



Quarterly National Accounts

Sources for GDP by Production Approach

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Methodology and data sources for QGDP by activity

Presentation outline

- ▶ Manufacturing
- ▶ Electricity, gas and water supply
- ▶ Construction
- ▶ Issues



Data sources: Manufacturing

Possible monthly/quarterly Data sources/Indicators

- ▶ Industrial Production index
- ▶ Sample survey of manufacturing establishments (main contributors to value added)
- ▶ Quarterly surveys on inventories.
- ▶ Exports
- ▶ Data on turnover reported for VAT purposes
- ▶ Data quantity produced reported for payment of excise duty



Mining and Manufacturing: Some issues

- ▶ Limited coverage of the Index of Industrial Production (covers only those employing 20 or more)
- ▶ Limited coverage of the Producer Price Index (covers only goods produced for sale on local market, exports are not included)
- ▶ Adjustment to sales and exports for change in inventories
- ▶ Adjustment to inventories for holding gains
- ▶ Estimate for non response
- ▶ Business Register not up-to-date
- ▶ Outsourcing



Data sources: Electricity. Gas and Water

Possible quarterly indicators: values/quantities

- ▶ Public authorities: sales (value and quantity) of electricity and water
- ▶ Business accounts / Annual reports of producers
- ▶ Production structure (separate production accounts for production of electricity - hydro, thermal, nuclear and biomass)
- ▶ Unit price by type of product
- ▶ Unit price by type of customer (industrial, commercial, residential, etc)



Data sources: Construction

▶ Possible quarterly indicators: values/quantities

- Administrative data : Data on building permits issued/floor area built from local authorities
- Return for tax purposes (corporate tax, VAT)
- Survey of :
 - Builders
 - Customers of builders

Input indicators

- Supply/usage of building materials - cement, iron sheets, paint),
- Employment/hours worked (+ productivity trend?)



Data sources: Construction (cont'd)

Output indicators

- Length of roads built (Kms)
- Progress payment for work done

Price indicators

Construction (Input price index)

- PPI + wage rates + margins)
- Index of cost of building materials

Construction (Output Price Index)

- Pricing standard specifications



Construction: some measurement issues

- ▶ Large number of small contractors and informal businesses
- ▶ Long-term projects: issues of holding gains and allocation of output to quarters
- ▶ Subcontracting and possibility of double counting
- ▶ Speculative construction: price is not known at the time the work is done
- ▶ Data on own account construction by households specially in rural areas

Note : These same problems are also present in ANA. Statisticians need to seek assistance of experts in specific fields , e.g. civil engineers, architects and quantity surveyors, for construction.



Issues: Data availability

- Availability and Quality of Production data (Benchmark year, monthly/quarterly/annual)
- Availability and quality of production volume indices
- (Availability and quality of price data and price indices)
- Technical ratios (not regularly updated)
- Adjustment factors (not documented)



Thank You