Tax Regimes in Hydrocarbon-Rich Countries: How does Trinidad Compare?

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Outline of presentation

1. Where does Trinidad want to go in the Medium Term?
2. What is the current production system and tax structure (vis-à-vis investment)?
3. What are the issues and best practices regarding taxation and revenue management in hydrocarbon economies?
4. How does the tax system compare in Trinidad?

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Where does Trinidad want to go in the Medium Term?

- Development of downstream industries (ammonia, methanol, urea, fertilizer)
- Regional hub of the Caribbean *(R. Hausmann: countries with more capabilities will have what is required to make more products)*:
    - Become part of value chain in sustainable energy
    - Develop services (financial, oil industry-related)
    - Links to new global trade patterns (Panama Canal)
- Provide population with opportunities in retraining, life skills and services.
- And invest in oil and gas

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Recent budget and medium-term documents suggest the government wants to increase private sector participation.

- Discussions of ‘’laying the ground work for growth and fiscal consolidation In the medium-term”
  - Improve the regulatory and administrate environment to encourage private sector activity
  - Provide support for private sector through a more focused and growth oriented *Public Sector Investment Programme.*
  - Reduce the government’s overall fiscal deficit, which in light of the first two objectives, will require both cutting and restraining recurrent expenditures.

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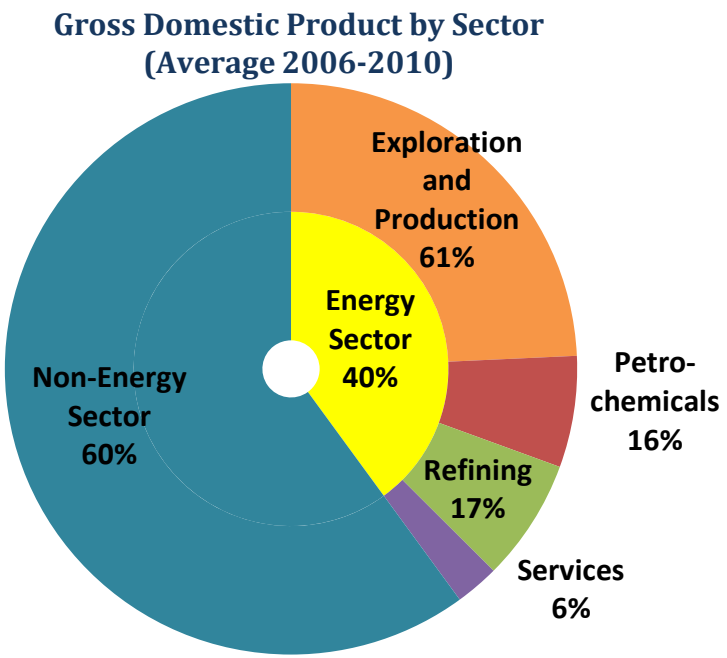
Production structure in Trinidad and Tobago

- The economy of Trinidad and Tobago depends on oil and gas extraction and exports, accounting for 40% of GDP, 80% of the exports of the country and 58% of fiscal revenues in 2011.

- Given the ‘resource curse’, economy currently cannot diversify—especially when hydrocarbon prices are high.



Source: Central Statistical Office.

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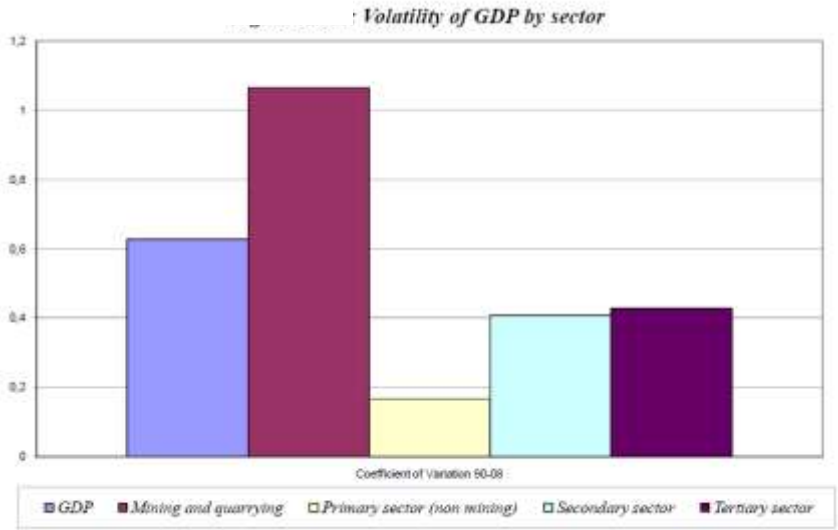
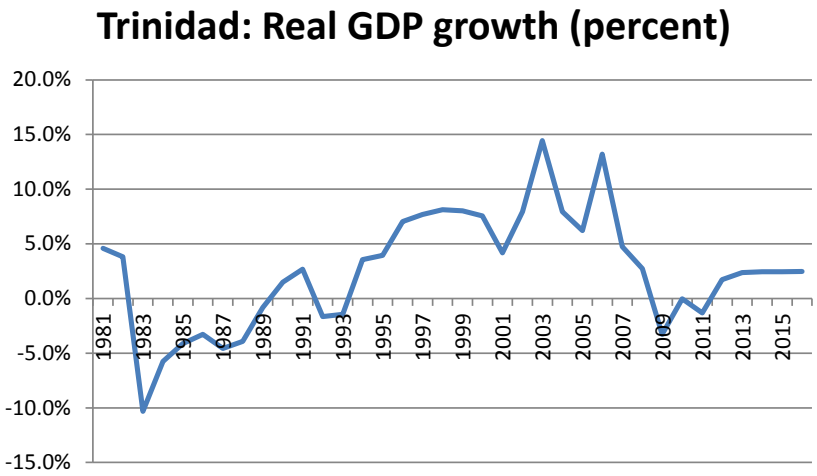
Volatility of hydrocarbon prices creates volatile GDP





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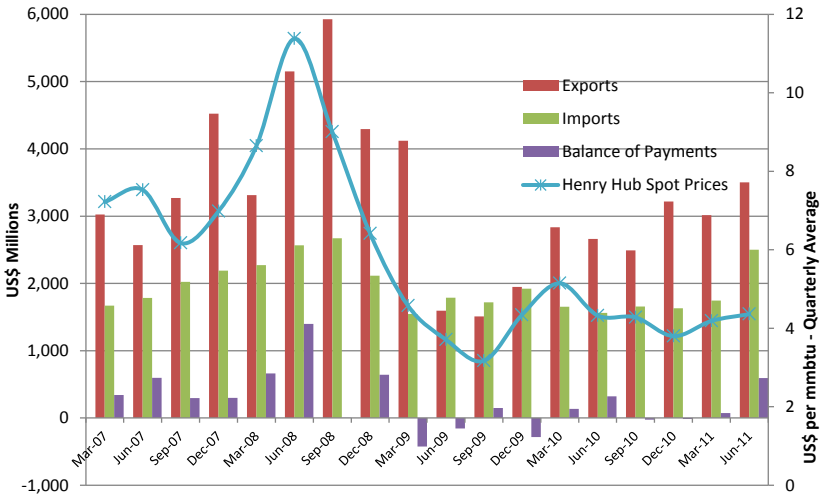
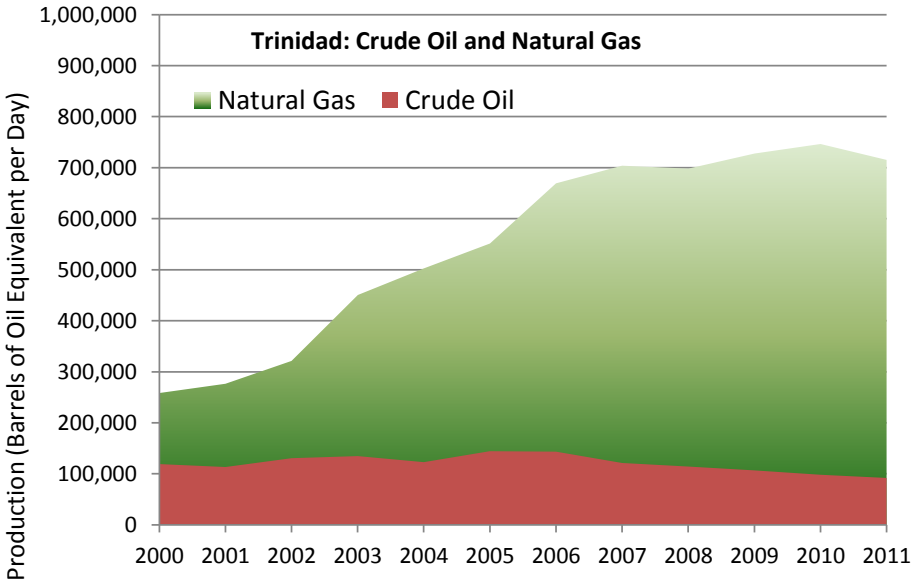
External volatility is very tied to gas prices, as most of the production is gas.





Sources: Ministry of Energy and Energy Affairs.

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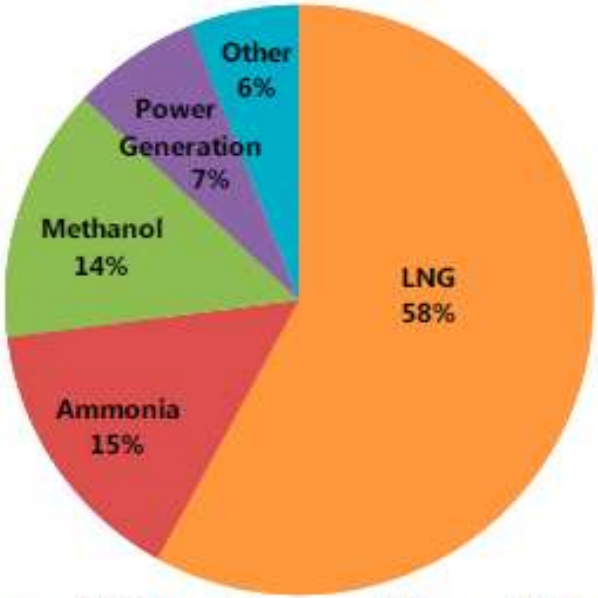
..so need to understand economics of natural gas.

- Production structure of Gas: same sector and expertize as petroleum
- Distribution: depends on final use
- Transportation: pipelines or LNG terminals
- Consumption: oil for transportation, gas for electricity (but competes with coal—and it's a non-tradable sector)

Figure 5. Natural Gas Utilization by Sector (In 2010)



Source: Ministry of Energy and Energy Affairs

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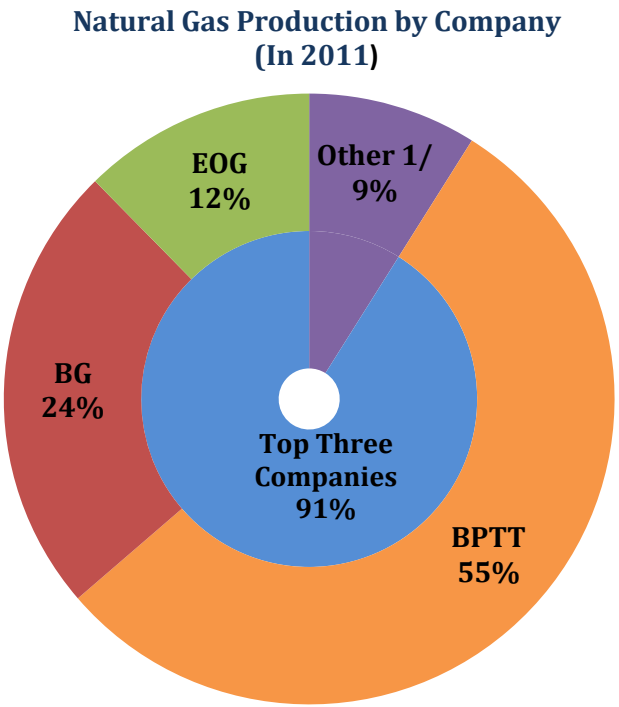
..as well as price determination for taxation purposes.

- Segmented global gas markets
- More difficult to price when upstream and downstream are integrated (in Trinidad there is some integration..but public sectors prevalent)
- Most gas export sales are under long-term (20-30 year) contract, and the terms of sales agreements reflect numerous factors. (But because many things taken into account, may be more stable that petroleum).
- In some cases gas prices may be below cost of production!



Source: Ministry of Energy and Energy Affairs.
1/ BHP Billiton, Repsol, and Petrotrin including its Trinmar operations.

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Going forward, technology developments will likely increase supply from the rest of the world and attractiveness of Trinidad for investors (external force)

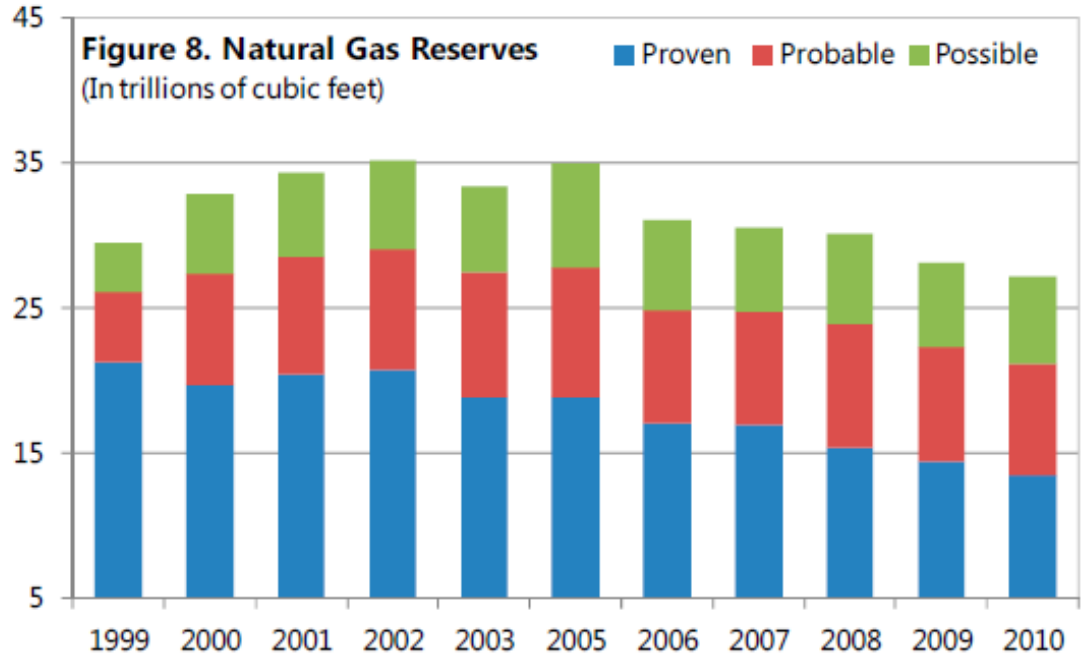
Technically Recoverable Shale Gas Resources by Country

(In trillions of Cubic Feet)

Country	Resources	Country	Resources	Country	Resources
Algeria	231	Germany	8	South Africa	485
Argentina	774	India	63	Sweden	41
Australia	396	Libya	290	Tunisia	18
Bolivia	48	Lithuania	4	Turkey	15
Brazil	226	Mexico	681	United Kingdom	20
Canada	388	Morocco	11	Ukraine	42
Chile	64	Netherlands	17	United States	862
China	1,275	Norway	83	Uruguay	21
Colombia	19	Pakistan	51	Venezuela	11
Denmark	23	Paraguay	62	Western Sahara	7
France	180	Poland	187	Total	6603

Source: The U.S. Energy Information Administration; and H. Monroe

..based on this, assumption on proven reserves should remain conservative (also related to amount of investment)



Source: Ministry of Energy and Energy Affairs. Note: There was no audit in 2004. ; and IMF

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Production and contracting system in Trinidad

- Mostly system of production-sharing agreements: gives the risk and expertize to the oil companies, but also allows them to recuperate costs and can be very profitable.

- Generally preferred by investors as they take all the risk, but require some resources by the government in auditing given asymmetric information.

- Petroleum produced by both private and public companies (3% in 2010), with significant foreign participation.

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Fiscal Regime for oil and gas production in Trinidad

- A Royalty 12.5% for land and marine production. The royalty rate is 10% for marine production off the West Coast of Trinidad. There are also special sliding scale as much as 15%.
- A Production Levy of up to 3% of gross income from crude oil. The Levy provides the subsidy for petroleum products sold on the domestic market.
- A Supplemental Petroleum Tax (S.P.T.) charged on production of crude oil and based on an oil price sensitive rate structure. (0% for crude prices under US$13.01 a barrel to a maximum of 35% for those over US$49.50 a barrel.
- Petroleum Profits Tax (P.P.T.) or corporation tax charged at a rate of 50% of gross revenues from all sources less deductible expenses and allowances.
- An Unemployment Levy of 5% is also charged., with some deductions allowed,

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..and some incentives were added in 2011

- 20% discount on SPT / 20% credit on capital expenditure for small and mature marine fields for the application of ‘enhanced oil recovery’' (EOR) methods (companies can choose)

- SPT will not be applied at all if oil prices (presumably netted back to Trinidad) are up to US$50 a barrel.

- The "windfall feature" only kicks in beyond US$90 a barrel.

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Compared to other countries, Trinidad a little above average

Table 4. Global Taxation of Oil Production

	Royalties (% of production)	Production sharing	Income tax rate
Algeria	10-20%	60-88%	Gov. Share
Angola		15-80%	50%
Australia	40%		30%
Azerbaijan	None	50-90%	32%
Brazil			15%
Canada	10-12.5%		31-39% (22.12%)
Chad	12.50%	None	50%
China	Nat. res. Tax		33%
Congo			
Ecuador	12.5-18.5%	None	25%
India			42%
Indonesia		75-90%	30%
Kazakhstan	Up to 20%	Negotiable	30%
Kuwait			
Libya	16.67%	5-90%	None
Malaysia	10%	50-70%	38%
Mexico	None	None	35%
Nigeria	0-20%	20-65%	50-85%
Norway	50%		28%
Oman	None	77.5-80%	None
Qatar	None	35-90%	Gov. Share
Russia	16.50%	Applicable	exp. Tax
Saudi Arabia			
Trinidad and Tobago	12.50%	Variable	50%
UAE			
UK	12.5%	None	40-70%
US	15% average 1/	None	35%
Venezuela	30%	None	50%
Vietnam	6-25%	65-80%	Gov. Share
Yemen	3-9%	50-86%	None

Source: various, mainly from government information publications
1/ On Federal land. Complex calculation, States also charge

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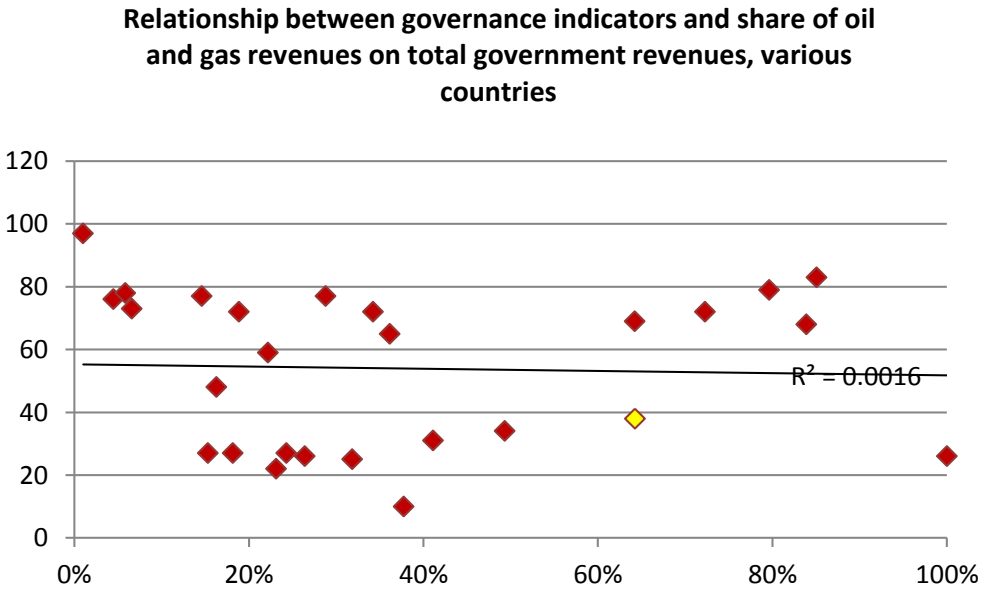
But investors care more about political stability than tax take

- Studies show that onc a tax rate is agreed, investors prefer stability.

- No relationship between tax take and political stability or governance indicators



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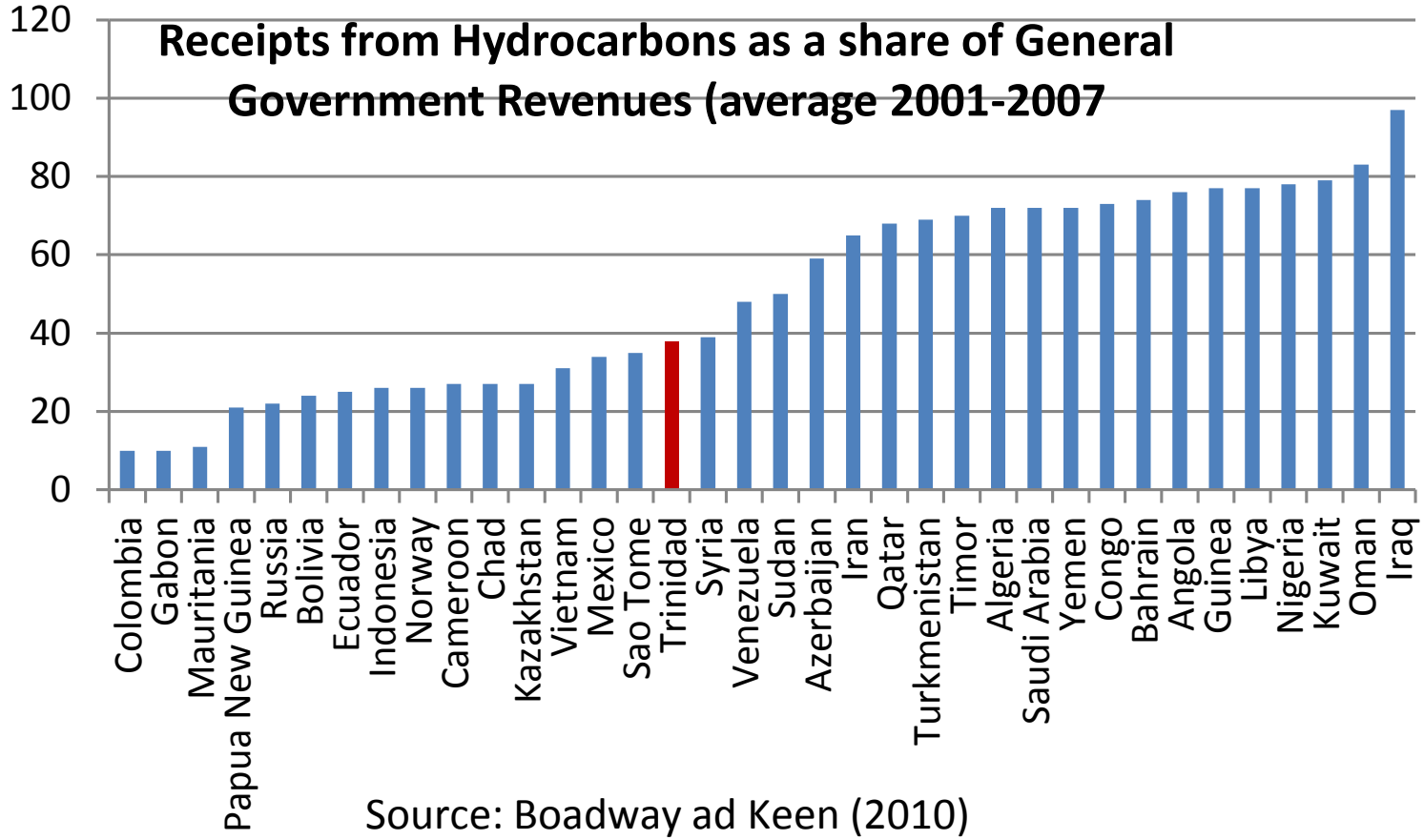
In terms of revenue collection, Trinidad is about average



Source: Boadway ad Keen (2010)

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Special circumstances to take into account when taxing hydrocarbons

- High sunk costs and long production periods.
  - Creates a time-inconsistency problem
- Exhaustability: when to leave in ground.
- In theory government should try to tax resource rents. But full cost of resource exploitation has to include cost of unsuccessful exploitation as well.
- Uncertainty about geology and global markets (i.e., shale gas discoveries)
- Asymmetry of information
- International considerations: tax of host country of company and other places—complicated by transfer pricing practices

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…and even more considerations pertaining to gas for tax purposes

- Difficult to separate some production costs between oil and gas (such as maintenance).
- Not having specific terms in spot markets makes government's job difficult.
- Supplemental gas is sometimes less profitable. Sale contracts usually do not offer parity with oil—sometimes a 28% discount. Trinidad&T, like a few other countries (Egypt, Indonesia, Malaysia, Nigeria) tries to take this into account, by exempting gas from certain taxes.

Try to establish taxation based on reasonable gas prices

- Most gas export sales are under long-term (20-30 year) contract, and the terms of sales agreements reflect numerous factors. (level of tariffs which are charged by the owners of the shipping; regasification and pipeline costs (which in turn depend on alternative supply, link, distances operating costs, etc.---FERC established guidelines for reasonable rates of return).

- TT could also develop project-level tax regime based on profitability of project.

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What literature advises to consider when setting up taxes

- A well designed tax system should also enhance transparency.
- Rent taxes should be kept simple.
- Governments should strive to make the system neutral, in other words, the taxes should not affect decisions of exploration, abandonment and timing.
- In addition to offering a standard tax regime for oil, considerations about the bidding processes are important.
- Global downward trend of corporate income taxes due to capital mobility has also been evident globally in recent years for natural resources. Even though the resource is immobile, income is just as mobile.

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Trinidad in general takes into considerations good taxing practices, but..

- Companies and tax bills should separate oil and gas revenues if possible (not done now)
- Use SPT and petroleum levy for skills training and retooling (just have one price-sensitive levy).
- Customs and VAT concessions should be transparent and not project-based.
- Possibly implement Fiscal Stability clauses with contingencies
- Instead of providing non-transparent incentives for downstream industries, offer quid-pro-quo infrastructure construction incentives.

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Good Management of Heritage Stabilization Fund is key.

HSF + conservative price assumptions for budget is a good system, but clearer rules would help

What could work better:

- Clearer rule for when to draw down ‘on the margin’ (dis-savings should be exception—depends on rate of return of borrowing).
- Strategy for when to withdraw should make economic sense (for example, large infrastructure project could justify withdrawal if investment capacity is there)
- Holistic approach: more savings should also include more efficient expenditures on transfers and subsidies
- Transparency: Rules with contingent ‘exit clauses’ should be followed and publicized as much as possible (example of Chile)

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Fuel subsidy creates various problems…

- Transfers and subsidies have grown, accounting for 17.7% of GDP in FY 2010/11 in comparison with 12% in FY 2007/08
- Discourages less driving: Pump price per gasoline in about US$1.50, compared to US$3.50 in US).
- Tends to favor wealthy
- Leads to more emissions per-capita: 350 vehicles per thousand population, about the same level as Korea!
- Has created problems for investment of Petrotrin, which may be cash-flow constrained.

Reducing the subsidies will have to be part of a campaign to save for the future.

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…but investment in oil and gas sector still crucial

- New discoveries still possible off the coast of Trinidad—particularly oil
- Properly managed, expertize in oil and gas sector can be used towards the development of new sectors
- Can be tied to infrastructure projects.
- Make it attractive if foreign investors also offer expertize and training of human capital (the real asset).

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Thank you