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Keywords

trade balance, tariff policy, uncertainty, pass-through, elasticity

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Tariff Policy Activism and the Trade Balance under Multiplicative Uncertainty: A Cautionary Tale

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In the face of multiplicative uncertainty about the effects of a tariff on the trade balance, policymakers should err on the side of caution and use tariffs less aggressively. This important insight is illustrated in two separate cases, one where multiplicative uncertainty arises only in the pass-through from the tariff to import prices, and the other where multiplicative uncertainty is present in both the pass-through to import prices and the elasticity of the trade balance with respect to import prices.

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1. Introduction

The imposition of tariffs on imported goods into the United States has grabbed headlines in national and international media outlets.¹ A few commentators have labelled the unilateral increase in US tariff rates and the ensuing response by global players such as the European Union and China as planting the seeds for the eruption of a global trade war [Baldwin and Navaretti (2025), Conteduca et al. (2025), Obstfeld (2025)]. There seems to be general agreement that the road ahead is marked by great uncertainty about where and when this simmering international trade conflict will end [Kilcrease and Gertz (2025)].

Uncertainty can take many forms. As alluded to above, it can mean uncertainty about the future course of political decision-making. Financial markets, business sentiment, and consumer confidence are particularly sensitive to erratic geo-politics and record heavy falls in the wake of abrupt and unexpected political decision-making. Economic policymakers are also concerned about a different form of uncertainty. This type of uncertainty arises in the transmission process of policy and applies to the actual outcome of policy action towards achieving an intended target. The purpose of this short note is to convey a simple yet important point about the effectiveness of policy under the latter type of uncertainty. Owing to the headline-grabbing news about tariffs and the trade balance, we frame our discussion in the context of trade policy.²

Our point is this: in the presence of uncertainty about the actual effect of tariffs on the trade balance, the policymaker (e.g. the government) should exercise care in choosing the tariff (rate). In an environment where information about the true impact of the policy instrument, a tariff, on the

¹ The announcement of sweeping tariffs on US imports was front-page news in leading daily newspapers around the world, led to extensive television, radio, and internet coverage, and prompted swift reaction by economic commentators. Hawkins (2025) provides a breakdown of the country-by-country response in the Asia-Pacific region following the announcement.

² See Neiman (2025) for a vivid illustration of how shoddy analysis can lead to bad outcomes for US trade relations.

presumed objective, the trade balance, is imperfect, the policymaker should use the policy instrument less aggressively than in the absence of such multiplicative uncertainty. We demonstrate this simple but important point in a variant of Brainard's (1967) model where the policymaker attempts to keep variations in the trade balance to a minimum when choosing the optimal tariff rate. A key finding is that an optimizing policymaker sets the tariff at a level where trade is not balanced. In other words, the gap between exports and imports is not fully closed.

The remainder of the paper is structured as follows. In the next section we review briefly the literature that we deem relevant to our analysis and provide a frame of reference for our discussion. In Section 3 we present our model. The implications for optimal tariff policy in our linear-quadratic framework under multiplicative uncertainty are worked out in Section 4. Section 5 offers a brief conclusion.

2. Review of Related Literature

In this section, we provide a brief overview of some of the issues and concepts involved in discussions central to the application of tariff policy and its intended and unintended consequences. In general, tariffs are used to protect certain domestic industries, to induce trading partners to change their practices on certain issues, and to raise revenue. For a large country that can influence world prices, a tariff means a lower world price of the imported good, generating a terms-of-trade improvement at the expense of distorting production and consumption. For a small country that cannot change world prices, however, an import tariff implies no terms-of-trade improvement but just distorted production and consumption. In both cases import tariffs generate revenue for the country.

It is possible that the imposition of a tariff by a large importing country decreases the world price of the imported good. The good becomes more

expensive in the importing country with a tariff. This decreases the importing country's demand for the good on the strength of which world demand decreases, leading to a decrease in the world price of the good, so long as the importing country's demand is sufficiently large in world demand. The exact change in the world price and the domestic price of the imported good (the pass-through) is, however, determined by the price elasticity of export supply and import demand. The incidence of a tariff on the importing country would be greater the more (less) price elastic is the export supply (import demand).³ Similarly, the change in the trade balance is determined by the responsiveness of imports and exports of the country to price (and possibly income) changes.⁴

Johnson (1953) shows that a welfare-maximizing tariff should be inversely proportional to the elasticity of foreign export supply. Extending Johnson's (1953) optimal tariff analysis to an environment with trade deficits, Pujolas and Rossbach (2024) show that a trade deficit increases the optimal tariff for it makes foreign demand more inelastic, enabling the importing country to better manipulate its terms of trade. In contrast to Pujolas and Rossbach's (2024) finding, Itskhoki and Mukhin (2025), building on Johnson (1950), argue that neither trade shares nor elasticities matter for balancing a trade deficit, but the financial valuation effect of a tariff does. That is, an imbalanced net foreign asset position leads to an aggregate trade imbalance, which can be changed via tariffs to the extent that tariffs change the net financial position through adjustments of the value of gross foreign assets. For example, if a country has currency debt (gross international home-currency liabilities), then it is the currency appreciation (a negative valuation effect) induced by either an import tariff or an export subsidy that can balance a trade deficit. This mechanism works through the budget constraint that takes into account the country's financial position. A trade deficit (surplus) should

³ Fontagné et al. (2018) find that exporters absorb one third of tariff changes in their export prices.

⁴ One might expect a tariff to decrease imports directly through increasing the cost of importing, and (perhaps to a lesser extent) to decrease exports indirectly through general equilibrium feedback effects by decreasing other countries' income.

be balanced out by a positive (negative) net foreign asset position, or by paying less (more) on its foreign debt – the country’s assets, such as bonds and equity, held by the country’s major trading partners – than what it earns on its foreign assets; see Itskhoki and Mukhin (2025, pp.19-20) for details. By the same token, Aguiar et al. (2025) argue that, as long as gross positions differ in sign, there exists a set of bilateral tariffs with balanced trade and zero net financial position vis-à-vis the trading partner.

A few recent papers probe the empirical linkage between tariff policy and the trade balance. Delpeuch et al. (2024) present evidence that trade deficits are associated with increases in trade protectionism among G20 countries in the 2009–2020 period. MacDonald et al. (2020) argue that macroeconomic factors are the drivers of both aggregate and bilateral trade imbalances rather than tariffs in a gravity model. Also employing a gravity model, Cuñat and Zymek (2023) show in their simulations that the removal of asymmetric trade wedges, including tariffs, would substantially reduce bilateral trade imbalances.

The recent literature has incorporated uncertainty in trade policy discussions and developed two broad measures to capture trade policy uncertainty (TPU). The first method is a text-based analysis that identifies certain terms related to TPU and constructs broad time-varying indices.⁵ The second method is an event-based analysis that looks at changes in the probabilities of different states (e.g., a trade agreement) and proxies those states with focal tariff levels such as free trade, most-favoured-nation (MFN), or trade war tariffs. Both measures have shown increased trade policy uncertainty in the last decade; see, among others, Handley and Limão (2022), Davis (2019) and references therein. Some notable developments that led to peaks in trade policy uncertainty in the last decade were the Brexit referendum, Trump’s protectionist rhetoric and his election in 2016, his re-election in 2024 and, most recently, his promulgated tariff hikes and threats of further sanctions. The withdrawal of the US from the Trans-Pacific Partnership (TPP) in 2017 and the flare-up of US-China trade tensions, culminating in tariff hikes on US

⁵ The text-based measure of TPU closely follows the text-based measure of economic policy uncertainty (EPU) developed by Baker et al. (2016).

steel and aluminium imports in 2018, are further events that triggered greater trade policy uncertainty. Combining trade policy uncertainty and discussions around the relationship between trade policy and trade deficits, Caliendo et al. (2025) develop a dynamic multi-country quantitative Ricardian trade model that incorporates aggregate uncertainty. In their model, trade imbalances emerge endogenously as equilibrium outcomes of optimal intertemporal allocation decisions under uncertainty. They show that tariff shocks do not eliminate trade imbalances but only reallocate them. This result appears to hold also for the “Liberation Day” tariff schedule announced by the United States in April 2025.

The “Liberation Day” tariff schedule imposes a baseline tariff of 10 percentage points on each country and is adjusted upward by half the bilateral deficit-to-imports ratio and cannot be explained by welfare maximization. While uncertainty is assumed away in their study, Ignatenko et al. (2025) develop a quantitative trade model and show that the “Liberation Day” tariffs are not structured optimally to maximize the terms of trade gains, revenue collection, or deficit reduction. Their results suggest that an optimally designed tariff would involve a uniform rate of approximately 19 percentage points applied equally across all trading partners.

The “sales pitch” behind the “Liberation Day” tariff schedule has been “reciprocity” and “correcting trade imbalances”; see, among others, Mitra (2025). Moreover, since the beginning of 2025, the world has witnessed back-and-forth type of trade policy announcements causing substantial uncertainty.⁶ These constitute also the main motivation of this paper: multiplicative uncertainty about the effects of a tariff on the trade balance. In our theoretical set-up, multiplicative uncertainty appears in the form of stochastic parameters on the policy instrument (tariff rate) that is positively related to the policy objective (trade balance). An important strand of the

⁶ As Davis (2019, p.7) puts it: “Under President Trump, tariffs are threatened, announced, delayed, reversed, announced again, imposed, and removed – often in quick succession. Some countries get tariff exemptions, some don’t. Exemptions vary in duration, and they come and go in a head-spinning manner.”

empirical literature attempts to measure the size of these parameters - trade elasticities and the extent of pass-through to import prices. Hillberry and Hummels (2013) and Head and Mayer (2014) document substantial variation in the estimates of the elasticity measure. Their estimation results are reflective of the wide disparity in the magnitude of the elasticity of trade volumes with respect to trade policy reported in the empirical literature. Alessandria et al. (2025) argue that there are at least two reasons behind this divergence: (i) trade responds gradually to policy changes (making the elasticity measure sensitive to the time horizon over which it is measured);⁷ and (ii) both the lagged effects of past reforms and the effects of expectations over future reforms affect the way trade responds. In addition, Fontagné et al. (2022) argue that the differences in methods and data also contribute to divergence in the estimation results.⁸

With respect to pass-through of tariffs to import prices, Cavallo et al. (2021) report an estimated pass-through of 94 percent to US import prices of goods from China in the wake of the first round of US import tariffs over the 2018-19 period. A tariff of 10 percent on the price of imports from China caused US import prices to increase by 9.4 percent. Similarly, Amiti et al. (2019) and Fajgelbaum et al. (2020) also find that the tariffs were passed through almost fully to U.S. domestic prices of imports.

Not only does this high pass-through contrast sharply with the low pass-through of 25 percent that the Trump administration used in setting the *reciprocal tariff* rates for many countries, as reported by Neiman (2025), but it is also at odds with the theoretical insights provided by Lehrer (2023). To reconcile the theory and the empirical evidence, Lehrer (2023) uses a dynamic model of exporting with costly price adjustments and variable mark-ups and shows that a standard model without TPU would suggest an increase in import prices by 5.9 percentage points following an increase in tariffs by 10

⁷ For example, using US net trade flows, relative prices, and expenditures, Alessandria and Choi (2021) estimate a quarterly short-run elasticity of 0.2 and a long-run elasticity of 1.1.

⁸ Fontagné et al. (2022) show that there is considerable heterogeneity in trade elasticity also across products.

percentage points. Under high TPU, however, the increase in import prices would be 8.1 percentage points.

Taken altogether, the issue of the extent of pass-through of import tariffs to import prices is far from being settled in the trade literature.

3. The Model

The choice of the optimal tariff rate is illustrated in a stochastic setting where the policymaker uses a policy instrument (τ) to achieve a single objective. The aim of policy under uncertainty is to minimize expected losses that manifest themselves as squared fluctuations of the trade balance ($TB=X-M$) around a fixed target value:⁹

$$\min_{\tau} E(X - M - TB^*)^2 \quad (1)$$

where X = exports, M = imports, and TB^* = target for the trade balance. In what follows, the goal of the policymaker is to achieve balanced trade, $TB^* = 0$.¹⁰

The trade balance and the policy instrument are linked via a simple positive relation:

$$X - M = a_0 + \varepsilon a_1 \tau + u, \quad (2)$$

where $a_0 < 0$, i.e. a trade deficit occurs if no tariff is applied and no random shocks occur;¹¹ and u is an additive random disturbance with $u \sim N(0, \sigma_u^2)$.

⁹ While the objective function given in equation (1) appears to be at odds with the optimal tariff literature, it closely follows the current official US tariff policy discourse that emphasizes balanced trade. A linear-quadratic framework is also standard in the macroeconomic policy literature. We also looked at the case of an asymmetric objective function, one where the policymaker stands to gain from a positive trade balance. Incorporating this benefit into the objective function does not overturn the results reported in Section 4. We return to this point later in the paper.

¹⁰ This paper is not about whether a zero-trade balance is a reasonable goal. A zero target simplifies the algebra.

¹¹ Here we focus squarely on the linkage between tariff policy and the trade balance. A more elaborate framework would consider the role of macroeconomic factors, such as exchange

The tariff rate affects the trade balance through two channels. Its total effect is captured by the multiple εa_1 , where ε denotes the elasticity of the trade balance with respect to import prices, and a_1 represents the extent of pass-through from tariffs to import prices.

4. Policy Implications of Multiplicative Uncertainty

In this section we trace the implications for policymaking of two separate cases. Both cases probe the transmission process from the application of an import tariff to the trade balance. The first case looks at a scenario where multiplicative uncertainty exists only in the pass-through from the tariff to import prices, while the second case considers a scenario where multiplicative uncertainty engulfs the complete chain of channels from the policy instrument to the target variable.

4.1. Multiplicative Uncertainty about the Pass-Through to Import Prices

We begin our analysis by assuming that the elasticity of the trade balance with respect to import prices, denoted $\varepsilon > 0$, is constant and known to the policymaker.¹² The locus of multiplicative uncertainty is thus the extent of pass-through from tariffs to import prices: $a_1 \sim N(\bar{a}_1, \sigma_{a_1}^2)$. The extent of pass-through is random for the policymaker and accounts for the uncertain effect associated with the use of the policy instrument. That is to say, the policymaker knows only the mean but not the realized effect of the policy instrument on the final objective when setting policy.¹³ There is multiplicative

rates and income differences, and microeconomic factors, such as differences in market size and relative demand and supply elasticities, in determining net trade balances.

¹² Positive elasticity measure ε implies that a change in import prices changes the trade balance in the same direction, such that an increase in import prices improves the trade balance (decreasing trade deficit).

¹³ Think of a timeline where policy is set first on the basis of the expected multiplicative effect of the policy instrument on the target and before the realization of the additive disturbance.

uncertainty associated with the actual impact of the tariff on the trade balance via its stochastic conduit through to import prices.

To show the policy implications of this type of uncertainty, we begin by taking the unconditional expectation of equation (2):

$$E(X - M) = a_0 + \varepsilon \bar{a}_1 \tau. \quad (3)$$

With the help of equation (3), we can rewrite the expected loss function in equation (1) as:

$$E(X - M - E(X - M) + E(X - M) - TB^*)^2. \quad (4)$$

Evaluating equation (4) yields

$$E(X - M - E(X - M))^2 + (a_0 + \varepsilon \bar{a}_1 \tau - TB^*)^2, \quad (5)$$

because the cross-product term drops out. Recall that $TB^* = 0$. Substituting equations (2) and (3), respectively, for $(X - M)$ and $E(X - M)$ in the first term, we can now restate the policy problem as in equation (6):

$$\min_{\tau} \varepsilon^2 \tau^2 \sigma_{a_1}^2 + \sigma_u^2 + 2\varepsilon \tau \text{Cov}(a_1, u) + (a_0 + \varepsilon \bar{a}_1 \tau)^2. \quad (6)$$

Taking the first-order condition with respect to τ , setting the result equal to zero, and solving for the policy instrument yields the optimal policy setting as given in equation (7):

$$\tau^* = \frac{-\frac{1}{\varepsilon} \left(\frac{\text{Cov}(a_1, u)}{\bar{a}_1^2} + \frac{a_0}{\bar{a}_1} \right)}{\frac{\sigma_{a_1}^2}{\bar{a}_1^2} + 1}. \quad (7)$$

If the additive and multiplicative sources of randomness are independent of each other, then $\text{Cov}(a_1, u) = 0$ and the optimal setting for the policy instrument reduces to:

$$\tau^* = -\frac{\frac{1}{\varepsilon}\left(\frac{a_0}{\bar{a}_1}\right)}{(1 + V_{a_1}^2)} > 0, \quad (8)$$

where $\varepsilon > 0$, $a_0 < 0$ and $\bar{a}_1 > 0$ (by assumption), and $V_{a_1}^2 = \frac{\sigma_{a_1}^2}{\bar{a}_1^2} > 0$. Note that $V_{a_1}^2$ is the square of the coefficient of variation, which captures the policymaker's uncertainty about policy effects.¹⁴ Equation (8) shows that, *ceteris paribus*, greater uncertainty associated with the effect of the tariff rate on import prices (i.e. a larger $\sigma_{a_1}^2$ implying a larger $V_{a_1}^2$) reduces the optimal tariff rate. The policymaker should exercise more caution when using a tariff to achieve a balanced trade account if there is a great disparity between its actual and mean effect on the trade balance.¹⁵

The final step consists of substituting the optimal setting for τ into equation (2) and taking unconditional expectations. Doing so yields:

$$E(X - M) = a_0 - \frac{a_0}{(1 + V_{a_1}^2)} < 0, \quad (9)$$

where $a_0 < 0$ and $|a_0| > \left| \frac{a_0}{(1 + V_{a_1}^2)} \right|$, for any $\sigma_{a_1}^2 \neq 0$. Equation (9) suggests that on average, the trade gap is not closed under the optimal policy when

¹⁴ The ratio of the standard deviation to the mean of a random variable (denoted V) is referred to as the coefficient of variation; see Goodman (1960).

¹⁵ This result is predicated on $\text{Cov}(a_1, u) = \rho\sigma_{a_1}\sigma_u = 0$. If the two sources of uncertainty are not independent and $\rho \neq 0$, then the optimal setting of the policy instrument could be higher or lower, depending on whether the correlation coefficient ρ is positive or negative. In the case of an asymmetric objective function, one where the policymaker stands to gain from a positive trade balance, such as

$\min_{\tau} E(X - M - TB^*)^2 - \lambda(X - M - TB^*) \quad \lambda > 0$, the optimal policy setting changes to

$\tau^* = \frac{\frac{1}{\varepsilon}\left(\frac{\hat{\lambda}-a_0}{\bar{a}_1}\right)}{(1+V_{a_1}^2)} > 0 \quad \hat{\lambda} = \frac{\lambda}{2}, \quad TB^* = 0$. In essence, optimal policy becomes somewhat less conservative

because of the gain from a positive trade balance. However, the main conclusion of this paper is unaffected. The inverse relationship between the square of the coefficient of variation and the optimal policy setting still holds.

multiplicative uncertainty exists, that is, a trade deficit persists. A balanced trade account occurs, however, in the absence of multiplicative uncertainty (i.e. when $\sigma_{a_1}^2 = 0 \Rightarrow V_{a_1}^2 = 0$).

4.2. Multiplicative Uncertainty in the Whole Transmission Process

While uncertainty about the effect of pass-through of a tariff to import prices is a factor complicating policy analysis, it may not be the only factor. There may also be uncertainty about the elasticity of the trade balance with respect to import prices, as documented in the latter part of Section 2. Both factors account for the uncertain effect associated with the use of the policy instrument. Thus, in addition to assuming $a_1 \sim N(\bar{a}_1, \sigma_{a_1}^2)$, we now assume $\varepsilon \sim N(\bar{\varepsilon}, \sigma_\varepsilon^2)$, that is, both parameters are stochastic. Moreover, to keep the analysis as simple as possible, we assume the sources of uncertainty are independent of one another. To put it formally, there is no systematic covariation among the three random elements: $Cov(\varepsilon, a_1) = Cov(\varepsilon, u) = Cov(a_1, u) = 0$.

To show the policy implications in the present case, we again begin by taking the unconditional expectation of equation (2), which leads to:

$$E(X - M) = a_0 + \bar{\varepsilon} \bar{a}_1 \tau. \quad (10)$$

Next, we calculate the variance of the trade balance as given in equation (11):

$$V(X - M) = E(X - M - E(X - M))^2 = \tau^2 V(\varepsilon a_1) + \sigma_u^2. \quad (11)$$

Given both sources of multiplicative uncertainty are independent of one another, the variance of the product of ε and a_1 can be expressed as:¹⁶

$$V(\varepsilon a_1) = \bar{a}_1^2 \sigma_\varepsilon^2 + \bar{\varepsilon}^2 \sigma_{a_1}^2 + \sigma_\varepsilon^2 \sigma_{a_1}^2. \quad (12)$$

¹⁶ See Goodman (1960) on the derivation of the exact formula for the variance of the product of two random variables.

Substituting equation (12) back into equation (11) and following the same steps as in Section 4.1., we can restate the policy problem as in equation (13):

$$\min_{\tau} \quad \tau^2 (\bar{a}_1^2 \sigma_{\varepsilon}^2 + \bar{\varepsilon}^2 \sigma_{a_1}^2 + \sigma_{\varepsilon}^2 \sigma_{a_1}^2) + \sigma_u^2 + (a_0 + \bar{\varepsilon} \bar{a}_1 \tau - TB^*)^2, \quad (13)$$

where $TB^* = 0$. Taking the derivative of the above equation with respect to τ , setting the result equal to zero, and solving for τ yields the optimal setting for the policy instrument:

$$\tau^* = - \frac{\frac{1}{\bar{\varepsilon}} \left(\frac{a_0}{\bar{a}_1} \right)}{(1 + V_{a_1}^2)(1 + V_{\varepsilon}^2)} > 0, \quad (14)$$

where $\bar{\varepsilon} > 0$, $a_0 < 0$ and $\bar{a}_1 > 0$ (by assumption), and $V_{a_1}^2 = \frac{\sigma_{a_1}^2}{\bar{a}_1^2} > 0$ and $V_{\varepsilon}^2 = \frac{\sigma_{\varepsilon}^2}{\bar{\varepsilon}^2} > 0$. Given both the extent of pass-through and the elasticity of the trade balance with respect to import prices are random for the policymaker, it is not surprising to find that the optimal setting for the policy instrument now includes the square of the coefficient of variation for both parameters (i.e., τ^* given in equation (14) is a function of both $V_{a_1}^2$ and V_{ε}^2).

Comparing equation (14) with equation (8), it is evident that the optimal policy setting should become even less aggressive when both sources of uncertainty exist. The presence of the product $(1 + V_{a_1}^2)(1 + V_{\varepsilon}^2)$ in the denominator in equation (14) suggests that the two sources of uncertainty, while being independent of each other, mutually reinforce each other. As such, multiplicative uncertainty associated with the application of tariffs to achieve a balanced trade target calls for a very conservative, measured application of tariff rates. Moreover, both equations (8) and (14) show that the optimal setting for the policy instrument aiming to close the trade balance gap is (i) inversely related to the elasticity of the trade balance with respect to import prices (i.e., the larger is the elasticity measure, the lower is the tariff rate), which can be related to Johnson's (1953) finding; and (ii) positively related to the ex-ante trade imbalance with no tariff and no random shock (i.e., the

greater is $|a_0|$, the higher is the tariff rate), which can be related to Pujolas and Rossbach's (2024) finding.

As in Section 4.1., the implication for the behavior of the expected trade balance is straightforward. Substituting the optimal tariff (τ^*) from equation (14) back into equation (10) shows that

$$E(X - M) = a_0 - \frac{a_0}{(1 + V_{a_1}^2)(1 + V_\varepsilon^2)} < 0, \quad (15)$$

where $a_0 < 0$ and $|a_0| > \left| \frac{a_0}{(1 + V_{a_1}^2)(1 + V_\varepsilon^2)} \right|$, for any $\sigma_{a_1}^2 \neq 0$ and $\sigma_\varepsilon^2 \neq 0$. Similar to equation (9) in the previous sub-section, equation (15) suggests that on average, the trade gap is not closed under the optimal policy when multiplicative uncertainty exists, that is, a trade deficit persists because of the conservative use of the policy instrument. Compared to a single source of uncertainty, however, the expected trade balance gap under the optimal policy is greater when both sources of uncertainty exist (see equation (15)) than in the case of a single source of uncertainty. Finally, similar to the finding in Section 4.1., a balanced trade account occurs only under complete certainty (i.e., when both $\sigma_{a_1}^2 = 0 \Rightarrow V_{a_1}^2 = 0$ and $\sigma_\varepsilon^2 = 0 \Rightarrow V_\varepsilon^2 = 0$).

5. Conclusion

Policymakers around the globe now must come to grips with greater uncertainty, not only in the political arena, but also in international trade relations. One central area of concern is the threat or outright imposition of import tariffs to correct trade imbalances. In this short paper, we use this topical issue to highlight an often-overlooked complexity of real-world policymaking and assess its consequences. In the face of multiplicative uncertainty about the effects of a tariff on the trade balance through import prices, policymakers should err on the side of caution and use tariffs less aggressively. This insight carries over a fortiori to the case where multiplicative uncertainty characterizes all channels through which the policy instrument affects the trade balance. It is vital to take this uncertainty into

consideration to make an informed judgement about the use of a tariff as a policy instrument. Judicious use of the tariff does not result in the closing of the trade imbalance.

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