#### William Milberg

Dean and Professor of Economics Minsky Conference/Levy Institute April 18<sup>th</sup>, 2018

# "Trump won on Trade": "The end of the era of free trade agreements"



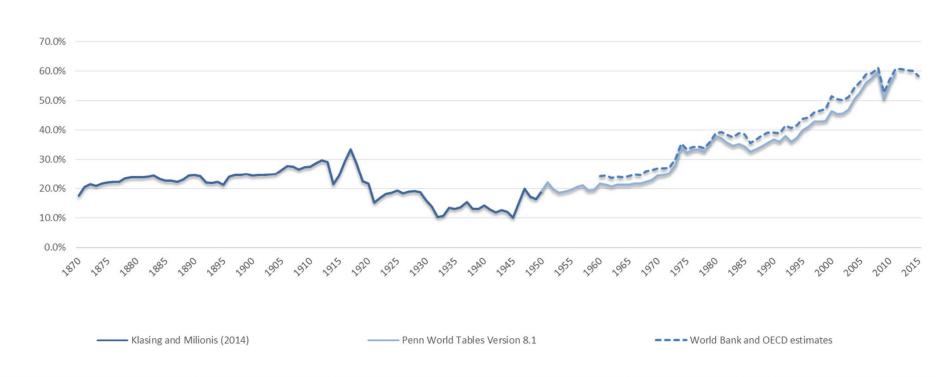
### unilateral protection

- Elasticity pessimism
- Rebalancing
- Return of twin deficits?
- Supply chain effect and continued inequality
- Hegemon retreat a la 1973?

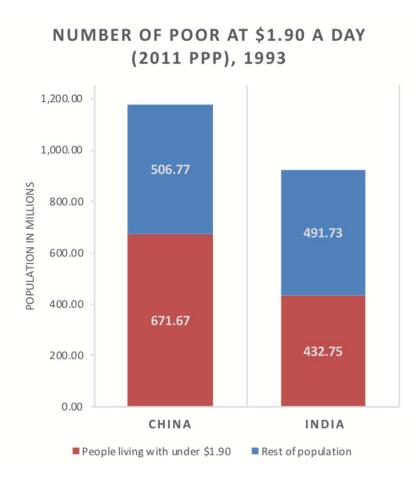
# How did we get here?

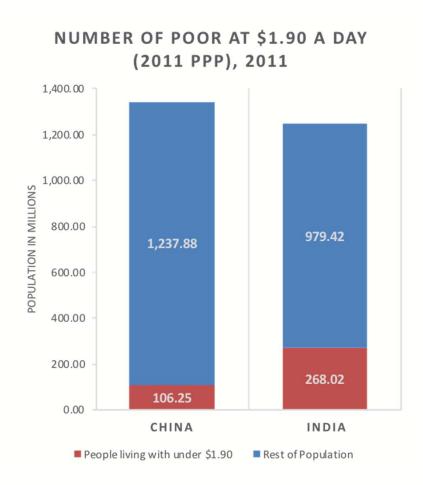
### World Trade (% GDP), 1870-2015

#### World Trade as Percentage of GDP



# Poverty reduction in China and India, 1993 - 2011

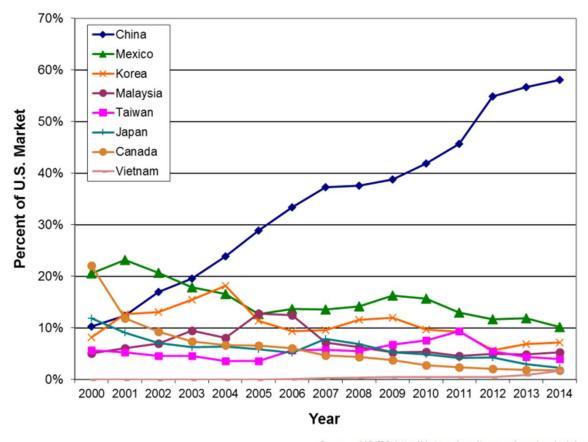




THE NEOW'SEHOOLd Bank, 2017

# Competitors in U.S. Market for Telecom Equipment, 2000-2014

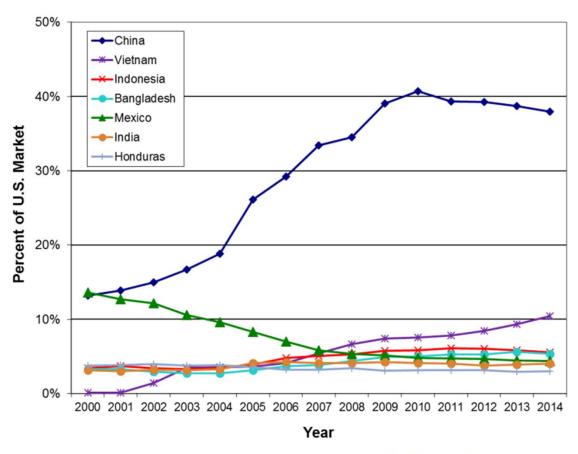
Main Competitors in the U.S. Market for Telecom Equipment (SITC 764)



Source: USITC http://dataweb.usitc.gov downloaded Aug 26, 2915

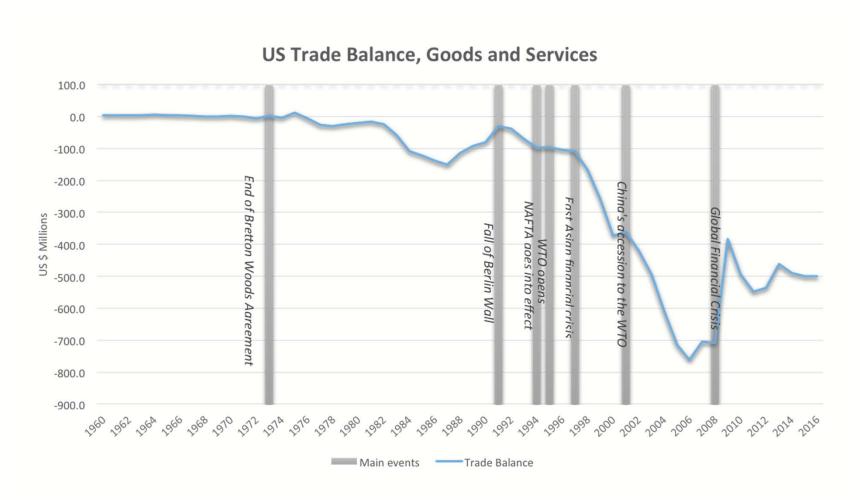
# Competitors in U.S. Market for Apparel and Clothing, 2000-2014

Main Competitors in the U.S. Market for Apparel and Clothing (SITC 84)



Source: USITC http://dataweb.usitc.gov downloaded Aug 26, 2915

### **US trade balance, 1960-2016**

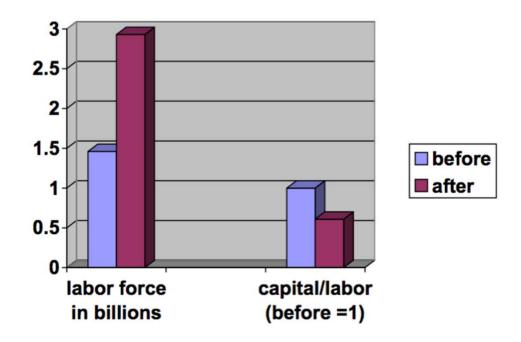


#### Causes of the chronic US trade deficit

- •Declining competitiveness vis-à-vis Europe, then East Asia, then others with growing capacity.
- Capital account liberalization and inflow
- Strong dollar
- •Firm strategy of offshore outsourcing
- Trade liberalization, including NAFTA and WTO

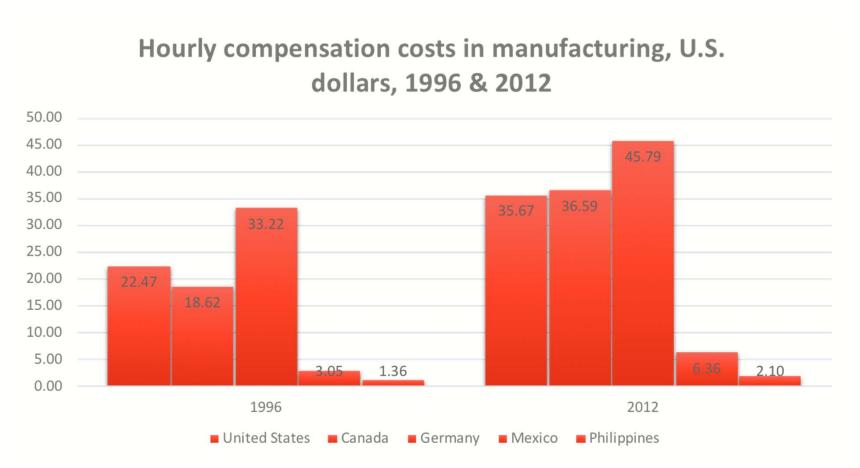
### "The great doubling"

Exhibit 1: Workers in the Global Labor Force and the Global Capital/Labor Ratio, 2000, Before and After China, India, and ex-Soviet bloc join global economy



Source: Employment from ILO data, laborsta.ilo.org/ Millions of Economically Active Persons, 2000 Capital-labor ratio, calculated from Penn World Tables as described in Freeman 2005, scaled so before is 1.00.

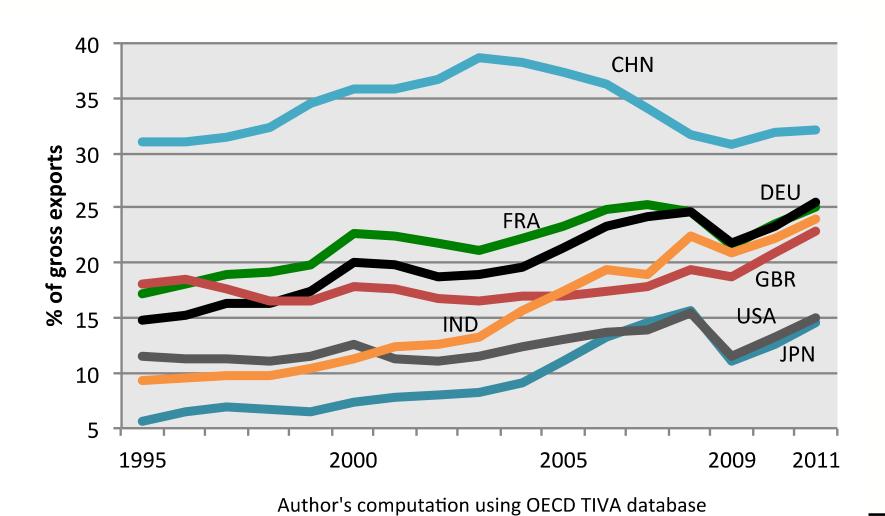
# Hourly compensation costs in mfg., selected countries



Source: BLS (2017), International Labor Comparisons

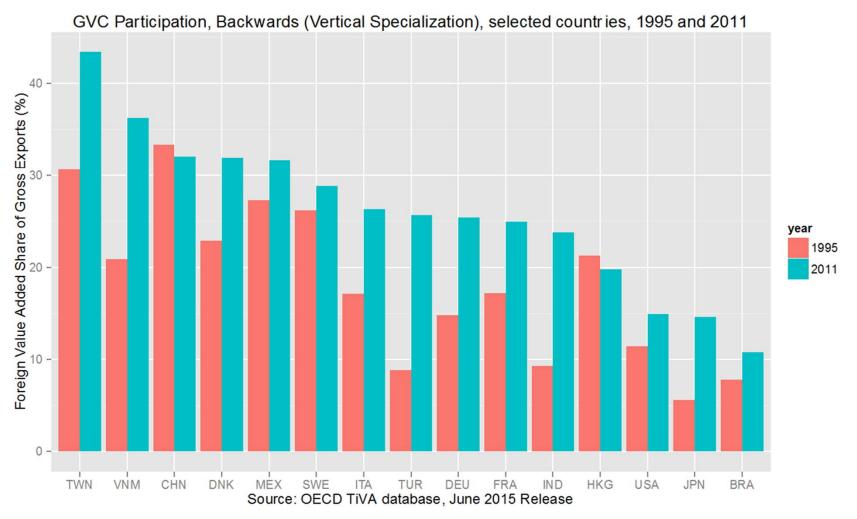
### GVC expansion: 1995-2011

Foreign VA in exports of 7 biggest economies



#### Growth in importance of global value chains:

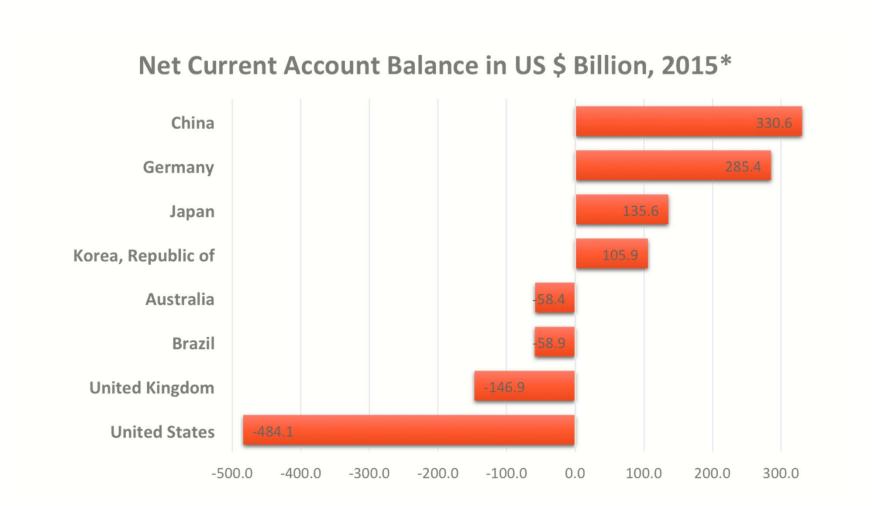
Foreign Value Added Share of Gross Exports, 1995 + 2011

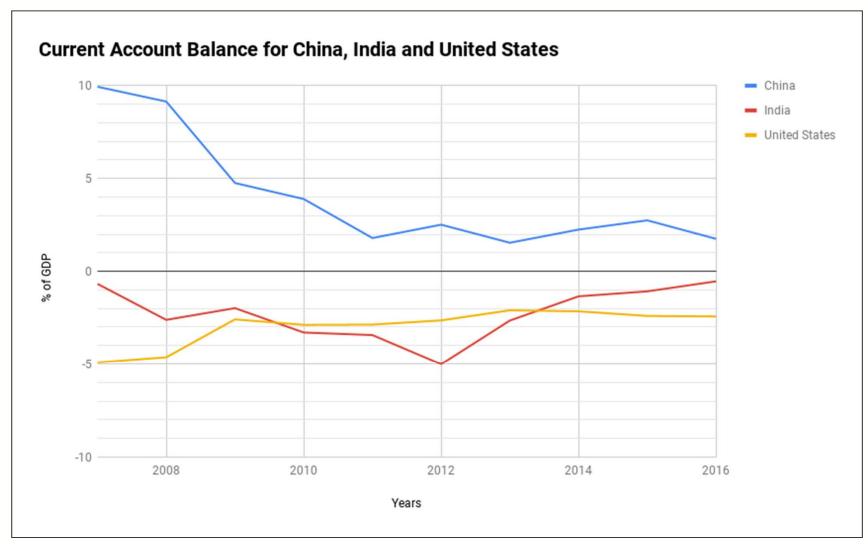


### political reversal: Gore – perot nafta debate, 1993



#### Global imbalances in international trade





Source: International Monetary Fund, Balance of Payments Statistics Yearbook and data files, and World Bank and OECD GDP estimates

# US Winners from globalization and US trade policy

- Sectors with significant outsourcing potential: retail, software, telecom, autos, aerospace.
- Sectors benefitting from stronger intellectual property protection: pharmaceuticals, Hollywood.
- Firms benefitting from financial services liberalization: banks and other financial institutions.
- Profit share, CEO and skilled-worker wages rise

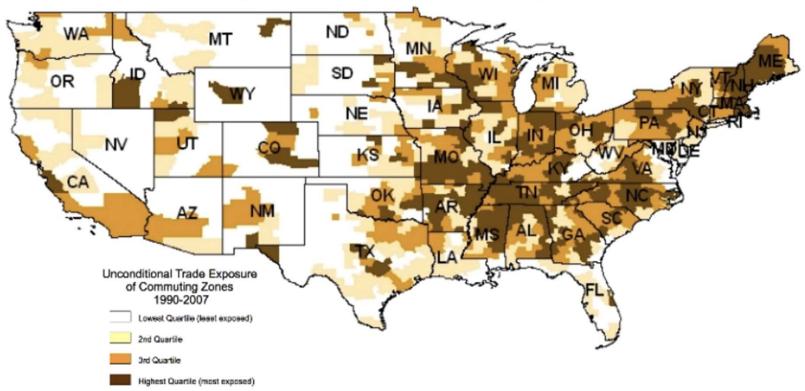
# Losers from globalization and US trade policy

- Employment declines in industries facing outsourcing and import competition (2.4 million from Chinese imports in 2000's -- Autor et al.)
- Income declines felt across the economy, especially for workers without college degree (5% wage decline for 100 million workers affected – Bivens)

### **Local Exposure to Import Shocks**

Figure 6: Geographic Exposure to Trade Shocks at the Commuting Zone (CZ) Level





Source: Autor, Gordon, David Dorn, Gordon Hanson: The China Shock: Learning from Labor Market Adjustment to Large Changes in Trade (2016)

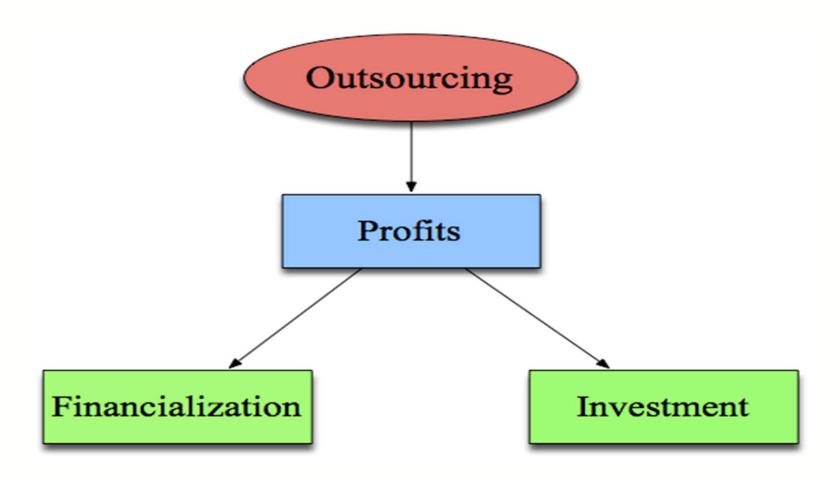
### Soul searching by trade economists

- Failed to understand labor markets in space and time
- Advocated for FTAs when they are not mainly about free trade (ISDS, IP, Fin. Svcs.)
- Ignored need for compensation, retraining of losers
- Contributed to populist, nationalist turn

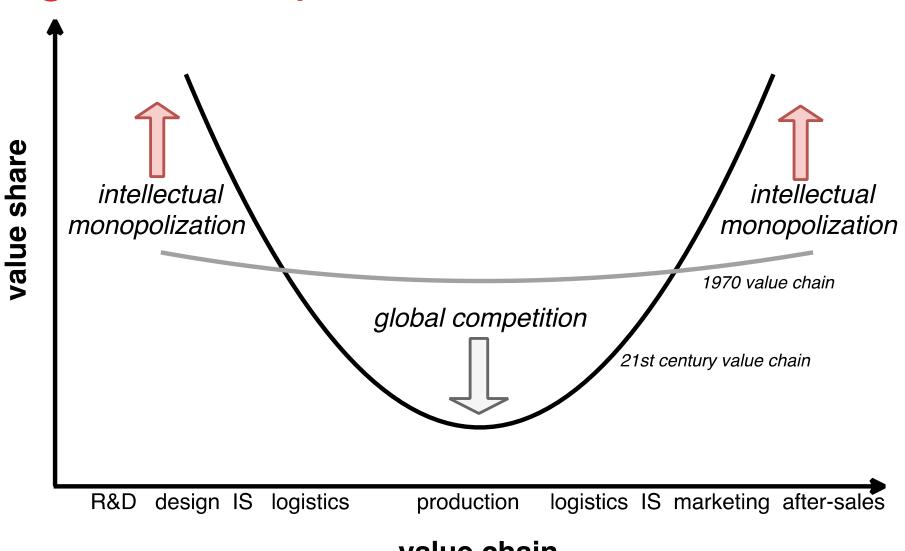
### Trade and income inequality

- •Skills bias: trade vs. automation vs. institutions
- Asymmetric market structure of global value chains
- Financialization as leakage from dynamic gains
- •IP monopolization and protection

#### financialization

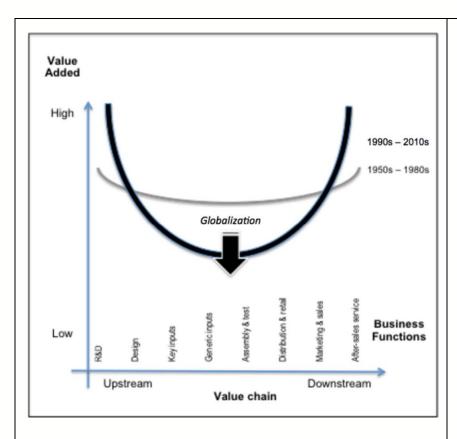


# Intellectual monopolization versus global competition in the smile

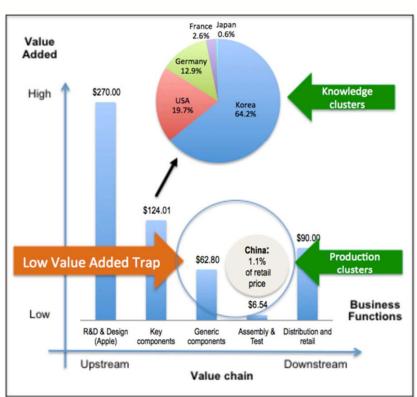


value chain

# The "smiling" curve of value Added, with \$600 iPhone 4



Cost differentials lower the share of value added for routine business functions, which are shifted to developing countries.

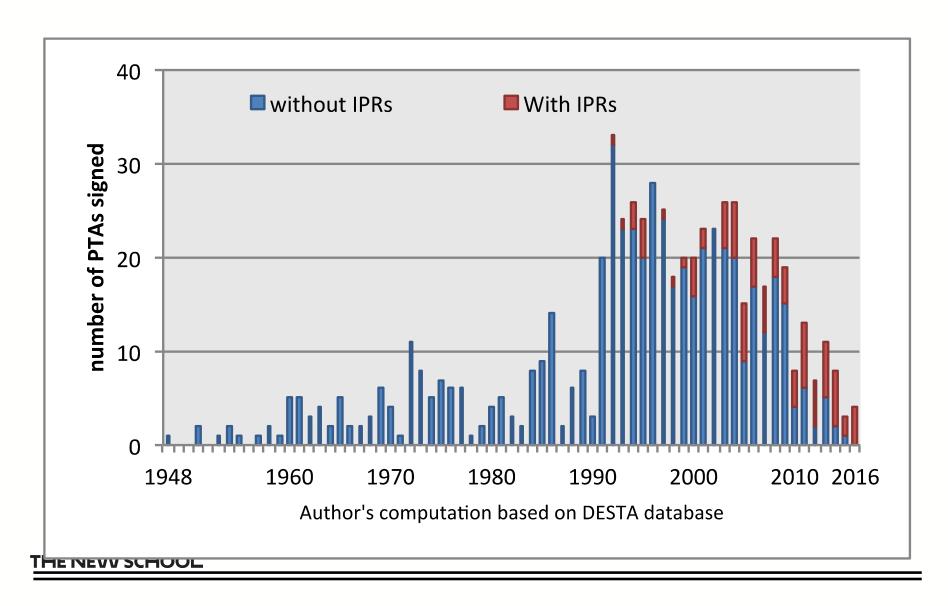


Functions become geographically segmented between knowledge clusters, for higher value-added functions, and production clusters, which pool lower value-added functions, creating low value-added traps (China, the exporter of record, contributes only 1.1% of a \$600 iPhone's value)

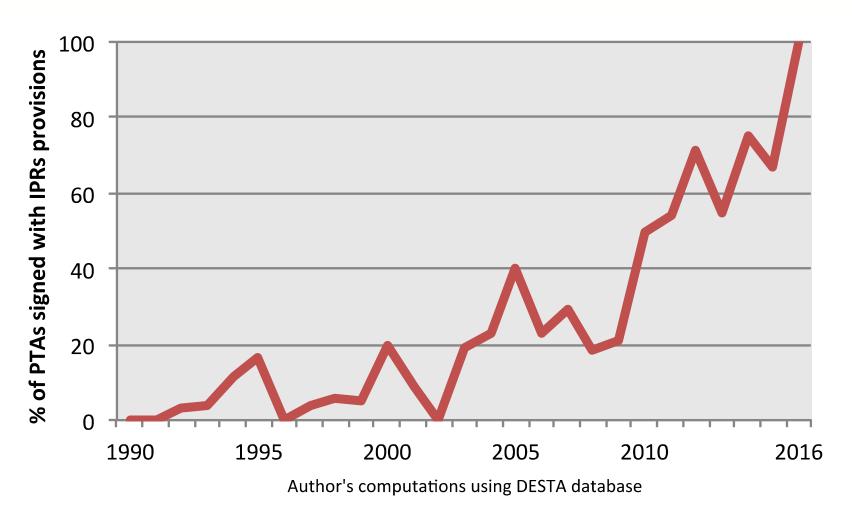
#### THE NEW SCHOOL

Source: T. Sturgeon, for UNCTAD, with iPhone example drawn from OECD, 2011.

### Trade Agreements and IPRs

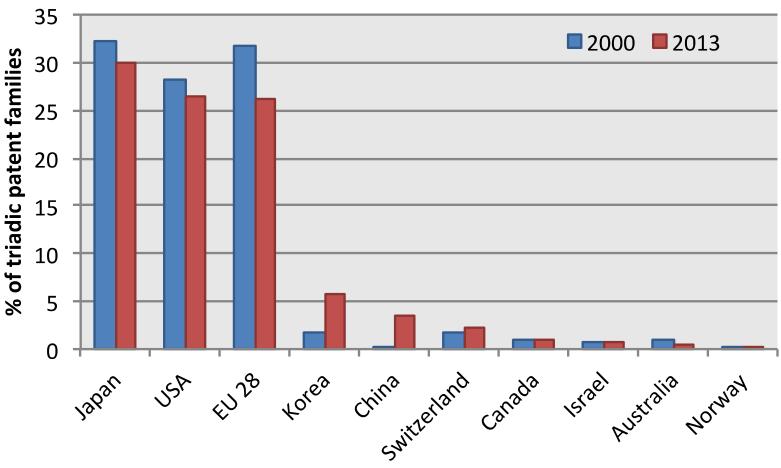


# IPRs in trade agreements

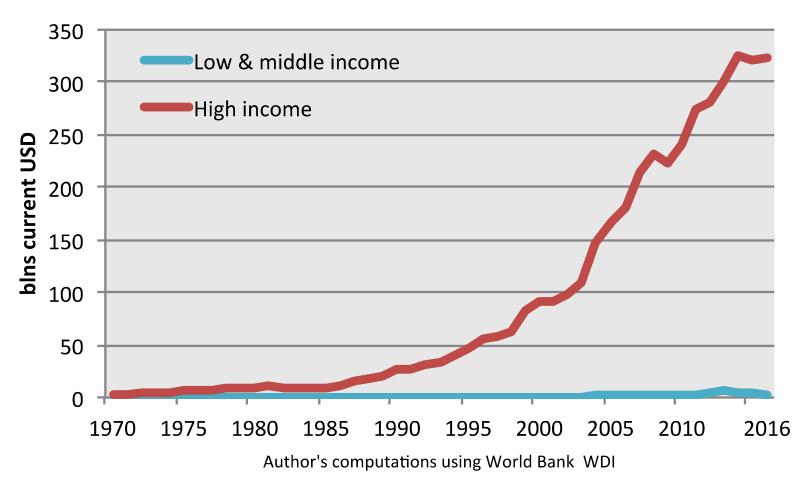


### international patents

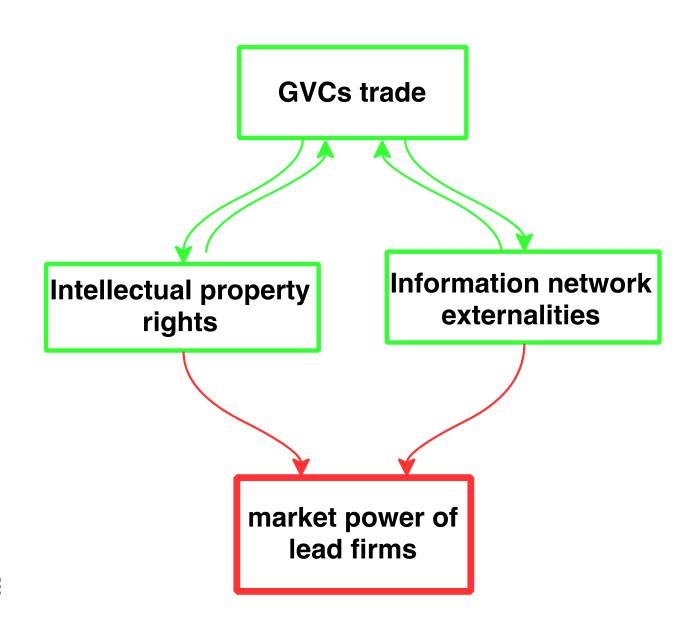
Main countries contributing to Triadic patent families



### BoP Receipts from ip use,1970-2016



### Intellectual monopoly in GVCs



<u>THE NEV</u>

# The battle for information and network returns

#### Managing the chain: Amazon v/s Wal-Mart

"retailers need to figure out how to manage sophisticated supply chains connecting Southeast Asia with stores in big American cities so that they rarely run out of product. They need mobile apps and websites that offer a seamless user experience so that nothing stands between a would-be purchaser and an order. (...). Larger companies that are good at supply chain management and technology can spread those more-or-less fixed costs around more total sales."

(NY Times, June 19 2017)

#### Capturing the data on machinery

"Manufacturers such as Rolls-Royce, GE and Siemens have been investing in "predictive maintenance" technology for years. It is just one of the myriad ways they capture data across the value-chain to improve efficiencies and automate work."

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(FT, April 27 2017)

« We manufacture products that generate power, that automate manufacturing processes, that scan people (like CT and MRI machines), and that move people and goods from place A to place B. That's a lot of products, and all those products have sensors. (...), once we get the data, we have the data analytics platform and the cloud. We have a proprietary cloud, for example, an on-site cloud. Our customers care about manufacturing and engineering data intellectual property rights because [this type of data] is the holy grail of innovation ».

Joseph Kaeser, Siemens CEO, 2016

#### After the Washington consensus

- Populist wave has shown that globalization is not a natural, irreversible
- Promote dynamic gains from trade
- Limit financialization, tax havens.
- New social contract on income support, health insurance, educational access
- Labor standards at home and abroad
- Promote upward rebalancing

# Thank you

# Policy implications

#### "Trade liberalization" a misnomer

Beyond trade agreements, a regulatory agenda

With crucial implication for GVC dynamics

#### Privatization of ideas is adverse to development

An issue beyond IPRs

Network externalities, an underestimated problem

#### Intellectual monopoly

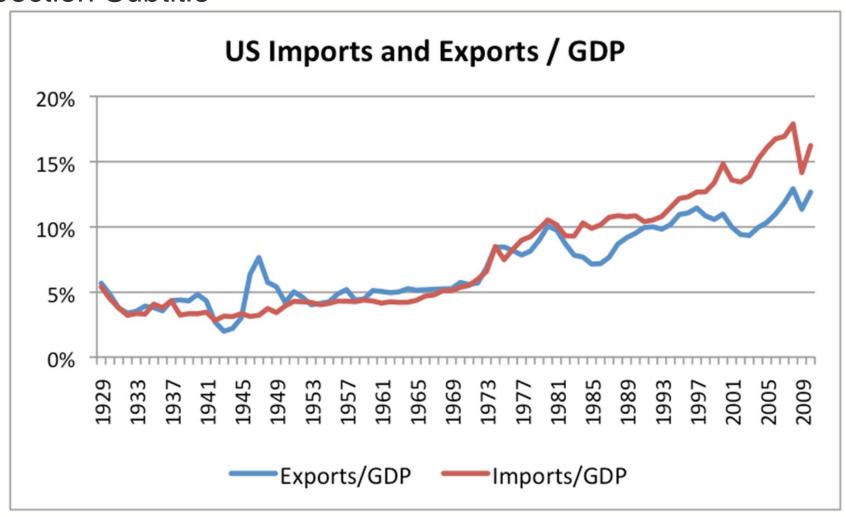
A new outlook on GVC upgrading possibilities

A progressive agenda on weaker IPRs and data openness

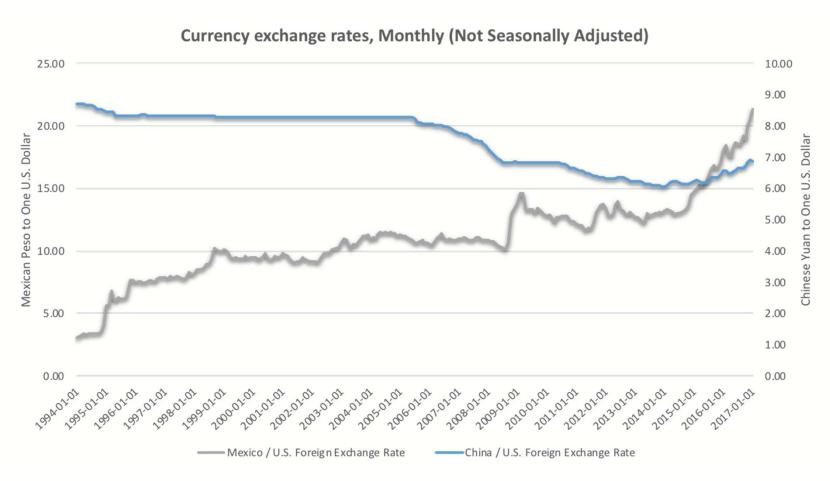
Dilemma of regulating a natural monopoly

### **US trade, 1929-2010 (share of GDP)**

#### Section Subtitle

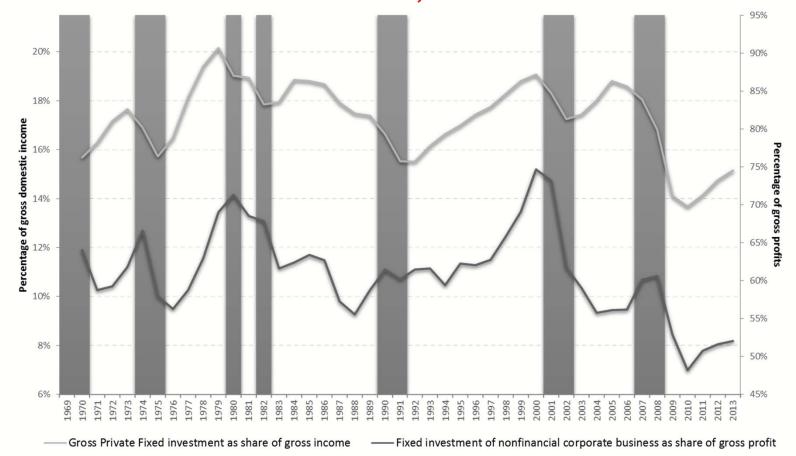


# Exchange rate of Peso and Yuan against the Dollar, 1994-2017



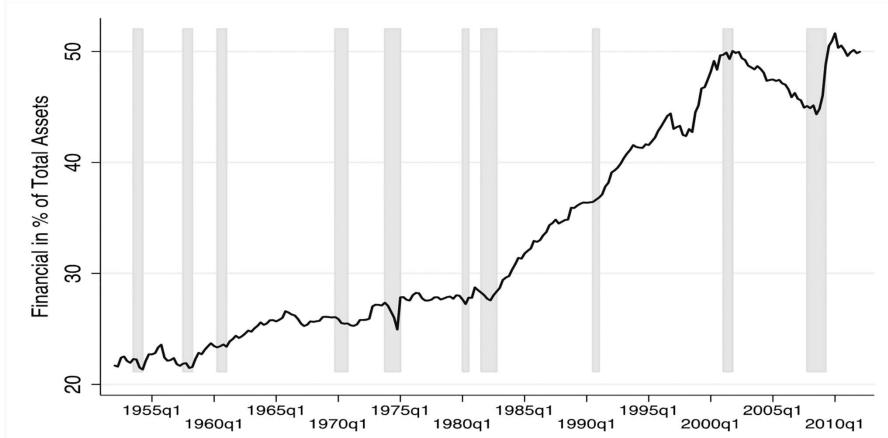
THE NEWYSELFO deral Reserve, FRED, 2017

# **Investment Share, Total and Non-Financial Corporations United States, 1970-2013**



**Source:** Own illustration. Data: U.S. Bureau of Economic Analysis, National Income and Product Accounts. U.S. Federal Reserve Bank, Flow of Funds Account, Schedule Z.1.

#### Financialization of NFCs



\* Sources: Federal Reserve Flow of Funds Accounts of the United States; Federal Reserve Bank of St. Louis; NBER. Includes Nonfinancial Corporate Business, s.a. annual rates.

#### Repurchases and Dividend Payments

# Top 30 Non-financial, Non-energy Corporations [% of company net income over 2000-2007]

	Company	Stock	Cash	Stock repurchases
		repurchases	dividends	plus cash dividends
1	Hewlett-Packard	128	33	160
2	Ciscco Systems	151	O	151
3	Microsoft	80	63	143
4	Pfizer	76	61	137
5	Dell	136	O	136
6	Amgen	126	O	126
7	Procter&Gamble	80	44	124
8	Texas Instruments	108	10	119
9	Walt Disney	92	27	118
10	Intel	93	18	110
11	Anheuser-Busch	69	37	106
12	Boeing	69	33	102
13	3M	58	43	101
14	Pepsico	64	35	99
15	UPS	64	34	99
16	Wellpoint	99	O	99
17	United Health Group	95	1	95
18	McDonalds	64	30	94
19	Oracle	92	O	92
20	AT&T Inc	25	65	90
21	Merck	34	53	87
22	Altria Group	26	56	82
23	General Electric	29	49	79
24	IBM	63	15	78
25	Allstate	49	27	77
26	Johnson & Johnson	39	37	76
27	Home Depot	54	16	70
28	Wal-Mart Stores	31	20	51
29	Time Warner	-56	-4	-60
30	CBS	-70	-9	-78

Source: Milberg and Winkler (2010a). Data: Lazonick (2008), Table 7.

NB: Stock repurchases = repurchases of common and preferred stock, net income = net after-tax income, cash dividends =

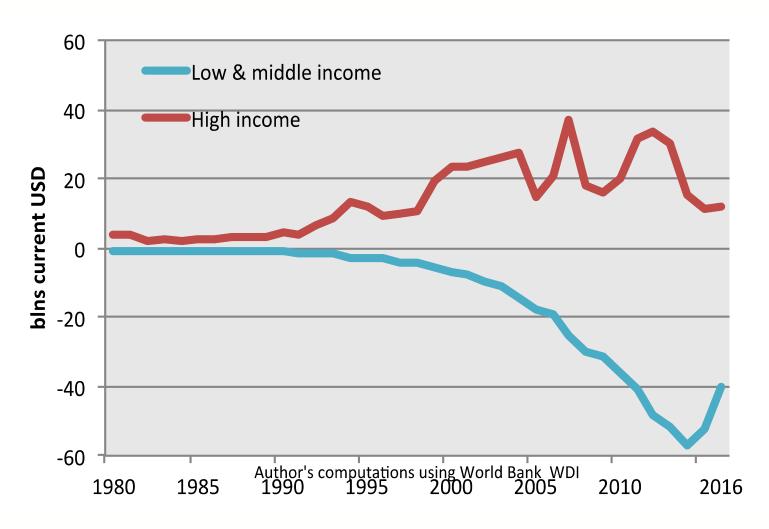
dividends. Ranked by stock repurchases plus cash dividends.

common and preferred cash

### Deep challenges

- Restructure within the system of production or simply expand social safety net?
- Reform without limiting developing country expansion and innovation diffusion that trade promotes.

# BoP net receipts/payments from the use of intellectual property (1980-2016)



# Endogenous asymmetries of market structures

#### Asymmetry of market structures within GVC

(Milberg and Winkler, 2013, p.123-130).

#### Oligopolistic lead firms at the top

markup pricing power and concentration of industry

#### Dispersion among lower-tier suppliers

as more developing countries entered lower- and medium-tech industries

# Endogenous production of asymmetries global competition

- (i) inducing competition among suppliers
   Labor fragmentation, excess capacities, capital mobility
- (ii) offloading risk to suppliers

  Shareholder value revolution (Lazonick and O'Sullivan, 2001)

#### Intellectual monopolization

- (i) IPRs: entry barriers through branding minimizing technology sharing.
- THE NEW SCHOOL(ii) Information returns and network externalities

### GVCs and IPRs are self-reinforcing

# Fragmentation of productive process

Intangibles circulate to sustain integration of dispersed processes

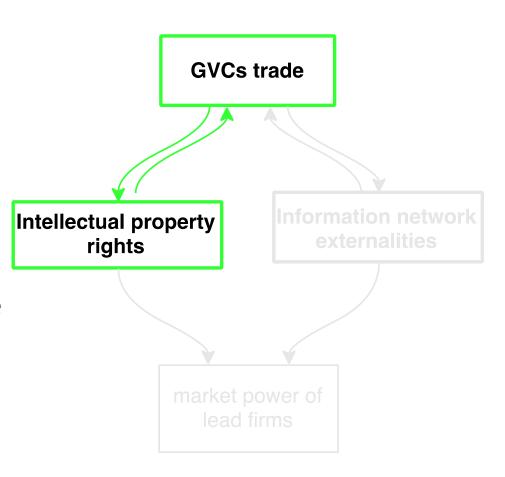
Specifications, know-how

Risk of IP appropriation

#### IPRs protection

Induces to deepen trade fragmentation

Including with sophisticated tech and branding features



#### Networks externalities and returns

#### GVCs as network

Externalities from complementarities

Value increased by combination

Necessitate integration:

specifications (Economides, 1996) IS as informational backbone

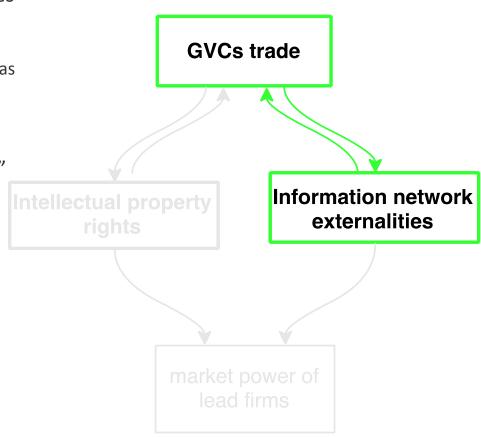
#### Centralization of externalities

the integrator is in position to reap the benefits => participants "pay-in" through lower prices their entry Accumulation of data out of IS

#### Increasing returns

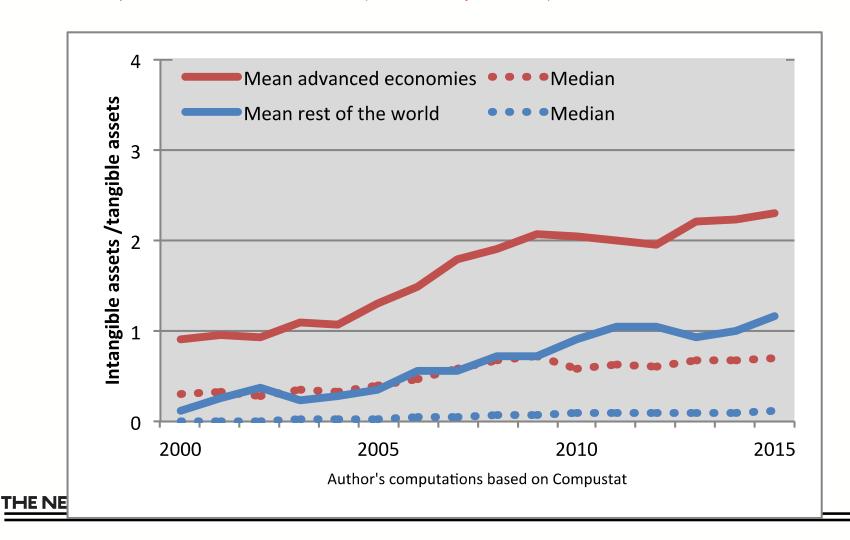
Non-rival assets with low or zero marginal costs

Intangibles-intensive firms benefit more from increasing returns (no diseconomies of scale as with tangibles)



# Intangibles intensity growing and higher in advanced countries

average and median of industry/country revenue (weighted average) Source Compustat North America & Global (assistance by O. Vallès)



# Industries investment/profits in advanced economies and developing countries (2000-2015)

