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Linking Services Turnover/Output and Prices to the National Macroeconomic Framework

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Session Overview

- Highlights from VG 2008 presentation by Matt Berger – Mary Beth Garneau
- Linking Services Turnover/Output Prices to the National Macroeconomic Framework– Alain Gallais
- Beyond the National Accounts – other important uses for the data Jakob Kalko
- Eurostat Task Force of an Index of Services Production – Dorothee Blang
- Services Statistics in New Zealand
- Discussion of Country Issues



National accounts & measurement of constant price output of the service sector

Based on slides from the 2008 presentation by Matt Berger at the 23rd Voorburg Group, Aguascalientes, Mexico

Updates by Mary Beth Garneau with special thanks to Joumana Harfouche, Andreas Trau and Robert Campbell of the Canadian SNA

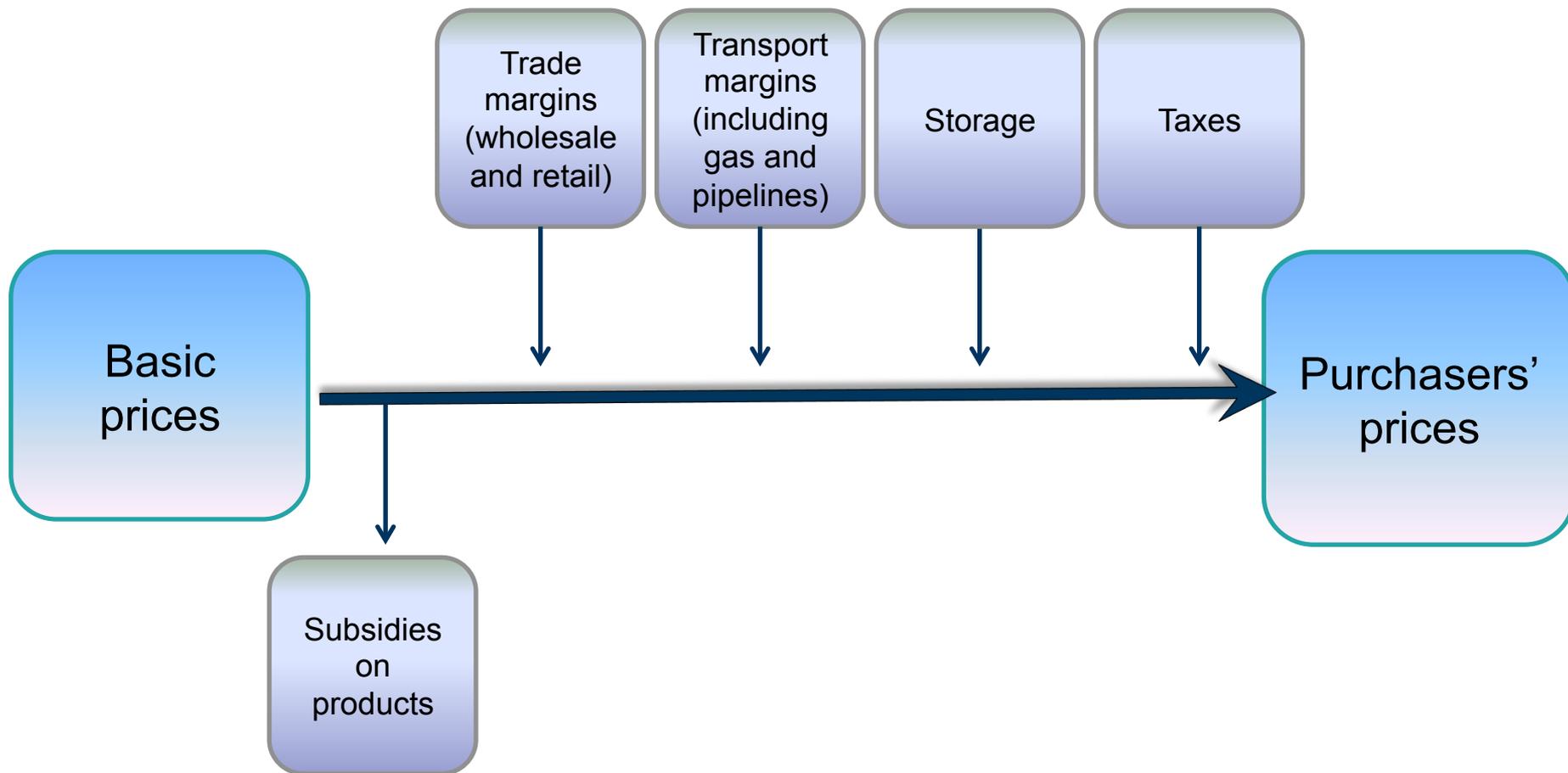
NA prefer SPPIs for deflation

- Deflation of output by SPPI is the preferred approach of NSOs
 - SPPIs measure *prices at constant quality*
 - Changes in resulting constant price output measures are *changes in volumes*

SPPIs used for other purposes

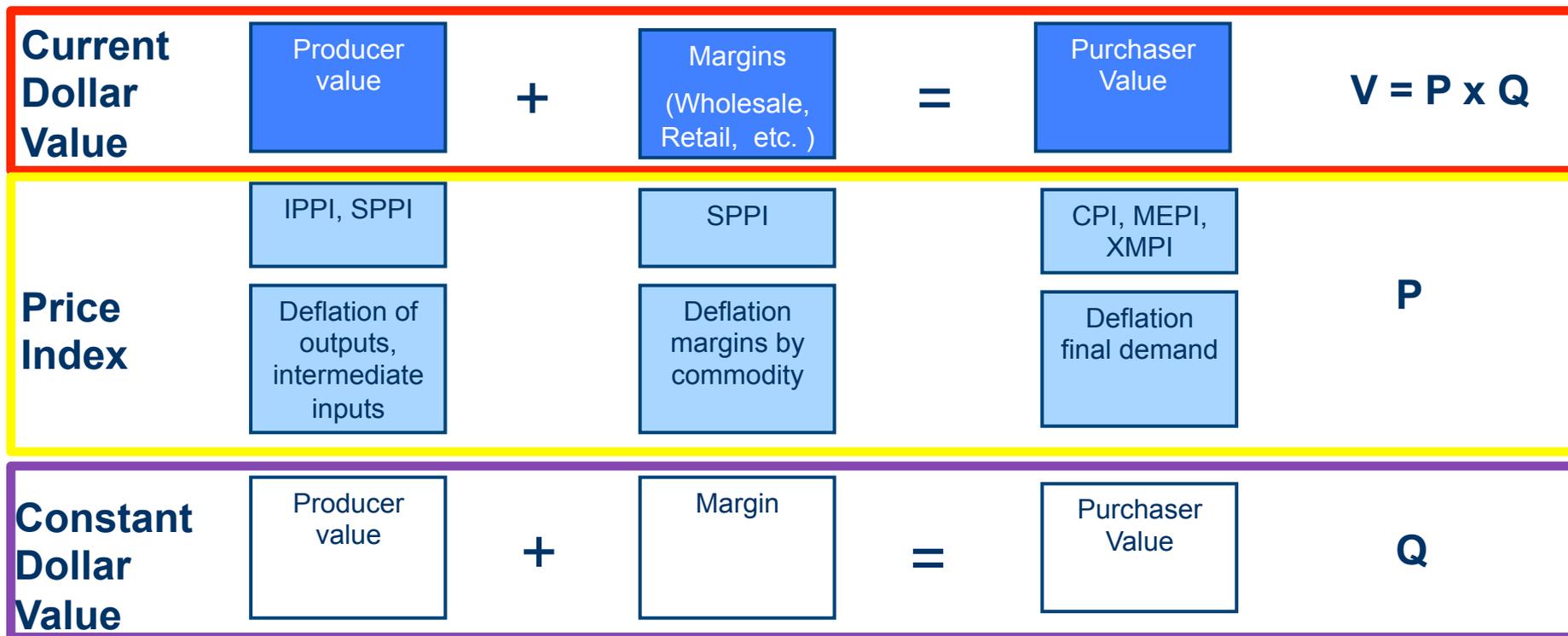
- SPPIs also have uses beyond output of the service sector
 - Adopted in some circumstances in compilation of the expenditure approach
- SPPIs not generally used for non-market outputs
- SPPIs enable the study of the evolution of price dynamics

Output valuation criteria



Valuation of a product

Supply = Demand





Valuation of a product (example)

Supply Price

=

Demand Price

\$75 tax



\$75 retail margin



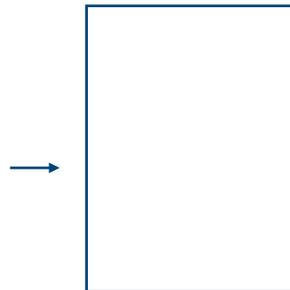
\$50 wholesale margin



\$50 transport margin



\$300 factory gate price
(basic price)



\$550 purchase price of a suit



Output

- All domestic output
 - Not just business-to-business
 - Not just sales to domestic customers

Double deflation

- Production approach uses double deflation
 - Outputs measured to constant price
 - Inputs measured to constant price
 - Constant price value added
equals
Constant price outputs
less
Constant price inputs

Product based SPPIs

- National accountants require a ***product*** focus for SPPIs
 - Industry SPPIs are not satisfactory (in general)

When SPPIs are not available ...

- In the absence of suitable SPPIs, national accountants
 - Use nearest CPI (where applicable)
 - Construct output measures based on input costs
 - Use “nearest” PPI’ s (for distributive trade)
- Reluctant solution (for the ***production approach***)
 - Not priced to constant quality or on correct pricing basis
 - Using inputs for outputs is a concern when using the value added approach to GDP

Revenue & output

- Income and revenue do not always equate with industry **output**

Examples:

- Retail and wholesale
- “Brokerage” – ticketing, travel agents, freight forwarders
- Some advertising
- Employment placement
- SNA imputes some outputs (e.g. own account production)
- Need to **understand** activities of different industries
 - And their treatment in the national accounts (including understanding **why**)

Supply Use Framework

- Key tool in the compilation of the national accounts

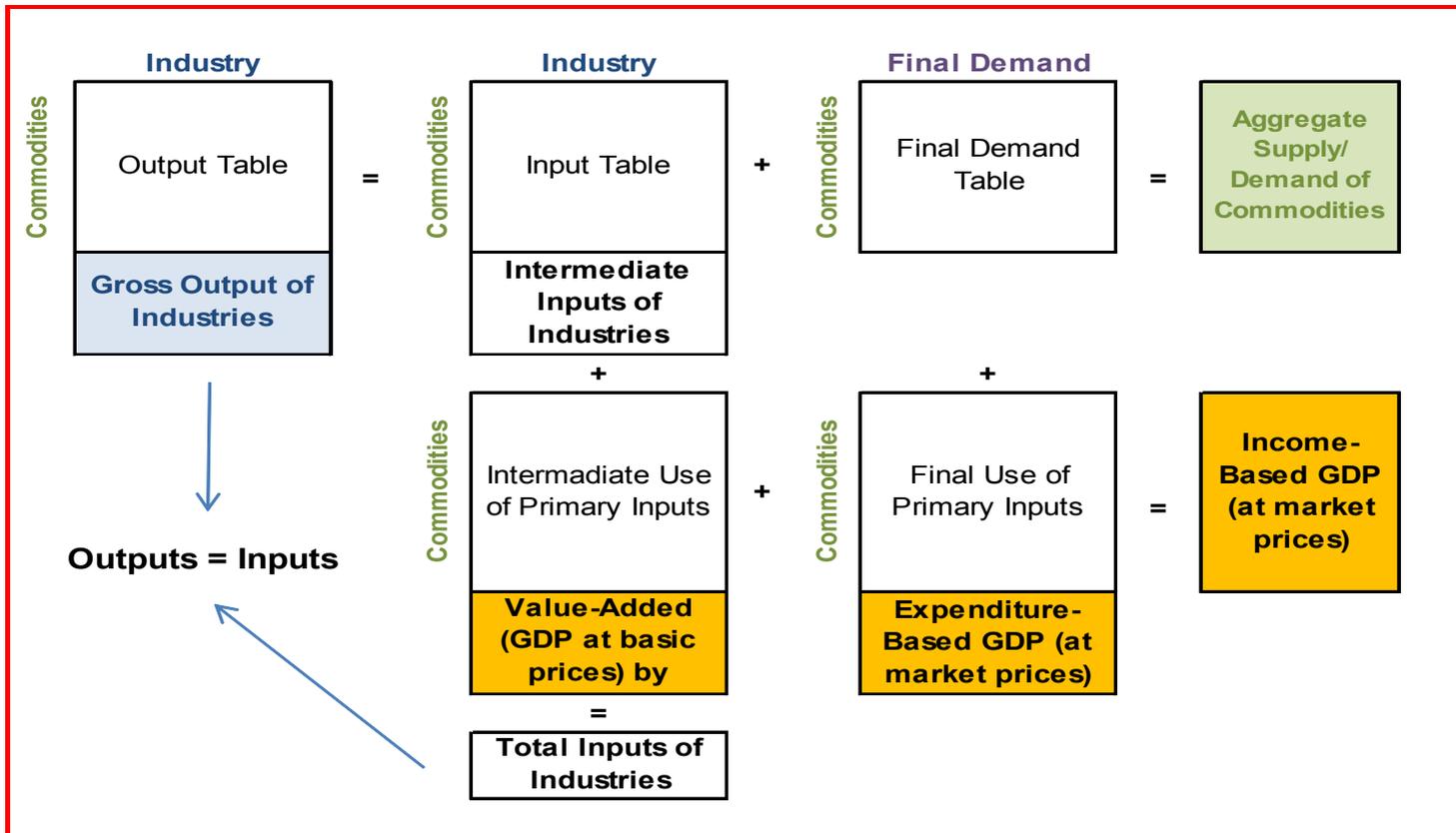
- Shows flows of goods & services
 - From different types of producers ...
 - ... through different types of intermediate use ...
 - ... to final demand



Supply = output + imports
= **demand** = intermediate consumption
+ final consumption (including capital formation)
+ exports



General Schema of the Input-Output and Supply-Use Tables





Challenges SNA faces with source data

- Converting enterprise-based data into establishment-based data
- Converting activity-based data into establishment-based data
 - e.g. publishing as an activity is much broader than publishing as an output of the publishing industry
- The treatment of ancillary units such as head offices and warehouses

Canadian System of National Accounts

- Canadian Supply-Use tables provide the estimates required to calculate GDP according to each of the three methods by calculating
 - the valued added by industry:
 - the flow of goods to final demand sectors (the GDP by expenditure method)
 - the cost to industries of the primary inputs (the GDP by income method)
- Output and intermediate consumption are estimated at a detailed industry level (NAICS) which is used to benchmark other calculations of GDP

Canadian System of National Accounts

- Supply-Use Accounts
- GDP by Income and Expenditure Accounts (benchmarked to Supply-Use Accounts)
 - National data published quarterly
 - Provincial/territorial data published annually
- Monthly Real GDP by industry (National level)
 - Calculated by projecting the relationship between real gross output and real value-added (Assumes that the volume of value added generated from a given volume of output for a specific industry is generally constant over short periods of time)
 - Uses indicators of real output, employment or real input to project the relationship between these characteristics and value added, as determined from the deflated Input-Output tables