MSBR Innovates
New Insight of
Malaysia Trade Statistics

Siti Haslinda Mohd Din & Nur Aziha Mansor
Department of Statistics Malaysia
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TEC at Glance

Traditional trade statistics
Record what types of goods are trading across borders between countries.

Trade by enterprises characteristics (TEC)
The linkage of trade statistics with business registers allows us to describe those who are engaged in global market and what are their characteristics.
Benefits of TEC

- Provide an additional and better statistical information
  - Muryawan, 2014

- Compiling new statistics without causing an additional burden on businesses
  - Tilewska et al., 2013

- Relevant for policymakers
  - Snyder & Jansen, 2015

- An efficient tool to improve the quality of existing statistics
  - Alajäskö, 2015

- Cost-effective way for national statistical offices
  - Tilewska et al., 2013
Potential Output of TEC

Snyder & Jansen, 2015:
Trade value, trade quantity & by number of enterprises for the following variables (and combinations thereof):

- Trade by economic activity
- Trade by enterprise size
- Trade by foreign ownership
- Trade by partner countries
- Trade by geographic location
- Trade by sectors' traded commodities
- Trade by export intensity

Eurostat:
5 indicators expressed in terms of number of enterprises and trade value:

- Trade by economic activity and enterprise size class
- Concentration of trade by economic activity
- Trade by partner country and economic activity:
- Trade by number of partner countries and economic activity
- Trade by commodity and economic activity
Methodology

TRADE DATABASE

Import & Export Value

UNIQUE ID BR NO.

TEC DATABASE

International Trade Statistics By Enterprise Characteristics

MSBR

Enterprise Characteristics

UNIQUE ID BR NO.
Methodology & Findings

Start

Linkage by Unique Identifier

Business Registration Number

String Matching Algorithm

The matching rate by unique identifier approach is low

Matching Rate

No. of records 73.8%

Exports Value 65.4%

Identify the best string matching methods

Identify the best tools

Expand the Coverage and Automate the Linking Process
Issues

Quality Issues
- Poor quality of business registration number in trade database
- Invalidated business registration number in Customs declaration
- Data inconsistency between 2 different statistical domains

Task Complexity Issues
- String matching algorithms
- Identifying the primary activity for enterprise with multiple plant

Confidentiality Issues
- The possibility to identify an enterprise or a trader getting higher with detailed statistics
- May hinder international comparability and may discourage users

Asia-Pacific Economic Statistics Week
Economic and Social Commission for Asia and the Pacific
Future Perspective

- Business Demography (MSBR)
- Trade Database

= New Indicators

- Identifying born-global enterprise
- Identifying new or persistent exporters
Conclusion

1) The TEC project has been identified as a pioneer project in Asia.

2) The initiative is in line with the international recommendations i.e. Business Registers Recommendation Manual 2010 (Eurostat) and International Merchandise Trade Statistics (IMTS) 2010 (UNSD).

3) The project adds values to existing international trade statistics by providing new indicators for the purpose of formulating or revising the national policies.

4) The investment of data linking is relatively low and the returns in the form of new economic insights are high.

5) The TEC will be DOSM new development areas for external trade statistics in order to analyze the effects of international trade to production, employment and enterprises' performances.
THANK YOU

Nur Aziha Mansor
nuraziha@stats.gov.my
Methodology & Research Division
Department of Statistics Malaysia