Discussant's Remarks

on

Falling Dominoes? The Impact of US Exit from Free Trade on the Sustainability of Trade Cooperation

by

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Recent U.S. trade actions have disrupted nearly seven decades of global trade cooperation. The hegemonic leader and largest player in the postwar trading system has withdrawn from painstakingly negotiated trade agreements that provided for mutual liberalization under the most-favored-nation principle. How will this reversal affect cooperation among the remaining signatories to these agreements? This paper addresses a straightforward but timely and important question.

The received wisdom—to the extent that one exists—harkens back to Kindleberger's (1973_ view that international stability requires a hegemon willing and able to create, enforce, and maintain the rules of the international order. The United States has served as hegemon throughout the postwar era. Its repudiation of that role risks the onset of a geoeconomic domino effect, as captured in this quote from the former Director General of the WTO:

> [The United States] has played a very important role throughout the history of the multilateral trading system ... I don't have to tell you that this leadership is going to be critical for the future steps that we have ahead of us.
>
> Robert Azevêdo (2015)

What most discussions of hegemonic stability theory have lacked is a precise statement of what "leadership" means in the context of trade cooperation. What happens to the incentives facing others if the hegemon withdraws? The beauty of this paper is that it gives this question a rigorous analytical framing that is amenable to quantification.

The paper's starting point is the observation—recognized for over two centuries—that free trade is not the unilaterally optimal policy for an opportunistic government. But if all governments act on their short-term temptation to restrict imports and thereby improve their terms of trade, the outcome can be disastrous for all. There are ample incentives to cooperate, as might be formalized in a multilateral trade agreement, but since the world trading system lacks an external enforcer, any such cooperation must be self-sustaining as an equilibrium of an infinitely repeated trade-policy game. As Bagwell and Staiger (1990) and others have shown, cooperation requires a high enough discount factor, such that the short-run gains achievable from deviation are outweighed by the long-run losses that ensue during a subsequent punishment phase.

Bonadio, Levchenko, and Pandalai-Nayar (henceforth BLP) lend analytical precision to their topical question by phrasing it as follows: What minimum discount factor is needed to eliminate unilateral incentives to deviate from a cooperative trade-policy agreement? They use a quantitative trade model to evaluate countries' welfare along a cooperative path with tariffs below Nash-equilibrium levels, and use the same model to evaluate welfare along a path with a one-period deviation by some player, followed by a long—or infinite—period of reversion to the non-cooperative Nash equilibrium. They calculate the smallest discount factor for which the cooperative path dominates the deviation-and-punishment path. Finally, they redo the same exercise after removing the model counterpart of the United States from the global system under consideration.

This is a valuable discipline to impose on the discussion. Talk of hegemonic leadership can easily become metaphorical, with leadership standing for prestige, agenda-setting, institutional

stewardship, or coercive power. BLP instead ask a narrower but sharper question: how does the presence or absence of the hegemon affect the payoffs that govern cooperation among others? In their framework, leadership matters only insofar as it changes the one-period gain from deviation, the subsequent punishment payoff, or the cooperative payoff itself. This framing does not exhaust the meanings of leadership, but it usefully identifies one channel through which the exit of a large player might undermine cooperation.

It is worth taking a moment to outline the key ingredients of their quantitative setting, so that we can return later to how well those assumptions match the real-world situation the trading system now faces. BLP adopt a standard multi-country, multi-sector trade model with endogenous labor supplies. Households have CES preferences over goods distinguished by country of origin. Firms operate CRS technologies using bundles of inputs that also enter with constant elasticities of substitution. Each variety in a given industry is produced by a different country, and each country produces a single variety in each industry; that is, the model has an Armington structure. Firms price competitively, with zero markups, although the results would follow with any constant markups. Importantly, the model leaves little room for strategic complementarities across sectors. It therefore limits the scope for shocks in one sector to alter policy incentives in others. Finally, once the hegemon withdraws, the Nash choices by the remaining players are derived from a repeated game that does not involve any further actions by the model counterpart of the United States former hegemon.

The authors' headline finding is reassuring: the dominoes do not fall. There is little change in the discount factor needed to sustain cooperation among the remaining $N-1$ countries.

How should we understand this finding? As in other contexts—especially Arkolakis et al. (2012)—the CES specification, combined with complete specialization, delivers an elegant and transparent formula for welfare changes that depends only on trade elasticities and spending shares. In the current setting, export-weighted foreign expenditure shares, trade elasticities, and labor-supply elasticities determine optimal tariffs. Domestic absorption shares and optimal tariffs, in turn, determine welfare changes. Thus, incentives to deviate from a cooperative tariff equilibrium are mediated by trade shares. Since the sustainability of cooperation depends not on the supportive role of any one player, but rather on the marginal incentives of others to deviate, the BLP results hinge on the stability of trade shares. And trade shares are remarkably stable in their quantitative model.

The connection to the repeated-game calculation is then immediate. If the U.S. exit barely moves the trade shares that determine optimal tariffs and welfare, it can barely move either side of the incentive constraint. The short-run gain from opportunistic deviation changes little, and so does the future loss from a breakdown in cooperation. It follows that the minimum discount factor needed to sustain cooperation remains largely unchanged.

Why are the model trade shares so stable? In the model, bilateral trade shares are functions of wages, trade costs, tariffs, and the elasticity of substitution. The U.S. exit leaves bilateral iceberg trade costs unchanged. The general-equilibrium effects on wages are modest. In the Armington

setting, each country loses a single variety, but not a critical input; the result is smooth substitution rather than discontinuous adjustment. And the CES specification spreads the adjustment across countries, generating only modest changes in market shares. In short, the quantitative model translates the departure of the world's largest trader into many small reallocations.

This brings us to the question of whether the paper's quantitative findings reflect fundamental economic forces or instead are specific to the model's structure. Might the reassuring conclusions be too sanguine? I will now describe several reasons for possible concern.

First, the Armington specification seems to play a critical role in shaping adjustment to the shock. In this setting, the withdrawal of the United States from the trading system removes a single variety of a differentiated product, not a critical input or sector. No country can be "central" in the sense that its departure dramatically reshapes others' trade patterns.

Relatedly, with complete specialization, one variety per country, and CES preferences and technologies, what matters for the gains from trade (as we know from Arkolakis et al., 2012) is the *volume* of trade, not its *pattern*. Trade is diversified, and no country can become a critical bottleneck, as China arguably has in the market for rare earths. In richer economic settings, shocks to one sector can affect export opportunities and incentives for policy intervention in others.

Third, despite the input-output linkages recognized by BLP, theirs is not a model of supply chains with firm-to-firm relationships, increasing returns to scale, or entry and exit. Their setting is one in which trade shares vary continuously, so even a large shock, such as the removal of a large country and its CES variety, has only modest effects on the trade shares of the remaining countries. In other economic settings, especially those with increasing returns or critical inputs, small shocks can generate large reallocations.

A fourth limitation is that countries in the BLP model do not produce any goods in common. Therefore, trade diversion operates only through the effects of policies in one country on price indexes elsewhere. Trade diversion can be much larger, and much more politically salient, when countries produce close substitutes. When one large market closes, exports that would have gone there seek other destinations. If producers in those destination markets compete directly with the diverted exports, they may press their governments for protection. In this way, a policy change in one country can alter policy incentives elsewhere, even without any large change in aggregate trade shares.

Consider, for example, the response to the United States' imposition of Section 232 national-security tariffs on steel and aluminum in 2018. The EU soon imposed new steel safeguard measures, because it feared that steel shut out of the U.S. market would be redirected to Europe. The Commission determined in July 2018 that the U.S. Section 232 measures were likely to cause "substantial trade diversion" of steel products into the EU. The EU then converted those measures into definitive steel safeguards in early 2019 and later prolonged them, citing the continuing need to prevent injury to the EU steel industry. Canada also adopted provisional steel safeguards in October 2018, using a surtax above quota levels on selected steel products, after finding evidence of increased imports that caused or threatened serious injury to domestic producers.

A similar dynamic may be emerging in electric vehicles. After the United States essentially closed its market to Chinese EVs in 2024 by implementing a 100 percent tariff, Chinese producers had stronger incentives to seek other markets, including Europe. The EU, already concerned about the rise of subsidized Chinese EV exports, imposed additional duties on imports from China. In short, the presence of a strong and direct channel for trade diversion raises the possibility of political-economic contagion, whereby increased barriers in one country generate protectionist responses in others.

Another potential concern arises from the way that BLP model the policy-setting game. They assume that, once the hegemon exits the cooperative trade regime, the remaining $N-1$ countries continue to play the same repeated game, but with one fewer player than before. The counterfactual effectively removes the United States as a strategic actor. In practice, however, the United States has remained quite active in trade-policy negotiations, repeatedly using the threat of restricted market access to demand one-sided bilateral deals. This substantially alters the strategic environment facing other countries. Rather than focus solely on cooperation among themselves, many governments have chosen to bargain separately with the United States and to compete with one another for preferential access to its market. Such competition can undermine their incentives to cooperate in ways not captured by the BLP analysis.

Finally, the model leaves no role for institutions. Yet the U.S. retreat from the multilateral system has weakened the WTO in ways that may make it more difficult for other countries to cooperate. The most prominent example is the erosion of dispute settlement. The United States' blockage of appointments to the Appellate Body has left the WTO's appellate function inoperative, weakening the institution's capacity to enforce its rules. In a repeated-game setting, institutions can help identify violations, coordinate expectations about permissible retaliation, and reduce uncertainty about whether punishment will be imposed. If those functions deteriorate, the punishment phase becomes less automatic and perhaps less credible. When enforcement mechanisms are weakened, as they have been by recent U.S. actions, sustaining cooperation may require higher discount factors than the model suggests.

So far I have emphasized forces absent from the model that could undermine cooperation. But, as the authors now recognize in their final paragraph, there is also a force pushing in the opposite direction. The analysis in BLP considers only global trade agreements, while neglecting the possibility that countries may negotiate preferential agreements at the bilateral or regional level. The authors cite Baldwin (1993), who argued, in another paper with "dominoes" in the title, that cooperation can be self-reinforcing. When a subset of countries enters a preferential agreement, it becomes more valuable for outsiders to join and more costly for them to remain outside. Might U.S. disengagement from multilateral cooperation initiate, or at least encourage, a process of formation and expansion of regional agreements among countries that were formerly satisfied with multilateral arrangements?

There is indeed some evidence that this may be happening. In January 2026, for example, the EU and Mercosur signed their long-delayed free-trade agreement, with provisional application

beginning in May. That same month, the EU and India concluded negotiations for a free-trade agreement after talks that had begun in 2007, paused, and then resumed in 2022. The Comprehensive and Progressive Agreement for Trans-Pacific Partnership also expanded to include the United Kingdom, its first European participant, with accession entering into force in December 2024. Perhaps U.S. disengagement is fostering more cooperation among other countries than existed before.

To summarize, the authors have written a provocative and somewhat reassuring paper. They deserve much credit for taking an often-vague policy discussion and giving it a precise framing that makes it amenable to quantitative analysis. My reservations arise from a concern that the reassuring conclusion may be too optimistic. The paper shows that, within a disciplined and transparent quantitative trade framework, the U.S. exit has surprisingly little effect on the incentives of others to defect. The remaining question is whether the framework includes the channels most likely to transmit protectionist shocks in the world we now observe. I worry that the Armington-plus-CES formulation dampens mechanisms such as supply-chain disruptions, trade diversion, and firm entry and exit that could destabilize cooperation in a world with critical inputs, increasing returns to scale, and politically sensitive governments. But time will tell.

References

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