



ELSEVIER

Contents lists available at ScienceDirect

International Business Review

journal homepage: www.elsevier.com/locate/ibusrev



Export prices, selection into exporting and market size: Evidence from China and India[☆]

Sushanta Mallick^{a,*}, Helena Marques^b

^a Queen Mary University of London, UK

^b University of the Balearic Islands, Spain

ARTICLE INFO

Article history:

Received 7 November 2016

Received in revised form 8 February 2017

Accepted 22 March 2017

Available online xxx

JEL Classifications:

F14

F41

O11

Keywords:

Exchange-rate pass-through

Pricing-to-market

Selection into exporting

Product differentiation

India

China

ABSTRACT

This paper empirically analyses the export pricing behaviour of Chinese and Indian exporters when there is selection into exporting. Previous exchange rate pass-through estimates that did not take selection into account could be biased if selection into exporting is correlated with pricing strategy. We use 6-digit product-level data across high- and low-income export destinations over the period 1994–2007 and assess a number of determinants of the degree of pass-through of exchange rates to export prices, such as the level of external demand, exporter's wage cost, degree of competition in export markets, currency volatility and the direction of currency movements. We find systematic differences in the pricing strategies of Chinese and Indian exporters while uncovering a selection bias in exports to high-income markets, although the pricing of exports to low-income markets is independent of the decision to export. Export prices do not increase systematically with the destination market per capita income, and tend to be less sensitive in shipments to advanced nations. Export prices of India are sensitive to the volatility of the trade-weighted nominal effective exchange rate (NEER), indicating heterogeneity in prices to maintain competitiveness, but not in China as volatility is insignificant given a fixed currency system. It is also revealed that a country with a relatively flexible currency regime and arms-length trade such as India is more likely to exhibit incomplete pass-through, whereas a country with an inflexible currency system and involved in outward processing trade is more likely to have full pass-through as shown in the case of China.

© 2017 Elsevier Ltd. All rights reserved.

1. Introduction

It has been shown that the observed pass-through of exchange rate changes to international prices is incomplete due to sluggish price adjustment originating in mark-up adjustment by the exporters following changes in costs or movements in their currency (see for example Nakamura & Zerom, 2010; and the references cited there in). The extent to which exchange rate fluctuations affect international prices (ERPT) can be influenced by the firm's pricing orientation as well as by the degree of exchange rate uncertainty. A substantial literature has documented that exchange rate changes are, at best, weakly associated with changes in traded goods prices at the consumer level (Auer & Chaney, 2009; Devereux & Yetman, 2003; see Mallick and Marques (2008a, 2012) for the case of India).

The explanations given in the literature for the low pass-through that is commonly found are primarily microeconomic, such as the practice of PTM by imperfectly competitive firms

[☆] The authors acknowledge financial support from the British Academy through a Small Research Grant (Project SG-46699). Thanks are due to Yong Yang for his research assistance in compiling the datasets from UN Comtrade. We also thank an anonymous reviewer of this journal and the participants at the Money, Macro and Finance (MMF) 45th Annual conference, 11–13 September 2013, Queen Mary University of London, UK; RES2013 Annual Conference at Royal Holloway, University of London, April 3–5, 2013; Annual Meeting of the Allied Social Science Associations (ASSA) (AIEFS session discussant, Parul Jain), 3–6 January, 2013, San Diego, USA; the BMRC-QASS Conference on Macro and Financial Economics, 24 May 2012, Brunel University, UK; 11th European Economics and Finance Society Annual Conference, Istanbul, Turkey, 14th–17th June 2012 and at the XIII Conference on International Economics, Granada, Spain, 21st–22nd June 2012, for their useful comments that contributed to the improvement of the paper. The usual caveat applies.

* Corresponding author.

E-mail addresses: s.k.mallick@qmul.ac.uk (S. Mallick),

helena.ferreira-marques@uib.es (H. Marques).

(Corsetti & Dedola, 2005). Imperfect competition in international markets is one of the key explanations for why prices of 'similar' goods might differ among destination markets (Aw, 1993; Athukorala & Menon, 1995). Gopinath and Itskhoki (2010) using US import prices show that on average goods with a high frequency of price adjustment have a long-run pass-through that is at least twice as high as that of low-frequency adjusters. Aw, Batra, and Roberts (2001) isolate the market-specific price differences by simultaneously accounting for firm-level price heterogeneity in the same product market. If firms face capacity constraints in distribution networks or quantitative trade restrictions, then pricing-to-market may be greater during depreciations of the exporter's currency, or if firms attempt to build market share subject to the threat of trade restrictions, then PTM may be greater during appreciations of the exporter's currency (Knetter, 1994). This asymmetry in pass-through is also studied at both the firm and the aggregate levels by Rodriguez-Lopez (2011). Assuming a home currency depreciation, he finds that, when firms have heterogeneous productivity, aggregate exchange rate pass-through into home import prices can be negative even if at the firm level the pass-through is positive (although incomplete). This result is due to the adjustment of the extensive margin whereby only the most productive foreign exporters survive a depreciation of the home currency and each exporter adjusts the mark up differently depending on productivity.

It is also important to consider demand in the destination market along with demand in the exporting country, which can be crucial in the price setting behaviour of an exporter (see for example Yang & Mallick, 2014). Until now there has been little focus on considering the role of demand-side factors of both exporting and importing countries in explaining price variation across markets. In other words, price discrimination under the form of PTM in response to an exchange rate shock can be conditional on the size of demand in the exporting and importing countries, as measured by their per capita income, which might explain the existence of incomplete ERPT (Ferrantino, Feinberg, & Deason, 2012). Besides, Hoffmann (2007) and Bergin and Feenstra (2009) have shown that there are significant differences in the variability of macroeconomic aggregates under fixed and flexible exchange rate regimes. The degree of ERPT may also be correlated to the extent of outward processing trade that fosters transfer pricing. In general, transfer pricing can make the exporter's price vary in the same direction as the exchange rate, amplifying exchange rate changes instead of dampening them (Bernard, Jensen, & Schott, 2006; Neiman, 2010, 2011). Another possibility is that Chinese exporters could raise their invoiced prices in RMB terms when the RMB appreciates in order to bypass capital controls and move capital offshore. Finally, price discrimination causes ERPT to be incomplete in both the short and the long run with high exchange-rate volatility (Corsetti, Dedola, & Leduc, 2008). The choice of invoicing currency may be an important strategic variable facilitating discriminatory pricing by exporting firms, linking pass-through to exchange rate volatility; namely, pass-through is lower the more volatile the exchange rate (see for example Bowe & Saltvedt, 2004). Assessing the impact of exchange rate uncertainty or fluctuation on prices can help uncover the extent to which exporters in different countries respond to currency risks. Intuitively, exporters may tend to trade more under an uncertain environment by adjusting prices so as to increase their current revenues when faced with an expected decline in future revenues. This suggests that we can expect either a positive or a negative effect of exchange rate uncertainty on export prices, depending on the source country and export market characteristics.

It is therefore of interest to compare the pricing behaviour in countries with fixed exchange rate regimes and a great deal of

outward processing trade, such as China, to countries with flexible exchange rate regimes with predominantly arms-length trade, such as India. In this context, considering those two key emerging market exporters, where exchange rate fluctuations are respectively fully and partially managed by their monetary authorities, can reveal whether exchange rate volatility tends to increase price discrimination and thereby reduce the degree of pass-through. The interest of the comparison is augmented by the fact that the two countries considered in this study are both important emerging markets that followed different options of integration in world value chains and that under the 2007–2008 economic downturn took up the role of growth engines in the world economy.

In this paper we study the pricing-to-market decisions of China and India in response to changes in their Nominal Effective Exchange Rate (NEER). The results suggest that Indian exporters absorb changes in the Indian rupee by changing export prices¹ in their own currency in the opposite direction to that of the exchange rate change, but the opposite happens in the case of the Chinese yuan. We further establish whether the decision to stay in or out of an export market for a particular product is correlated to the pricing-to-market (PTM) decisions. If this correlation exists but it is not taken into account, the estimates of exchange rate pass-through (ERPT) will be biased. The results indicate that a selection bias exists in exports to high-income markets, but the pricing of exports to low-income markets is independent of the decision to export.

We further find that Indian exporters have changed their mark-ups in response to the rupee's volatility, exercising market power to obtain price premia. On the contrary, Chinese exporters do not react to currency volatility given a fixed exchange rate system with a narrow band. There is a strong positive relationship between volatility and prices in the case of a (relatively) flexible currency system (India) implying low pass-through, while high pass-through occurs in the case of a fixed exchange rate regime (China). We also find that pass-through is largely symmetric: exporters absorb appreciations of their currency through downward price adjustment while they tend to increase prices following depreciation of their currency. The resulting pass-through is incomplete in India's exports to high-income markets. There is full pass-through in the remaining cases. The results are very robust across specifications.

Section 2 of the paper develops a theoretical model from which the empirical specification is derived. Section 3 deals with estimation and data issues, introducing the selection estimators used to generate the estimation results presented in Section 4. Section 5 presents several robustness checks, and Section 6 concludes.

2. The model

We outline a simple ERPT model in a similar spirit as Devereux and Yetman (2003), Ghironi and Melitz (2005), Melitz and Ottaviano (2008), Chaney (2008) and Rodriguez-Lopez (2011). In this class of models based on the work of Melitz (2003), it is assumed that only a subset of domestic firms are exporters due to the interplay between heterogeneous productivity across firms and, in some models, the existence of fixed costs of exporting. In

¹ Although we refer to export prices, the pricing data used in the paper are export unit values at the 6-digit level. This level of disaggregation is high enough to ensure that there is not much price dispersion within each 6-digit product category and, even though some measurement error is unavoidable, the pass-through literature has kept on using unit values as prices due to data constraints, especially at the international level. Hence we follow this literature in taking unit values as proxies for prices.

Download English Version:

<https://daneshyari.com/en/article/5106943>

Download Persian Version:

<https://daneshyari.com/article/5106943>

[Daneshyari.com](https://daneshyari.com)