

Requirements for Services Producer Price Indexes

Australian National Accounts





What is covered

- Why we need price indexes
- •How volume estimates are constructed
- Need for Services PPIs
- Desired attributes for indexes



Why we need price indexes

- SNA provides an integrated set of price and volume measures.
- •All aggregates in the accounts are estimates of the sums of individual transactions.
- These transactions have two components: price and volume.
- Volume estimates are required to understand the 'real' changes in production, income and wealth.



Deriving volume estimates

- Quantity revaluation
 - Used for homogenous products with no quality changes over time

- Price deflation
 - Appropriate price indexes
 - Factor price indexes pricing of inputs
 - Proxy indexes representative price



Use of Price Indexes

- Supply and use tables
 - annual tables provide benchmarks for GDP
 - balance supply (production) and use (expenditure)
- Annual and quarterly GDP
 - > Production
 - ➤Income
 - ➤ Expenditure
- Other outputs
 - ➤ Balance Sheets
 - ➤ Satellite Accounts



Production/Supply

- Supply and Use Tables
 - double deflation method
 - input and output PPIs
 - > factor price indexes
- Annual GDP
 - ➤ as with Supply and Use
- Quarterly GDP
 - agriculture double deflation
 - other extrapolate using output (input) indicators



Expenditure/Use

- Same methodology used across supply-use tables and quarterly/annual GDP
- Price deflation for most components
 - Household final consumption CPI
 - Government final cons LPI, PPI, quantity reval
 - ➤ Capital Formation PPI, MPI
 - Inventories PPI, quantity reval
 - Exports XPI, CPI, quantity reval
 - >Imports MPI, other indexes



Services PPIs

- Price indexes covering property & business services and transport and storage services used in the accounts
- Significant 'areas' still to be covered:
 - Finance and insurance services
 - Retail and wholesale trade
 - International trade in services
 - ➤ Intangible products
- Non-market services
 - development of output measures rather than PPIs



Services PPIs

- Finance and insurance services
 - Very difficult to conceptualise volumes and prices
 - Onus sits with national accounts to develop complete framework - coherency
 - Work with Prices on requirements for index
- Retail and wholesale services
 - Experimental ABS series developed for retail
 - Further collaboration required to define 'volume' of trade services



Services PPIs

- International trade in services
 - poor coverage compared to merchandise trade
 - difficult collection issues
 - growing demand from users
 - address in conjunction with PPI developments
- Intangible assets
 - growing importance in most countries
 - expanding SNA asset boundary
 - significant measurement issues



Requirements in indexes

- Remove change in price caused by a change in quality
 - more work required to define 'volume' in difficult services industries
 - 'market' price of quality change, consistency across indexes
- Not reflect any changes in price due to underlying compositional change



Requirements in indexes

- Consistency & coherency across all data sources
 - ➤ Conceptual framework collections based on SNA, use different aggregation methods to address different purposes
 - Units consistent frame and unit rules across collections
 - Classifications consistent classification for industries and products across collections



Wrap Up

- Price indexes required to separate price and volume components
- PPIs required at the product level covering the entire economy
- Services PPIs remain as a large data 'gap' for development of volume estimates
- Price indexes need to appropriately deal with quality and compositional changes
- Need for consistency and coherency across all data sources