Designing a Fiscal Regime for Deep Sea Mining

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Presentation Outline

- Overview of key objectives for extractive industries (EI) (that is, mining and petroleum) fiscal regimes
- Types of fiscal regimes
- International experience with different fiscal regimes
- Other key tax design issues for the sector

Part 1

OVERVIEW OF KEY OBJECTIVES FOR EXTRACTIVE INDUSTRIES FISCAL REGIMES

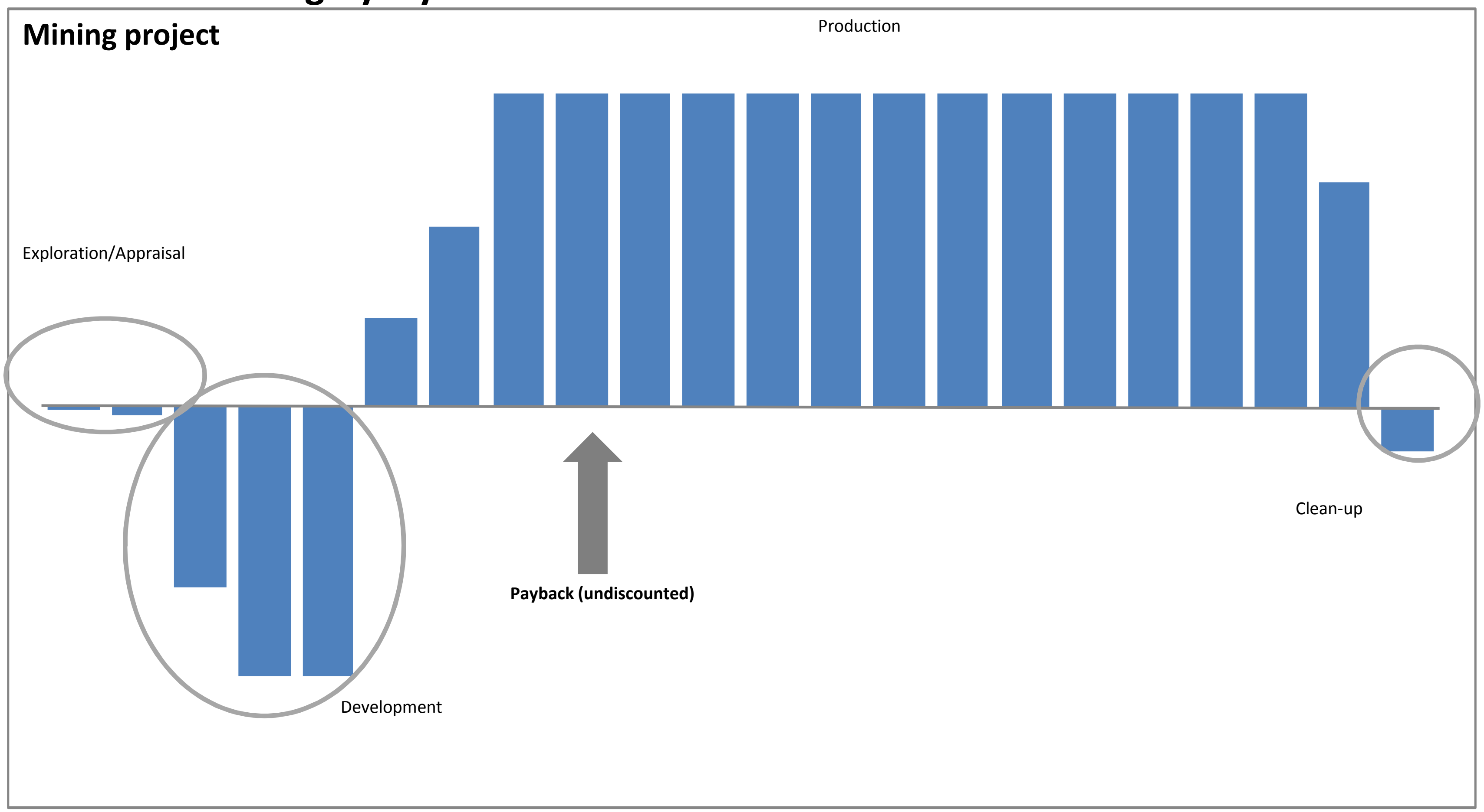
Why distinct fiscal regimes for EI?

- Substantial rents
- Pervasive uncertainty
- Asymmetric information - (companies probably know more) at the time of negotiation
- High sunk costs, long production periods
- Extensive involvement of multinationals in some countries…and of State-Owned Enterprises in others

Few of these considerations are unique to resources—they are just bigger. What is unique is ***Exhaustibility*** — recognize revenues as transformation of finite assets in the ground into other assets

Cash flow profile of a mining project

highly stylized



Central Objectives/Principles

- Ensure State as resource owner gets an ‘appropriate’ share – the fiscal regime should:
  - Provide Government with a revenue stream in all production periods, but also possibly with an increasing share of revenues as profitability increases (progressivity)
  - Be attractive enough to encourage investments, now and in the long run
- Fiscal terms must be “robust” in the face of changing circumstances : anticipate that the long term reality will be different from current forecast

Central Objectives/Principles (cont'd)

- Consistent with countries of similar prospectivity
- Encourage development of all viable discoveries
- Easy administration (for authorities) and compliance (for taxpayers)
- Establish by law
  … minimize discretionary and negotiated elements
- Stability and credibility

Part 2

TYPES OF EI FISCAL REGIMES

Three main fiscal schemes (sometimes blended)…

1. Contractual, including production sharing or service contracts (mainly in oil and gas)

2. Tax and royalty

3. State ownership or participation

- These can be made fiscally equivalent

Fiscal Instruments

1. Land rental/surface fees
2. Bonuses – Signature or Production
3. Royalties
4. Corporate income taxes
5. Rent tax/Additional profits tax
6. State participation
7. Dividend and interest withholding taxes
8. Other indirect taxes

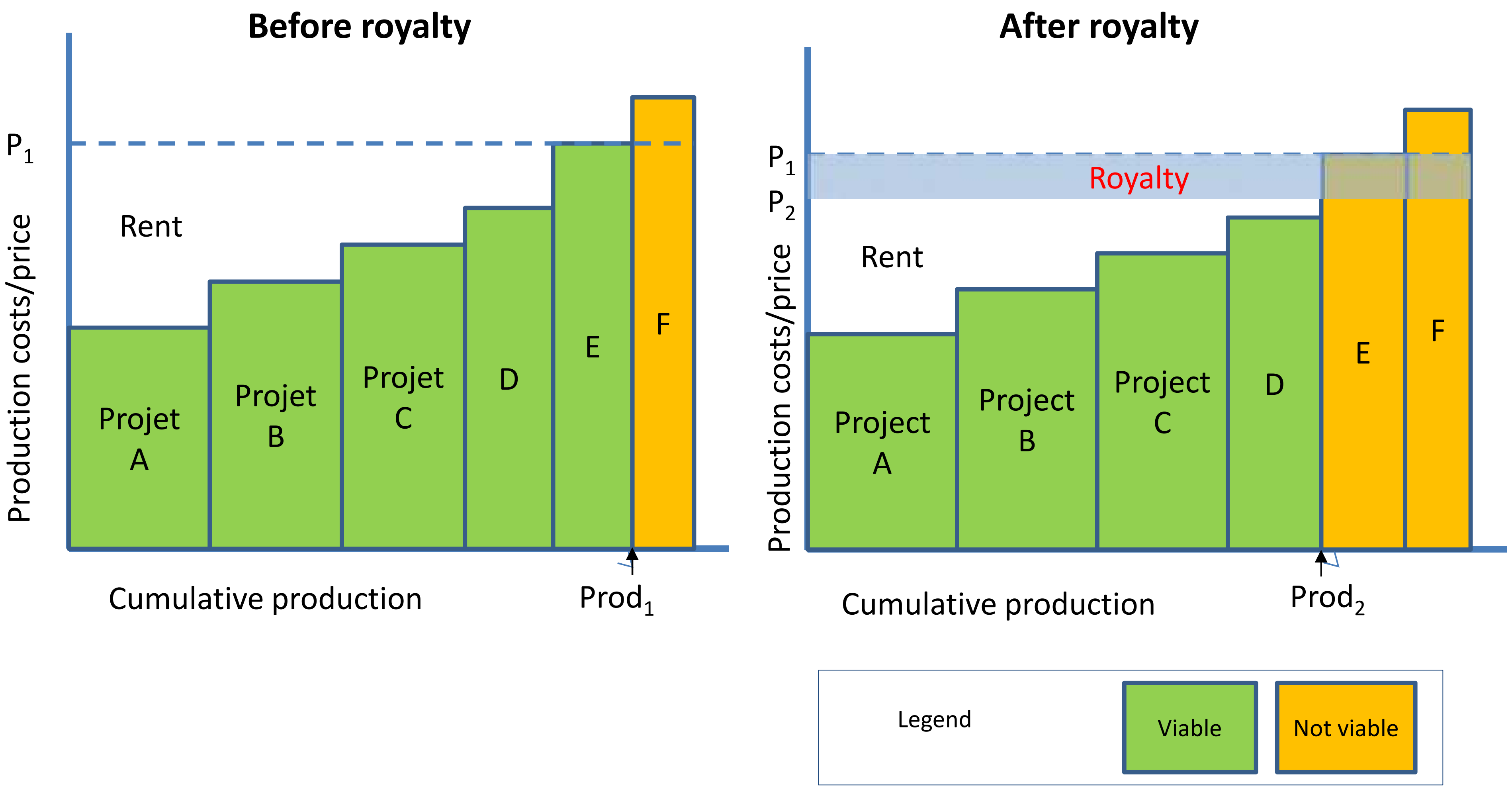
Royalties

- Payment to the resource-owner (usually the state) for extracting the mineral
- Most common (and often most important) levy on EI
- Attractive to governments because it secures revenue from the start of production
- Considered easier to administer than most other fiscal instruments (though in practice challenges exist)

Royalties

- Royalties raise the marginal cost of extracting minerals (except for profit-based royalties) and increase cut-off grade of the mineral
- Some countries have introduced sliding scale royalties where the royalty rate is linked to the mineral price or profitability
- Investors perceive it as an additional cost to mineral extraction

Effect of ad-valorem royalty



Different types of royalties

Royalty	Description	Used in
Ad valorem	% of production value	Latin America, Africa, some Australian and US states
Specific	Fixed charge per unit of production	Some Australian states for some minerals, Indonesia (pre-2009), China
Profit-based	% of net income or other measure of profit	Most Canadian provinces, Chile, Peru, Nevada (US), Northern Territory (Australia), South Africa
Price-based	% of production value based on a price scale	Zambia (repealed in 2009), Mongolia (repealed in 2010), Bolivia

Corporate Income Tax (CIT)

- Share of profits, calculated under specific tax rules
- Statutory CIT rates usually apply but sometimes higher rates for EI companies
- Commonly applied to natural resource projects: consistent treatment across sectors
- Creates creditable tax in home jurisdiction

But…

- Delay until CIT payments start
- Somewhat non-neutral – taxes the minimum return
- Debt bias – deduction for interest but not dividends
- Needs natural resource specific rules

Variable Income Tax (VIT)

- VIT scheme uses the CIT base, but varies the rate of tax according to the ratio of profits to gross revenues
- Developed first in the gold mining industry of South Africa, where the effective tax rate may be lower or higher than the standard CIT rate. Also used in Botswana, Uganda, Zambia.
- The VIT is relatively simple but introduces distortions
  - when a period of high accounting profit occurs early in the life of a project causing tax to rise well before the required return has been earned, or rent generated

Example – Botswana VIT

- CIT rate is 25% to 45%
- Rate determined by applying formula:

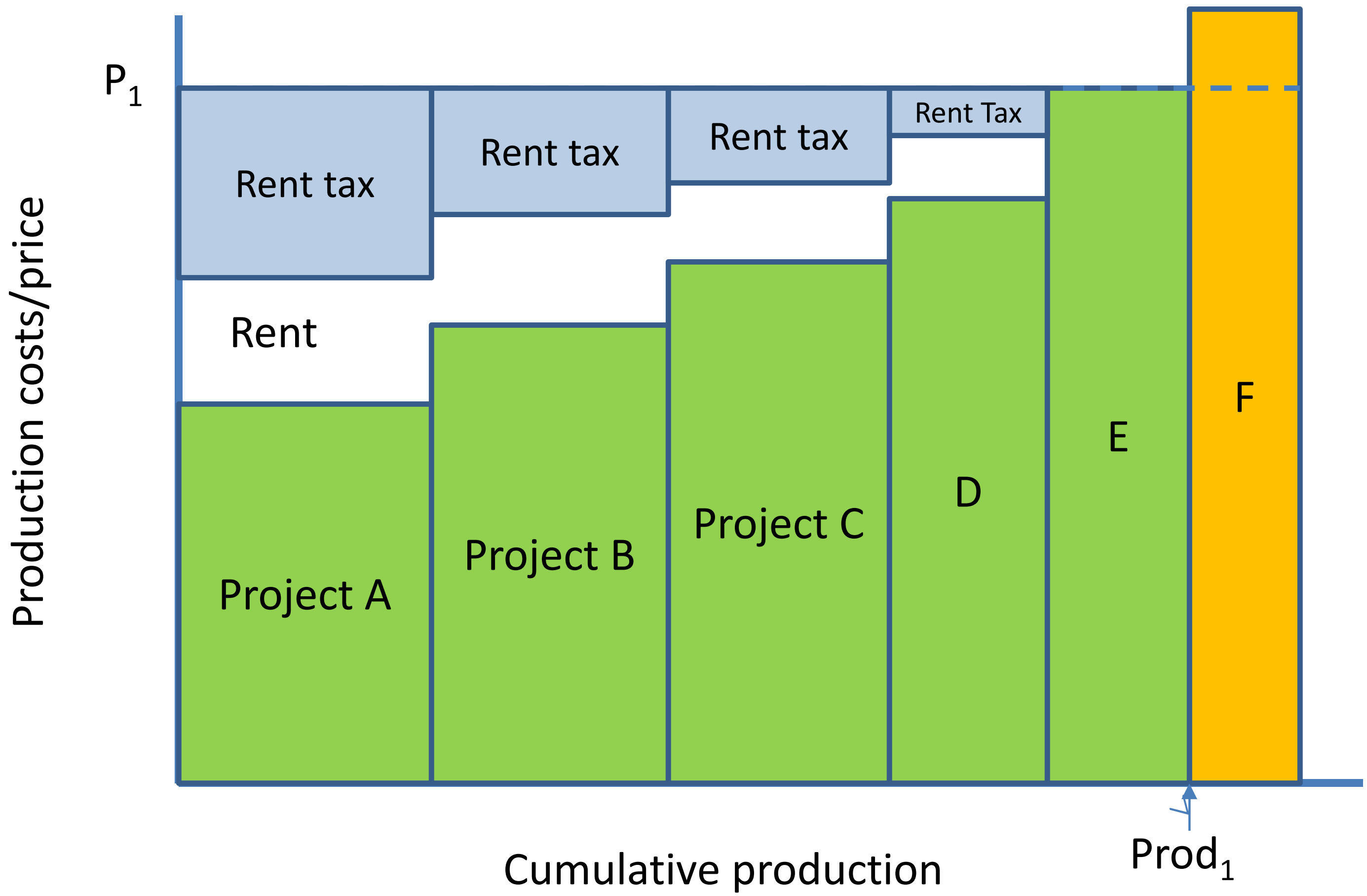
  70 - (1500/X) where X is the ratio of chargeable income to gross revenue

Example

Gross Revenue	$1000
Less Expenses	600
Chargeable income	400
X equals 400/1000	40
Tax rate 70 - (1500/40) = 70 – 37.5 =	32.5

Why Tax Rents ('super-normal profits')?

- Should not distort investment decisions
- Allows state to share in "upside" of projects



Types of Rent Taxes

1. Cash flow tax

- Cash flow = Current receipts less expenses (non-financial) with immediate expensing of capital costs
- Various forms:

  A. Brown Tax

    - Pure rent tax where the state acts as a passive investor
    - Taxes all net positive cash flows and government meets its share of all net negative cash flows by direct cash payment at the same percentage as the tax rate
    - Australian Resource Super Profits Tax (RSPT) proposal came close
    - In substance, like a working interest (paid) equity

Types of Rent Taxes

B. Resource rent tax
   - Uplift on losses for investors rate of return

C. Tax surcharge on cash flow
   - Tax on net <u>positive</u> cash flow
   - No uplift on <u>negative</u> cash flow but may allow uplift (investment allowance) on capital costs
   - Could apply R-factor (that is, tax is paid once ratio of cumulative income to cumulative costs reaches a certain level)
   - Used in the UK for the North Sea as a CIT surcharge on petroleum projects (in addition to normal CIT)

Types of Rent Taxes*

2. Allowance for Corporate Equity/Capital (ACE/ACC)
   – Amends standard CIT by providing a deduction for return on book equity
   – Now used by some countries as part of normal CIT

- Difference between cash flow tax and ACE/ACC is generally timing of tax payments (usually earlier under ACE/ACC)

*For a detailed discussion of rent capturing mechanisms see *Fiscal Regimes for Extractive Industries: Design and Implementation*, IMF 2012

Resource Rent Tax (RRT)

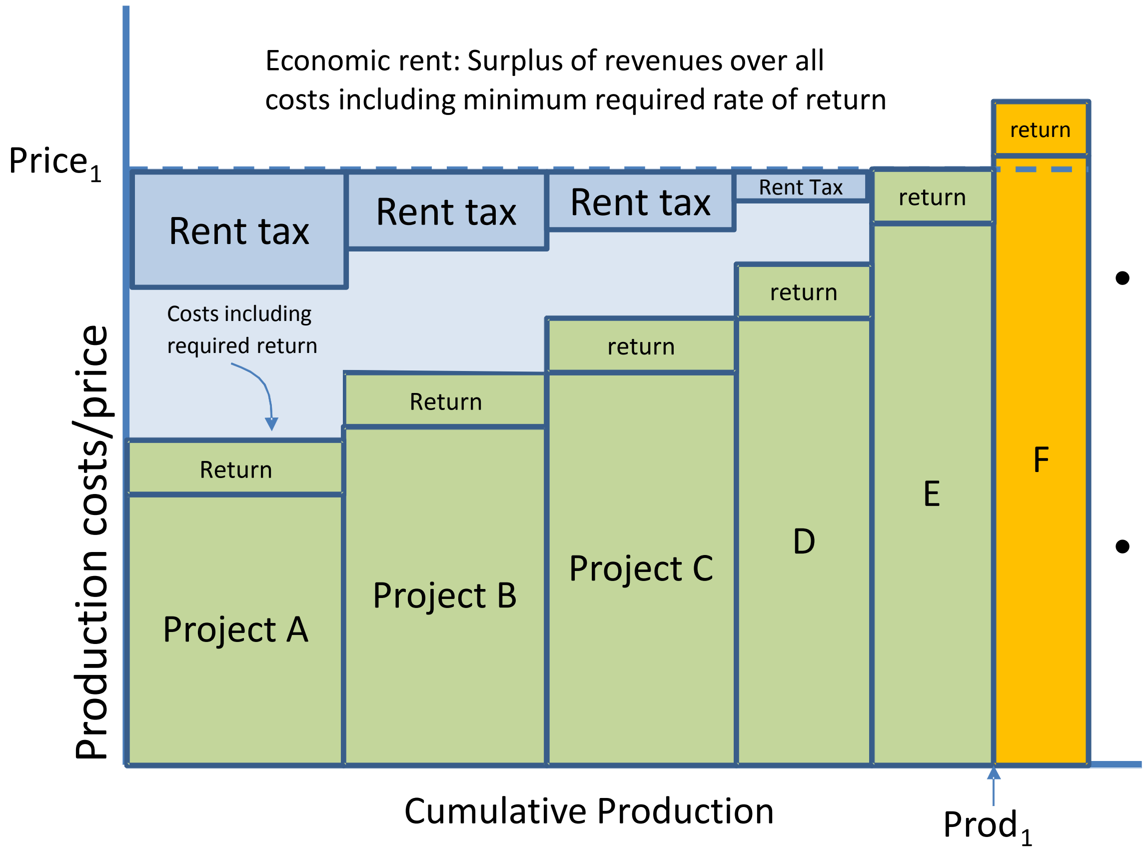
- Instead of direct cash payments by the state, the investor receives an annual uplift on accumulated losses until these are recovered
- Tax then applies at specified rate
- Uplift rate set at the minimum required rate of return for the investor
- Again, the calculations use cash flows, not book or tax depreciation.
- Can calculate using same data as CIT
- It is usually applied with ring-fencing by license

Example - RRT

- Year 1 - Expenses $5m and capital costs $20m
- Year 2 – Income $10m, expenses $5m and capital costs $10m
- Year 3 – Income $80m and expenses $20m
- Assume RRT uplift of 15% and RRT rate of 25%

(in $ million)	Year 1	Year 2	Year 3
Income	0	10	80
Less: Capital costs	-20	-10	0
Expenses	-5	-5	-20
Gain(Loss)	(25)	(5)	60
Loss carried forward	-	-25	-33.75
Uplift (c/fwd x 15%)	-	-3.75	-5.06
Gain(Loss)	(25)	(33.75)	21.19
Tax	**-**	**-**	**5.30**

Effect of Resource Rent Tax



- Surplus of revenues net of all costs of production, including required rate of return (“hurdle” rate)
- Ideal base for taxation:
  - Satisfies neutrality
  - Government owns the resource that generates the rent
- But, highly uncertain:
  - Resource existence
  - Resource quality and size
  - Extraction costs
  - Commodity price
  - Required rate of return

State Participation

- Different forms:
  – Full equity
  – Carried equity
  – Free equity
  – Production sharing contract
- Helps resolve asymmetric information (‘seat at the table’)
- But potential budgetary issues (if have to pay for interest) and governance issues (can be conflict with regulator role)
- Direct fiscal mechanisms preferable

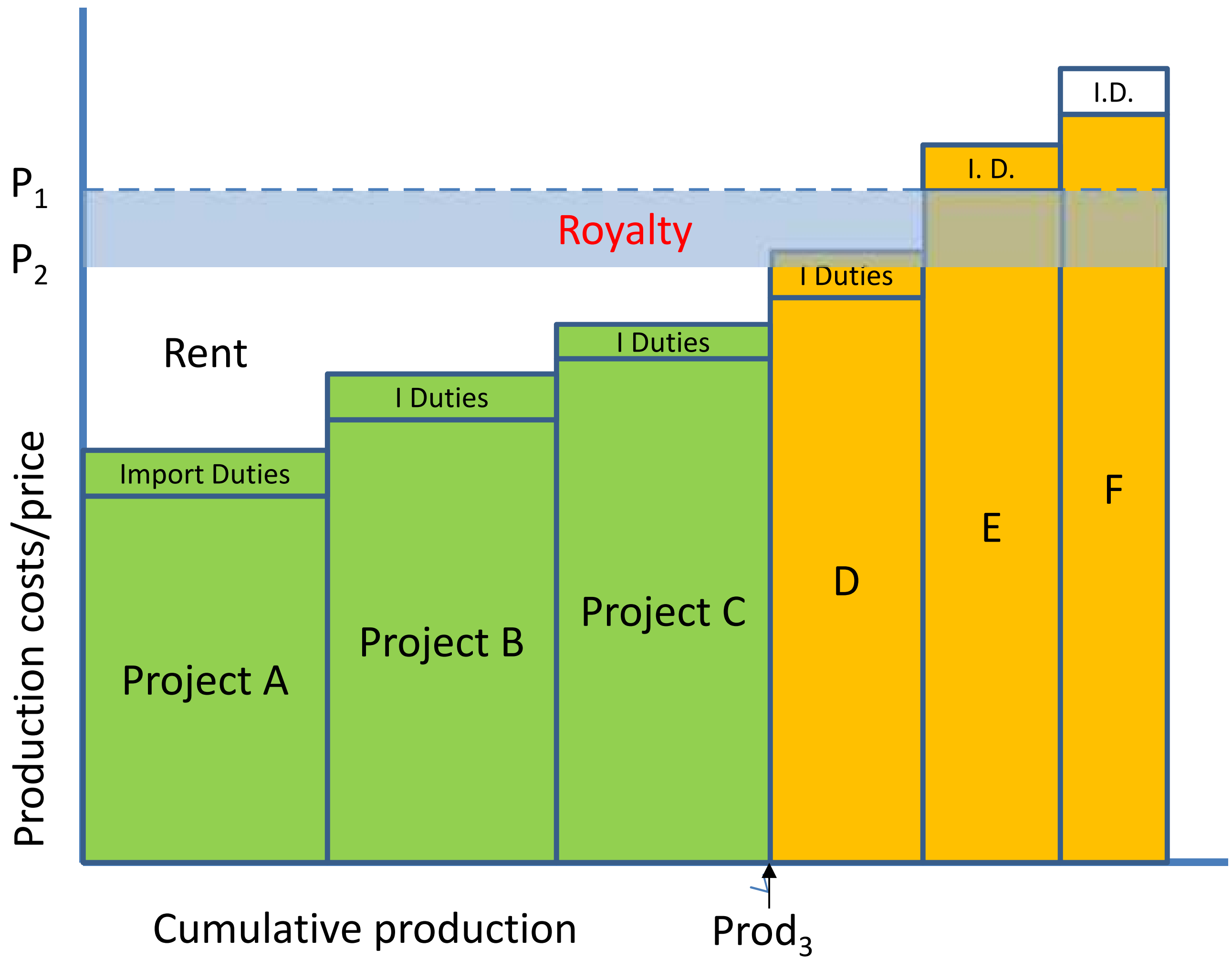
Indirect Taxes

- In the form of import duties, non-refunded VAT
- Early revenues (before production)

but…

- Highly regressive
- Disincentive to exploration
- Commonly exempt specialized equipment, at least until production

Effect of Import Duties



Value Added Tax (VAT)

1. Best: Exported mine product *Zero Rated*
   - Investor cannot charge VAT to international customers
   - Pay VAT on inputs, then claim refund

2. Second best: if refunds are a problem:
   - Zero rate exports
   - Exempt VAT on imports (but not domestic supplies) or Allow for deferred payment of VAT on imports

3. Third best: Mine inputs *Exempted*
   - VAT paid on inputs becomes a distortionary tax on investment

1. is consistent with basic “destination” principle of VAT

Multiple fiscal instruments needed

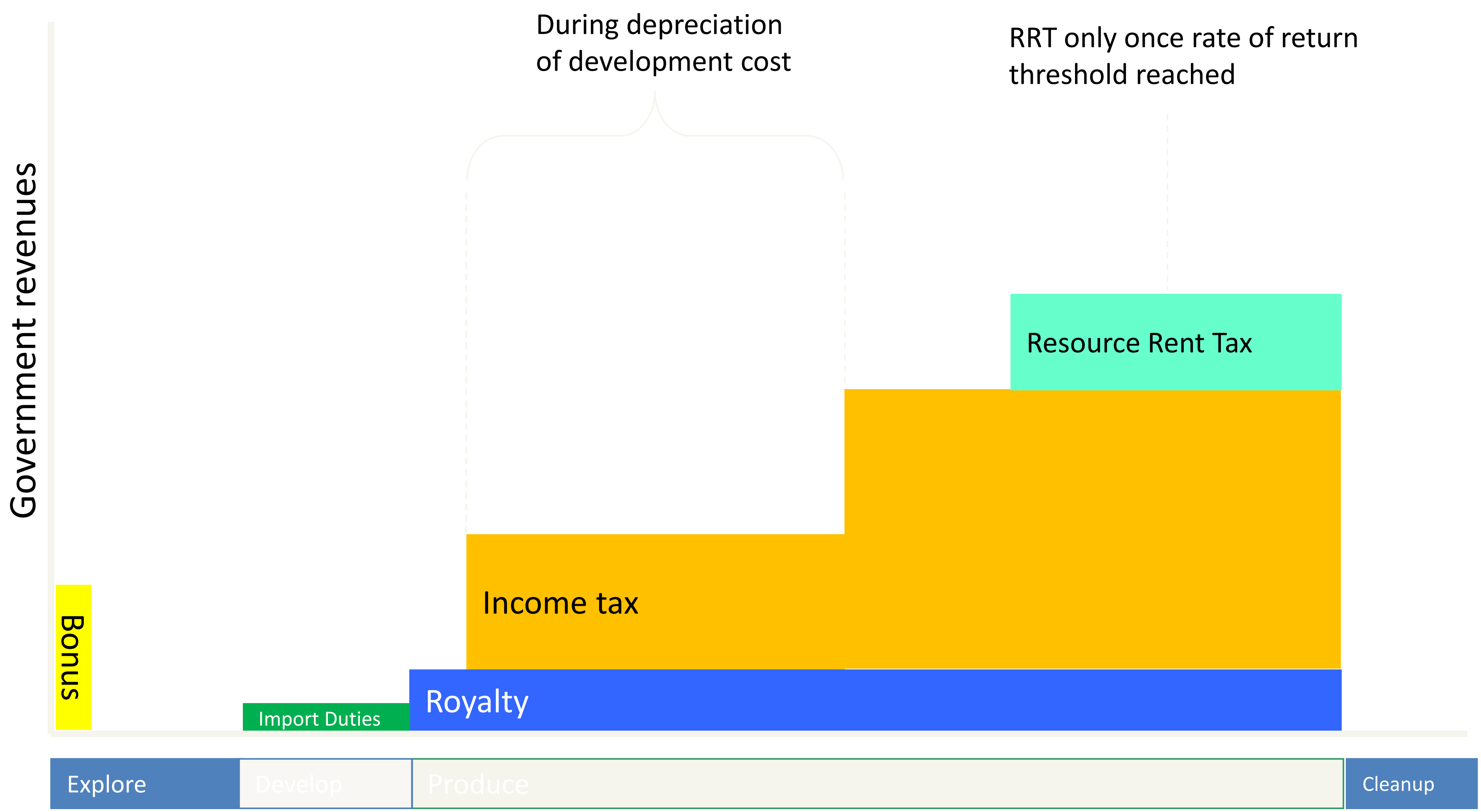
- Rent taxation (vs. incomes) is most efficient in principle
- **Royalties** distort extraction and exploration

  … but may still have an important role, to:

  - Assure some revenue from day 1 of production
  - Set the pace of extraction (implicit depletion policy)
- Problems of **regular corporate income tax**

  … but, usually included to create creditable tax and consistent treatment with other sectors
- An **additional profits tax** scheme for progressivity
- So: (1) Royalty + (2) CIT + (3) rent capture mechanism

Stylized Government Revenue Profile



Choice of Fiscal Instruments Matters

- ***Choice of fiscal instrument matters*** for investors' decision whether to invest and for ensuring a reasonable government share
- Country circumstances require tailored advice

Part 3

INTERNATIONAL EXPERIENCE OF FISCAL REGIMES

What is adopted in practice (mining)?

Survey of 25 Countries

Fiscal Instrument	No. of Countries
Signature bonus	1
Production bonus	0
Royalties - Specific	2
Royalties – Ad Valorem	21
Royalties – Other	2
Resource rent taxes	5
Variable Income Tax	3
Additional income taxes	1
State participation	5
Social investments/infrastructure	1

What is adopted in practice (petroleum)?

Survey of 67 Countries

Fiscal Instrument	No. of Countries
Signature bonus	16
Production bonus	10
Royalties	50
Resource rent taxes	9
Additional income taxes	3
Production sharing	34
State participation	27
Social investments/infrastructure	6

Government revenue yield?

Not only do the regimes vary greatly, but also the revenue yields

- Simulations for petroleum suggest government shares of: 65 to 85 percent
- Lower share for mining : 40 to 60 percent

Part 4

OTHER KEY TAX DESIGN ISSUES

General Tax Issues

Some general tax issues have an important impact on the sector:

1. Transfer pricing
2. Deductions for interest expenses
   - International trend to limit interest deductions (thin capitalization and earnings stripping rules)
3. Loss carry forward
   - Often longer periods for EI sectors
4. Ring fencing (limiting offset of losses across projects)
   - Usual practice in EI sectors to ensure timely receipt of government revenue

General Tax Issues

5. Decommissioning, rehabilitation costs
   – Ensuring tax deductions can be claimed encourages companies to fully rehabilitate sites
6. Taxation of gains on sale of interests
   – Important concern especially with indirect transfers of interests (e.g., domestic share sales; offshore share sales; farm outs)
7. Tax incentives
   – Tax holidays/lower rates are not common for EI sector

General Tax Issues

8. Withholding taxes
   - Allow source country to receive tax from income flows to non-residents
   - Can apply to: interest, dividends, rent, royalties, sub-contractor fees, management and technical service fees
   - Should ensure protect source country taxing right, especially under tax treaties, by avoiding significant reductions in withholding tax rates

Fiscal Stability

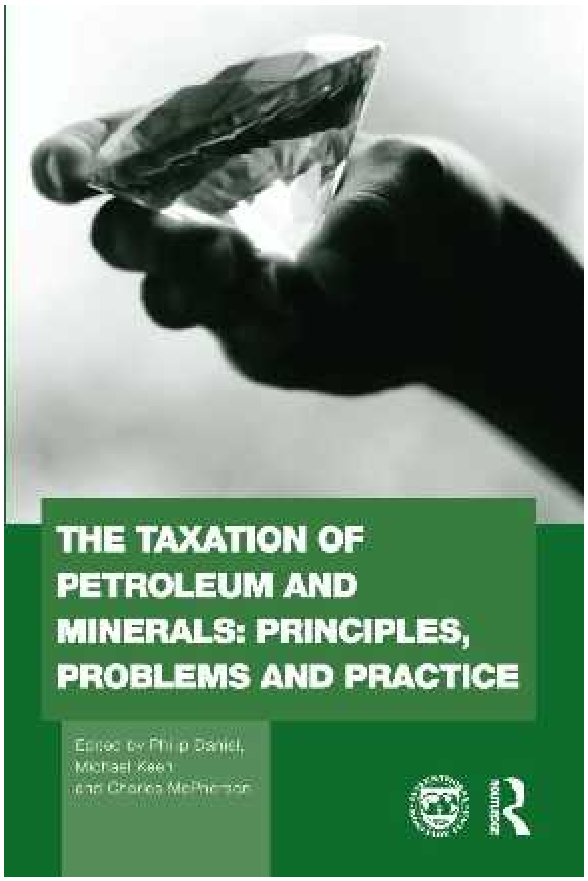
- Companies will usually seek fiscal stability, often through a fiscal stabilization clause in agreements
- Preference is that they be restricted to key rates and duties and significant deductions, not to reasonable administrative changes
- Should be symmetrical (that is, company is protected from any tax or duty increase, but cannot benefit from rate reductions)

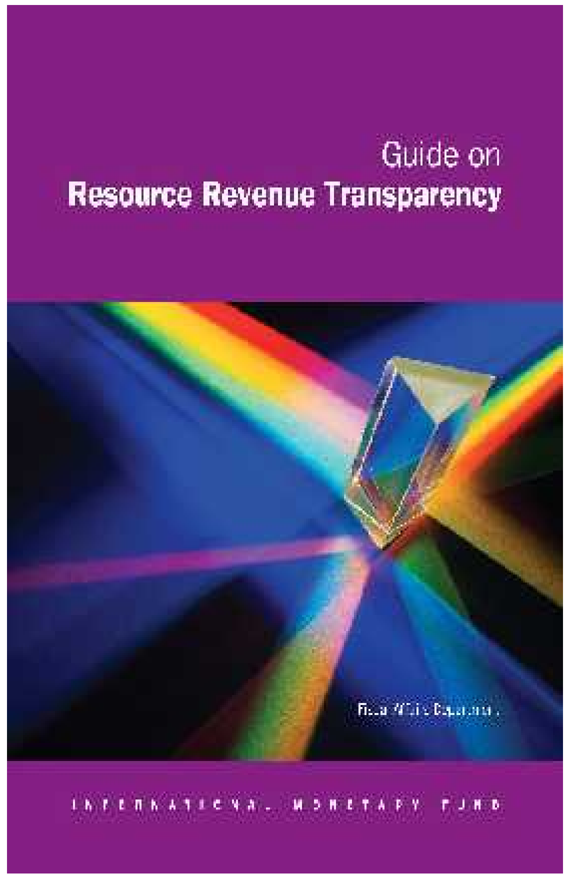
Information Sources

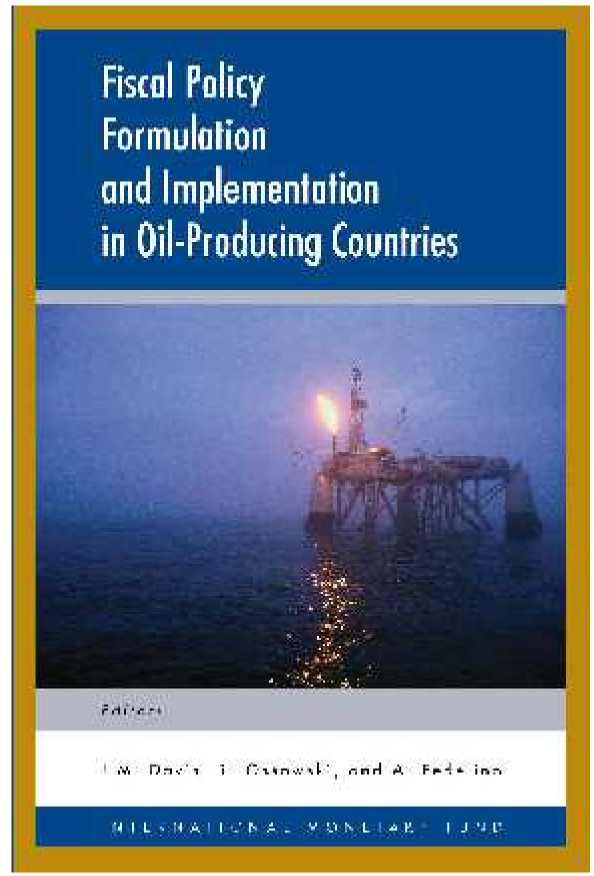
- IMF Board Paper (August, 2012) on "Fiscal Regimes for Extractive Industries: Design and Implementation" available at:

http://www.imf.org/external/np/pp/eng/2012/081512.pdf

Other IMF (FAD) Products







And forthcoming:

- Handbook on Resource Tax Administration (joint with World Bank)
- Book on international issues in extractive industry taxation

Conclusions

- In designing a fiscal regime for DSM, be clear about the objectives

… in particular, ensuring the State as resource owner gets an ‘appropriate’ share, while not deterring investment

- Each country requires tailored advice, but generally within a framework (fiscal package) that combines:
  - ***Royalty*** on gross revenue – for early, steady revenue stream
  - ***Corporate income tax*** – taxes normal return to equity
  - ***Rent tax -*** Targeted explicitly on rents to obtain larger government share for more profitable projects
- Transparent rules and contracts promote stability and credibility