# Comparative Analyses of Australia's Petroleum Resource Rent Tax (PRRT) and the Resource Super Profits Tax (RSPT)

Emre Üşenmez





## **Background**

In 2010 the Australian Government proposed to replace the existing PRRT by 2012 with an administratively simpler RSPT. This was rejected by the extractive industries which led to the withdrawal of the proposal, and the eventual fall of the Rudd Government. This study examines what would have happened if the RSPT was enacted. Specifically, it aims to answer: under which of the tax regimes a new investor in offshore Australia would have been better off?

RSPT	PRRT
Most capital expenditure written-off over time	Capital expenditure is immediately expensed
Transferable expenditure	Limited transferability of exploration expenditure
Refundability of unutilised expenditure	No refundability of unutilised expenditure
One allowance (uplift) rate for all capital expenditure	Eight uplift rates for capital expenditure

## Methodology

**Deterministic Sensitivity** 

Variables	Values			
				Very
	<u>High</u>	<u>Medium</u>	Low	Low
Oil Price (\$USD)	70	56	42	_
Reserves (million barrels)	250	100	50	25
<b>Development Capital Costs</b>	17.5	15	12.5	10
(\$ per barrel)				
<b>Delay in Commencement of</b>	0	1	2	-
<b>Development Phase (years)</b>				
<b>Development Drilling Costs</b>	50	45	40	-
(% of development capital				
costs)				
Operating Costs (% of	7.25	6.5	5.75	-
accumulated development				
costs)				
Risk-Free Interest Rate	7.5%	6.0%	4.5%	-
Cost of Capital	15%	10%	0%	-

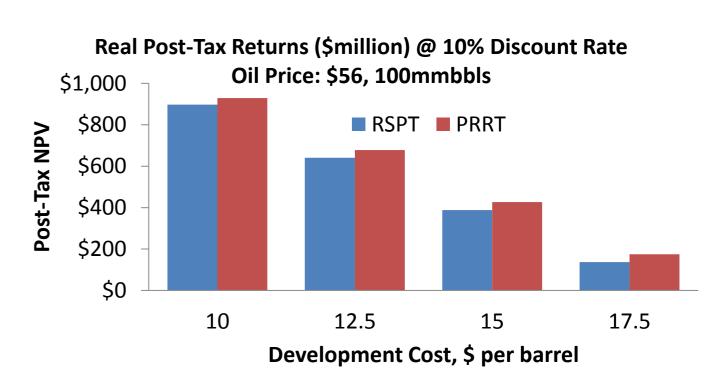
#### **Stochastic (Monte Carlo)**

Variables	Values				Distribution
	<u>Mean</u>	St. Dev.	Min	Max	
Oil Price	56	25%	5	170	Normal, Mean Reverting
Reserves	100	30%	0	Infinity	Lognormal
Development	12.5	10%	5	20	Normal
<b>Capital Costs</b>					
Development	45	5%	1%	Infinity	Normal
<b>Drilling Costs</b>					
<b>Operating Costs</b>	6.5	1.25%	1%	Infinity	Normal
Risk Free Int. Rate	6%	1.5%	1%	Infinity	Normal

#### **Results**

Under almost all of the operating conditions considered PRRT is more advantageous for the investor.

Both regimes are regressive, though the degree of regressiveness is lower under PRRT. This can result in high tax takes as projects become marginal.



In terms of post-tax returns arising from a project at the development stage, an investor is better off under the PRRT regime as it provides a better protection from downside risks.

The results are also consistent when probabilityadjusted full distribution of possible values for the risky variables are considered under Monte Carlo analysis.