Quickonomics

September 14, 2022

A tale of two effects

The global slowdown will more than offset export gains to be had from the rupee fall

India's merchandise exports growth slowed to 1.6% on-year in August[1] after growing 2.1% in July. That's a steep fall from the 27% growth seen in the first quarter of this fiscal.

The reasons for the slide in export growth since the past few months are two-fold. One, India's major exports destinations — the United States (US), United Kingdom (UK), and European Union (EU) — are battling economic slowdown on account of supply disruptions, high energy prices and monetary tightening. Whereas China's growth is slowing due to tough Covid restrictions and the property market crisis. Two, the low base effect of the previous year is wearing off.

But did the rupee not depreciate ~7.1% against the US dollar between January- September 2022[2], which should have made Indian goods cheaper in international markets spurring exports?

So which effect prevails?

In this Quickonomics, we focus on the one-on-one relationship of global gross domestic product (GDP) and the exchange rate with exports, to find out.

Of course, these are only some of the demand side factors, which influence exports. Variables such as competitiveness, in turn determined by trade agreements, logistics, domestic manufacturing infrastructure, policy support on taxation and other elements that affect cost of production, too impact export supply, but these largely play out over the medium-long run.

Global growth matters more than a weaker rupee for exports

To probe this, we see the impact of real effective exchange rate (REER)[3] and global GDP on real exports (merchandise plus services).

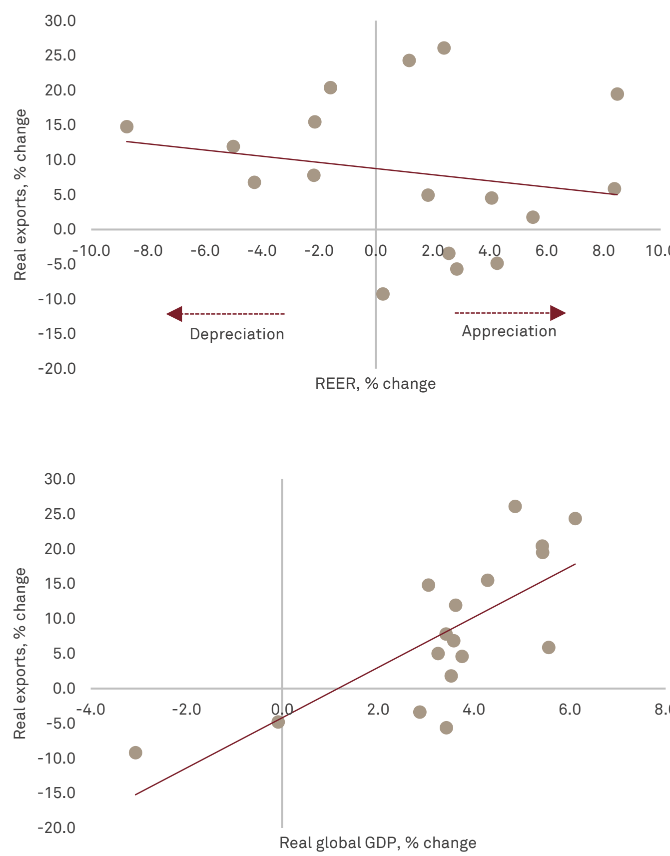
Figure 1 plots changes in these two important drivers of exports over time.

The top panel shows that growth rate in India's real exports moved largely opposite to changes in REER. This is in line with what the theory predicts, which is that exports improve with depreciation (fall in REER).

The series is quite dispersed from the trendline though, and the relationship is not always apparent: for instance, in the two years between FY06-FY07, REER appreciated on average by 0.4% on-year, yet real exports grew by a strong 23.2%.

The bottom panel shows that global GDP and India's exports moved in the same direction[4]. However, this association seems much stronger, going by the steepness of the trendline. But here too, there were exceptions[5].

Figure 1: World GDP and India's exports correlate much stronger than REER and exports



Note: Data for the period FY05-FY22, all variables in real terms
Source: National Statistical Office (NSO), International Monetary Fund (IMF), Reserve Bank of India (RBI), CRISIL

[1]In US dollar terms, as per data released by the Ministry of Trade and Commerce, on September 14, 2022; [2]Data as of September 12, 2022; [3]The effective exchange rate a summary indicator of movements in the home currency against a basket of currencies of trading partners, considering inflation differential between the two. We use the 40-currencies, trade-weighted REER (FY16 base), as released by the RBI; [4]This was particularly evident last year when global GDP was on an upswing, rising 6.1%, supporting exports (which grew 24.3%). For details on which sectors respond more to global growth, refer to CRISIL Insight "The sail ahead" (November 2021); [5]This is evident from the dispersion across the trend line. For e.g. between FY14-18, global GDP was relatively stable, averaging 3.5%, and yet, real exports were much more volatile, even declining in FY16

Next, to quantify the impact of global GDP and exchange rate on exports, we conducted an econometric analysis in the form of a dynamic OLS[6] to estimate income and price elasticity of exports[7], respectively.

We found that a 1% change in the global GDP is associated with 2.3% change in exports (in the same direction). This is interpreted as income elasticity.

We also found that price elasticity is statistically significant at near-unity (-0.96), i.e. every 1% depreciation in REER improves real exports by a similar magnitude.

So while both global GDP and REER have an impact on India's exports, the former has a stronger impact.

Dynamics of the slide in global growth outlook and the rupee

Prospects for global growth this year and next have progressively been revised downwards. The IMF expects global GDP growth at 3.2% for 2022, and 2.9% in 2023 (WEO, July 2022), revised downwards by 40 and 70 percentage points, respectively, compared with the April 2022 outlook. Starting with the Russia-Ukraine crisis, the commodity price shock, aggressive monetary tightening by the US Fed and other large central banks, spiralling energy prices in Europe, disruptions caused by China's zero-Covid strategy, the property sector slowdown and acute power shortages in China have dealt one body blow after another on global economic outlook. The prognosis for the next year is not too good either, with recession/stagflation-like risks strengthening.

On the other hand, the rupee-dollar exchange rate in nominal terms has depreciated ~7.1% so far this calendar year (up to September 12), buffeted by headwinds from tighter global financial conditions (including foreign portfolio investor, or FPI outflows), risk-off sentiment, and a strengthening US dollar.

While a weaker rupee poses risks of imported inflation, it can also support India's exports as our goods and services become cheaper for foreign importers. Thus, there are calls in some quarters for allowing rupee to weaken further to make it more competitive, thereby supporting exports and acting as a natural stabilizer for India's growth.

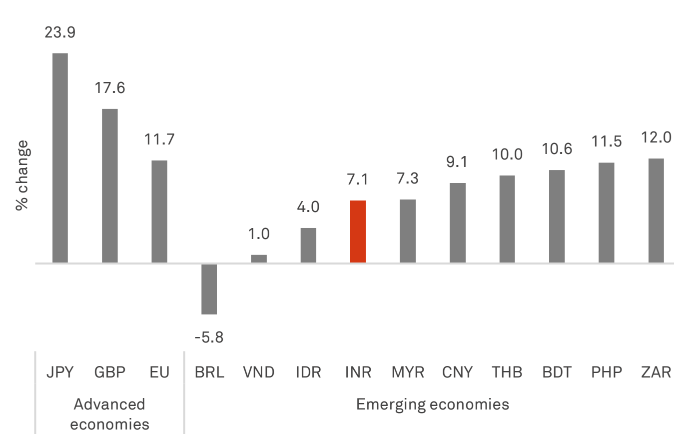
But it is not only the Indian rupee, but currencies of most advanced and emerging market countries that have depreciated against the US dollar this fiscal (see Figure 2).

The Indian rupee's depreciation sits somewhere in the middle of the emerging currencies' pack. Among India's competitors, Vietnam's currency has fallen relatively less (1.0%), the Chinese renminbi has depreciated much more (9%), while Bangladesh has seen double-digit depreciation (10.6%).

Further, the rupee (or for that matter, major emerging market currencies) has depreciated much less compared with its advanced economy counterparts (euro: 11.7%, British pound: 17.6%), as their economies are expected to slow down much more owing to impact of high inflation and their dependence on imported energy. A sharply depreciating euro against the dollar dampens the comparative advantage the depreciation of Indian rupee may have had on its exports to the EU. This is of significance because EU is the second largest export destination for India, and more than 39% of EU imports are invoiced in euro[8].

However, when one considers the corresponding real exchange rates of major currencies, the rupee's depreciation is not as stark. In REER terms, it has depreciated by a relatively low 1.6% between January-July 2022[9] (Figure 3). The difference between the nominal and real rate is owing to the fact that India's major trading partners (e.g. US, EU) are seeing relatively higher inflation vis-à-vis India, making the rupee's depreciation smaller in real terms.

Figure 2: Changes in nominal exchange rate (foreign currency/$), January-September 2022



Note: Data as of September 12, 2022. Positive % change in nominal exchange rate implies depreciation
Source: CEIC, CRISIL

[6]DOLS is a single equation approach that controls for regressor endogeneity. We estimate a standard equation linking real exports to global GDP and the REER, controlling for 'crisis' periods (GFC and pandemic) using a dummy, and including international commodity price index. The variables are log transformed, and are found to be cointegrated, so the coefficients from the DOLS equation have the interpretation of long-term elasticity. Relevant variables are log-transformed, so the coefficients are read in elasticity terms. The period of estimation is 2004Q2- 2022Q1; [7]Elasticity is interpreted as the responsiveness of the dependent variable (here, India's exports) to changes in the explanatory variables (here, income= global GDP, price= REER); [8]Share of euro as an invoicing currency in extra-EU imports, as of 2021. Source: Eurostat; [9]Latest data from IMF on real exchange rates is available only till July

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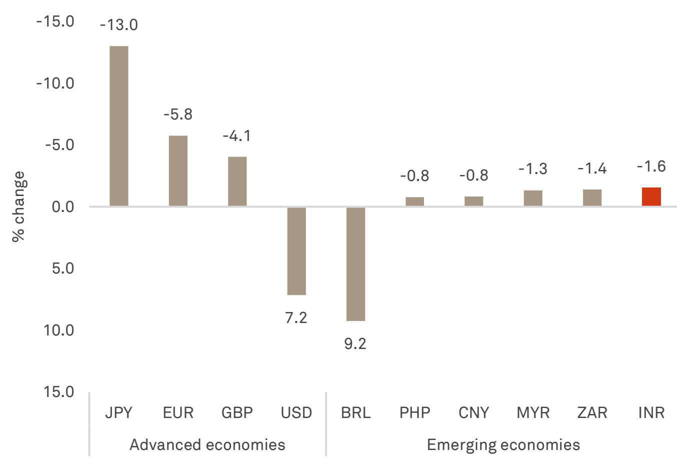
Figure 3: Changes in REER index, January-July 2022



Note: Negative values in % change in REER imply depreciation. Values in reverse order for clarity
Source: IMF International Financial Statistics

Current account deficit to widen this fiscal

Exports have contracted not just on-year in August, but sequentially in the past two months. The slowdown is coming from major trading destinations, viz. US, EU, and China (-6.4%, -3.1%, and -9.0% on-month, respectively[10]).

That said, depreciation of the rupee is expected to help exports of select goods and services (e.g. apparel, automobile, information technology and enabled services).

In all, we expect the impact of a slowing global economy on exports to overwhelm the mild positive impulse from rupee depreciation, acting as a drag on India's economic growth this fiscal.

And with slowing exports and a rising import bill (owing to elevated commodity prices and recovering domestic demand), we expect the current account deficit to widen to 3% of GDP this fiscal.

[10] *Data available for July, calculated in seasonally adjusted terms*

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