

Importers, Exporters and Exchange Rate Disconnect by Amiti, Itskhoki and Konings

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Motivation

- ▶ Trade has changed: fragmentation of production process means exporters are importers
- ▶ Several studies show that: 1) largest exporters are most active in fragmentation (large importers); 2) exporters that import more are more productive
- ▶ Very large share of aggregate exports by a few exporters in OECD countries: 80% of exports by 5% of exporters
- ▶ May change our understanding of aggregate implications of exchange rate movements
- ▶ This paper is important in this respect

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What the paper does

- ▶ Analyzes the heterogeneity of exchange rate pass-through across exporters
- ▶ Theory: a combination of Atkeson and Burstein (2008) and Halpern, Koren and Szeidl (2011) shows that exporters with high import shares and large market shares have low exchange rate pass-through
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Two main mechanisms

Two channels through which exchange rate pass-through is affected:

- ▶ marginal cost channel: if euro depreciates and a firm imports intermediate inputs, its marginal cost increases. Firms react by increasing price on all markets and on export markets in particular
- ▶ Strength of marginal cost channel: depends on import intensity of the firm (observable) + correlation between export and import weighted exchange rates specific to the firm

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- ▶ Cournot competitors faced with a nested CES demand over several sectors: elasticity of substitution between sectors is lower than inside each industry.
- ▶ Firms with larger market share face lower demand elasticity
- ▶ High productivity (market share) firms perceive a lower demand elasticity. When faced with real exchange rate depreciation, market share expands and firms react by increasing their markup
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The two channels interact for two reasons (should be better explained)

- ▶ 1) As in Halpern, Koren and Szeidl (2011) more productive firms import more intermediate inputs. Higher productivity increases market share and the markup channel
- ▶ Higher share of imported inputs increases marginal cost channel. Greater share of imported inputs in turn reinforces their competitive advantage and their market share
- ▶ 2) As in the Atkeson and Burtsein (2008), change in marginal costs (here coming from exchange rate that alters cost of imported inputs) affects the market share and therefore the markup: here marginal cost effect reduces markup effect. Second order impact

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Main empirical specification (21):

- ▶ $\Delta p_{f,i,k,t}^* = [\alpha_{s,k} + \beta \varphi_{f,t-1} + \bar{\gamma} S_{f,s,k,t-1}] \Delta e_{k,t} + [\delta_{s,k} + b \varphi_{f,t-1} + c S_{f,s,k,t-1}] + \tilde{u}_{f,i,k,t}$
- ▶ $p_{f,i,k,t}^*$ = log euro producer price to destination k
- ▶ $e_{k,t}$ = log exchange rate relative to destination k
- ▶ $\varphi_{f,t-1}$ = import intensity of firm f from outside the Euro Zone.
- ▶ $S_{f,s,k,t-1}$ = firm f market share in sector s export destination k relative to all other Belgium exporters
- ▶ Key variable: $\varphi_{f,t} \equiv \frac{\text{Total non-euro import value}_{f,t}}{\text{total costs}_{f,t}}$
- ▶ Mechanism should depend crucially on correlation between import and export exchange rates
- ▶ Why not construct an import intensity that is specific to the export destination : weighted by the correlation of import and export exchange rates?

Related results on French exporters

- ▶ Berman et al. (2012): Firms with higher productivity level have lower pass-through because adjust more their markup to exchange rates movements (lower demand elasticity)
- ▶ Consistent with this paper findings
- ▶ This paper is much richer in its treatment of the interaction between markups and the import shares of exporters

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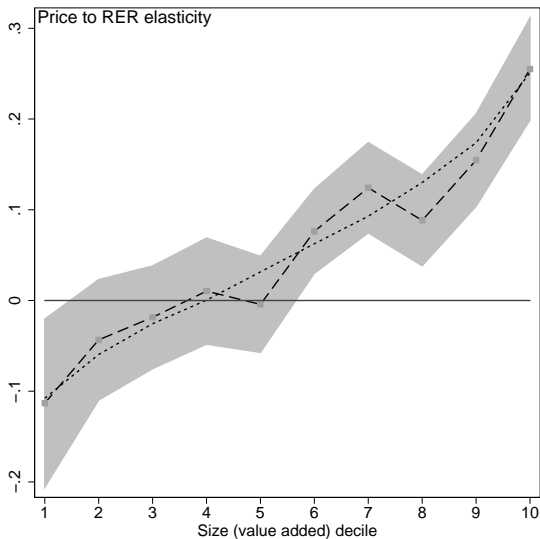
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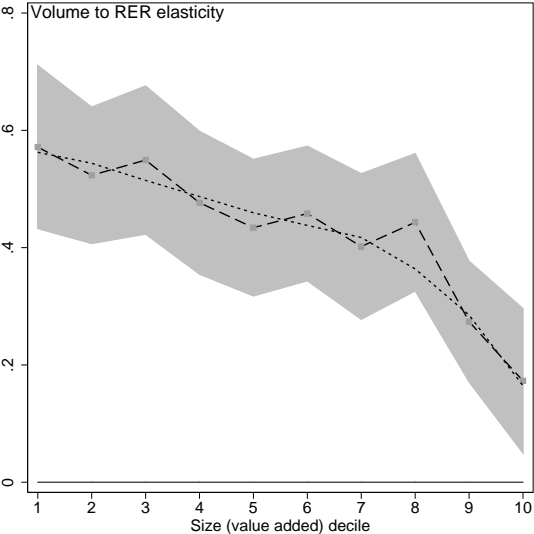
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Export price to exchange rate elasticity and firm size



Export volume to exchange rate elasticity and firm size



Related results on French exporters data

Dep. var. # observations	(1)	(2)
	Unit value 355996	Export volume 355996
$\ln TFP_{t-1}$	0.012 ^a (0.004)	0.083 ^a (0.008)
$\ln RER$	0.071 ^a (0.021)	0.425 ^a (0.047)
$\ln TFP_{t-1} \times \ln RER$	0.049 ^a (0.015)	-0.109 ^a (0.035)
$\frac{\text{imports}}{\text{sales}} \times \ln RER$	0.136 ^c (0.078)	-0.283 ^c (0.156)
BW06 $\sigma \times \ln RER$		
Mean Δ unit val. $\times \ln RER$		
sd. unit val. $\times \ln RER$		
$\ln GDP$		0.627 ^a (0.051)
\ln importer price index		0.054 ^a (0.012)
Sector \times RER dummies	No	No

All regressions with firm-destinations and year fixed effects

Multi-product firms

- ▶ With multi-product firms, changes in unit values may reflect changes in product mix instead of pricing strategies
- ▶ When faced with an “easier” destination market (currency depreciation), multi-product firm increases number of products exported to this market (Bernard, Redding, and Schott, 2011) and gives less weight to its best products (Mayer, Melitz, and Ottaviano, 2011)
- ▶ Robustness tests with more samples: 1) retain firm-destination combinations for which firm exports only one product, 2) observations only for main product exported, 3) observations for which the mix of products exported to a specific destination remains the same between t and $t + 1$

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Other comments

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- ▶ Belgium is characterized by entrepot trade: see Bernard, Blanchard, Van Beveren, and Vandebussche (2012)

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Final comments

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- ▶ Fragmentation of production process changes role of exchange rate in macroeconomic adjustment?
- ▶ Does this imply that exchange rate has lost its role both as an origin of shocks and absorber of shocks?

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