

The China Shock: Learning from Labor Market Adjustment to Large Changes in Trade

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Political Opposition to International Trade Is on the Rise



How Did We Get Here?

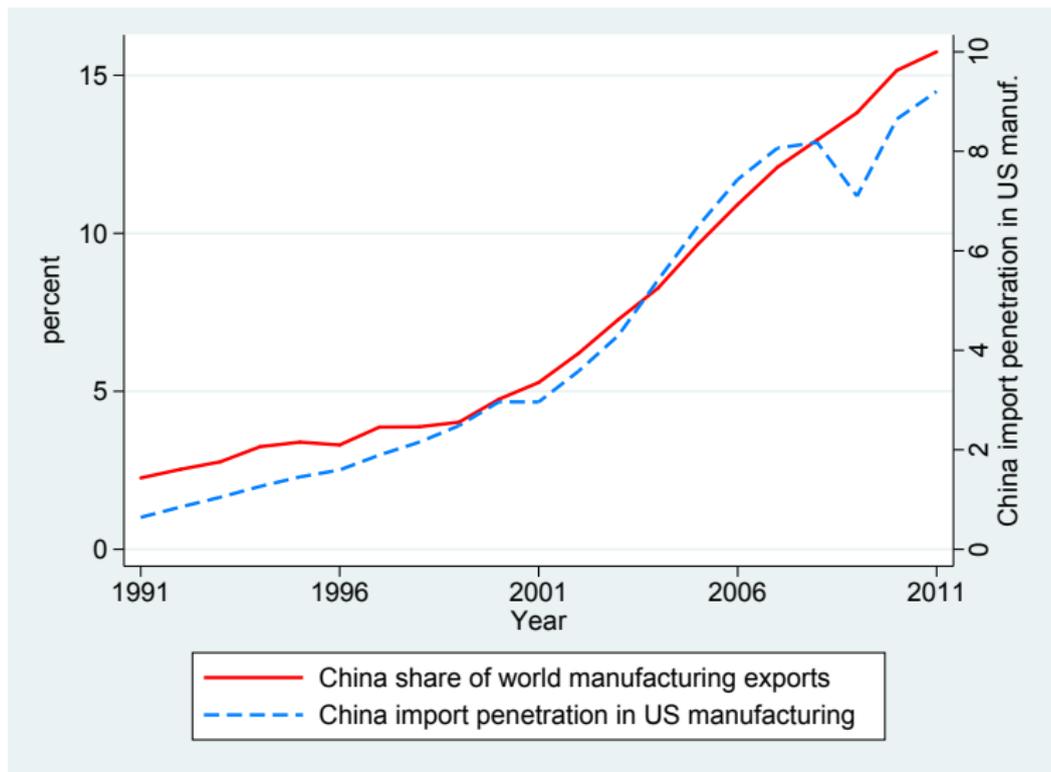
In the '90s, freer trade—embodied in NAFTA & the WTO—were pitched as guarantors of future American prosperity

- Bill Clinton, NAFTA signing, Dec. 8, 1993

“I believe we have made a decision now that will permit us to create an economic order in the world that will promote more growth, more equality, better preservation of the environment, and a greater possibility of world peace.”

- The reality of how globalization would affect the US economy turned out to be a bit more complicated...

...And the Primary Complicating Factor Was China



The Economic Consequences of Trade

Economists have long known that international trade, while generating aggregate welfare gains, also creates losers

- Paul Krugman and Maurice Obstfeld (1988)

“Owners of a country’s abundant factors gain from trade, but owners of a country’s scarce factors lose... international trade tends to make low-skilled workers in the United States worse off—not just temporarily, but on a sustained basis.”

- But until recently the consensus was that, in practice, trade just hadn’t mattered much for US labor-market outcomes

The Economic Consequences of Trade

The conventional wisdom among economists circa 2005

- ① Trade had not been a major contributor to declining manufacturing employment or rising wage inequality in the US
- ② Workers employed in regions specializing in import-competing sectors could readily reallocate to other regions if displaced by trade
- ③ Any labor market impacts of trade would be felt by low-skill workers generally, not by trade-exposed workers specifically

The momentous impact of China's recent export growth has helped topple this conventional wisdom

Agenda

- 1 What have we learned about the labor-market impacts of trade?
- 2 Should we be surprised by large earnings losses?
- 3 What's the problem: Trade adjustment or trade itself?
- 4 Has the US policy response been effective?
- 5 Conclusions

What Are Impacts on Import-Competing Industries?

- It is perhaps unsurprising that jobs have been lost in industries subject to more intense product-market competition from China
 - Greater exit by manufacturing plants (Bernard Redding & Schott)
 - Contractions in employment by plants that stay in operation (Acemoglu Autor Dorn Hanson & Price, Pierce & Schott)
- What *has* come as a surprise are the magnitudes of the impacts
 - Every 1% increase in import penetration reduces industry employment by 1.3%, with total manufacturing job losses from trade with China at 1 million (17% of the total for '91-'11)

What Have Been Local Labor Market Consequences?

More surprising still is how US local labor markets have adjusted to the China trade shock (Autor Dorn & Hanson)

- Because regions vary greatly in what they produce...
 - Huntsville, AL, is (was) a textile manufacturer
 - Las Vegas, NV, is a mecca for tourism
- ... they were highly differentially exposed to greater import competition from China
 - Among trade-impacted local labor markets in the '90s and '00s, Huntsville was in top quarter and Las Vegas in bottom quarter

Adjustment to Trade in Local Labor Markets

Active margins of adjustment to greater import competition

- Reductions in manufacturing employment, increases in non-participation in the labor force and in long-run unemployment

Inactive margins of adjustment to greater import competition

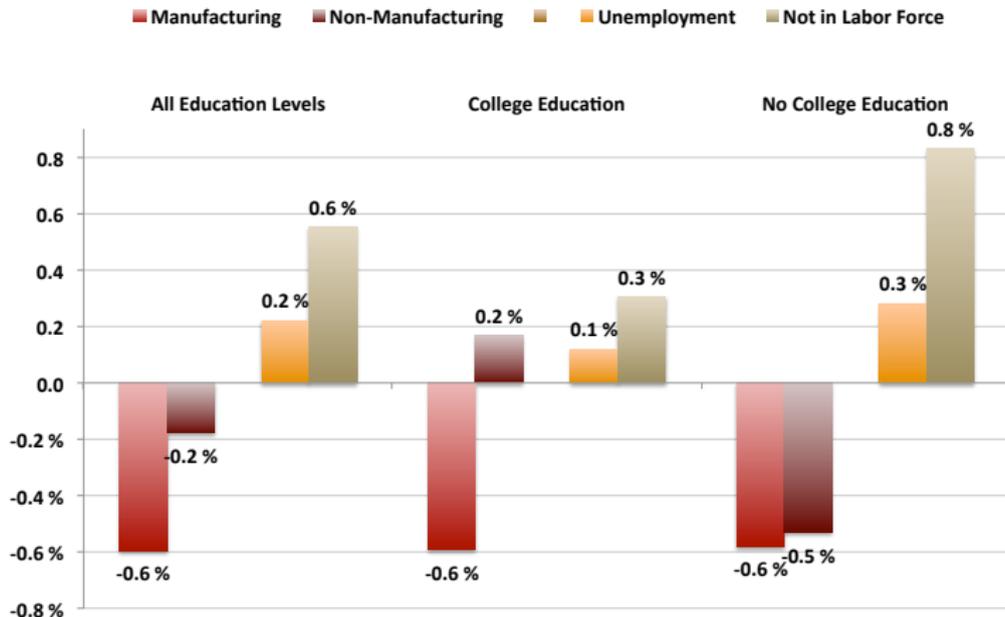
- Little response of interregional migration to trade shocks
 - Movement of labor across areas due to changes in labor demand is slow and incomplete (Blanchard & Katz, Glaeser & Gyourko, Yagan)

Local Labor Market Impacts of Import Competition

Employment impacts overall and by education

Imports from China and Employment Status of Working Age Population within Commuting Zones (1990-2007)

Effect of an \$1000 Per Worker Increase in Imports from China during 1990-2007 on Share of Population in Employment Categories



What Are Impacts on Specifically Trade-Exposed Workers?

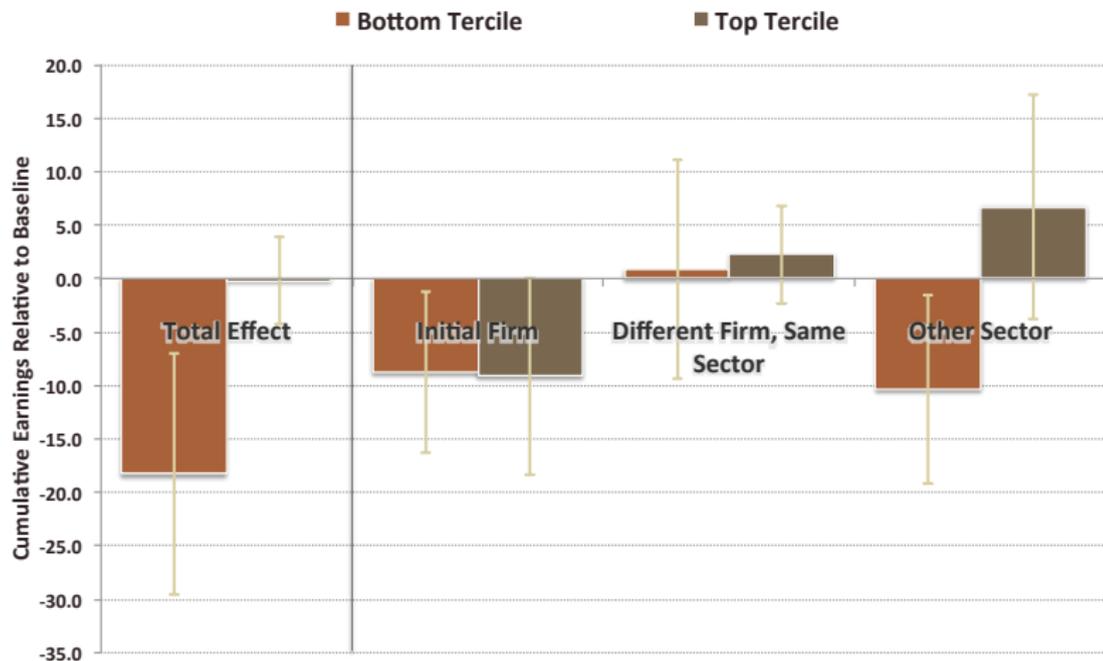
Go back to '91 and consider two observably similar workers
(Autor Dorn Hanson & Song)

- Same age, gender, annual earnings, recent earnings growth, tenure at their employer, size of and wages paid by employer, etc.
- But one works in an industry that will, over the next two decades, be more exposed to the China trade shock
- Over the next 16 years, the initially more-exposed worker will have
 - Lower cumulative earnings
 - More churning between jobs
 - And higher uptake of disability insurance
 - With larger effects for low-wage workers

Impacts of Trade Exposure on Long-Run Earnings

Bottom versus top tercile workers

Impact of Trade Exposure on Cumulative Earnings by Sector:
Workers Initially in Lowest and Highest Earnings Tercile

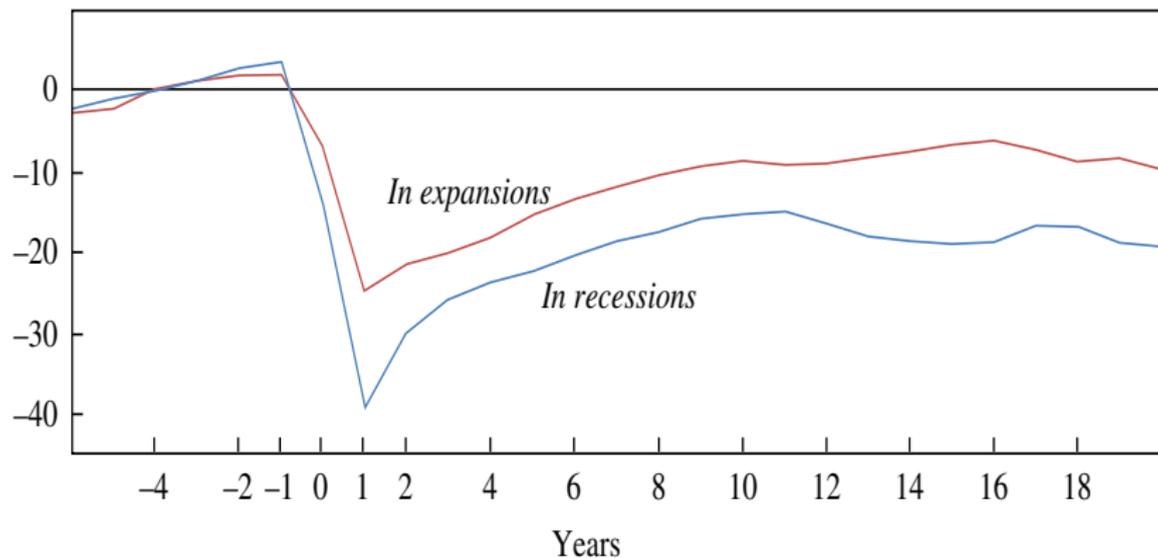


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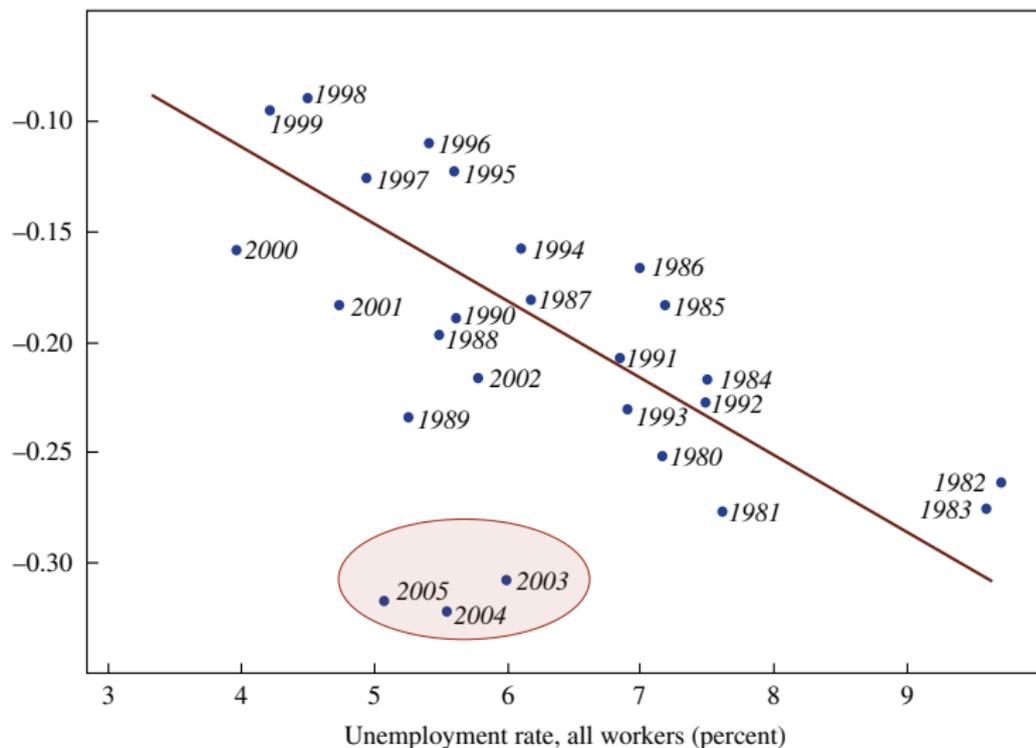
Durable Scars from Job Displacement *Much Worse in Recessions*

Average Earnings Losses of Displaced Workers as a Percent of Pre-Displacement Earnings



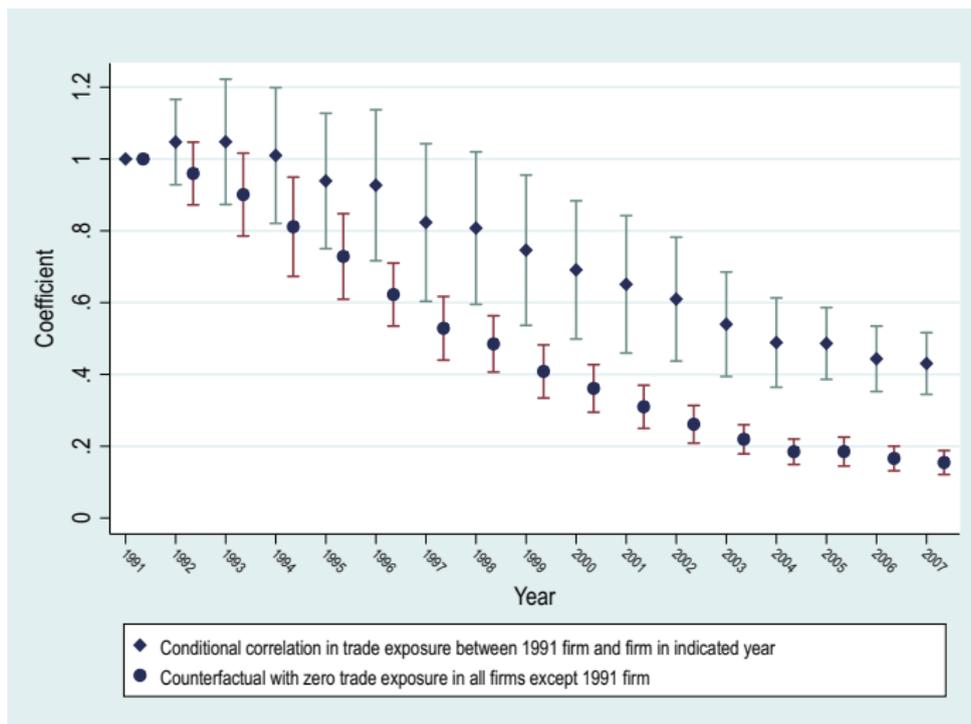
Davis and von Wachter '2011

Average 3-Year Earnings Losses of Displaced Workers: *Much Larger in a Slack Labor Market*



Davis and von Wachter '2011

When Workers Exit One Trade-Exposed Industry... They Often Enter Another



Autor, Dorn, Hanson and Song '2014

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Is the Focus on Trade Adjustment a Misdirection?

Posted April 26, 2016 at 12:42 pm by **Lawrence Mishel**

Tired of economists' misdirection on globalization

Trade theory tells us that globalization's impact is much greater on the wages of all non-college grads... not just a few dislocated manufacturing workers. The damage is widespread, not concentrated among a few... Trade theory says the result is a **permanent**, not temporary, lowering of wages of all "unskilled" workers.

Adjustment Versus Steady State

The Short and Medium Run: Trade Adjustment

- Costs of job loss are sharp, steep, and scarring to displaced workers
- Concentration matters: A \$10,000 loss suffered by one worker is a *much greater social cost* than a \$1 loss suffered by 10,000 workers

The Long Run: Prices *and* Wages Change

- Lower prices of goods and services
- But also lower *wages* for workers made *less scarce* by globalization—typically non-college workers
- Wage effects *not* limited to manufacturing workers—potentially *all* non-college workers

Which is the Bigger Cost?

Adjustment Versus Steady State

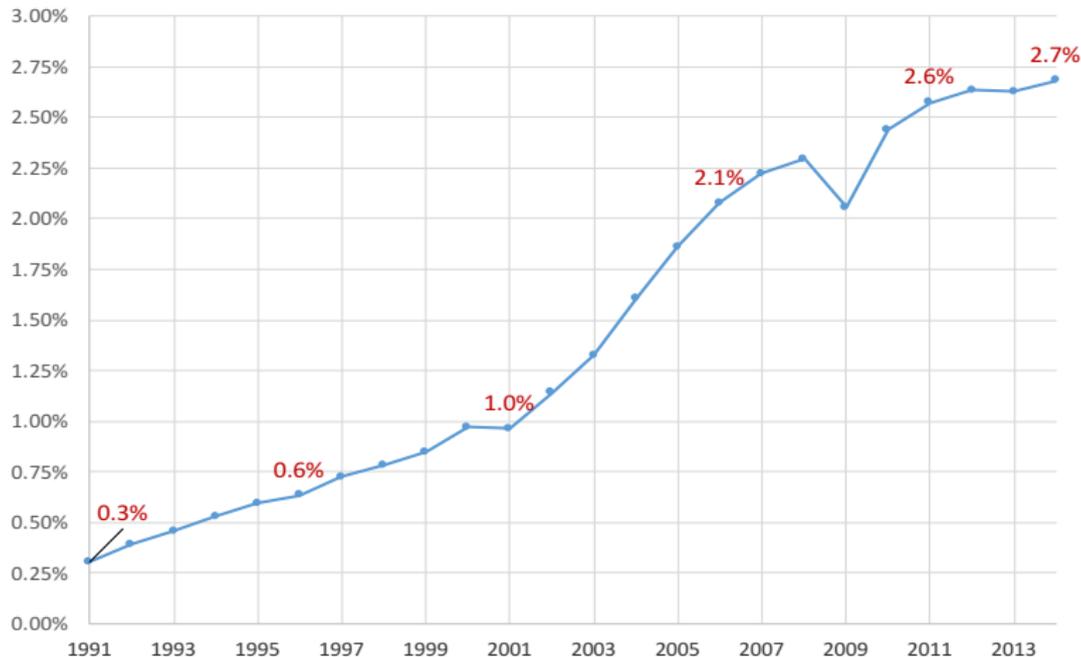
Best existing estimates of impact of trade on wages 1980 – 1995

- Rising trade with Less Developed Countries (LDC) 1980 – 1995:
 - ① Less Developed Country imports to U.S. rose from 2.3 to 3.9 percent of GDP
 - ② Reduced HS Dropout vs. HS Graduate wages by 0.6 – 1.2 pct points (\cong 10 percent of actual fall)
 - ③ Raised College Grad by HS Grad wages by 0.7 – 1.4 pct points (< 10 percent of actual fall)

Borjas, Freeman, Katz '1997

U.S. China Imports Rose Dramatically After 2001

U.S. Goods Imports from China as a Share of U.S. GDP, 1991 - 2014



Adjustment Versus Steady State

Extending Borjas, Freeman, Katz '97 to China Shock

Magnitude of China Import Expansion

- **1991 – 2001: 0.7% of GDP**
 - HS Dropout vs. HS Grad wages: -0.26% to -0.53%
 - College Grad vs. HS Grad wages: $+0.31\%$ to $+0.61\%$
- **2001 – 2014: 1.7% of GDP**
 - HS Dropout vs. HS Grad wages: -0.64% to -1.28%
 - College Grad vs. HS Grad wages: $+0.74\%$ to $+1.49\%$
- **1991 – 2014: 2.4% of GDP**
 - HS Dropout vs. HS Grad wages: -0.90% to -1.80%
 - College Grad vs. HS Grad wages: $+1.05\%$ to $+2.10\%$

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Policy Responses to Import Competition

On paper, Trade Adjustment Assistance is a main policy tool

- In principle, TAA helps workers hurt by trade retrain (through extended UI) and resettle (through relocation allowances)

But the actual policy response has had little to do with TAA

- The increase in benefits uptake due to trade shocks is large...
 - Benefits rise in commuting zones by \$58 per capita for every increase in import exposure of \$1000 per worker
- ...where uptake of Social Security Disability Insurance dwarfs TAA
 - For every \$1.00 increase in uptake of TAA due to greater trade exposure, there is a \$2.80 increase in uptake of SSDI

Benefits Uptake in Response to Import Competition

Increase in benefits varies sharply by program

Effect of an \$1000 Per Worker Increase in Imports from China during 1990-2007 on Dollar Change of Annual Transfer Receipts per Capita



Is the time right for higher trade barriers?

- Nothing in our results contradicts the conclusion that trade on net generates welfare gains for the United States
 - General-equilibrium analyses show that US gains from trade with China are positive (with impacts greater in long run than short run)
 - Hsieh & Ossa, Caliendo Dvorkin & Parro, Galle Rodriguez-Clare Yi
- Recent evidence highlights the failure of social-insurance programs to help workers adjust to adverse labor-market shocks
 - TAA and SSDI appear to weaken incentives to find new employment, either in the short run or in the long run

What might effective alternative policies look like?

- **Wage insurance**
 - May help workers leave declining regions and strengthen their incentive to stay in the labor-force (certainly relative to SSDI)
- **Expanded Earned-Income Tax Credit**
 - May help insulate workers from reductions in labor demand, endure wage cuts at firms at risk of closure
- **Gradual adjustment versus shock therapy**
 - Attrition versus layoffs. Sunset versus shutdown.

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China trade impacts of future will look different from past

- The worst of the China shock is over
- China's "transitional" growth is coming to an end, as it begins to confront the challenges of being a middle-income nation

Donald Trump, Bernie Sanders not as surprising in retrospect...

- Inattention to negative labor-market consequences of trade have helped catalyze opposition to globalization
- Trade boosterism has arguably been trade's worst enemy in the public policy sphere
- Surprisingly, the political consequences of trade include movement to the extremes, which may worsen political disfunction