

Impact of Transaction Costs on Competitiveness of Manufactured Products in Egypt

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This study assesses the impact of transaction sectors on the competitiveness of manufactured exports and resource allocation in Egypt.

MAIN POINTS

Introduction

- I. Empirical evidence on the importance of services in reducing transaction costs.
- II. Reasons behind high transaction costs.
- III. Transaction costs in Egypt.
- IV. A Quantification of the impact of services on manufacturing and exporting processes in Egypt

Conclusion and Policy Implications

Introduction

- There is a problem with *definition* of what constitutes transaction costs. There is a also problem with *estimation* (All agreed that it is subject to high margin of error).
- For the purpose of this study, we adopt Wallis and North's classification of economic activities into transaction and production activities. We estimate the impact of the relative (in)efficiency of Egypt's transaction sector on its production sector.

I. Empirical Evidence on the Importance of Services In Reducing Transaction Costs

Empirical evidence on the importance of services in reducing transaction costs is scarce but all point towards that transaction costs affect competitiveness significantly:

- El Badawi (1999) showed that transaction costs heavily affect the competitiveness of manufactured exports in Sub Saharan Africa.
- According to Heydon (2006), inefficient services reduce effective rate of protection in agricultural and manufacturing sectors in developing countries.
- Djankov et. al (2006) showed that delays on the borders due to inefficient services negatively affect the competitiveness of developing countries' exports. Each additional day of delay is equivalent to distancing a country from its trading partners by 85 km.

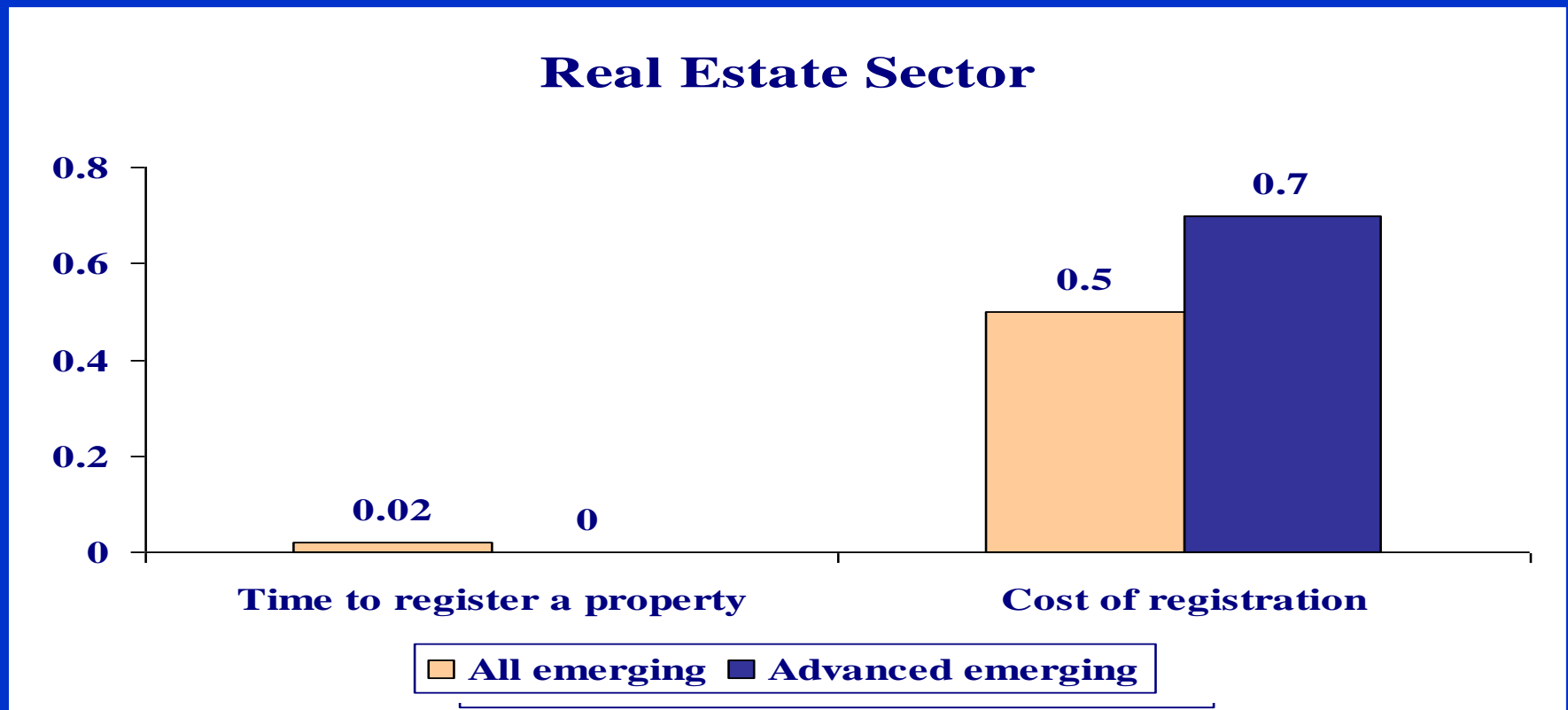
II. Reasons Behind High Transaction Costs

- *Heavy Regulations*
- *Poor Infrastructure*
- *Inefficient Trade Facilitation System*
- *Bad Institutions*

III. Transaction Costs In Egypt

Egypt lags behind as regards the efficiency of services.

Egypt's Normalized Performance Variables for Different Transaction Sectors



Source: Calculated from The Global Competitiveness Report 2005-06.

III. Transaction Costs In Egypt

- Studies on business environment in Egypt identified some services as problematic such as tax administration, customs, transport and finance.
- A study that compared the tariff equivalent of services in four countries, namely Egypt, Morocco, Tunisia, and Turkey concluded that:
 - Egypt ranks relatively well in the telecom. sector and the banking sector.
 - Egypt held a relatively late position in the maritime sector.
 - The tariff equivalent in the telecom. sector for Egypt averaged 4% whereas it reached 11.73% in banking and more than 500% in the case of maritime sector.
- Studies dealing with services and their role in affecting transaction costs remain scarce.

IV. A Quantification of The Impact of Services on Manufacturing and Exporting Processes in Egypt

1. The importance of services to the production sector in Egypt.
2. Tariff/subsidy equivalents of inefficient services in Egypt.
3. The impact of transaction sectors on the competitiveness of Egypt's manufacturing industries

IV.1 The Importance of Services to the Production Sector In Egypt

- On average, the share of all services in local intermediate requirements of the manufacturing sector is 33%.
- The share of transaction sectors alone (transportation, communication, trade, finance, real estate and public administration) is 24%.
- The most important contributor to manufacturing is trade and the least is the real estate.

IV.2 Tariff/Subsidy Equivalents of (In)efficient Services in Egypt

- A set of performance indicators was selected for each transaction sector.
- Egypt's scores on performance indicators for each transaction sector were averaged and compared to the average score of other emerging economies.
- Tariff equivalent for each sector was calculated as:
$$\frac{\text{Average value for Egypt} - \text{Average for emerging economies}}{\text{Average for emerging economies}}$$

The set of performance indicators and tariff/subsidy equivalents by transaction sector*

Transaction sector	Performance indicators	Tariff /subsidy	
		All emerging	Advanced emerging
Public administration	Burden of gov. regulation, IP protection, efficiency of legal framework....	-4.6	-11.1
Financial sector	Financial sector sophistication, ease of access to loans, interest rate spread....	-15.9	-22.9
Real estate	Time to register a property, cost of registration.	-44.6	-34.7
Transportation	Railway infrastructure development, port infrastructure quality.	5.7	-8.7
Communication	Telephone/fax quality, price of comm. services, postal service efficiency.	3.1	-3.7
Trade	VA per employee in the wholesale and retail trade sectors.	-8.9	

* Negative numbers indicate tariffs and positive numbers subsidies.

IV. 3 The Impact of Transaction Sectors on Competitiveness of Manufacturing Industries

Impact of services efficiency on

- Anti-export bias (AEB)
- Effective rate of protection (ERP)

IV.3 The Impact of Transaction Sectors on Competitiveness of Manufacturing Industries

To estimate the impact of services on AEB:

- AEB due to trade policy was first calculated.
- AEB due to trade policy and inefficient services was then calculated.
- The difference is the effect of inefficient services on AEB in Egypt's manufacturing sector.

AEB formula with and without Accounting for service efficiency

$$\text{AEB } j = \left\{ \frac{1 + t_j}{1 + s_j \pm TE_j} - 1 \right\} \times 100$$

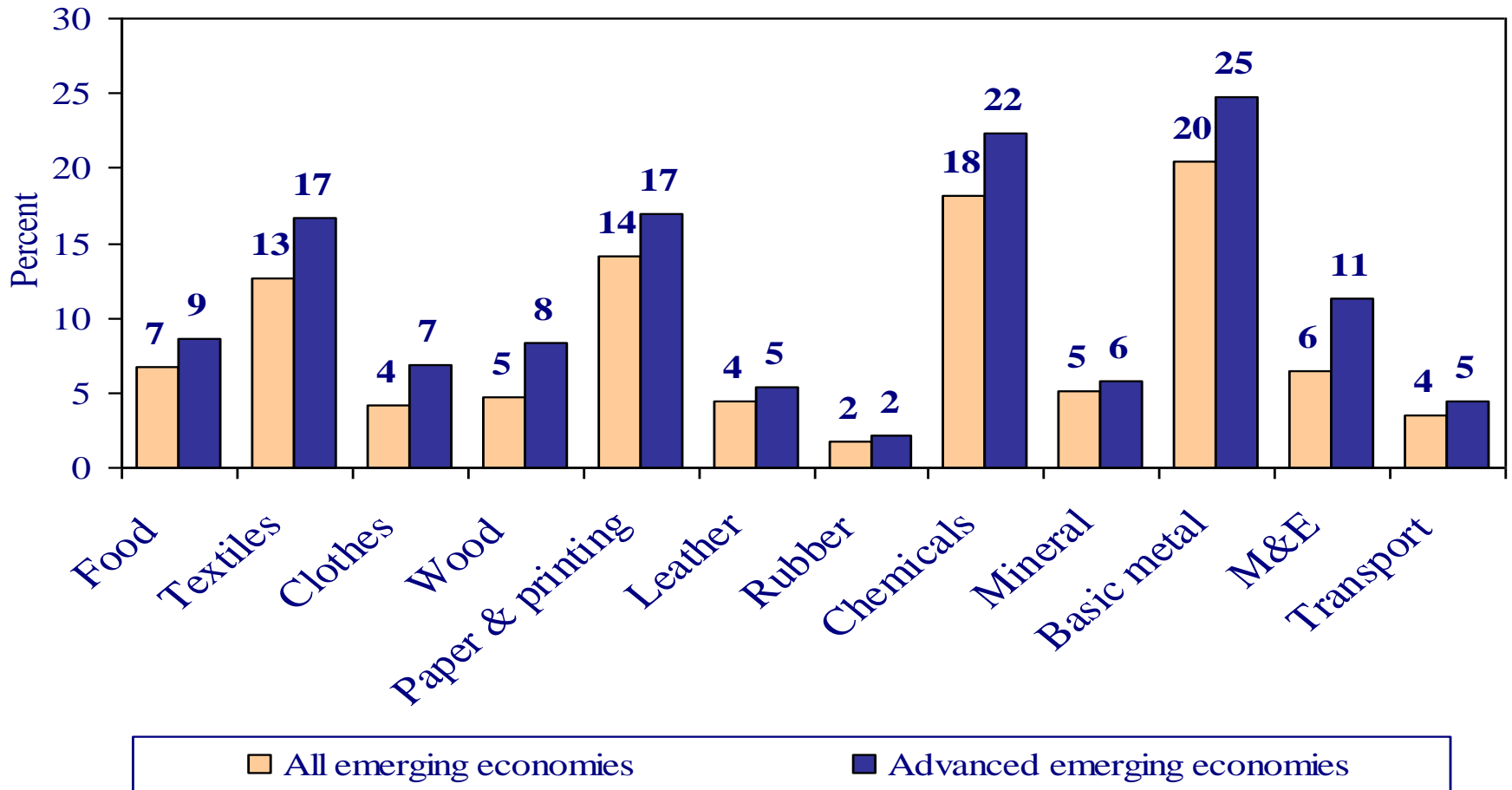
The diagram illustrates the components of the AEJ formula. Two orange boxes, labeled "Trade Effect" and "Service Efficiency Effect", have arrows pointing upwards towards the denominator of the fraction in the formula above. The "Trade Effect" box points to the term s_j , and the "Service Efficiency Effect" box points to the term TE_j .

t_j = nominal tariff on activity j

s_j = export subsidy or duty drawback per LE of exports

TE_j = extra costs due to inefficient services

% change in AEB due to services



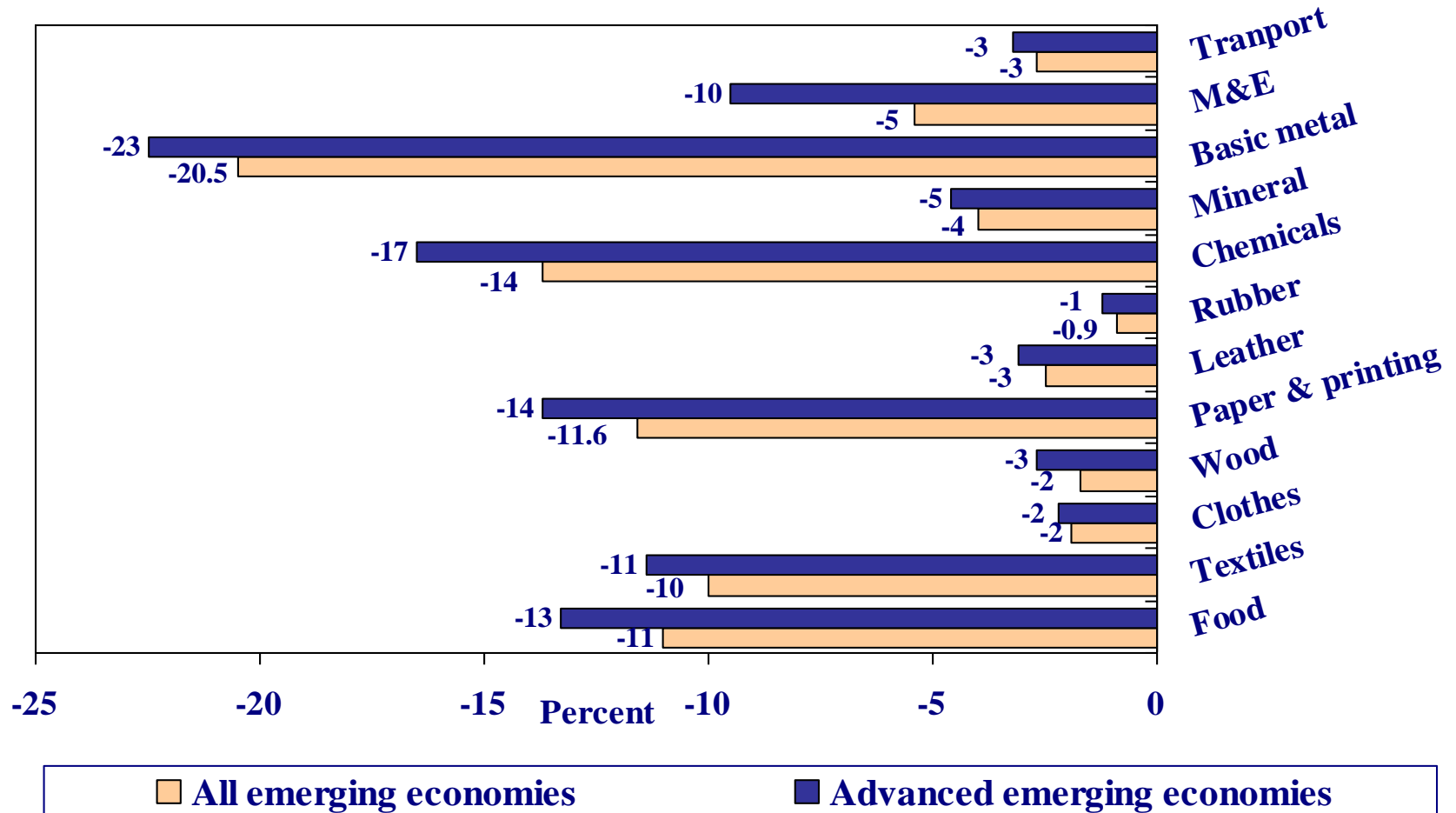
Source: Authors' calculations.

IV.3 The Impact of Transaction Sectors on Competitiveness of Manufacturing Industries

To estimate the impact of services on ERP:

- Balassa's ERP (assuming zero tariffs on non-tradables) was calculated to obtain ERP in the manufacturing sector in case of no efficiency differentials between Egypt and other emerging economies.
- Non-zero tariff on services was then assumed and Balassa's formula for ERP was amended accordingly.
- The difference represents the impact of inefficient services.

% change in ERP due to services



Source: Authors' calculations.

IV.3 The Impact of Transaction Sectors on Competitiveness of Manufacturing Industries

- Transaction sectors in Egypt increase bias against exports. Percentage increase in AEB due to services ranges between 2% and 20%.
- Services also reduce ERP. Percentage change ranges between -2% and -20%.
- Highly affected industries include basic metal, chemicals, paper and printing and textiles industries.
- The least affected industries are the rubber, clothing, wood and transport industries.

Conclusion and Policy Implications

- Efficiency of services is an integral part of the competitiveness of the Egypt's production sectors.
- Quality of transaction sectors needs to be seriously addressed, especially the public administration and financial sectors.
- Improving the quality of services involves dealing with procedures as well as the physical infrastructure.
- GOE needs to strike a balance between enhancing the regulatory framework governing the services sector and increasing contestability of markets.

Thank You