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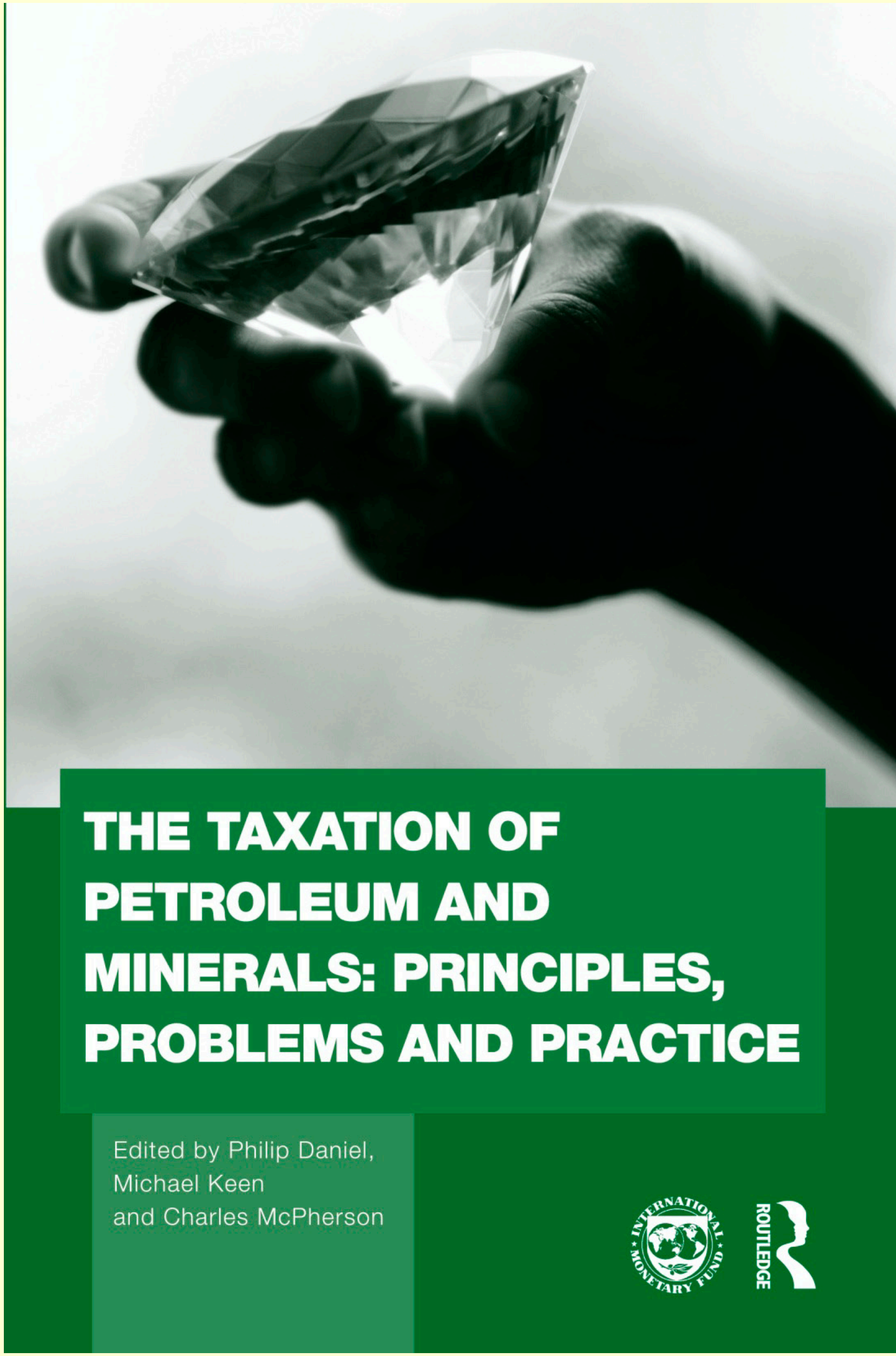
# Natural Resource Taxation: Challenges in Africa

***Management of Natural Resources in Sub-Saharan Africa***

***Kinshasa Conference, March 22, 2012***

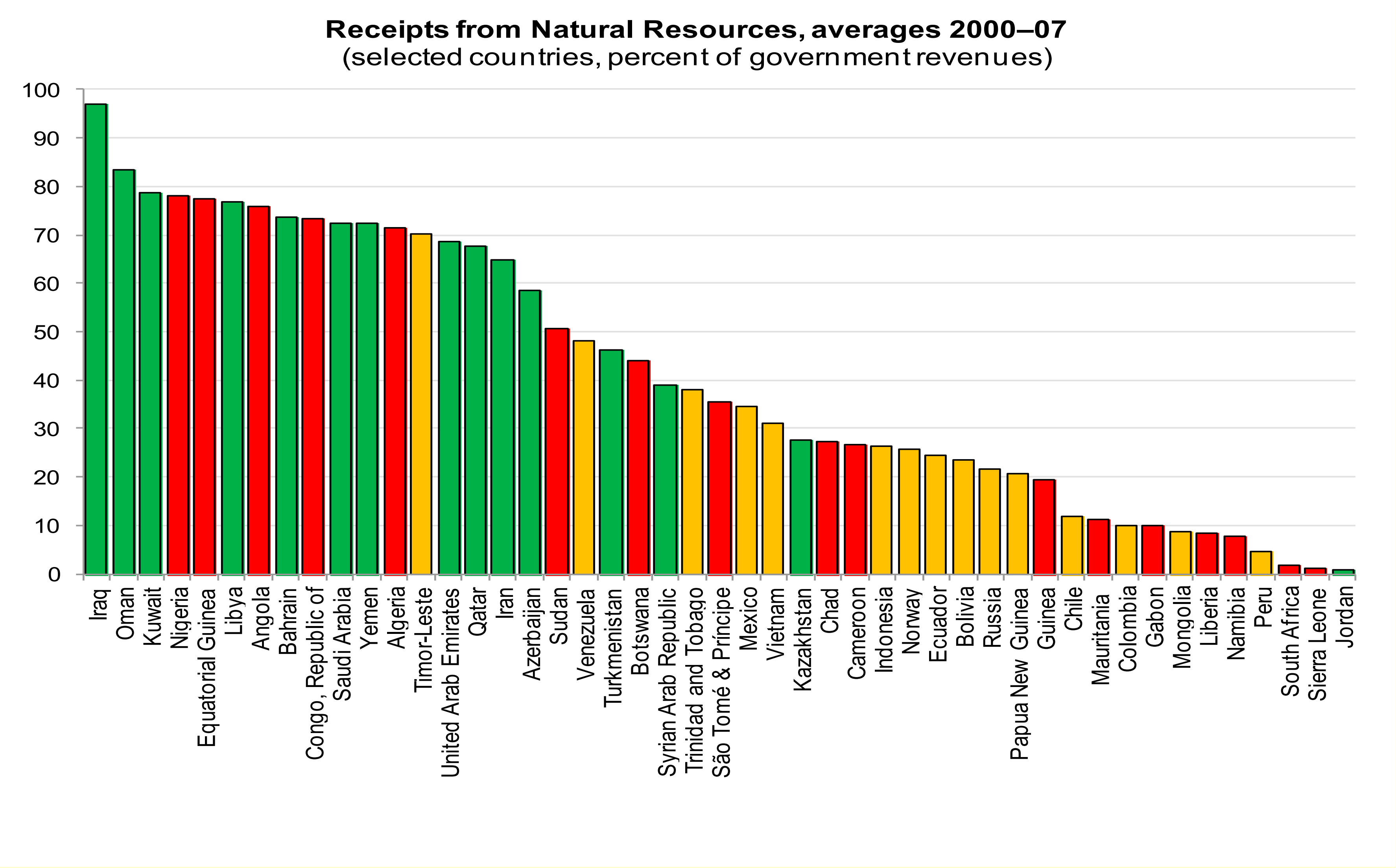



"There are few areas of economic policymaking in which the returns to good decisions are so high – and the punishment of bad decisions so cruel – as in the management of natural resource wealth"

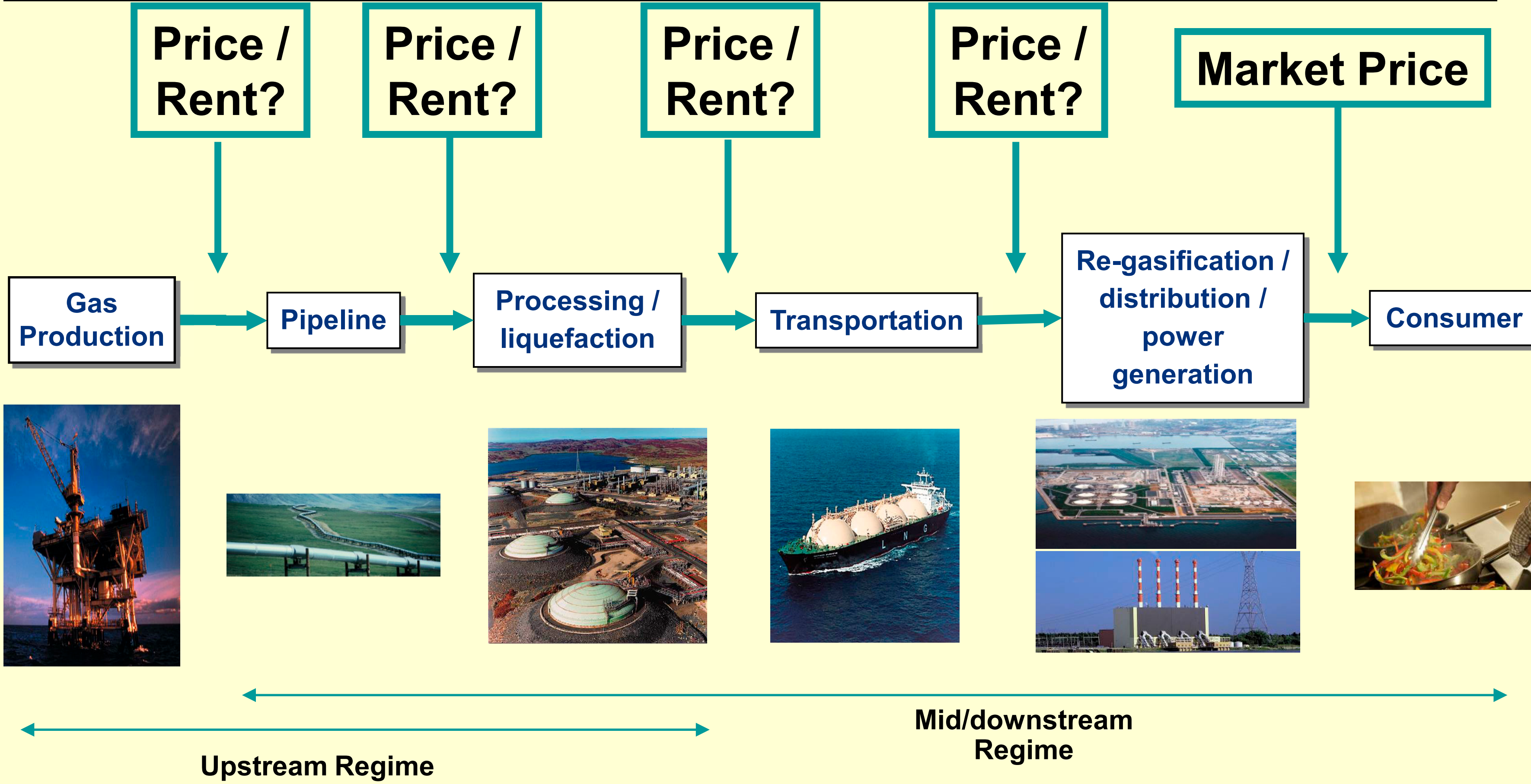
# Natural resource potential

- OECD countries well-explored
- Discovery rate in Africa rapidly increasing; world oil reserves up 25%, 2000 to 2010, but Africa's up more than 41% in the same period (BP data), with large additions in 2011 and 2012
- If correct, flows from natural resources likely to dwarf other sectors
- Example - potential for new transformative projects in Africa
  - **Oil**: Ghana, Uganda, Niger, Sierra Leone? Liberia?
  - Gas: Mozambique, Namibia, Tanzania?
  - **Iron Ore**: Guinea, Liberia; Tanzania?
  - **Nickel**: Tanzania, Burundi
  - **Uranium**: Niger, Tanzania, Namibia, Malawi
- What are the key challenges in getting the most for host countries from these projects?

# Diverse Experience so far…



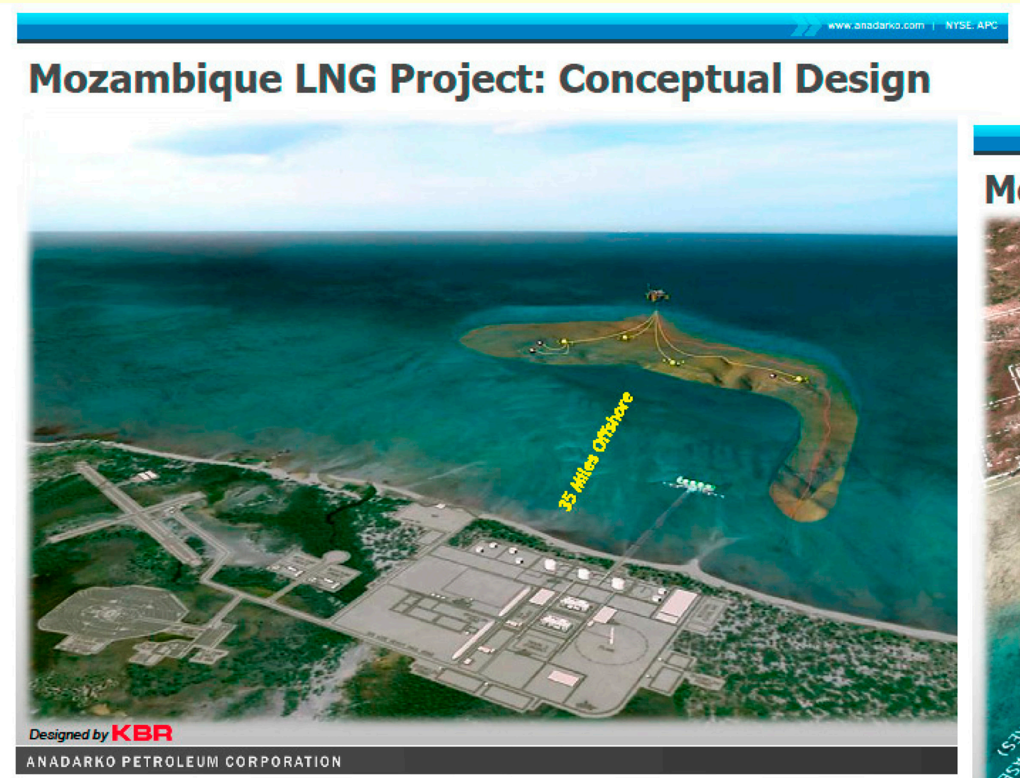
# …and increasing complexity of projects…for example Natural Gas Projects

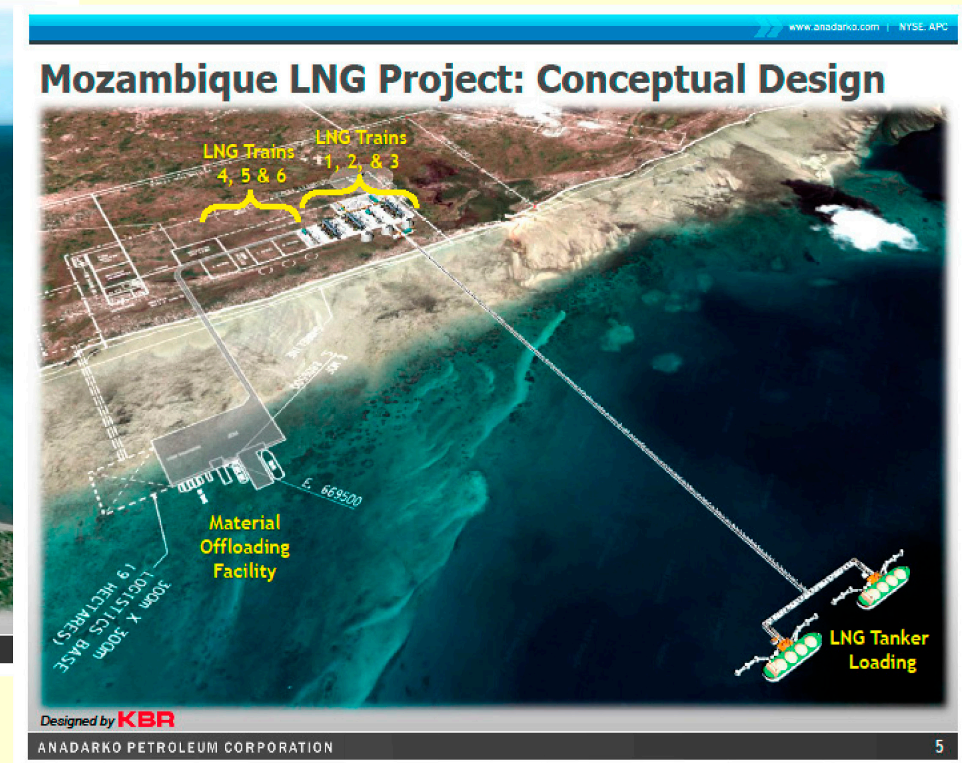



Note: number of links in each chain depends on the project (e.g. gas may be sold directly to consumer after processing)

Source: Wood Mackenzie

# Mozambique LNG *



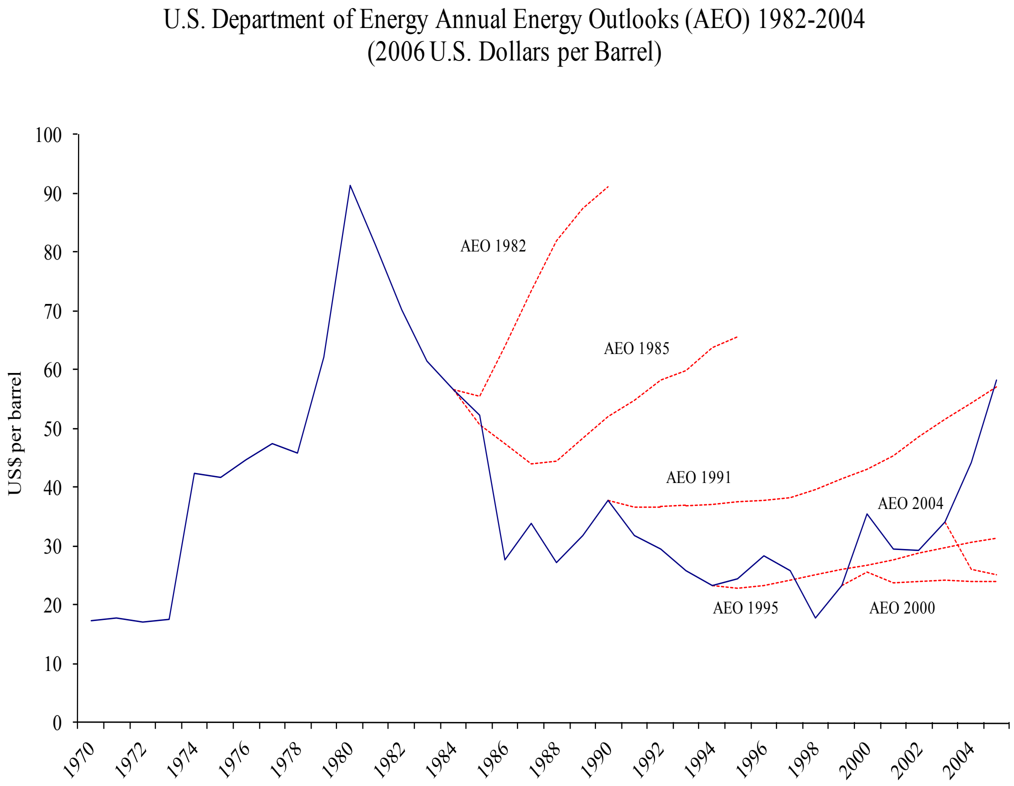



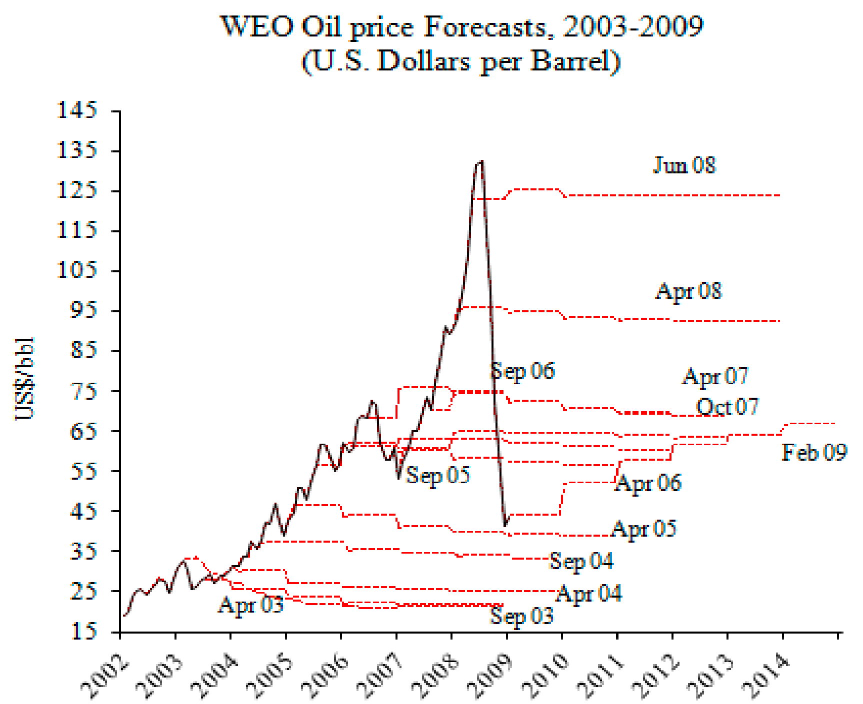

*http://www.anadarko.com/Investor/Pages/Presentations.aspx

# What’s so special about resources?

- Size of sector (even individual projects) relative to the economy
- Tax revenue is the central benefit to host country
  - Promoting linked economic development a continuing challenge
- High sunk costs, long production periods
  - Create ‘time consistency’ problem
- Substantial rents
  - The ideal of a non-distorting, immobile tax base!
- International considerations loom large
  - Foreign tax rules matter
  - Tax competition

# Forecasting prices is hard…




Sources: U.S. Department of Energy Outlook (1982,1985,1991, 1995, 2000 and 2004); and IMF World Economic Outlook (2003,2004,2005,2006,2007, 2008, and 2009). After Ossowski et. al. (2008)

Note: Solid lines on the left chart are spot WTI oil prices, on the right chart are WEO average of WTI, and Fateh. The dashed lines are price projections.

# What else?

- Asymmetric information

  Few of these are unique to resources—they’re just bigger.

What is unique is:

- Exhaustibility
  - Opportunity cost of extraction includes future extraction forgone
  - Views differ on how important this is in practice
  - Recognize revenues as transformation of finite asset in the ground into financial asset

# The key points…

- Fiscal terms must be robust in the face of changing circumstances.
- Should provide government with a revenue stream in all production periods, but also with an increase share of revenues as profitability increases (progressivity).
- Establish by law, or published contracts. Minimize discretionary and negotiated elements.
- Specialized incentives should be avoided.
- Stability and credibility.

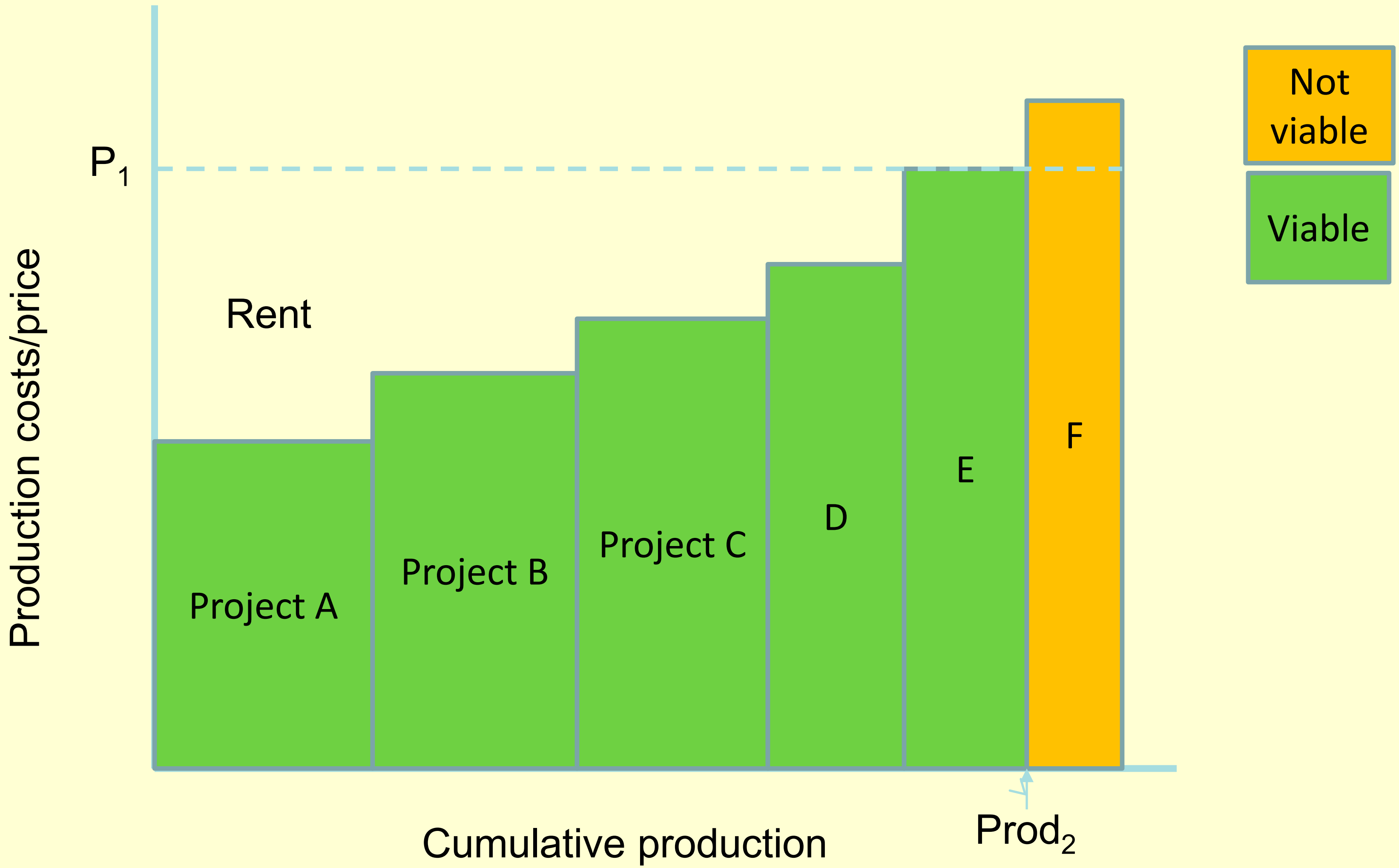
# The key points…

- Tax and royalty, production sharing, and state equity can all be made fiscally equivalent.
- Different contract structures can apportion risks differently, and affect stability and credibility.
- Need to make data for key assessments in the regime observable and/or verifiable.
- Opportunities for aggressive tax planning should be minimized.
- Overall fiscal regime must take account of relative capacity to bear risk.

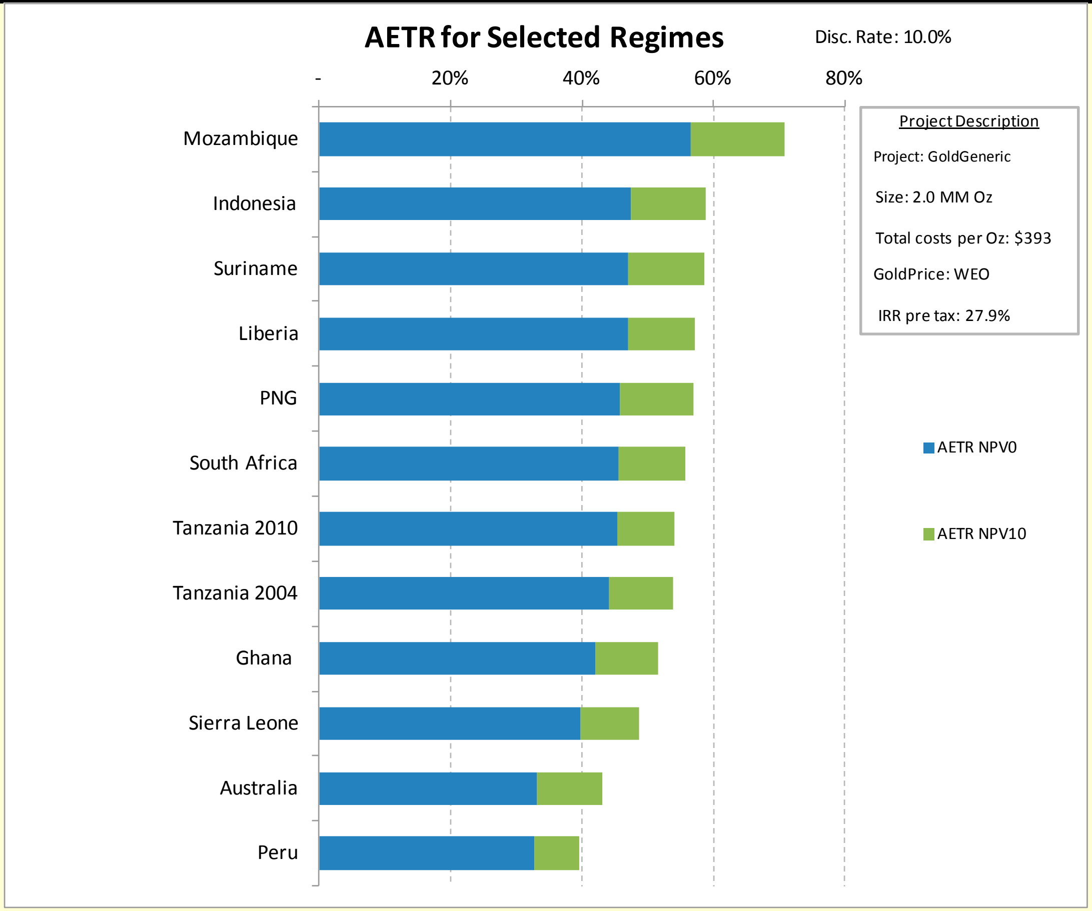
# General terms or cases-by-case negotiation?

- Although there will be many project-specific issues, there are disadvantages to governments of case-by-case negotiation of fiscal terms
- Asymmetry of information (companies probably know more) at time of negotiation
- Skill-intensity of negotiations, and likelihood of internal conflicts on government side
- Many specially- negotiated deals have proved unstable renegotiations time and again
- Better to aim at setting generally applicable terms as soon as practicable.

# Economic rent



# Simulated gold project – average effective tax rate



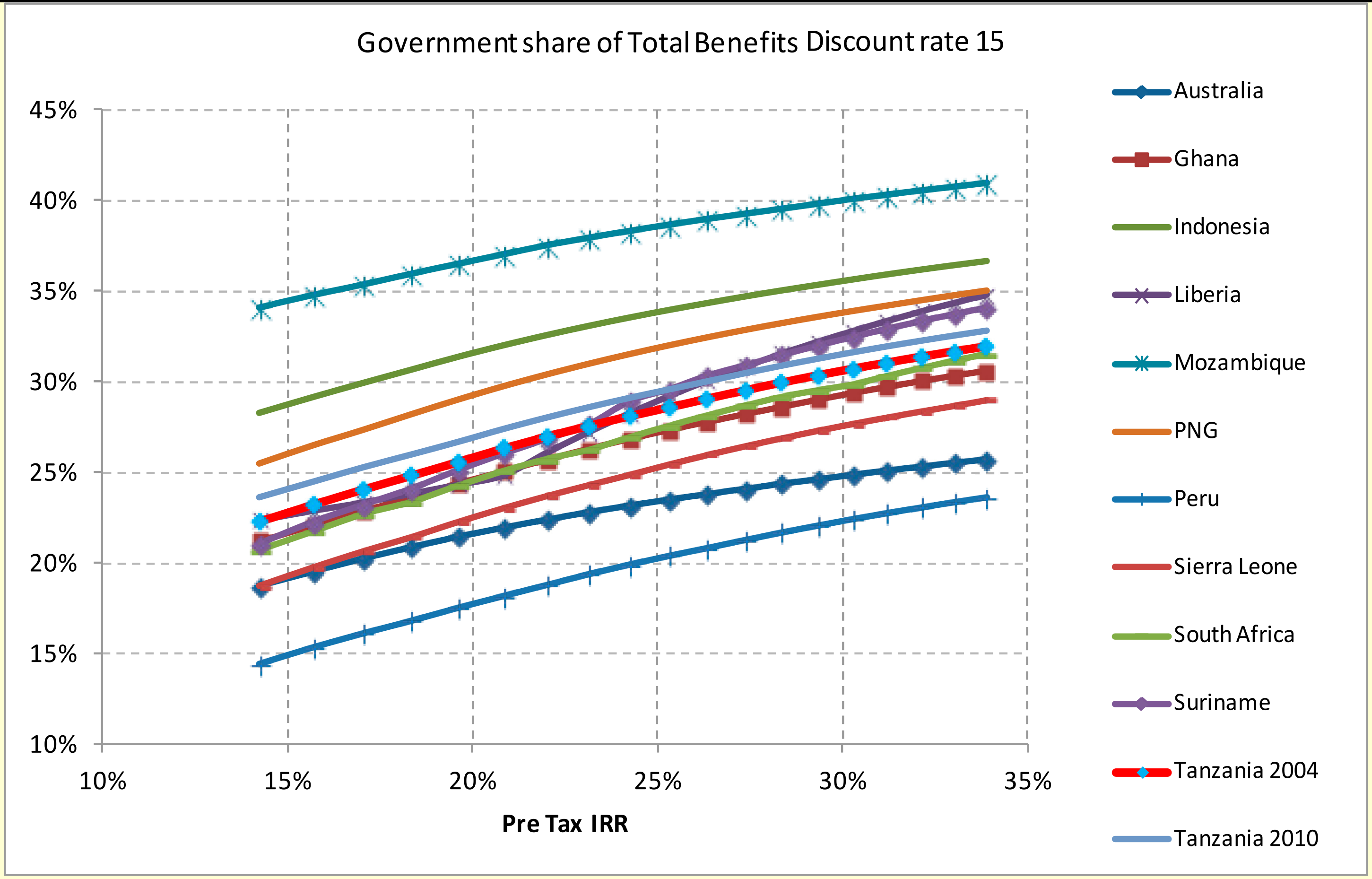

Project

- 2 million ounces gold produced over 12 years @ 200 thousand oz. per year
- Exploration and Development costs $485 million
- Operating costs $150 per ounce

Note:

- Outcome dependent on application of withholding taxes, that may be varied by treaties.

# Progressivity – tax share of total benefits



# Distinctions between minerals and petroleum?

- Appears to have been easier for governments to impose and collect high rent taxes on petroleum than on minerals. Why?
- Recent Australian debate is a case in point.
- Are there systematic differences in the risk profiles? For example, higher exploration risk in petroleum, higher development risk in mining?
- Does petroleum pricing (OPEC) create more profitable pre-tax projects?
- Does petroleum on average yield higher rents than mining (cost proportions lower)? Yet no evidence that returns to petroleum companies are systematically higher on average
- Does the commercial structure matter? Petroleum projects commonly UJVs with adverse interests, mining projects not.
- Related issue – why is bidding for rights less common in mining?

# Resource rent taxes and equity participation

- All rent taxes in cash flow form involve some “refund’ of the tax value of losses.
- Either directly (the “Brown Tax” or “R-based” cash flow tax) when the state shares proportionately in positive and negative cash flows – effectively the same as “working interest” participation.
- Or indirectly, when losses are carried forward with uplift, or transferable to other operations of the tax payer.
- Regular corporate income tax also has this form, with distortions caused by depreciation, interest deductions, and loss-carry-forward restrictions; BUT foreign tax credit issues still argue for CIT.
- Problem for pure rent taxes alone in low income countries.

# Resource rent taxes (continued)

- Various possible forms, with differing revenue paths and risk sharing:
  - "Brown" tax (=cashflow = equity share from day 1)
  - Resource Rent Tax: single or multiple tiers; carry forward losses at interest (Australia, Angola)
  - Allowance for Corporate Equity
  - CIT surcharge on cash flow (UK North Sea)
  - Variable Income Tax (South Africa)
  - State equity participation
- For true neutrality, relief for exploration costs and failed projects
- Key issue is the right local combination of royalty (gross revenue) and a results-based resource rent tax
- Australia proposed RSPT; now MRRT. Rent tax should be kept simple, with low (risk-free?) uplift and rate that leaves incentive margin to companies.

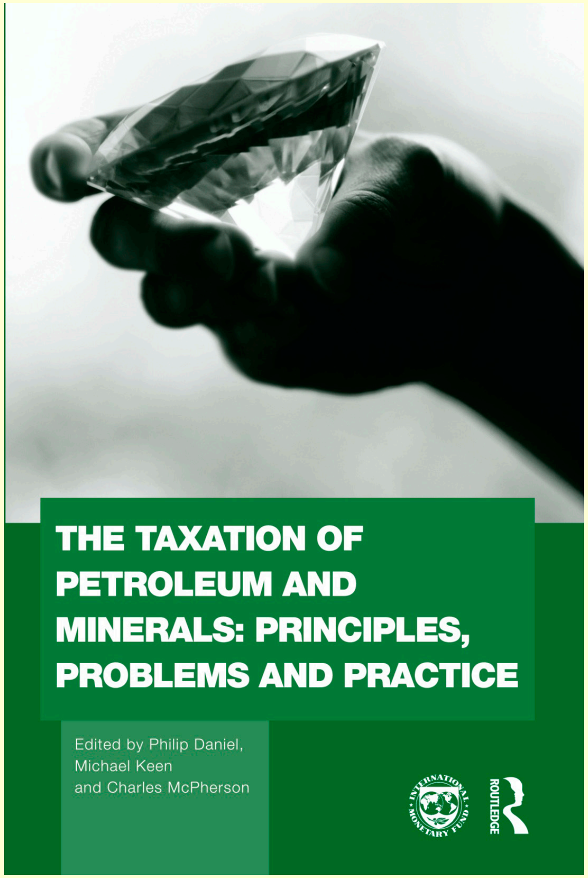
# Capital gains taxation, bonus-bidding, and rent taxes

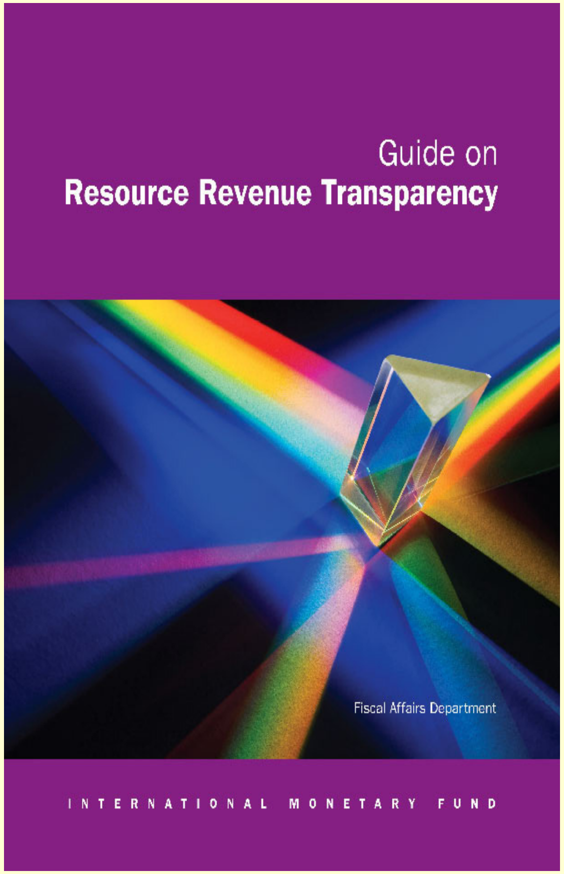
- Taxation of transfers of interest in a resource project has become a big issue (Ghana, Liberia, Uganda, South Africa provisions).
- Gains on transfers of real property usually taxable (whether separate CGT or general income tax).
- What happens when real property is an asset held by foreign companies who sell shares to other non-residents?
- Gains tax hen very difficult to enforce. One approach is to tax unrealized gain in the local company – unlikely to be contrary to any treaty
- Place obligation (with penalties) on local company to notify change of control and pay tax
- Presence of large gains suggests that fiscal regime is not expected to tax rents fully – so the ultimate answer is better rent taxation

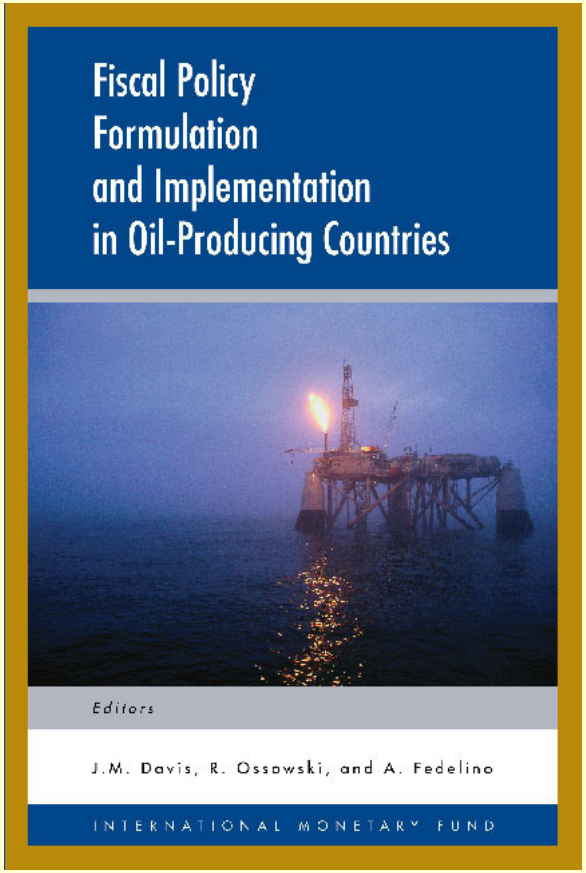
# International taxation and treaties

- Border withholding is the main way to tax flows (dividends, interest, service fees, royalties) to non-residents.
- Modern tax treaties have eroded permissible rates – sometimes to zero.
- Raises questions about value of tax treaties to capital-importing countries.
- Treaties will be of value if they establish host country's right to border withholding, and taxpayer's right to credit in home country.
- "Treaty shopping" has increased difficulty in effectively taxing flows to parent companies.
- Capital gains taxation also affected
- Is a better answer to focus on royalty and rent taxation by the host?

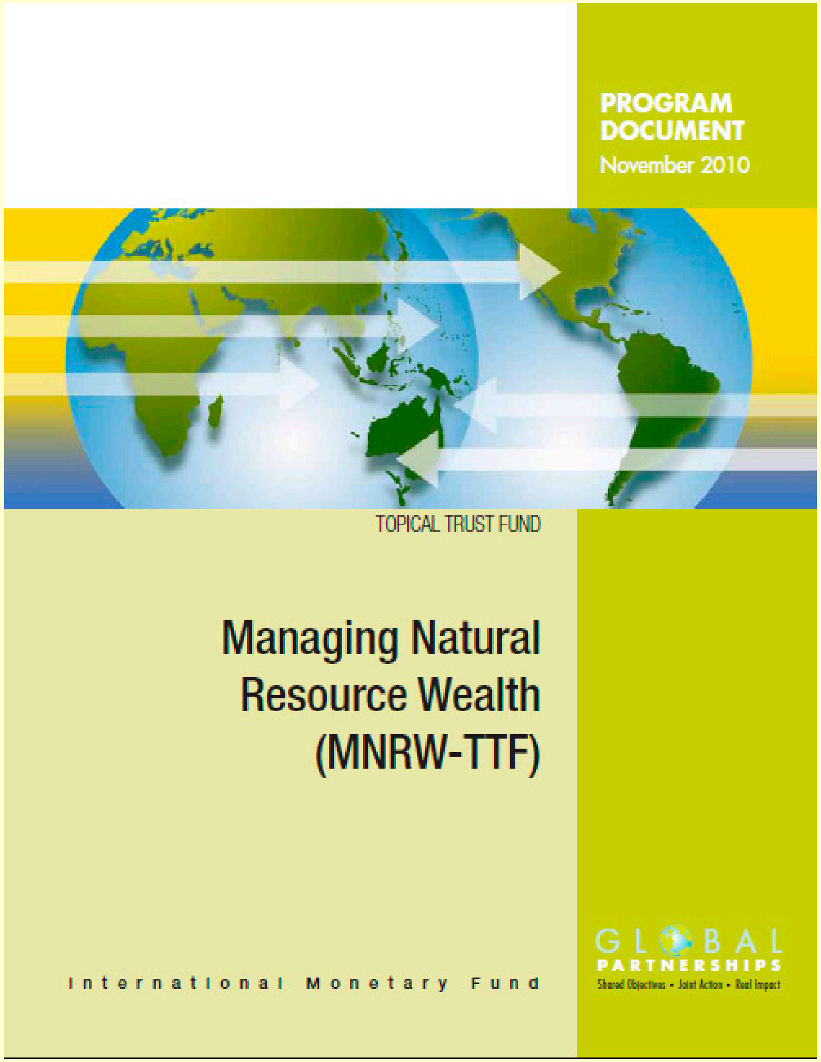
# IMF (FAD) TA actively engaged and research-based



# IMF Expanding advisory work…




- New Trust Fund with lead donors – Norway, Australia, Switzerland, and EU Commission, together with the Netherlands, Oman and Kuwait
- 5 year program, US$25 million, commenced May 1, 2011
- Permits large scaling up of TA advisory work, especially fiscal
- Initial Africa projects: Congo DR, Sierra Leone, Guinea, Mozambique; likely Niger, Uganda, CAR
- Other TA continues: Ghana, Nigeria, Tanzania,
  Liberia, Namibia, Malawi, Mali, Seychelles and more

Thank you!