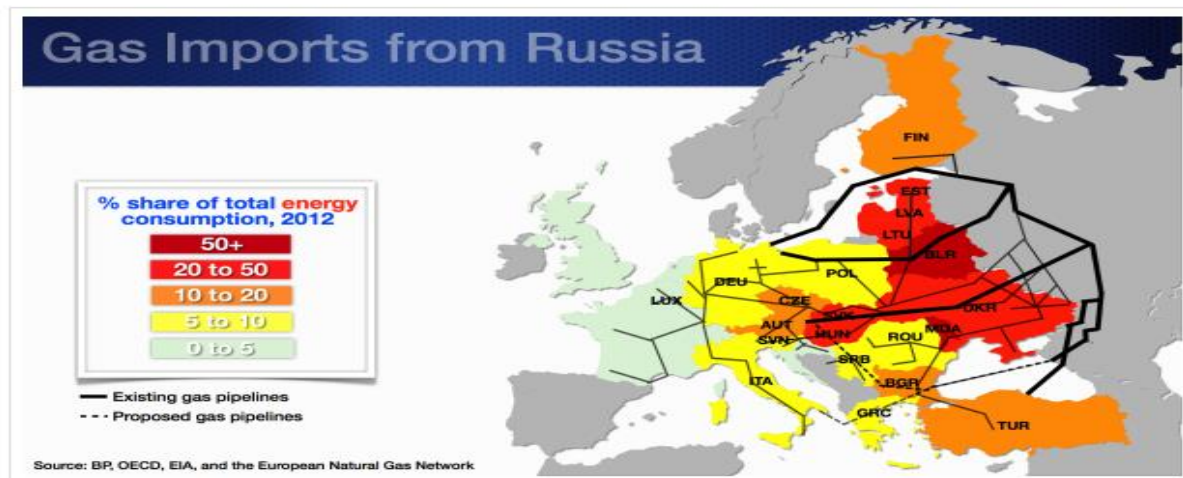
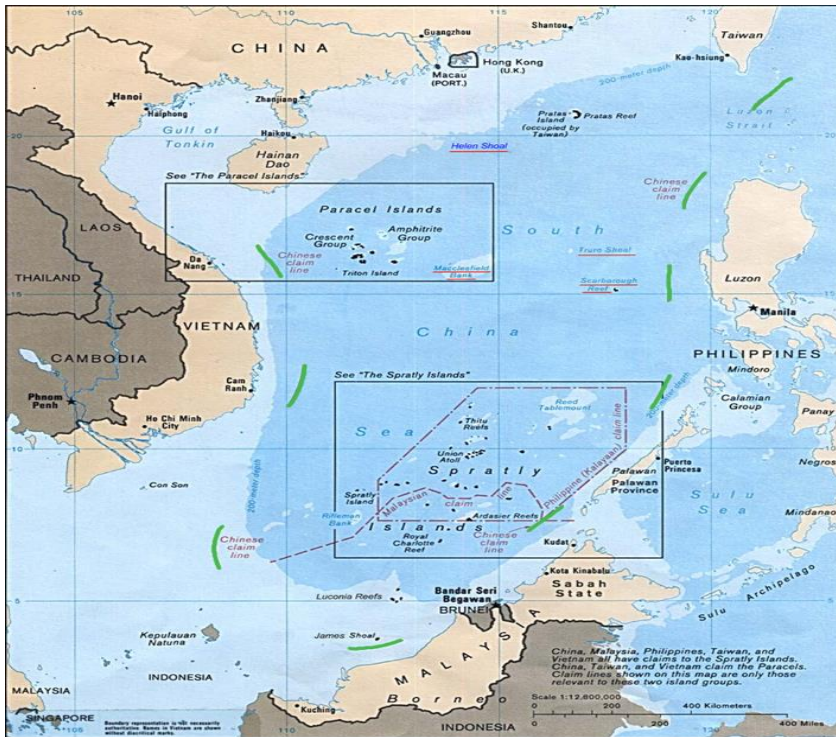


Chart 5



CHINA AND ITS NEIGHBORS

Source: Wikipedia

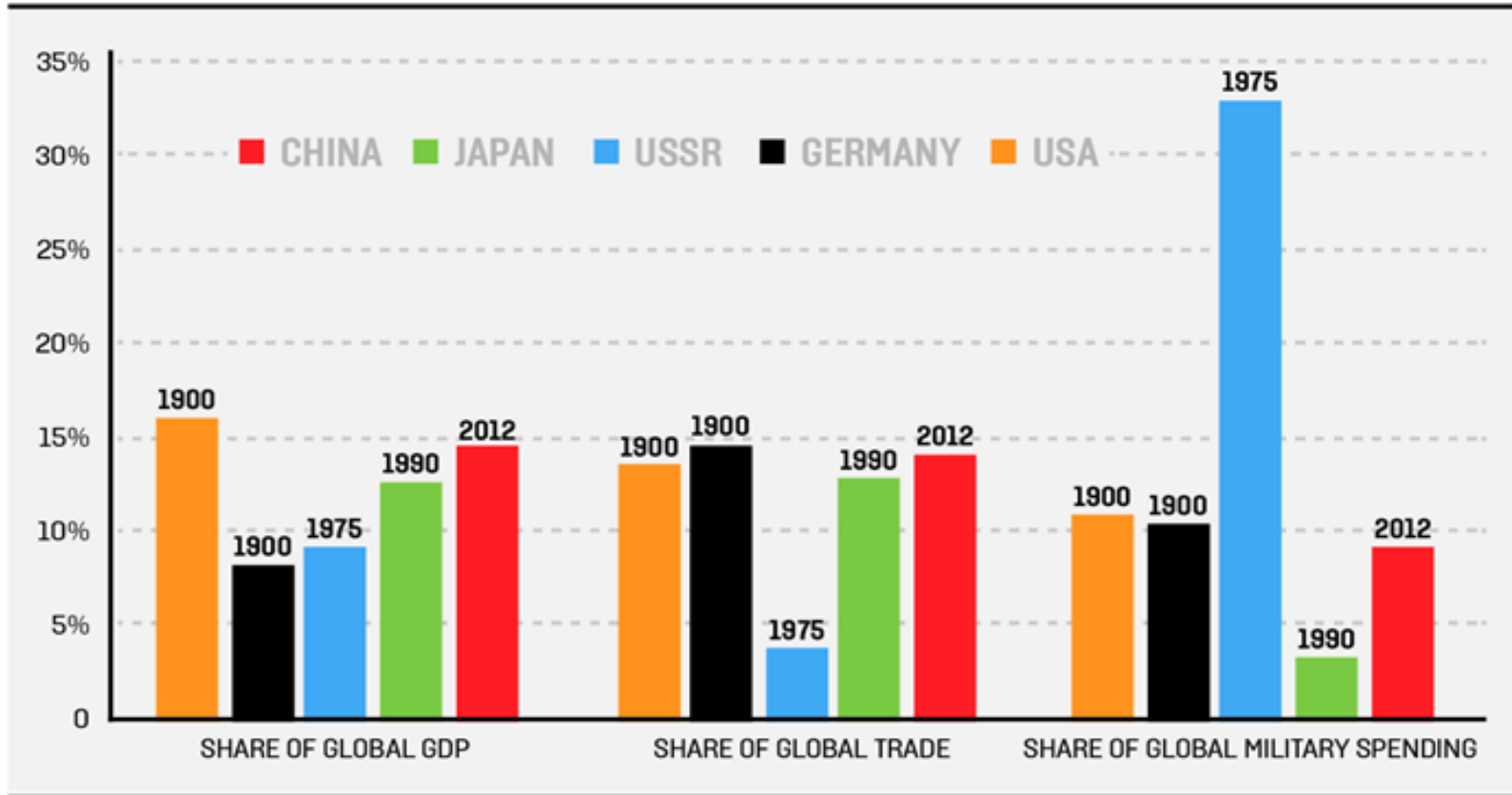


East and South China Sea disputes

- Air Defense Identification Zone extending the country's airspace (East China Sea – November 2013...);
- Diaoyu/Senkaku islands dispute;
- Nine-dash map...;
- Deep water drilling around the Paracel islands;
- Reclamation projects in the South China Sea...

THE THUCYDIDES TRAP

Source: Kliman (2014)



FOREIGN POLICY/TEA LEAF NATION | DATA VIA THE WORLD BANK AND STOCKHOLM INTERNATIONAL PEACE RESEARCH INSTITUTE

WALL STREET AND GEOPOLITICAL SHOCKS

SOURCE: CEMBALEST (2014)

S&P 500 Index around military invasions and conflicts (1973 - 1983)

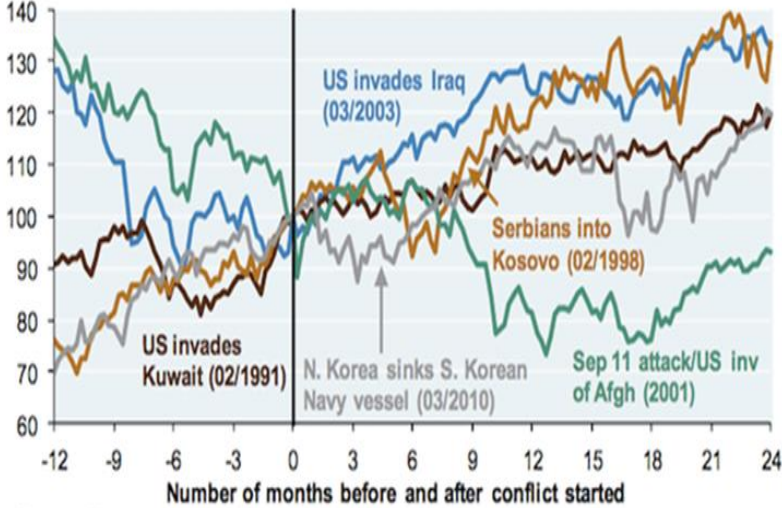
Index, month of invasion = 100



Source: Bloomberg, April 2014. Equity index represents price returns.

S&P 500 Index around military invasions and conflicts (1991 - today)

Index, month of invasion = 100



Source: Bloomberg, April 2014. Equity index represents price returns.

Note: it is not possible to invest directly in an index.

BUT IT IS GOOD TO REMEMBER...

Mike Tyson

“Everyone has a plan ‘til they get punched in the mouth.”

Kim Jong-un



TECHNOLOGICAL SHOCKS

JOBS AND TECHNOLOGY

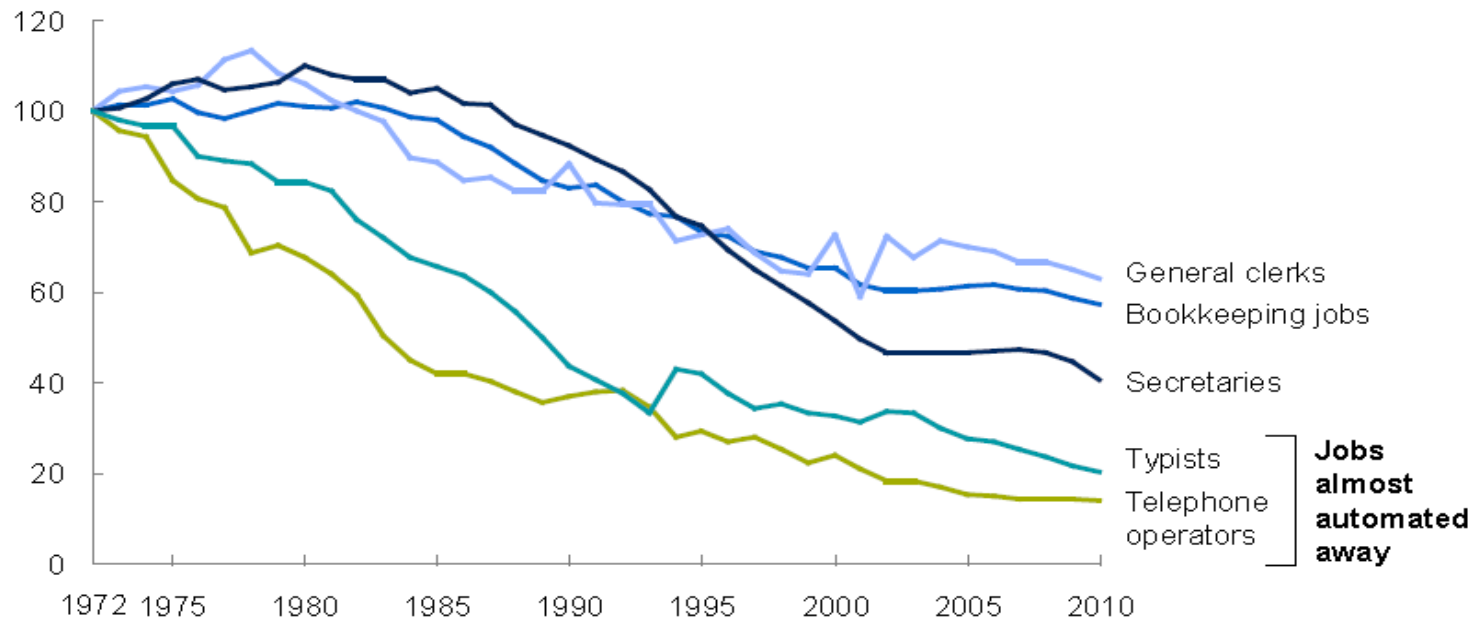
Source: McKinsey (2013a)

The number of transaction workers in the United States across some major job types declined more than 50 percent between 1970 and 2010

Decline in transactional jobs between 1970 and 2010¹

% workforce share decline for select highly automatable jobs

Index: 100 = 1972

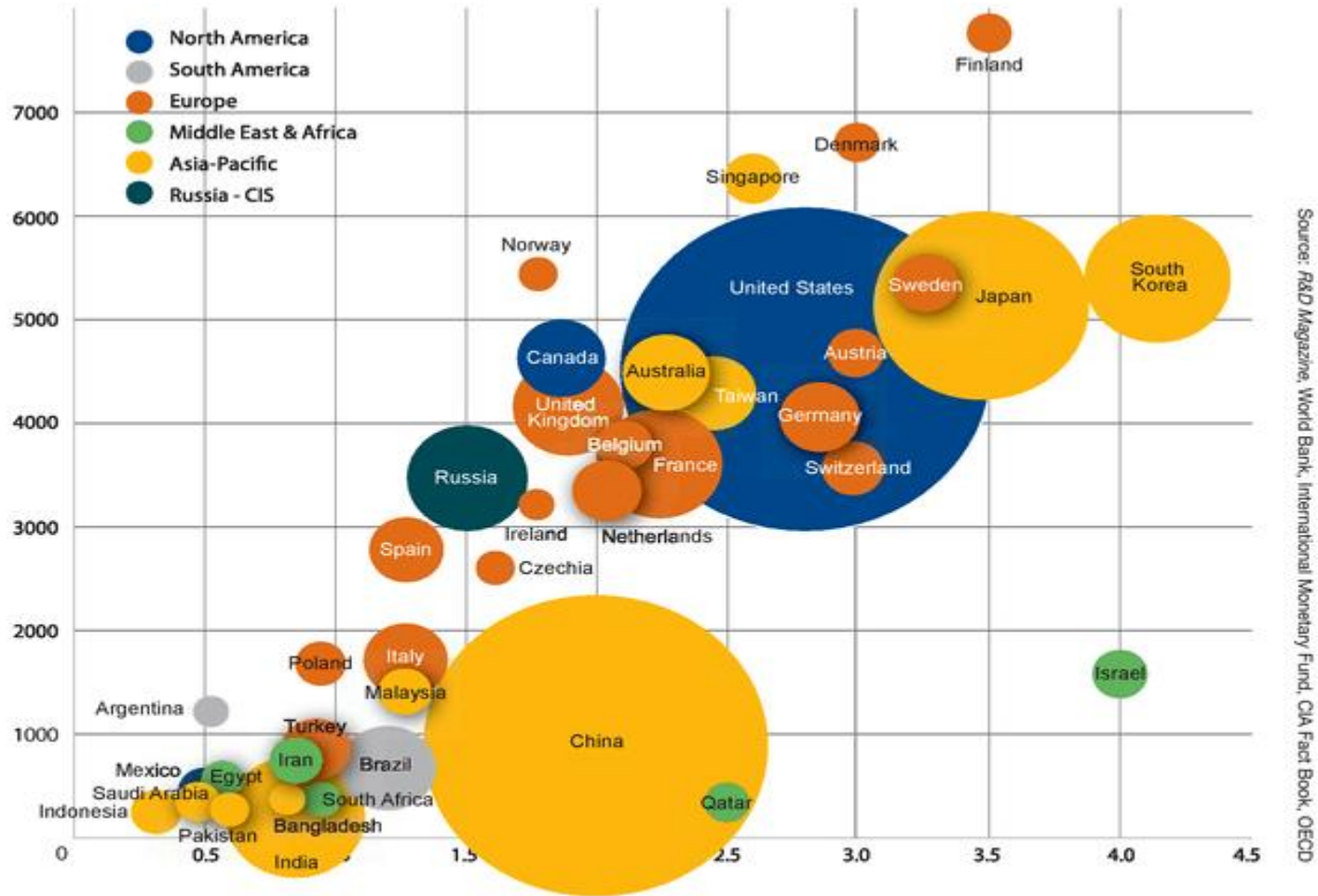


¹ Job types that can be scripted, routinized, automated (e.g., cashiers, receptionists, stock traders). Data are for the US private economy. Occupation data normalized in 1983 and 2003 to account for classification differences.

SOURCE: US Bureau of Labor Statistics 1972–2010; McKinsey Global Institute analysis

THE R&D INPUT LANDSCAPE, 2017

SOURCE: R&D (2018)



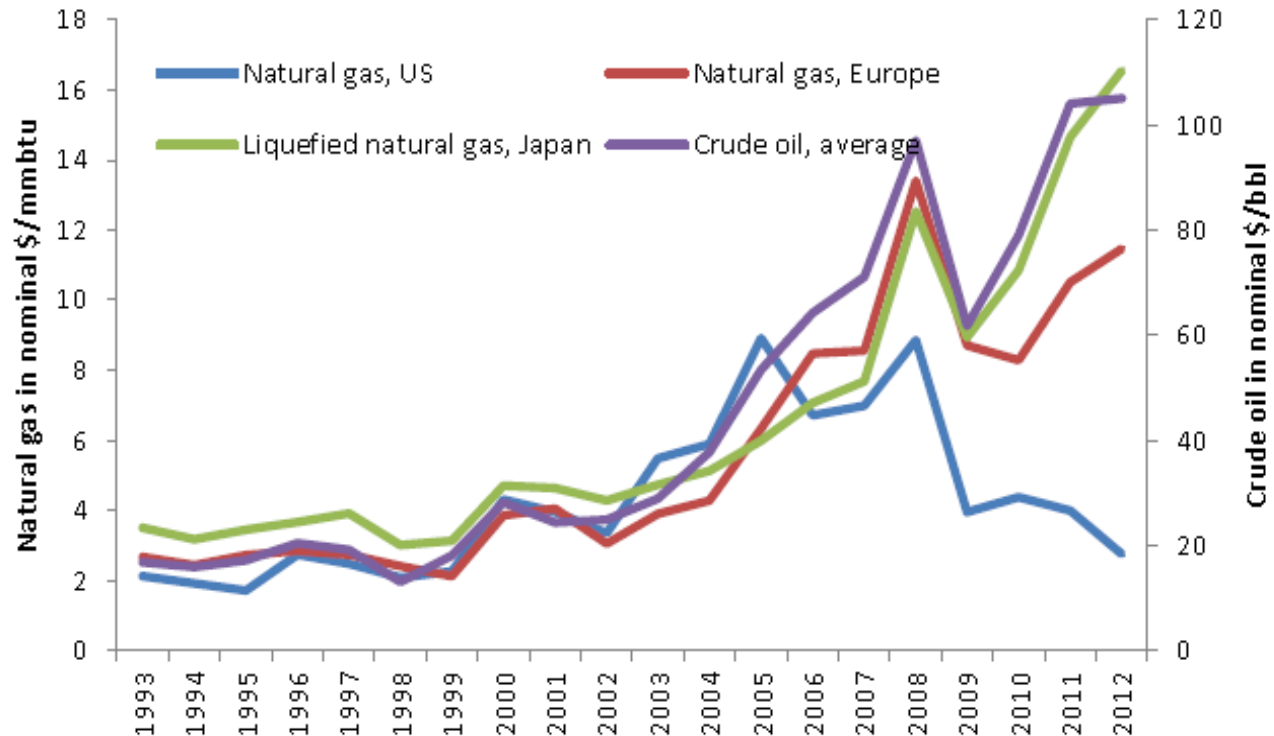
Source: R&D Magazine, World Bank, International Monetary Fund, CIA Fact Book, OECD

The size of the circles in this Chart reflects the relative amount of annual R&D spending by the indicated country. Note the regional grouping of countries by the colors of the balls. The horizontal axis reflects R&D spending as a percent share of the countries' GDP (gross domestic product). The vertical axis reflects the number of researchers (including scientists and engineers) per million population for the respective countries.

THE ENERGY REVOLUTION: THE US COMPETITIVE ADVANTAGE

Source: CEPS (2013)

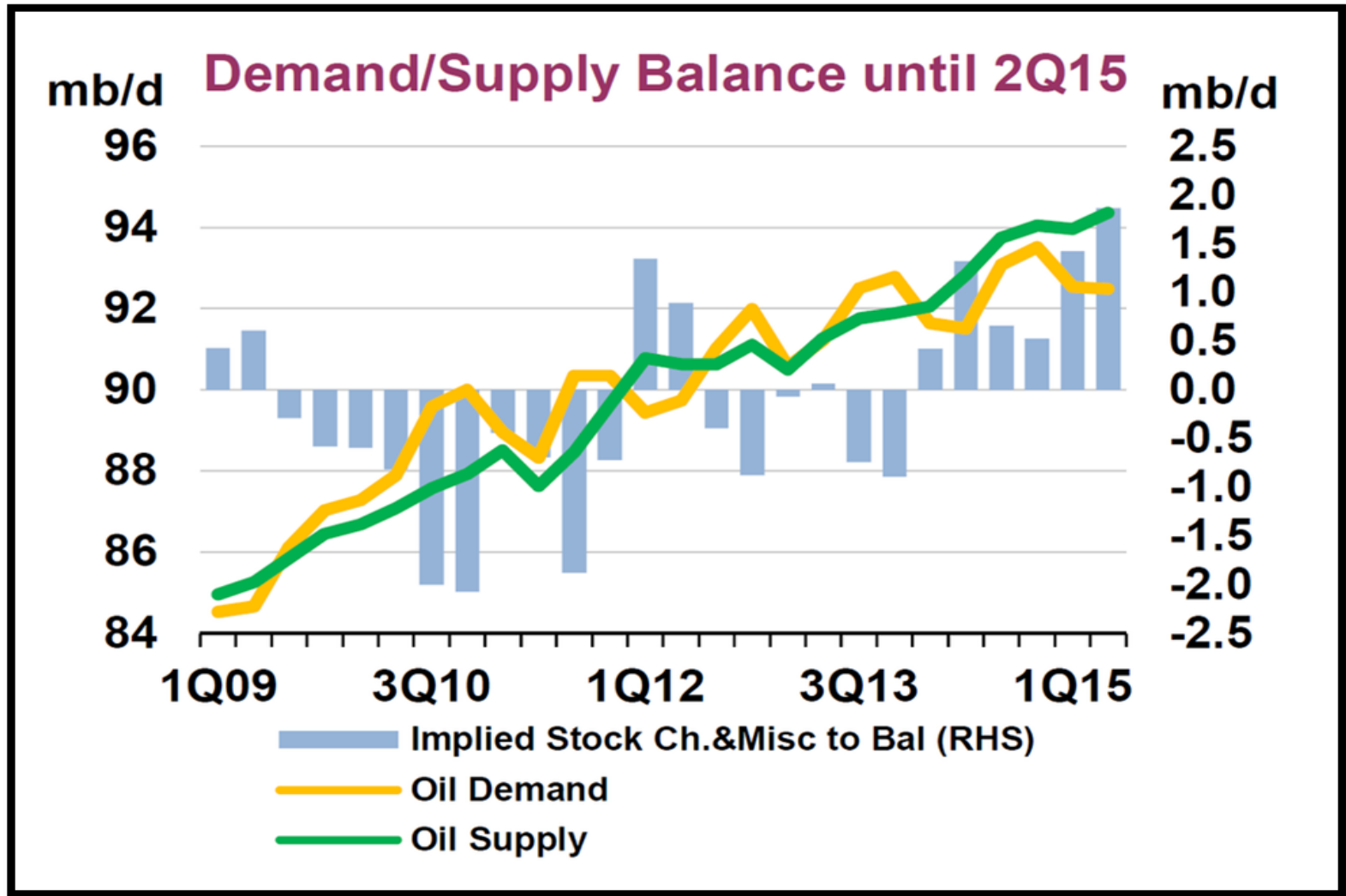
Figure 6.5 Natural gas prices in the US, Europe and Japan, 1993-2012



Source: World Bank Commodity Price Data.

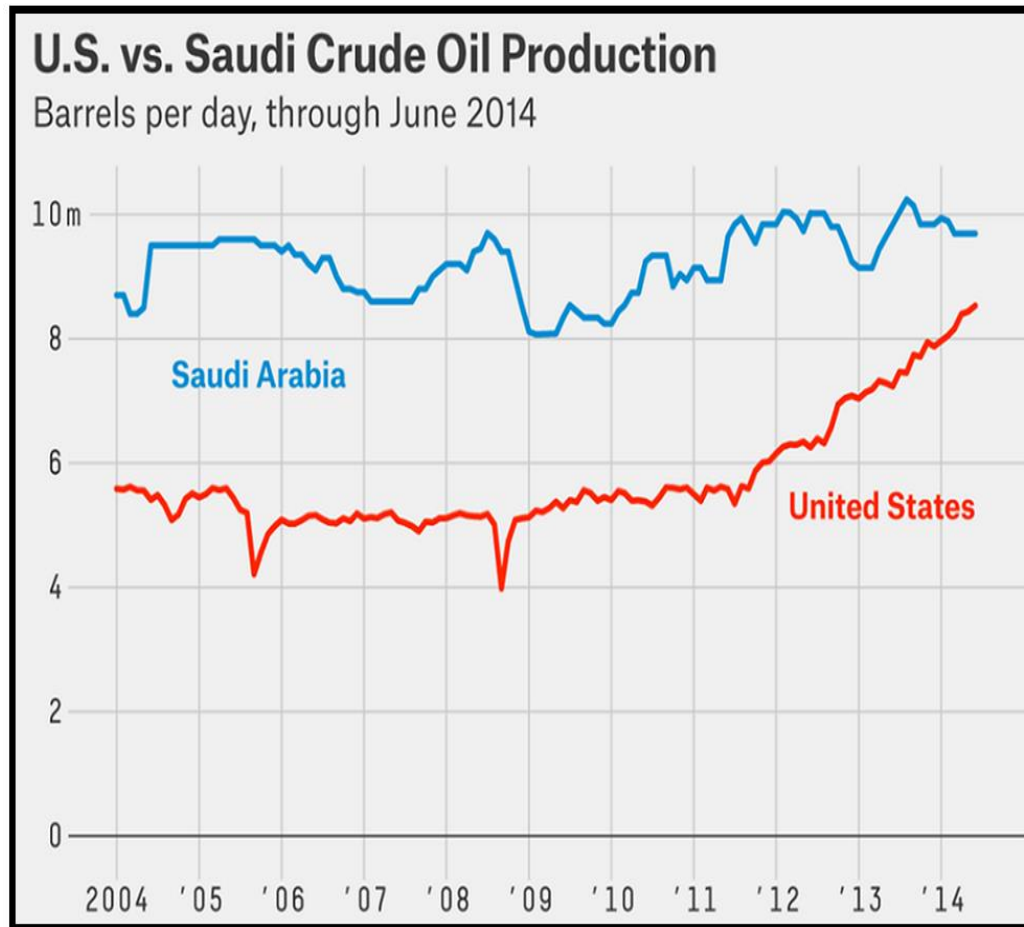
THE OIL MARKET

Source: Leach (2015)



U.S. AND SAUDI ARABIA

Source: Leach (2015)

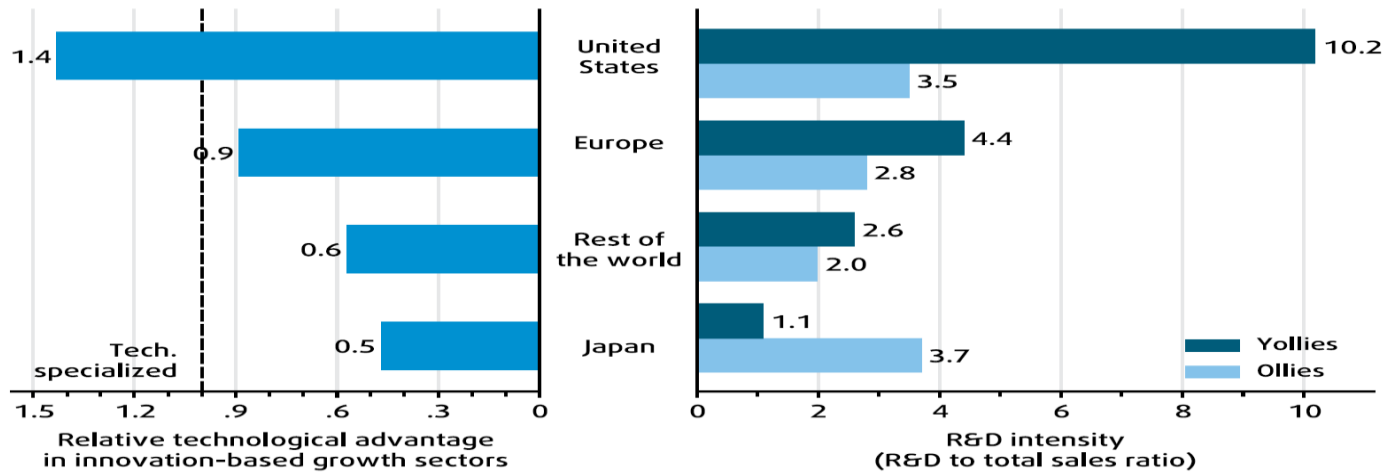


THE US SPECIALIZES IN NEW HIGH-TECH SECTORS

Source: World Bank (2012)

The United States specializes in younger, more R&D intensive products

(relative technological advantage and R&D efforts by young and old innovation leaders in the United States, Europe and the rest of the world)



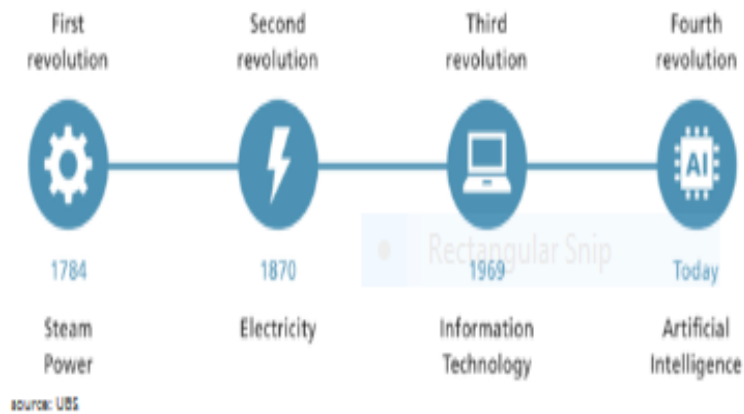
Note: R&D intensity is measured as the ratio of R&D spending to total sales, for firms established after 1975 (young leading innovators or “Yollies”) or before 1975 (“Ollies”). The relative technological advantage is calculated as the share of each region or country (say Europe) in the R&D of a particular sector (say the Internet) relative to the share of Europe in world R&D; values greater than 1 indicate the region is technology specialized in the sector.

Source: Bruegel and World Bank staff calculations based on the Institute for Prospective Technological Studies R&D Scoreboard; see **Chapter 5**.

THE IMPACT OF ARTIFICIAL INTELLIGENCE

SOURCE: UBS (2017)

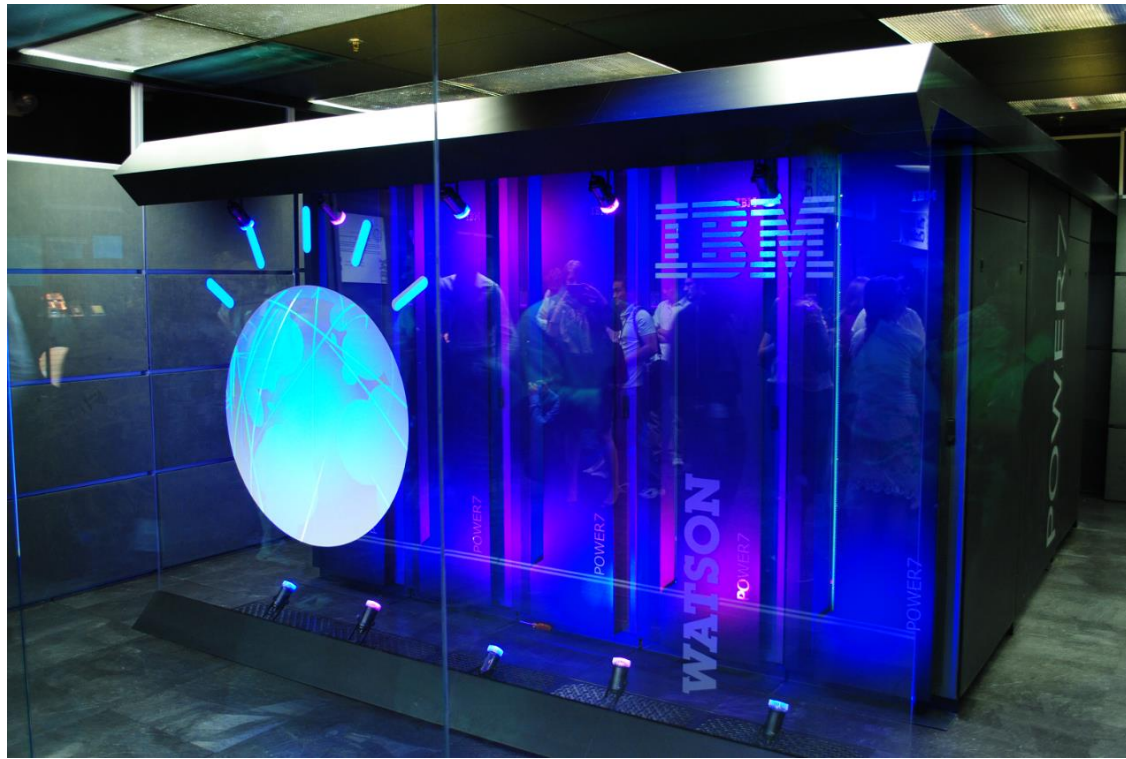
Technological revolutions



The path to human obsolescence?

- Alan Turing: “At some stage... we should have to expect the machines to take control.”
- AI evolution:
 - Artificial narrow intelligence (<2016)
 - Artificial general intelligence (around 2020?)
 - Artificial super intelligence (around 2050???)

IBM'S WATSON

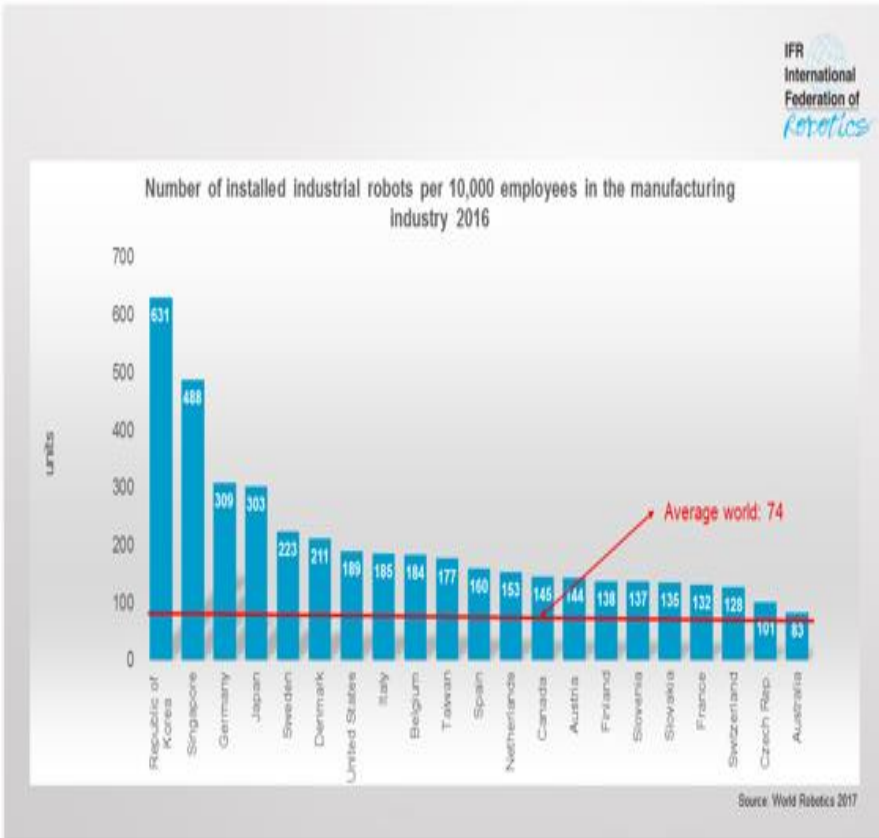


INDUSTRIAL ROBOTS

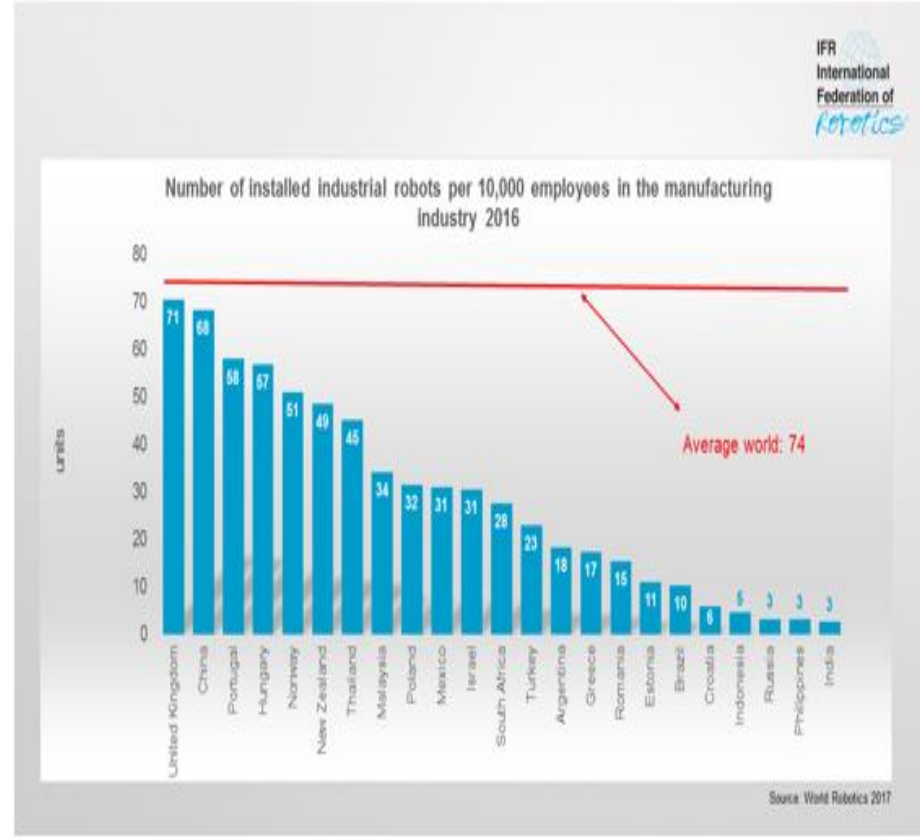
(PER 10.000 WORKERS IN MANUFACTURING)

SOURCE: IFR (2018)

Leading countries



Followers



HYPE VS. REALITY: THE OTTO/UBER EXPERIMENT (20 OCTOBER 2016)

From Fort Collins, CO to
Colorado Springs

2000 boxes of Budweiser
travel 100 miles



ALEXA AND THE PARROT...

SOURCE: MOYES (2017)



PROBABILITY THAT “IT” WILL LEAD TO JOB LOSSES (2010 – 2030)

Source: Turner (2015)

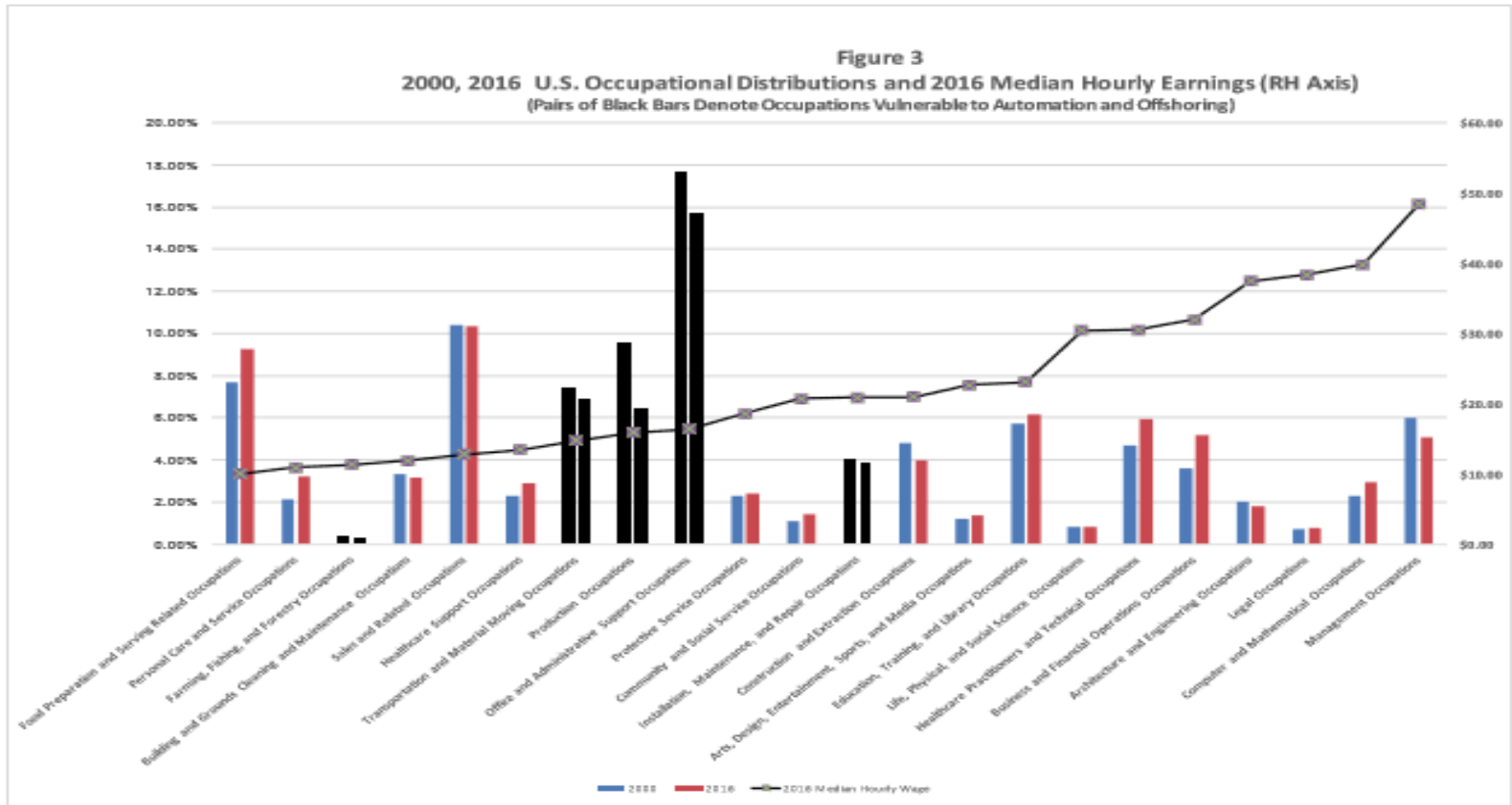
OCCUPATION	PROBABILITY (1=certain)
Recreational Therapists	0.003
Personal Trainers	0.007
Firefighters	0.17
Economists	0.43
Machinists	0.65
Retail salesperson	0.92
Accountants & auditors	0.94
Telemarketers	0.99

Source: *The Future of Employment: How Susceptible are Jobs to Computerisation?* C. Frey and M. Osborne (2013)

THE POTENTIAL IMPACT OF ARTIFICIAL INTELLIGENCE/AUTOMATION

SOURCE: LEVY (2018)

- Parallels between the impact of globalization/offshoring and automation in the labor market: greater impact on jobs characterized by routine tasks (either in cognitive terms or physical terms: 39.2% of employment by 2000; 33.3% by 2016).



EXPECT THE UNEXPECTED



TECHNOLOGY AND THE LEGAL SYSTEM

David Slater vs. Wikimedia;
Naruto's selfie, Indonesia 2011...



The debate

- “Selfie” taken by a macaque (identified as a male, 6 years old, called Naruto);
- David Slater published the book “Wildlife Personalities” with the picture;
- Wikimedia published the picture without authorization and when Slater asked that the picture be deleted from the web, Wikimedia representatives argued that since the picture was a selfie by an animal the image was in public domain;
- PETA (an NGO) presented a petition in 2015 to a court in San Francisco asking that the copyright be granted to the macaque and that related revenues were allocated for the preservation of the species in Indonesia;
- This request was denied in 1/2016, but in 9/2017 an agreement was reached between Slater and the NGO so that 25% of the revenues generated by the use of the picture will be allocated to the preservation of macaques.

PEAK GLOBALIZATION?

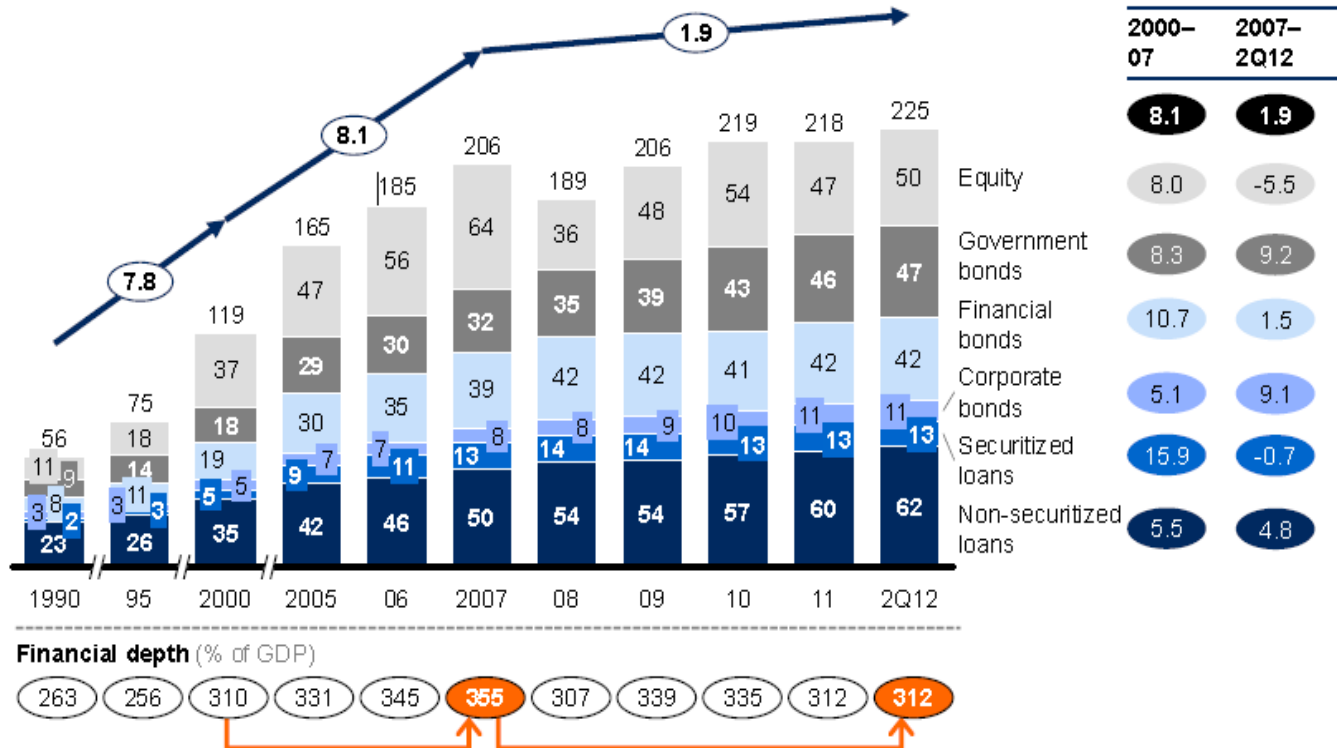
Hypothesis: global trade will no longer grow faster than global GDP and as a consequence outward-oriented development strategies will become less appealing...

FINANCIAL GLOBALIZATION: A RESET?

SOURCE: MCKINSEY (2013)

Global financial assets have grown to \$225 trillion, but growth has slowed since 2007

Global stock of debt and equity outstanding¹
 \$ trillion, end of period, constant 2011 exchange rates



¹ Based on a sample of 183 countries.

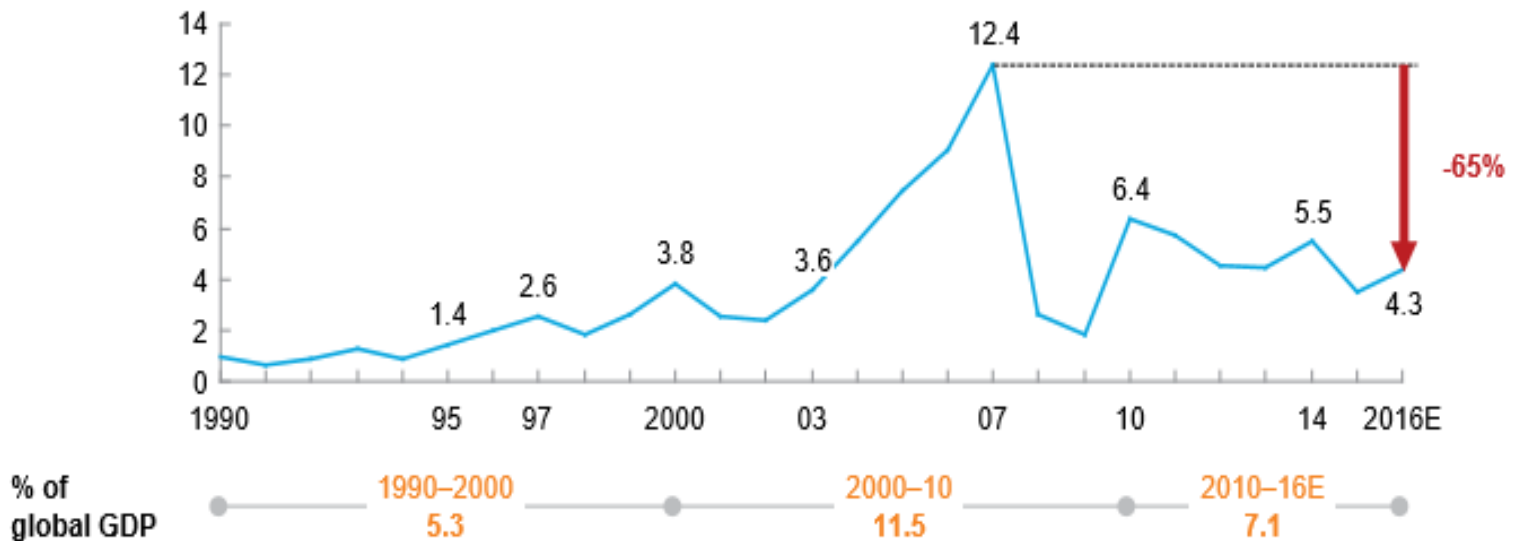
SOURCE: McKinsey Global Institute Financial Assets Database; McKinsey Global Institute analysis

THE DECLINE OF GLOBAL CAPITAL FLOWS

SOURCE: MCKINSEY (2017)

Global cross-border capital flows have declined 65 percent since the 2007 peak

Global cross-border capital flows¹
\$ trillion

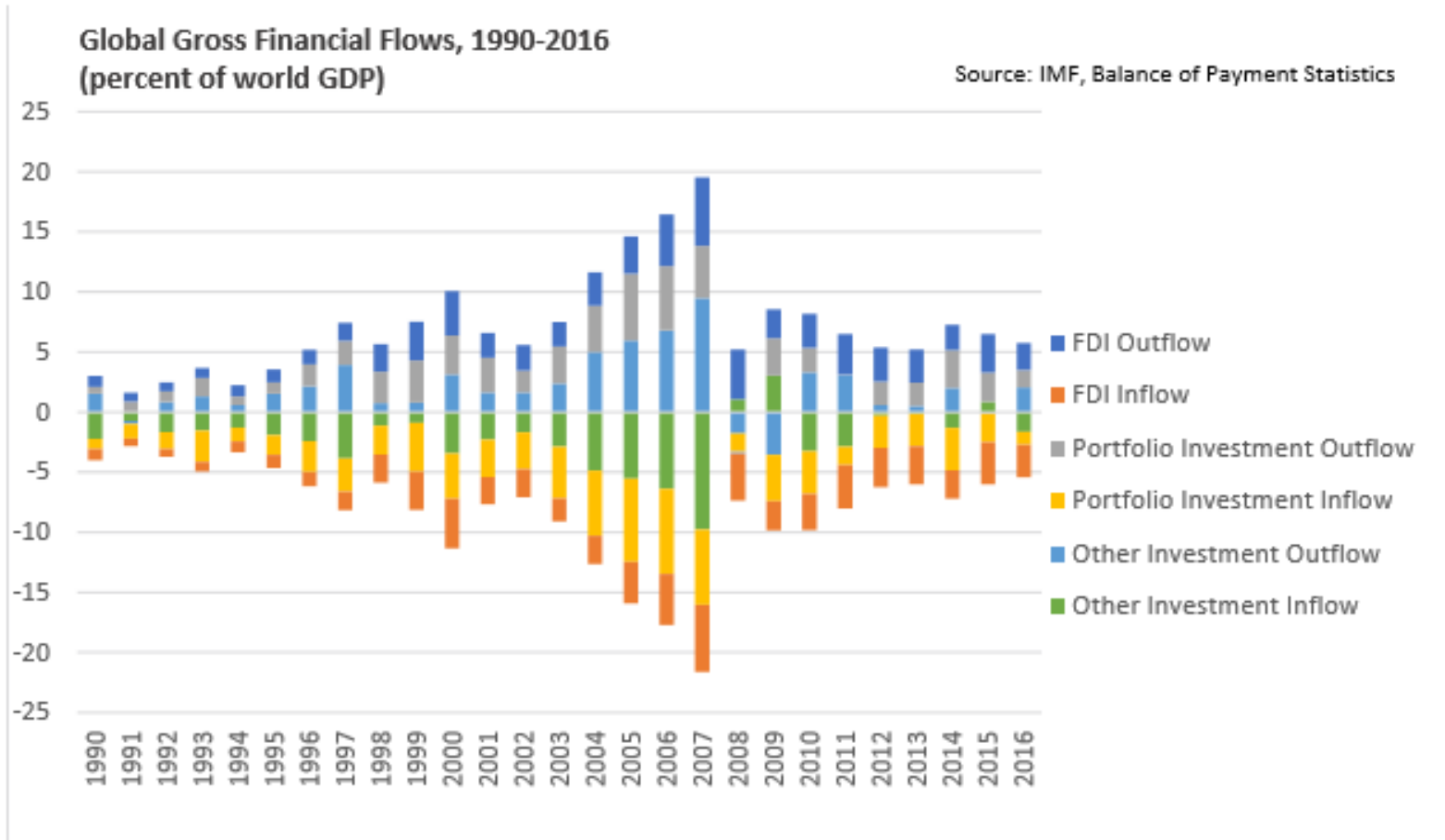


¹ Gross capital inflows, including foreign direct investment (FDI), debt securities, equity, and lending and other investment.

SOURCE: International Monetary Fund (IMF) Balance of Payments; McKinsey Global Institute analysis

FINANCIAL FLOWS HAVE NOT YET RECOVERED

SOURCE: GOPINATH (2017)

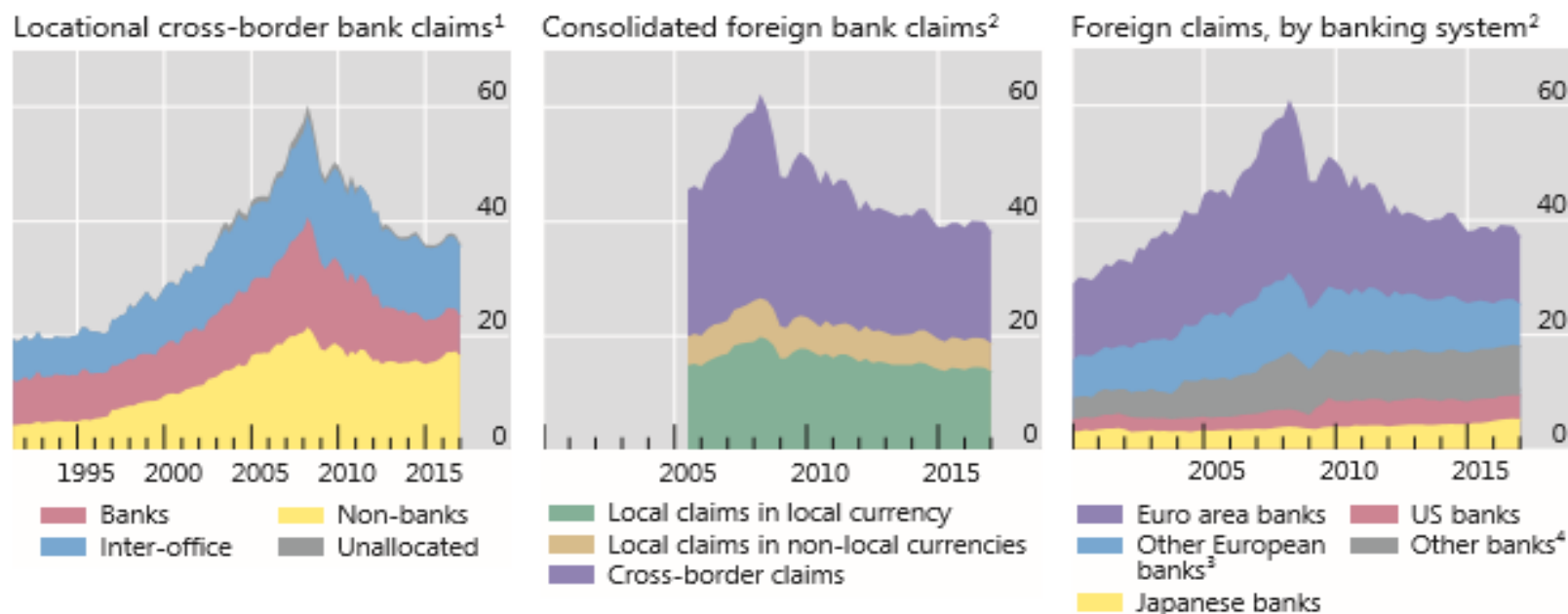


AN ALTERNATIVE READING OF FINANCIAL “DEGLOBALIZATION”

SOURCE: BIS (2017)

As a percentage of world GDP

Graph VI.B.1

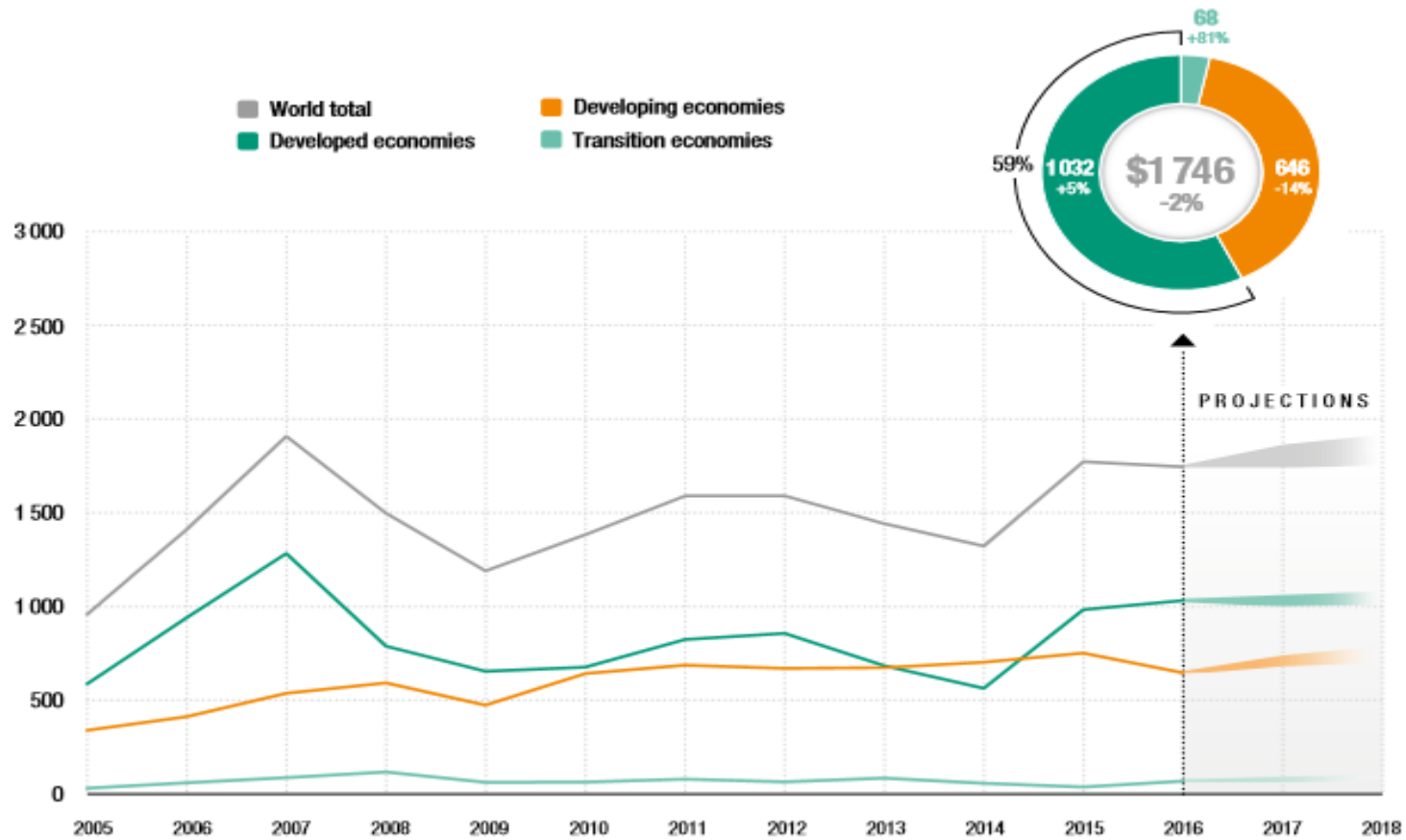


¹ Total cross-border claims (including inter-office positions) reported by banks in all reporting locations on borrowers worldwide. ² Consolidated foreign claims (excluding inter-office positions) of banks headquartered in all reporting countries on borrowers worldwide. Foreign claims include both cross-border claims and the local claims of banks' overseas affiliates, but exclude claims on residents of banks' home countries. The split of local claims into local claims in local currencies and local claims in non-local currencies is derived by applying the share of local claims (all currencies) in foreign claims from the ultimate risk statistics to the total foreign claims value in the immediate borrower statistics. ³ Banks headquartered in CH, DK, GB, NO and SE. ⁴ Banks headquartered in AU, BR, CA, CL, HK, IN, KR, MX, PA, SG, TR and TW.

Sources: IMF, *World Economic Outlook*; BIS consolidated (immediate borrower and ultimate risk basis) and locational banking statistics.

FDI INFLOWS SINCE 2005

SOURCE: UNCTAD (2017)



INTERNATIONAL TRADE

EVOLUTION OF WORLD TRADE (MERCHANDISE EXPORTS)

SOURCE: WTO (2013A)

(Billion dollars and percentage)

	1948	1953	1963	1973	1983	1993	2003	2012
	Value							
World	59	84	157	579	1838	3677	7380	17930
	Share							
World	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
North America	28.1	24.8	19.9	17.3	16.8	18.0	15.8	13.2
United States	21.7	18.8	14.9	12.3	11.2	12.6	9.8	8.6
Canada	5.5	5.2	4.3	4.6	4.2	3.9	3.7	2.5
Mexico	0.9	0.7	0.6	0.4	1.4	1.4	2.2	2.1
South and Central America	11.3	9.7	6.4	4.3	4.4	3.0	3.0	4.2
Brazil	2.0	1.8	0.9	1.1	1.2	1.0	1.0	1.4
Argentina	2.8	1.3	0.9	0.6	0.4	0.4	0.4	0.5
Europe	35.1	39.4	47.8	50.9	43.5	45.3	45.9	35.6
Germany ^a	1.4	5.3	9.3	11.7	9.2	10.3	10.2	7.8
France	3.4	4.8	5.2	6.3	5.2	6.0	5.3	3.2
Italy	1.8	1.8	3.2	3.8	4.0	4.6	4.1	2.8
United Kingdom	11.3	9.0	7.8	5.1	5.0	4.9	4.1	2.6
Commonwealth of Independent States (CIS) ^b	-	-	-	-	-	1.5	2.6	4.5
Africa	7.3	6.5	5.7	4.8	4.5	2.5	2.4	3.5
South Africa ^c	2.0	1.6	1.5	1.0	1.0	0.7	0.5	0.5
Middle East	2.0	2.7	3.2	4.1	6.8	3.5	4.1	7.5
Asia	14.0	13.4	12.5	14.9	19.1	26.1	26.1	31.5
China	0.9	1.2	1.3	1.0	1.2	2.5	5.9	11.4
Japan	0.4	1.5	3.5	6.4	8.0	9.9	6.4	4.5
India	2.2	1.3	1.0	0.5	0.5	0.6	0.8	1.6
Australia and New Zealand	3.7	3.2	2.4	2.1	1.4	1.4	1.2	1.6
Six East Asian Traders	3.4	3.0	2.5	3.6	5.8	9.7	9.6	9.7
Memorandum item:								
EU ^d	-	-	24.5	37.0	31.3	37.4	42.3	32.4
USSR, Former	2.2	3.5	4.6	3.7	5.0	-	-	-
GATT/WTO Members ^e	63.4	69.6	75.0	84.1	78.4	89.3	94.3	96.6

a. Figures refer to the Fed. Rep. of Germany from 1948 through 1953.

b. Figures are significantly affected by including the mutual trade flows of the Baltic States and the CIS between 1993 and 2003.

c. Beginning with 1998, figures refer to South Africa only and no longer to the Southern African Customs Union.

d. Figures refer to the EEC(6) in 1963, EC(9) in 1973, EC(10) in 1983, EU(12) in 1993, EU(25) in 2003 and EU(27) in 2012.

e. Membership as of the year stated.

Note: Between 1973 and 1983 and between 1993 and 2003 export shares were significantly influenced by oil price developments.

GLOBAL TRADE, 2017

SOURCE: WTO (2018)

Rank	Exporters	Value	Share	Annual % change	Rank	Importers	Value	Share	Annual % change
1	China	2263	12.8	7.9	1	United States of America	2409	13.4	7.1
2	United States of America	1547	8.7	6.6	2	China	1842	10.2	16.0
3	Germany	1448	8.2	8.5	3	Germany	1167	6.5	10.5
4	Japan	698	3.9	8.3	4	Japan	672	3.7	10.6
5	Netherlands	652	3.7	14.1	5	United Kingdom	644	3.6	1.2
6	Korea, Republic of	574	3.2	15.8	6	France	625	3.5	9.2
7	Hong Kong, China	550	3.1	6.5	7	Hong Kong, China	590	3.3	7.8
	Domestic exports	18	...	-27.9		Retained imports a	138	...	6.2
	Re-exports	532	...	8.3					
8	France	535	3.0	6.7	8	Netherlands	574	3.2	13.7
9	Italy	506	2.9	9.6	9	Korea, Republic of	478	2.7	17.8
10	United Kingdom	445	2.5	8.6	10	Italy	453	2.5	11.2
11	Belgium	430	2.4	7.9	11	India	447	2.5	23.8
12	Canada	421	2.4	7.8	12	Canada	442	2.5	7.0
13	Mexico	409	2.3	9.5	13	Mexico	432	2.4	8.7
14	Singapore	373	2.1	10.4	14	Belgium	403	2.2	8.2
	Domestic exports	188	...	15.9					
	Re-exports	185	...	5.4					
15	United Arab Emirates a	360	2.0	20.4	15	Spain	351	1.9	12.7
16	Russian Federation	353	2.0	25.3	16	Singapore	328	1.8	12.3
						Retained imports c	142	...	22.7
17	Spain	321	1.8	10.5	17	Switzerland b	269	1.5	-0.5
18	Chinese Taipei	317	1.8	13.2	18	United Arab Emirates a	268	1.5	-1.1
19	Switzerland b	300	1.7	-1.1	19	Chinese Taipei	259	1.4	12.5
20	India	298	1.7	13.0	20	Russian Federation d	238	1.3	24.1
21	Thailand	237	1.3	9.9	21	Turkey	234	1.3	17.7
22	Poland	231	1.3	14.0	22	Poland	230	1.3	16.8
23	Australia	231	1.3	19.9	23	Australia a	229	1.3	16.6
24	Saudi Arabia, Kingdom of a	218	1.2	18.8	24	Thailand	223	1.2	14.7
25	Malaysia	218	1.2	14.9	25	Viet Nam	212	1.2	21.0
26	Brazil	218	1.2	17.5	26	Malaysia	195	1.1	15.9
27	Viet Nam	214	1.2	21.4	27	Austria	176	1.0	11.5
28	Czech Republic	180	1.0	10.7	28	Czech Republic	162	0.9	13.2
29	Indonesia	169	1.0	16.5	29	Brazil	157	0.9	9.7
30	Austria	168	0.9	10.5	30	Indonesia	157	0.9	15.7
	Total of above e	14884	83.9	-		Total of above e	14866	82.5	-
	World e	17730	100.0	10.6		World e	18024	100.0	10.7

a Secretariat estimates.

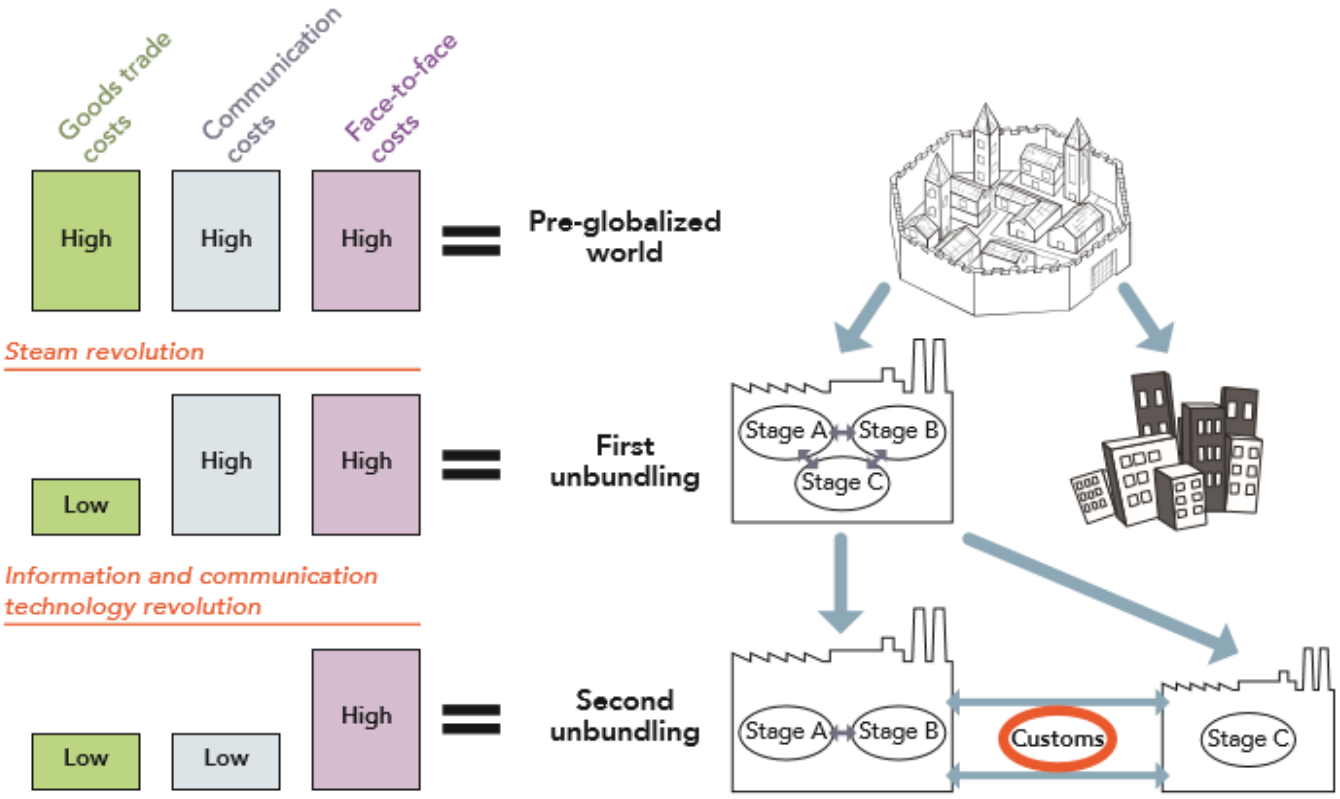
THE RISE OF GVCS

SOURCES: ICTSD AND WEF (2016); WORLD BANK ET AL. (2017); BALDWIN (2016)

- A globalized networked economy driven by investment flows and ICT has significantly impacted global trade;
- Nowadays, business-to-business intermediate trade accounts for roughly 2/3 of the trade in goods and 3/4 of the international services trade;
- In such an environment, it is important to track trade in value-added terms and to recognize the growing importance of services trade;
- In the GVC-centered world, the focus of globalization shifts from sectors of the economy to stages of production.
- The importance of “neighborhood” effects.

A NEW STAGE OF GLOBALIZATION

SOURCE: INOMATA (2017)

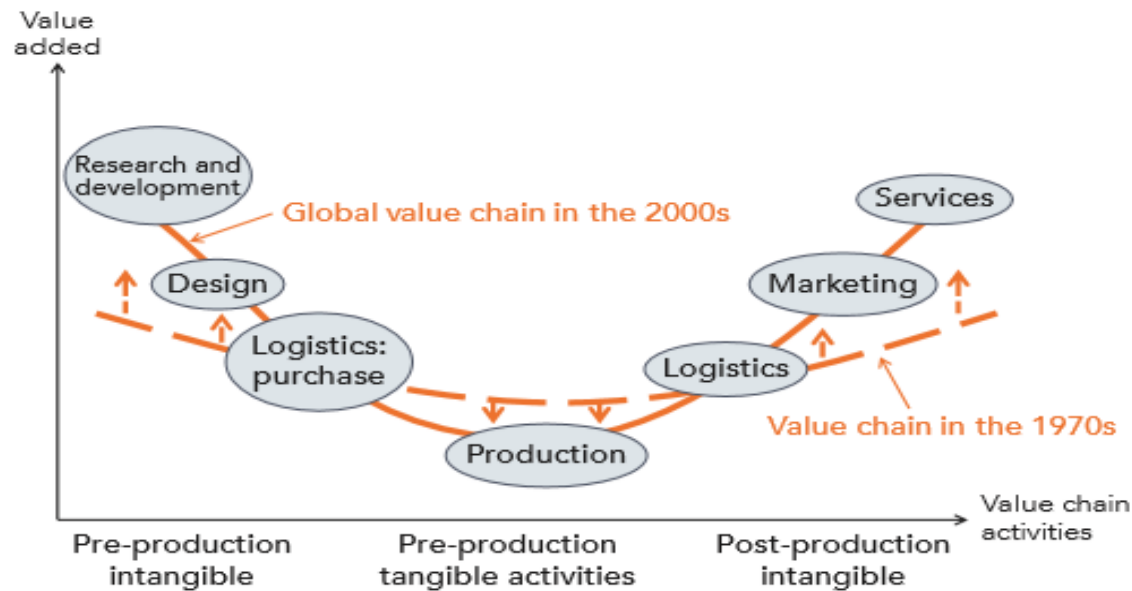


Source: Adapted from Baldwin 2013.

THE SMILE CURVE

SOURCE: AHMAD AND PRIMI (2017)

FIGURE 3.1 The smile curve of the global value chain, 1970s and 2000s

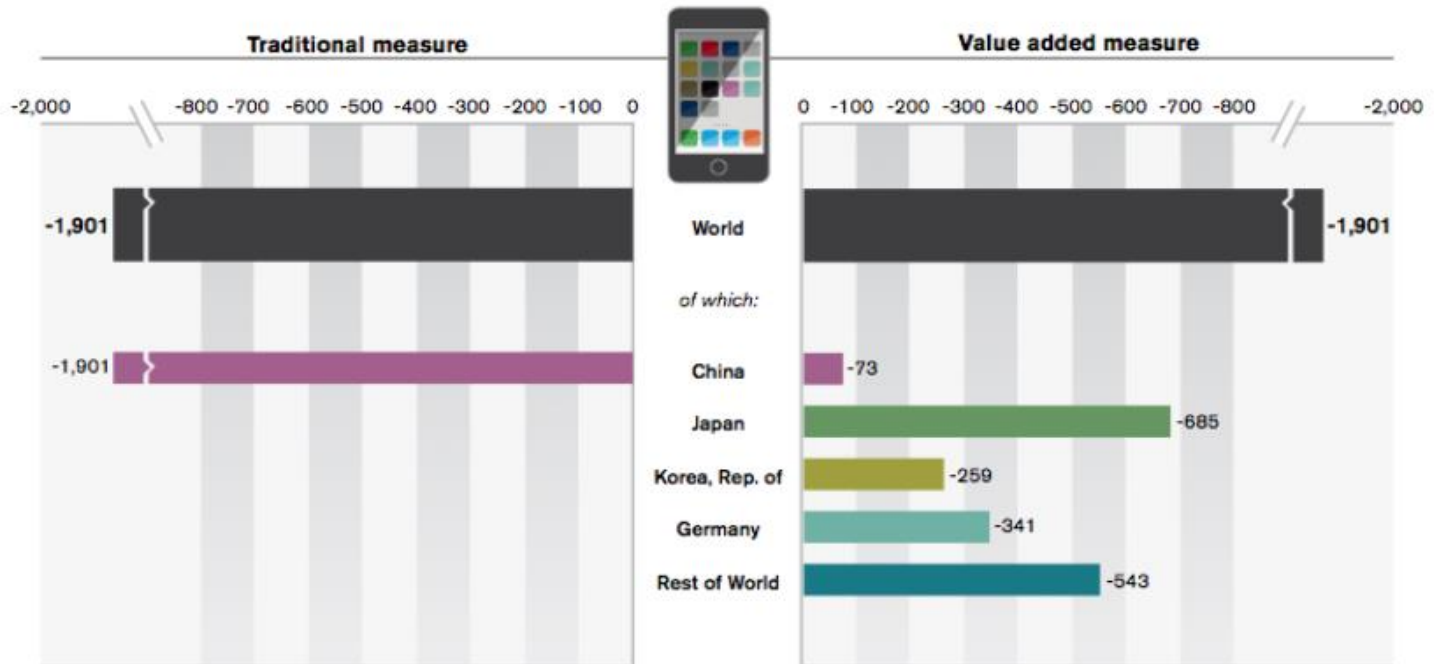


Source: Author's analysis based on Shih 1996 and Gereffi, Humphrey, and Sturgeon 2005.

RETHINKING BILATERAL TRADE BALANCES

(INTERDEPENDENCE AND COMPLEXITY)

2009 US trade balance in iPhones (in millions of US\$)



Source: Meng and Miroudot (2011).

GVCs: SOME BASIC CONCEPTS

SOURCES: UNCTAD (2013); PRIMO BRAGA (2013C)

- They are dominated by Northern transnational corporations (TNCs);
- They underscore the interdependence between trade and foreign-direct investment policies;
- Their dynamism is greatly influenced by a different array of trade policies involving logistics, trade facilitation, technical barriers to trade, rules of origin, and commercial services (e.g., transport and distribution services);
- These networks are prone to display “small-world” properties in the sense that local disturbances can have global effects and they can exhibit “tipping-point” characteristics beyond which systemic dislocation can be orders of magnitude greater than the size of initial shocks;
- Foreign value-added in exports can be used as a proxy of the upstream involvement of a country in GVCs, but to get a full picture of a country’s dependency on GVCs one should also look into the extent to which the relevant exports are integrated further into international production networks (downstream perspective).

GVCS: POLICY CONSIDERATIONS

SOURCE: PRIMO BRAGA (2013C)

- Business as usual is not enough. In other words, to have proper fundamentals at macro level, reasonable infrastructure, a liberal trade policy, and a favorable investment and regulatory climate are necessary, but not sufficient conditions. Particularly with respect to GVC upgrading, the host country has to be able to offer an innovation eco-system that facilitates technology dissemination and skills upgrading. In this context, the quality of the intellectual property rights regime is a key variable;
- Not all GVCs are born equal in terms of their implications for industrial upgrading at country level. On the one hand, there is evidence that firms participating in GVCs associated with machinery and equipment tend to converge more rapidly to productivity patterns prevailing in industrialized countries than those associated with GVCs associated, for example, with textiles and clothing. On the other hand, targeting sectors with higher productivity pay-off will not necessarily bring sustainable development as these sectors may not generate enough job opportunities to unleash substantive structural transformation and economy-wide convergence;

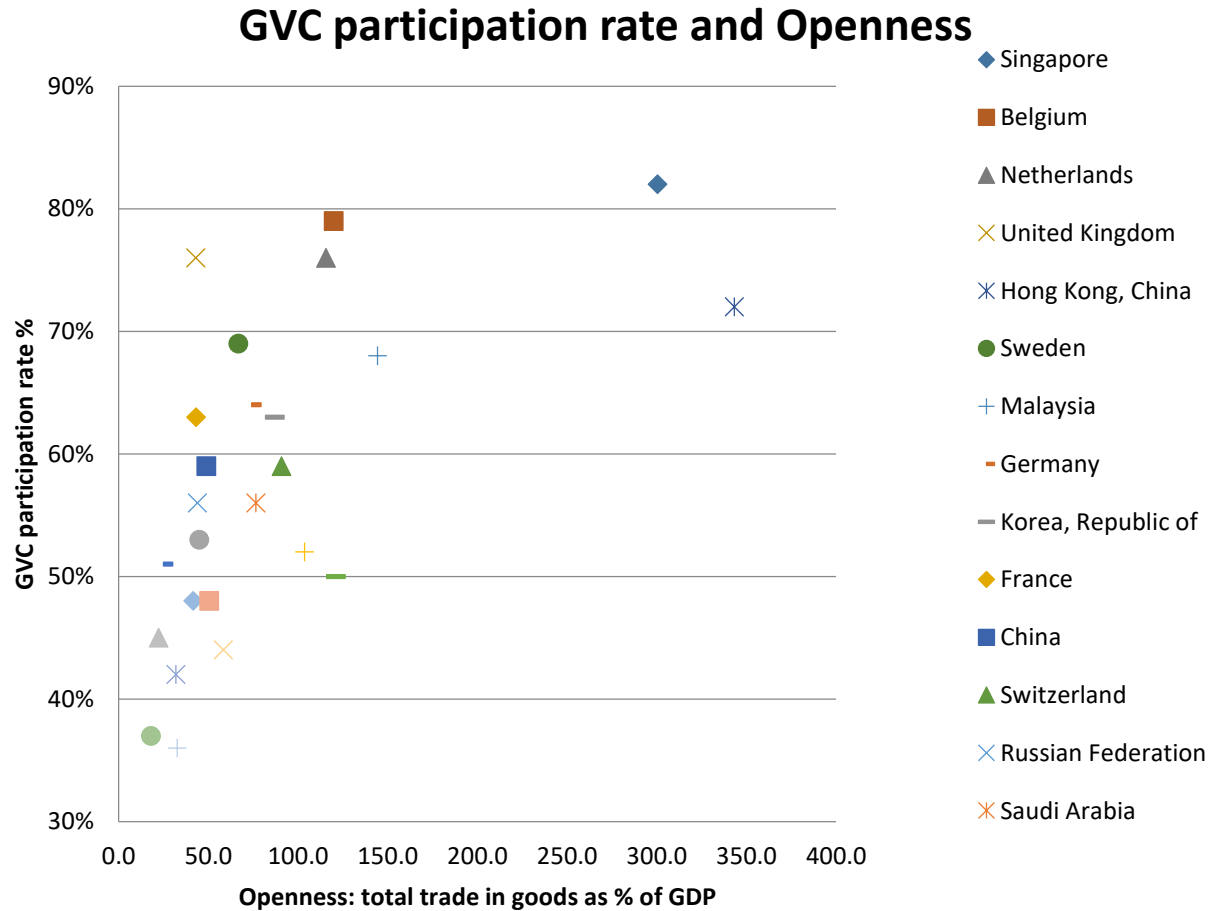
GVCS: POLICY CONSIDERATIONS (CONT.)

SOURCE: PRIMO BRAGA (2013C)

- GVCs do not respond well to piece-meal approaches to policy change. In other words, it is important to adopt a “whole of the supply chain” approach addressing, for example, border management constraints, technical barriers to trade, and transport and distribution services. Actually, one of the main levers for GVC upgrading can be a well-designed policy of services liberalization since GVCs are particularly sensitive to the quality of commercial services available to its nodes;
- GVCs can suffer from “bullwhip” effects (reflecting quicker adjustments in production and inventories), reacting faster to external demand shocks than is the case for arm’s length trade. As a consequence, disruption and recovery can occur at a much faster pace than usual and it is important not to overreact to these shocks;
- GVCs greatly increase the premium on coherence of domestic policies. If trade and investment policies are not consistent, this will constrain the chances of expansion and upgrading.

GVCS AND OPENNESS

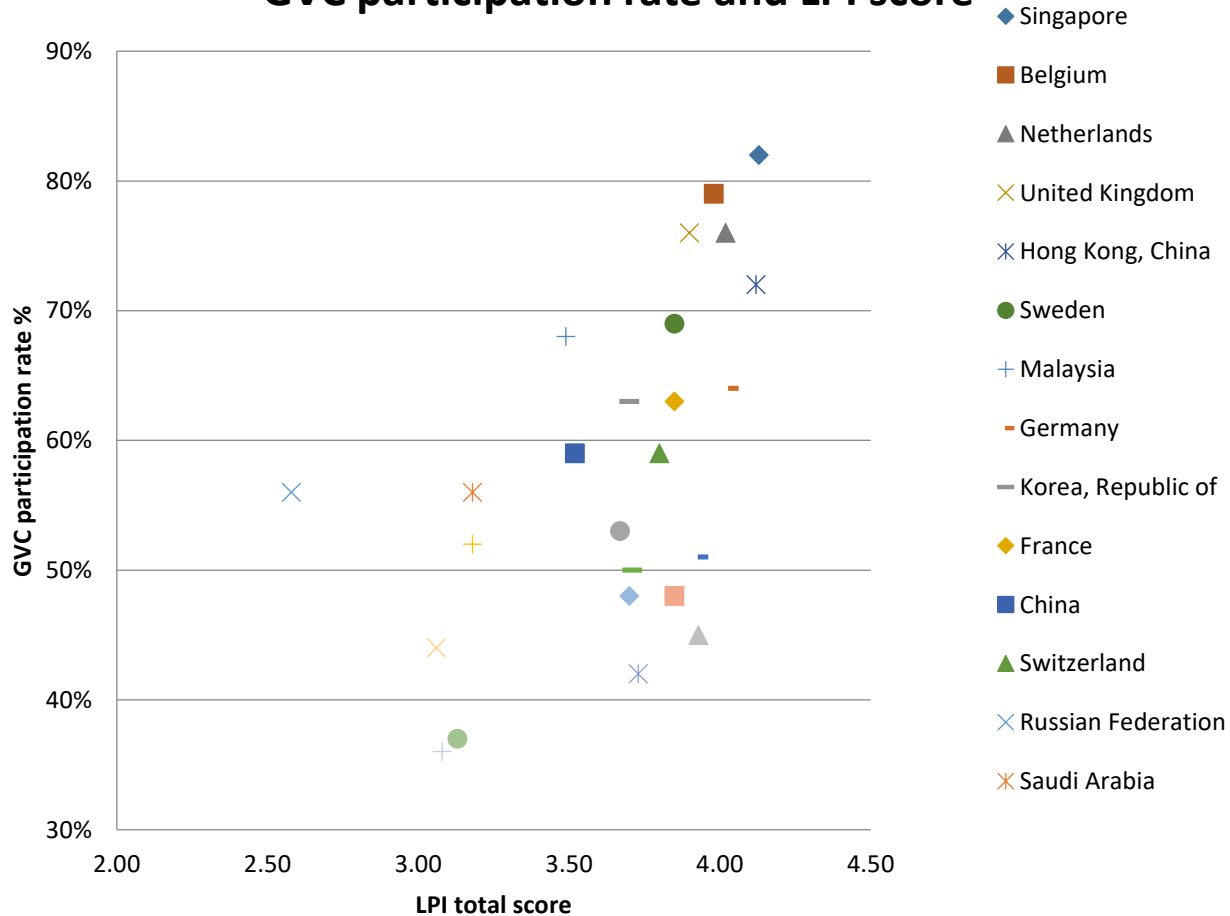
SOURCES: WORLD BANK AND UNCTAD



GVCS AND LOGISTICS

SOURCES: WORLD BANK AND UNCTAD

GVC participation rate and LPI score



BRAZIL AND GVCS

SOURCE: CADESTIN, GOURDON, KOWALSKI (2016)

Backward GVC integration ratio: Share of foreign VA embodied in a country's gross exports

Brazil and other LAC countries

Figure 1. Backward GVC participation ratios, cross-country comparison for 2011

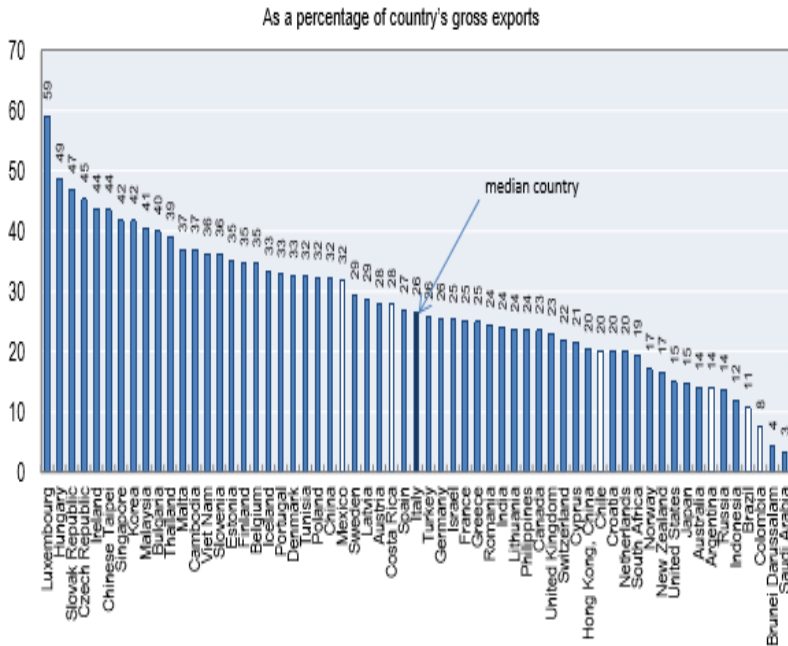
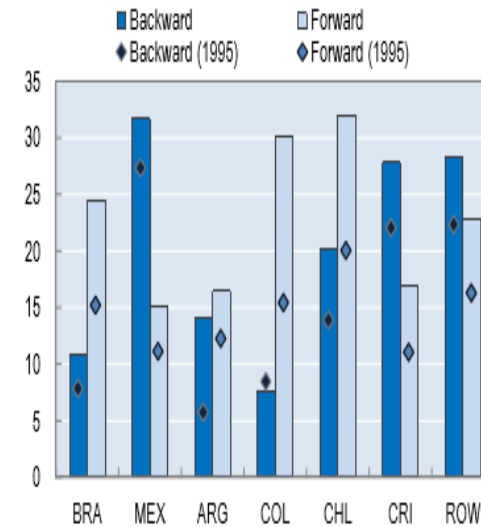


Figure 3. Backward and forward GVC participation ratios in Latin American countries (1995-2011)



Note: The rest of the world (ROW) category here denotes all the remaining countries in the OECD TVA sample.
Source: OECD Trade in Value Added Database.

THE INNOVATION ECOSYSTEM AND TRADE REGIMES

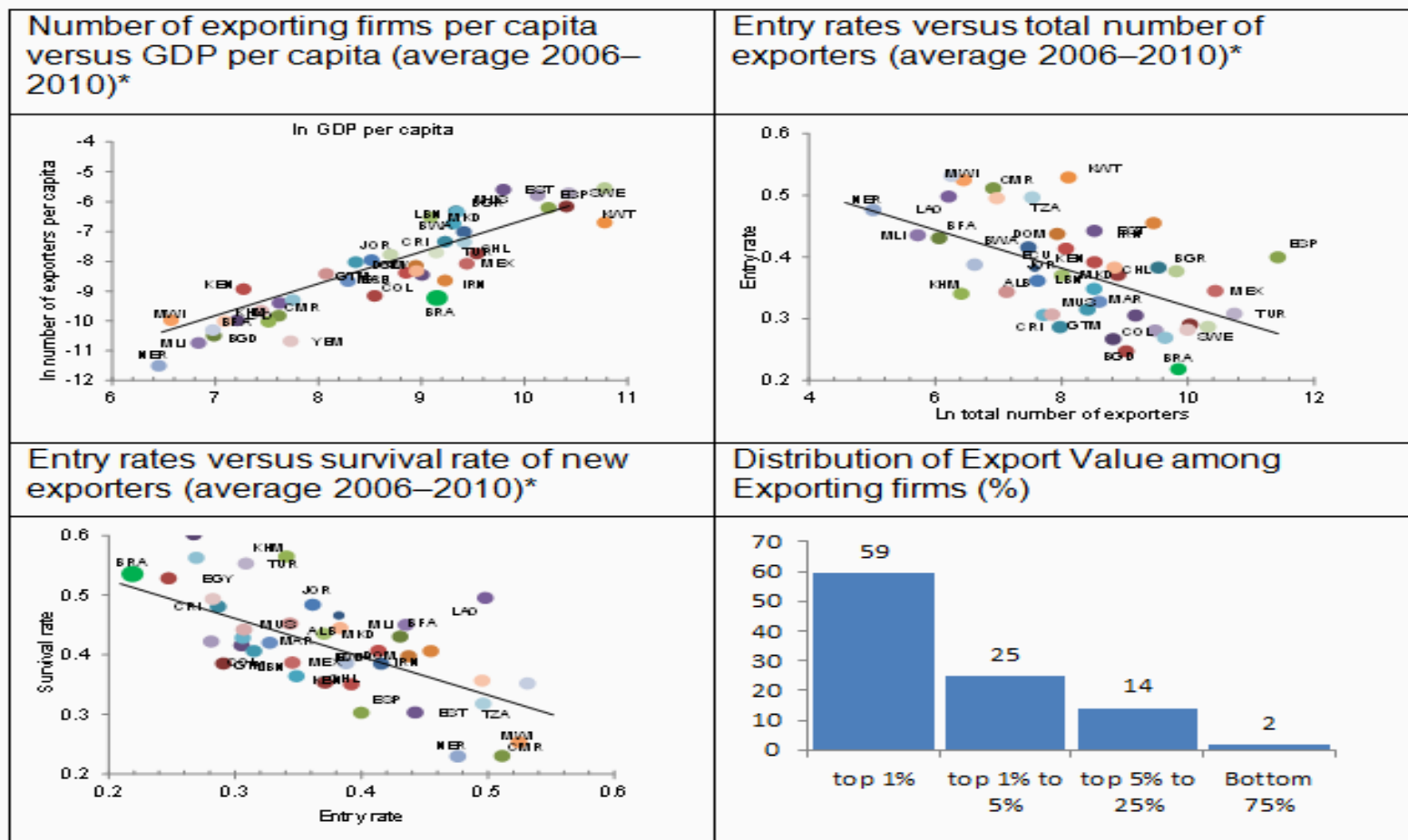
Source: Primo Braga (2014)

Innovation model vs. Integration style	Inward oriented	Outward oriented (among top 29 countries in the MGI index)
Top down (government led)	Brazil (36.33; 37%), India (36.17; 36%), Chile (40.58), Argentina (37.66; 39%)	Mexico (36.82; 44%), Turkey (36.03)
Bottom up (private sector-led: more than 50% R&D done by enterprises)	South Africa* (37.60; 59%)	Switzerland (66.59; 59%), Germany (55.83; 64%), USA (60.31; 45%), China* (44.66; 59%), Russia* (37.20; 56%), South Korea (53.51; 63%), Japan (52.23; 51%), France (52.83; 63%)
Numbers in parenthesis are the scores in the Global Innovation Index and GVC participation rates when available. Sources: Cornell University, INSEAD, WIPO (2013); UNCTAD (2013)	*South Africa is just at the margin of the 50% threshold for R&D sources of financing	*The role of SOEs in China and the effect of the energy sector in Russia may distort the figures for these countries

TRADE REGIMES AND EXPORTING FIRMS: THE CASE OF BRAZIL

Source: Canuto et al. (2015)

Figure 2. Brazil's relative lack of exporting firms



Charts and data from World Bank (2014); Data source: Exporter dynamics database

EMBRAER: A BRAZILIAN EXCEPTION...

Main Suppliers

LIEBHERR

Flaps and Slats Actuation Systems; AMS



New Generation Power Plant

Honeywell

Improved Avionics



Triumph Group, Inc.

Aft fuselage segments, rudder and elevators



Vertical and horizontal stabilizers



Horizontal Stabilizer Actuation System



Wheels & Brakes; APU; Electrical System



United Technologies

Fly-by-wire Primary Flight Controls



Ailerons and Spoilers



THE FUTURE OF GLOBALIZATION: PROTECTIONIST THREAT AND THE CHANGING RULES OF THE GAME

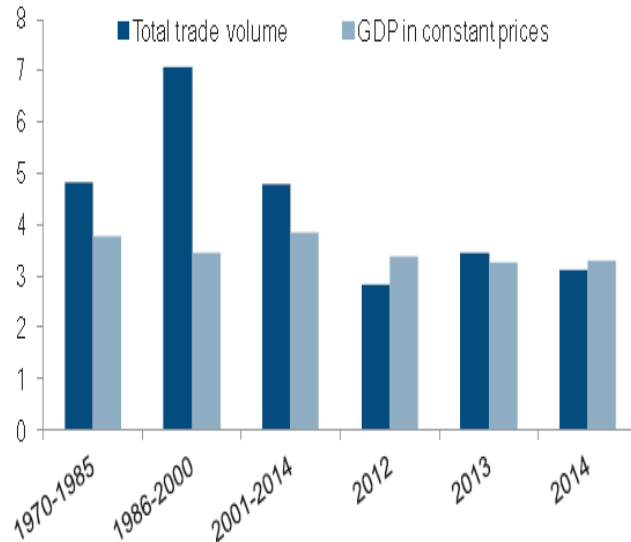
PEAK TRADE?

SOURCES: PRIMO BRAGA (2015); CONSTANTINESCU ET AL. (2015); ESCAITH AND MIRODOUT (2015)

Trade and GDP growth

Figure 1 Average growth rates in trade and GDP

Selected periods (percent)

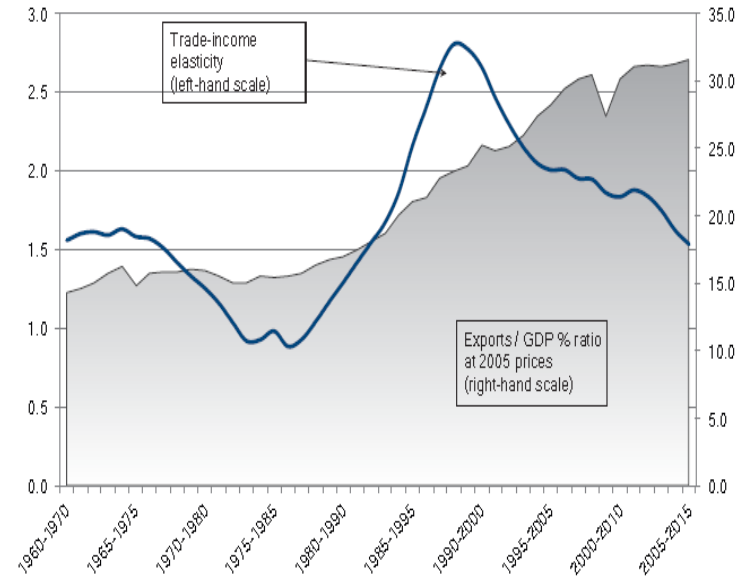


Note: Total trade is the sum of exports and imports of goods and services.

Source: IMF World Economic Outlook.

Trade-income elasticity

Figure 1 World trade-GDP ratio and trade-income elasticity, 1970-2015



Notes: Merchandise exports only; world GDP and trade at constant 2005 prices; dollar figures for GDP are converted from domestic currencies using official exchange rates. Long-term elasticity is based on 10-year rolling period from 1960-1970 to 2005-2015 (2015 is based on forecasts).

Source: WTO and authors' calculations.

THE “GOOD” OLD DAYS:

‘THE 1990-2005 PERIOD WAS SPECIAL’ ARGUMENT

SOURCE: HOEKMAN (2015)

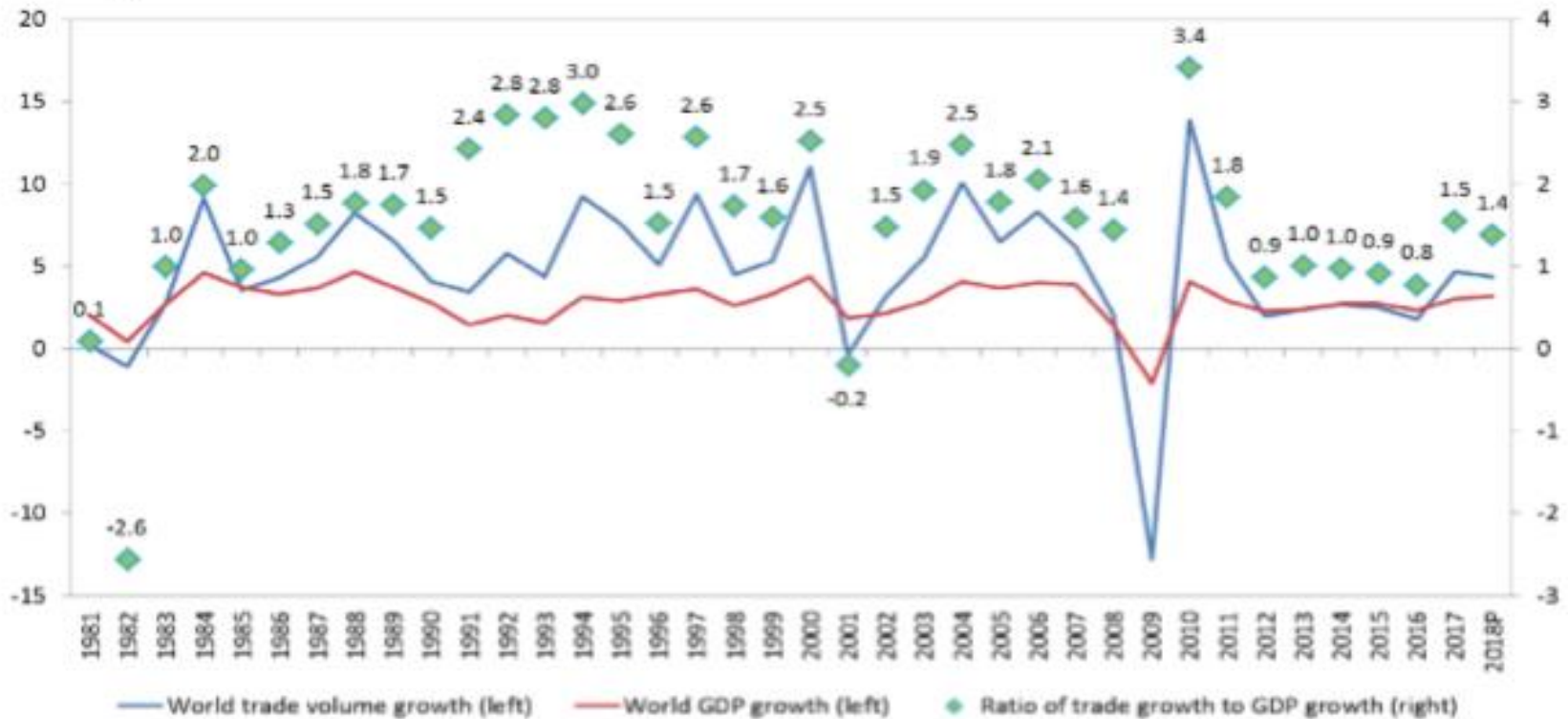
1. Re-integration of Central and Eastern European nations with Western Europe;
2. Re-integration of China into the global economy;
3. Policy reform/liberalization around the globe;
4. Technological advances – leading to a great expansion in the use of so-called global value chains (ICT, containers...);
5. Multilateral cooperation – the WTO becomes a reality (1995).

THE “SLUMP” IN TRADE OF THE LAST FEW YEARS

SOURCE: WTO (2018)

Chart 2: Ratio of world merchandise trade volume growth to world real GDP growth, 1981-2018

% change and ratio



Sources: WTO and UNCTAD for trade, consensus estimates for GDP.

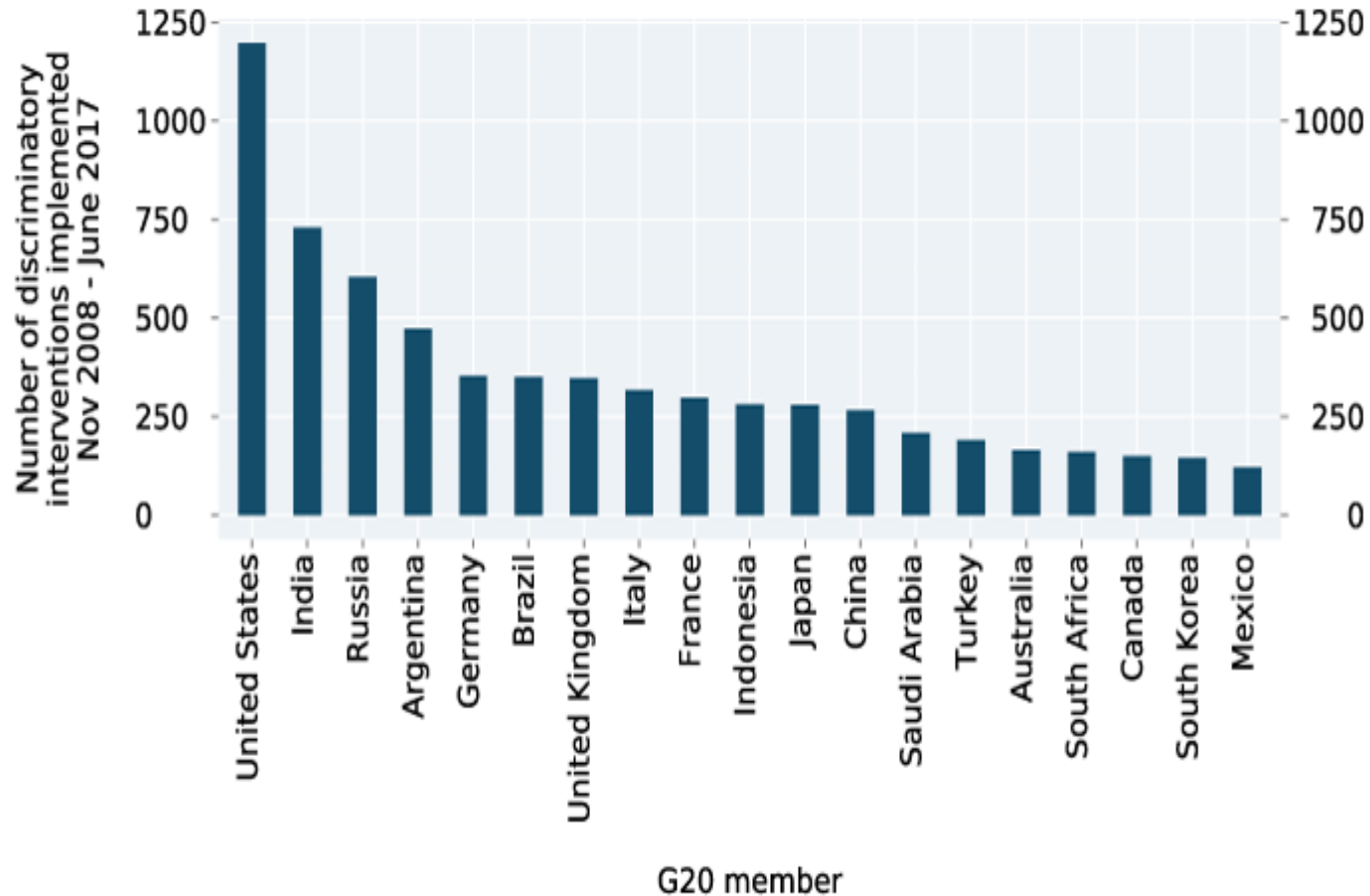
HOW TO UNDERSTAND THE TRADE DECLINE?

SOURCES: PRIMO BRAGA(2015) AND TIMMER ET AL. (2016)

- Demand-side explanations versus production-side explanations
- Immediately after the onset of the GFC: market-driven, fostered by macro problems?
 - Impact of the financial crisis/credit financing and global economic slow-down;
 - Euro area crisis;
- The “secular stagnation” hypothesis (“sick recoveries and immovable core unemployment”; excessive savings/”new economy”);
- Geo-political frictions and growing uncertainty (impact on investments);
- Structural components (consolidation of GVCs; Chinese rebalancing...);
- Technological shocks (incentives for reversing offshoring);
- Trade-policy driven:
 - The ghost of the Great Depression
 - The lure of trade protectionism in tandem with the populist “wave” (the Trump effect...);
 - The threat of “currency wars”;
 - Global governance failure (the Doha impasse...).

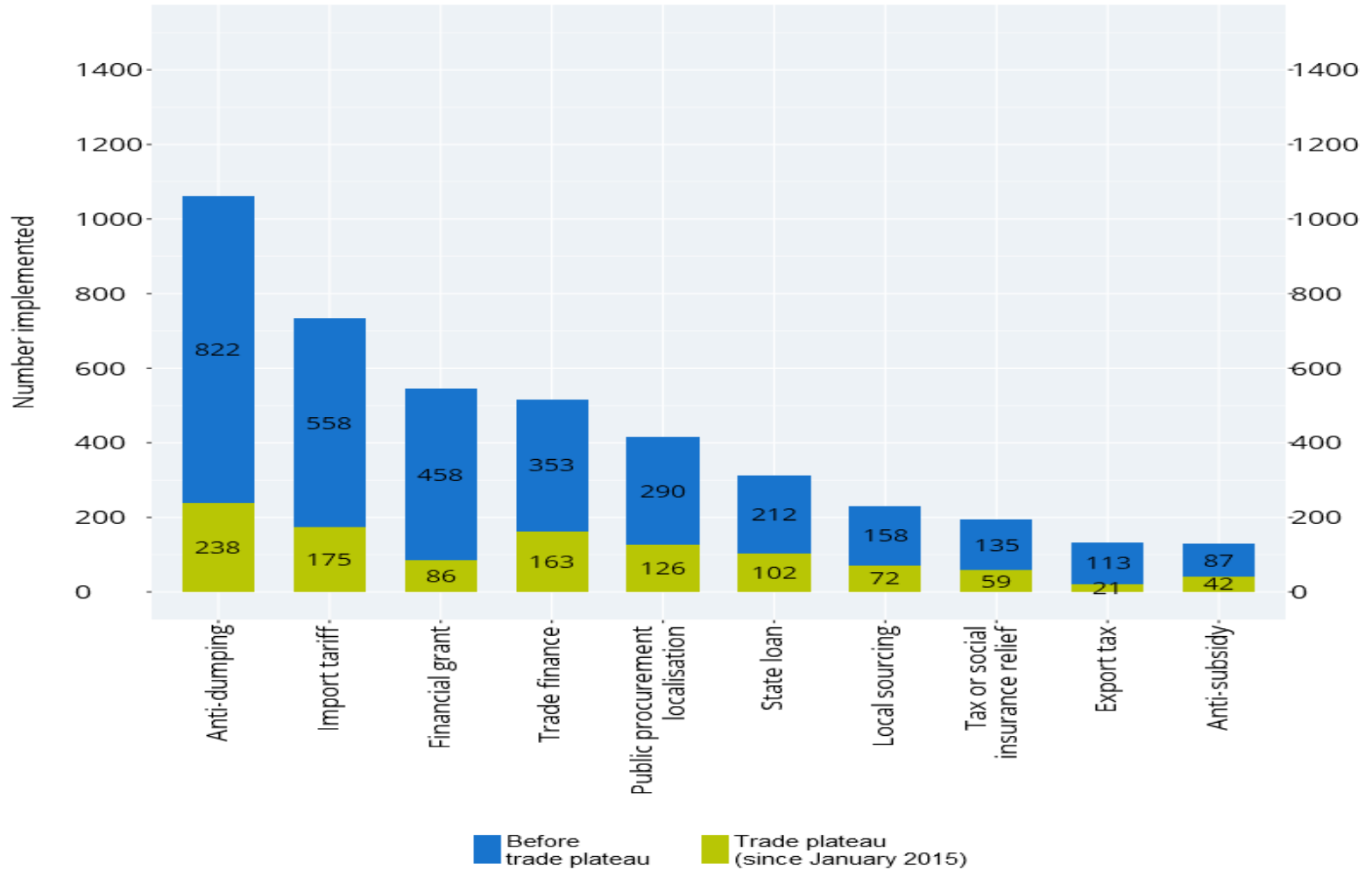
RESORT TO DISCRIMINATORY ACTIONS

SOURCE: GTA (2017)



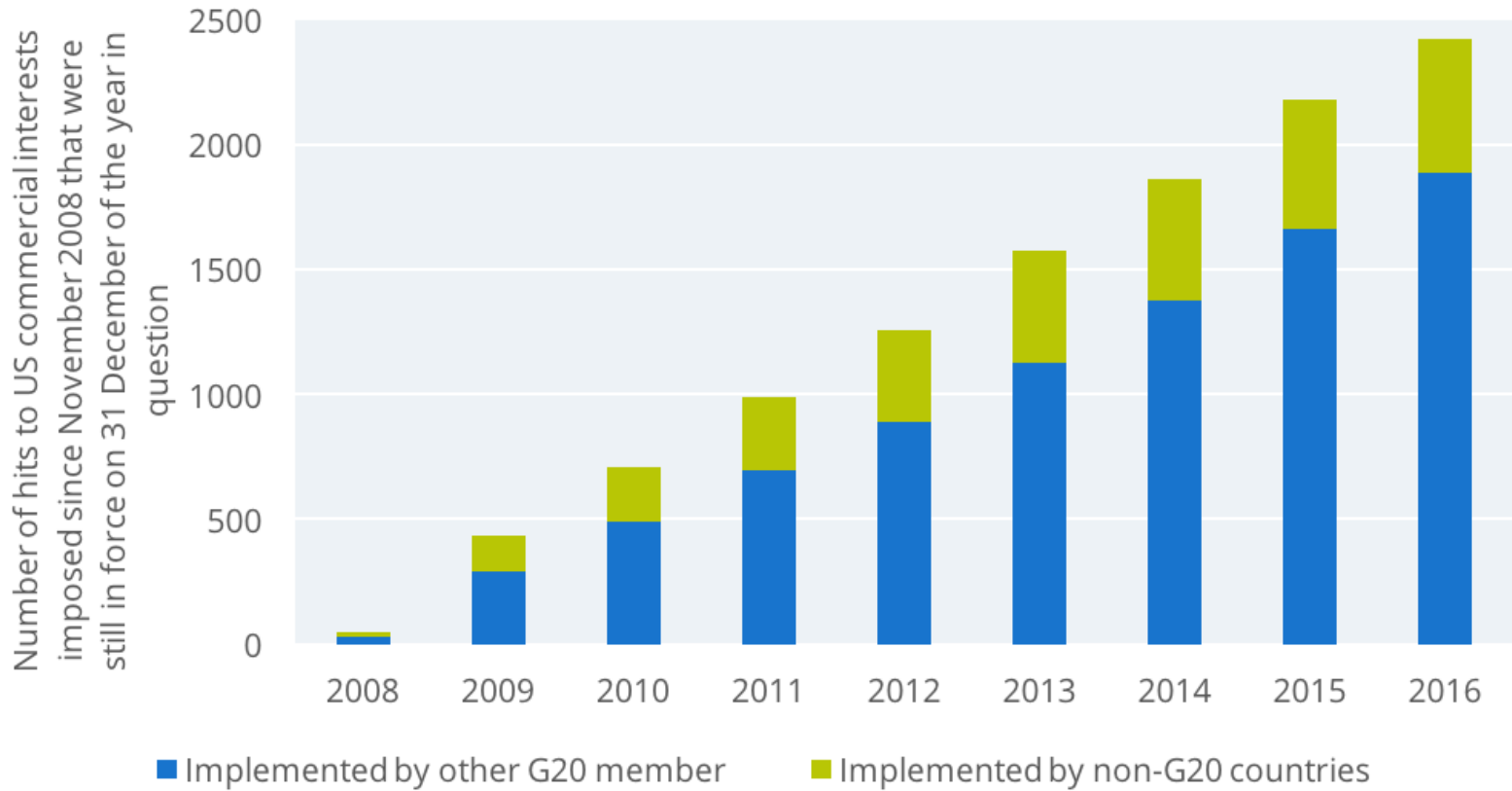
NOT YOUR “FATHER’S” PROTECTIONISM

SOURCE: GTA (2017)



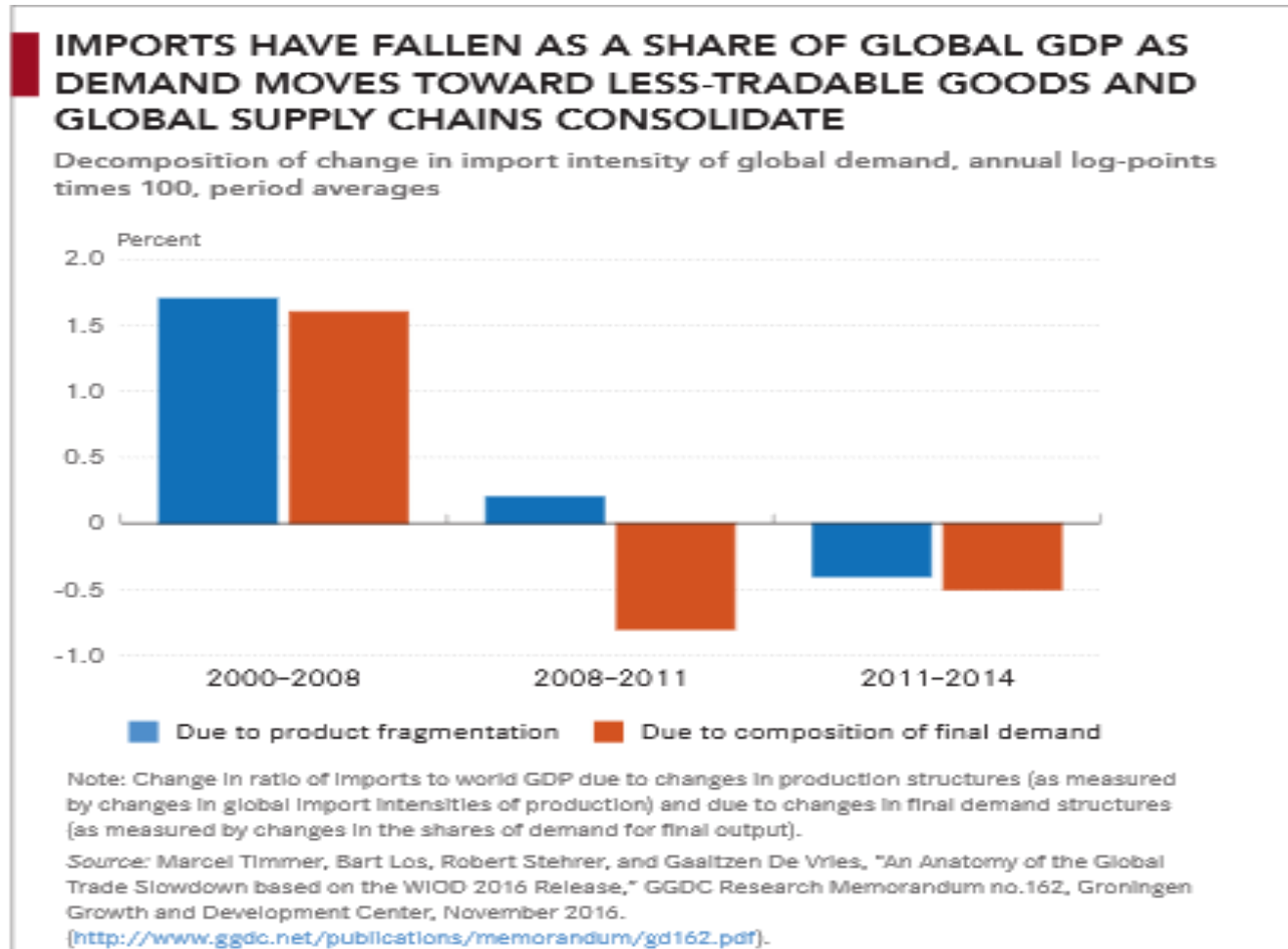
THE USA AS A TARGET

SOURCE: GTA (2017)



TRADE SLOW-DOWN: STRUCTURAL VARIABLES

SOURCE: VAN ARK (2017)



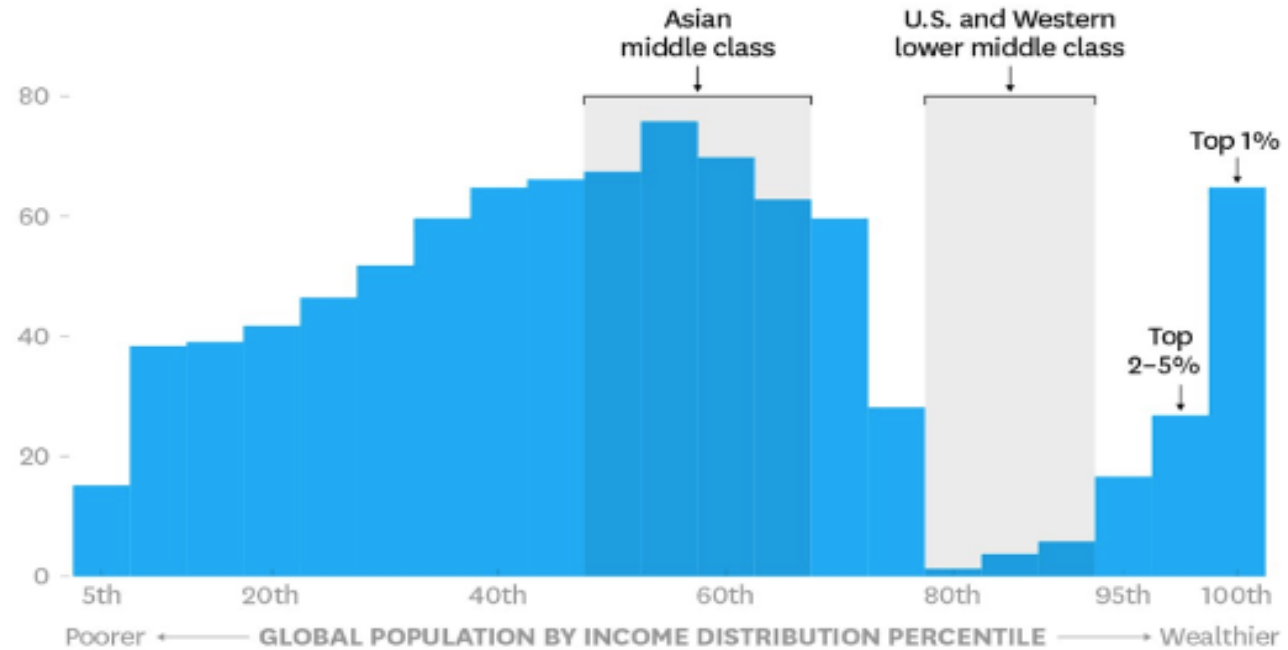
GLOBALIZATION AND GLOBAL REAL INCOME

SOURCE: MILANOVIC (2016)

Who Has Gained from Globalization

The global 1% and the Asian middle class.

REAL INCOME GAINS IN PERCENTAGE, 1988 TO 2008
100% -



NOTE INCOMES ARE REAL, PPP-ADJUSTED, IN 2005 DOLLARS.
SOURCE BRANKO MILANOVIC

Source: Harvard Business Review

THE POPULIST WAVE

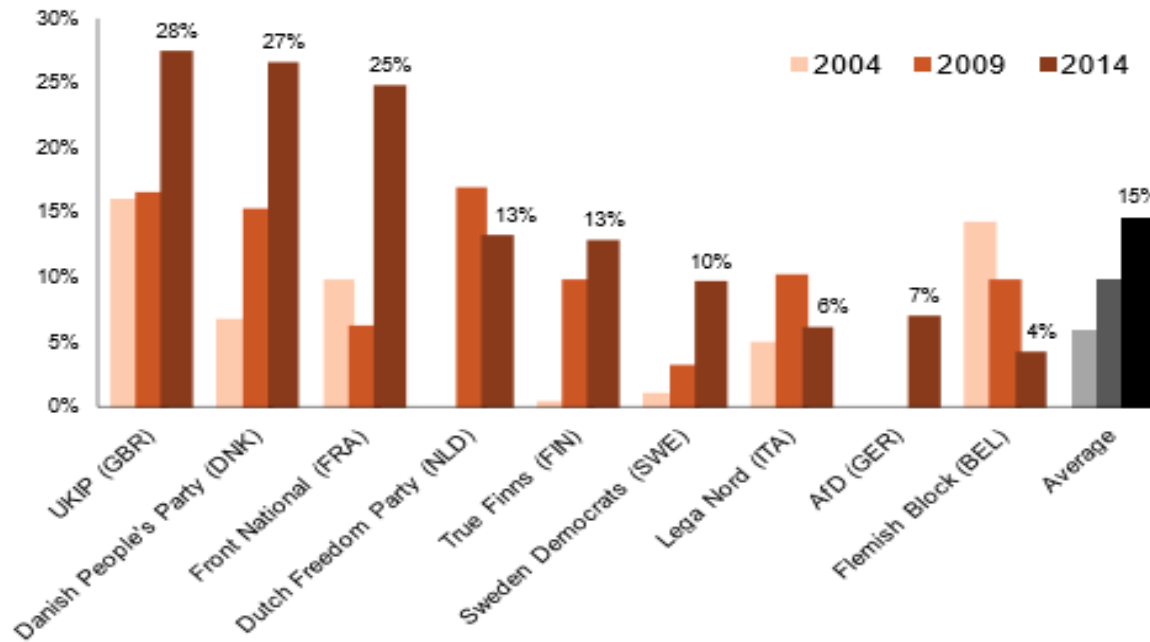
SOURCE: FUNKE, SCHULARICK AND TREBESCH (2015)

- Financial crises typically put a strain on democracies; votes for populist/far-right parties tend to increase significantly in their aftermath; the fragmentation of the political system tends to increase; these political developments tend to foster uncertainty and to delay recovery.
- The aftermath of the GFC has coincided with a “wave” of influential “populist” politicians around the world (Viktor Orbán, Hungary; Jarosław Kaczyński, Poland; Recep Erdoğan, Turkey; Geert Wilders, The Netherlands; Rodrigo Duterte, The Philippines; Nigel Farage, UK; Marine Le Pen, France; Donald Trump, USA...). The Macron victory in France was perceived by some as evidence that this trend is losing strength, but the recent results of the Austrian and Italian elections suggest otherwise;
- Common characteristics: nationalism, anti-globalization rhetoric, anti-migration, mistrust of multilateral institutions, multinationals, and intellectual elites. Emphasis on the wisdom of the common man/woman and resentment against the establishment. Often combined with an autocratic style;
- Simple solutions for complex problems (and disregard for fiscal constraints, the LAC experience...).

THE EUROPEAN EXPERIENCE

SOURCE: FUNKE, SCHULARICK AND TREBESCH (2015)

Figure 2: Far-right and right-wing populist votes in European elections

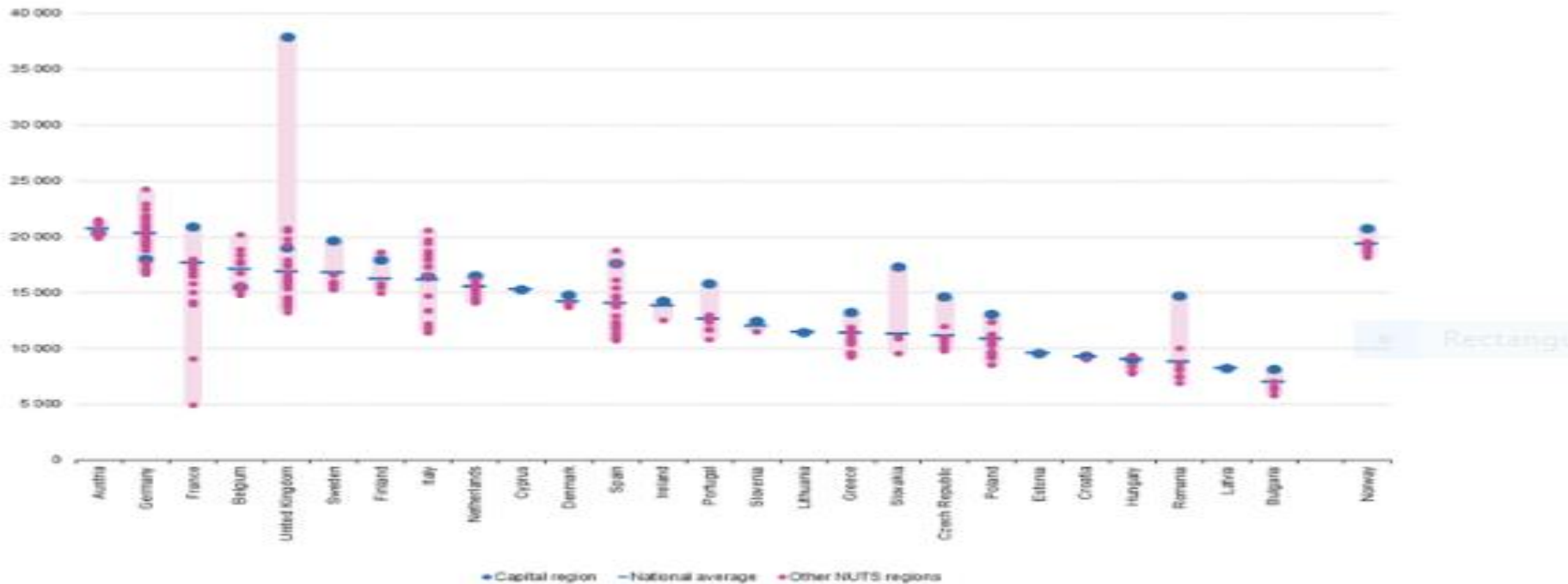


Notes: The figure shows the vote shares of far-right and right-wing populist parties in the European Parliamentary elections 2004, 2009, and 2014. These 9 EU countries are also included in the main analysis. The figure is for illustration only, since electoral data from the European Parliament are not used in the remainder of the paper. The grey columns show averages.

DISPOSABLE INCOME IN EUROPE

FONTE: COYLE (2017)

Disposable income of private households*, by NUTS 2 regions (2013, euros)



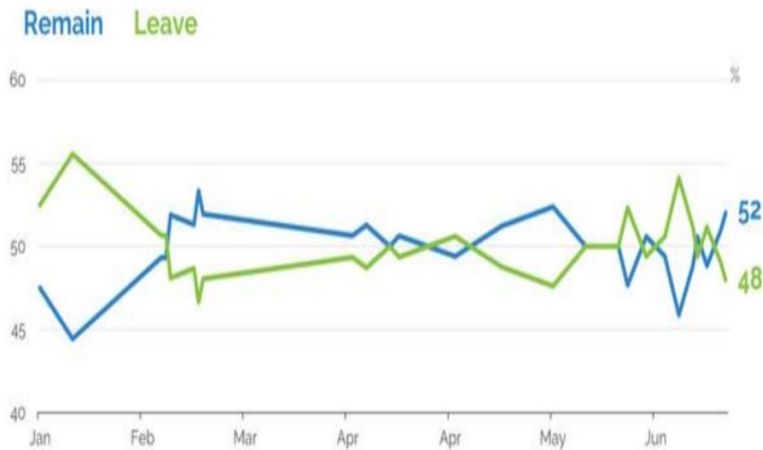
Notes: The light lilac shaded area shows the range of the highest to lowest income by region for each country. The blue bar shows the national average. The blue circle shows the capital city region. The lilac circles show the other regions. Luxembourg, Malta, Iceland, Liechtenstein, Switzerland, Montenegro, the former Yugoslav Republic of Macedonia, Albania, Serbia, and Turkey: n/a. * purchasing power consumption standard per inhabitant. NUTS is the nomenclature of territorial units for statistics. Source: Eurostat.

BREXIT: THE OUTCOME OF THE REFERENDUM

Brexit: intentions to vote...

Source: YouGov

Referendum intention in 2016
EU referendum voting intention in 2016



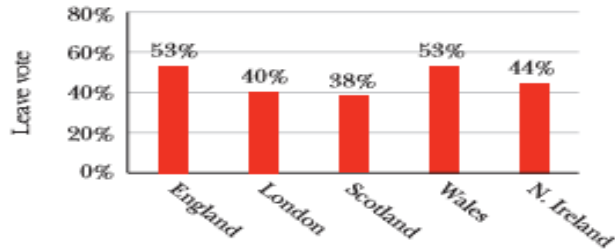
Final result: some questions

- **52% in favor of Brexit... Immigration being the critical variable (level vs. rate of change)**
- Initial economic impact: pound depreciation, postponement of investment decisions, the role of London as a financial center...
- Political impact: Scotland and Northern Ireland...;
- Article 50 of the Lisbon Treaty: hard negotiations ahead.
- Parallels with the GFC (Lehman Brothers-style shock)? Exaggeration...
 - In 2008, investors were fleeing from most high-risk financial assets since there was no clarity on the “degree of contamination.” Today the problem is better defined;
 - Central Banks are better prepared to handle the situation;
 - Financial sector is better capitalized.

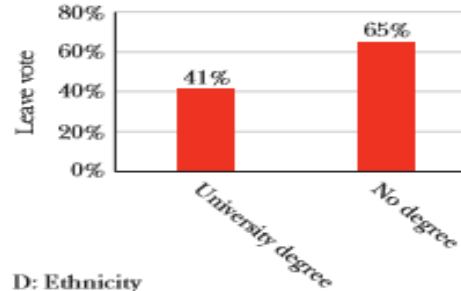
VOTES FOR BREXIT

SOURCE: SAMPSON (2017)

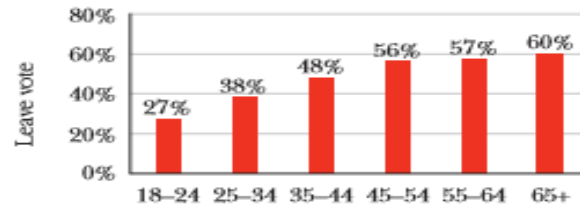
A: Region



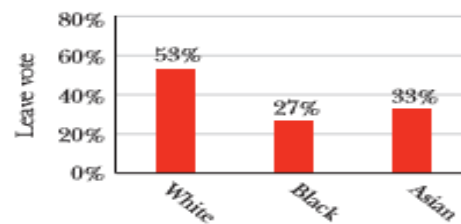
B: Education



C: Age



D: Ethnicity

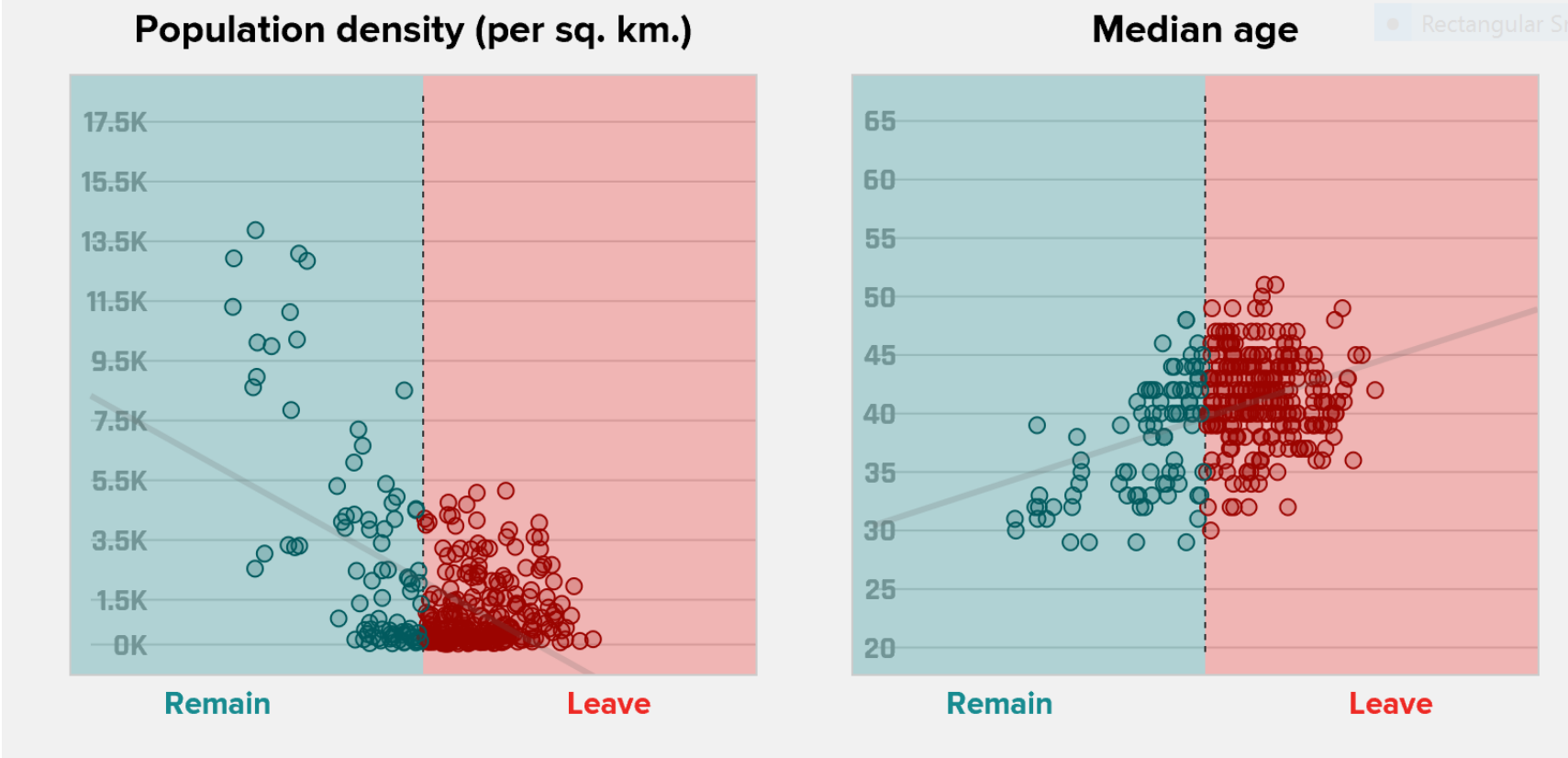


Source: Regional data from the Electoral Commission. Demographic data from Lord Ashcroft Polls.

Notes: The geographic breakdown uses actual votes cast in the referendum. All other data on voting patterns is from polling conducted by Lord Ashcroft Polls (2016) on the day of the referendum. See <http://lordashcroftpolls.com/2016/06/how-the-united-kingdom-voted-and-why/>.

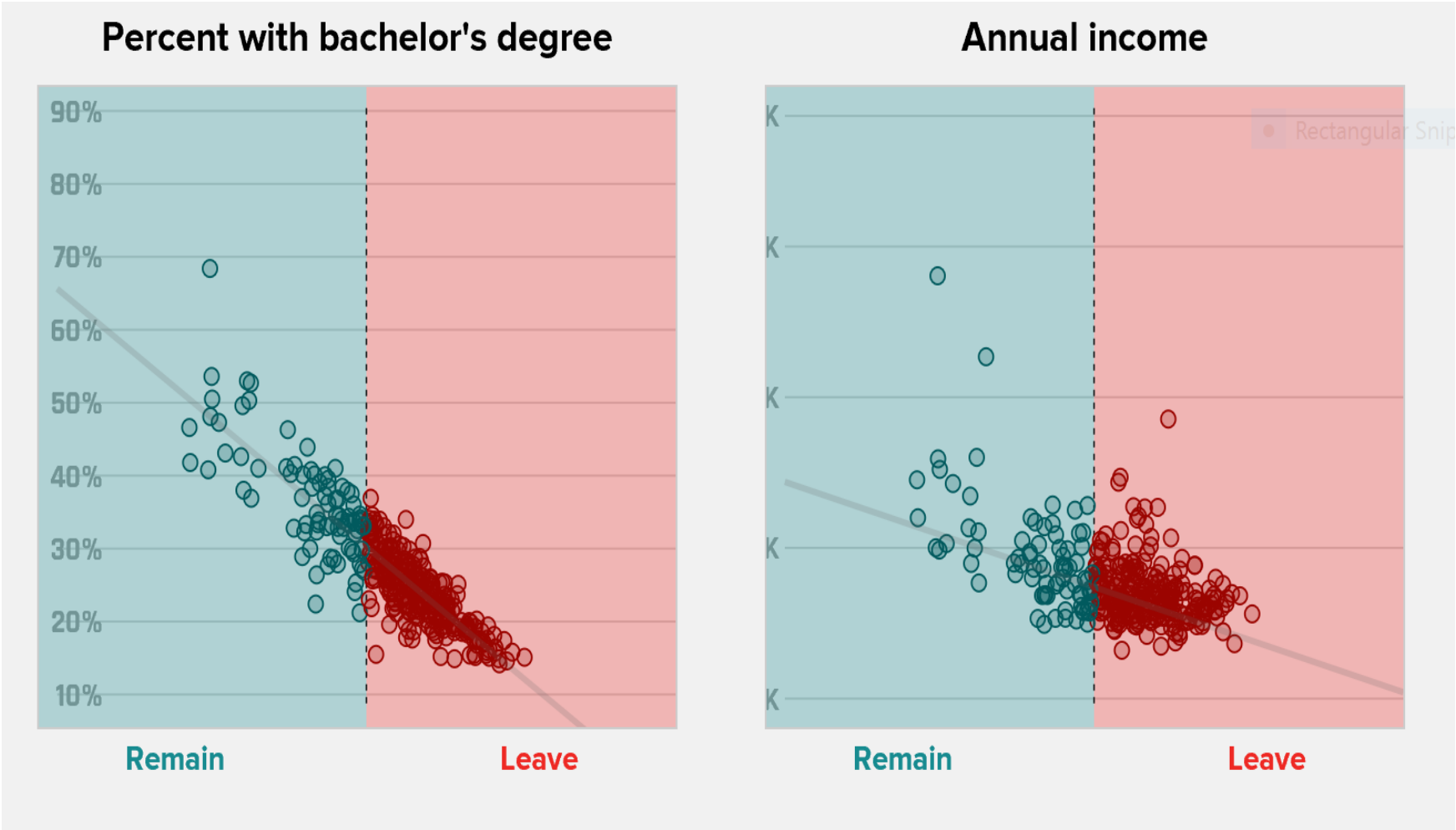
BREXIT, POPULATION AND AGE (ENGLAND AND WALES)

SOURCE: MCGILL (2016)



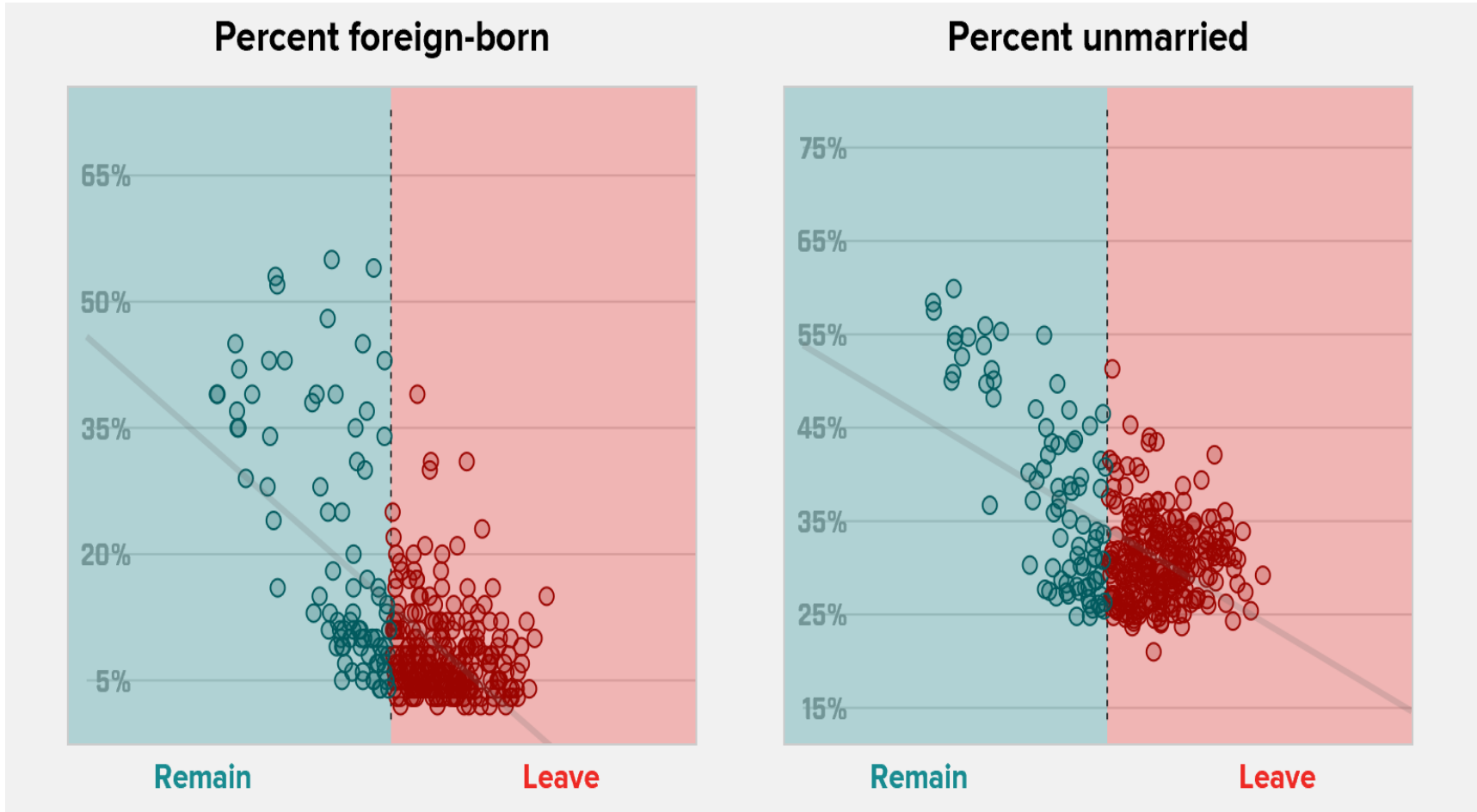
BREXIT, EDUCATION AND INCOME (ENGLAND AND WALES)

SOURCE: MCGILL (2016)



BREXIT, IMMIGRANTS AND MARITAL STATUS (ENGLAND AND WALES)

SOURCE: MCGILL (2016)



BREXIT POSSIBLE SCENARIOS

SOURCE: HSBC (2017)

- George Osborne, ex-Chancellor of the Exchequer: “greatest act of protectionism” in Britain’s history (2016);
- In reality, difficult to predict the impact since we are entering “unchartered waters.” Never before, a member has left the European Union. The vision (Theresa May’s speeches at Lancaster House, 1/17/17, and Florence, 9/22/17):
 - Exit the EU Single market;
 - Exit the EU Customs Union (including the CET and Common Commercial Policy);
 - Negotiate a new FTA with the EU and after BREXIT with other countries;
 - End the jurisdiction of the European Court of Justice.
- Some possible scenarios with respect to trade:
 - BREXIT extended – additional transition period after March 2019;
 - Hard BREXIT – back to WTO rules;
 - Soft BREXIT – Norway style...

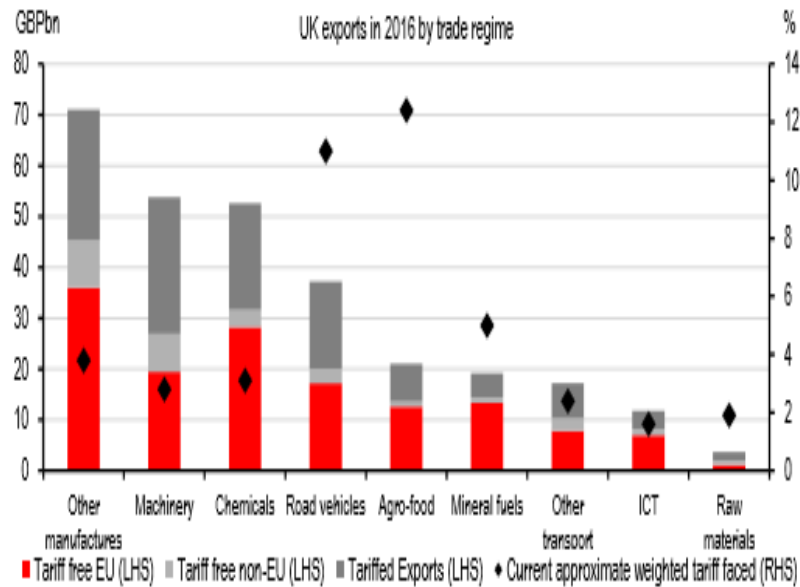
BREXIT AND FUTURE TARIFFS

SOURCE: HSBC (2017)

Potentially significant impact on the competitiveness of the auto-industry and agribusiness

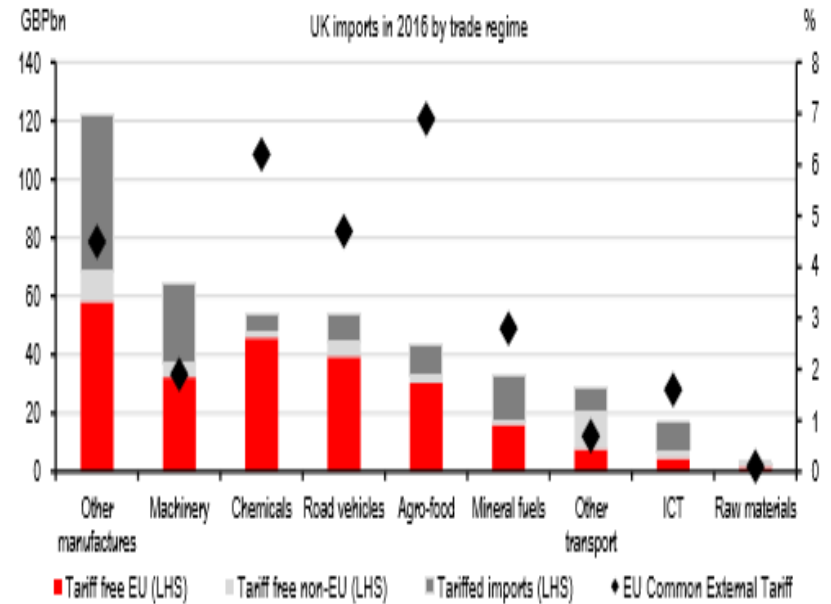
Impact on the costs of imports can be substantial

6. The UK's exports are subject to tariffs of varying levels



Source: HSBC, WITS, HMRC (Current weighted tariffs faced by all UK exports)

7. Import tariffs could push up on inflation, exacerbating the effect of a fall in sterling



Source: HSBC, WITS, HMRC

HAS THE EUROPEAN INTEGRATION EXPERIMENT FAILED?

No

- Political underpinnings (the most murderous region of the world has now become a peaceful one...)
- The most advanced experiment in mega regionalism
- Concept is OK, implementation can be improved upon (Eurobonds, etc.)
- Even in Greece, support for the euro remains strong...
- Europe is the solution, not the problem...

Yes

- Peace in the region has nothing to do with the EU, but with the US (NATO)
- A project doomed to fail, because you cannot have monetary union without fiscal and political union
- An elite-driven project that is increasingly out of touch with European voters...
- The experiment has lost political legitimacy.
- The Italian political crisis will be the critical test...

STEREOTYPES

Source: PEW (2013)

Stereotyping in Europe

Who Is Trustworthy, Arrogant and Compassionate

EU nation most likely to be named...

<u>Views in:</u>	Most Trustworthy	Least Trustworthy	Most Arrogant	Least Arrogant	Most Compassionate	Least Compassionate
Britain	Germany	France	France	Britain	Britain	Germany
France	Germany	Greece	France	France	France	Britain
Germany	Germany	Greece/Italy	France	Germany	Germany	Britain
Italy	Germany	Italy	Germany	Spain	Italy	Germany
Spain	Germany	Italy	Germany	Spain	Spain	Germany
Greece	Greece	Germany	Germany	Greece	Greece	Germany
Poland	Germany	Germany	Germany	Poland	Poland	Germany
Czech Rep.	Germany	Greece	Germany	Slovakia	Czech Rep.	Germany

PEW RESEARCH CENTER Q44a-Q46b.

USA: A LITTLE BIT OF HISTORY

“THE GREAT RULE OF CONDUCT FOR US IN REGARD TO FOREIGN NATIONS IS, IN EXTENDING OUR COMMERCIAL RELATIONS, TO HAVE WITH THEM AS LITTLE *POLITICAL* CONNECTION AS POSSIBLE.” George Washington

AMERICANS DO NOT GO “ABROAD IN SEARCH OF MONSTERS TO DESTROY.” John Quincy Adams

**Global leadership post-WWII (in the context of the Cold War):
“THE MOST TERRIBLE RESPONSIBILITY THAT ANY NATION EVER FACED.” Harry Truman**

**“RELUCTANT SHERIFF” VS. “INDISPENSABLE NATION”
(Madeleine Albright)**

BACKGROUND USA

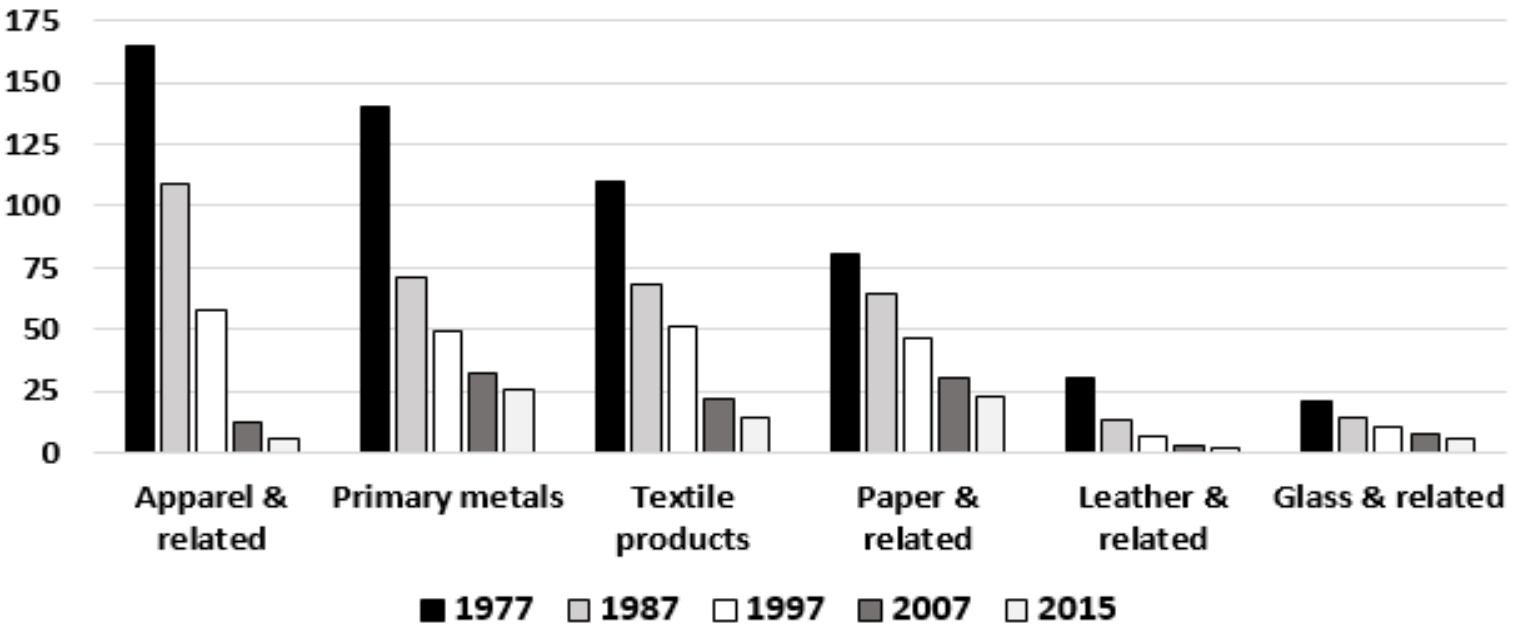
SOURCES: FUKUYAMA (2016); PRIMO BRAGA (2016C); VANGRASSTEK (2017B)

- Evolving attitudes towards globalization:
 - From the 1960s to the 1980s, growing international competition and the impact of labor-saving technology led to an increase in the demand for protectionism in the USA, particularly, in the case of labor-intensive industries;
 - The USA began to experience deficits in its balance of trade around 1971 and in current-account from 1992 on;
 - Gradually firms that were more exposed to international competition began to adjust (or “died”), exploring internationalization and becoming more pro-trade. The adjustment of labor, however, was more difficult and led to the creation of an “army” of displaced workers that either have to accept lower-paying jobs or to face unemployment;
 - Employment in vulnerable industries declined dramatically: they employed 1 out of 18 workers in manufacturing around 1977; by 2015, the relation was 1 for each 130 workers in manufacturing...

EMPLOYMENT IN PROTECTION-SEEKING INDUSTRIES IN THE USA

SOURCE: VANGRASSTEK (2017B)

Employees in an Industry per 10,000 Non-Farm Jobs in the United States



Source: Calculated from the Census of Manufactures (for employment by industry in 1977-2007), the Annual Survey of Manufactures (for employment by industry in 2015), and Bureau of Labor Statistics (total non-farm jobs) data at <http://www.bls.gov/ces/>.

Note that the comparability of data for the periods before and after 1997 is complicated by the transition that year from the Standard industrial Classification (SIC) to the North American Industry Classification (NAIC) nomenclature. While the categories appear to cover the same territory, it is possible that some SIC categories may be slightly broader or narrower than some of the corresponding NAIC categories. Data for apparel are based on SIC 23 and NAIC 315; data for primary metals are based on SIC 33 and NAIC 331; data for textiles are based on SIC 22 and NAIC 313 and 314; data for paper are based on SIC 26 and NAIC 322; data for leather are based on SIC 31 and NAIC 316; and data for glass are based on SIC 321-323 and NAIC 3272.

BACKGROUND (CONT.)

SOURCES: FUKUYAMA (2016); PRIMO BRAGA (2016C); VANGRASSTEK (2017A)

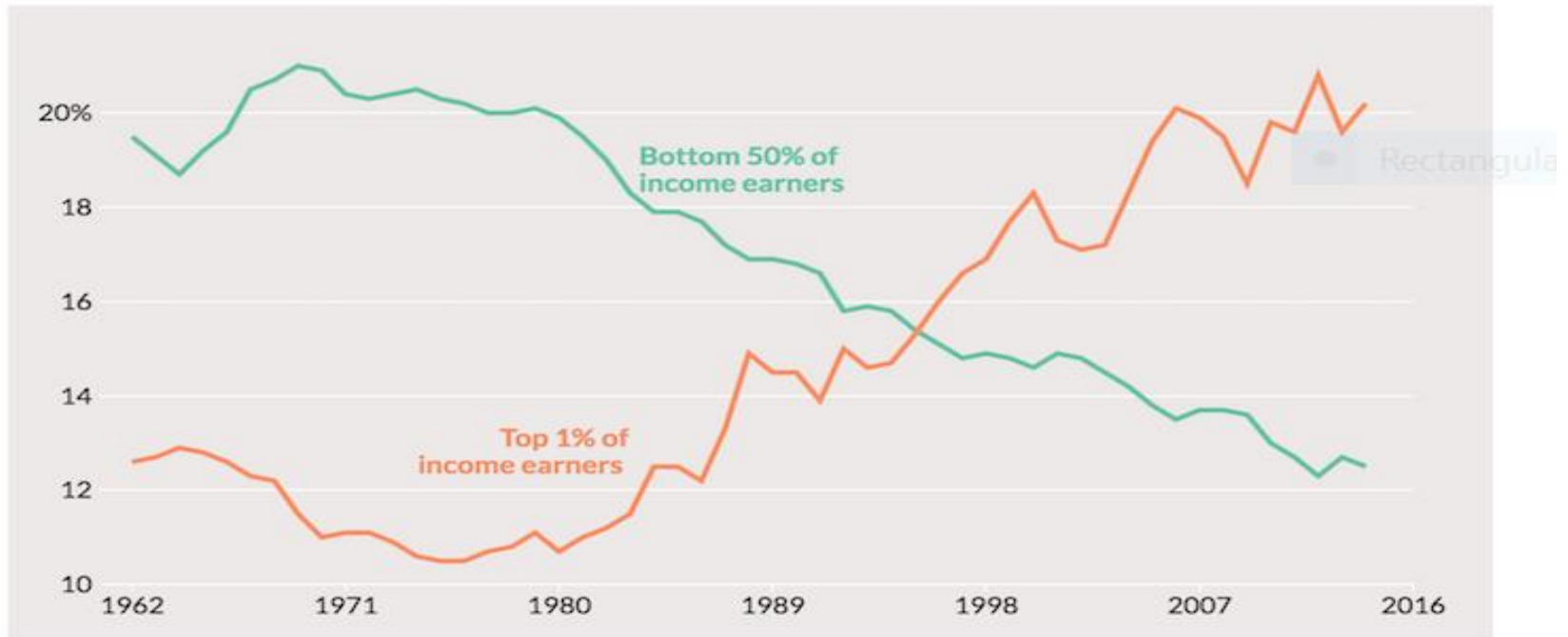
- The growing internationalization of American enterprises and the adoption of multilateral (WTO) and preferential disciplines/rules of engagement (e.g., NAFTA) diminished the demand for protectionist measures from the private sector (mainly after the 1990s) even though the USA became much more import-intensive over the last 40 years;
- The Chinese expansion: 2.4% of global GDP (1995) to 14.9% by 2015 (for the USA, the figures are 24.4% and 24.6% respectively). The Chinese component of the American trade deficit evolved from 17.1% (2000) to 37.6% (2016);
- The Obama era: political “vetocracy” (in the Congress, the opposition – the Republican party – found it more appealing to paralyze the Executive than to advance a common agenda). At the same time, the interest demonstrated by President Obama with respect to trade-related issues (as measured by the number of citations on trade in documents of the Executive) was the lowest in the last 4 decades. Only in his second mandate, there was an attempt to revitalize the trade agenda (TPP, TTIP, “fast-track authority”...)
- Key issues explored in the 2016 Presidential campaign by Donald Trump: growing economic inequality; white voters “left-behind” by globalization; the Chinese threat; and “arguments” about the negative impact of international trade on the USA.

THE WIDENING GAP

SOURCE: PIKETTY, SAEZ, AND ZUCMAN (2017)

A tale of two countries

The share of U.S. pre-tax income accruing to the bottom 50 percent and top one percent of income earners, 1962-2014

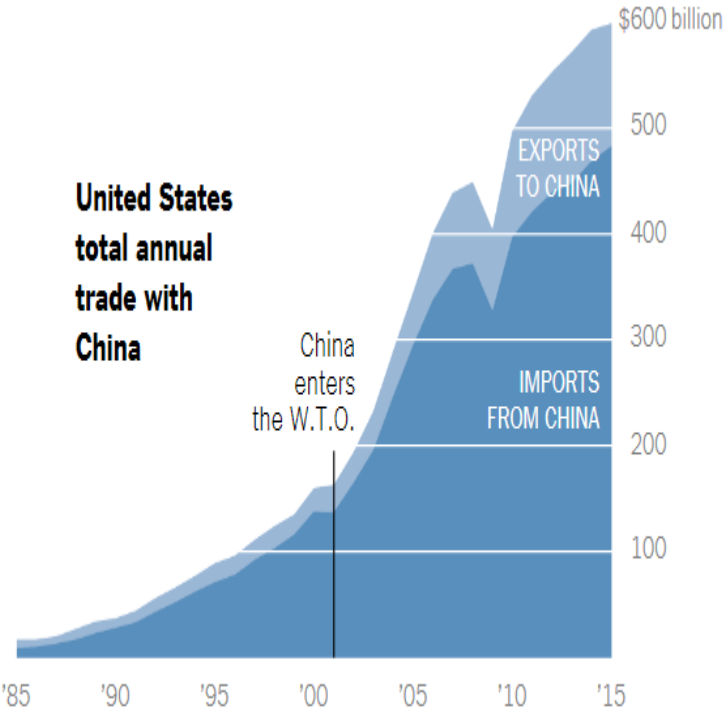


Source: Thomas Piketty, Emmanuel Saez, and Gabriel Zucman, "Distributional National Accounts: Methods and Estimates for the United States," 2016, Cambridge, MA: National Bureau of Economic Research

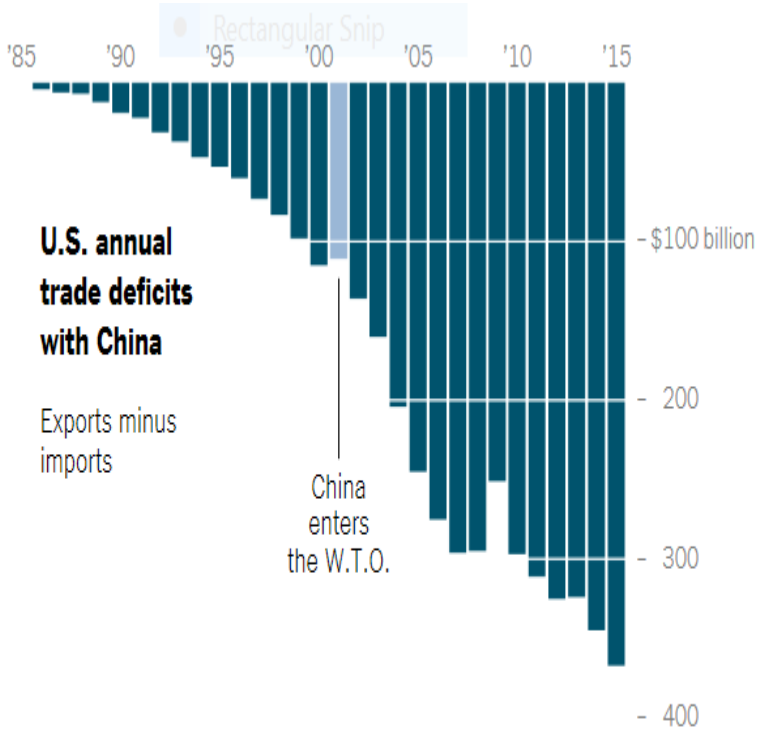
Note: The unit is the individual adult and incomes within married couples are split equally.

THE “CHINESE THREAT”

SOURCE: BRADSHER E RUSSEL (2017)



Source: Census Bureau

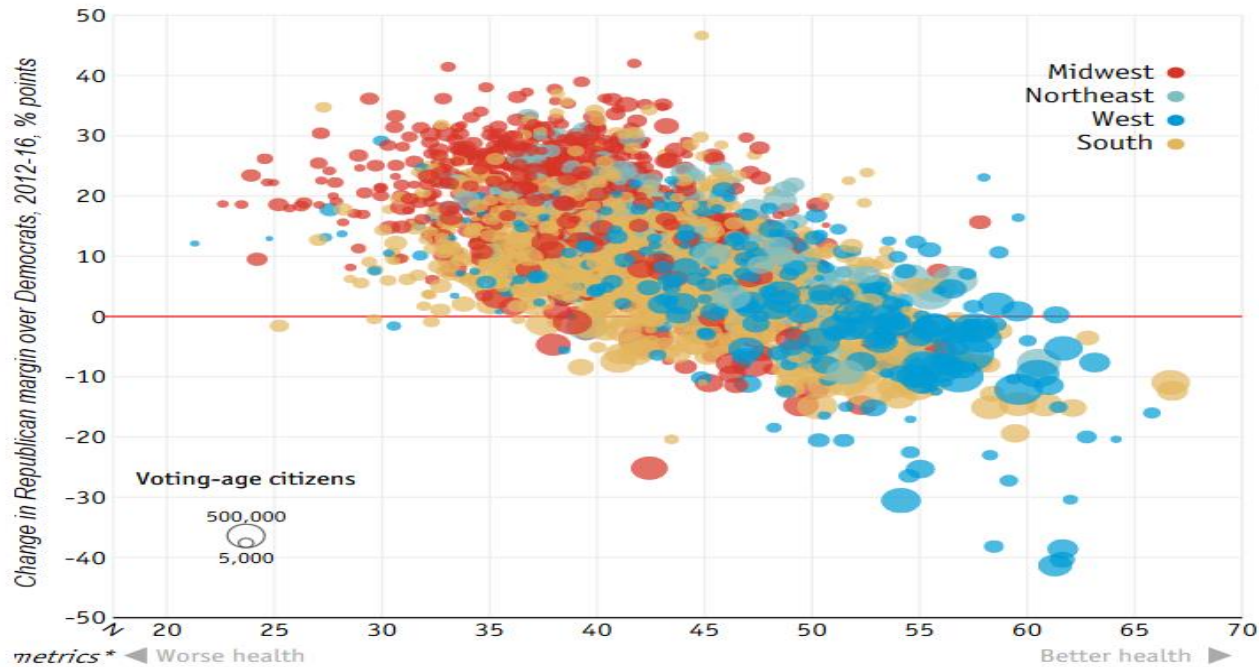


TRUMP AND THE “DEPLORABLES”

SOURCE: THE ECONOMIST (2016)

Vitality and the vote

United States, health metrics against swing to Donald Trump, by county



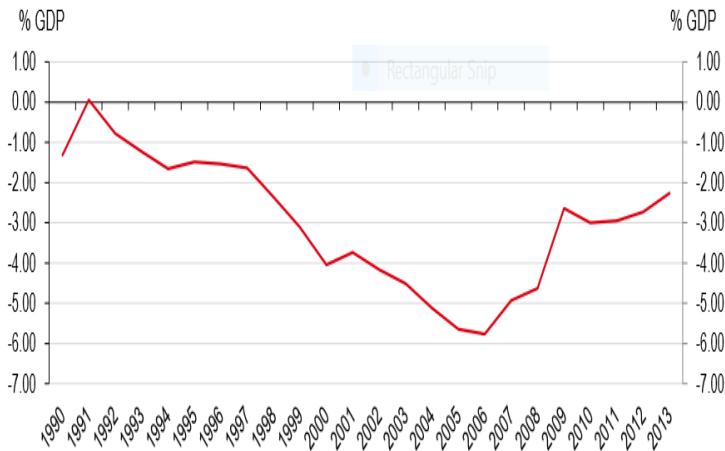
Sources: Atlas of US Presidential Elections; Census Bureau; IPUMS; Institute for Health Metrics and Evaluation; *The Economist*

*Weighted index of obesity, diabetes, heavy drinking, physical exercise and life expectancy, 2010-12

TO BLAME INTERNATIONAL TRADE AS THE MAIN CAUSE OF DISLOCATION IS A MISTAKE

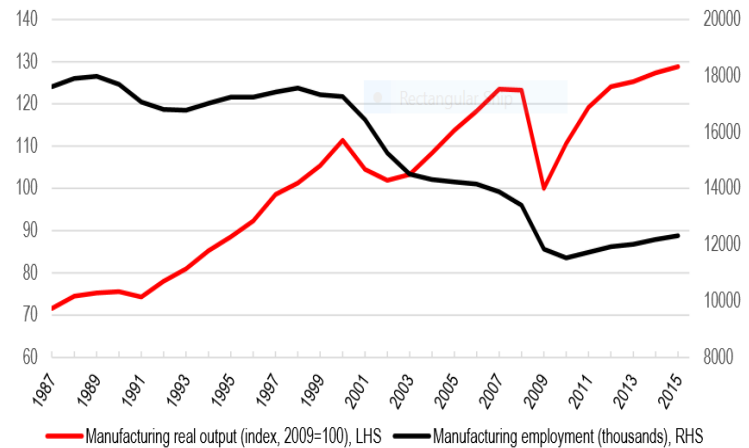
SOURCE: LIPPOLDT (2017)

USA – current account as % PIB – deficits driven by low savings rate



Source: Federal Reserve Bank of St. Louis

USA – Employment in manufacturing – the role of technology



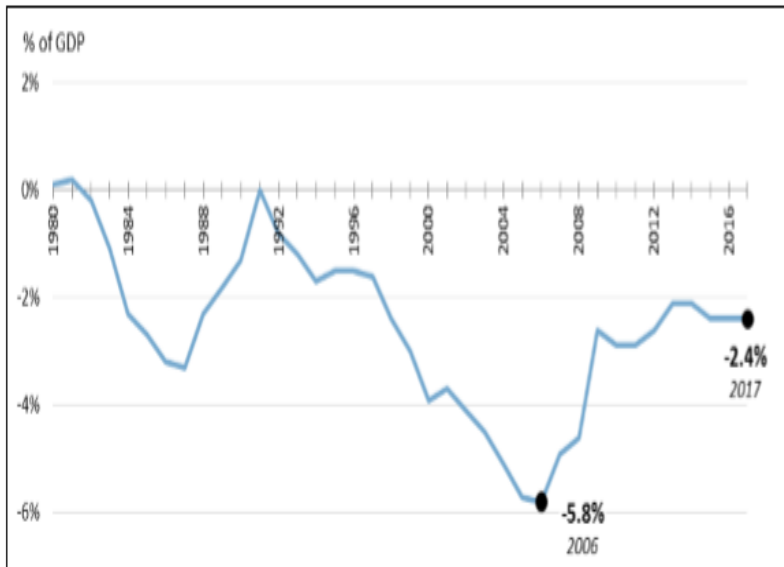
Source: Federal Reserve Bank of St. Louis, <https://fred.stlouisfed.org>

THE U.S. CURRENT ACCOUNT

SOURCE: CRS (2018)

Trends in the U.S. current account as a share of GDP

Figure 8. U.S. Current Account Balance, 1980-2017



Source: IMF, World Economic Outlook database, October 2017.

Notes: Data for 2017 are estimates.

The saving-investment balance and the current account

Table 2. Current Account Balances and Savings/Investment for Selected Major Economies, 2017

Country	Current Account Balance, % of GDP	Ratio of Gross National Savings to Total Investment
Germany	8.1%	141.7
Japan	3.6%	115.3
Russia	2.8%	111.9
China	1.4%	103.1
France	-1.1%	95.2
India	-1.4%	95.4
Brazil	-1.4%	92.1
Indonesia	-1.7%	95.1
United States	-2.4%	88.5
United Kingdom	-3.6%	79.0

Source: IMF, World Economic Outlook database, October 2017.

Notes: Data for 2017 are estimates.

TRUMP'S AGENDA FOR "FAIR TRADE": THE CANDIDATE'S PLATFORM

SOURCE: LIPPOLDT (2017)

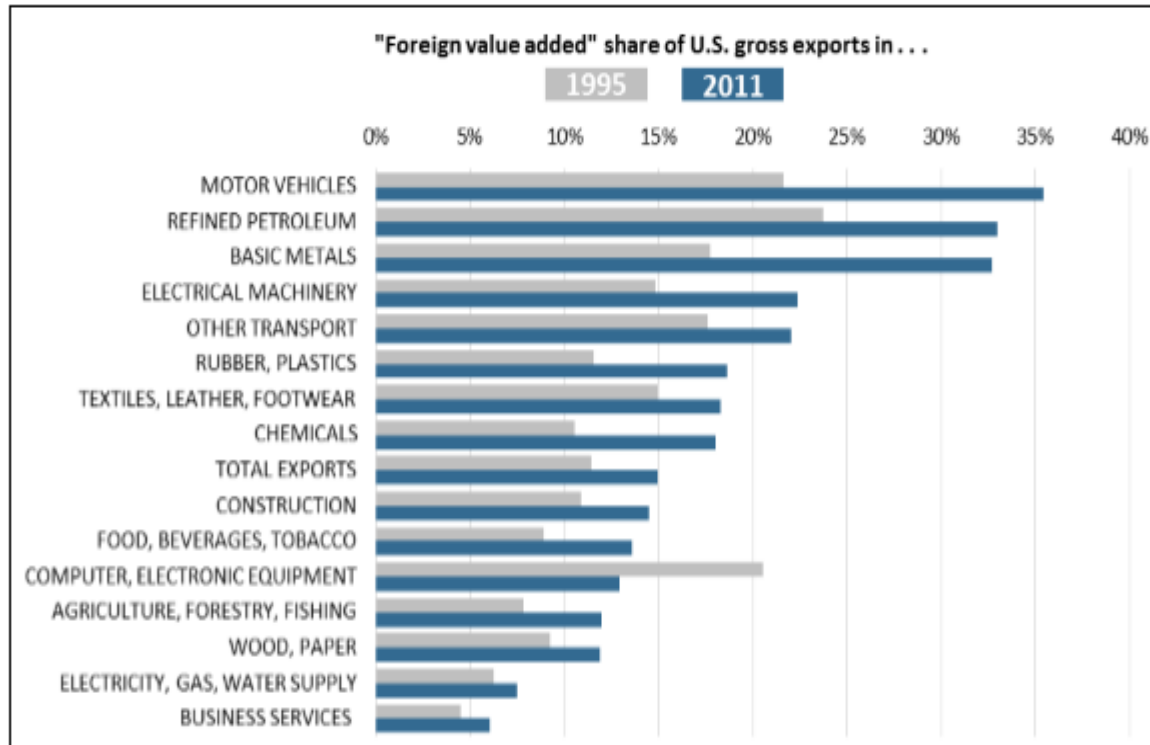
1. Withdraw from the Trans-Pacific Partnership, which has not yet been ratified.
2. Appoint tough and smart trade negotiators to fight on behalf of American workers.
3. Direct the Secretary of Commerce to identify every violation of trade agreements a foreign country is currently using to harm our workers, and also direct all appropriate agencies to use every tool under American and international law to end these abuses.
4. Tell NAFTA partners that we intend to immediately renegotiate the terms of that agreement to get a better deal for our workers. If they don't agree to a renegotiation, we will submit notice that the US intends to withdraw from the deal. Eliminate Mexico's one-side backdoor tariff through the VAT and end sweatshops in Mexico that undercut US workers.
5. Instruct the Treasury Secretary to label China a currency manipulator.
6. Instruct the US Trade Representative to bring trade cases against China, both in this country and at the WTO. China's unfair subsidy behavior is prohibited by the terms of its entrance to the WTO.
7. Use every lawful presidential power to remedy trade disputes if China does not stop its illegal activities, including its theft of American trade secrets - including the application of tariffs consistent with Section 201 and 301 of the Trade Act of 1974 and Section 232 of the Trade Expansion Act of 1962.

Source: Donald J. Trump for President, Inc., campaign web site, 11 January 2017 at: <https://www.donaldjtrump.com/policies/trade>; further details are elaborated in the Trump Campaign document, "Declaring American Economic Independence", available here: https://assets.donaldjtrump.com/DJT_DeclaringAmericanEconomicIndependence; and HSBC, [Trump: the global impact](#), 9 November 2016.

IMPORTED INPUTS INTO U.S. EXPORTS

SOURCE: CRS (2018)

Figure 2. Import Content of U.S. Exports, by Industry



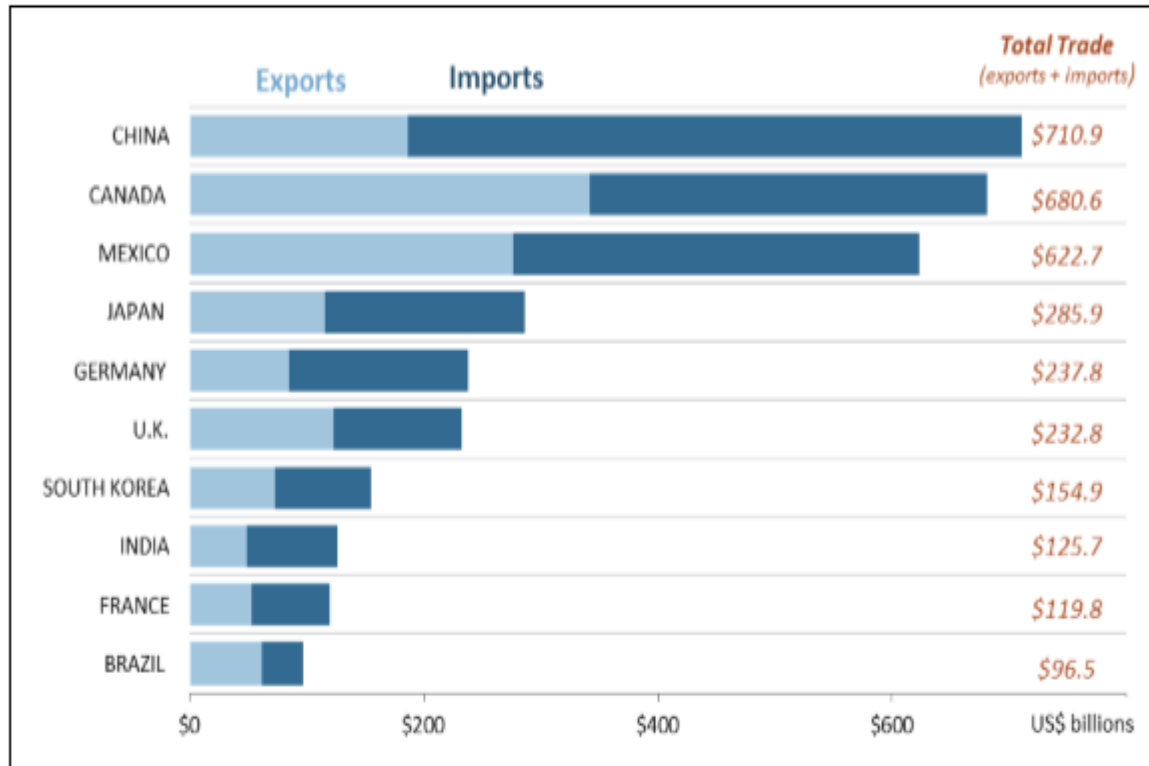
Source: OECD-WTO Trade in Value-Added (TiVA) database, December 2016, stats.oecd.org.

Notes: Import content of exports is defined as “the share of imported inputs in the overall exports of a country, and reflects the extent to which a country is a user of foreign inputs.” Data for 2011 is the most recent data available.

TOP U.S. TRADING PARTNERS

SOURCE: CRS (2018)

Figure 6. Top U.S. Trading Partners, Ranked by Total Trade, 2017



Source: Bureau of Economic Analysis.

Notes: Data on a balance of payments basis.

THE INAUGURAL ADDRESS, JANUARY 20, 2017

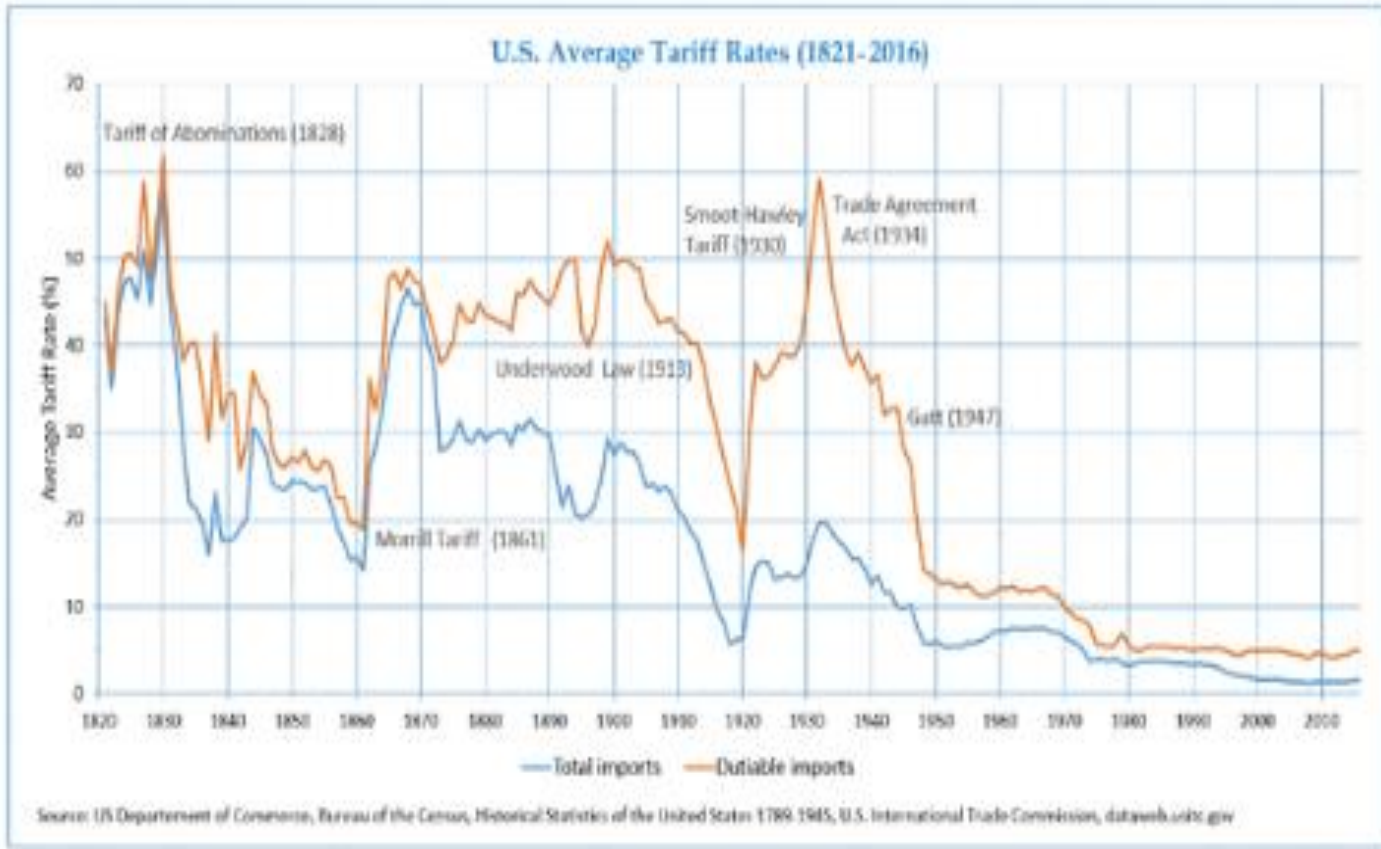
“Every decision on trade, on taxes, on immigration, on foreign affairs, will be made to benefit American workers and American families.

We must protect our borders from the ravages of other countries making our products, stealing our companies, and destroying our jobs.

Protection will lead to great prosperity and strength.”

Donald J. Trump

US TARIFF RATES: HISTORICAL TRENDS



U.S. TRADE POLICY: INSTITUTIONAL CONSTRAINTS

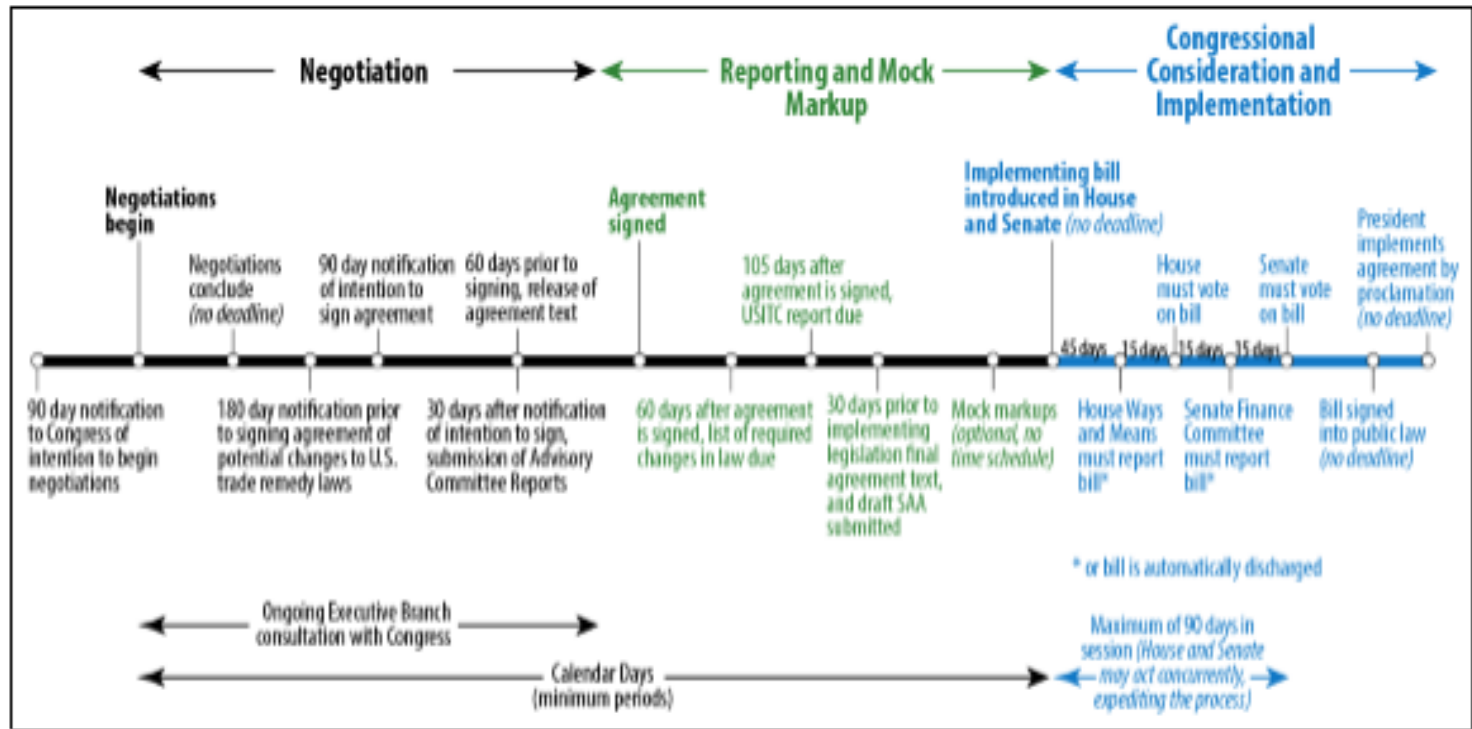
SOURCES: WOLFF (2017), VANGRASSTEK (2017A)

- Significant asymmetry: elaborate procedures to enter into trade agreements (consultations with Congress; reports from ITC; reports from private sector advisory bodies and opportunity for public comments...) versus “vacuum” of procedures in the case of exit of a non-ratified trade agreement (e.g., TPP) or limited procedures in the case of a ratified one (e.g., NAFTA). Consequence: trade actions are appealing for an Executive searching for quick “results”;
- Trade Promotion Authority (TPA) is scheduled to expire on July 1, 2018. In practice, unless an extension of TPA is granted by Congress (the Trump asked for an extension in March 2018), any new bilateral trade agreement negotiated by the Trump administration had to be concluded by March 31, 2018 (the President has to inform Congress 90 days before he signs an agreement)...

TRADE PROMOTION AUTHORITY

SOURCE: CRS (2018)

Figure 11. Congressional Requirements and Timeline for TPA Procedures



Source: CRS In Focus IF10038, Trade Promotion Authority (TPA), by Ian F. Fergusson.

CURRENCY MANIPULATION

SOURCE: US DEPARTMENT OF TREASURY (2016)

- Criteria for bilateral engagement – rules from the US Treasury Department:
 - “(1) An economy has a significant trade surplus with the United States if its bilateral trade surplus is larger than \$20 billion (roughly 0.1 percent of U.S. GDP) with the United States last year;
 - (2) An economy has a material current account surplus if its surplus is larger than 3.0 percent of that economy’s GDP;
 - (3) An economy has engaged in persistent one-sided intervention in the foreign exchange market if it has conducted *repeated* net purchases of foreign currency that amount to more than 2 percent of its GDP over the year.”
- October 2016: China, Mexico, India, and Italy failed (1); Japan, Germany, and South Korea failed (1) e (2); Taiwan and Switzerland failed (2) and (3). No country currently fails all 3 criteria, in theory a necessary condition to begin “enhanced bilateral engagement” and eventually to declare a country a currency manipulator.

DATA FOR THE ANALYSIS OF CURRENCY MANIPULATION

SOURCE: US DEPARTMENT OF TREASURY (2017)

	Bilateral Goods Surplus with United States (USD Bil., Trailing 4Q) (1)	Current Account			Net Foreign Exchange Intervention			
		Balance (% of GDP, Trailing 4Q) (2a)	3 Year Change in Balance (% of GDP) (2b)	Balance (USD Bil., Trailing 4Q) (2c)	Purchases (% of GDP, Trailing 4Q) (3a)	Purchases (USD Bil., Trailing 4Q) (3b)	Purchases (USD Bil., Trailing 2Q) (3c)	Purchases 8 of 12 Months† (3d)
China	357	1.3	-0.1	155	-2.7	-311	-62	No
Japan	69	3.7	3.5	185	0.0	0	0	No
Mexico	69	-1.7	0.7	-18	-0.2	-2	-2	No
Germany	63	7.7	0.7	268	-	-	-	-
Italy	29	2.8	1.4	51	-	-	-	-
India	23	-1.3	-0.3	-30	1.8	42	30	Yes
Korea	22	5.7	-0.3	84	0.3	5	9	Yes
Canada	19	-2.9	-0.2	-45	0.0	0	0	No
France	14	-1.0	0.3	-26	-	-	-	-
Taiwan	14	12.7	1.5	70	0.9	5	3	Yes
Switzerland	13	10.3	1.3	69	8.7	58	30	Yes
United Kingdom	-1	-5.1	0.4	-129	0.0	0	0	No
Brazil	-5	-0.7	2.9	-13	2.3	46	5	Yes
Memo : Euro Area	126	3.0	0.8	357	0.0	0	0	No

Sources: Haver, National authorities, U.S. Census Bureau, and U.S. Department of the Treasury staff estimates

†In assessing the persistence of intervention, Treasury will consider an economy that is judged to have purchased foreign exchange on net for 8 of the 12 months to have met the threshold.

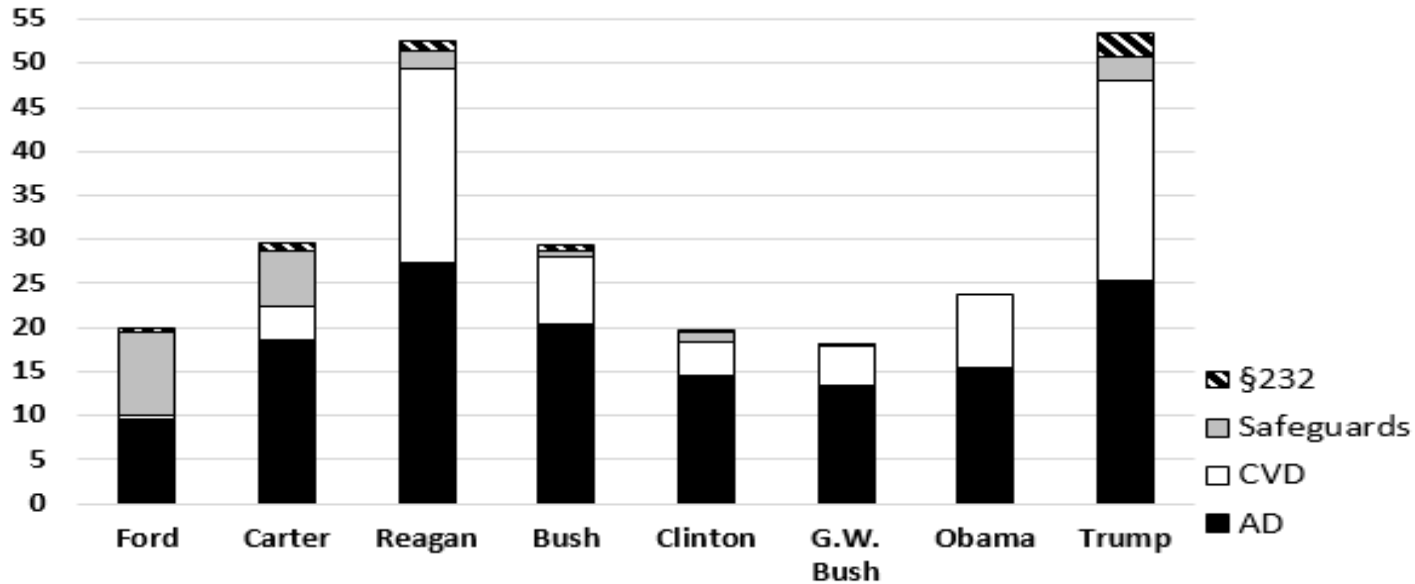
TRUMP: THEORY AND PRACTICE

- Pulled the plug on TPP under the President's constitutional foreign affairs power;
- NAFTA: initial Mexican focus, in view of trade deficit (more than US\$60 billion/year). Negotiations have, however, become increasingly tense for all countries involved. Review (focus on rules of origin) – important to note that NAFTA termination would have a significant impact on US firms (40% of US imports from Mexico are intermediate products produced in the US; 1.1 million American jobs depend upon exports to Mexico). Sectors that are particularly sensitive to NAFTA-changes: auto industry (40% of US light vehicles exported in 2015 went to NAFTA partners; 75% of the value of US automotive parts exports were shipped to NAFTA partners); agriculture; medical devices; textile & clothing; “sunset clause” ...
- AD e CVD: the USA is likely to increase these actions (that in the past affected as much as 8% of Chinese exports to the USA, mainly steel);
- Multilateral constraints – WTO bindings: on average the USA can increase its tariffs by only 1% vs. threats of 35%-45% tariffs... Alternative, to use arguments based on national security;
- Negative attitudes towards the WTO (DDA, S&D treatment, DSB...).

LEGAL ACTIVISM

SOURCE: VANGRASSTEK (2017B)

Average Annual Number of Investigations Initiated in Each Administration



Note: All data are for the full calendar years shown, including presidents' first year in office (when they are sworn in on January 20). Data for the Ford administration begin with the entry into force of the Trade Act of 1974 (January 3, 1975). Data for the Trump administration are annualized, based on activity during January-September, 2017. Data for antidumping and countervailing duties are based on products rather than partners (e.g. if simultaneous petitions are filed against imports of a given product from three countries that is counted as one petition rather than three).

THE DANGER OF THE NATIONAL SECURITY ARGUMENT

SOURCES: PRIMO BRAGA AND HOEKMAN (2017), PRIMO BRAGA (2018) AND BOWN (2018)

- **Section 232 (Steel and Aluminum)**

- *March 1, 2018: Trump announces forthcoming steel (25%) and aluminum (10%) tariffs*
- *March 8, 2018: Trump issues formal steel and aluminum tariff proclamations, initially exempting Canada and Mexico*
- *March 22, 2018: Trump issues revised formal steel and aluminum tariff proclamations, ongoing negotiations with Canada, Mexico, EU, South Korea, Argentina, Australia and Brazil*
- *March 23, 2018: Trump's steel and aluminum tariffs go into effect;*
- *April 2, 2018: China imposes retaliation on \$3 billion of US exports for Trump's steel and aluminum tariffs*

- **Implications for the WTO!!!**

SECTION 301 AND “TIT-FOR-TAT”

SOURCES: PRIMO BRAGA AND HOEKMAN (2017), PRIMO BRAGA (2018) AND BOWN (2018)

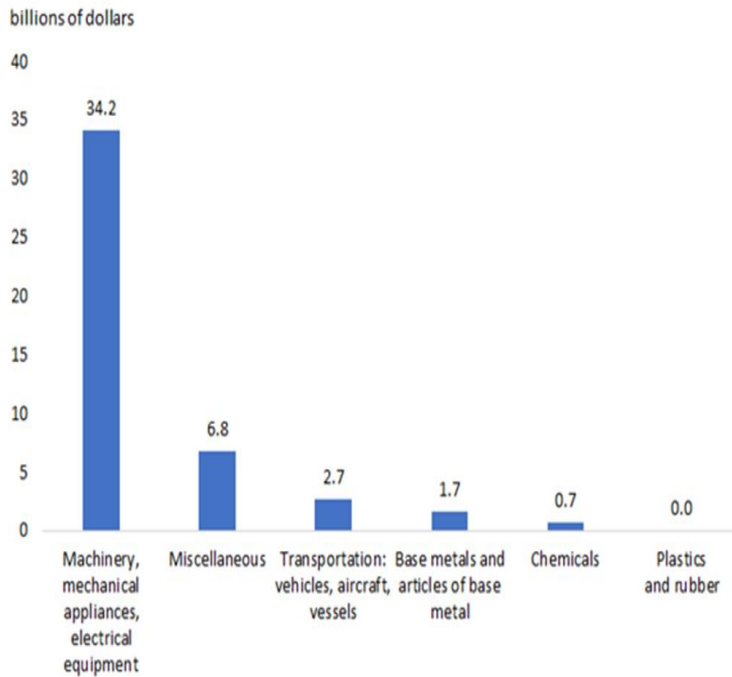
- **Section 301 (China/IP)**
 - *“March 22, 2018: Trump administration releases Section 301 investigation report, President Trump indicates remedy forthcoming is (1) tariffs of up to \$60 billion on China, (2) WTO dispute, (3) new rules on investment*
 - *April 3, 2018: Trump releases list of 1,333 products (\$46.2 billion of US imports from China) subject to forthcoming 25% tariffs*
 - *April 4, 2018: China publishes list of 106 products (\$49.8 billion of China’s imports from US) subject to forthcoming 25% tariffs as retaliation for Trump’s Section 301 tariffs*
 - *April 5, 2018: Trump instructs USTR to consider whether an additional \$100 billion of US imports from China should be subject to new tariffs”*
- **Provisory truce in May;**
- **Echoes from the 30s...**

A “TRADE WAR”?

SOURCE: BOWN (2018)

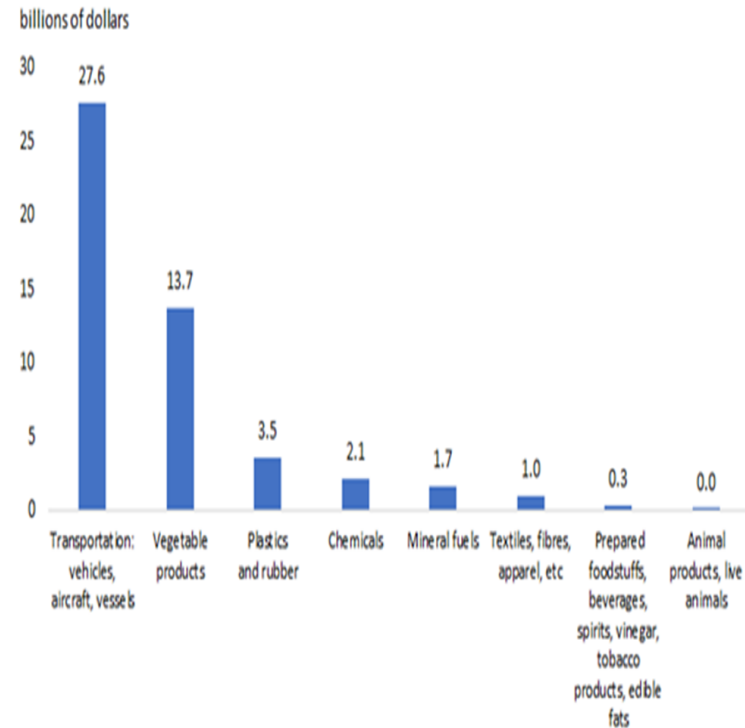
US Section 301 against China: targeted products

Figure 1 US imports from China in 2017 subject to Trump's proposed Section 301



An eventual Chinese retaliation

Figure 2 US exports to China in 2017 subject to China's tariff retaliation



THE “TRUMP” EFFECT

SOURCES: PRIMO BRAGA (2016B); VANGRASSTEK (2017B)

Alternative scenarios:

- (1) – Redesigning traditional US trade policy approach: withdraw from TPP (loss of face and of potential economic gains); TTIP DOA; NAFTA adjustments (annual revisions; Section 201 implementation act...); legal offensive at the WTO (legal disputes...); push for bilateral deals...
- (2) -- (1) + unilateral actions: using Commerce Acts of 1962 (Section 232 (b)) and of 1974 (Sections 122, 201, e 301); eventually declaring China a currency manipulator irrespective of rules; from tweaking NAFTA to major changes (e.g., “a sunset clause” ...); skirmishes at the WTO (e.g., negative attitudes towards the DSB; potential for conflict around Article XXI – the national security rationale for trade interventions...).
- (3) – Shock treatment: (2) + USA out of NAFTA (Chapter 22) + out of the WTO + reviewing existing bilateral agreements...; “revolution” in the global architecture of world economy.

Conclusion: increased potential for trade conflicts and the end of “Pax Americana”...

GLOBAL GOVERNANCE

GLOBAL GOVERNANCE

SOURCE: BOUGHTON AND BRADFORD (2007)

“Global governance is a process of cooperative leadership that brings together national governments, multilateral public agencies, and civil society to achieve commonly accepted goals.”

- Dominance model of global governance: few countries seating at the top of the global economic pyramid invited others to participate without ceding much control;
- Is the system out of date?
 - Center of economic power has drifted/emergence of new regional powers;
 - Fragmentation of specialized agencies/lack of coherence/lack of comprehensive system of oversight.

WORLD (DIS)ORDER

- International government organizations (IGOs) began to be set up by governments in the XIX century to address transnational problems and to engage in sovereign sensitive activities (e.g., surveillance, dispute resolution...);
- Current structure set up after WW II under the leadership of the U.S.; Economic priorities: how to finance postwar reconstruction, stabilize exchange rates and discipline trade protectionism to foster trade, and to avoid balance of payments crises;
- Bretton Woods (Mount Washington Hotel, New Hampshire, June 30- July 22, 1944): 750 delegates from 44 countries
- J.M. Keynes vs. Harry Dexter White:
 - British plan: the creation of an agency to which countries would delegate monetary powers. An automatic clearing house in which no national currency would have a central role and no conditionalities would be imposed upon deficit countries.
 - US plan: the new institution would use the U.S. dollar (and gold) as its main unit of account. Transfers would be made on a discretionary basis and the institution would have the power to set conditions.

WORLD (DIS)ORDER (CONT.)

- Original main pillars:
 - Global/country financial imbalances (IMF);
 - Resource transfers/development (WB and Regional Development Banks);
 - Trade (GATT/WTO);
 - Security (UN/Security Council).
- Since then ad hoc groupings have emerged over time to complement these institutional structures: G7/8, G20...
- Dominance model of global governance: few countries seating at the top of the global economic pyramid invited others to participate without ceding much control;
- WW III (Cold War): American exceptionalism vs. “aberration” of Communism;
- “End of history”: spread of democracy and free markets would create a just, peaceful, and inclusive world...

WORLD (DIS)ORDER (CONT.)

SOURCE: ADAPTED FROM KISSINGER (2014); PRIMO BRAGA (2017A)

- Power is in flux;
- Economic globalization (interdependence) vs. nation-state based political structures (winners vs. losers);
- Nature of the state is being challenged (failed states; non-state actors, WW IV= war on terrorism?; the EU experiment...);
- Absence of an effective platform for cooperation among great powers... (US vs China);
- Skepticism of the Trump administration with respect to multilateral solutions;

Key challenges: how to achieve equilibrium while restraining the “dogs of war”; how to preserve the multilateral trade order?

TENSIONS AND THE EVOLVING BALANCE OF POWER

- A functional international order is required:
 - (i) to avoid great-power confrontation;
 - (ii) to sustain economic prosperity and proper rules of the game (e.g., to minimize trade frictions), as well as related international institutions;
 - (iii) to check international aggression and tyranny;
 - (iv) to facilitate the provision of global public goods (e.g., addressing climate change).

A KEY CONCEPT

**“A LIBERAL INTERNATIONAL ECONOMY
CANNOT COME IN EXISTENCE AND BE
MAINTAINED UNLESS IT HAS BEHIND IT
THE MOST POWERFUL STATE(S) IN THE
SYSTEM.”**

Robert Gilpin

G7 IN CANADA, JUNE 2018: “FRENEMIES” ..



“VOICE” REFORM IN THE BRETTON WOODS INSTITUTIONS

AN EXAMPLE: WORLD BANK “VOICE REFORM”

IBRD REALIGNMENT => 75% EW + 20% FC +5% DC

AN INCREASE OF DTC VOTING POWER OF +3.13% IN PHASE 2 (2010)

SOURCE: DEVELOPMENT COMMITTEE (2010)

Economic Weight (EW)

- Global GDP blend converted at market exchange rates (60%) and PPP exchange rates (40%), three-year average (2006-2008)

For Developed Countries

- Threshold of 90%, i.e. if shareholding is more than 10% below EW, shareholding is brought up to 90% of EW

For DTCs

- *No Threshold* (100% allocation of shares to bring shareholding to EW).
- *PPP Booster*: A minimum increase of +10% in shareholding percentage for members whose GDP share on a PPP-only basis is at least 30% above their shareholding, calculated after allocation of shares based on EW

FINANCIAL CONTRIBUTIONS (FC)

IDA13-15 contributions

Eligible members: IDA ratio above 1.0 = higher of (a) share of IDA13-15 contributions/ share of donors' IBRD shareholding, or (b) share of IDA13-15 contributions/ notional IDA burden share.

Allocation of additional shares: +2.0% of IBRD shareholding. Allocate at least 500 shares, but capped at a +10% shareholding increase for smaller shareholders (below 5,000 shares held)

Historical IDA contributions (one-time recognition)

Eligible members: Historical IDA ratio above 1.0 = share of IDA0-15 contributions/ share of donors' IBRD shareholding, calculated separately for Developed Countries and for DTCs.

Allocation of additional shares: +1.0% of shareholding. Additional recognition of +0.5% of shareholding for donors with historical IDA ratio over 2.0, when calculated for all donors

IDA16 pledges from DTC donors

Current IDA donors are allocated shares to maintain voting power if increasing their IDA16 contributions by at least 50% over IDA15.

New IDA donors are allocated shares to maintain voting power if contributing to IDA16 at their notional IDA burden share

DEVELOPMENT CONTRIBUTIONS (DC)

Protecting the voting power of the Smallest Poor members

Eligible members: Low-income/lower middle income countries < 0.4% shareholding (WDI July 2009, not limited to IDA-only members).

Allocation of up to 250 shares to address voting power dilution

Recognition of DTC contributions to IDA, including for IDA13-15, historical IDA contributions, and future contributions for IDA16 (see under FC above)

IBRD VOTING POWER REALIGNMENT/2010: RAISING DTC VOTING POWER FROM 42.6% (2008) TO 47.19%

SOURCE: DEVELOPMENT COMMITTEE (2010)

Country	Pre-Reform	Rank
USA	16.36%	1
Japan	7.85%	2
Germany	4.48%	3
France	4.30%	4
UK	4.30%	4
Italy	2.78%	5
Canada	2.78%	5
Russian Federation	2.78%	5
Saudi Arabia	2.78%	5
China	2.78%	5
India	2.78%	5
Brazil	2.07%	12

Post-Phase 2 Voice Reform	Rank
15.85%	1
6.84%	2
4.00%	4
3.75%	5
3.75%	5
2.64%	8
2.43%	9
2.77%	7
2.77%	7
4.42%	3
2.91%	6
2.24%	10

NEW INSTITUTIONS

- Contingency Reserve Arrangement, 2014 (\$100 billion; China's participation at \$41 billion; Brazil, India, Russia at \$18 billion each; South Africa at \$5 billion) to forestall short-term balance of payments pressures needs (alternative to the IMF?);
- New Development Bank (NDB), 2014: the BRICS answer to the Western dominated World Bank? With a start-up capital of US\$ 50 billion (\$10 billion in cash and \$40 billion in callable capital; to be eventually raised to \$100 billion in 5 years), even under very optimistic assumptions the new bank would need 20 years to reach annual lending levels similar to those currently provided by the World Bank;
- A relevant parallel initiative:
 - Asian Infrastructure Investment Bank (AIIB): Chinese-led organization (\$50 billion capital) to help underwrite infrastructure projects in Asia (challenging/complementing the ADB and the WB?; fostering frictions in the Western alliance since the UK, France, Germany, and Italy willing to join in spite of US concerns...)

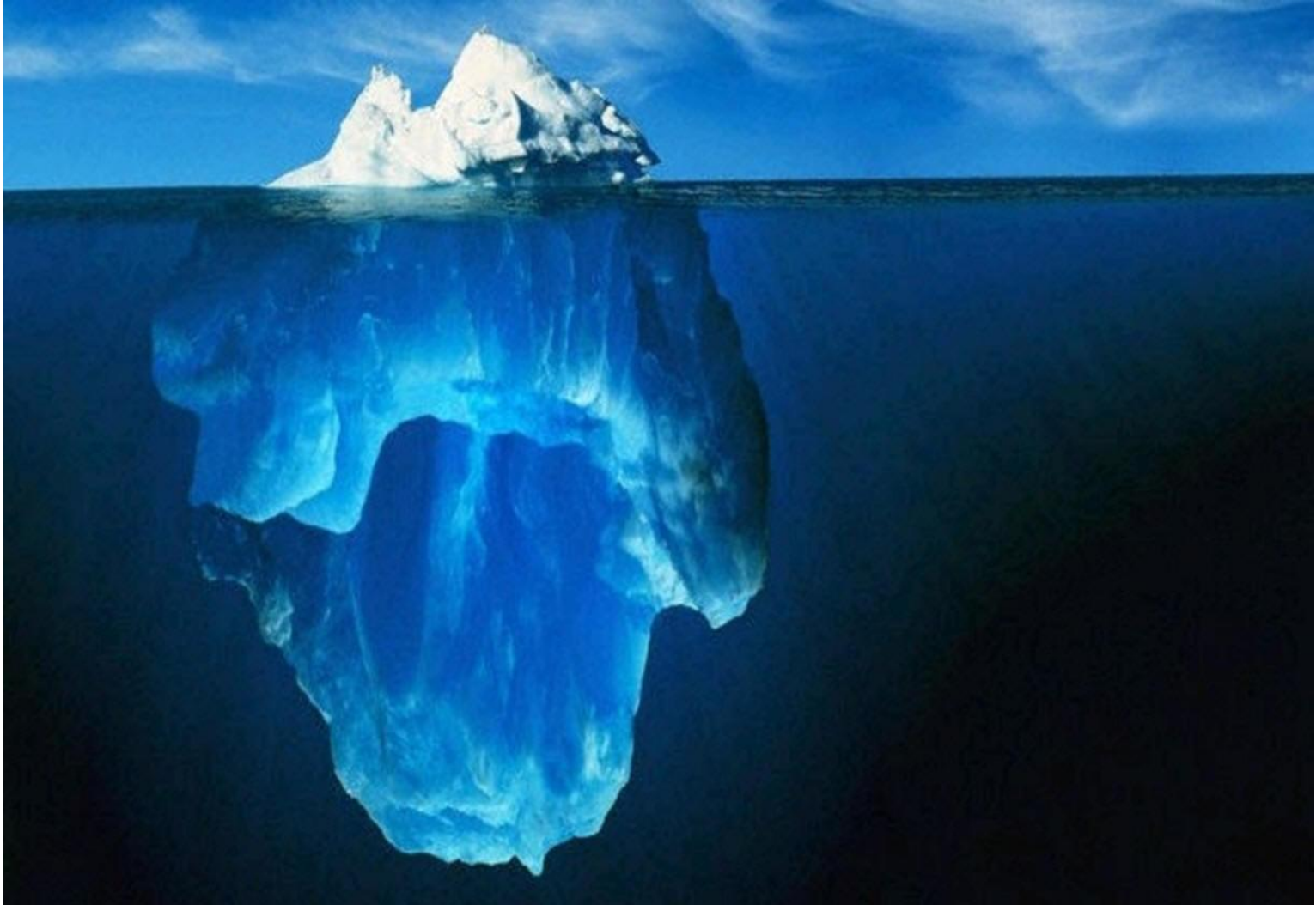
THE FUTURE OF THE GLOBAL TRADE ORDER

THE ROAD FROM THE GATT TO THE WTO

SOURCES: WTO, DIFFERENT PUBLICATIONS; PRIMO BRAGA (2015B)

- Bretton Woods and the ITO;
- GATT 1947: 23 “contracting parties” agree to tariff deal;
- GATT a treaty, not an organization;
- “Member-driven” – “weak” secretariat;
- 1994: Uruguay round concludes; WTO created and came into force 1 January 1995;
- GATT 1994: 128 members with very different obligations;
- 2001: Doha Development Agenda (DDA) launched;
- Bali Ministerial, 2013: 9th MC, some signs of progress (TFA);
- 2017: 164 members; DDA still ongoing, but “no light at the end of the tunnel...” and some key member(s) have already stated that it is dead!
- Expectations for the 11th MC (Buenos Aires) were subdued and as expected no major decisions were taken (not even a Ministerial Declaration...)

WTO: MULTILATERAL TRADE ROUNDS ARE JUST THE TIP OF THE ICEBERG...



THE WTO AS A DISPUTE SETTLEMENT FORUM AND AS A MONITORING BODY

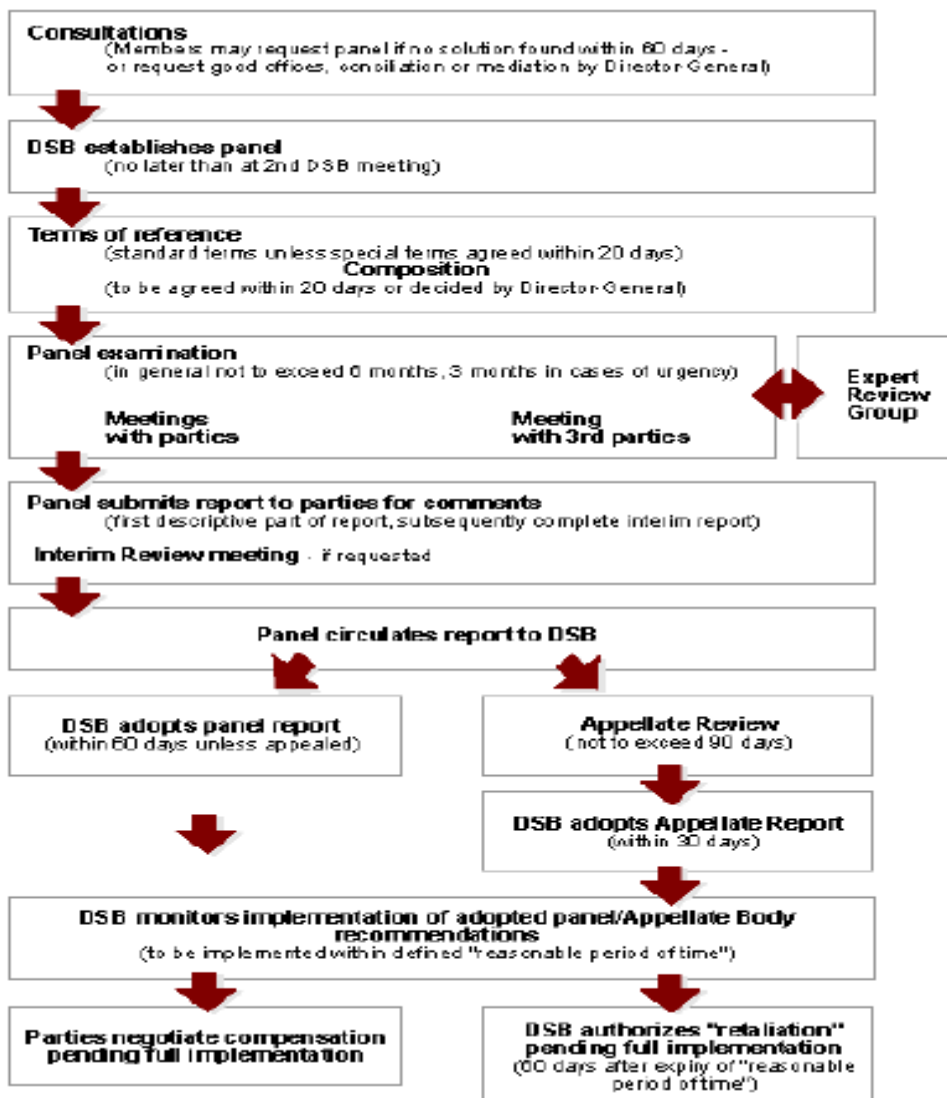
- **Trade Policy Review Mechanism-** Periodic review of trade policies
- **Settlement of disputes under the DSU**
 1. Consultations, good offices, conciliation and mediation
 2. Panel proceedings
 3. Appeal Body
 4. Consideration and adoption of Panel/AB reports by the DSB

If the report concludes that a measure is inconsistent with a covered agreement the Panel (AB) must recommend that the Member concerned bring the measure into conformity with that agreement.

Adoption of Panel (AB) reports by the DSB is automatic.
 5. Implementation of reports by members
 - Compliance
 - Negotiation of compensation (voluntary, mutually acceptable)
 - Authorization of retaliatory action (suspension of concessions/obligations)

WTO DISPUTE SETTLEMENT FLOW CHART

SOURCE: OWENS (2015)



THE DISPUTE SETTLEMENT SYSTEM (DSS) STRENGTHS

SOURCE: SACERDOTI (2016)

- Some positive aspects of the DSS:
 - “The high number of cases introduced (the 500 mark was reached in November 2015; of these only 282 have been brought to litigation in the end) and the very high proportion of cases resolved effectively by the removal of measures found to be in breach of WTO obligations (some 90% of those brought to adjudication);
 - The effective functioning of its multi-stage procedure (from consultation to implementation, through a double-stage adjudication phase), which is meant to solve specific, mostly bilateral disputes, but at the same time to give guidance to all interested members and to take into account the multilateral dimension of the trading system;
 - The participation of both major trading powers and small developing countries (signaling the importance of the DSS also for small players and developing economies in ensuring access of their products to the larger economies’ markets);
 - The development of a balanced and consistent case law, sensitive to non-trade concerns such as environment protection and health, which recognizes on one hand the need to uphold market access obligations, and on the other hand the existence of evolving non-trade values and policies – domestic and international – that need to be safeguarded as part of the domestic policy space of WTO Members.”

CONCERNS ABOUT THE DSS

SOURCE: SACERDOTI (2016)

- “The increasing number of cases brought to panels and the increasing complexity of disputes and sophistication of arguments made is extending the length of proceedings beyond reason, especially at the panel stage, and is putting strain on the limited resources of the Secretariat.
- The willingness of losing respondents to promptly comply with the decisions appears to be decreasing, in that effective implementation, while usually performed, requires on average more time. Alternatives to compliance (such as compensation), which appear to be on the rise, may tilt the system towards the protection of the interests of major trading nations, who may be able to pay-off weaker members while maintaining their import restrictions;
- WTO Members appear to be unable to agree on further liberalization (notably in services) and on adding new rules to the multilateral system to face new issues (such as the green economy, environmental subsidies or electronic commerce). This leads to a possibly problematic role of “gap filling” and “law-making” for the DSS, for which it was not intended.
- The parallel massive increase of regional trade agreements (RTAs), to which WTO Members are increasingly turning (including “mega-RTAs” such as the TPP and the TTIP), risks reducing the relevance of the WTO and therefore possibly of its DSS, which moreover might find competitors in the dispute settlement mechanisms of RTAs.
- On several recent occasions the initiation of a case by a country against another country has been immediately followed by the initiation of a separate case by the respondent in the previous case against the first country (notably between the United States and China and between Argentina and the United States and the European Union). Although there is no evidence that the second case was a kind of tit for-tat response to the first one, this belief has been informally expressed as a sign of an abuse or political strategic use of the DSS, contrary to its purpose.”

THE U.S. AND THE DSS

SOURCE: CRS (2018)

Table 3. WTO Disputes Involving the United States

Selected Trading Partners	U.S. as Complainant (# of Disputes)	U.S. as Respondent (# of Disputes)
China	22	10
European Union	19	33
Canada	7	19
Korea	6	12
Mexico	6	9
Japan	6	8
India	7	10
Argentina	5	5
Brazil	4	11
All others	35	19
Total	117	136

Source: WTO, https://www.wto.org/english/tratop_e/dispu_e/find_dispu_cases_e.htm.

Notes: Includes cases since 1995 as of March 2018. Trading partners sorted by number of cases initiated by the United States. Data do not include cases with U.S. participation as a third party.

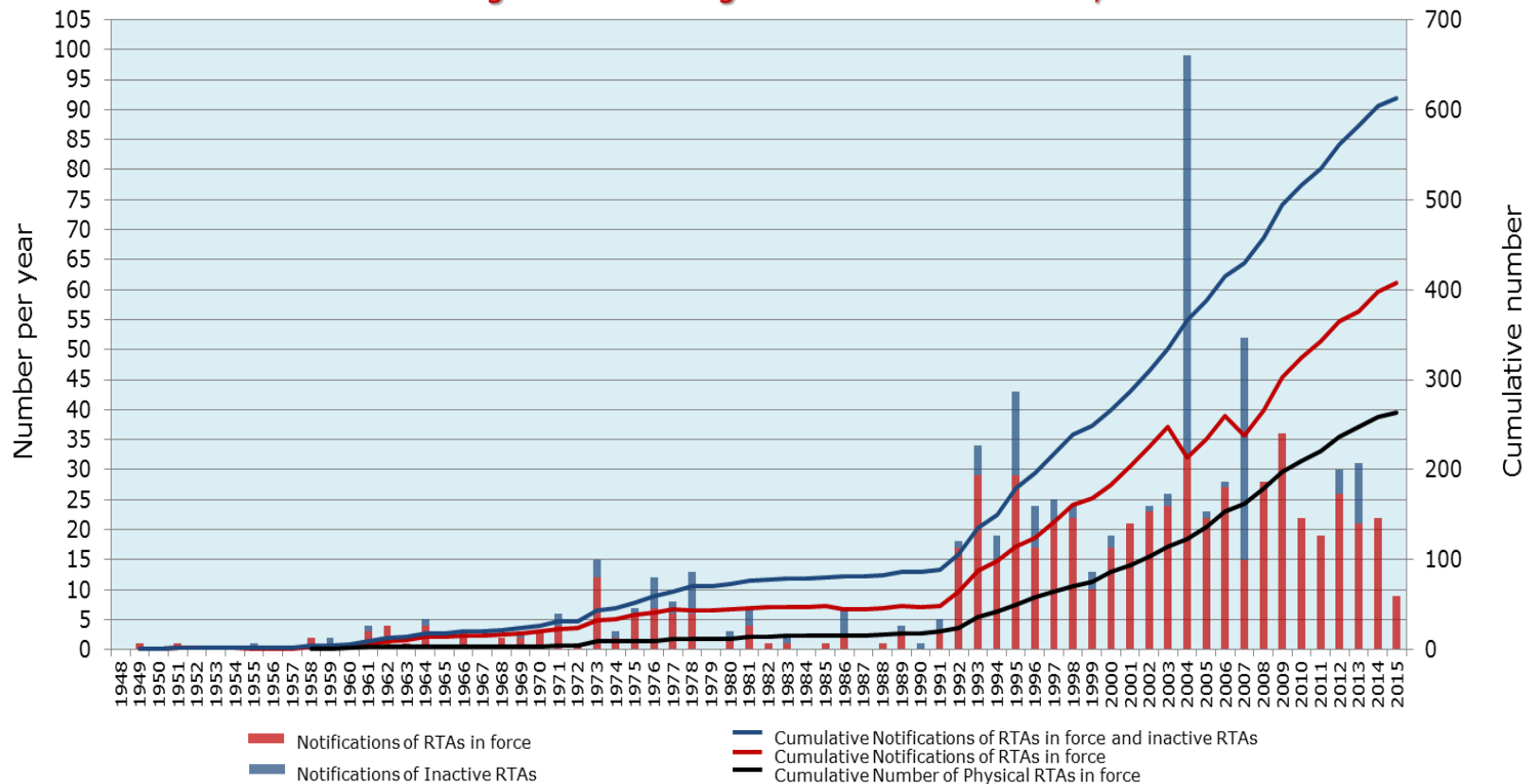
THE PROLIFERATION OF PREFERENTIAL TRADE AGREEMENTS

SOURCE: WTO (2011) AND PRIMO BRAGA (2015B)

- From around 70 active PTAs (1990) to more than 300 currently...
- Number of PTAs per country: on average a country was involved in 2 PTAs around 1990, nowadays the average is around 12 plus... (WTO 2011)
- More importantly, the USA became a key player in the PTA game (disillusion with multilateral trade system or strategic behavior?)
Will the Trump administration maintain such a trend?
- Beyond the expansion in numbers we also see a trend to go beyond GATT-style PTAs, covering also NTBs, regulations, SOEs, IPRs, FDI and ISDS ... (i.e., pursuing deep integration)
- Can PTAs be multilateralized or can their negative effects be minimized?

THE CHANGING TRADE ENVIRONMENT

Evolution of Regional Trade Agreements in the world, 1948-2015



Note: Notifications of RTAs: goods, services & accessions to an RTA are counted separately. Physical RTAs: goods, services & accessions to an RTA are counted together.
 Source: WTO Secretariat.

PTAS AND THE WTO: DIFFERENT PERSPECTIVES

Source: Baru and Dogra (2015)

- PTAs offer a fast-track option for trade liberalization but are complementary to the WTO;
- Respond to new realities of international trade (GVCs, interaction between FDI and trade);
- Driven by geo-political considerations either to contain the new mega-trader (China) from a Western perspective; or to pave the way for new China-centered production networks from a Chinese perspective.

TRANSITION IN THE CONTEXT OF PTAS

SOURCE: PRIMO BRAGA E HOEKMAN (2017); HOEKMAN (2017)

- “On November 11, 2017, eleven of the original TPP twelve signatories announced that they would be willing to go ahead with a new agreement – the so-called Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) – that builds upon the TPP text. There was also a decision to suspend 20 sensitive provisions of the original agreement, on topics such as express shipments, investor rights, and IPRs. Actually, 11 of the suspended provisions are related to IPRs, reflecting the controversial character of some of the rules of the original TPP as discussed above. The suspension of these provisions, rather than simply eliminating them, suggest that the CPTPP partners want to keep the door open for an eventual return of the United States to the agreement in the future.”
- Comprehensive Economic and Trade Agreement (CETA), Canada-EU (provisional application as of 21/September/2017): only 2 chapters focus on traditional market access issues (tariffs and government procurement). The main focus is on regulatory issues, trade facilitation, “mutual recognition” and regulatory equivalence (SPS...).

SCENARIOS

THE CHINA FACTOR

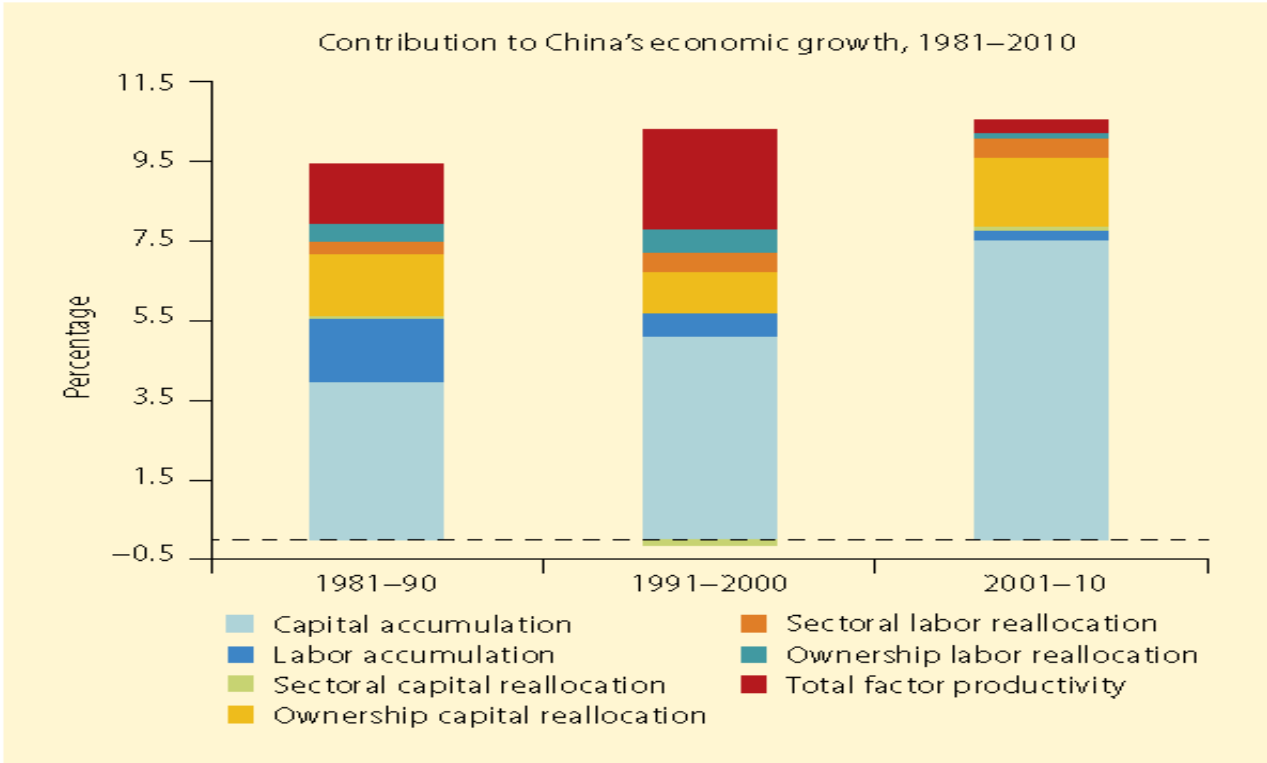


Source: Financial Times, July 31, 2013

SOURCES OF ECONOMIC GROWTH

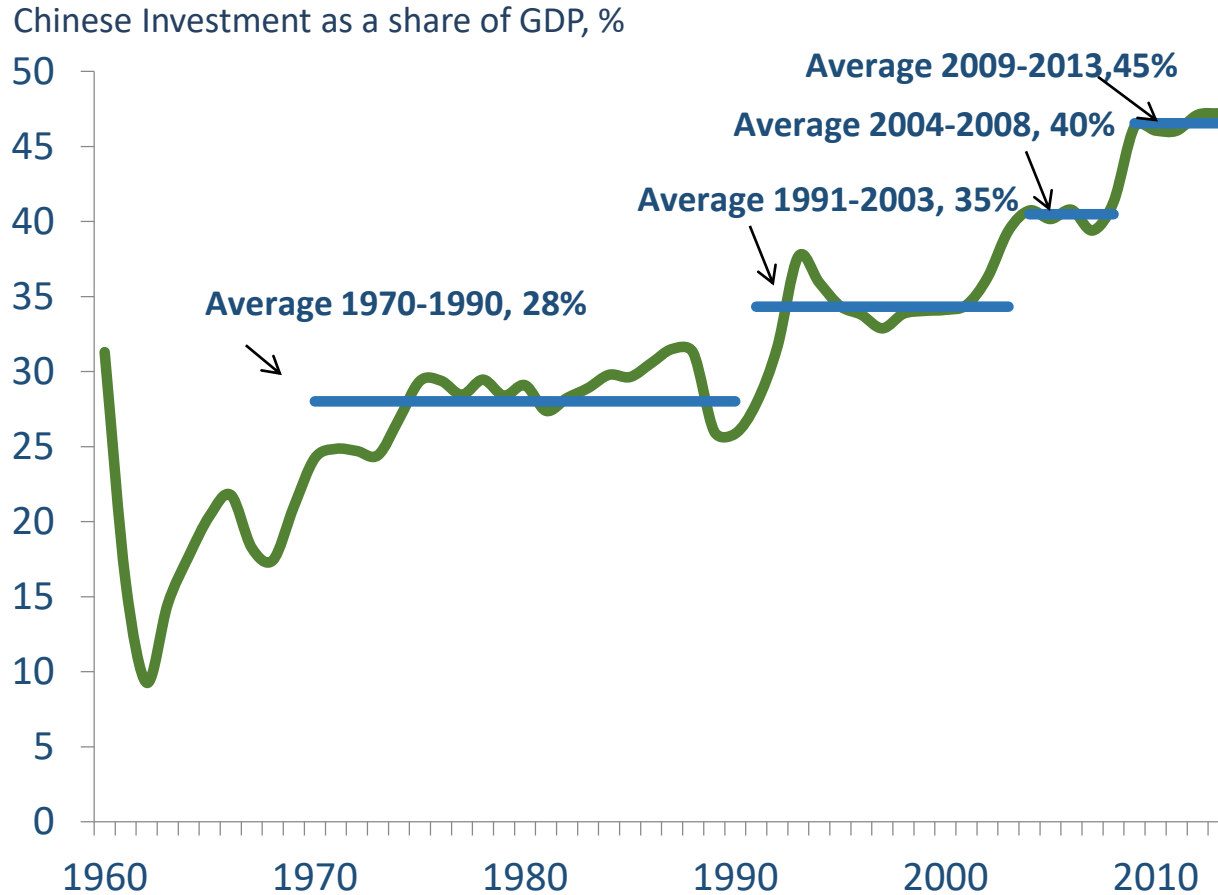
SOURCE: WORLD BANK AND DRC (2014)

FIGURE 0.2 Productive gains from reallocating labor and capital are almost exhausted



Source: Based on research by David Bulman and Aart Kraay for this study.

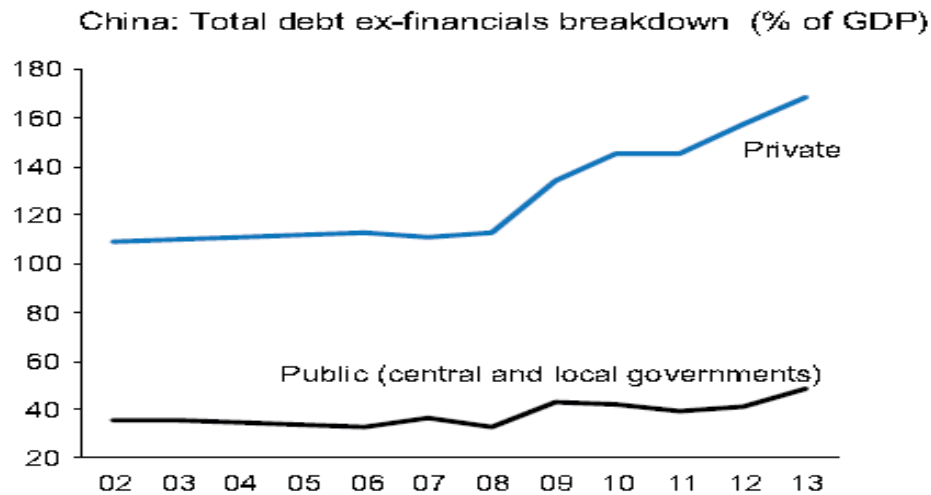
HIGH CHINESE INVESTMENT AND CONCERNS ABOUT FINANCING



Source: World Bank.

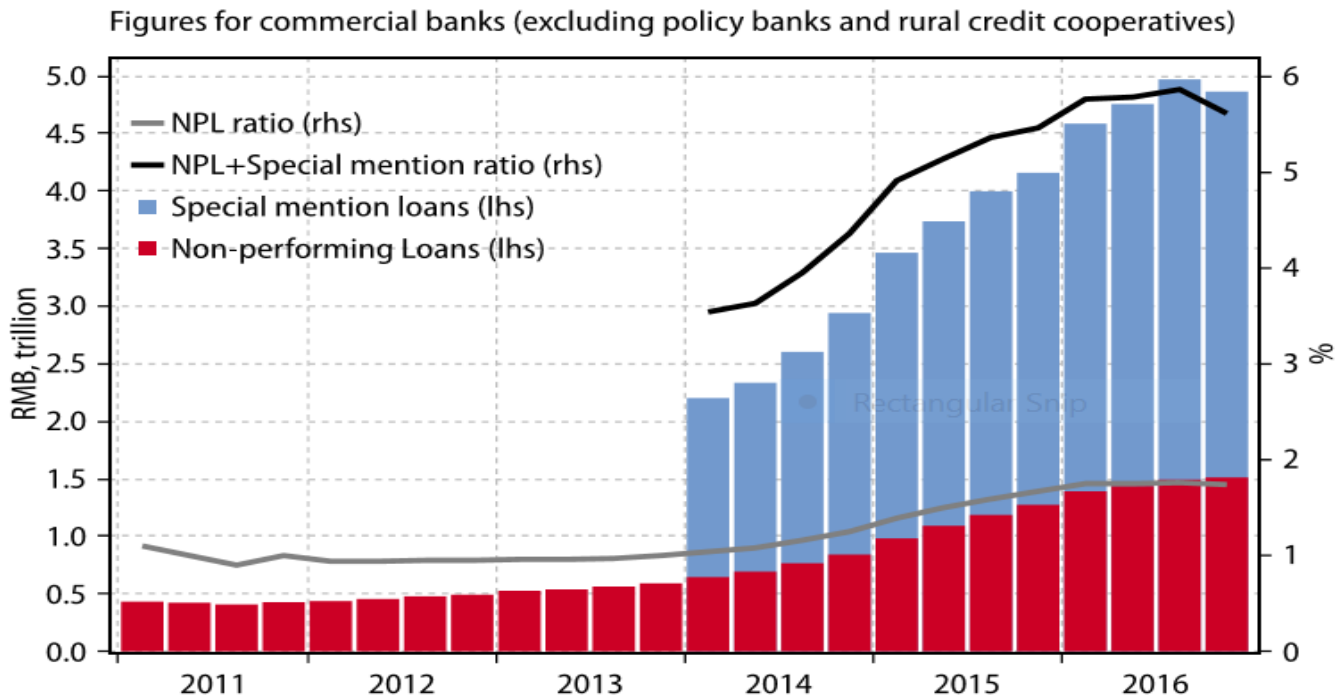
CHINESE DEBT EVOLUTION

SOURCE: BUTTIGLIONE ET AL. (2014)



CHINA: NPLS

FONTE: KROEBER (2017)



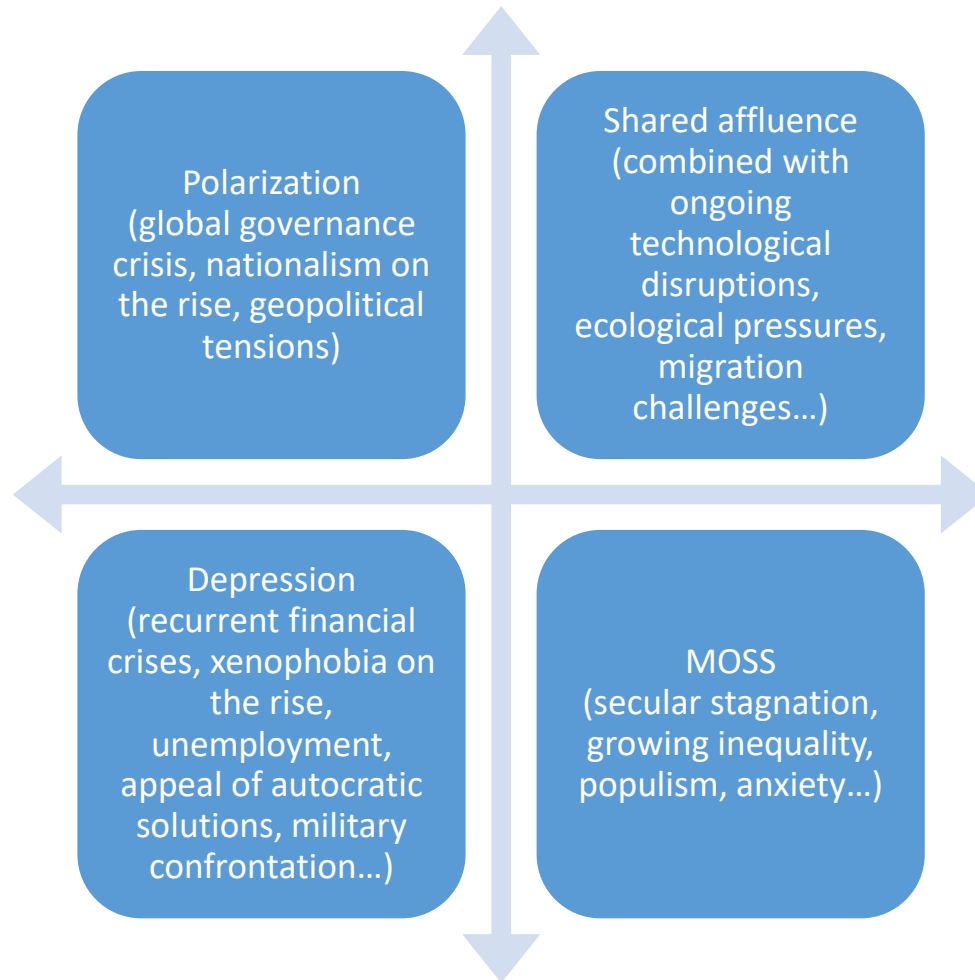
REMEMBER

Nowadays, what happens
in China will not stay in
China...

MACRO EXTERNAL SCENARIOS

HICs -- economic recovery	(1) Unicorn	(4) New dynamism
Secular stagnation	(2) Perfect storm	(3) MOSS
	Commodity prices (-)	Commodity prices (+)
	China hard- landing	China soft- landing

LONG TERM SCENARIOS: GROWTH AND INTERNATIONALIZATION



CONCLUDING REMARKS

- Have we reached “peak globalization”? **YO**
- Danger ahead: a new protectionist wave driven by mercantilistic strategies (USA) and the unintended consequences of policy decisions driven by “globalization fears” (e.g., BREXIT);
- The Trump administration doesn’t support the USA playing the role of the “indispensable” nation to foster a stable global order; the danger of retrenchment driven by domestic politics and Trump’s skepticism about multilateral solutions/institutions is real...;
- The relative economic weight of China is expected to continue to increase, but the related “commodity super-cycle” has come to an end;
- Revealed preference for plurilateral cooperation *outside* the WTO (e.g., mega-preferentials and TiSA...);
- Multinational corporations will increasingly focus on “glocal” strategies;
- Can the private sector help building “bridges” back to the WTO (plurilateral solutions?)
- **Who will lead?**

THE IMPORTANCE OF A “COUNTERFACTUAL”...



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