

Impact of the Oil Markets on the Marine Industry



New York Energy Forum – Devan King
December 2010

Agenda

- Setting the Stage – Oil Production & Tanker Markets
- The Changing Demand Landscape – Rise of East of Suez Markets
- Role of Oil Price on Tanker Markets
- Outlook & Conclusions

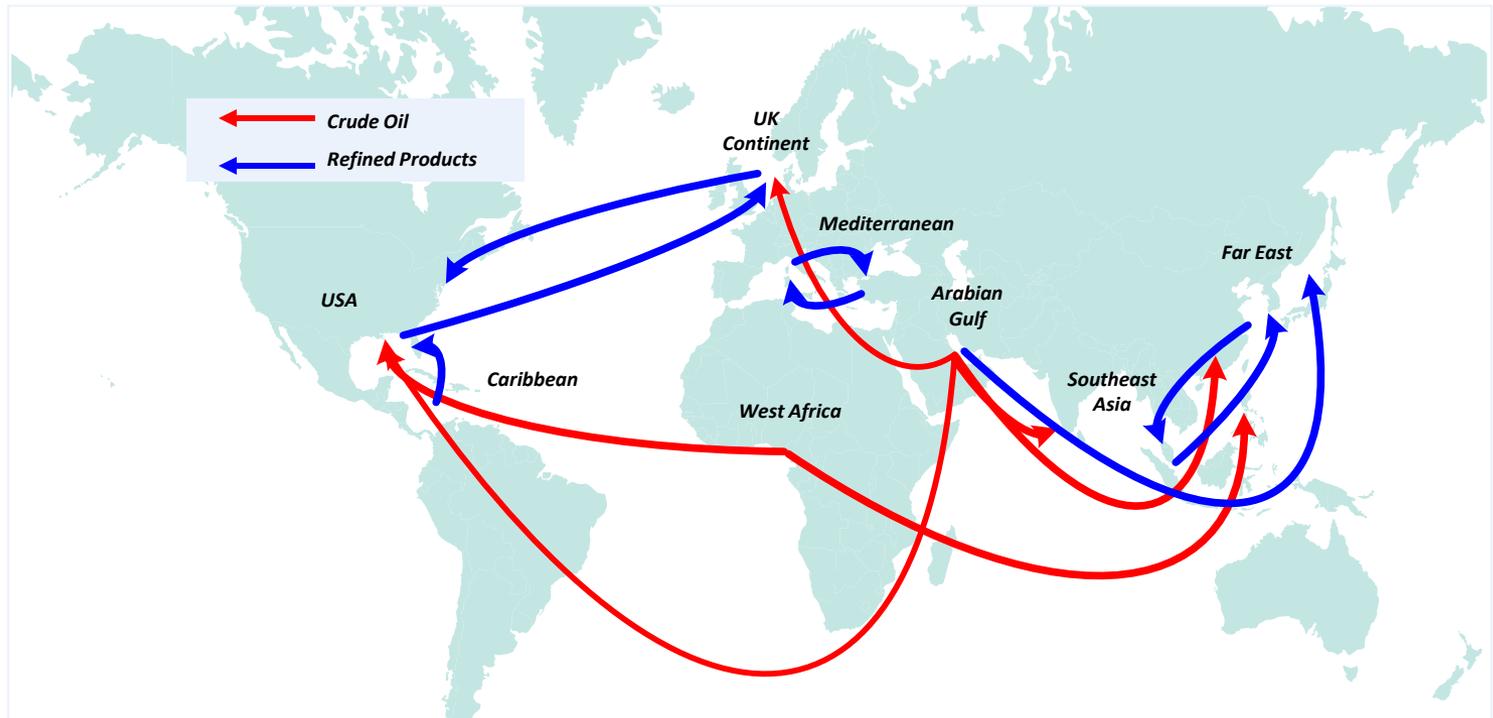




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Setting the Stage – Oil Production & Tanker Markets

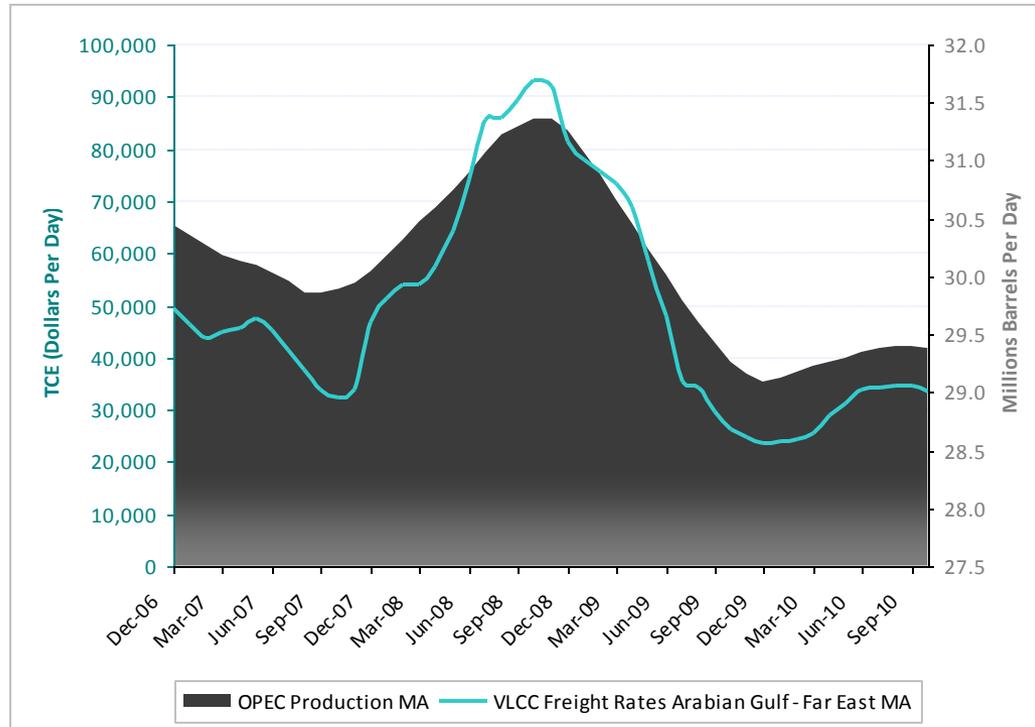
Major Trade Lanes



Size	Deadweight Tons	Standard Vessel (DWT)	Crude Oil Capacity (Bbl)	Clean Product Capacity (Bbl)
VLCC	200,000 +	300,000	~2.0 million	
Suezmax	120,000-200,000	164,000	~1.0 million	
Aframax/LR2	80,000-120,000	105,000	~585,000	~750,000
Panamax/LR1	60,000-80,000	72,000	~365,000	~500,000
MR	37,500-60,000	47,000	~275,000	~310,000
Handysize	25,000-37,500	37,000	~220,000	~255,000



Setting the Stage – Oil Production & Tanker Markets



Source: EIA, Poten & Partners

- Historical OPEC crude production and the VLCC benchmark voyage of the Arabian Gulf to the Far East are strongly correlated illustrating the sensitivity of dirty tanker rates to OPEC crude oil supply
- Over two-thirds of the barrels produced in the Arabian Gulf are transported to regions of consumption by tankers



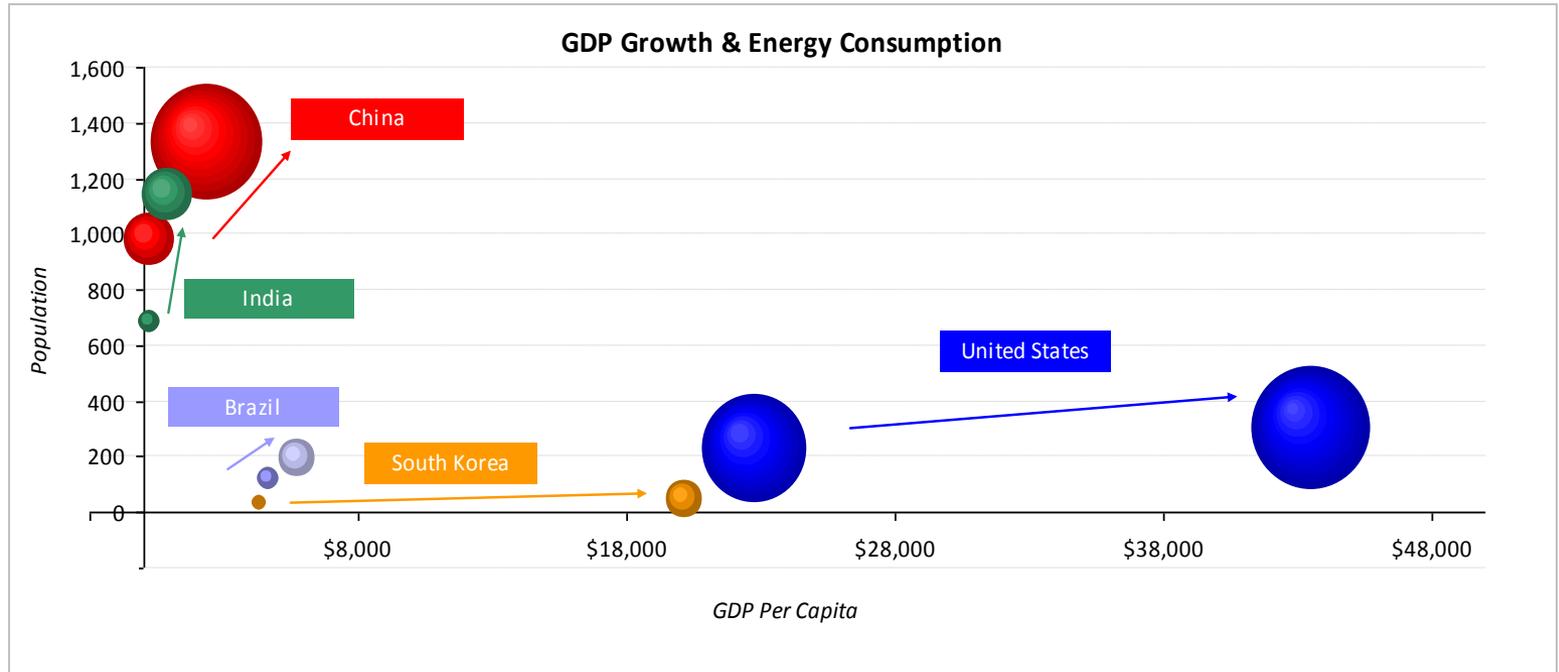


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The Changing Demand Landscape – Rise of East of Suez Markets



Changing Energy Landscape

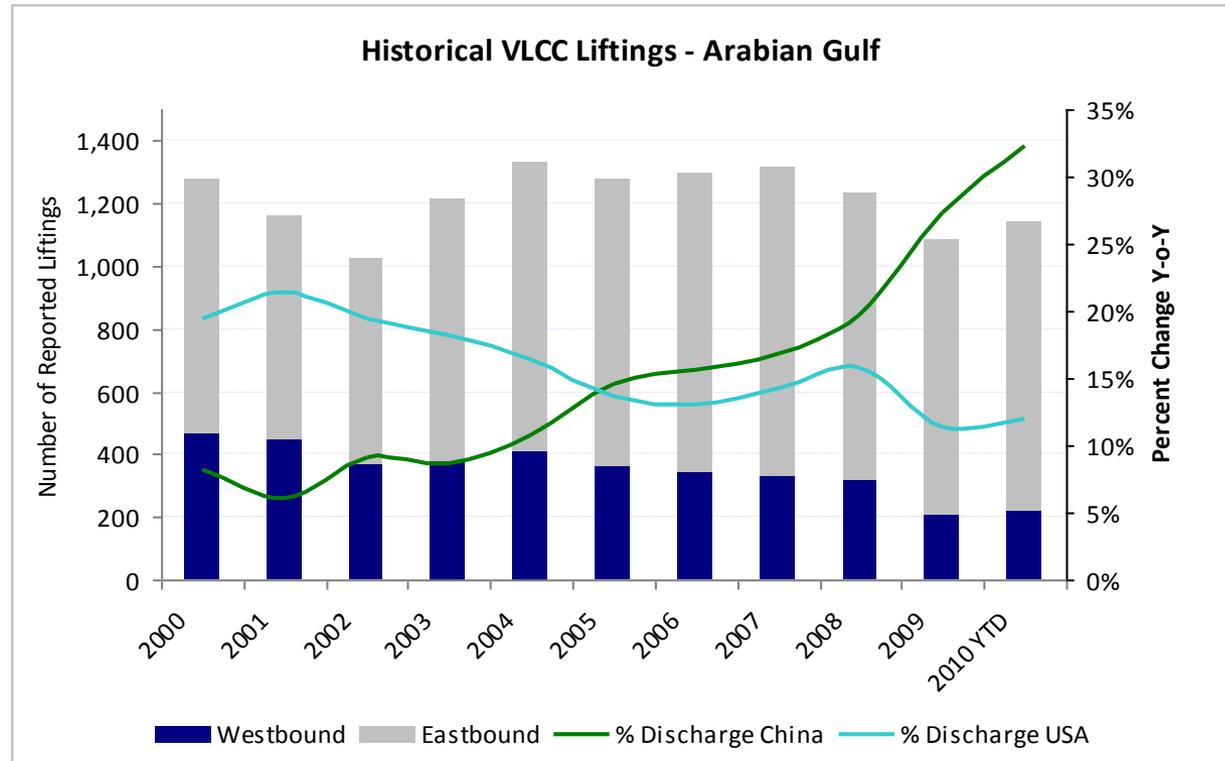


Source: BP Statistical Review of World Energy, IMF, Poten & Partners

- Compares GDP per capita in 1980 versus GDP per capita in 2008
- Size of the bubble shows total primary energy consumption in million tons oil equivalent
- China's total primary energy consumption expanded by an average of 5% y-o-y over the period but 11% y-o-y between 2003 and 2009



Structural Shift in the Tanker Market



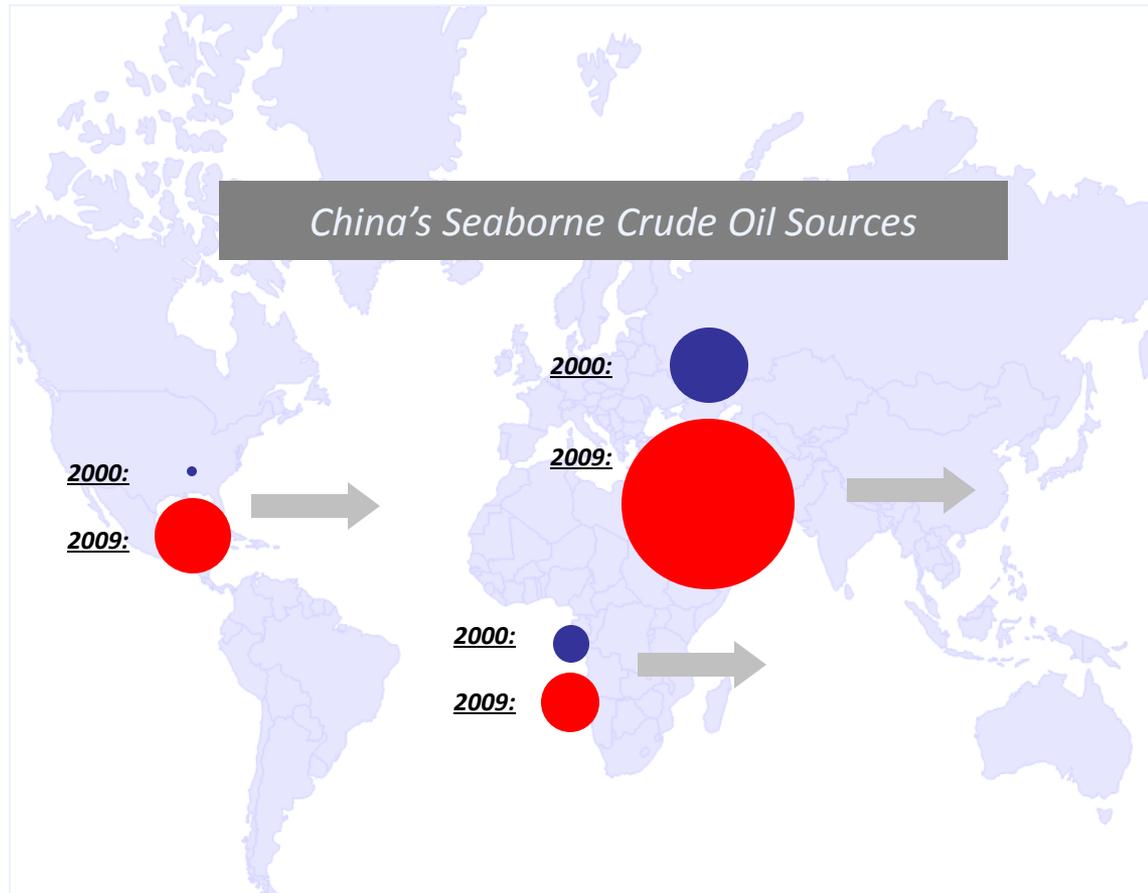
Source: Poten & Partners

- Economic growth in East of Suez markets is driving a structural change in the tanker market
- Westbound cargoes from the Arabian Gulf have been on the decline for the past decade, replaced by Eastbound cargoes
- The number of cargoes destined for China in 2010 YTD is 14 times greater than the level seen in 1995



Crude Oil Trade Flows to China

- Arabian Gulf suppliers have provided over 70% of imports since 2005
- Growing relationships with Atlantic Basin crude oil suppliers will drive tanker ton-mile demand



Source: Poten & Partners

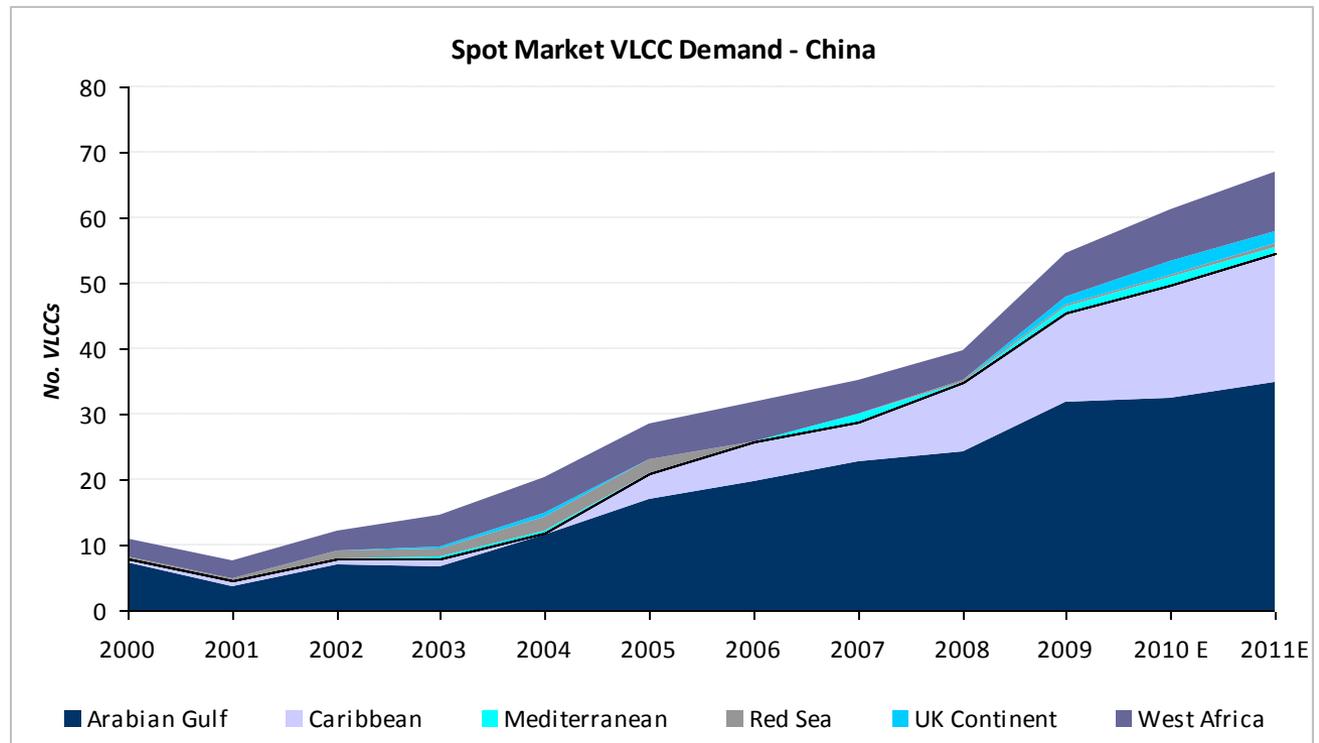


China Factors Driving the Global Tanker Market

- Strong growth in oil demand, resulting in:
 - Reliance on imported crude oil
 - Development of relationships among range of suppliers
 - Expansion of global reach
 - Structural changes to refining business
 - Overall growth in refining sector
 - Consolidation into larger state-run entities
 - Commitment to shipowning
 - Focus on growing size of controlled fleet
 - Estimate that nearly 40% of cargoes bound for China are on Chinese-controlled tonnage



Chinese Annual VLCC Demand



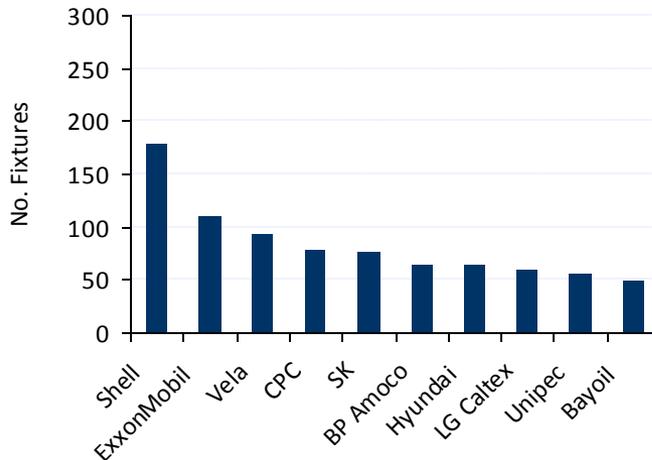
Source: Poten & Partners

- Chinese VLCC spot chartering program equivalent to 11 VLCCs in 2000
- Five-fold increase in size of chartering program to nearly ~55 VLCCs in 2009
- Estimate of reported VLCC spot requirements are over 60 ships in 2010
- Will likely grow by 10% next year
- Noteworthy growth in Atlantic Basin import volumes

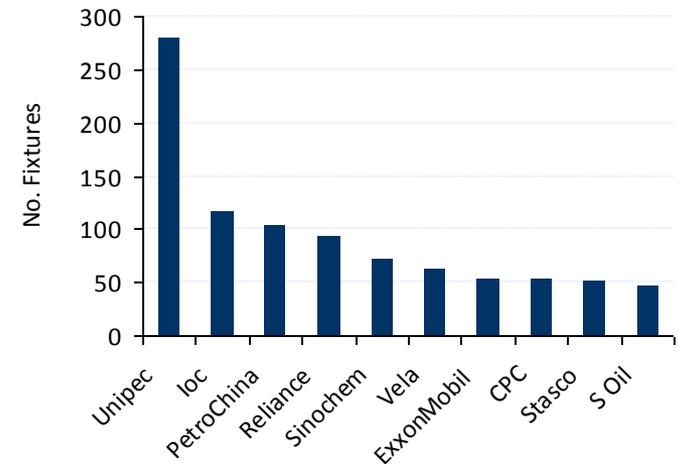


Top Ten Spot VLCC Charterers

Top VLCC Spot Charterers - 2000



Top VLCC Spot Charterers – Past 12 Mo.



Source: Poten & Partners

- 1,676 fixtures reported in past 12 months, compared with 1,838 in 2000
- Between Nov 2009 and Oct 2010, top ten charterers accounted for 55% of total VLCC fixture activity
- Role of Asian charterers in VLCC spot market has increased significantly over past decade
- Unipeac alone responsible for 280 VLCC fixtures, or over 16% of reported spot market over past twelve months

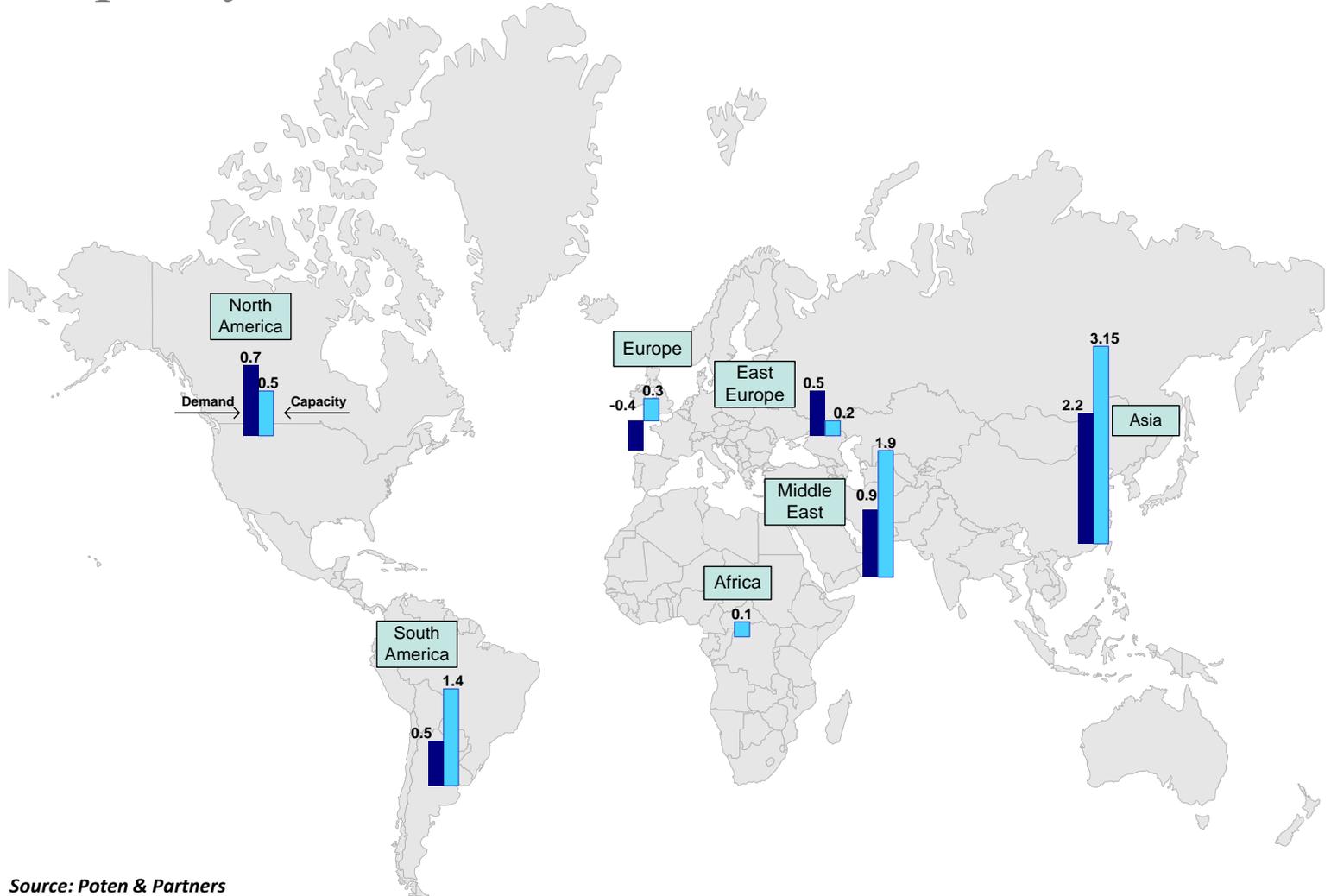




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Role of Oil Price on Tanker Markets

Changes in Global Demand & Net Refining Capacity 2011 - 2015



Source: Poten & Partners

- Geographic dislocations exist between key refining and demand centers
- These imbalances will continue to drive product tanker demand



Reported Spot MR Fixtures - 1986



Source: *Poten & Partners*

- Very limited trade routes
- 716 total reported spot market fixtures
- Even distribution amongst Caribbean, North Sea and Arabian Gulf as load regions



Reported Spot MR Fixtures - 2008

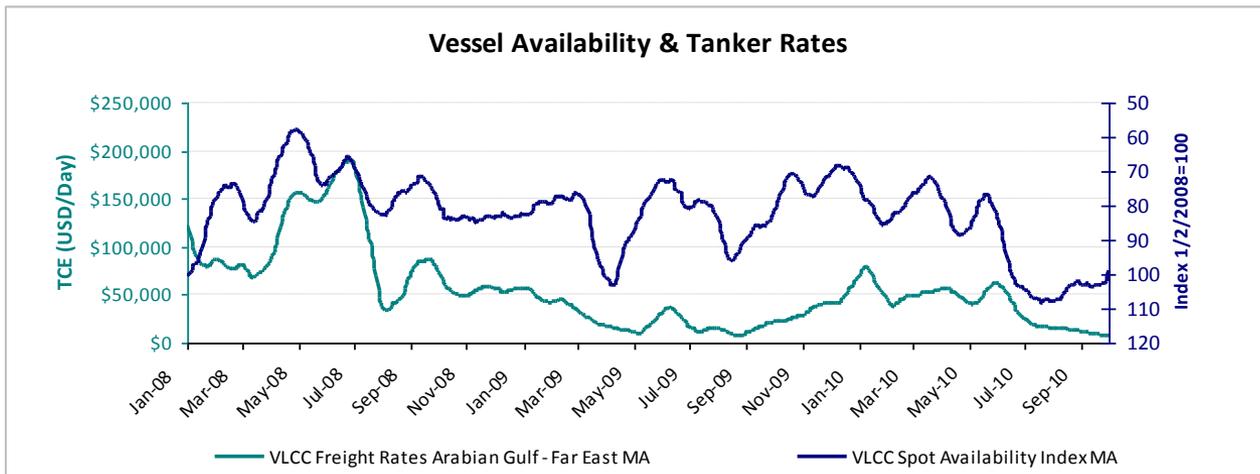
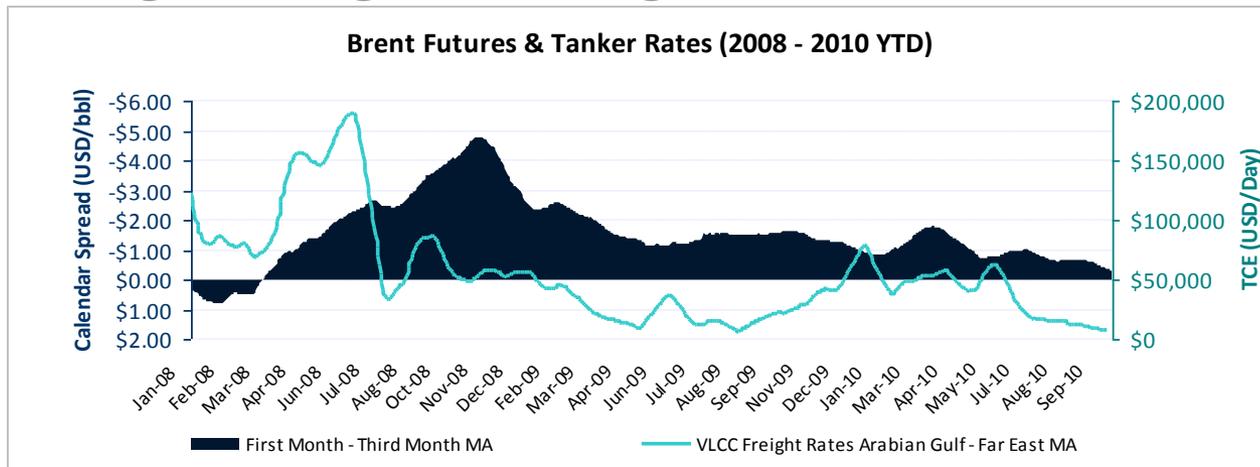


Source: Poten & Partners

- Growing role of traders in the tanker market contributed to the development of ton-mile demand
- Over 3,000 reported spot market fixtures and increased complexity
- More activity originating in the East



Floating Storage & Freight Rates



Source: Poten & Partners, Bloomberg

- When the contango in crude oil prices was the widest, barrels of crude oil in floating storage exceeded 60 million
- Storage employment removes vessels from the trading fleet, strengthening market fundamentals and lending support to freight rates

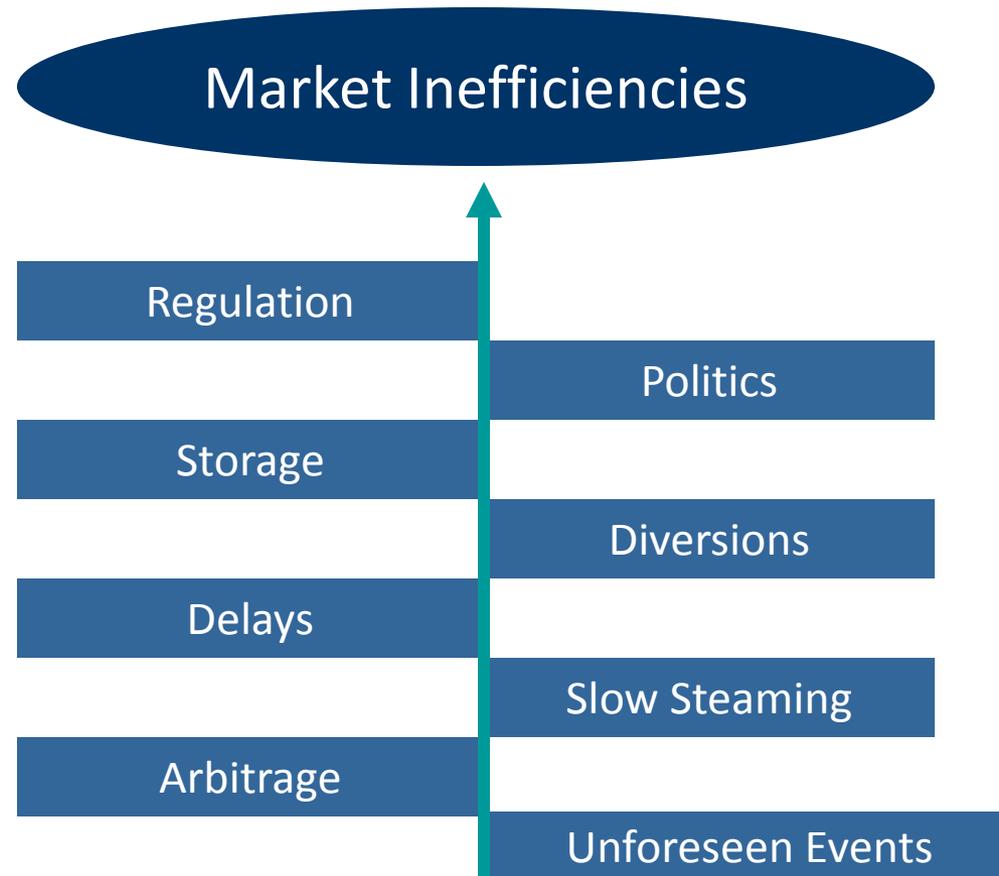




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Outlook & Conclusions

Drivers of the Tanker Market



- Market inefficiencies affect vessel demand to varying degrees
- Aided in buoying freight rates during the first half of 2010



Outlook

- The tanker market tracks closely with OPEC production as increased volumes for seaborne trade drive tanker demand
- The past ten years have seen a structural shift in the tanker market as East of Suez demand growth outpaces traditional West of Suez demand
- Recovery in U.S. demand will be consumer driven and contribute to overall recovery in worldwide petroleum demand
 - Employment levels and consumer confidence directly impact consumption habits
- China will continue to be a substantial driver of growth in crude oil trades
- East of Suez refining projects loom on the horizon creating potential for shifts in clean and dirty trading patterns
- Changes in oil prices impact shipping markets in a variety of ways
 - Consumer behavior
 - Floating storage plays
 - Introduction of market inefficiencies with the increased participation of traders



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