Globalisation and uncertainty

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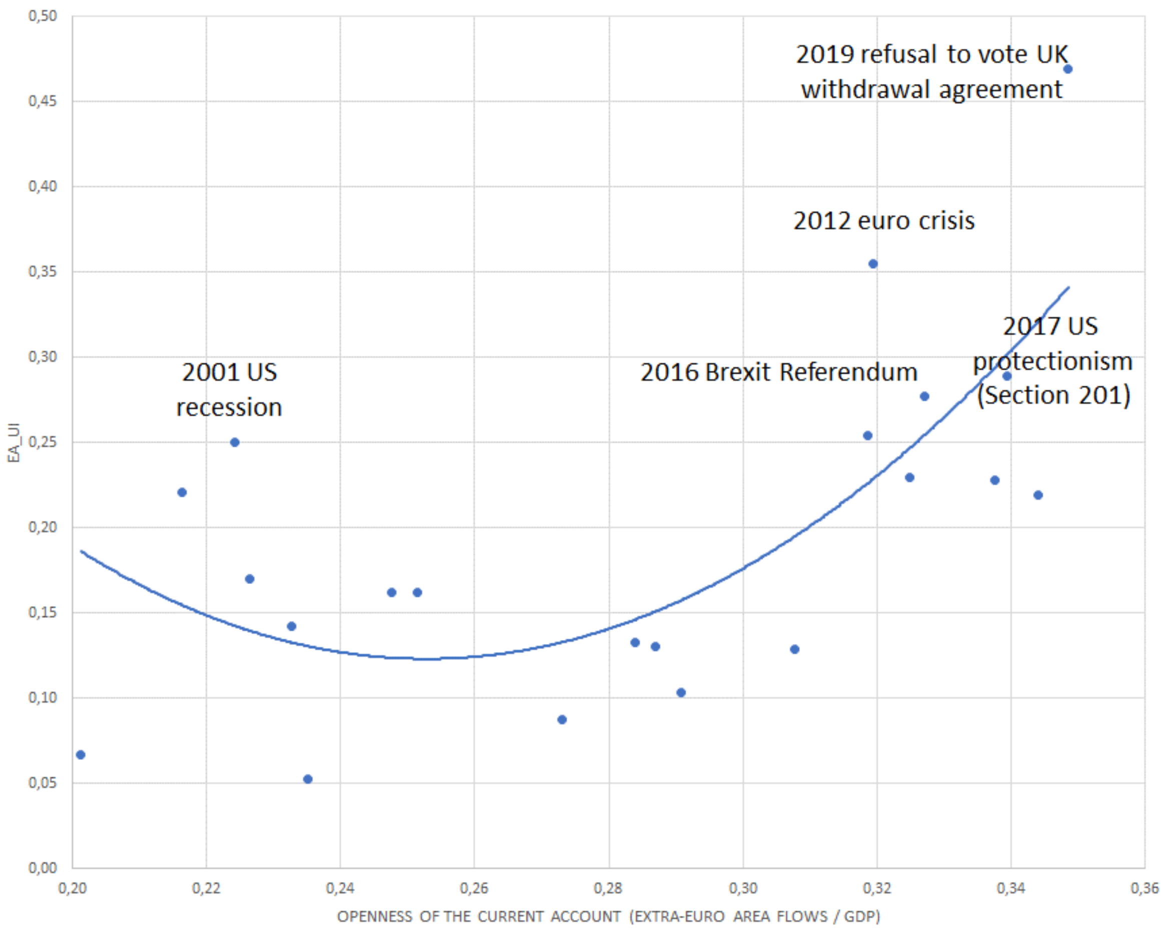
The environment that economic policy makers face today is characterised by both a large amount of uncertainty and a high level of globalisation. This blog post highlights a perception of increasing uncertainty by economic agents when external shocks become more frequent, and a faster transmission of these shocks when the economy is more open, or when traded goods are produced within more sophisticated "value chains". Globalisation has thus heightened the macroeconomic impact of uncertainty on the real economy, amplifying the consequences of international uncertainty shocks.

Chart 1: Uncertainty and openness of the euro area current account (1999-2019)



Note: y-axis: GDP-weighted average of the quarterly euro area uncertainty indices (EAUI). X-axis: half-sum of euro area current account payments and receipts relative to its GDP (CHELEM). Uncertainty data are missing for Cyprus, Estonia, Luxembourg and Malta.

A large amount of uncertainty in a highly globalised economy

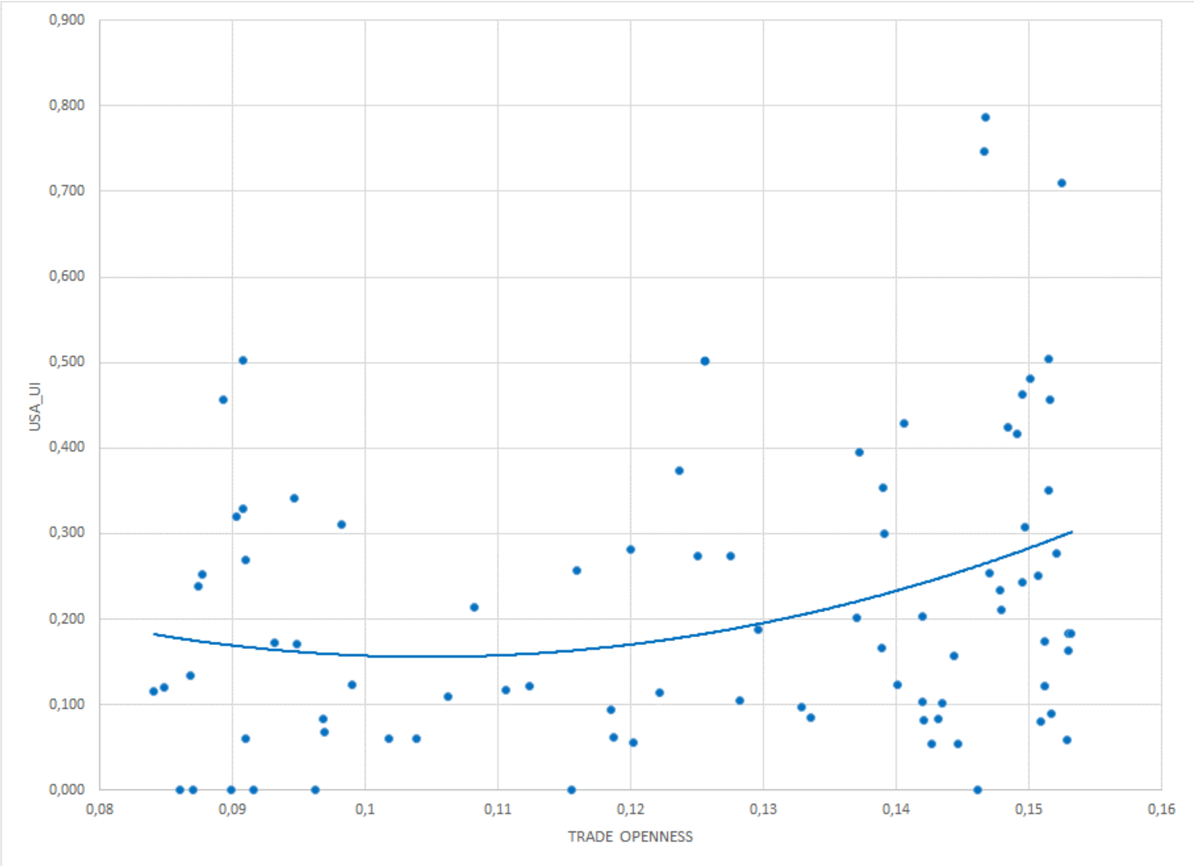
*Why did Christine Lagarde declare in 2020 "*There is no doubt that the economic situation we face today is characterised by profound uncertainty. Looking into the future has rarely been harder*"?*

Why have economic policy makers, in particular monetary authorities, become more attentive to uncertainty? Because it has increased sharply, in parallel with economies' growing interconnection as a result of globalisation. But the relationship between the perception of uncertainty, whose shocks spill over to the real economy, and globalisation is complex. Certain episodes of high uncertainty (such as the US recession following the September 11 attacks) occurred at a time when economies were less globalised than today, with limited global impacts. The period of sustained growth, from 2001 to 2008, was marked, on the other hand, by an acceleration of globalisation in a world that had become less uncertain. Ultimately, it is the return of strong uncertainty in a now highly globalised world that gives cause for concern. The nature of globalisation has also changed since the great financial crisis, with trade in goods no longer growing at a faster pace than world GDP, even if this trend is less marked in the euro area. Services and income, especially financial income, are now posting strong growth, creating an additional potential source of uncertainty. Whatever the indicator, the level of globalisation remains high at the end of the period in the euro area.

This relationship between globalisation and uncertainty becomes clearly apparent if we relate the various indicators of the euro area's integration into the global economy to the indicator of Ahir et al. (2018), which is reconstructed in this post for the euro area countries alone. This indicator increases with the frequency of appearance of the word "uncertainty" in the country reports of the Economist Intelligence Unit for the major euro area countries (EAUI in Charts 1 and 2). Peaks of uncertainty appear during the following episodes: the US recession (already mentioned), the sovereign debt crisis in the euro area, the vote in favour of Brexit, the United States' shift towards protectionism, the US presidential campaign, and finally the refusal to vote the UK's withdrawal agreement.

While the global financial crisis has illustrated how a financial shock can be transmitted globally and lead to a deep and lasting recession, Brexit and the 2011-2013 euro crisis are the two events that are associated with increased uncertainty in the EU. In Chart 1 this uncertainty is related to the degree of globalisation of the euro area at each date, taking into account trade in goods and services and the euro area's international income as a proportion of its GDP, i.e. the current account. This relationship is still visible, albeit attenuated, if we limit ourselves to the globalisation of trade in goods and services. This is shown in Chart 2, this time for the United States, for the period again starting with the creation of the euro, but including the first quarter of 2020. Chart 3 extends the period covered to the whole of the 1990s, for the euro area, and also includes the outbreak of the Covid-19 epidemic in the first quarter of 2020 (Berthou et al., 2020). The succession of these shocks gives rise to a growing sense of global unpredictability, adding to the effect of stronger (and more complex) interconnections between countries at the global level (Ludvigson et al., forthcoming).

Chart 2: Uncertainty and trade openness of the United States (Q1 1999 –Q1 2020)



Note: Quarterly data. Y-axis: Quarterly uncertainty index for the United States (USA_UI). X-axis: Half-sum of US exports and imports.

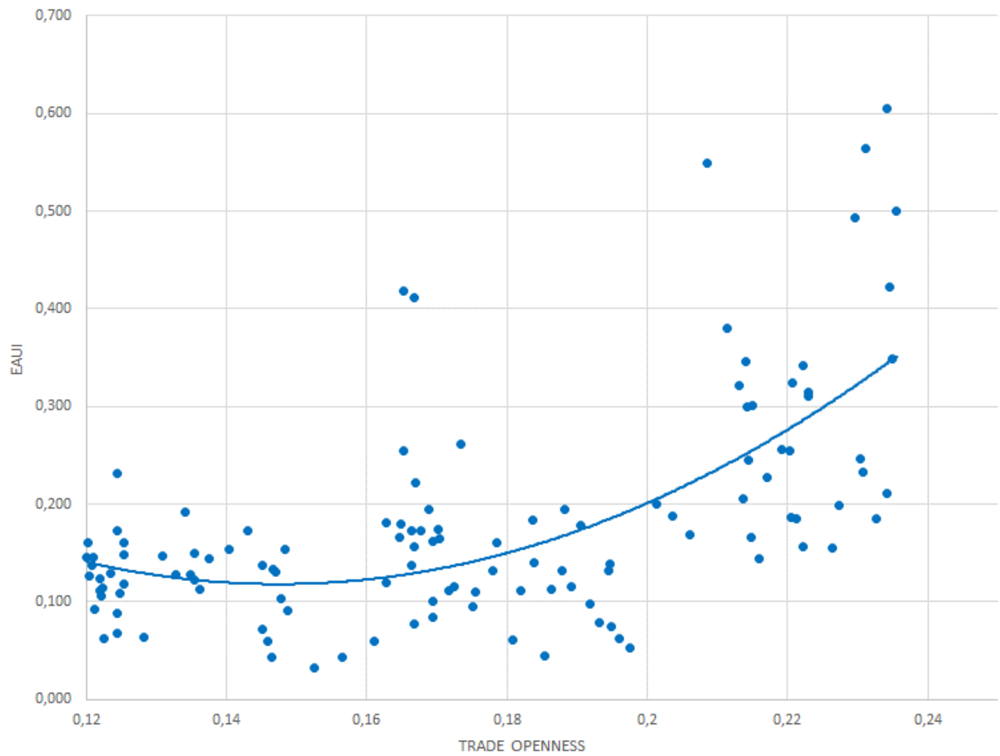
Globalisation has contributed to the rise in uncertainty shocks

The fact that globalisation and uncertainty have moved in tandem above a certain level of openness of the euro area economies, especially if one takes into account the euro area's entire current account and not just its trade in goods and services, is also because globalisation has made the economy more volatile, leading to increased macroeconomic and political uncertainty.

On the financial side, international integration can mitigate certain shocks, for example when bank credit is redistributed internationally in the form of trade credit to companies with a weakened financial position. But beyond a certain threshold of integration, financial globalisation is associated with more of a systemic risk (Battiston et al., 2012).

A similar logic applies to the strategies of industrial enterprises. While the fragmentation of global value chains was initially a source of efficiency, beyond a certain point, the fragility of complex networks of specialised suppliers to shocks overcompensates for the efficiency gains, as illustrated by the economic consequences of the Fukushima disaster (Boehm et al., 2019) or by the more volatile valuation of firms most exposed to globalisation (Barrot et al., 2019). The international fragmentation of value chains has also contributed to amplifying the economic consequences of the Covid-19 crisis (ECB, 2020).

Chart 3: Uncertainty and trade openness of the euro area (Q1 1990 – Q1 2020)



Note: Quarterly data. Y-axis: GDP-weighted average of the quarterly euro area uncertainty indices (EAUI). X-axis: half-sum of extra-euro area exports and imports. Uncertainty data are missing for Cyprus, Estonia, Luxembourg and Malta.

With globalisation, economies have become less resilient in three respects: they are more vulnerable to shocks, they are less able to absorb shocks and less able to rebound rapidly after a shock. Because of economic agents' adjustments, extreme globalisation thus increases the macroeconomic impact of uncertainty on the real economy, and international uncertainty shocks, even moderate ones, can lead to sharp declines in output and prices, and to short-term interest rates aiming to offset their effects (Cuaresma et al., 2020).

The mechanism is simple: as the real distribution of shocks in the economy is unknown, economic agents estimate this distribution using past events, and extreme events trigger large revisions in expectations. In a globalised economy, the uncertainty surrounding foreign demand is added to fluctuations in domestic demand. Thus, an increase in demand uncertainty on their export markets has a negative and persistent impact on the growth of French companies, as shown by the analysis of exhaustive customs and tax data between 1996 and 2013 (Bricongne & Gigout, 2020).

In the presence of extreme uncertainty, the option value of waiting (Dixit & Pindyck, 1994) therefore plays a key role. Firms differ their investment or hiring plans, especially if there are significant sunk costs. The global Covid-19 shock, because it has led to a long-term revision of expectations (a persistent change in the perception of the probability of future extreme negative shocks) will generate long-term costs to the economy that are much higher than the short-term loss estimates (Kozlowski et al., 2020, for the United States). For these reasons, central bankers are paying increasing attention to the link between uncertainty and globalisation. Forward guidance, which aims to reduce uncertainty about their future decisions and their determination to implement them, and thus to guide agents' expectations, contributes to a better transmission of monetary policy in this new context.