Global imbalances: The choice of the exchange rate-indicator is key

The path towards a more stable, balanced and equitable global economy received an important boost in recent days. In December 2010 in Seoul, the G-20 leaders acknowledged the need for a co-ordinated multilateral response to global trade imbalances and asked for “indicative guidelines composed of a range of indicators” which “would serve as a mechanism to facilitate timely identification of large imbalances that require preventive and corrective action to be taken” (paragraph 9 of the Seoul Summit Declaration). This is very much in line with UNCTAD’s recent proposals (see, for example, Policy Brief No 17, published prior to the summit). UNCTAD recommended the use of the Real Effective Exchange Rate (REER) as a practical and effective indicator to differentiate between sustainable and unsustainable trade imbalances. This policy brief argues that a REER based on unit labour costs (the premium of nominal wages over productivity for the economy as a whole) is better suited to grasp changes in competitiveness than one based on consumer price inflation. The latter misses out important elements of the catching-up process of developing countries and may result in significant misinterpretation for some important emerging economies like China.

A simple rule for aligning exchange rates

UNCTAD has argued in recent years for the rule of Real Effective Exchange Rates as a simple and viable system for averting exchange rate mis-alignment and the prevention of carry trade based on currencies. As described in Policy Brief 17, the REER rule would be enforced by multilateral agreement on the appropriate pattern of exchange rates and by direct central bank action to maintain this pattern.

At least two important technical problems need to be addressed in order to implement such a scheme. A central problem is the determination of the level and range of nominal exchange rates as a starting point of this mechanism. Determining the appropriate “original equilibrium exchange rate”, will require a detailed investigation into the absolute purchasing power of all currencies. UNCTAD will develop a proposal to address this question in due course. This Policy Brief focuses on the second problem - identifying the right indicator to be used as the basis for the real exchange rate calculation.

The charts below show that there can be significant differences in the measurement of the real exchange rate, depending on whether it is calculated on the traditional basis of changes in the consumer price index (CPI) or on changes in unit labour costs (ULC). The charts depict these two indicators for the four biggest economies in terms of economic power as measured by GDP, using 1995 (a year with low trade imbalances among the G-20) as the base year. On both counts, the real exchange rates of Japan and Germany indicate a significant gain of competitiveness compared to the base year. Despite the persistent surpluses of these two economies and the recent nominal appreciation of the Japanese Yen, their real exchange rates did not significantly appreciate in the subsequent years. On the other hand, the US dollar appreciated sharply in real terms between 1995 and 2001, together with high and further rising current account deficits. Although the United States has been on a path to recover its competitiveness since then, the level of 1995 has only again been reached in 2008. For these three countries the two measures move more or less in tandem, indicating that urgent policy action is required to reduce imbalances by realigning nominal exchange rates to the domestic cost level.

For China, however, the situation is different. China experienced a widening deviation between the two measures for the reasons explained below. The CPI-based REER rose less than the ULC-based REER and has remained reasonably constant since the end of the 1990s, interrupted by a phase of depreciation in the mid-1990s. To some extent this trend may have been influenced by the different weights used to calculate the Chinese CPI, which some observers believe require updating. By contrast, however, the ULC-based REER appreciated sharply since 1994. It rose consistently and strongly between 2000 and 2010, indicating an overall loss of competitiveness of some 40 percent in these years. While the data used for this exercise does not cover the whole of the Chinese labour force, there are strong indications from several sources that wages in the Chinese economy have risen quickly in recent years. An important gauge of this trend is booming private consumption, which would not have been possible without strongly rising nominal and real wages.

FDI is the key to understanding the real appreciation of the Chinese currency

The divergence between the two indicators has to be fully understood before China can be accused of unfair competition and an “undervaluation”. Based on the ULC:REER China is the only country among the four specifically identified in this brief where the rising surplus on the current account coincides with the expected loss of competitiveness. This discrepancy is less surprising when the particularities of China’s economic development over the past two decades are considered. China is the only country among this group where activities based on foreign direct investment (FDI) dominate export and import behaviour. More than 60 per cent of all Chinese exports emanate from affiliates of foreign firms. Most of them use China as a host location because production there allows technology incorporating high labour productivity to be combined with low absolute wages. This combination warrants extraordinarily high profit margins and allows
companies using this production hub to conquer global markets by means of lower costs and prices. Even if nominal and real wages and the ULC rise strongly, as they did in China during the last ten years, there is a significantly larger margin for foreign producers in China to keep prices low to gain market shares than for producers using the same technology located in developed economies.

A huge amount of so-called greenfield-investment in fixed capital is searching for cheap factors of production, and in particular cheap labour. This kind of FDI moves technologies with a high capital intensity, or at least a capital intensity much higher than hitherto applied in the low-wage countries. If labour in these countries is mobile or wages are set centrally and are following the domestic productivity trend, the overall level of wages in the country of destination is influenced by the import of this kind of FDI slowly, namely to the extent of the impact that an individual investment has on the overall level of productivity.

In this case, unit labour costs for a single production unit applying the new imported technology will normally drop remarkably. For example, an average industrial production site in Germany has a productivity (value added per hour) of 40 Euros per hour and average hourly wages (including all sorts of labour taxes) of 27 Euros. The unit labour costs are 0.67 (27 divided by 40). Moving such a production to a low cost location like China or India may cut the average wage to be paid by the foreign investor to a twentieth of the German level, i.e., 1.35 Euros per hour. Even if the productivity of the imported plant is not as high as in Germany, due to losses incurred by less skilled workers or lack of efficient logistics in the developing country location, the new level of unit labour costs realized will be much lower than in Germany. This implies that products can be either sold on the world market at very low prices or at “normal” prices, realized with high profit margins. If more and more intermediate products are relocated to the low wage country the overall cost level will drop significantly to reach its maximum once the whole production chain is relocated.

As unit labour costs are the most important determinant of competitiveness between countries and regions with less mobile labour, the monopoly rents or the gains in market shares that the foreign investor is able to realize by cutting prices up to the full extent of the monopoly position of the foreign investor recedes only slowly as the process of catching-up takes many years or even decades, given the low original level of wages and the low domestic capital stock compared to the most advanced economies.

The absolute competitive advantage enjoyed by foreign investors who are able to combine high technology with low wages in a low-wage environment is an advantage vis-à-vis those competitors with the same level of capital equipment in advanced economies and vis-à-vis those competitors enjoying low prices of labour in developing economies but having no access to high level technology. Consequently, the strategy of some early catching-up developing countries in Asia (Japan and Korea) and of China to combine the advantage of having a well educated but low paid labour force with imported high technology (in China mainly driven by FDI, in the other countries by industrial policy) is without parallel. Undervaluation is not a necessary complement for the success of such a strategy.

Conclusion

Accusations against China as a violator of trade rules, as raised by Fred Bergsten (FT, 29.11.2010) and many other prominent economists, based on the mere fact that the nominal exchange rate is fixed, are baseless. Real effective exchange rate changes are the most reliable measure to estimate the impact of domestic costs on trade flows and imbalances. Even if some uncertainty concerning the validity of the data is taken into account, China has undoubtedly experienced a significant, real appreciation in recent years. Nominal wages and real wages have been rising much faster in relation to productivity than in other big countries. Given the special circumstances of China as a hub of manufacturing production employing the highest technology globally available, the ULC-based REER provides the most reliable information on the country’s competitiveness. If, as occurred in China, labour costs increase sharply in relation to productivity, the effect will show up in either a loss of market share or a loss of profitability compared to the past. On both accounts, competitiveness is reduced in relation to producers in other countries with a lower increase in labour costs. If the REER based on a price index remains unchanged, the economic situation of producers who choose to accept falling profit margins to maintain their trade volumes deteriorates.

To “find a mechanism to facilitate timely identification of large imbalances that require preventive and corrective action” is crucial for the future of world trade. Trade cannot be made an effective tool to foster growth and reduce poverty if the global community fails to find such a mechanism, which must be based on sober theory and thoughtful analysis.