Putting Economics Back Into Geoeconomics

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June 13, 2025

The comeback of geoeconomics

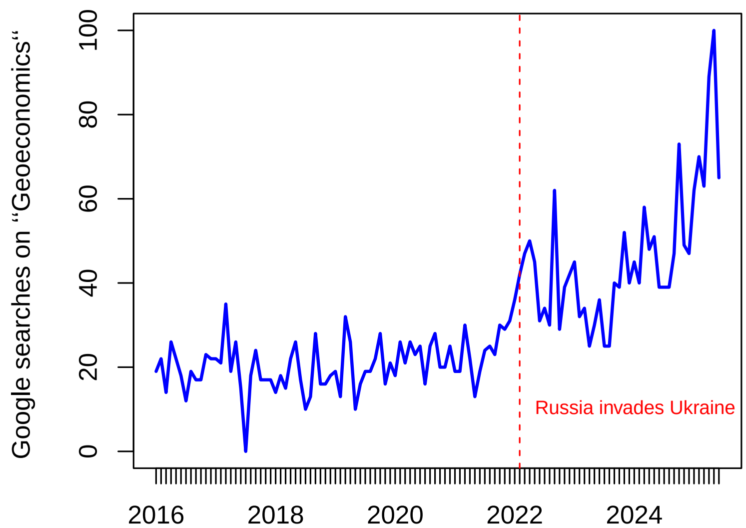
Geoeconomics is a rare example of a term that suddenly became very popular among scholars and policy makers alike. Figure 1 shows the usual google search numbers for this term only since 2016 and the break in interest in that word which is essentially only used by researchers and politicians clearly picks up starting after the Russian invasion of Ukraine. Clayton, Maggiori and Schreger (CMS) propose an integrated framework designed to make sense of this new interest and literature and propose a structure for this flourishing subdomain of research.[1]

A good framework starts with a good definition. Many such definitions have been proposed recently. For instance, the research group on geoeconomics recently launched at CEPR[2] states that *"Researchers will study how international economic policies can be used to achieve geopolitical, security and foreign policy goals and aim to quantify these vulnerabilities and the economic costs of potential disruptions of supply chains, production networks, financial networks, technology and market access."* Mohr and Trebesch (2025) also take a wide angle of analysis, i.e. they *...take a broad view and define geoeconomics as the study of the interlinkages between geopolitics and economics.* Gopinath et al. (2025) recent paper state that: *"geoeconomic fragmentation" refers to policy-induced changes in the sources and destinations of cross-border flows, often guided by strategic considerations, such as national and economic security, sovereignty, autonomy"*, therefore focusing on international exchanges, which is

[1] In a sense this is such a comeback for this question in our discipline (as their figure 1 shows) that the authors could have titled their paper "The return of the Geo (in) Economics".

[2] `https://cepr.org/research/research-policy-networks/geoeconomics`

Figure 1: Searching geoeconomics



also the approach of Thoenig (2024) in his handbook chapter defining geoeconomics as *"the study of the interaction between trade, diplomacy, and geopolitics."*

CMS adopt a very clear definition from the first sentence of the abstract: *"Geoeconomics is the use of a country's economic strength to exert influence on foreign entities to achieve geopolitical or economic goals."* Essentially, this restricts the topic as the *threat of using economic power* by a government to extract concessions from another government. The paper is therefore focused on a quite specific part of the literature. For instance, it remains relatively silent on the determinants and consequences of the use of force, particularly military or other forms of violence. The paper has high ambitions, as it should *"...serve as an entry point to economists, political scientists, and historians on how to think more formally about economic threats"*. This sounds like a survey, but it is in reality quite a lot more than that. The authors present an elegant integrated framework. Sufficiently rich to encompass most threats, while remaining sufficiently tractable to be useful for framing policy, the paper helps the reader make sense of a dense literature with a structured guidance.

Of course, on top of all its qualities, the paper could not come at a more relevant time... Donald Trump's avalanche of announcements since he took office (with special spike when the paper was presented and discussed) makes it indispensable reading in times when weaponizing trade policy is presented as a legitimate policy move by some governments.

How to think about economic threats?

The basic setup considers a small open economy (n) facing threats by an hegemon (heg). Those threats are intended to incentivize some behavior by n that it would not "naturally" adopt. The utility of n's government depends (in a separable way) on real consumption w_n/P_n of its population (P_n being a CES price index) together with a geopolitical action a_n. The threat involves an economic policy decision by the hegemon that affects w_n/P_n in exchange for a_n conforming to what the hegemon requests.

A key way in which geoeconomics is *geopolitics plus economics* lies in the fact that the hegemon should account for the optimal reaction of country n in case of the realization of the threat. That is, the hegemon can decide to cut all imports from n, but cannot prevent (as easily) n to look for alternative markets if it does so. Similarly, the hegemon can decide to impose sanctions on its exports of some critical input to n, but cannot forbid n to develop its own production capacities of this critical input.

In that setup, the paper shows very generally that the efficacy of (or resilience to) threats always depend on

1. *Alternatives* that n can turn to: markets and/or suppliers when the threat relates to trade policies, "guardian angel(s)" when the threat relates to financial flows or bilateral aid.

2. *Elasticities of substitution* $(1-\sigma)$ which are the key parameters driving how easy it is to shift to alternatives. A high σ diffuses the threat, since it signals low shifting costs.

The ability of alternatives to provide similar goods or funding at a reasonably close price will determine how costly will be the implied changes in bilateral shares of expenditure originating from country i (denoted by $\hat{\Omega}_{ni} = \Omega'_{ni}/\Omega_{ni}$). CMS then rely on the trade literature that has shown that under the assumptions of their setup, any change in trade costs exhibits welfare effect $\hat{\Omega}_{nn}^{\frac{1}{1-\sigma}}$ (Arkolakis et al., 2012). The intuition between that expression is that the change in domestic trade shares (which is one minus the import ration) ($\hat{\Omega}_{nn}$) is a sufficient statistic for all trade reallocations that occur after a trade shock (here the policy imposed by the hegemon). The power

$\frac{1}{1-\sigma}$ is scaling the change in trade patterns in terms of indirect utility. With very differentiated goods (σ close to 1), it is very costly to reallocate consumption to other sources, increasing the cost imposed by the hegemon.

To arrive at the key equations describing how much pain the hegemon can inflict to n, the authors use the structure of the CES demand system, where changes in shares are a simple a function of initial shares. In the limit, if the hegemon manages to cut off totally n from the rest of the world, $\hat{\Omega}_{nn} = 1/(1 - \sum_{i \neq n} \Omega_{ni})$. This result that you can express welfare changes and therefore nuisance power of the hegemon with sufficient statistics that rely on the current observable situation and a substitution parameter is much more general than CES demand, it is true under a wide *class of trade models* that yield what is known as structural gravity (the vast majority of the ones used in macro)[3].

One of the important results of CMS, is that this approach to measurement of welfare costs known as Exact Hat Algebra (Dekle et al., 2008; Costinot and Rodríguez-Clare, 2014) applies to a large array of threats (not only trade policy) which is very nice from an academic viewpoint, but also very useful for the practitioner.

A Laffer curve for uniform threats

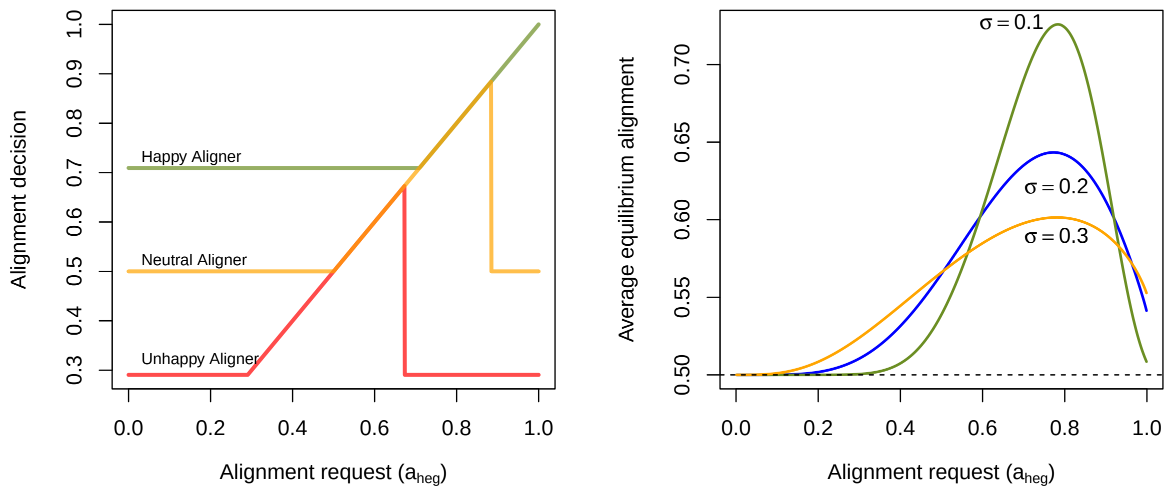
One of the limitations of the integrated framework proposed by CMS is that they consider (in this paper) one hegemon making a threat to one target country n in order to achieve one objective. It seems to me that a distinguishing feature of being a hegemon is to be willing and able to extract geopolitical concessions from many countries at once. This requires to think a little about the limits imposed to the hegemon when facing this multi-target world.

The authors recognize that with only economic threat, there is an upper limit to the requests of the hegemon. Indeed, they mention that "If the hegemon were to ask for more, then the request would be declined." This is what determines CMS's illuminating definition of power as the slack between lower and upper bounds of coercion. This made me wonder about possible *threat Laffer curves*.

Imagine that the threat is uniform and binary. For instance, you can decide to go from free trade to MFN with respect to each n but free trade is 0 tariffs, while MFN is applied to all countries as it should. Punishment is triggered by non-compliance with the request. Imagine also that the request a_{heg} is geopolitical alignment and that you can measure that on a 0-1 continuum (for instance, the share of UN votes where you align on the hegemon's votes). It is very likely that a_n varies a lot across

[3] Krugman (1980); Eaton and Kortum (2002); Chaney (2008) being prominent examples featured in Arkolakis et al. (2012).

Figure 2: The Laffer curve of threats



(a) 3 targets

(b) Many targets aggregated

n (some are easier to convince than others), which will affect when do they decide to comply and when they decide that $a_{\text{heg}} - a_n$ is too large compared to the threat on real consumption. Figure 2(a) shows three countries, with increasing ease of convincing/compliance. The horizontal axis varies the hegemon request, the vertical axis shows the level of alignment chosen by n. Each of those starts with compliance since its desired a_n is larger than a_{heg}. Then the country follows the request exactly (unitary slope) until it finds it too costly and returns to its desired a_n. On the (b) panel, I draw the average level of alignment obtained from countries randomly drawn in terms of desired a_n with standard deviation σ (and a central parameter such that the average is 0.5 with no request). The aggregation of individual country behavior exhibits a Laffer curve, where the average alignment first increases before coming back down. This comes from the heterogeneity in the initial a_n combined with uniform punishment. A key feature is that increasing heterogeneity σ makes it harder to achieve the overall objective for the hegemon.

How to protect oneself from "tailored" threats and the cost of decoupling

This Laffer curve phenomenon which comes from heterogeneous responses to a uniform threat seems (among other reasons) to make *bilateral threats* an appealing alternative route for the hegemon. In a sense, the now famous April 2nd 2025 "Liberation day" tariffs and more generally the flurry of trade policy threats made by president Trump since January 2025 can be interpreted as such a form of tailored threat. In order to extract concessions for a variety of motives (reducing drug traffic and/or migration flows, accepting deported citizens, etc.), the Trump administration adopted among other things a "reciprocal" tariff formula specific to each of the targets. In this case like in others, the hegemon's threat point, *holding general equilibrium forces— w and P—fixed*, depends entirely on trade elasticities and existing flow (dependence).

As the authors note in their section 4, targets can act ex-ante to increase elasticity and /or reduce dependence. For instance, they can pay fixed/variable costs to *decouple* markets for final goods or sources for inputs, or invest in creating or defending protecting institutions (WTO, EU, alliances). The costs to be put in front of the benefits linked to threat dissipation are quite clear:

1. Consumers do not like higher prices in peacetime which will inevitably occur if one wants to move back production at home or in friendly countries for some inputs. Reducing export dependence is also costly, since it involves essentially reducing output that is intended to serve the hegemon in order to reduce its leverage.

2. Another cost comes from the often recommended diversification of sources. In most cases, when defined at a sufficiently granular level, inputs and final goods are single-sourced when serving a given destination. Duplication costs on essentially perfect substitutes produced with increasing returns has to be costly.

3. Those investments are not only costly, but also uncertain. The 2025 Trump tariffs announcement gives us the best possible example that economic policy decisions can be reversed, sometimes quite fast, leaving little space for adjustment through long-run investment.

Another cost of uncertainty is more subtle. In the vast majority of this paper, the *hegemon and target* behave knowing all parameters of the economy, which will tend to lead to situations where threats are off of equilibrium path. Clearly, in the real world, threats are sometimes exerted. Probably because countries face incomplete information with respect to the reciprocal costs of an conflict. In that case, countries might not manage to settle on a mutually beneficial solution, and punishments are trigerred. As emphasized in Martin et al. (2008) and Thoenig (2024), reducing bilateral trade dependence lowers the opportunity costs of a conflict (the logic should hold in the case of bilateral financial dependence). Therefore, when decoupling in trade or FDI, countries raise the probability that the threat materializes. In ongoing work (Mayer et al., 2025), we quantify the tradeoffs of trade decoupling, evaluating the costs and benefits of US-imposed tariffs on imports from China. The model combined a diplomacy module with a trade module including I/O linkages for a world economy calibrated for 2018 using WIOD, first shows that the opportunity cost of a conflict falls for both countries. As a result, the probability of escalation rises, compensating in part the benefits of reduced costs in the even that the conflict actually occurs. Quite intuitively, the net geoeconomic advantages of decoupling are negative when the situation is initially peaceful, since the detrimental effect of increasing the chances of a conflict dominate. On the contrary if the initial situation is already very prone to conflict, the positive effect of reducing the consequence of conflicts through decoupling dominate.

Putting Macro back into geoeconomics

Let me get back to a maintained assumption in the model, i.e. that n is a small country. Equation (6), re-expressed in proportional changes states in a general formulation that economic threats induce a loss in value to the target equal to $\hat{V}_n = (\hat{w}_n/\hat{P}_n)^{\beta}$, the hat operator being between inside and outside option. This expression is closely related to the above mentioned Arkolakis et al. (2012) formula. Indeed with constant markup and labor as unique factor for producing inputs, the domestic expenditure share change is $\hat{\Omega}_{nn} = (\hat{w}_n/\hat{P}_n)^{1-\sigma}$ implying that $\hat{V}_n = \hat{\Omega}_{nn}^{\frac{\beta}{1-\sigma}}$.

However, equation (5) and their equivalent for other trade-related threats only has the price index change $\hat{P}_n$ since it assumes that w_n and w_{heg} are unaffected (which is implied by the fact that n is assumed to be a small open economy).

This does not apply well to cases like Trump 2 tariffs, since n is the whole world including very large countries. Consequently, w_n and w_{heg} *will adjust*. What are the consequences of this adjustment? This is best illustrated in the "Threat not to buy" case considered by CMS in their section 3.1. There the threat is implemented as the hegemon "lowering the price at which country n can sell". This is rather ad hoc, and I think the authors actually do not need such an assumption: prices of n will fall naturally as a consequence of the tariff.

Their equation for quantities sold to buyer b by target n is written as $x_{bn} = \gamma \left(\frac{p_n}{P}\right)^{-\zeta} X_b$. Let me reformulate this in values and consider that the price index is specific to the buyer, as it should in a world with trade costs:

$$p_{bn}x_{bn} = \left(\frac{p_{bn}}{P_b}\right)^{1-\sigma} X_b = \gamma' \left(\frac{\tau_{bn}w_n}{P_b}\right)^{1-\sigma} X_b$$

Market clearing ensures that total production is equal to total sales by all N_b firms: $Y_n = w_n L_n = \sum_b N_n p_{bn} x_{bn}$, which gives the *wage equation*:

$$w_n = \left(\gamma' \frac{N_n}{L_n} \sum_b \tau_{bn}^{1-\sigma} X_b P_b^{\sigma-1}\right)^{\frac{1}{\sigma}}.$$

With monopolistic competition,[4] N_n is proportional to L_n, and therefore

$$w_n = \gamma'' \left(\mathrm{RMP}_n\right)^{\frac{1}{\sigma}}, \quad \text{with} \quad \mathrm{RMP}_n \equiv \sum_b \tau_{bn}^{1-\sigma} X_b P_b^{\sigma-1}, \tag{1}$$

with RMP_n denoting real market potential, a term also called market access in the literature. It summarizes the demand to be expected from all countries in the world (including n) for an exporter located in n. Redding and Venables (2004) have shown how to estimate all components of RMP_n using structural gravity. When estimating different versions of equation (1), the literature has shown that the relationship is empirically very robust, in the cross section as in the within dimension (see Redding, 2022, for a recent survey).

Equation (1) means that nominal wages n will adjust to trade cost shocks imposed by its destination. Indeed the real market potential adjusts such that

$$\widehat{\mathrm{RMP}}_n = \sum_b \xi_{bn} \hat{\tau}_{bn}^{1-\sigma} \times \hat{X}_b \hat{P}_b^{\sigma-1} = \xi_{\mathrm{heg}\leftarrow n} \hat{\tau}_{\mathrm{heg}\leftarrow n}^{1-\sigma} + \sum_{b\neq \mathrm{heg}} \xi_{bn} \hat{\tau}_{bn}^{1-\sigma} \hat{X}_b \hat{P}_b^{\sigma-1},$$

with ξ_{bn} being the export dependence of n on market b. If the hegemon imposes a severe tariff on n, this will hurt w_n, all the more that n depends a lot on the hegemon for its overall sales. Therefore the χ reduction factor of CMS is not need, since wages and therefore prices will fall as a natural consequence of the tariffs.

The hegemon can threaten to reduce RMP directly through its imports (raising $\tau_{\mathrm{heg}\leftarrow n}$), or even more efficiently with a coalition of buyers. This reduces w_n, which is the intended purpose, but also raises w_{heg}, an unintended consequence of the threat

[4] The resulting equation holds for all models characterized by structural gravity as shown in Head and Mayer (2011).

in most cases. The reason is quite simple: because n is a worse competitor in market heg, the local producers will have a better share of their own market (through a rise in P_{heg}, i.e. a lower competition for the hegemon market consumers, which is the main market for hegemon producers). Let us take the case of the US threatening n = Vietnam of very large tariffs. The general equilibrium consequences of the ensuing rise of w_{heg}/w_n would be the following:

1. Vietnam would be more competitive because of its falling nominal wages and prices, and therefore would export more ex-post to the rest-of-the world (EU for instance).

2. The United States are predicted to export *less* to the world (including to Vietnam), simply because it is now a more expensive source of goods.

3. If n is small like in the case of Vietnam, the general equilibrium effects to third countries should not matter much (even though the shock will be large to Vietnam, the US will not be too affected, since it is small in its price index, and terms of trade won't change much).

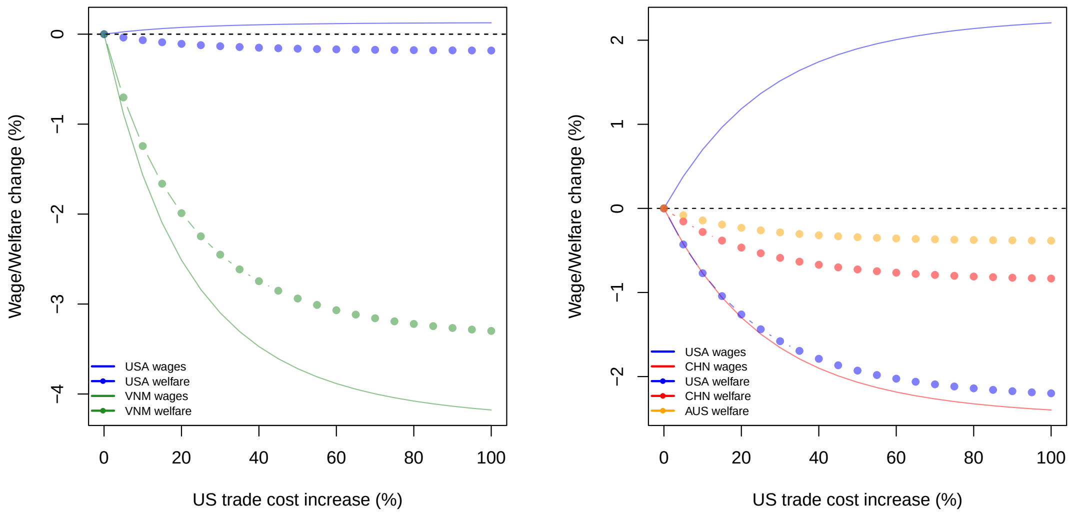
4. But clearly "liberation day" is a completely different thought experiment, since it threatens to also hit very large entities like the EU and China.

5. We should finally note that "deflected trade", i.e. the increase in Vietnam's export to the EU for instance, has the potential to degenerate into a global trade war (EU hitting Vietnam and others with emergency tariffs justified by the surge in imports, triggering further reaction, etc.), which is maybe the ultimate threat to the system in order for the hegemon to obtain its desired concessions from every country fearing trade chaos.

Do those general equilibrium effects that are omitted from the CMS paper for the sake of elegance and simplicity matter quantitatively? I would argue that they do. In figure 3, I present results from two simple quantitative exercises. Using the data from Head and Mayer (2021) for the year 2018, I simulate the impact of a trade cost shock imposed by the US to Vietnam on the one hand and China on the other hand. The model is calibrated on real world trade flows between 130 countries in 2018, and is described in Head and Mayer (2022).[5]

[5]Note that this is in no way an evaluation of liberation day tariffs, since a proper study requires a much richer framework with current data, tariff revenues, input-output linkages etc. See for instance the real-time analysis at the Kiel Institute (`https://www.ifw-kiel.de/publications/news/new-us-tariffs-hit-the-us-itself-hardest/`).

Figure 3: Welfare effects of increasing US trade costs on two countries



(a) Vietnam hit by USA (b) China hit by USA

When the United States hit Vietnam with a 0 to 100% rise in trade costs (panel a), the drop in welfare and nominal wages of Vietnam is very large, getting up to -3%, which reflects the high dependence on its exporters on the US market (with 2025 data, the shock would probably be even larger). The US is also hurt, but the damage is quite negligible, as is the anticipated increase in nominal wages. In the (b) panel, the US hits China instead. Now both wage effects are very large, growing for US and falling for China by up to 2%. With China being a large share of the US consumption basket (and inputs), the price increases and corresponding welfare loss for the US are quite substantial, also going up to 2% when approaching autarky. In this scenario where China does not reciprocate, its welfare loss are relatively contained since there is little price increase (except on US goods which do not matter much), and the increased competitiveness of China on third markets mitigates lost exports to America. Finally this panel shows welfare losses for Australia, which illustrates that a third country can be hit indirectly, here by the surge in imports from China, and fall of exports to China, that displaces Australian output.

Overall, when titan nations start entering in bilateral trade wars, the general equilibrium of the threats should be taken into account, since they can be large quantitatively, and inform upon the credibility of different types of threats. This does not impair the value and elegance of the CMS theoretical framework, but one should be aware of those general equilibrium effects when implementing it quantitatively.

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