

Trade in value added

Concepts, applications and challenges

Training Workshop on Trade in Services
Negotiations for AU-CFTA Negotiators
Nairobi, Kenya

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Agenda

1. The emergence of trade in tasks: impact on policy (and on statistics!)
2. Measuring gross vs value-added trade flows
3. The OECD-WTO TiVA initiative
4. What TiVA indicators can tell
5. Some caveats and way forward

1. The emergence of trade in tasks

“trade in tasks” and GVCs

development of infrastructure
and technology

lower applied tariffs
and trade policy incentives

international
consumer demand

outsourcing/offshoring
strategies and FDI



**Global Value Chains
(GVCs)**

trade in intermediate
goods

intra-firm trade

processing trade

1. The emergence of trade in tasks

Some policy-related questions

- How much exports really contribute to economic growth and employment
- Where domestic value added is created
- Are services “non-tradable”?
- Are imports “bad”?
- Which countries trade with whom
- How trade imbalances change
- ...

1. The emergence of trade in tasks

Statistical challenges

“Traditional” trade statistics

- flows of goods are recorded in gross terms each time they cross borders => multiple - counting
- all final value accrues to the last country of assembly, irrespective of the true origin of the value-added

New information needs

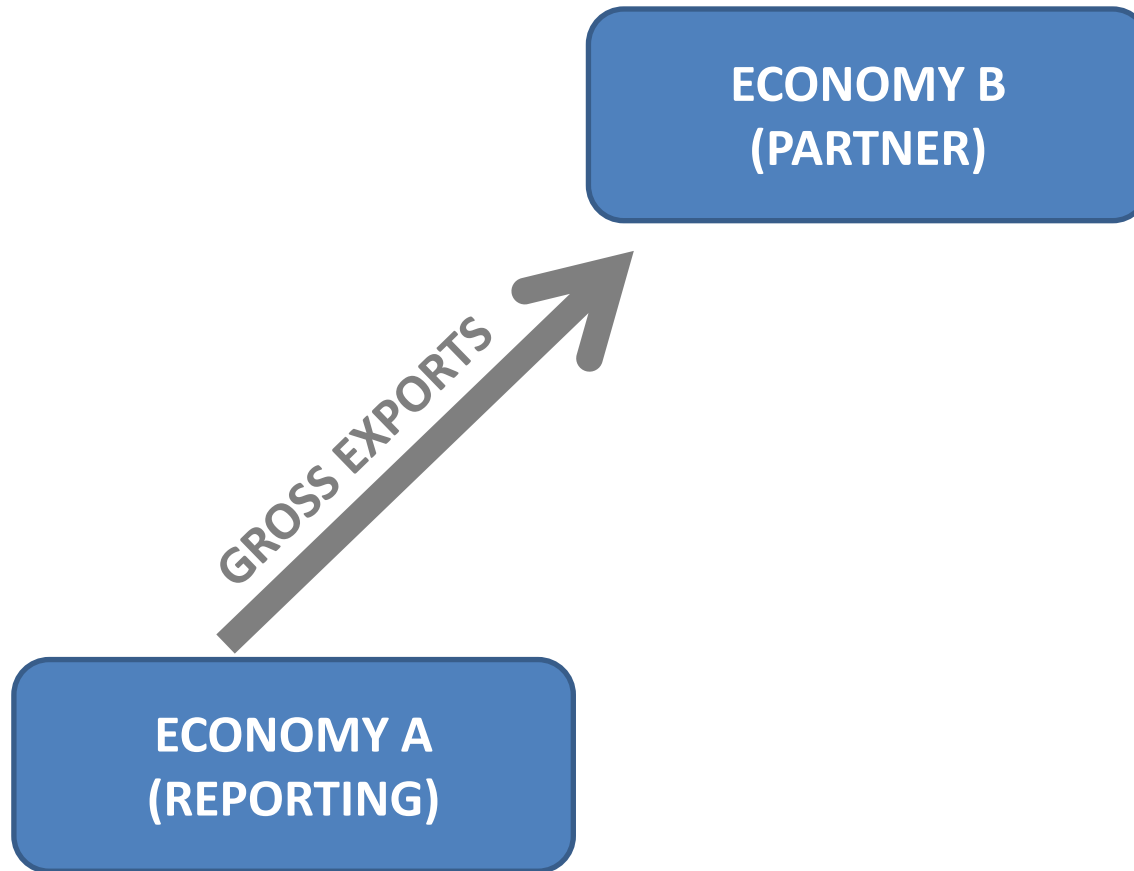
- decomposition of gross trade flows in their VA components
- intra-firm trade, trade by enterprise characteristics



Gross trade statistics still important!!!

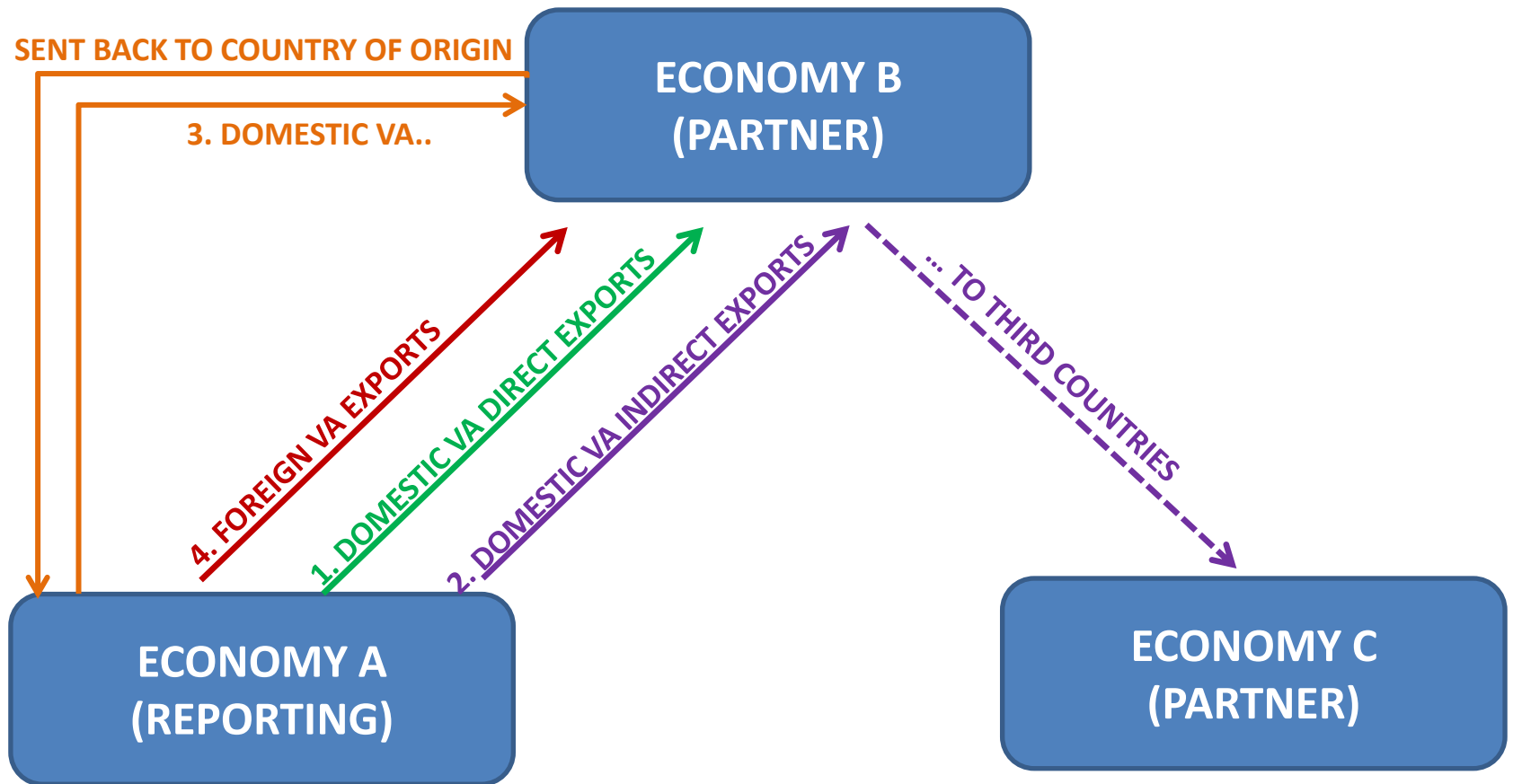
2. Measuring gross vs VA flows

“Traditional” trade flows



2. Measuring gross vs VA flows

“Value-added” flows



➔ Decomposition of gross exports into their value-added components

2. Measuring gross vs VA flows

The Input-Output approach

National I-O tables



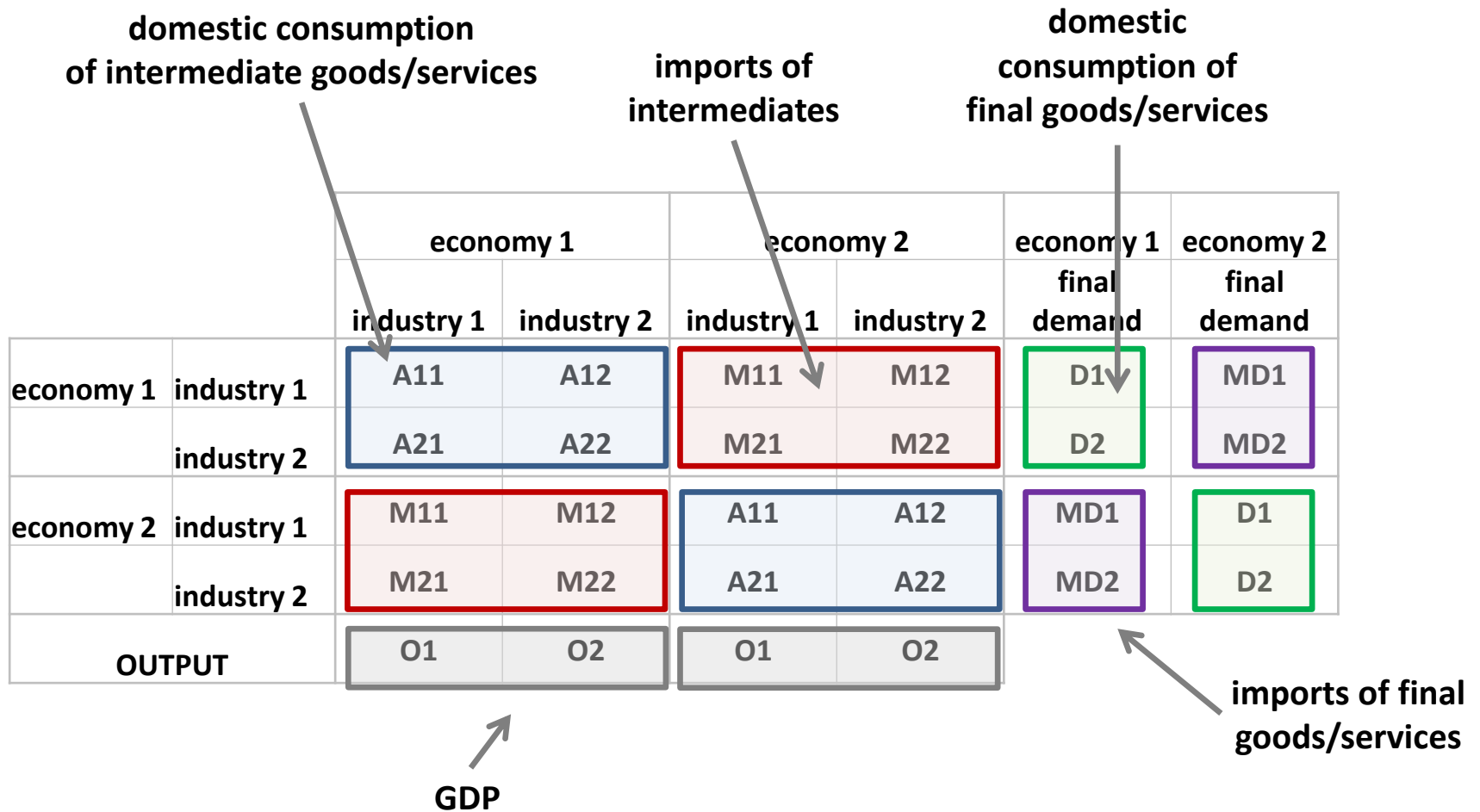
Bilateral trade data



Estimates of the value added by each industry/country in the production chain

2. Measuring gross vs VA flows

The Input-Output approach



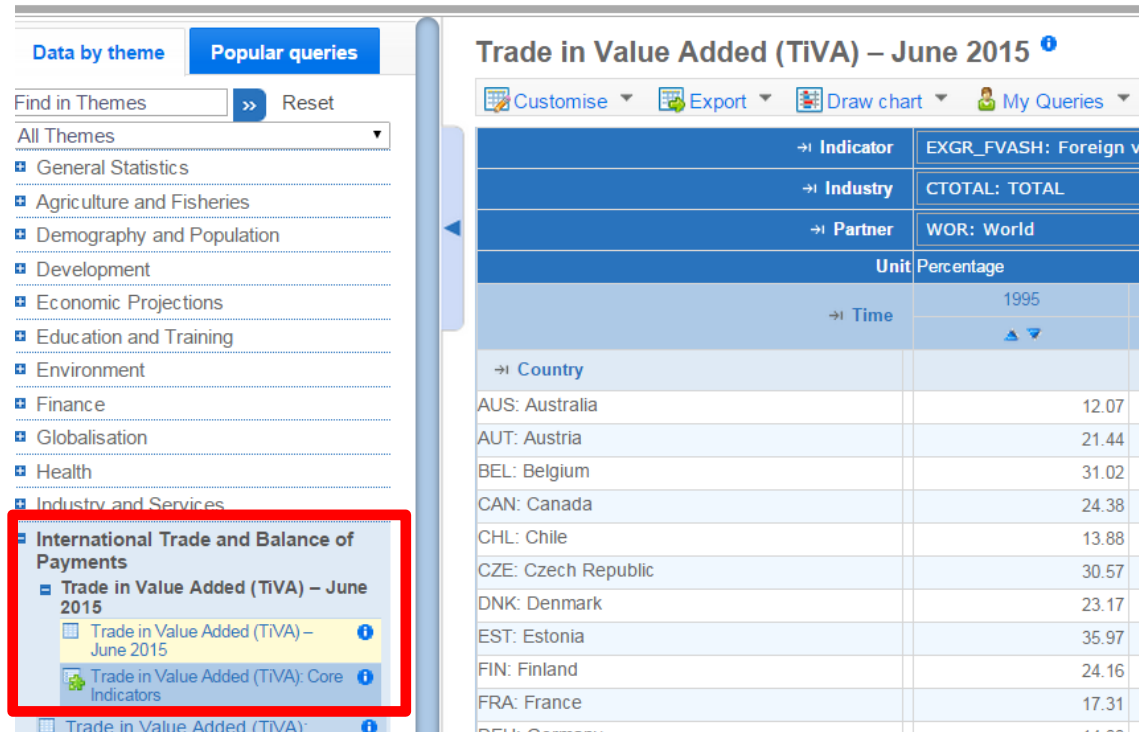
3. The OECD-WTO TiVA initiative

The Trade in Value Added database

http://stats.oecd.org/Index.aspx?DataSetCode=TIVA_OECD_WTO



- Fostering the use of Input-Output modelling to assist policy-making
- Development of methodologies
- Regular production of trade in value added indicators



The screenshot shows the OECD.Stat interface for the 'Trade in Value Added (TiVA) – June 2015' dataset. The left sidebar lists various themes, with 'International Trade and Balance of Payments' expanded to show 'Trade in Value Added (TiVA) – June 2015' selected. The main panel shows the dataset configuration with the following settings:

- Indicator: EXGR_FVASH: Foreign v...
- Industry: CTOTAL: TOTAL
- Partner: WOR: World
- Unit: Percentage
- Time: 1995
- Country: (dropdown menu)

The table below shows the values for various countries:

Country	Value
AUS: Australia	12.07
AUT: Austria	21.44
BEL: Belgium	31.02
CAN: Canada	24.38
CHL: Chile	13.88
CZE: Czech Republic	30.57
DNK: Denmark	23.17
EST: Estonia	35.97
FIN: Finland	24.16
FRA: France	17.31
DEU: Germany	11.00

3. The OECD-WTO TiVA initiative

The Trade in Value Added database

- Coverage
 - 62 countries
 - 34 industries (incl. goods and services – ISIC rev. 3)
 - 7 years: 1995, 2000, 2005, 2008-2011
- Indicators
 - set of 40 indicators on trade in value added
 - matrix on the origin of value added in gross exports by source country and industry

4. What TiVA indicators can tell

VA components of exports

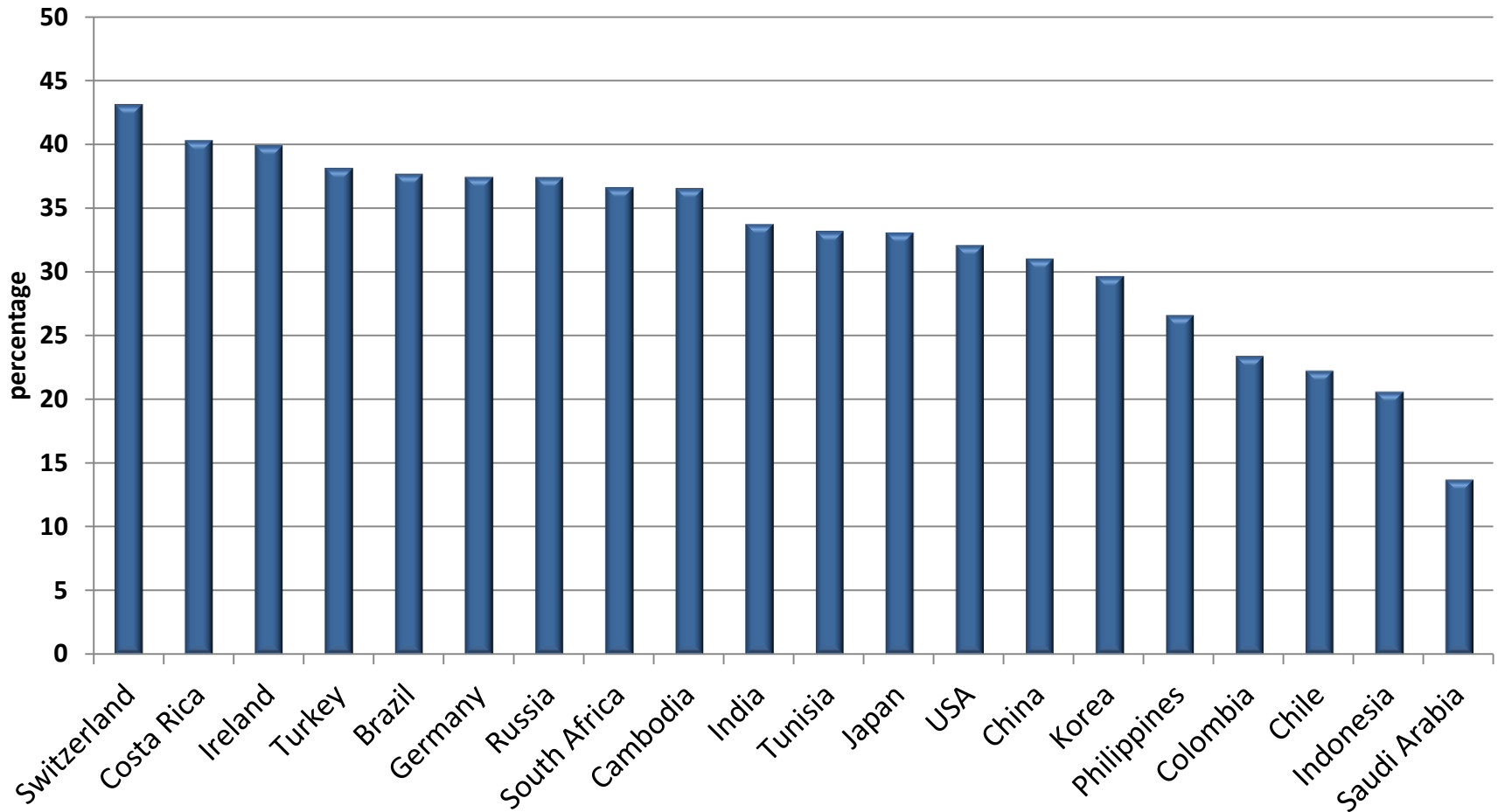
VA components as % of gross exports, total manufactures, 2011

	South Africa	United States	China
Domestic value added	72	78	60
Direct domestic value added	26	41	21
Indirect domestic value added	46	37	37
Re-imported domestic value added	0	1	1
Foreign value added	28	22	40

Source: author's calculations based on OECD-WTO TiVA database, June 2015

4. What TiVA indicators can tell

Services VA in manufactures exports

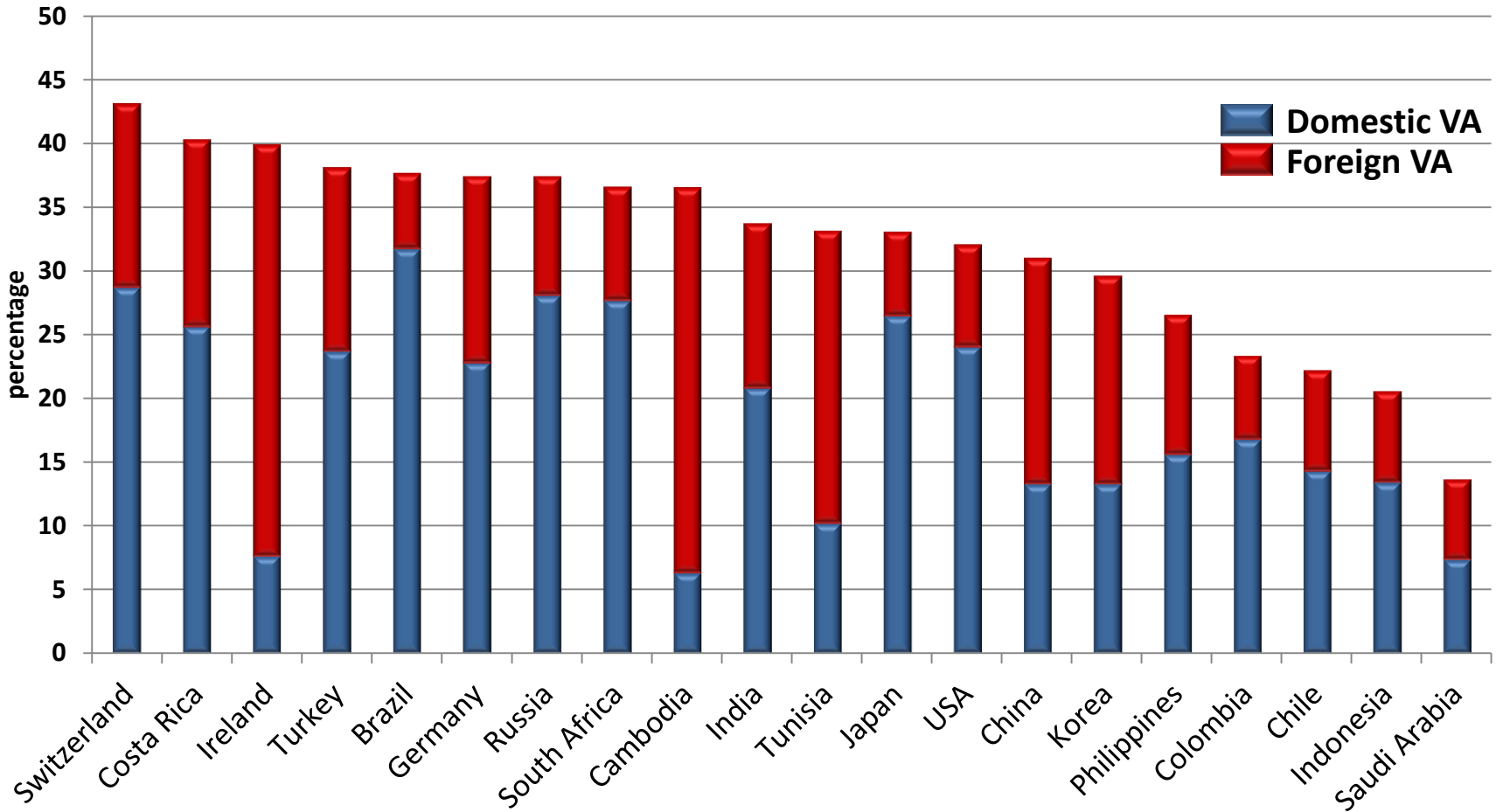


Note: Figures refer to 2011.

Source: author's calculations based on OECD-WTO TiVA database, June 2015

4. What TiVA indicators can tell

Services VA in manufactures exports

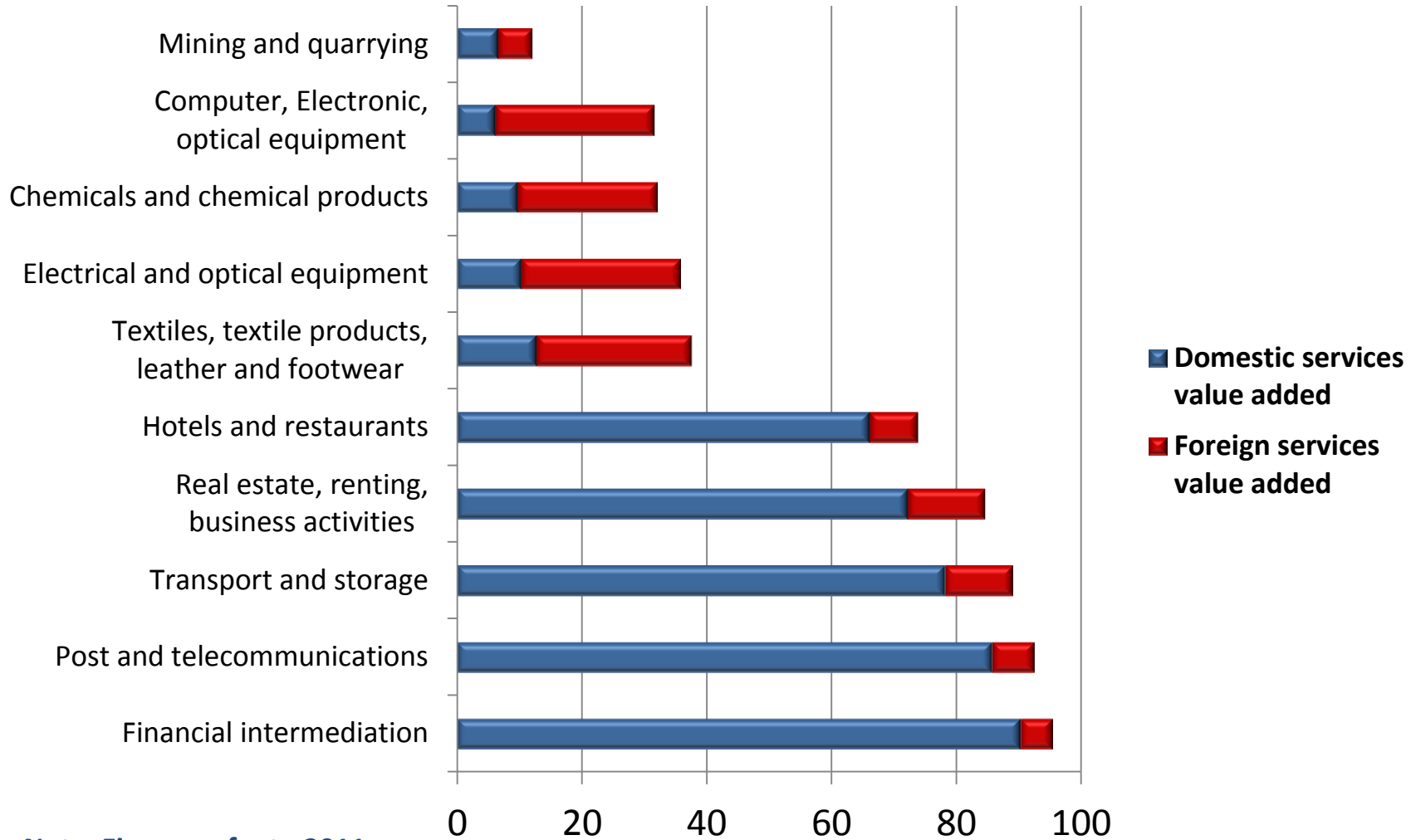


Note: Figures refer to 2011.

Source: author's calculations based on OECD-WTO TiVA database, June 2015

4. What TiVA indicators can tell

Services VA in exports – Tunisia



Note: Figures refer to 2011.

Source: author's calculations based on OECD-WTO TiVA database, June 2015

4. Some caveats and way forward

TiVA - a note of caution

TiVA indicators are *estimates*

- Underlying data are not perfect
 - inconsistencies across countries
 - lack of complete bilateral trade in services data
- Several assumptions are used: results must be interpreted with caution
 - firms are treated as homogeneous
- The level of industry detail may (currently) not be enough for policy analysis

4. Some caveats and way forward

TiVA - future plans

- Extending TiVA database coverage: countries, sectors, years
- More trade in value added indicators
- Improving the quality of the results:
 - trade statistics (bilateral trade in services, inconsistencies of “mirror” merchandise trade flows)
 - standardization and development of national I-O tables
 - including official processing trade data in the I-O tables (e.g. for China, Mexico)
 - taking into account firm heterogeneity