

After Equilibrium: Theory Neglect, Real Deindustrialization, and the Roots of Anti-globalization Politics [Memo]

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Abstract

Why has anti-globalization sentiment rapidly intensified and become bipartisan? While free trade was expected to be mutually beneficial, its assumptions and long-run effect remain contested, and what happens after trade equilibrium is largely neglected in existing trade (politics) literature. I develop a theory of trade backlash that arises when advantage sectors are eroded after voluntarily letting go disadvantage ones – a common dynamic in the post-1970s, non-idealized globalized economy (e.g., mercantilism and strategic competition). Trade then becomes a non-starter and real deindustrialization fuels skepticism and opposition. Using congressional speeches on trade (1990–2024) and case studies of the 1990s and recent episodes, I find strong support for the theory. A survey experiment further shows that public opinions align with theoretical expectations, moderated by ideology, geopolitics, product differentiation, and global value chain linkages. The findings reveal how trade liberalization, under certain conditions, can be undesirable, while providing a novel explanation for anti-globalization backlash.

1 Motivation

Over the past decade, globalization-skeptic sentiment has become not only more intense but also bipartisan in many advanced economies. The post-1970s economic order within a broader liberal international order (LIO) was supposed to bring prosperity and freedom through open markets as its normative purpose, apart from strategically binding countries within the U.S.-led order (Ikenberry 2011). States abandoned the old-style “import substitution” industrialization or closed economy and embraced “Washington Consensus” liberalization for the sake of continuous benefits in the first place. Yet, decades later, from the Tea Party to progressive populism to Trump’s unilateral, broad-based tariffs, policymakers across party lines now question the long-standing consensus that trade liberalization is net beneficial.

This is puzzling as classic trade models rooted in comparative advantage assume that once economies move from autarky to open trade equilibrium, the gains are generally positive by capitalizing on their pre-endowed trade advantages, despite local winners and losers (see

Figure 1, Ohlin 1933; Krugman 1987; Melitz 2003). Empirical IPE literature built on this foundation has long recognized short-term adjustment costs of trade exposure and tends to treat trade preferences as static: individuals' exposure to trade liberalization determines attitudes, which then aggregate into policy preferences (Mansfield and Mutz 2009; Owen and Walter 2017). But overall, states participating in the global economy are supposed to be able to compensate losers and achieve aggregate benefits.

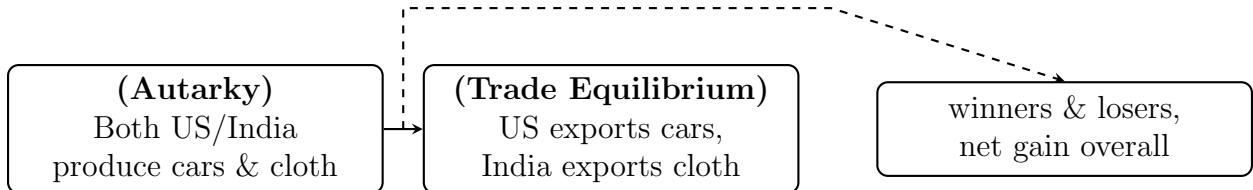


Figure 1: Classic Models: From Autarky to Open Trade.

Yet, the contemporary backlash suggests that this “pre-equilibrium” logic has insufficient explanatory power. Certainly, comparative advantage is a static efficiency principle in that trade makes both sides better off at given technology and factor endowments. Long-term development depends on how countries can transform their endowments that move comparative advantage higher. Moreover, the post-1970s especially post-1990 globalization doesn’t quite follow the idealized assumptions and process of trade theories and is full of distortions (Baldwin 2016; Stiglitz 2016). Overall, the long-run effect of free trade is far from unclear (Garret 2000; Krugman 1987; Lawrence and Weinstein 1999; Rodriguez and Rodrik 1999), not to mention its ensuing political effect.

One common case is, production networks, technology diffusion, and ill-adjusted currency among other mercantilist practices allow late-industrializers to quickly upgrade into advanced sectors, uncaptured by traditional trade models. As trading partners ascend the value chain, “early-birds” face the erosion of once-advantaged industries – a process often masked until employment, tax bases, and development prospects deteriorate. Existing theory’s equilibrium bias renders invisible the structural aftershocks of global integration. The result is a major theoretical lacuna: we can explain why free trade was politically feasible in its rise but not why it has become unsustainable in its maturity.

I problematize the “pre-equilibrium” logic and assumptions and develop a theory of trade backlash: for advanced economies, comparative advantage can be endogenously eroded after the phase of trade equilibrium; when advantage sectors face the threat of displacement after voluntarily giving up disadvantage ones, states and societies experience a reversal of expected welfare gains, usually real de-industrialization among other impacts. This post-equilibrium dynamic, rather than short-term exposure of disadvantaged ones, creates skepticism and opposition to trade, distinct from those during the transitional adjustment. It explains both the endurance and the cross-ideological diffusion of anti-trade politics in the United States and beyond.

Overall, the “after equilibrium” dynamic fills the theoretical void, explains the puzzles

of anti-globalization policy change, and potentially marks the turning point of the current trajectory of globalization.

2 Theory: “After Equilibrium”

Theoretical Logic

I conceptualize and theorize the “after equilibrium” dynamics of trade backlash grounded in rational cost-benefit logic but oriented toward long-run sectoral dynamics to simplify the analysis. The central claim is that discontent emerges when a state’s advantage sectors come under threat after it has already let go of its disadvantage sectors. During the initial liberalization to trade equilibrium in traditional trade models, governments allow disadvantage sectors to decline, expecting gains from specialization in comparative advantage sectors. However, once those advantage sectors face new competition – from technological diffusion or mercantilist strategies like strategic undervaluation – the country finds itself doubly exposed: it can no longer revert to the lost industries, yet its advantageous ones are eroding.

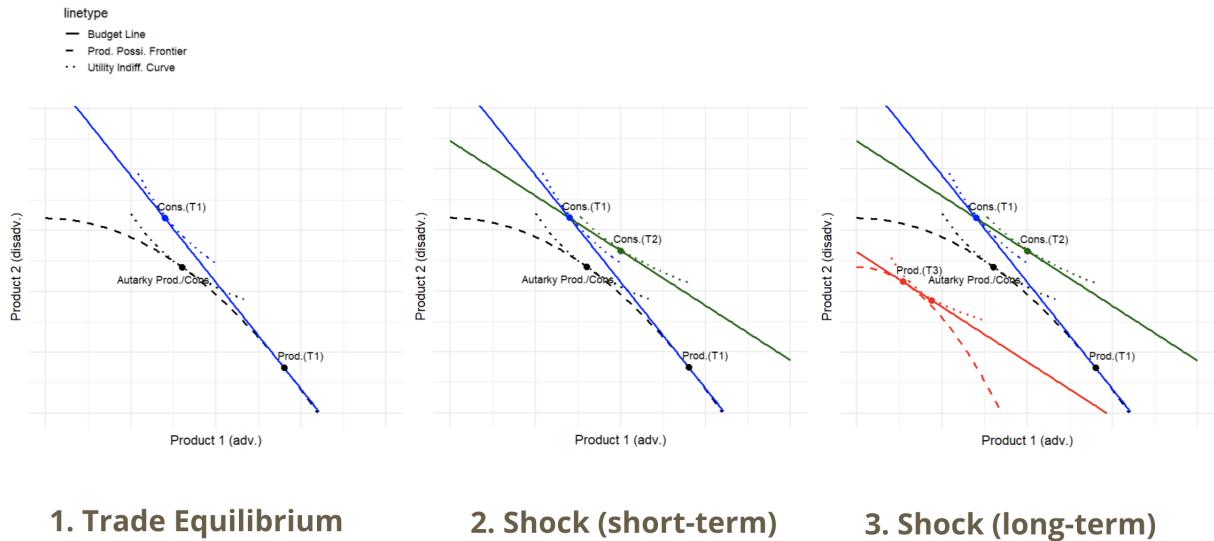


Figure 2: Illustration: Utility Change during “After Equilibrium”

Figure 2 shows that losing advantage sectors completely nullify trade gains by lowering a country’s production levels. Naturally, this post-equilibrium dynamic generates skepticism and opposition. Politically, it activates cross-class coalitions: workers, firms, and regional elites that once benefited from globalization now perceive future losses as systemic rather than sectoral. Of course, national-level elites perceive it as a national economic threat. Ideologically, it delegitimizes the narrative of mutual gain that underpinned free trade. Free trade becomes not an engine of efficiency but a non-starter: a policy in which further openness appears self-defeating.

My theory applies to a variety of trade scenarios. At the inter-industry level (Ricardo-

Viner, Heckscher-Ohlin, Eaton-Kortum), it explains backlash when advantage sectors like U.S. automobiles face erosion after specialization. At the intra-industry level (Krugman 1980), similar dynamics emerge within sectors, such as EU pharmaceuticals versus India's pharmaceuticals. At the intra-firm level (Melitz 2003), the logic extends to global value chains – e.g., California's iPhone R&D versus Vietnam's assembly – where diffusion or relocation undermines prior advantages. Even in services like finance or R&D, sustained openness depends on exporting high-value outputs. Across all, the theory captures how backlash arises once comparative advantages deteriorate after equilibrium. After all, a country chooses free trade expecting to somewhat export comparative advantage output to realize sustainable trade gains.

Note that in reality, the boundaries of comparative advantages may not be crystal clear; they can be subjective and dynamically moving. Policymakers or the public may rely on expertise in some cases or rely on focal points with one historical example being the U.S. semiconductor and automobile industries.

From After Equilibrium to Trade Attitude

How does “after equilibrium” translate into trade sentiment? I identify three connecting pathways which can work collectively.

(a) Expectational: Elites and voters embrace free trade expecting it to yield persistent benefits – jobs, fiscal revenue, and favorable terms of trade. When advantage sectors decline, the expectation–reality gap produces perceived welfare loss. This aligns with loss-aversion logic: losses relative to expected gains weigh more heavily than equivalent foregone income.

(b) Developmental: While giving up disadvantage sectors are not supposed to matter, losing advantage sectors implies real deindustrialization, productivity stagnation, and reduced fiscal capacity. This mechanism converts sectoral erosion into macro-developmental decline, reframing trade as a developmental issue.

(c) Ideational: High-tech or industrial prowess may carry symbolic national value – industrial decline is interpreted as national decline fueling trade skepticism. Threats to advantage sectors therefore trigger identity-based grievance, national-security anxiety, and loss of collective pride (Mutz 2018; Guisinger 2009).

Theoretical Expectations

The generated anti-trade sentiment through the pathways above can be moderated by a few factors. The effect of advantage-sector erosion on anti-trade sentiment is not uniform across trading relationships. One key variable is whether the threat is systemic or sectoral. When the threat is only sectoral, states may react by sectoral-level rather than broad-based protection.

Other moderators can include regime type/ally status, product differentiation, or own MNC and localized production. For example, the partner's regime type conditions how the three mechanisms operate. When the trading partner is an autocracy or strategic rival,

expectation-based disappointment transforms into suspicion of manipulation, developmental concerns become fears of dependency, and psychological loss evolves into a narrative of national vulnerability.

Table 1: Theoretical Expectations of Trade Threats

	Sectoral Threat	Systemic Threat
Disadvantaged Sector	Managed transition (regional politics) (e.g., 1990s Mexico/NAFTA)	Managed transition (regional politics) (e.g., first China shock)
Advantaged Sector	Targeted protection (bipartisan) (e.g., U.S.–Japan trade war)	Broad-based protection (bipartisan) (e.g., second China shock)

Other Moderators:

- Geopolitics: ally status, regime type
- New trade theory: product differentiation
- New new trade theory: own MNC, localized production

Competing Explanations

New losers? Moving from textile to furniture to consumer electronics, no opposition.

High value-added? Silent for rail equipment, shipbuilding, telecommunications, DRAM (first defended then let go due to economic logic)

Sociotropic? National identity? Developmental? Security? Part of pathways, but not same.

3 Empirical Evidence

The whole empirical section seeks to do two tasks: 1) how far the “after-equilibrium” logic plays out in real trade policymaking, and 2) how it shapes public trade attitudes. Both are important in that both elite and public attitudes shapes the future of globalization.

3.1 Elite Opinion: Congressional Speech (1990-2024)

To assess the theory’s plausibility, I analyze over three decades (1990–2024) of U.S. congressional speeches mentioning “free trade” and “trade with China” using structural topic modeling. The results show striking temporal patterns. Between the 1990s and early 2000s, trade discourse remained largely technocratic and partisan: Democrats seem to be more concerned about the negative regional impact of trade than Republicans who focus on efficiency and growth. After 2010, however, trade skepticism rose sharply across both parties, converging on a common frame of “deindustrialization” and “losing good-paying jobs.”

Three pathways above are mentioned: expectational = “lost jobs,” developmental = “deindustrialization,” psychological = “national economic decline”.

Topic-proportion analysis indicates that “manufacturing decline” becomes the dominant latent theme after 2010, while traditional security and human-rights frames stagnate. The bipartisan rise in anti-trade sentiment correlates closely with empirical indicators of real manufacturing contraction—particularly in high-value-added sectors once considered U.S. strengths. This rhetorical convergence supports the after-equilibrium logic: discontent expands when formerly advantaged industries experience visible erosion.

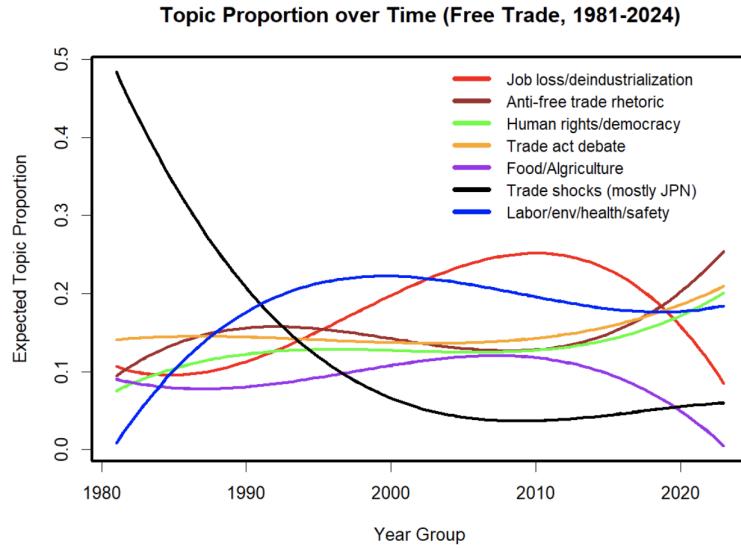


Figure 3:

In sum, bipartisan concerns over unfair trade, losing good-paying jobs, and deindustrialization dominate all other concerns about trade around the early 2010s. Logically, losing advantage sectors should prompt all these concerns which are unlikely for disadvantage sectors especially for national leaders. We do observe many concerns are around advantage sectors such as automobiles. As concerns reach some level, anti-free trade rhetoric (dormant between 1995/WTO and early 2010s) spikes. No other major competing factors such as security, geopolitics, inequality, etc are as salient. Human rights, econ security, etc later were framed as justifying anti-free trade views.

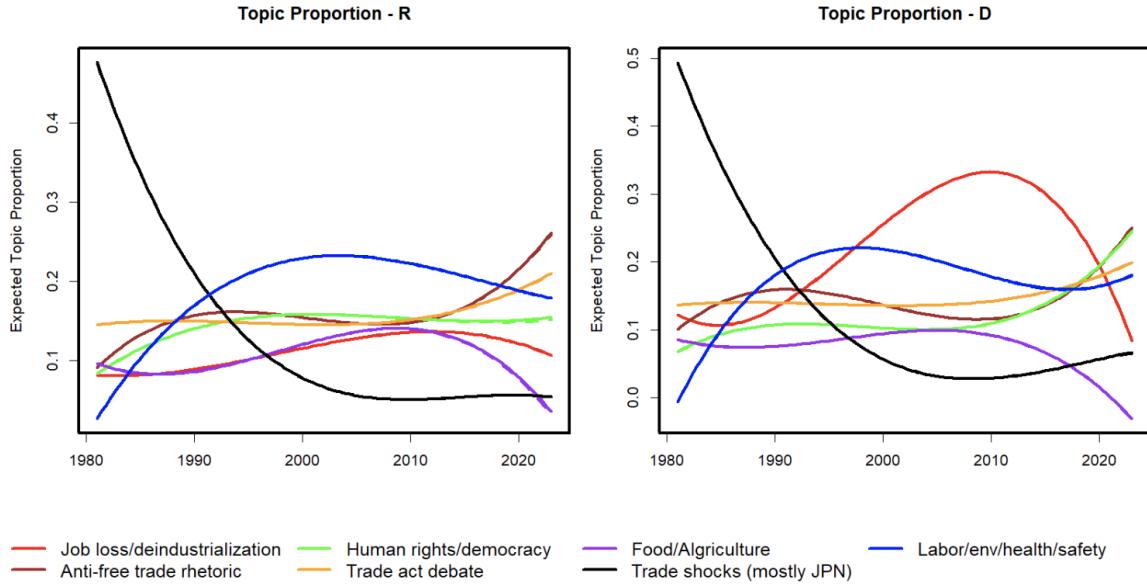


Figure 4:

Republicans (establishment, although intra-party dissents from Midwestern regions) were generally pro-free trade until the early 2010s and TEA party/Trump to become anti-free trade. Dems were historically more protectionist. Both parties similarly concerned Japan's trade shocks (even R like Reagan). From 1992 to 2012, rust belt states mostly voted Dems. So gop red line is mild, also b/c displaced sectors were disadv. Trump's anti-trade stance largely comes from concerns over deindus. (e.g. tariffs on semi/steel/cars) and mercantilism (e.g., trade deficit) by trading partners. Anti-trade views can quickly spread to establishment if deindus goes deeper.

Examples:

“... we are not going to have a strong economy unless we have a strong manufacturing capability. unless companies are reinvesting in Colorado or Vermont. creating good jobs here... “ (GY: creating good jobs/strong mfg refer to adv sectors in trade; cannot refer to disadv. sectors)

“... This raw deal would be particularly bad for my district and districts around the country that support our domestic auto industry, auto suppliers and parts makers... ”

“(in 1997) ...and there is some reason to fear that in 10 or 20 years. Detroit and automobile production in this country will be diminished as car manufacturing moves to China. ...”

“...The titans who run these global transnational corporations. their operatives. and the Wall Street giants that finance them couldnt care less about workers anywhere or the communities in which they live... ” (GY: refer to GVC)

By looking into details, corpus examples reveal that legislators increasingly describe trade not as an external relation but as an internal governance failure—phrases such as “we gave away our supply chains” or “we hollowed out the heartland” treat globalization as a self-inflicted vulnerability. This self-referential blame dynamic marks the shift from sectoral loss

to systemic grievance.

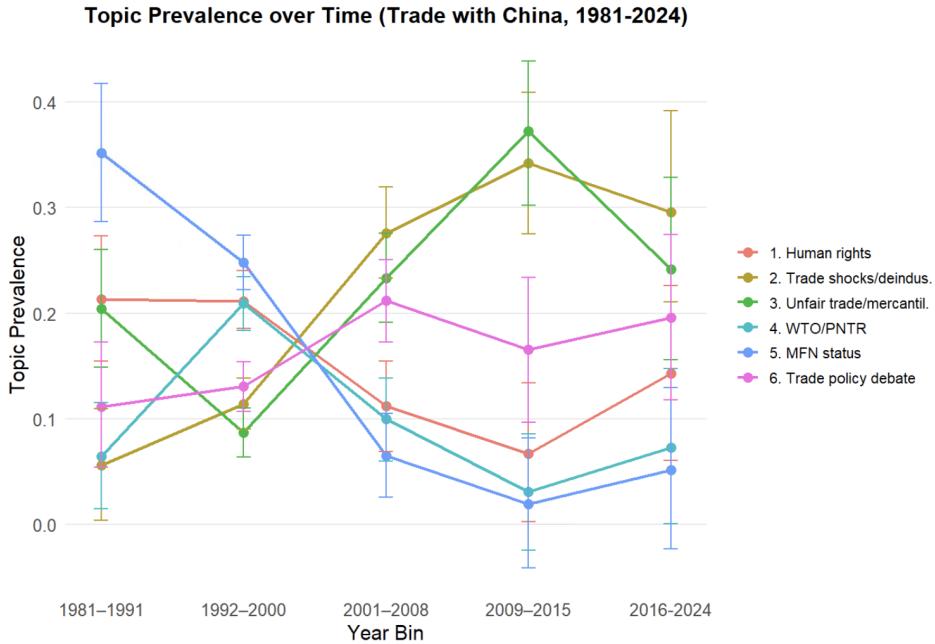


Figure 5:

Examples

“...If the United States is to remain a major industrial power. producing real products and creating goodpaying jobs. we cannot continue the failed, unfettered free trade policies”

“...Chinese imports did overwhelm U.S. industry. The Cato Institute was dead wrong.”

“...”We will buy American airplanes only if they are manufactured in China.” It is another way of saying. ”We want to trade with you. but we want American. jobs to move to China.” That is not fair trade.”

“... In fact. we were told that permanent normal trade relations with China would create hundreds of thousands of American jobs. Well. not quite. [GY: expect adv. sectors exporting...]”

“...China tilts the playing field against American firms, innovators, and workers and gets the technology they need to leapfrog the competition.”

“...Now General Motors says a Chinese firm knocked off an entire vehicleand Americans could soon start buying its cars...”

3.2 Case Studies

Trade tensions in the 1980/90s (U.S.-East Asia)

The theory's logic appears across historical cases. In the 1980s–90s, the U.S.–Japan trade frictions remain generally sectoral disputes (autos, semiconductors), although there were concerns about industrial policy and unfair competition. The result was “voluntary export restraints” and “reciprocity” in some sectors.

- Let go textile, electronics, shipbuilding, passenger rail, DRAM (eventually), etc
- Fought autos, semiconductor, machine tools, precision equip, etc
- Within semiconductor, let go semi manufacturing (defend design & high-end)
- Defended steel, military ship (security)
- Tolerated semi manufacturing in Taiwan/South Korea (ally/democracy)

Trade tensions in the 2010/20s (U.S.-China)

In contrast, post-2000 China represents the full realization of after-equilibrium dynamics: an “elephant-in-the-room” partner upgrading across many of industrial sectors, aided by mercantilist state support. The resulting perception of full-scale deindustrialization – that the liberal order itself enables decline – catalyzes bipartisan realignment on more broad-based tariffs on China later the world.

- Ignored “China shock 1.0”
- Board-based tariffs for “China shock 2.0” (systemic threat)
- Steel & alum tariffs (security)

These cases show continuity: anti-trade sentiment intensifies whenever policymakers see the erosion of high-value sectors. The U.S. response – from Plaza Accord interventions to contemporary tariff regimes—reflects recurring attempts to avoid the post-equilibrium dynamics through managed trade.

3.3 Public Opinion: a Conjoint Survey

To extend beyond elite rhetoric, I plan to field a survey experiment examining how citizens evaluate trade under varying issue conditions. Respondents are randomly assigned vignettes describing trade scenarios that differ along four dimensions:

I expect results to indicate that advantage-loss frames generate the strongest trade opposition, particularly when paired with rival-country cues among others – consistent with the theory's emphasis on perceived reversal of expected gains. Ideological moderation may or may not emerge: conservatives and liberals respond similarly when the narrative highlights high-tech or defense-relevant sectors. This convergence mirrors the congressional rhetoric patterns described above.

Table 2: Design Dimensions of Public Opinion Conjoint Experiment

Dimension	Levels
Shock Type	Disadvantaged sector Higher value-added, but not comparative advantage Higher value-added, comparative advantage (sectoral) Higher value-added, comparative advantage (systemic)
Geopolitics	Ally vs. adversary Democracy vs. autocracy
Sociotropic Effect	No overall harm Net harm to U.S. economy
Product Diff. (New Trade Theory)	No product differentiation Product differentiation
Firm Type (New New Trade Theory)	Foreign firm Own MNC Localized production

4 Implications

The after-equilibrium perspective has two theoretical implications for trade and trade politics literature.

First, it reframes globalization not as a one-time liberalization event but as an evolving strategic process in which early winners continually defend eroding advantages. If this is not properly resolved, globalization won't go far.

Second, it implies that sustained liberalization can be counterproductive—not merely politically costly but economically inefficient once specialization locks states into declining sectors. This insight challenges the presumption that institutional deepening (e.g., WTO expansion) necessarily stabilizes the liberal order. If the order's institutional design is based in incomplete theories, it would be unsurprising to see why it's enmeshed in troubles that seem hard to fix.

For policy, this suggests that preserving globalization's legitimacy requires careful redesign from the system level. Besides material outcomes, one has to also consider the normative purposes the LIO was designed for: economic prosperity, political freedom, and social justice.

References