Comprehensive Wealth Accounting

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Outline

- Conceptual framework
- The wealth of nations in 2005
- Saving for the future
- Policy messages
Concepts: An Economic Approach to Sustainable Development
Sustainability and human well-being

- Economics views environment and natural resource issues through the lens of benefits to humans, rather than environment having any intrinsic value.
- From an economic viewpoint, therefore, a development path is sustainable if human well-being does not decline at any point along the path.
  - Of course, part of this well-being is provided by the environment.
Basic concepts (1)

- A basic measure is ‘saving’ – how much of production is saved for the future, rather than being consumed now.
- ‘Genuine saving’ is a comprehensive measure of saving, which includes depletion of environmental resources.
- Hamilton and Clemens (1999): negative genuine saving implies that development is not sustainable.
Basic concepts (11)

- Other key papers are Dasgupta and Maler (2000) and Asheim and Weitzman (2001)
- Hamilton and Withagen (2007) show that there is a general rule for sustainability: ensure that genuine saving is positive and not growing faster than the rate of interest
Testing genuine saving

- Ferreira and Vincent (2005) show that genuine saving is correlated with future well-being in developing countries.
- Ferreira, Hamilton and Vincent (2008) show that genuine saving is the only measure of saving that is correlated with future well-being.
The Wealth of Nations in 2005
Income and wealth in Brazil, 2005 $bn

Produced capital 1,828
Natural capital 2,417
Net financial assets -280
Net worth 3,965
Adjusted NNI 636
Implicit rate of return on wealth 16.0%
Brazil’s intangible wealth, 2005 $bn

Intangible capital 8,806

Comprehensive wealth 12,772

Implicit rate of return on comprehensive wealth 5.0%
Where is the wealth of Brazil?

Shares of total wealth, 2005

Total wealth / capita: $79,000

Shares of natural wealth, 2005
Composition of total wealth

Shares of comprehensive wealth, by income class, 2005

- Natural capital is most important in low income countries—more than twice as large as produced capital
- In middle income countries natural capital and produced capital are roughly equal
- Intangible wealth dominates in all countries, especially in high income countries
Saving for the future
Extending our measures of wealth creation

Calculating Adjusted Net Saving for Sub-Saharan Africa, 2008

- Depreciation of Fixed Capital
- Depletion of Natural Resources
- Pollution Damages
+ Educational Expenditures

Gross Saving | Net Saving | Net Saving plus Educational Expeditures | Depletion Adjusted Saving | Genuine Saving
Long-run trends in genuine saving

Genuine Saving Rates in EAP, ECA and SAR

- East Asia & Pacific
- Europe & Central Asia
- South Asia

Genuine Saving Rates in LCR, MNA and SSA

- Latin America & Caribbean
- Sub-Saharan Africa
- Middle East & North Africa
Limitations of the approach
Limitations

- Difficulty in valuing some natural assets
- Limited substitution possibilities
- Completeness of the accounting
- Accounting for ecosystem services
  - Most ecosystem services are capitalized in other assets, but not explicitly
  - Most are provided as ‘externalities’
  - The result: ecosystem services are at risk
  - The solution: identify the source of the ecosystem service, and put a value on it
“How we measure development will drive how we do development”
Policy implications

- Strengthen natural resource management and protect the sources of ecosystem services
- Invest resource rents in other assets
- Lower carbon footprints – ‘green growth’
- Invest in people
- Build institutions
Thank you!

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