### "Pricing to Market in India's Exports: The of Market Heterogeneity and Product Differentiation" by Sushanta Mallick and Helena Marques

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25 March 2009

#### Motivation

- Investigate pricing behavior of Indian exporters in selected developed and emerging markets
- Investigate extent of exchange rate and tariff rate pass through into export prices at 4-digit product level
- Identify the factors affecting India's pricing-to-market behavior
- Conducts single equation estimation in a panel framework taking into account autocorrelation and sector and country specific heterogeneity

# Main Findings: response of rupee price exports to 100% change in exchange rate and tariff rate

Table: Response of rupee export prices to exchange rate change: all commodities

Country	PTM	ERPT
All	18%	82%
Developed	30%	70%
Emerging	0%	100%

- PTM does not vary with product type in general
- PTM is 9% in emerging market implying incomplete TRPT. For developed markets tariff rate change does not have significant effects

- Categorization of products are based on availability of a reference price level: demands economic interpretation
- Categorization of products by market structure: monopoly, oligopoly, monopolistically competitive

- Restrictive assumption: exporter does not supply to home market
- In a general equilibrium framework with
  - Firms supply to both home and foreign markets
  - Consumers consuming both home and foreign varieties
  - Home producer of a particular variety will optimally choose domestic and export price
  - Strategically given foreign producer's optimally chosen domestic price
  - Vice Versa for the foreign producer

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- Other sources of potential endogeniety
  - Price competitiveness in the destination market may depend on unobserved sector/region-specific and time effects
  - Again foreign demand depends on price competitiveness factors
- Estimation technique: panel VAR (Love, 2001)
  - Applies traditional VAR approach, where all variables in the system are modelled as endogenous
  - Within a panel data framework, where unobserved individual heterogeneity is allowed

### Comments: Distribution chain of pricing is not considered

- Two measures of export price (Yoshida, 1998)
  - Wholesale price determined between exporters and distributors
  - Retail price set between distributors and consumers
- 18% PTM to a 100% exchange rate movement may not imply 82% ERPT to home prices in the destination market
- For a correct assessment of export price behavior, exchange rate pass-through to both the measures should be taken into account
- Form of relationship between exporters and local distributors matters for the choice of export price measure to analyse extent of pass-through

## Comments: Role of relationship between exporters and distributors

- If exporter and local distributor are two independent imperfectly competitive (monopoly/monopilistically competitive) firms with market power
  - Both will optimally set its price where the distributor takes wholesale price set by the exporter as its marginal cost
  - Degree of pass through into destination market's wholesale and retail prices may vary
- Pass through to both measures of price needs to be analysed

## Comments: Role of relationship between exporters and distributors

- If exporter and distributor are vertically integrated (exporter has its own subsidiary or has a contractual relation with foreign distributor)
  - Wholesale price will not be a valid measure to analyse pass-through
  - There exists an internal transfer price between exporter and distributor
  - Exporter optimally sets a single price by maximizing joint profits
- Consumer price will be the valid measure to analyse pass-through

Thank you