Trade Matters—and Not for Trade's Sake*

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On October 11, 2016, Daniel Gros published a post in the CEPS website in which he criticized the diagnosis of the global trade slowdown offered in the latest IMF *World Economic Outlook* (WEO) and offered his own explanation—that the slowdown is due to the behavior of commodity prices.[1] Gros argued that "there is little to be worried about the slowdown in trade," and he concluded his post by stating that: "The present slowdown in trade volumes […] should be welcomed, not bemoaned. New barriers are certainly not warranted, but political leaders should stop insisting on the narrative that more trade is always a sign of good times and that less trade is always bad."

I strongly disagree with these statements. Less trade *is* bad, and the global trade slowdown should *not* be welcomed. It is very important to understand its origins—and not just for trade's sake.

I will explain my point by means of the simplest analytical framework I can think of.

Suppose for simplicity that the world consists of two countries, each of them of size equal to 1/2 of the world (nothing of what I focus on changes if we assume a larger number of countries of different size). National accounting identities state that GDP (Y) is the sum of consumption (C), investment (I), government spending (G), and net exports (NX ≡ exports (X) – imports (IM)) in each country. Thus, for countries 1 and 2:

$$Y(1) = C(1) + I(1) + G(1) + NX(1), \qquad (1)$$

$$Y(2) = C(2) + I(2) + G(2) + NX(2), \qquad (2)$$

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* The views I express in this document are personal and do not reflect the views or policies of the CEPR, NBER, and the Central Bank Research Association.

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[1] Gros' post, titled "The Globalisation Litany," can be found at https://www.ceps.eu/publications/globalisation-litany. The relevant IMF WEO chapter, "Global Trade: What's behind the Slowdown?" is available at https://www.imf.org/external/pubs/ft/weo/2016/02/pdf/c2.pdf. For other recent analyses of the trade slowdown, see the ECB Occasional Paper "Understanding the Weakness in Global Trade: What Is the New Normal?" at https://www.ecb.europa.eu/pub/pdf/scpops/ecbop178.en.pdf, the OECD Economic Policy Paper on "Cardiac Arrest or Dizzy Spell: Why Is World Trade so Weak and What Can Policy Do About It?" at http://www.oecd-ilibrary.org/economics/cardiac-arrest-or-dizzy-spell_5jlr2h45q532-en, and the blog post on " Splitting out Emerging Economies Changes the Picture on Global Trade" by CFR's Brad Setser, available at http://blogs.cfr.org/setser/2016/10/14/splitting-out-emerging-economies-changes-the-picture-on-global-trade/.

where I assume that all variables are measured in the same units. Multiplying each of these equations by 1/2, adding up the resulting equations, and defining world aggregates as the sums of size-weighted country-level variables, we have:

$$Y(W) = C(W) + I(W) + G(W). \qquad (3)$$

World GDP is the sum of world consumption, investment, and government spending. Net exports disappear as a country's exports are the other country's imports. Therefore, NX(W) = (NX(1) + NX(2))/2 = 0 (this happens because the world as a whole does not trade with anyone else—yet).

On the surface, equation (3) tells us that if we wanted to understand world GDP growth, we should not concern ourselves with trade. After all, there is no NX(W) in equation (3). From this, we would conclude that trade is a zero-sum game, and that we are wasting time trying to understand the sources of the global trade slowdown because it doesn't matter for world GDP growth.

But that naïve view is not correct. Trade *does matter* for world GDP. Even if the world does not trade with aliens (yet), trade affects the allocation of resources and productivity. Even if no NX(W) shows up in equation (3), trade has a positive effect on Y(W) by affecting the allocation of resources across countries, within countries, and the efficiency with which the resources are used. In this way, trade increases the size of the world GDP "pie" that can be allocated to world consumption, investment, and government spending. Less trade *is* bad, and the global trade slowdown should *not* be welcomed.

The policy implication is that even if we may not care about the reasons of the global trade slowdown for trade's sake, it is important to understand why trade growth has been slow for years because trade matters for world GDP. Understanding what has been causing trade to slow down will help us formulate better policies, not with the goal of increasing trade per se, but with that of improving world GDP performance.[2]

With respect to trade policy, Gros argues that most gains from lowering trade barriers have already been exhausted. His argument is too tariff-focused. Trade agreements like the Trans-Pacific Partnership (TPP) and its Trans-Atlantic counterpart currently under negotiation—the Trans-Atlantic Trade and Investment Partnership (TTIP)—address many other types of policies that impinge on trade. Key gains will come from those areas.

Gros does point out that "New barriers are certainly not warranted." Here, we can use the simple framework I introduced above to reinterpret the logic of non-cooperative trade policy (protectionism) and why it is a very bad idea.

[2] I will note at this point that I also disagree with Gros that the trade slowdown is explained by commodity prices. I agree with the IMF's diagnosis that attributes an important role to weak investment and value-chain growth—though I will admit upfront that I may be biased by the fact that the IMF used the methodology I and coauthors developed in the paper available at http://faculty.washington.edu/ghiro/BussiereCallegariGhiroSestieriYamanoAEJMacro13.pdf.

Use D to denote the difference between country 1 and country 2 variables (for example, $Y(D) \equiv Y(1) - Y(2)$). Then, it is easy to verify that:

$$Y(1) = Y(W) + Y(D)/2, \quad (4)$$

$$Y(2) = Y(W) - Y(D)/2. \quad (5)$$

Equations (1) and (2) imply that:

$$Y(D) = C(D) + I(D) + G(D) + NX(D). \quad (6)$$

But $NX(D) = X(1) - IM(1) - X(2) + IM(2) = 2NX(1) = -2NX(2)$ since $X(1) = IM(2)$ and $X(2) = IM(1)$. Thus:

$$Y(D) = C(D) + I(D) + G(D) + 2NX(1). \quad (7)$$

Consider country 1's GDP and assume (for example) that country 1 is running a trade surplus: $X(1) > IM(1)$, so that $NX(1) > 0$. Equations (4) and (7) together imply that country 1's GDP is larger the higher world GDP (the larger the overall world "pie," which I argued above is positively affected by trade), and the larger country 1's trade surplus. (Symmetrically, country 2's GDP is larger the larger Y(W) and the smaller country 1's trade surplus—or the smaller country 2's deficit.)

The trade balance (and therefore the GDP differential) is the key channel through which non-cooperative trade (or exchange rate) policy is supposed to operate in the minds of its advocates: If country 1 wants to expand its GDP, all it needs to do is to engage in policies (such as protectionism, or exchange rate manipulation) that tilt the balance of trade in its favor, causing NX(1) to rise. But this boost to Y(1) comes at the expense of country 2, as a rising NX(1) implies a larger deficit for country 2, and thus lower Y(2). It is safe to expect that country 2 will not stay idle: It will retaliate by adopting its own protectionist or monetary policy measures.

In the simplest example (in which countries are mirror images of each other), country 2 will adopt policies that are identical to country 1's, with the result that no country will actually be able to tilt the balance of trade in its favor, and there will be no domestic GDP gain through the GDP-differential channel.

Now recall what we noted above about the effect of trade on world GDP: The reduction in gross trade flows (exports and imports) implied by protectionism will have a negative effect on the reallocation and productivity channels through which trade impacts world economic performance, with a negative effect on Y(W). The result is that both countries will be unambiguously poorer: Neither manages to accomplish a GDP boost relative to the other, and the overall size of the world "pie" has decreased. Both Y(1) *and* Y(2) are lower!

Such is the effect of trade war, and history has given us plenty of examples.