



International Mid-Cap Exploration Performance 2008-2010

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RICHMOND ENERGY PARTNERS

Independent, expert research and advice on smaller
oil & gas companies for the investment community

Agenda



- The REP international mid-cap E&P peer group
- Do E&P's create value? - yes
- Exploration drilling activity
- Discovered volumes
- Exploration strategies
- Conclusions



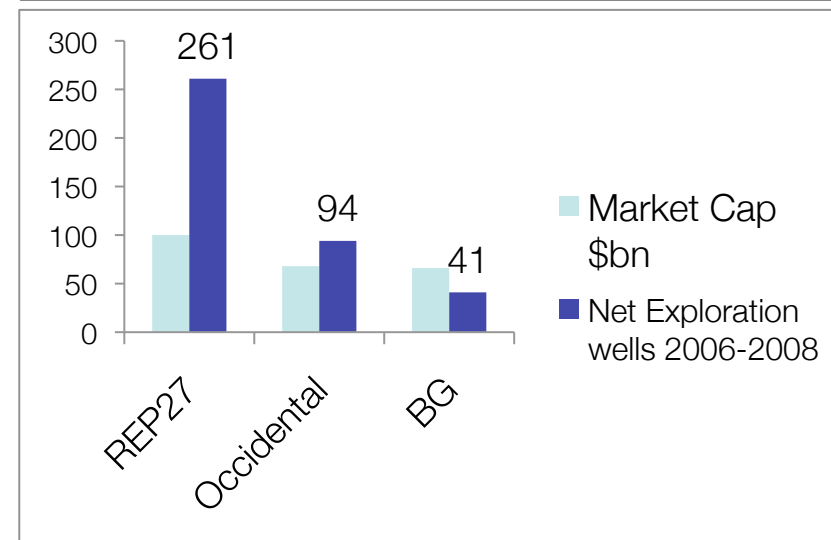
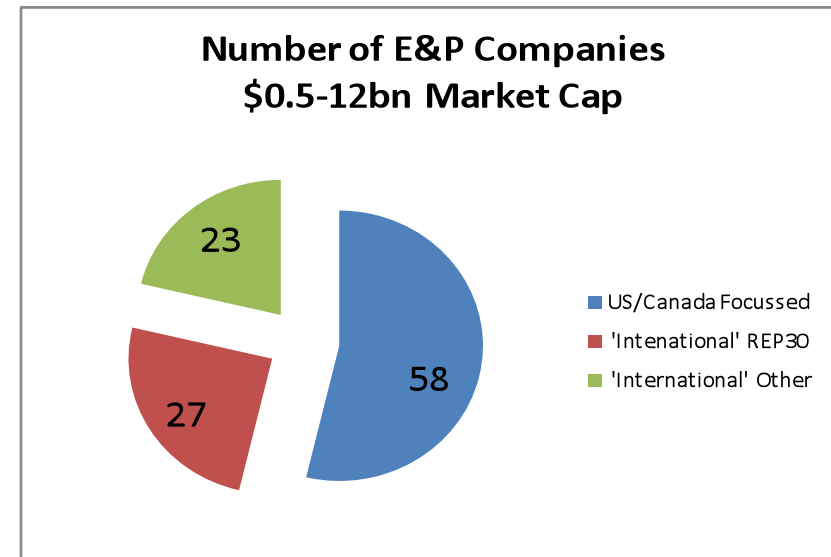
International mid-cap peer group

Peer group of 27 companies

Core group of mid-cap peers 2008-2010 (27 companies)	Afren	Oil Search	Pacific Rubiales
	AWE	PA Resources	Petroceltic
	Beach	JKX	Premier
	Cairn	Karoon Gas	Roc
	Dana	Lundin	Salamander
	Det norske	Maurel & Prom	Santos
	DNO	Melrose	Soco
	Dragon	Niko	Venture ¹
	Gran Tierra	Noreco	
	Heritage		
Additional companies we follow	OGX Tullow		

Current Market Caps:-

- Tullow plus OGX = \$60 bn
- Market cap of 27 others = \$100 bn

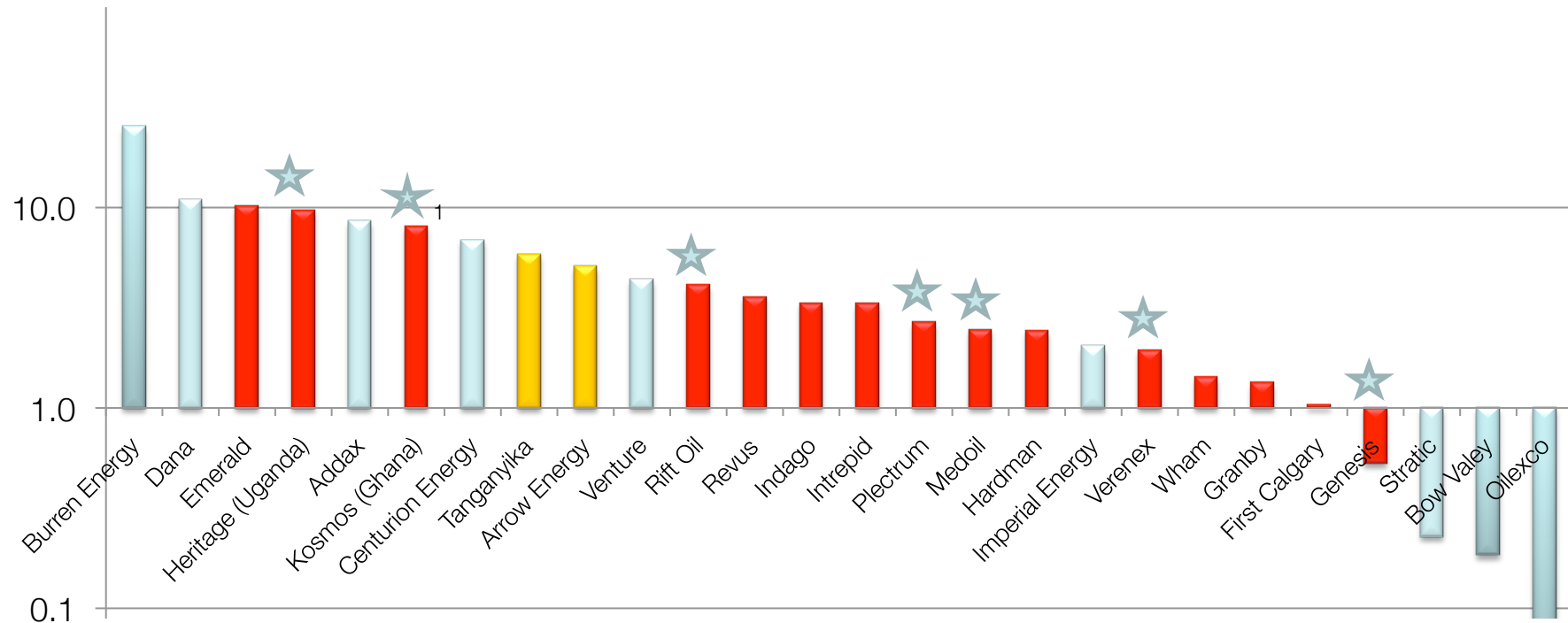


Mid-Cap E&Ps Create Value

Median \$3 returned for \$1 invested



Mid-Cap Corporate Deals 2004-2010
Exit Equity Value Out / Total Equity Capital In



- ★ No production when sold
- Exploration Led
- Unconventionals-Led
- Development/Production Led

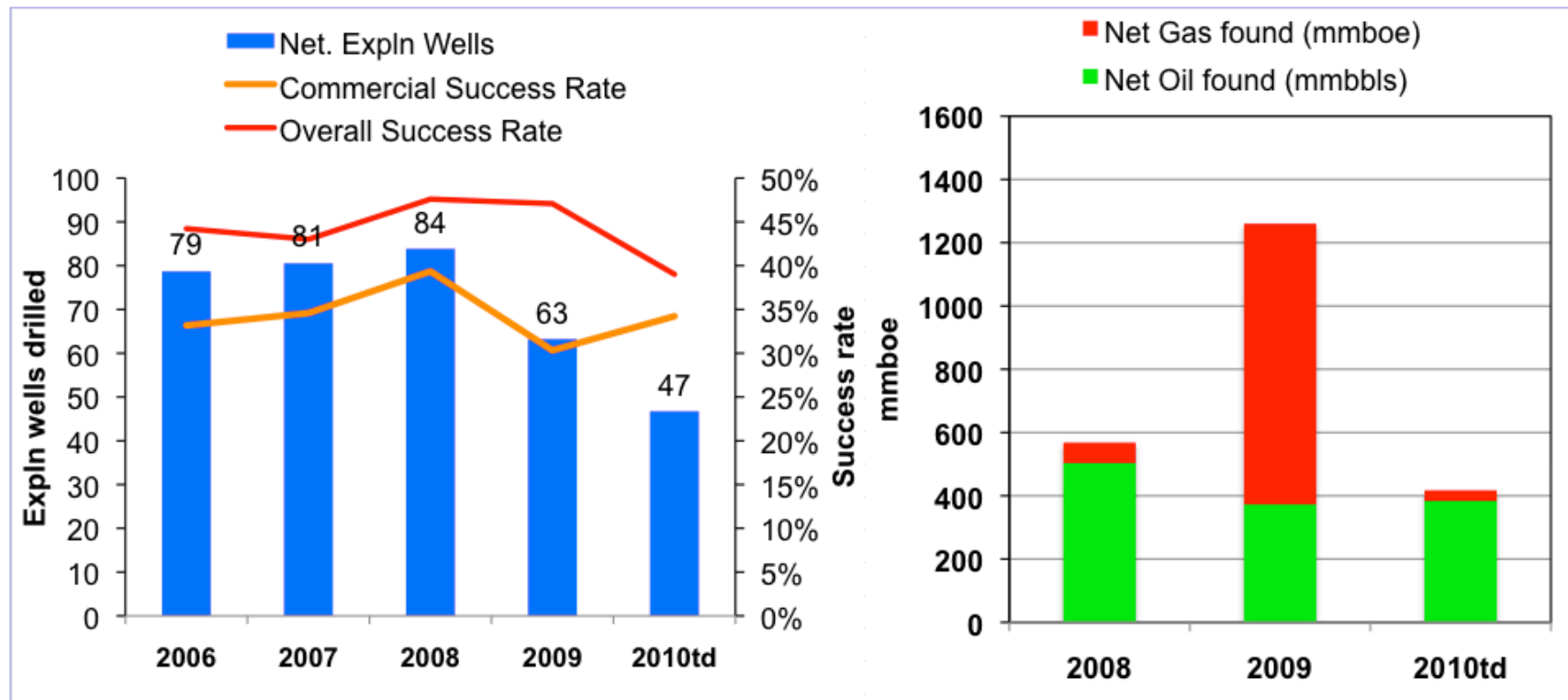
¹ Kosmos deal is an estimate based on Exxon's proposed bid for the company



Drilling activity for the 27 companies

- Activity still below pre-crisis levels

- 2010 activity similar to 2009, but still 20% down from 2008 levels
- Commercial success rate steady at ~1 in 3
- 2010 discovered oil volumes already achieved 2009 total



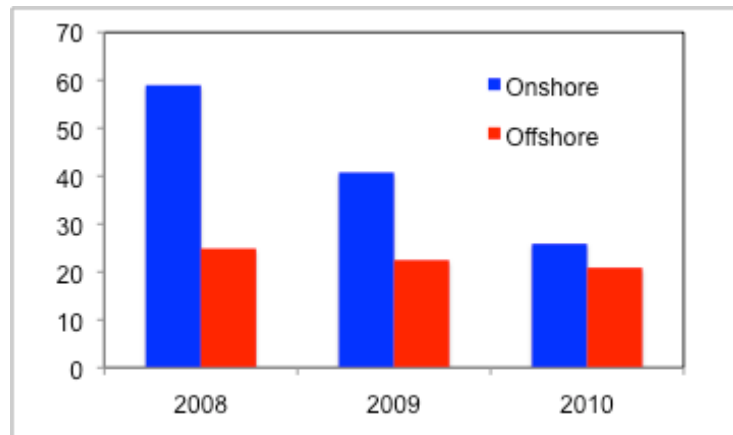
Note Gas exploration in 2009 :Petroceltic in Algeria and Karoon on the NW Shelf



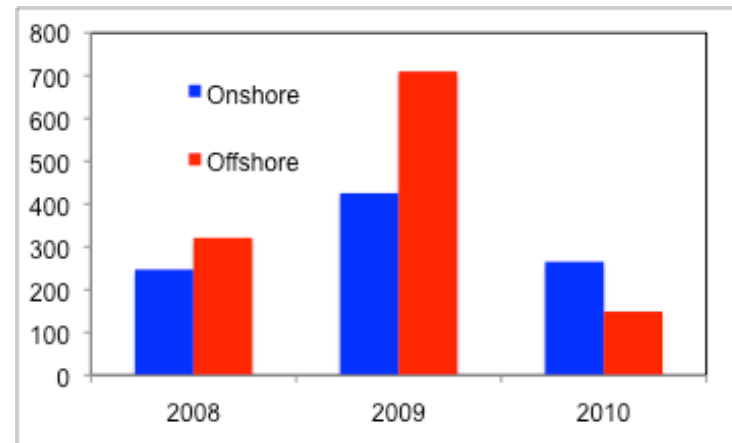
Peer group performance

- onshore and deep water activity declines

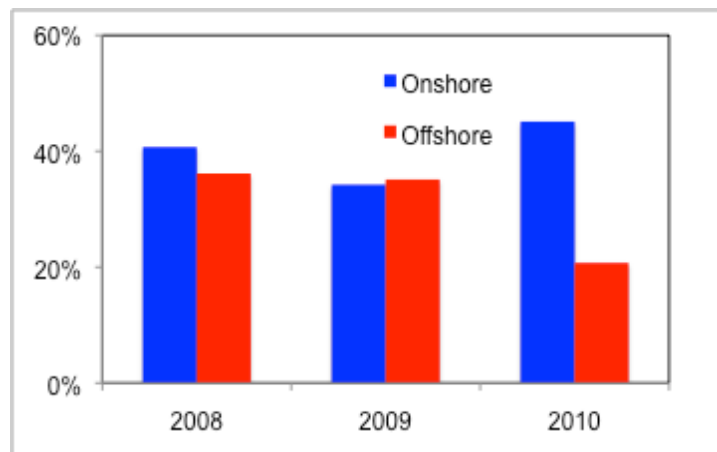
Drilling activity – decline in net wells



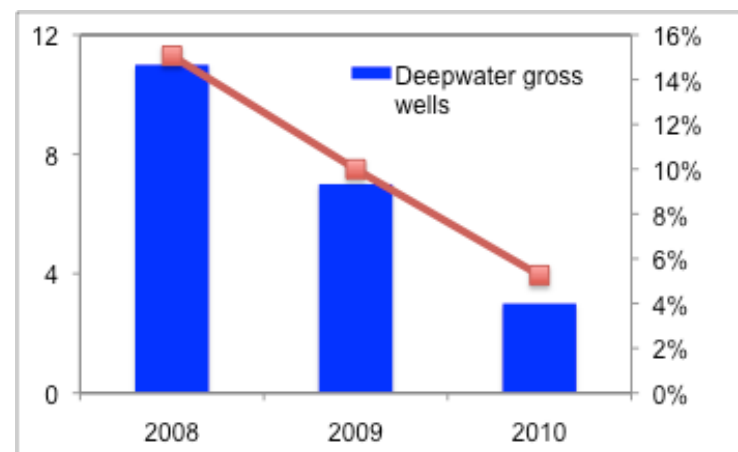
Net discovery volumes – less gas



Success rates – up onshore

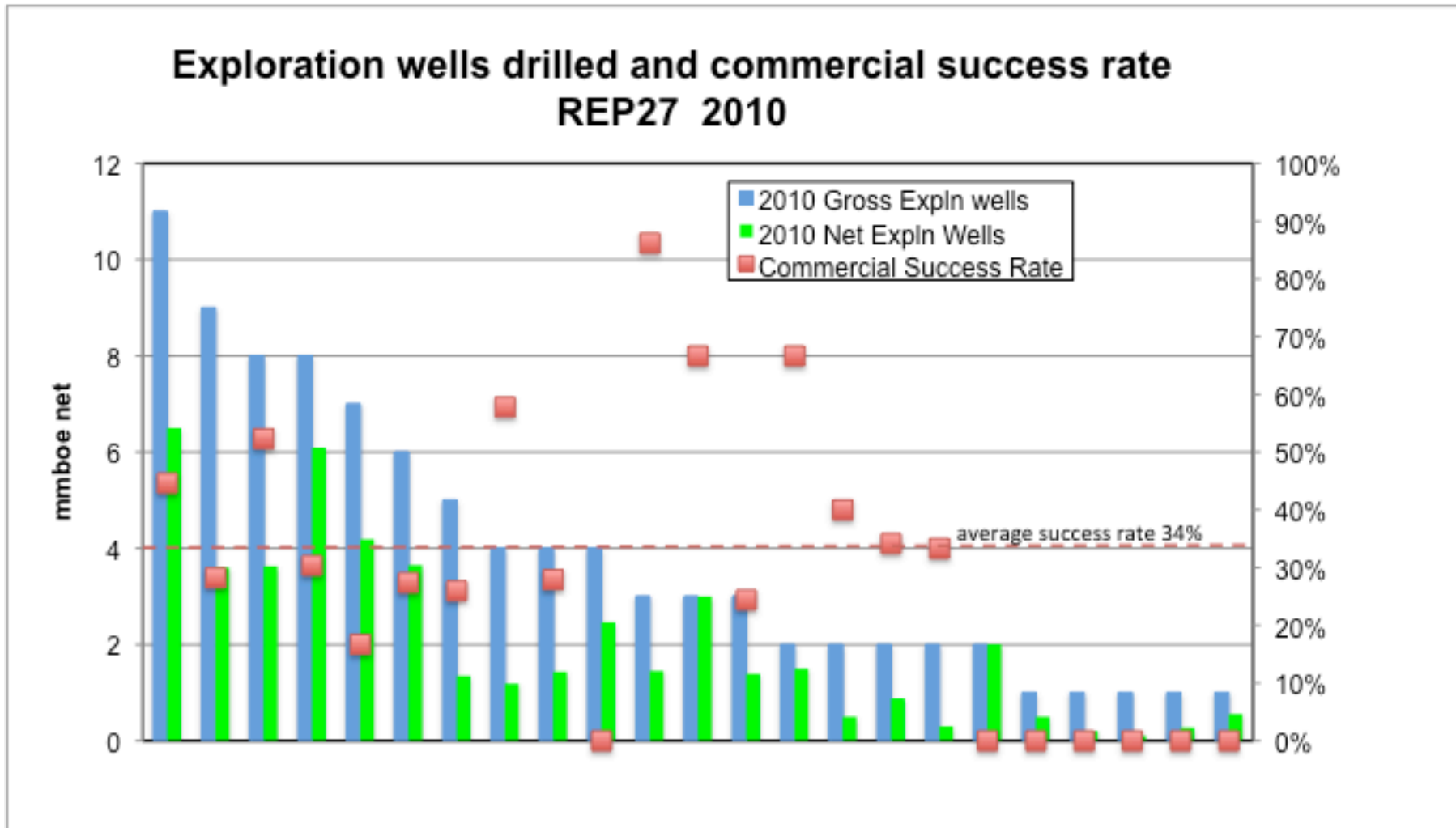


Deepwater drilling activity - decline



A closer look at 2010

- 90 gross wells, 47 net, 34% success rate



For comparison:
From 2008 to 2010, the average REP27 company drilled 5 gross exploration wells and 2.5 net wells p.a.

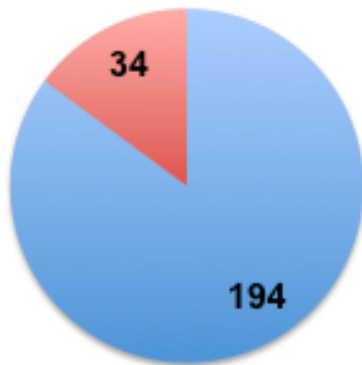
The OGX / Tullow effect



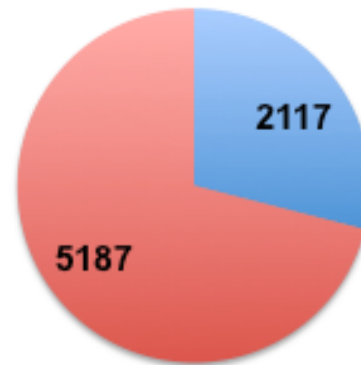
- Extraordinary performance 2008-10

- Tullow and OGX success is on a different scale the other REP27 companies

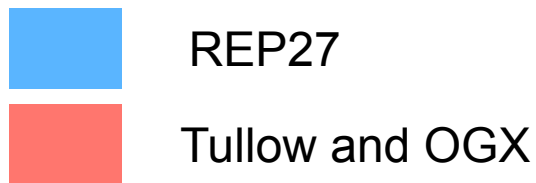
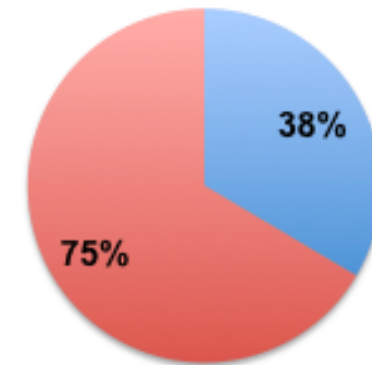
Net wells drilled



Net volumes found mmboe



Commercial success rate



Biggest Discoveries in 2010

14 bigger than 50 million barrels

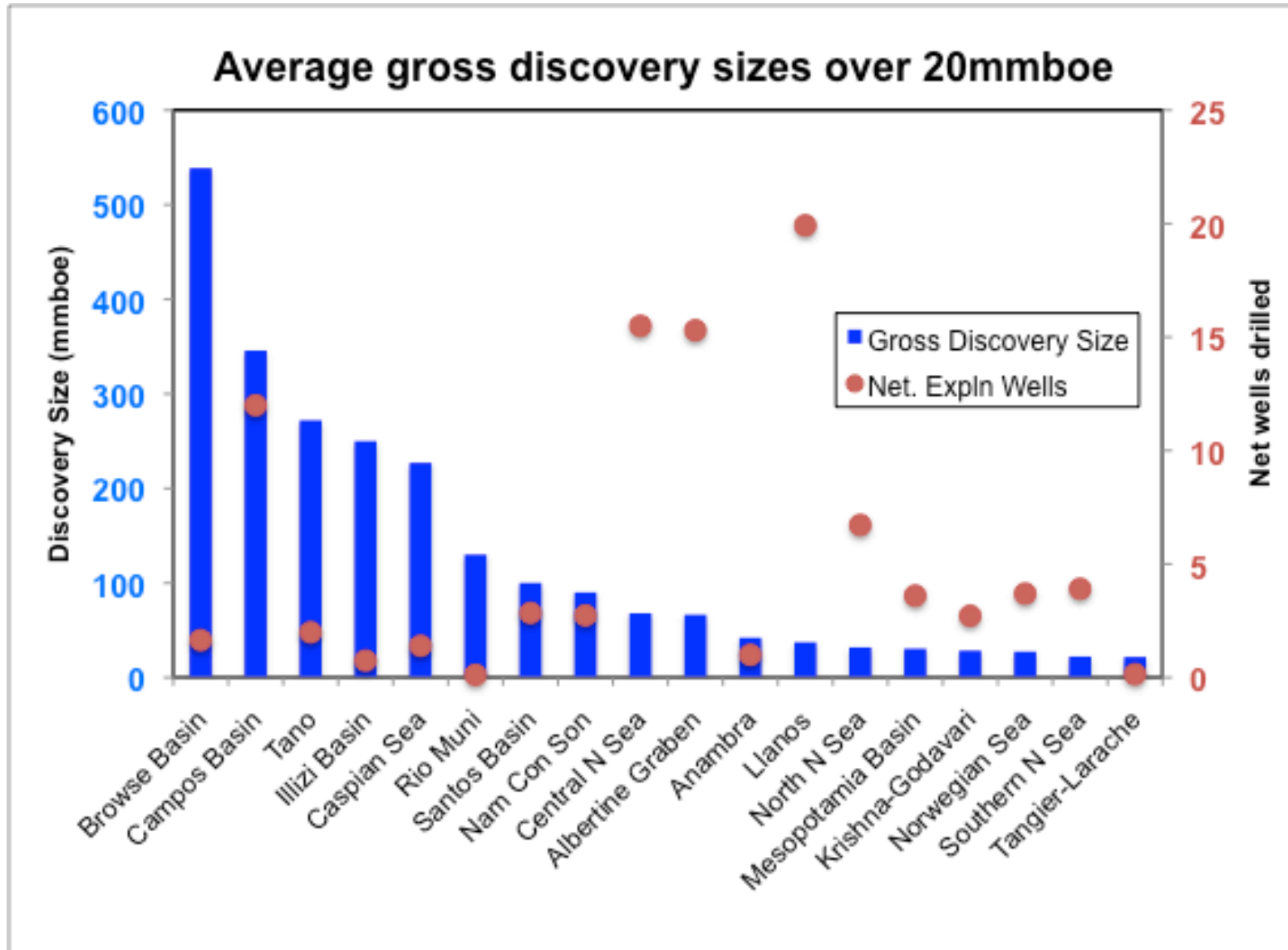


Company	Country	Basin	Well name	Date	Gross 2C Resource mmboe	Net 2C mmboe
OGX	Brazil	Campos	1-OGX-6-RJS Etna	Mar-10	1000*	1000
OGX	Brazil	Campos	1-OGX-8-RJS Fuji	Mar-10	425*	425
Tullow	Ghana	Tano	Owo-1	Jul-10	200	100
Lundin	Norway	Central N Sea	16/2-6 Avaldsnes	Sep-10	230	80
Pacific Rubiales	Colombia	Llanos	Quifa-26X Prospect F	Apr-10	155	93
OGX	Brazil	Campos	1-OGX-4-RJS Kilawea	Jan-10	150*	150
OGX	Brazil	Campos	1-OGX-10-RJS Hawaii	Apr-10	?	
OGX	Brazil	Campos	1-OGX-7A-RJS Huna	Apr-10	?	
OGX	Brazil	Santos	1-OGX-11D Natal	Sep-10	?	
OGX	Brazil	Campos	1-OGX-14 Pero	Sep-10	?	
Premier	UK	Central N Sea	28/9-1, 1Z, SW Catcher	Jun-10	80	26
OGX	Brazil	Campos	1-OGX-5-RJS Krakatoa	Jan-10	60*	60
OGX	Brazil	Campos	1-OGX-18 Inga	Sep-10	?	
Pacific Rubiales	Colombia	Llanos	Quifa-24X Prospect Q	Apr-10	58	35

* Discovered resources are mid-point or 2C volumes released by the company

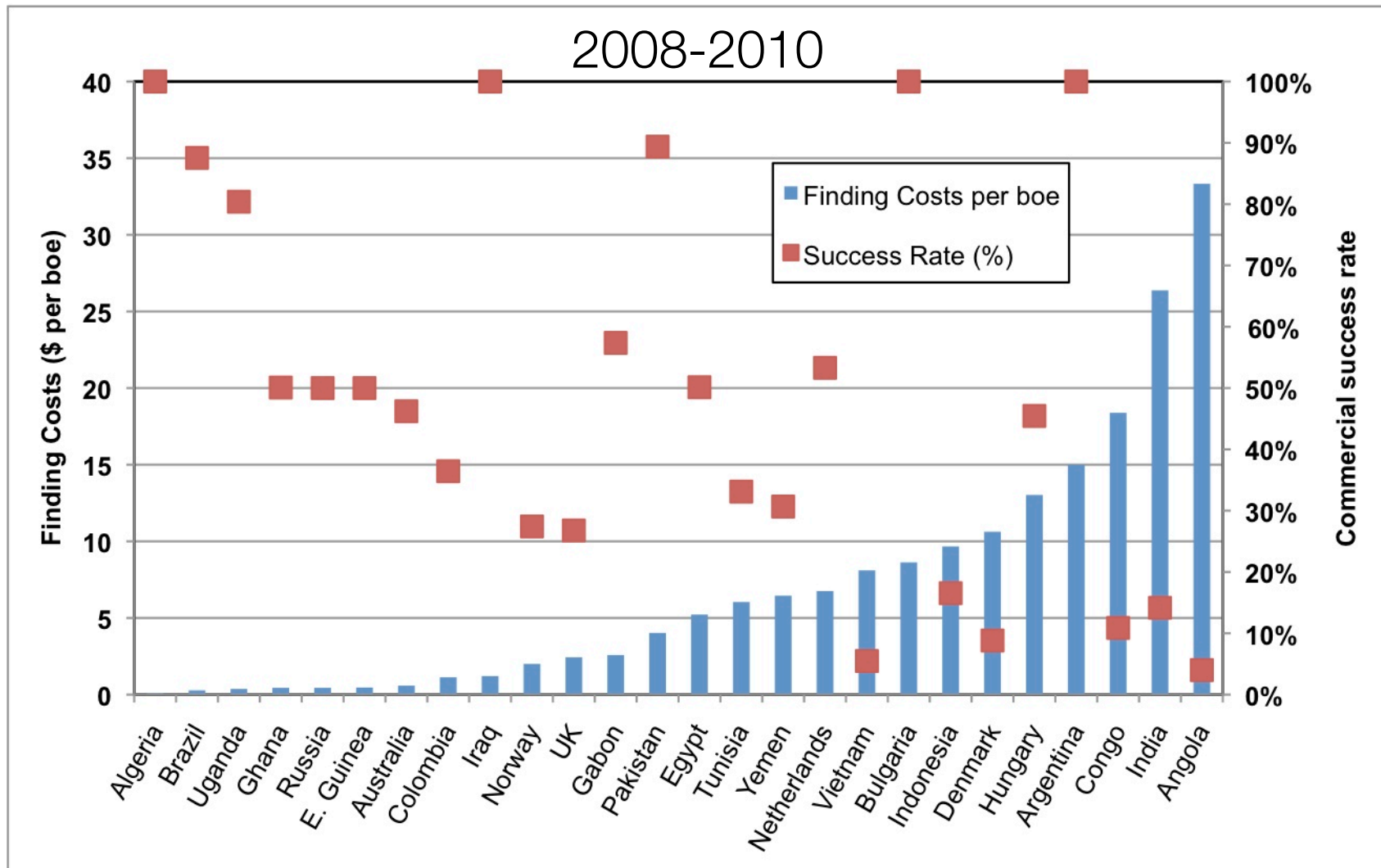
Exploration Hot Spots 2008-10

The biggest finds by basin



Finding Costs – overall \$1/boe

Country range \$0.1- \$33/boe





Norway – UK compared

Norway less mature, UK small cap thrive

Country	Net wells drilled 2008-10	Commercial success rate	Net volumes discovered mmboe	Av discovery volumes per well drilled	Average discovery size	Estimated pre-tax finding costs
UK Mid Caps	12	27%	100	8.2	30.7	2.1
UK Small Caps	11	26%	81	6.0	29.2	2.3
Norway	18	27%	269	15.0	54.5	2.0

Success rates are the same but:

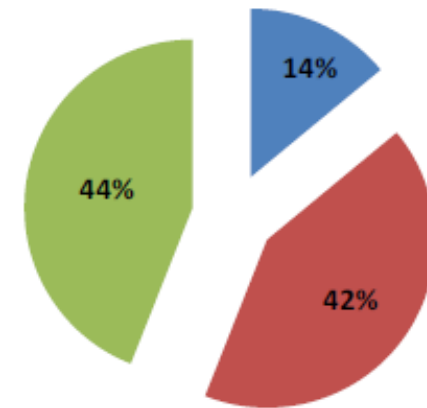
- Larger discoveries in Norway and lower finding costs
- UK small caps do a little better than larger peers



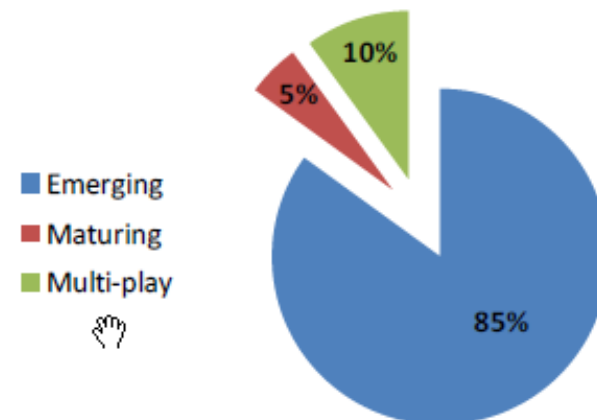
Company strategies

- Emerging play explorers
 - Most successful (volumes and success rates)
 - Hot areas were:
 - Albertine Graben, Uganda; Tano Basin, Ghana; The Zagros, Kurdistan; Campos basin, Brazil
- Maturing/Mature play explorers
 - Judging position on creaming curve is critical
 - Only 2 of 14 E&Ps discovered > 50 mmboe
 - Those focused on a particular region tend to perform better
- Multi-play explorers
 - Lowest success rates, generally
 - Low drill-out rates coupled with geologic diversity appears not to help

Wells



Discovered volumes



Conclusions



- E&P Companies continue to create value from exploration
 - Overall finding costs c. \$1.00/boe
- Macondo effect on mid-caps limited as they don't drill many deep water wells
- Decline in conventional drilling onshore
 - Australia and Yemen maturing
 - Where is the next onshore growth province ?
- The small & mid-cap sector is thriving but why has activity not recovered to pre-crisis levels ?

Further Reading



MULTI CLIENT REPORT:

Mid Cap E&P Exploration Performance
2008-2009; 2010 Update

Available Now

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