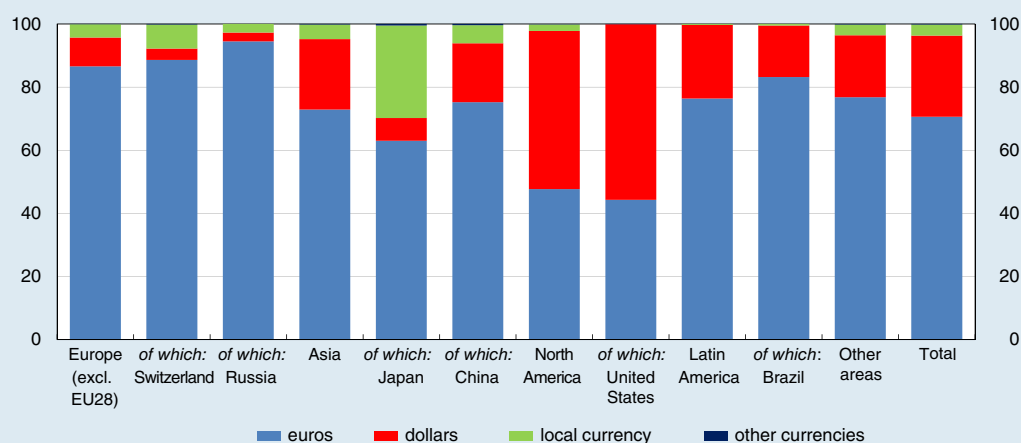


## THE INVOICING CURRENCY AND THE EFFECTS OF EXCHANGE RATE FLUCTUATIONS ON BUSINESS ACTIVITY

Italian firms set their prices mainly in euros even when they export outside the European Union (EU). However, a significant proportion of transactions are invoiced in other currencies,<sup>1</sup> in particular in US dollars: in 2015 a good 25.7 per cent of exports to non-EU countries and over 55 per cent of those directed to the United States were invoiced in dollars (see the figure).

**Invoicing currencies for Italy's goods exports to non-EU countries**  
(per cent)



Source: Based on Istat's foreign trade data.

There is a relationship between the pricing currency used in international trade and the change in the purchase prices of imported goods corresponding to exchange rate fluctuations (*exchange rate pass-through*).<sup>2</sup> A recent analysis of Italian firms' exports to non-EU countries between 2002 and 2015 confirms that importers' purchasing prices vary more when exporting firms set prices in euros than when prices are set in the currency of the destination country.<sup>3</sup> When a third currency is chosen, such as the dollar for exports to Asian countries, price changes are driven by the dollar exchange rate, rather than by the bilateral rates between the euro and

<sup>1</sup> Although referring to potentially different concepts, the terms 'invoicing currency', 'list-price currency' or 'pricing currency' are used synonymously, given that some empirical analyses have shown that they are interchangeable in almost all transactions; see R. Friberg and F. Wilander, 'The currency denomination of exports. A questionnaire study', *Journal of International Economics*, 75, 1, 2008, pp. 54-69.

<sup>2</sup> L.S. Goldberg and C. Tille, 'Vehicle currency use in international trade', *Journal of International Economics*, 76, 2, 2008, pp. 177-192; G. Gopinath, 'The International Price System', Jackson Hole Symposium, Volume 27, Federal Reserve Bank of Kansas City, 2015.

<sup>3</sup> A. Borin, A. Linarello, E. Mattevi and G. Zevi, 'Fluttuazioni del cambio e valuta di pricing: caratteristiche ed effetti sull'attività delle imprese italiane', Banca d'Italia, *Questioni di Economia e Finanza (Occasional Papers)*, forthcoming. This paper uses information from Istat's foreign trade database on transactions with non-EU countries and from the surveys on industrial and service firms conducted by the Bank of Italy. In the first case, the invoicing currency is exclusively available for non-EU exports as requested in the customs declarations that firms must compile to meet legal requirements. In the surveys, the question on invoicing currency relates to the currency predominantly used to set prices in the following markets: the euro area, the rest of Europe, the United States, China, the group comprising Russia, Brazil and India, and the rest of the world.

the currency of the importing country. This suggests that the prices expressed in the pricing currency are fairly rigid, at least in the short term. Exchange rate variations lead to an almost one-to-one change in import prices only when firms decide to invoice in euros which, in this case, also provokes a more marked response in terms of exported volumes.

The depreciation of the euro observed between 2014 and 2015 makes it possible to look more closely at how pricing strategies may influence the relationship between exchange rate fluctuations and business activity. The surveys carried out by the Bank of Italy on a sample of Italian industrial firms showed that the depreciation of the euro had mixed effects across companies: controlling for other possible determinants, firms that achieve a higher share of turnover abroad, particularly in the United States, were more likely to express a positive opinion on the effects of a depreciation, while those with a greater share of input purchases in dollars expressed a negative opinion more frequently. Among the firms that found the effect to be positive, those that set prices mainly in a foreign currency in at least one of the non-European markets stated that they had benefited from the depreciation of the euro above all through an increase in markups, while those that generally used the euro as the invoicing currency recorded increases above all in sales volumes.

The choice of invoicing currency is one of the competitive strategies a business may adopt in function of the characteristics of the target market.<sup>4</sup> The responses provided by the firms surveyed show that the largest and most productive companies are more likely to set prices in a foreign currency; these firms are also better able to manage the risks associated with exchange rate fluctuations and the fixed costs needed to maintain price lists that are differentiated by market. Companies that adopt a currency other than the euro do so above all to meet local customer demands in significant markets or in order to keep their sales prices aligned with those of competitors; in some cases this choice reflects intra-group transaction agreements.

The currency invoicing strategy seems to be associated with a propensity on the part of the largest and most productive firms to pass on exchange rate changes to markups; the shift of exports towards this type of firm may have contributed to making overall export volumes less sensitive to exchange rate fluctuations in recent years.<sup>5</sup>

<sup>4</sup> L.S. Goldberg and C. Tille, 'Micro, macro, and strategic forces in international trade invoicing: synthesis and novel patterns', *Journal of International Economics*, 102, 2016, pp. 173-187.

<sup>5</sup> M. Bugamelli, S. Fabiani, S. Federico, A. Felettigh, C. Giordano and A. Linarello, 'Back on track? A macro-micro narrative of Italian exports', Banca d'Italia, *Questioni di Economia e Finanza (Occasional Papers)*, 399, 2017, also published in *Italian Economic Journal*, 4, 1, 2018, pp. 1-31.