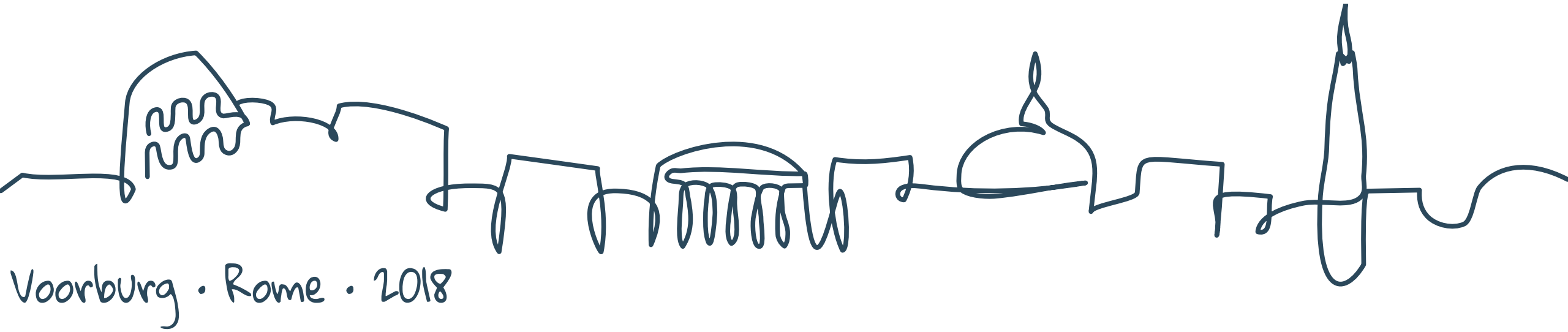
VOORBURG GROUP

ROME
24 | 28
SEPTEMBER
2018

Import and Export Service Producer Price Indices in the UK National Accounts

John Jeremy

Office for National Statistics – United Kingdom



VOORBURG GROUP

ROME
24 | 28
SEPTEMBER
2018

Topics for discussion

1. Current methods for producing Trade in Services Deflators
2. Issues with these methods
3. Services Export Price Index (SEPI) Development
4. Recent Improvements and Developments
5. Future Work and Developments

John Jeremy

Office for National Statiistics – United Kingdom

VOORBURG GROUP

ROME
24 | 28
SEPTEMBER
2018

Current Methods for Producing Trade in Services Deflators

Broadly, our current practices can be split into three methodologies:

- **Use of GDP(O) Deflators**

  - Uses GDP(O) implied deflator
  - No adjustment for exchange rates
  - Same deflator for import and export

- **Use of Weight Modified CPIs (WMCPIs)**

  - Uses foreign CPIs
  - Adjusted for exchange rates
  - Weighted by trade volumes

- **Combination of GDP(O) deflator and a WMCPI**

  - Uses equally weighted average of GDP(O) and WMCPI

VOORBURG GROUP

ROME
24 | 28
SEPTEMBER
2018

Issues With Current Methods

Review of current methods have have raised following issues:

- **GDP(O) Deflators**

  - Do not represent trade prices
  - No adjustment for exchange rates
  - Same deflator for import and export

- **WMCPI Deflators**

  - Uses aggregate CPI
  - Exchange rate adjustment is imperfect
  - Inconsistent methods
  - No representation of sterling prices
  - Assume only one currency is used

- **GDP(O) & WMCPI Combined**

  - All of the issues above
  - Arbitrary weighting

Issues With Current Methods

Figure 1: Proportion of import and export currency transaction by EU and Non-EU

	Imports from EU	Imports from Non-EU	Exports to EU	Exports to Non-EU
Sterling	52.2	39.5	38.9	50.6
Euro	39.5	12.9	46.0	4.9
US Dollar	7.3	40.1	13.7	39.9
Other	1.0	7.5	1.4	4.6

It should be noted that:

The results of this analysis only represent the responses given to the IPI and EPI surveys and not neccesarily trade of all goods.

The IPI only reflects imports of products and materials to be used for further processing in the manufacturing sector.

Issues With Current Methods

Review of current methods have have raised following issues:

- **GDP(O) Deflators**

  - Do not represent trade prices
  - No effect from exchange rates
  - Same deflator for import and export

- **WMCPI Deflators**

  - Uses aggregate CPI
  - Exchange rate adjustment is imperfect
  - No representation of sterling prices
  - Inconsistent methods
  - Assume only one currency is used

- **GDP(O) & WMCPI Combined**

  - All of the issues above
  - Arbitrary weighting

Development of Service Export Price Index (SEPI)

Ideally, we would directly observe export prices. As such, we have begun development of SEPI.

- Designed as a service equivalent to Export Price Index (EPI)
- Builds on methods developed for EPI and Annual Survey Goods and Services (ASGS)
- Pilot survey to be dispatched in November
- If publishable data is gathered it could be released middle of 2020
- Aim of the pilot is to assess viabliity of extending the survey

Recent mprovements and Developments

As the benefits of the SEPI survey are yet to be realised, development work has begun to improve existing methods.

Improvements to WMCPI deflators

Improvements to exchange rate adjustment

- No longer adjust by local currencies
- Addition of Sterling transactions
- Adjust for Sterling, US Dollar and Euro transactions
- Model is split between trade with Europe and the Rest of the World

Recent mprovements and Developments

As the benefits of the SEPI survey are yet to be realised, development work has begun to improve existing methods.

Improvements to WMCPI deflators

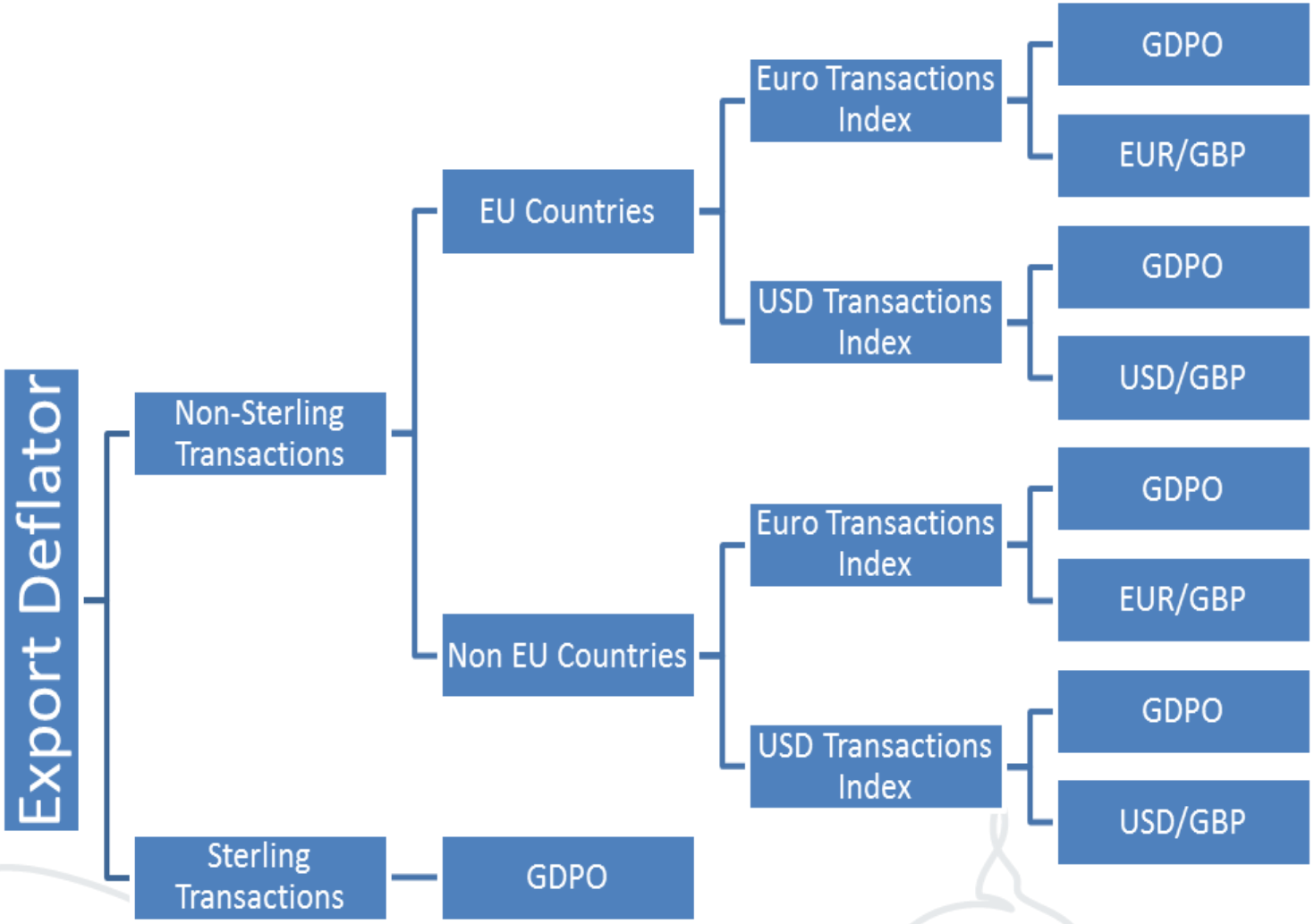
Updated export measure to use GDP(O) implied deflators

- Domestic deflators seem more appropriate than foreign CPIs
- Again, assumes transactions in Sterling, Euros and US Dollars

VOORBURG GROUP

ROME
24 | 28
SEPTEMBER
2018

Example of Aggregation of Improved WMCPIs



6. Future work and developments

Investigation of hedging activities

- Industry consultations suggest this could be important in some industries

Futher improvement to exchange rate adjustments

- Where GDP(O) deflators are used, consider exchange rate adjustment

Consider more specific CPIs

- Where CPIs are available for specific services, use these instead of aggregate CPI

Improvement to TiS systems

- A new system that allows for better analysis and disemination of the data