VALUATION OF NATURAL RESOURCES AND MINERAL EXPLORATION

Discussant: Henk Nijmeijer

UNECE, Group of Experts on National Accounts
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Agenda item 6
Three papers/presentations:

- The wealth of Norwegian raw oil and natural gas: 1970-2015, Statistics Norway
- Classification and valuation of natural resources, OECD
- Australian valuation of subsoil natural resources, ABS
General:

• Two country studies and one focussing on issues concerning concepts and classification
• Reference to SNA and System of Environmental-Economic Accounts (SEEA)
• Main focus on Net Present Value -> balance sheets
Asset boundary

• 2008 SNA (para.12.17):
  " ... those proven subsoil resources of coal, oil and natural gas, metallic minerals that are economically exploitable given current technology and relative prices." 

• 2008 SNA (para.10.179): " ... on or below earth's surface ... " 
The wealth of Norwegian raw oil and natural gas: 1970-2015, Statistics Norway

Extensive and well structured

I. Introduction and motivation

II. Methodology

III. Empirical results

IV. Concluding remarks
The wealth of Norwegian raw oil and natural gas: 1970-2015, Statistics Norway

- > 45% of total export (with export 40% of GDP)
- Policy perspective: Lessons learnt from NL
- 78% tax for oil industry
- In constant prices resource rent from oil and gas has already reached its peak in 2005
The wealth of Norwegian raw oil and natural gas: 1970-2015, Statistics Norway

Specific questions:

- Natural gas and LNG?
- 'Normal' return based on NOS divided by net stock of produced assets in mainland-Norway
Classification and valuation of natural resources, OECD

• Concise paper with recommendations regarding further clarifications of the 2008 SNA
• Staying closer to SEEA-Central Framework
• Include all known deposits?
• Calculating Net Present Value according to Ch.5 of SEEA 2012
Classification and valuation of natural resources, OECD

Specific questions:
- Deviating from SNA?
- What about 'known unknowns'
- Possibilities to make use of data mining companies that value their own projects
Australian valuation of subsoil natural resources, ABS

- Concise paper regarding recent improvements of the calculation of the Net Present Value
- Estimates begin in 1988/1989
- Paper discusses concepts, methods of valuation, sources and validation of results
Australian valuation of subsoil natural resources, ABS

- 27 minerals included (including *antimony*)
- Economically Demonstrated Resources: proven + probable resources
- Using 5-year lagged average for prices, costs and production
- 10% of total non-financial assets
Australian valuation of subsoil natural resources, ABS

Specific questions:
- Including 'probable resources' deviates from SNA?
- Normal rate of return to capital not derived from national accounts?
General questions:

1. How meaningful? Given the considerable uncertainty concerning prices, production, costs, discount rate and new discoveries
2. All costs included?
Groningen Gas Field
Groningen Gas Field
North Sea
General questions

1. How meaningful? Given uncertainty concerning prices, production, costs, discount rate, new discoveries

2. All costs included?
Thanks for your attention!