Office for National Statistics
Swyddfa Ystadegau Gwladol

Item IV: Strengthening the collaboration between the compilers of macroeconomic statistics in the region

Integrated National Accounts and Balance of Payments

Quarterly focus

Economic Commission for Europe
Conference of European Statisticians
Special Session for EECCA and SEE countries

Salle XI, Palais des Nations, Geneva, Switzerland
22nd May 2018

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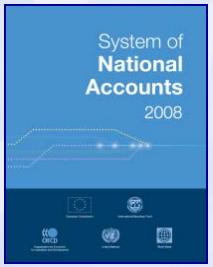
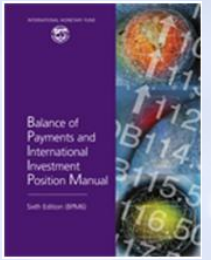
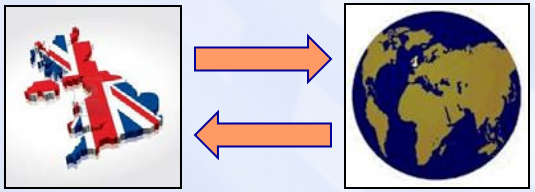
Integrated National Accounts and Balance of Payments Quarterly focus

An overview

- Statistical value chain - UK
- National Accounts Vision - Integrating the way forward
- Measuring UK GDP and National Accounts
  - Life cycle of National Accounts data - estimation timeframe
  - Revision time frame – GDP estimate for 2013 Q1
  - Evolution of data availability
- NA / BoP – where do we get our source data from?
- EU demands for economic statistics
- Integrating National Accounts and Balance of Payments
  - Issues to consider
- Way forward
- Any questions?







Integrated National Accounts and Balance of Payments Quarterly focus

Statistical value chain - UK

Compiled by **Sanjiv Mahajan** March 2014

Business Register (and the statistical unit) + Administrative data

→ Data collection, editing and validation processes

→ Production and publication of survey results and analysis

→ Census and population

→ National Accounts (including non-financial **and** financial accounts)

→ Supply and Use Tables and Input-Output Tables

→ Labour, prices and social statistics

→ Regional Accounts and Environmental Accounts

→ Balance of Payments (including IIP)

→ Public Sector Finance (including EDP)

→ Productivity analyses (labour and capital)

→ Well-being and Tourism Satellite Accounts

→ Labour Accounts and Social Accounting Matrices

→ Other satellite accounts

→ Regional, impact and policy analyses

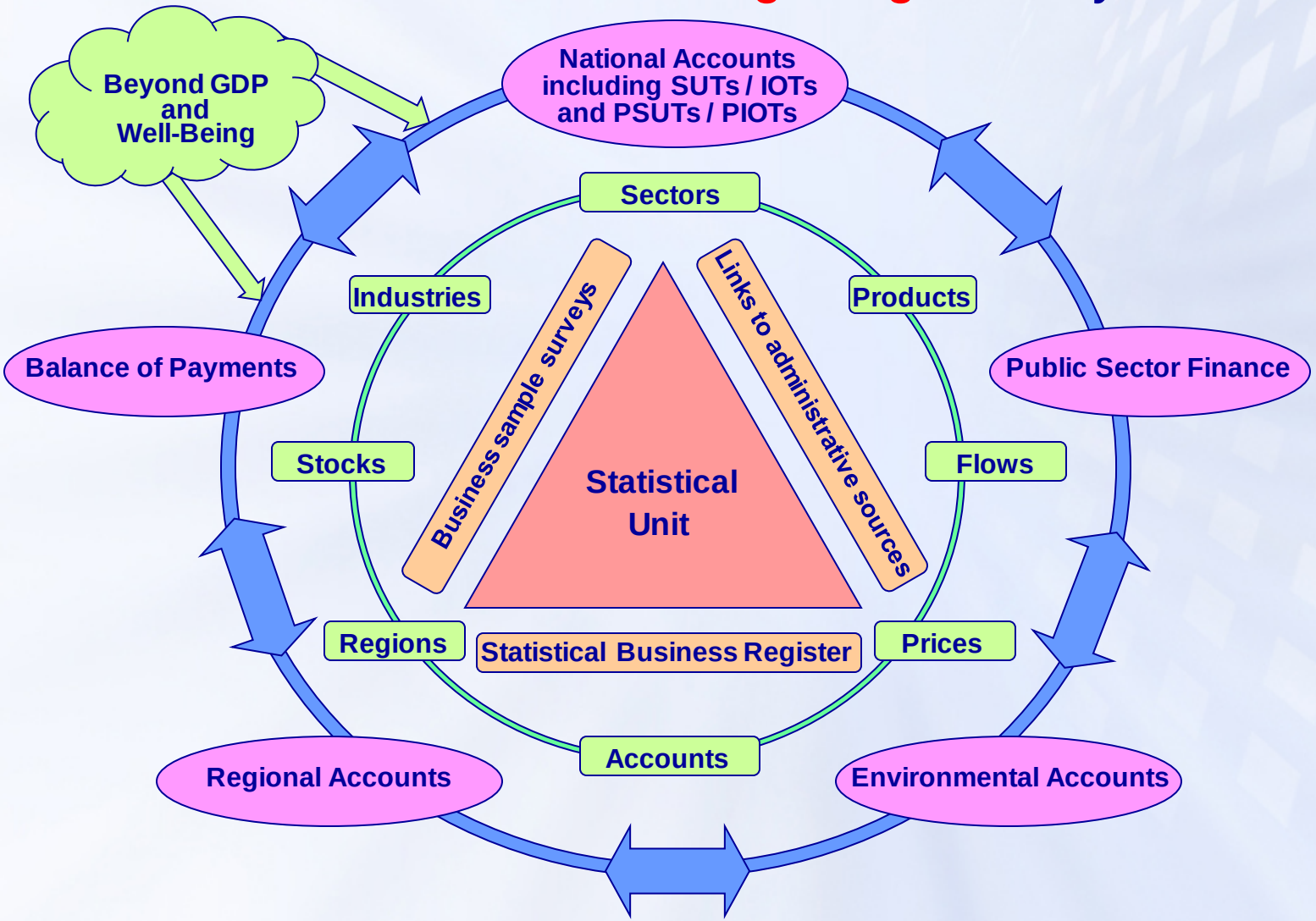
→ CGE and economic modelling

ALL DONE IN THE ONS

These boundaries covering the compilation of economic statistics in each National Statistical Office differ across countries

Integrated National Accounts and Balance of Payments Quarterly focus

National Accounts Vision - Integrating the way forward



Key cross-cutting issues

- Classifications
- Definitions
- Confidentiality
- Compliance
- Revision Policies
- Resources
- Timeliness
- Costs
- Users

Focus on Quality

Compiled by **Sanjiv Mahajan**
February 2013

Measuring UK Gross Domestic Product

Life cycle of National Accounts data - estimation timeframe

Use of short term indicators
and smaller sample size business surveys

Annual balancing

Annual balancing

Quarter

1st Estimate of GDP

(25 days)

2nd Estimate of GDP

(55 days)

3rd Estimate of GDP and Quarterly National Accounts

(85 days)

Output (production)

Expenditure

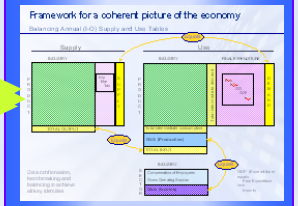
Income

Blue Book 1

Latest year annual data based on sum of quarterly data and partial benchmarking

Blue Book 2

Full SUTs framework plus benchmarking short-term indicators



Compiled by
Sanjiv Mahajan
November 2004

Measuring UK Gross Domestic Product

Revision time frame – GDP estimate for 2013 Q1

Initial GDP estimate and revisions through to annual benchmarking

Month	Release	
Apr 2013	1st estimate	Preliminary estimate of GDP (after 25 days)
May 2013	2nd estimate	2nd Estimate of GDP (after 55 days)
Jun 2013	3rd estimate	Quarterly National Accounts (after 85 days) (BoP, financial and non-financial accounts also released)
Sep 2013	Quarterly Exercise	
Dec 2013	Quarterly Exercise	
Mar 2014	Quarterly Exercise	
Jun 2014	Quarterly Exercise	
Sep 2014	**Blue Book One**	1st annual exercise - Partial benchmarking
Dec 2014	Quarterly Exercise	
Mar 2015	Quarterly Exercise	
Jun 2015	Quarterly Exercise	
Sep 2015	**Blue Book Two**	2nd annual exercise - Benchmarking short-term indicators and balancing through SUTs

Revisions from 1955

Revisions from 1985

Quarterly GDP Expenditure components

Data availability and estimation

R = Revised
B = Benchmarked

Expenditure GDP (% for the year 2013 in the 2015 Blue Book)	T+25	T+55	T+85	Blue Book 1	Blue Book 2
Households + NPISHs 49.3%		45%	85%	100% R	100% B
General Government 15.2%		60%	60%	100% R	100% B
GFCF 12.2%		55%	80%	100% R	100% B
Inventories + Valuables 0.5%		65%	85%	100% R	100% B
Exports of Goods 13.4%		100%	100%	100% R	100% B
Exports of Services 9.4%		60%	80%	100% R	100% B
Total (final expenditure)	**Limited data**	60%	80%	100% R	100% B

Integrated National Accounts and Balance of Payments Quarterly focus

NA / BoP – where do we get our source data from?

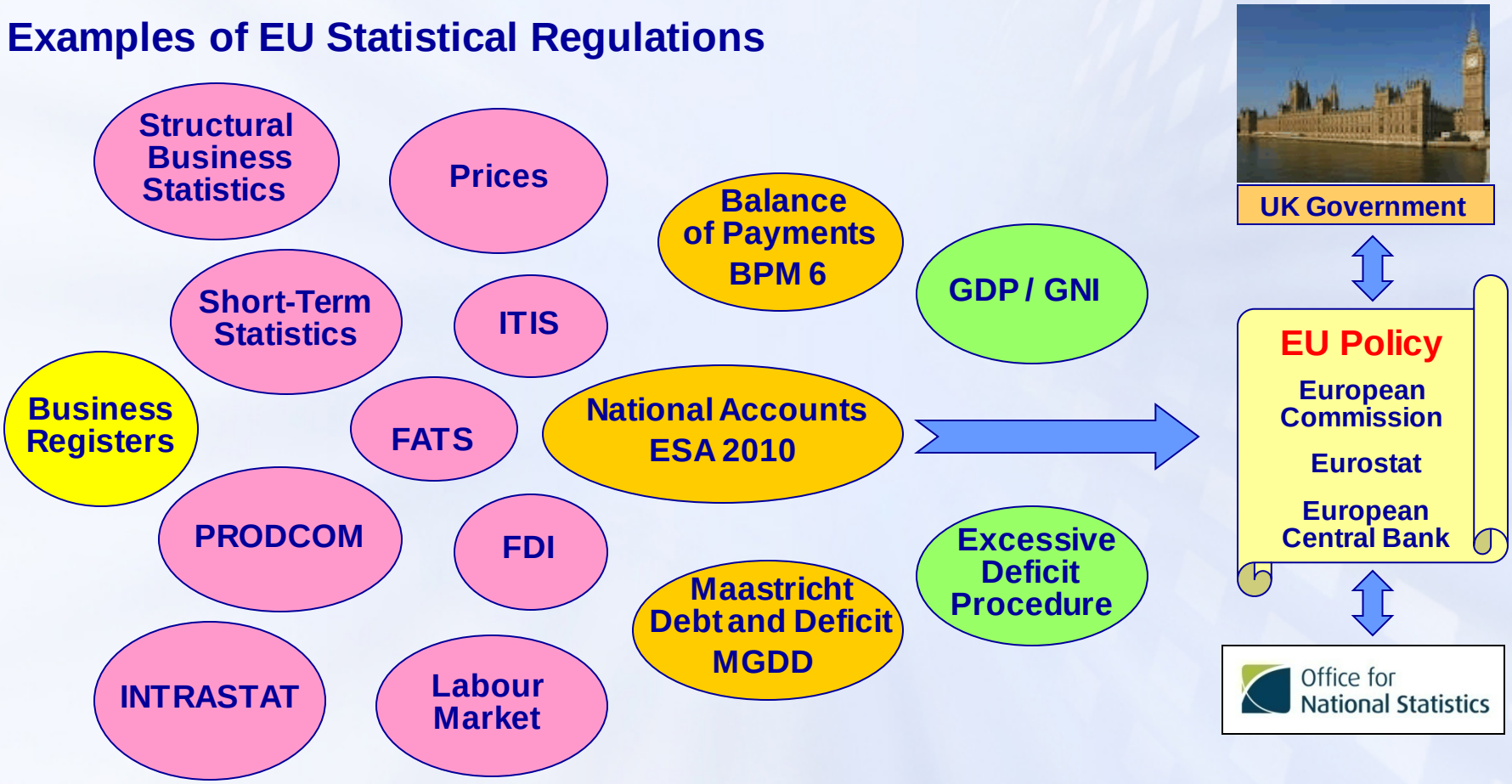
Data sources

- ONS Business surveys based on the Statistical Business Register sampling frame
  - Monthly, quarterly, annual and adhoc frequency - SBS, STS, PRODCOM, ITIS, FDI, FATS, etc.
- ONS Household based surveys
  - Census, International Passenger Survey (IPS), Labour Force Survey (LFS), Living Costs and Food Survey (LCF), etc.
- Administrative data
  - INTRASTAT and EXTRASTAT data.
  - Pay and profits relating to tax and employment records.
- Other government departments
  - Banking industry data from the Bank of England (Central Bank).
  - Government incomes and expenditures from the HM Treasury (finance ministry).
- Other sources
  - London Stock Exchange, Bank of International Settlements, etc.
  - Company annual report and accounts, regulatory bodies' accounts, etc.

Integrated National Accounts and Balance of Payments Quarterly focus

EU demand for economic statistics

Examples of EU Statistical Regulations



Different requirements with different delivery timetables and revision policies
Need to synchronise primary inputs

Compiled by
Sanjiv Mahajan
September 2012

Integrated National Accounts and Balance of Payments Quarterly focus

Integrating NA and BoP – Issues to consider (1)

Schedules

- Present UK position:
  - Single integrated timetable for each quarterly or annual exercise covering all institutional sectors and accounts.
- Pre-1990s:
  - Three separate timetables reflecting data deliveries from the BoE / HMT / ONS (previously, CSO) led to incoherent and inconsistent datasets.
- In the full quarterly institutional sector accounts process:
  - Balance of Payments were finalised and published first;
  - followed by GDP parts of the accounts; then
  - the institutional sector accounts down to the old financial surplus/deficit line; and
  - finally, in the fourth month after the respective quarter, the financial accounts and quarterly balancing items.
- Since 1989, all of the above have been produced and published at the same time by the ONS and to a quicker timetable (as a single common dataset).

All working together towards a common deadline

Integrated National Accounts and Balance of Payments Quarterly focus

Integrating NA and BoP – Issues to consider (2)

Systems

- Single integrated centralised system on a common platform.
- Local systems
  - Process different input data from different sources on different platforms.
- Consistent coding frame using international guidelines
  - Sectors, sub-sectors, transactions, etc. (linking ESA 2010 and ECB labels)
  - Lower level flexibility – country specific.
  - Need to ensure lower level matching with clear counterparts.
- Allows consistent methods and implementation of any changes across the systems.
- Geographical system – historically, constructed after control totals set – being developed
- SDMX transmission of ESA 2010 and BPM 6 datasets.
- Developing a new strategy of how the UK will compile the economic accounts to meet tomorrow's needs.

Coverage, conceptual, quality and balancing adjustments recorded separately

Integrated National Accounts and Balance of Payments Quarterly focus

Integrating NA and BoP – Issues to consider (3)

Statistical unit

- Use of a statistical reporting unit:
  - Enterprise for institutional sector accounts.
  - Establishment for industry accounts.
- Use of a single reporting unit in the UK - close to an enterprise unit.
- GDP, Supply and Use Tables, I-O Tables, current account and non-financial accounts:
  - Emphasis on units and structures.
  - Industrial classification of unit important for surveys like ITIS, SBS, STS, etc.
  - Consistent industrial classification of admin data sources like INTRASTAT.
- Institutional sector accounts and financial accounts:
  - Emphasis on stocks and flows.
  - FDI and FATS need the “whole” cross-border flow.

Can we build the “whole” framework using a single common statistical unit?

Integrated National Accounts and Balance of Payments Quarterly focus

Integrating NA and BoP – Issues to consider (4)

Harmonised revision policy in the UK

- A single revision policy applied to all institutional sectors, and across all accounts, produced in any particular quarterly or annual exercise.
- UK do not delineate "routine" revision versus "benchmark" revision as the annual benchmark revision is routine.
- Depth of quarters or years open for revision can change depending upon a range of factors.
  - Number of revisions, size of revision, regulatory requirements, etc.
  - Quarterly exercises:
    - March: up to 12 quarters; Jun: 13 quarters; Sept: 14 quarters; Dec: 11 quarters.
  - Annual release (including benchmarking and Supply and Use Tables)
    - Either June or September of each year.
    - Affects all quarters and years in line with agreed Revision Policy.
- Aim:
  - Correct growth rates and levels as well as flows and stocks.
  - Implies stored revisions cannot, or should not, be held back for long.

Different users have different needs all required to high-quality standards (Consistency, coherency and comparability of long-run time series)

Integrated National Accounts and Balance of Payments Quarterly focus

Integrating NA and BoP – Issues to consider (5)

Branch roles and responsibilities

- Seven Divisions in NA Directorate each comprising several branches.
- Branches responsible for:
  - Institutional sectors and key areas like HHFCe, GFCF, imports/exports of goods.
  - Quarterly and annual estimates in current prices, previous years' prices, chain-linked volumes and seasonal adjustment (as appropriate).
  - BoP Compilation and Coordination Branch supply consistent RoW/BoP data for all accounts to the NA Central Coordination and Balancing Division.
- Publication and Dissemination of NA and BoP data:
  - Consistent from a single balanced dataset with the same day release.
  - Publish non-consolidated data but also supply to Eurostat consolidated data.
- Staffing:
  - Economists, statisticians, administrators and project management support.
  - Various internally generated training modules covering concepts to practicalities, including quarterly compilation.
  - Seminars, workshops, etc.

Clear roles and responsibilities underpinned with appropriately skilled staff is key

Integrated National Accounts and Balance of Payments Quarterly focus

Integrating NA and BoP – Issues to consider (6)

Data confrontation and balancing

- Use of counterparts and residuals.
- Many staff involved in quality assurance of profile and plausibility – feedback loops.
- Balancing is across all sectors including Rest of the World/BoP and all accounts.
  - Improves coherence between the Domestic and Rest of the World accounts
  - Improves quality of the net lending/borrowing estimates for each institutional sector.

Specific data challenges / avenues for quality improvement

- No change in economic ownership - Goods sent abroad for processing
- Change in economic ownership – Merchanting
- Flows associated with SPEs, etc.
- Remittances
- Extended directional principle and asset / liability principle
- Financial services including Flow of funds (extended financial accounts)
- Balance sheets (non-financial and financial)

ESA 2010 Derogations

- Separation of HH and NPISHs institutional sector.

Data for RoW and BoP (including IIP) should align **and** also align with NA

Integrated National Accounts and Balance of Payments Quarterly focus

Way forward

- Integration of various parts of National Accounts is key to improving quality.
- National Accounts and BoP (and IIP) should be integrated, consistent and coherent.
- Summary of issues to consider reflecting UK experience and lessons learnt:
  - Data sources, schedules, systems, statistical unit(s), process – revision policy, data confrontation and specific data challenges.
- Future issues
  - NA / BoP - Development of HHs, NPISHs and Financial sub-sectors (plus Flow of Funds)
  - ONS – Bean Review, Economic statistics transformation programme, etc.
  - EU - Harmonised EU Revision Policy, Impact of FRIBS, T+82 schedule, etc.
  - Worldwide – Impact of globalisation

Integration leads to better Quality through improved coherence and consistency

Integrated National Accounts and Balance of Payments Quarterly focus

Office for National Statistics

Any questions?

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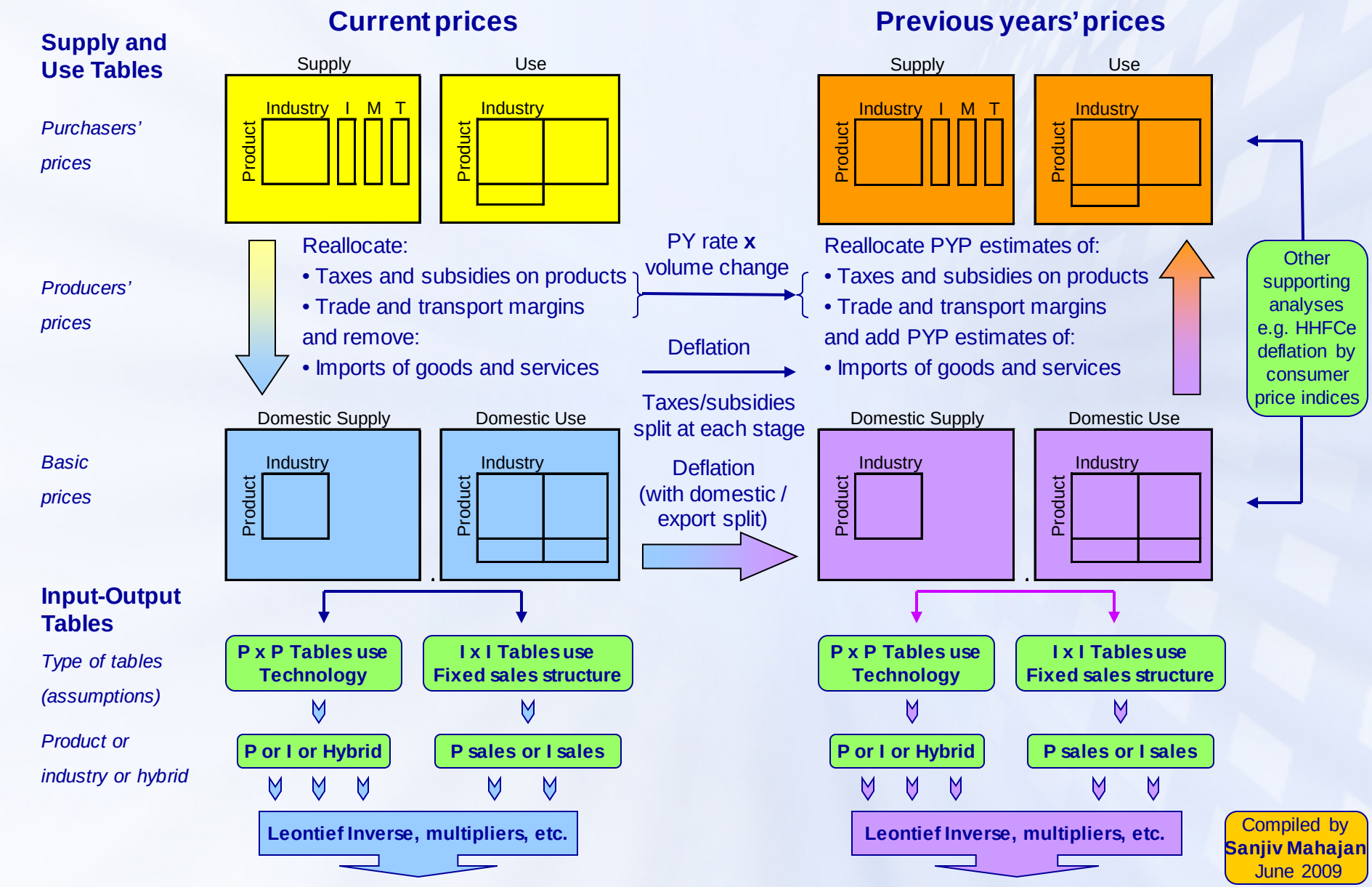
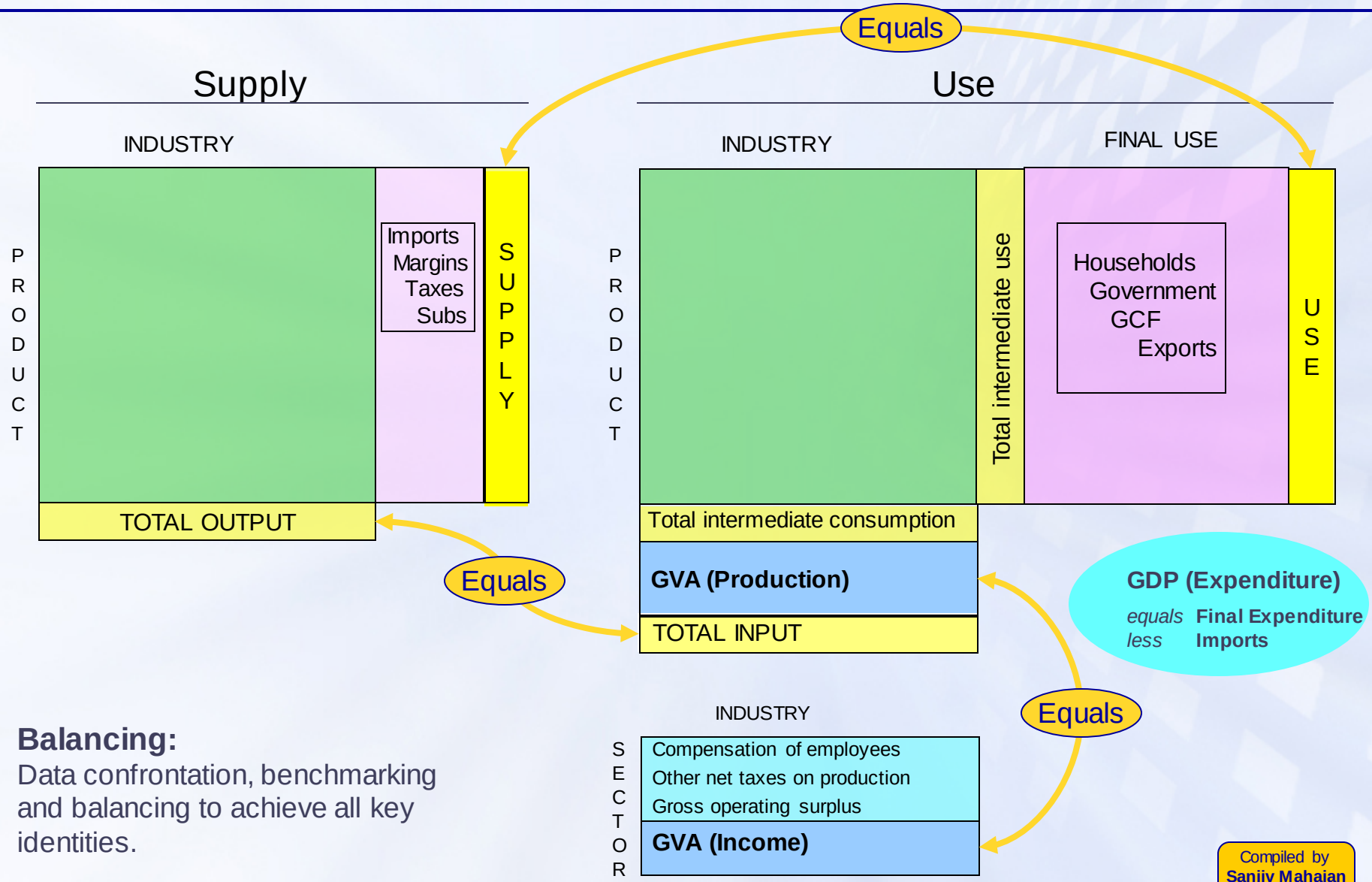
An overview of the compilation schematic integrating Supply and Use Tables and Input-Output Tables ("H-Approach")



Framework for a coherent picture of the economy



Balancing:
Data confrontation, benchmarking and balancing to achieve all key identities.

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November 2004