

**GLOBAL IMBALANCES:  
NOTE ON THE  
CONTRIBUTION OF NET  
EXPORTS TO GROWTH  
IN THE G20 COUNTRIES**

UNCTAD contribution to the G20 Framework Working Group

28 September 2011



UNITED NATIONS

In the G 20 Framework Working Group last week (21/9/2011) in Washington a vivid debate emerged about the contribution of net exports to growth in certain countries, in the context of global imbalances. The USA contended that Germany and China in particular had not done enough to balance global trade. Germany responded by referring to the slowdown of the positive contribution of its net exports to show that Germany has made efforts to help the global rebalancing process. China explained the rationale for managing its nominal exchange rate in the face of calls for greater flexibility.

However, the discussion overlooked some important **logical** aspects and some simple empirical findings:

First, the German reference to **falling positive** contributions of net exports misses the crucial point. It is a triviality, but it has to be noted that positive contributions from net exports in one country are necessarily associated with negative contributions in others. As with current account surpluses and deficits, a fallacy of composition applies: the overall contribution of net exports to growth is definitively zero for the world as a whole - as long as we are not engaged in exchanges with Venus or Mars.

Given this, balanced trade would mean that the contribution of *net exports* to growth should be very close to zero over time in all countries with a diversified trade structure, at least over a significant number of years. Indeed, in the G 20 as a whole the net contribution over ten years is close to zero (chart 1). The advantages of free trade have to show up elsewhere. For example, an improved allocation of resources that is usually expected from free trade would be reflected in higher productivity and higher income in **all** countries but clearly not in permanent positive contributions to growth in a few countries and in permanent negative contributions in others. Consequently, it is difficult to argue that the negative effects on growth that countries with long-lasting negative contributions from net exports have to absorb are more than compensated by the welfare effects of overall growth stemming from the effect of a trade-induced improvement of the global allocation of resources. Conversely, is it plausible that countries with permanent positive contributions of net exports to growth benefit less from the allocation effect than countries with negative contributions?<sup>1</sup>

In light of these considerations, the positive contribution that German growth received from net exports over the last ten years (chart 1) is as hard to justify as the negative contribution that other G20 countries (mainly France, Italy, Australia, South Africa and Canada) were exposed to. Moreover, the second and third part of the chart demonstrates that over time the global imbalances, as reflected by the contributions of net exports to growth, have only been reduced marginally and have been corrected by the crisis only temporarily. Moreover, the charts show that Germany and China are in a different position regarding the net export contributions even though the two countries are comparable regarding the absolute size of

---

<sup>1</sup> On a different track, some argue that countries with a (ex post visible) savings surplus need to have positive net exports and, consequently, have to receive more positive net contributions from trade than countries with low savings. But the accounting identity of net savings of a country and net exports does not allow for this conclusion. The identity is silent on causality and would allow countries to change their positions any time whenever forces come into play (like price, wage and exchange rate movements) that could increase **either** the propensity to export (and decrease the propensity to import) **or** increase the propensity to save. In the latter case, however, the forces that would trigger the one or the other outcome are not so easy to be identified. Net savings for the economy as a whole, unlike the savings of private households, are the result of a complex interplay of many forces in many sectors and cannot simply be influenced by the change of a single price like the interest rate.

their current account surpluses. China, as a result of strong domestic demand, never relied as much on positive export contributions as Germany, Korea and Japan. The rebalancing can only be completed if countries like Germany, Korea and Japan, having received the largest positive contributions of all countries in the G 20 for 10 years, are able to grow with **negative** contributions from net exports for a long time. But in 2010, and probably in 2011, their reliance on net export contributions is still remarkable.

Second, the critique of China’s fixed exchange rate (to the US dollar) misses another important point. If one country performs better than others in terms of a stronger increase in productivity, like China, this should be reflected **either** in flexible wages (rising in this case) in this country **or** in an appreciating exchange rate but not necessarily **in both**. Nominal wages rising more than productivity with an unchanged nominal exchange rate are as good a path to rebalancing as an appreciation of the nominal exchange rate with constant unit labour costs. Both lead to an appreciation of the **real** exchange rate and more cannot be asked for. Complaints about a fix nominal exchange rate as such are unwarranted if the real exchange rate is strongly appreciating by quickly rising wages, as UNCTAD has noted recently (see UNCTAD’s paper submitted to the G 20 Framework Group on September 16).

---

**Methodological note:**

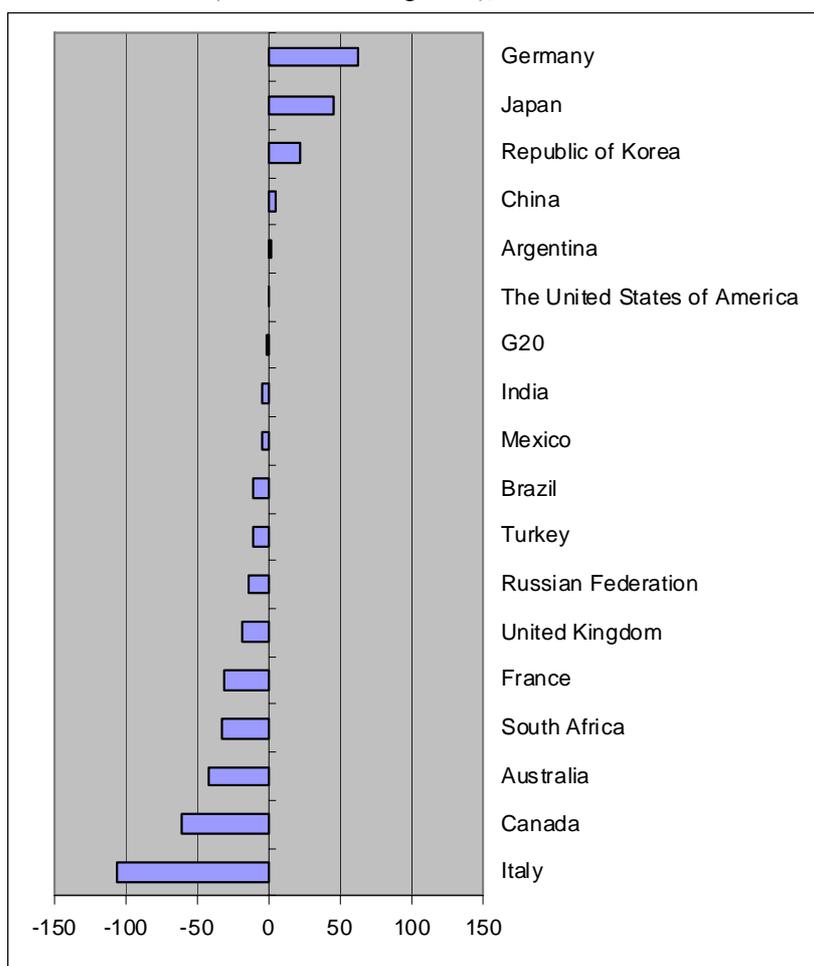
Average annual contributions of net exports to GDP growth, measured as per cent of respective GDP growth, were computed as follows:

$$\frac{\left[ \sqrt[N]{\prod_{n=1}^N \left( 1 + \frac{x_n}{100} \right)} - 1 \right]}{\left[ \sqrt[N]{\prod_{n=1}^N \left( 1 + \frac{g_n}{100} \right)} - 1 \right]} \bullet 100, \text{ where}$$

$x_n$  corresponds to the contributions to per cent change in real GDP of net exports at period “n”, and

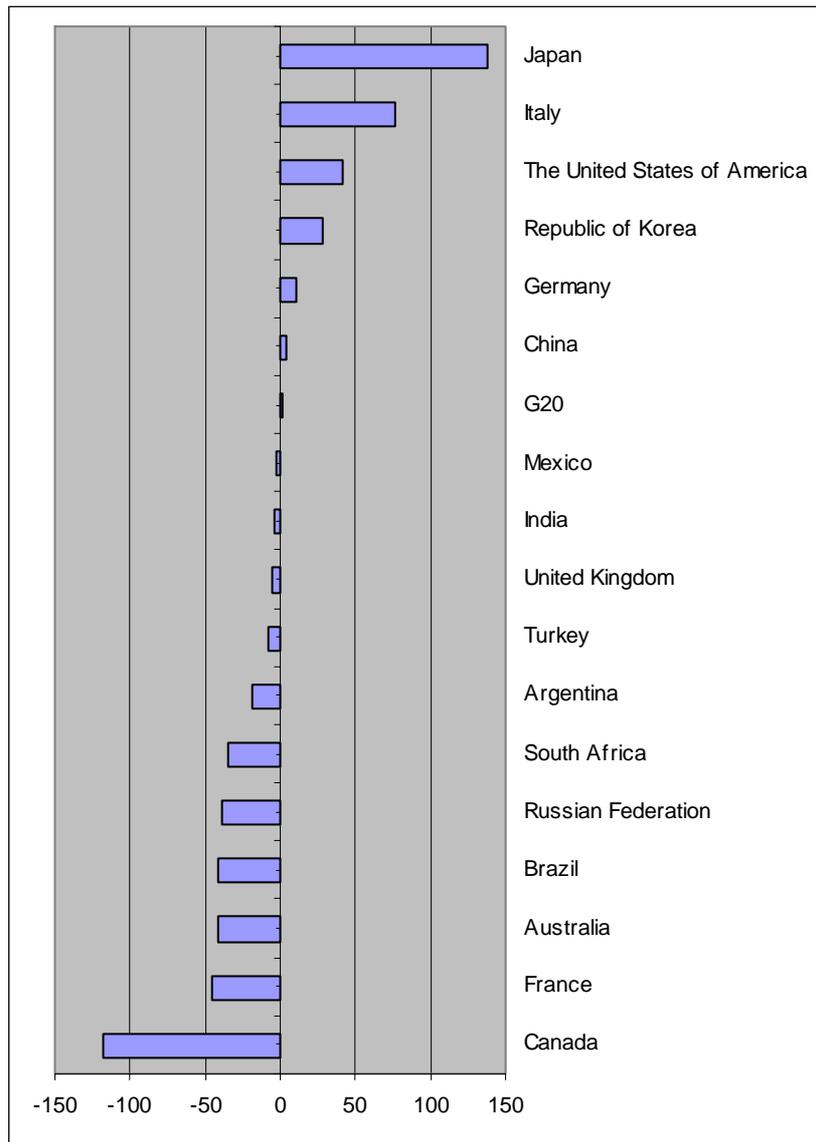
$g_n$  represents the real GDP growth rate in per cent at period “n”.

Chart 1: Average annual contributions of net exports to GDP growth  
(Per cent of GDP growth), 2001-2010



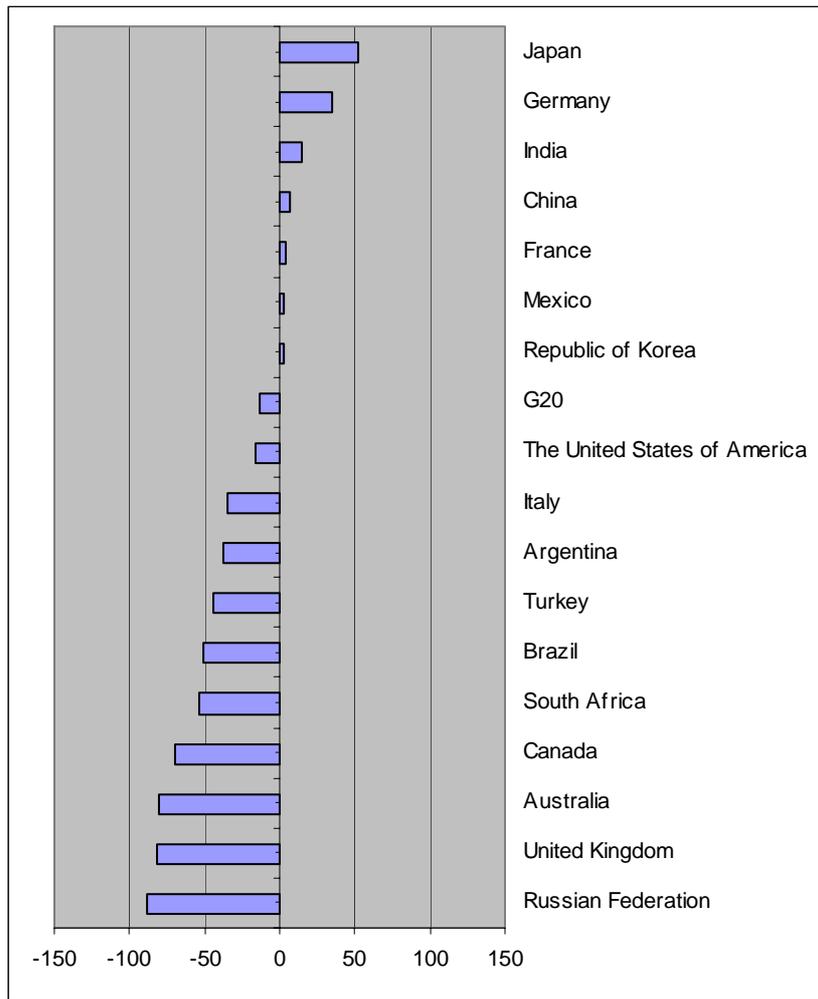
Source: UNCTAD calculations based on UNCTADstat. EIU data were used for GDP, exports and imports growth rates for 2010. See methodological note for calculation

Chart 2: Average annual contributions of net exports to GDP growth  
(Per cent of GDP growth), 2006-2010



Source: UNCTAD calculations based on UNCTADstat. EIU data were used for GDP, exports and imports growth rates for 2010. See methodological note for calculations

Chart 3: Annual contributions of net exports to GDP growth  
(Per cent of GDP growth), 2010



Source: UNCTAD calculations based on UNCTADstat. EIU data were used for GDP, exports and imports growth rates for 2010. See methodological note for calculations