Is the recent import dynamism in France surprising?

By Guillaume Gaulier and Jean-François Ouvrard

The upturn in economic activity in France has been accompanied by an acceleration in imports. This dynamism reflects the opening up of economies and the cyclical nature of components of demand. Over the medium term, a one-euro increase in demand generates no more than 0.33 euro of imports (their share in GDP); but import growth of two to three percentage points of GDP since mid-2016 remains difficult to explain.

**Chart 1: Goods and services imports – observed and simulated**

(volume in EUR millions)

The observed imports (using INSEE data) are simulated using an equation that incorporates a relative price variable and an indicator of demand with long-term unitary elasticity. Estimates for Q1 2000 to Q4 2014.

Can the French economy meet an increase in demand? The question is valid in light of the negative contribution of foreign trade to growth over the past three years (a negative 0.5 percentage point contribution in 2014 and 2015, and a negative 0.8 percentage point contribution in 2016) and particularly the dynamism of imports. From the beginning of 2014 to mid-2017, domestic demand (consumption, investment and inventory) increased by some
EUR 31 billion (in volume in previous year prices), while total imports went up by almost EUR 26 billion.

It can be tempting to therefore conclude that a one-euro increase in demand generates 83 euro cents of imports (EUR 26 billion divided by EUR 31 billion), which would allow French businesses to increase their sales by only 17 euro cents (see, for example, a similar calculation in Artus 2016). However, the same calculation for Germany, despite it having a significant foreign trade surplus, reveals trends that would appear to be even more unfavourable over the same period, with 99 euro cents lost to imports, leaving only one euro cent for sales by German businesses!

The analysis therefore needs to be fine-tuned. Two points are of particular importance: increasing import penetration is a phenomenon experienced in numerous economies; and the composition of demand can affect import dynamics both in the short and long term. Therefore, an error correction model for French imports that takes into account these two points, describes the movements in imports in 2014 and 2015 relatively accurately (see Chart 1). Although a significant divergence can be seen from mid-2016 when the simulated projections fall two to three percentage points below the observed imports, it is currently difficult to judge whether this divergence is temporary or definitive in nature.

**Increased import penetration, a result of the opening up of economies**

The import penetration rate in the French and German economies has been increasing for many years (see Chart 2). In principle, this trend should be interpreted as being symptomatic of the opening up of economies rather than problems of supply.

*Chart 2: Sharp increase in the penetration rate in France and Germany*

![Chart 2: Sharp increase in the penetration rate in France and Germany](image)

Penetration rate as a percentage, measured using the ratio imports/(GDP + imports), volumes.
*Sources: Eurostat and INSEE.*

Thus, the parallel growth in the export rate accounts for a significant part of the penetration rate increase due to the substantial foreign value added content in exports (around 30% in
France, see Cezar 2016). Furthermore, the growth in the supply of goods and services in terms of both quantity and variety, which results from globalisation, has been smaller in France and Germany than in the rest of the world.

These mechanisms are partly captured in the indicators of non-energy import prices and goods exports. The new supply of tradable goods places a limit on price increases for goods imported by France. Therefore, we estimate an imports equation in which demand is unitary elastic in the long term (a 1% increase in demand leads to a 1% increase in imports) and the penetration rate trend growth is linked to the evolution of relative non-energy import prices in relation to exports prices.

The key role of composition of demand, particularly in the short term

Certain components of demand – the most volatile – have greater import content. Corporate investment or the consumption of durable goods (IT and electronic equipment and to a lesser extent, motor vehicles) are extremely pro-cyclical and generate large quantities of imports. By contrast, the consumption of services by households has greater weight in domestic demand but is less volatile and is responsible for fewer imports (Bussière et al 2011).

An appropriate measure of demand within the framework of an imports equation therefore weights its components by taking account of both their direct and indirect import content: the domestic production of a rarely imported good or service, for example, can require a large amount of imported inputs. This is the type of indicator that we use in our equation. It results in an elasticity that is unitary in the long term but that in the short term is far greater than one. This high short-term elasticity can notably be explained by the extremely strong pro-cyclical nature of inventories that have significant import content.

A 0.33-euro increase in imports for a one-euro increase in demand

Chart 1 compares total observed imports (in volume) with those predicted using the equation that incorporates the mechanisms described above. The estimated equation captures the movements in imports across the entire period while keeping demand at unitary elasticity. This means that over the medium term, assuming that the different components of demand and the relative import and export prices remain stable, the outflow towards imports is in fact the same as the share of imports in GDP (approximately 33%): a one-euro increase in demand ultimately results in a 0.33-euro increase in imports and consequently an increase of 0.67 euro in the value added generated in France. The positive shocks of import demand do not appear to push up imports by increasing French relative prices.

However, part of the imports in 2016 remain difficult to explain
The dynamism of imports in 2014 and 2015 is therefore not inconsistent with these behaviours. 2014 and 2015 was also a catch-up phase following a period of low imports that continued until the beginning of 2013 and that was primarily linked to weak household consumption of manufactured goods.

Nevertheless, in 2016, part of the observed imports remains poorly simulated based on common behaviours. Several elements should be monitored that could contribute to this divergence:

- The dynamism of transport equipment imports, particularly of aerospace equipment, did not result in the expected exports.

- The increase in agricultural imports can be explained by poor levels of domestic production that are largely related to climatic conditions.

- Inventories, which are sometimes destined for export, as is the case in the aeronautics industry, have also risen significantly since 2013, contributing to the growth in imports.

The part of imports that is currently unexplained could therefore be temporary.