Overview

• Background
• Definition
• Data sources and methods
• Current state of data
Australia’s non-financial assets as a percent of GDP
Motivation for creating a Task Force on land and non-financial assets

• Created in response to:
  – G-20 data gaps initiative;
    • Recommendation 15 “a strategy to promote the compilation and dissemination of the balance sheet approach (BSA), flow of funds, and sectoral data more generally, starting with the G-20 economies.
  – European System of Accounts (ESA) 2010 requirements for additional mandatory items for table 26 “Balance sheets for non-financial assets”
    • Only the total value of land for the combined households and non-profit institutions serving households institutional sector is mandatory

• Recognition that the valuation of land and dwellings is a central issue when compiling balance sheets for non-financial assets
Different land types in Australia

Land Values
Per cent of GDP, current prices

Source: ABS
A major goal of the Task Force was to provide a better understanding of how countries estimate stocks of land.

While the role of land as an asset that provides a flow of capital services and the role of land as an environmental asset are important and interesting topics ... the focus was on the valuation of land on a nation’s balance sheet.
Definition of land in SNA 2008

- Land consists of the ground, including the soil covering and any associated surface waters, over which **ownership rights are enforced** and from which **economic benefits** can be derived by their owners by holding or using (or allowing others to use)
  - Land does not depreciate
  - Excludes the value of any improvements to the land (e.g. land clearance)
  - Excludes the value of structures which sit on the land
Data sources

• Major constraint in estimating land is the lack of data from a single source

• Administrative sources (cadastre maintained by a land registry office, tax authority, or land information centre)

• Collection sources (population and housing census, business survey, or other type of survey including data collected by another government agency)

• Price sources
Land under cultivation

• Source data
  – Agricultural census/statistics; information from the ministry of agriculture
  – Land use statistics
  – Cadastral data
• Many countries estimate agricultural land using the direct method \( LV_t = \sum_{i=1}^{n} p_{i,t} \times x_{i,t} \),
  – Where \( LV_t \) is the total value of land in the observed year \( t \)
  – \( p_{i,t} \) reflects the price for land type \( i \) in the observed year \( t \)
  – \( x_{i,t} \) the corresponding area measure
• Also, net present value can be an alternative
The preferred way to value land is at market values
  – Derived from information on land transactions, i.e. sales and purchases of land
Less frequent transactions in land (thin market) may lead to data gaps
What can be used as a proxy?
  – Publically-appraised market-price equivalent
  – Property tax information (often converted to a market price)
  – A market price of a nearby parcel of land
  – An artificial price based on a nearby parcel of land with a certain conversion factor
• Recommend to estimate by different types of land and regions
  – For different agricultural land types prices can deviate from each other considerably
    • Permanent grassland, arable land (further breakdown irrigable and non-irrigable if significant for a particular country) and permanent crops
  – However, you will probably not see this level of detail published on national balance sheets in the SNA
Current state of play

• Data availability
  – The OECD requests countries to submit the total value of land by institutional sector (financial/non-financial corporations, general government, households and non-profit institutions serving households (NPISH))
    • Currently only 8 countries provide data for every institutional sector (Australia, Canada, Czech Republic, Finland, France, Japan, Korea, the Netherlands)
    • United states only provides data for the households and NPISH sector
Further information

• Eurostat-OECD Compilation Guide on land estimation available at