



National Accounts Compilation Course: GDP Estimation, Supply-Use Tables and SNA Methods



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Introduction:

National accounts compilation, covering GDP estimation, supply-use tables and SNA methods, is a 10-day course for national accounts compilers in statistics authorities and economic analysts in planning ministries, ending with a GDP Compilation Improvement Plan. Many authorities publish GDP that does not reconcile across the production, expenditure and income approaches, rests on an ageing base year and is revised heavily without explanation. Nominees already compile or use GDP figures and learn through a modelling build on case source data. CoreConcept Training Center delivers this national accounts compilation course.

Course Objectives:

- Estimate annual GDP by the production, expenditure and income approaches from survey, administrative and trade source data, valued under SNA price concepts
- Construct and balance supply and use tables by product and industry, then derive symmetric input-output tables for analytical use
- Compile quarterly GDP from indicator series, benchmark it to annual totals and remove seasonal and calendar effects
- Produce chain-linked volume measures by deflating current-price estimates with matched producer, consumer and trade price indices
- Estimate oil and non-oil value added and the informal and non-observed economy so that GDP coverage is exhaustive
- Prepare a GDP Compilation Improvement Plan that sets rebasing, revision, source data and quality actions for a statistics authority

Target Audience:

- National accounts units responsible for compiling annual and quarterly GDP estimates
 - Economic statistics teams responsible for business, trade and price data used in GDP
 - Planning ministry analysts responsible for using GDP and sector value added in development plans
 - Balance of payments and government finance compilers responsible for feeding the external and government accounts
 - Statistical methodology units responsible for rebasing, classification changes and revision policy
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Course Outline:

Day 1: National Accounts Foundations and the SNA Sequence of Accounts

- SNA Institutional Sectors and Resident Unit Classification Rules
- SNA Sequence of Accounts From Production to Financial Account
- Market, Non-Market and Own-Account Output Valuation Rules
- Basic Prices, Producer Prices and Purchasers' Prices Distinctions
- National Accounts Source Data Inventory and Gap Register

Day 2: Production Approach GDP and Activity Classifications

- ISIC Activity Classes and CPC Product Codes in Compilation
- Gross Output and Intermediate Consumption Estimates by Industry
- Gross Value Added Derivation From Business Survey Returns
- FISIM Allocation and Taxes Less Subsidies on Products
- General Government Output Measured at Sum of Costs

Day 3: Expenditure and Income Approaches to GDP

- Household Final Consumption From Household Expenditure Survey Data
- Gross Fixed Capital Formation Through the Commodity Flow Method
- Changes in Inventories and Removal of Holding Gains
- Exports and Imports From Balance of Payments and Customs Records
- Compensation of Employees and Gross Operating Surplus Estimation

Day 4: Supply and Use Tables Construction and Balancing

- Supply Table Assembly With Imports, Margins and Product Taxes
- Use Table at Purchasers' Prices by Product and Industry
- Valuation Matrices for Trade and Transport Margins
- SUT Product Balancing With Commodity Flow and RAS Adjustment
- Compilation Workbook Design for Product-Level Balancing Records

Day 5: Guided Case Study on Annual GDP Compilation

- Case Economy Source Data Pack Review and Gap Flagging
 - Case Production Approach GDP Estimate by Industry Group
 - Case Expenditure Approach Estimate and Statistical Discrepancy Check
 - Case Supply and Use Table First Balancing Round
 - Week-One Annual GDP Reconciliation Note and Peer Review
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Day 6: Input-Output Tables, Non-Oil GDP and the Informal Sector

- Symmetric Input-Output Table Derivation From Balanced SUT
- Product and Industry Technology Assumptions for Input-Output Tables
- Oil and Non-Oil GDP Split by Hydrocarbon Activity Value Added
- Informal Sector Estimation Using the Labour Input Method
- Non-Observed Economy Adjustments From Mixed Household-Enterprise Surveys

Day 7: Quarterly National Accounts and Volume Measures

- Quarterly National Accounts Manual Indicator Selection by Industry
- Deflation With Producer, Consumer and Import Price Indices
- Chain-Linked Volume Measures and the Annual Overlap Technique
- Denton Proportional Benchmarking of Quarterly to Annual Totals
- Seasonal Adjustment Diagnostics and Trading Day Effects

Day 8: Rebasing, Revisions and Communication With Data Users

- Benchmark Revision Cycle and Rebasing to a New Reference Period
- Back-Casting Spliced Series After Classification Changes
- Revision Policy Design and Revision Triangle Analysis
- Data Supply Agreements With Customs, Tax and Survey Units
- GDP Release Notes, Flash Estimates and Planning User Briefings

Day 9: Compilation Quality Measurement and SNA Update Changes

- Quality Assessment Checklist for National Accounts Outputs
- Mean Absolute Revision and Bias Indicators for GDP Releases
- Statistical Discrepancy Tracking Across the Three GDP Approaches
- SNA Update Treatment of Data Assets and Digitalisation
- Timeliness, Coverage and Coherence Scorecard for GDP Compilation

Day 10: Modelling Build and the GDP Compilation Improvement Plan

- Case Statistics Authority Compilation Diagnostic and Priority Ranking
 - Case Quarterly GDP Model With Benchmarking and Chain-Linking
 - Case Non-Oil and Informal Sector Estimates Integrated Into GDP
 - Rebasing and Revision Roadmap for the Case Authority
 - GDP Compilation Improvement Plan Completion and Panel Review
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Skills You Will Gain:

- Three-Approach GDP Reconciliation
- Supply and Use Table Balancing
- Input-Output Table Derivation
- Quarterly Benchmarking
- Volume Measure Chain-Linking
- Informal Economy Estimation
- National Accounts Rebasing
- Revision Analysis

Why Attend This Course:

- Deliver a GDP Compilation Improvement Plan to the head of national accounts and the statistics authority's methodology board
- Decide which source data, deflator or benchmarking method to use when GDP approaches disagree, with a documented basis
- Avoid unexplained GDP revisions, breaks at rebasing and gaps in informal or non-oil coverage that undermine planning figures
- Coach compilers across the unit with the SUT balancing workbook, chain-linking template and revision triangle tools

Conclusion:

Back at work, the participant presents the GDP Compilation Improvement Plan to the head of national accounts and the methodology board. They use it to approve source data priorities, the next rebasing timetable, the quarterly benchmarking method and the revision policy, and planning ministries use the resulting series for sector targets. After the first annual benchmark round under the plan, the unit should review the statistical discrepancy, mean absolute revisions and coverage of informal and non-oil activity against the targets set, then adjust the actions that have not moved.

Frequently Asked Questions FAQ:

What should participants know before a national accounts compilation course on GDP estimation and supply-use tables?

Participants should already compile, check or use GDP figures and be comfortable with spreadsheets and index numbers. Bringing anonymised source data, a recent GDP release or a supply and use table from their own authority makes the modelling build more useful.

How does national accounts compilation training differ from a general official statistics or macroeconomic policy course?

It teaches how GDP itself is produced: the three approaches, supply and use balancing, quarterly benchmarking, volume measures and rebasing. Official statistics courses cover statistical systems and indicators broadly, and macroeconomic policy courses use GDP as an input rather than compile it.

Why does national accounts compilation use supply and use tables to estimate GDP?

Supply and use tables confront every product's supply with its uses, so the production and expenditure estimates are forced to agree. Balancing them exposes weak source data and removes the statistical discrepancy before GDP is published.

What do participants take back from national accounts compilation training on GDP estimation and SNA methods?

Participants take back a GDP Compilation Improvement Plan for a case statistics authority, with a balancing workbook, a quarterly benchmarking and chain-linking template and a rebasing and revision roadmap they can adapt to their own accounts.