Compnet talk Sep 2012

Today I am representing the European Commission. My role here today is to tell you a little bit more about what the Commission is doing in the area of competitiveness. First let me stress that there is a strong interest in the measurement of competitiveness, which is exactly why I am there at the moment because it largely overlaps with my current research interests. At present the EU commission is in search of an encompassing framework that would allow them to properly assess the competitive position of EU countries, of EU sectors but also of EU firms within countries and the products within EU firms and the market shares that these firms represent abroad. This is not a trivial exercise, as the workshop here at the Banque de France has also made clear.

Traditionally, the EU commission has been using measures of "unit labor cost" and of "real effective exchange rates" as the main indicators to assess the competitive position of countries and sectors. So if unit labor costs went up, this translated into a deterioration of the REER and a reduction of the current account which was regarded as an indication of reduced competitiveness.

However, it is now becoming clear that these traditional measures are not sufficient. First, because the indicators themselves are deficient. For one, unit labor cost, does not capture the presence of other factors of production other than labor which may play an important role in sectors where the labor content in total production costs is relatively low.

Second, the use of real effective exchange rates tend to give different results depending on which price indices are used in the construction of the REER. A REER based on unit labor cost tends to move differently then a REER based on CPI price indices. The disconnect between unit labor cost and CPIs is already indicative that producers cost and consumer prices need not move in parallel.

Something that was also stressed by Haltiwanger yesterday where he argued that for the US the correlation between TPFQ (which is the reverse of cost) and log of price at the firm-level is typically negatively correlated, with a correlation of around -0.5. The fact that this correlation diverges from -1 suggests that the relationship between cost and price is not a one-to-one and that other factors clearly matter to explain price.

A natural candidate for these factors are demand side variables. A correlation between cost and price of less than one suggests that even if costs go down, prices may go up. Price is not just driven by cost but also reflects the willingness-to-pay of consumers for a product and is also associated with quality or perceived quality of a product. Hence even when costs are going down, but quality is going up, prices may rise and still the firm may sell more which would in that case entirely be driven by demand factors.

To disentangle these cost versus demand factors in price movements is definitely a challenge in future indicators of competitiveness.

Let me also add another puzzling result coming from the literature in addition to the one mentioned by John yesterday. From my own studies on Belgian firm-product level data as well as from results in the literature on the French data obtained by Eaton and others, we now know that when a country exports to different markets, the correlation between quantities sold in these export markets and their corresponding prices in the same export market are low too.

Also the quantity correlations of the same product in different destination markets is very weak. In other words, when Belgium exports a particular beer to different destination markets, this beer may perform very differently in terms of market share. While a Stella may be liked very much in the UK, this may not be the case in the Czech Republic. While the cost of producing a stella is the same whether it is being shipped to the UK or Czech republic and the quality of a stella beer is likely to be the same in both export markets, there are country-specific and variety-specific reasons why a stella may sell well in one market but not in another. (distance does not matter here).

The country specific reasons may have to do with the fact that in the Czech republic there are a lot of good beer substitute products for stella since in the country where they argue that been originated they probably have pretty good beers of their own on offer, while this may be different for the UK, where the competition with Belgian beers is lower. But the difference in export performance of the same product across export markets may also be explained by another source of variation, notably taste differences. Perhaps the bitterness of a Stella is not appreciated by the Czechs but it is by the Brits.

In fact my own research on this account has shown that cost and quality as sources of heterogeneity in explaining price and quantity behavior of products across markets does not suffice to explain the underlying patterns observed. A third source of heterogeneity needs to be included in the existing frameworks which we label "taste" for convenience but can relate to anything that affect sales in a market without affecting price. Hence we need to make a distinction in the trade models between "quality" which is a product attribute that affects both price and sales, and "taste" which is country specific but need not necessarily affect price which thus corresponds perfectly with the IO definition of horizontal differentiation notably a product attribute for which consumers are not willing to pay more but which does affect the extent to which they buy the product. This is acknowledged by the Commission and a priority in their future work on competitiveness.

It is this type of framework that the Commission is interested in working with as a means to assess competitiveness and to disentangle the supply from demand factors underlying export performance. Of course there are stumbling blocks on this path. For one, at present there is no coherent firm-product-level dataset available for the entire set of member states. The Commission cannot simply focus on one country but has to consider all countries. At best the Commission has a coherent sector level database which does exist for the entire set of EU countries which offers some possibilities for assessing the competitiveness of products exported by countries to see to what extent the export performance is driven by cost versus quality or taste of a particular country's product. But this offers already an interesting starting point for analysis and a clear improvement of the competitiveness indicators in the past which as I said only included unit labor cost and the REER.

An assessment to what extent the average prices at sector level are correlated with average unit labor cost at sector level or rather with quality aspects for several EU countries would however already be an important improvement since for some countries indeed may unit cost matter more while for others quality factors may explain more; But whether prices go up for reasons of cost or for reasons of quality makes a huge difference in terms of how to assess competitiveness of a country-sector.

The unit cost database, while not a perfect measure of cost, is now available for public use on a project based approach. This database has unit costs for all EU countries at the sector level where a sector is between a CN1 and a CN2 digit level of aggregation.

This is the agenda of the Commission for the near future and we hope to tell you more by next meeting.