

Modern Capital – Summary Slides

Richard Heys
Deputy Chief Economist - ONS

High level Sprint objectives

“What we measure affects what we do. If we have the wrong metrics, we will strive for the wrong things.”

(Stiglitz, Fitoussi & Sen 2010)

While the Stiglitz Report set the dimensions of the global debate around ‘Beyond GDP’, it was not prescriptive of specific approaches or measurement. Since then, many approaches, frameworks, and specific measures have been put forward.

The sprint’s objective is to review the potential to agree an extended framework for measuring all aspects of economic activity, in a way which is compatible with GDP / national accounts, but captures key elements excluded from that measure.

Sprint One: Modern Capitals

‘What does capital look like in the modern economy, and how should we measure modern capital and its flows of benefits?’

Scope:

- What is modern capital and where do we classify it?
- How does our current measurement techniques impact on our understanding of modern capital?
- How do we think about ownership v use?
- How do we think about capital assets which are not exclusive or rivalrous?
- Does the produced / non-produced boundary help or hinder efforts to understand modern capital?
- How do we tackle capital which isn't defined by national borders?

Topics covered

Session 2: Intangible Assets

Presentation by Jonathan Haskel, Bank of England

Session 3: Data as an Asset

Presentation by John Mitchell, OECD

Country Presentation by Sean Crick, Australian Bureau of Statistics

Session 4: Natural Capital

Presentation by Bram Edens, UN, Carl Obst, ME, and Mark de Haan, IMF

Session 5: Human Capital

Presentation by Gueorguie Vassilev, Office for National Statistics

Intangible Assets

Professor Jonathan Haskel covered:

- Intangible assets framework and links to what is recorded in the national accounts.
- Economic properties of intangibles and implications for measurement.
- Purchased investment versus own-account investment (latter is more challenging as more research is required).
- Boundaries – firm versus individual; human capital and training; R&D, design and software; and current and capital spending.

Discussion covered:

- Cost of investing in intangibles versus tangibles.
- Deflation issues – addressed in “Measuring the Other Half” publication.
- Depreciation and net present values.
- Impact on balance sheets and total factor productivity.
- Adjustments to output and operating surplus separating any understating.
- Sum of costs approach applied to data, R&D, etc. and link to time use.

Data as an Asset

Presentation by Mr. John Mitchell covered:

- Market sector and non-market sector coverage.
- Data is the result of production. Observable phenomena is non-produced
- Considerations for inclusion in the National Accounts, e.g., sum-of-costs, asset lives.
- Data collection and measurement challenge - focus on aggregate levels.
- Legislative decisions' impact on the ownership of data.

Country Presentation by Mr. Sean Crick covered:

- Cost of production approach with application of lower-upper bounds for robustness; and links to databases.
- Use of the PIM and sensitivity test on price indexes and asset lives.
- Range of future work, e.g., occupation mapping data, capital stock estimates, overlaps, review of assumptions etc.

Discussion covered:

- Use of the data stack approach to estimation.
- Service lives – research can be helpful, e.g., marketing data does not last long.
- Use of current replacement cost valuation or impact of lost / damages.
- Corporate valuations are higher than sum of costs.
- Adjustment of traditional concepts to fit the asset.
- Transparency between NSIs on methods and assumptions.

Natural Capital

Presentation by Dr Bram Edens covered:

- Context on SEEA – framework, policy needs, dependence on nature, recognising natural capital as an asset.
- Defining natural capital and a range of accounts - SNA, SEEA CF and SEEA EA.
- Two perspectives – ecosystems and services (provision) and environmental assets and individual resources (usage).
- Measuring natural capital – asset accounts, valuation (NPVs), etc. Adjustments for depletion and degradation. Consistent with SNA valuation principles.
- Extended measures of wealth – integrates SNA, SEEA CF and SEE EA, avoiding double-counting with various definition challenges such as land and the atmosphere.
- Various specific issues, e.g., ownership, borders, exclusivity, produced versus non-produced.
- UN Common Agenda – call for implementation of SEEA EA.

Discussion covered:

- Environmental accounts scope - carbon emission accounts and prices.
- Modern capital as a collective set of assets providing services.
- Intangible spillovers linked to production of good and services.
- Natural capital link to management of these services, itself an intangible.
- Interaction of capitals and links to ecosystems.
- The use of system as a measurement for the costs of global warming
- Systems based approach versus individual asset based – one entity providing multiple services.
- Ownership of assets.
- Defining the benefits.
- Return on investment in nature.
- Abatement costs.
- Countries' ability to derive estimates.

Human Capital

Presentation by Mr. Gueorguie Vassilev covered:

- Available international guidance and use of different approaches by different countries.
- Drivers of change – users' expectations, policy research, feasible production.
- Various conceptual and methodological work still to develop on estimating human capital.
- Two estimation approaches and numerical differences.
- Further development of the framework and definitions and links to the SNA framework.
- Labour and human capital links and implications.
- Ownership and resident boundaries.
- Scope of human capital investment – organisational benefits, retirement, etc.
- Various outstanding measurement issues, e.g., output, investment, stocks and flows, prices, life-lengths, etc.
- Overlap with other capitals, e.g., natural capital impact on health, unpaid household production as input.

Discussion covered:

- Coverage of issues beyond human capital.
- System approach – external benefits and the unpaid dimension, and not solely employment.
- Extracting benefits from Time-Use Surveys.
- Economic benefits focus versus social benefits.
- Variations of the estimations – calibrating of the margins on the costs.
- Discrepancies between the cost-based and income-based approaches