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Overview of the Freight Derivatives Market

Nikos Nomikos
Director MSc in Shipping, Trade & Finance

Developments in the Freight Derivatives Markets

- Growth of the paper market on Shipping Freight
  - due to high levels of freight rates and high volatility
- Extensive use of risk management techniques and instruments
  - increase in trade sophistication
  - use of options in trading strategies
- Entrance of new players in the shipping markets
  - trading houses and energy companies as well as investment banks and hedge funds
- "Commoditization" of Shipping Freight

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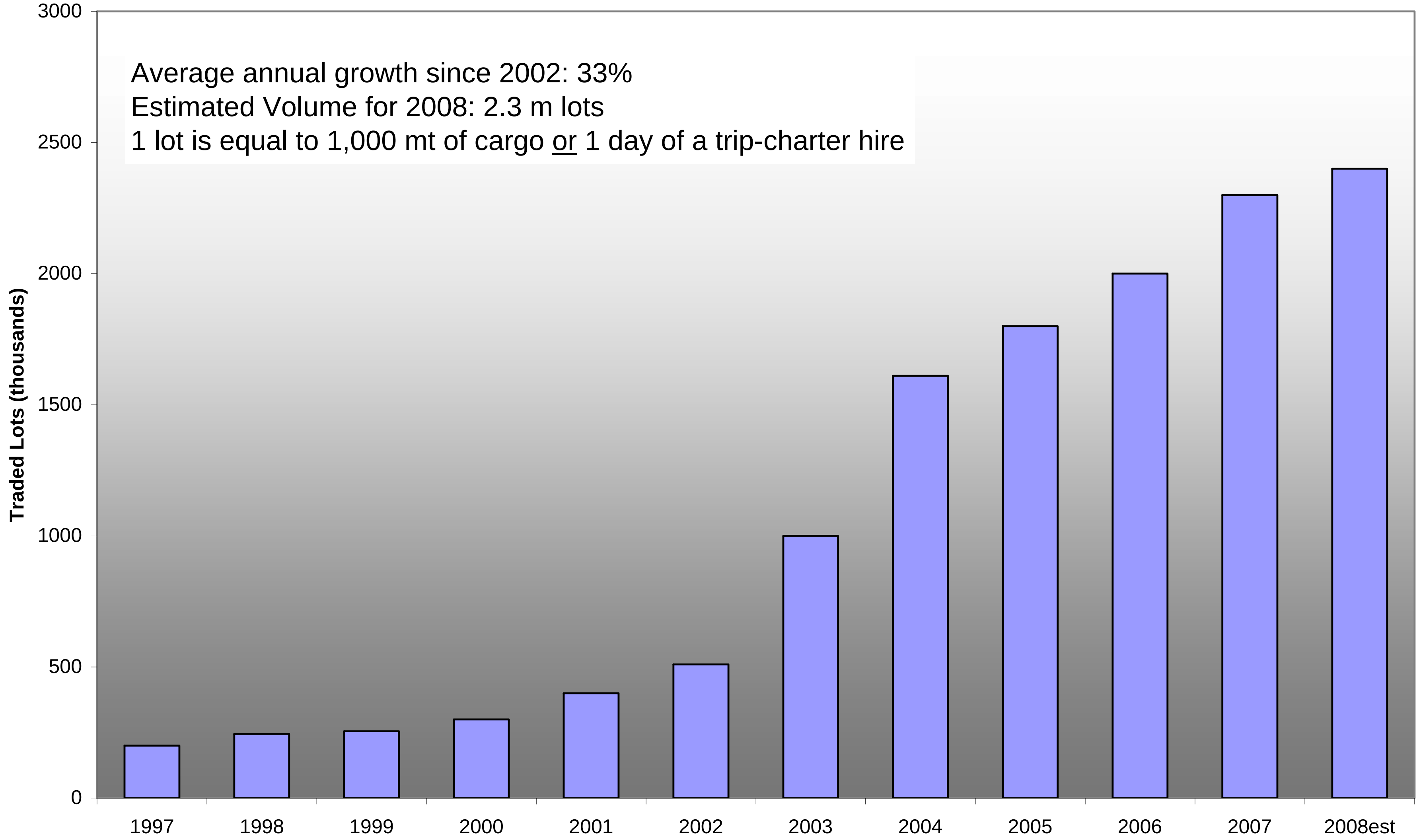
Dry FFA Volume



Source: FIS and Baltic Exchange

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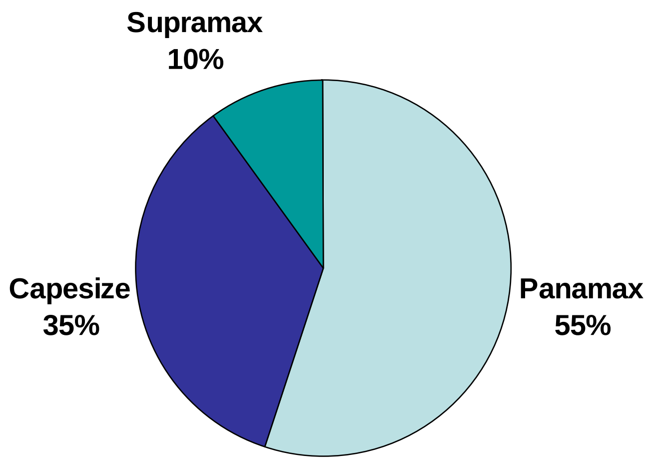
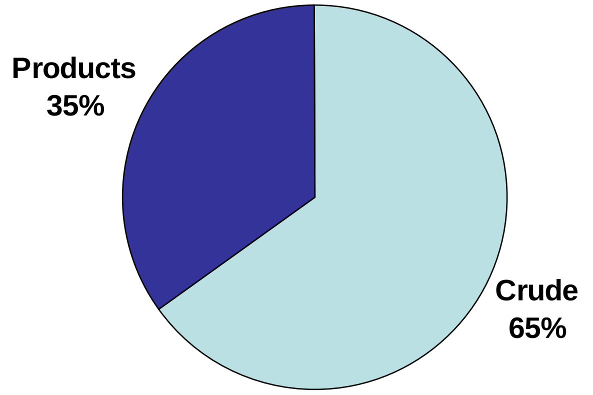
FFA Volume –Composition of Trades

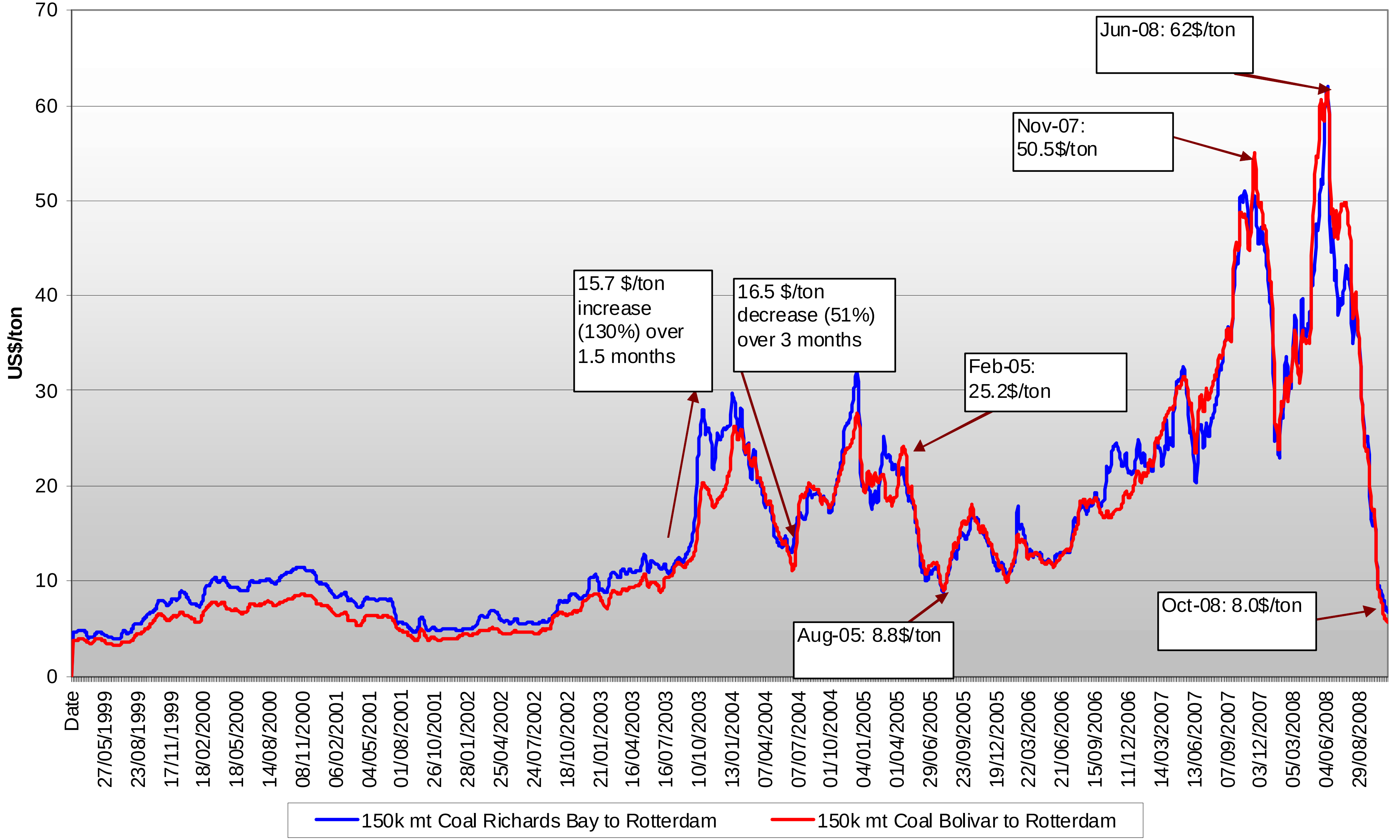
- Dry Market
  - Volume for 2008 (est): 2.3 m lots
    - panamax and capesize volume corresponds to two times the underlying physical base of the fleet
  - 60% of trades for 2008 are cleared
    - For Sep and Oct 08 75% of traded contracts were cleared reflecting the tighter credit conditions



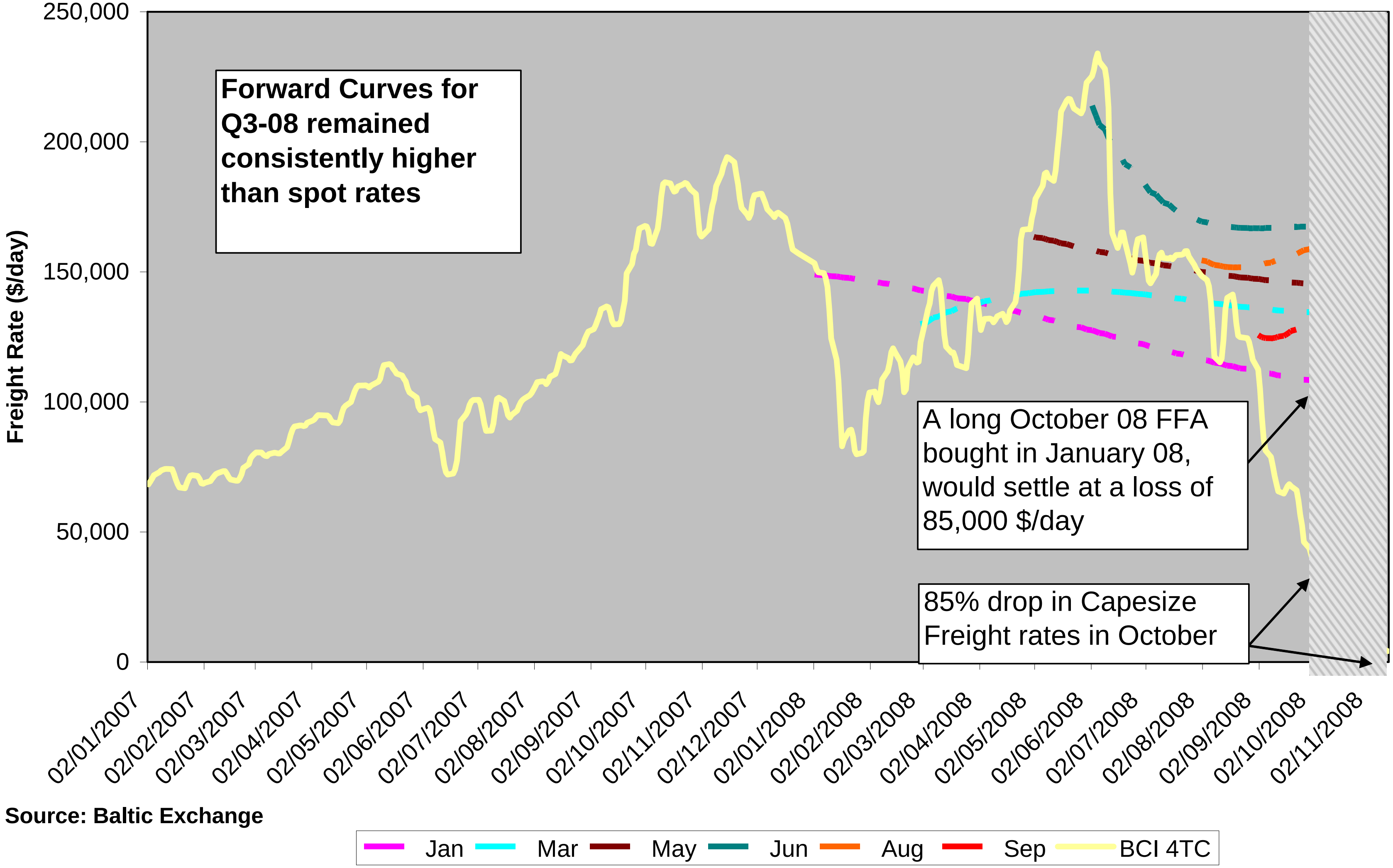
- Tanker Market
  - Volume for 2008 (est): 0.450 m lots
    - 40% trades are on the ME Gulf – Japan VLCC Route (TD3)
  - 75% of trades for 2008 are cleared



Freight Market Volatility – Coal Routes



Capesize TC Forward Curves – October Settlement



Source: Baltic Exchange

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FFAs – Market Volatility

- October 2008 witnessed the largest drop ever in dry freight rates
  - Rates in January 2008 were 20 times higher than the average October 2008 rate.
    - E.g. a long October 2008 FFA that was bought in January 2008, would settle at a loss of 85,000 $/day or around $2.7 million for the October settlement
- Market Volatility did not appear to have an impact on the settlement process due to:
  - large proportion of cleared trades
  - arrangement of emergency netting facilities
  - large outstanding positions for the rest of 2008
  - cash-flow mismatch between paper and physical.

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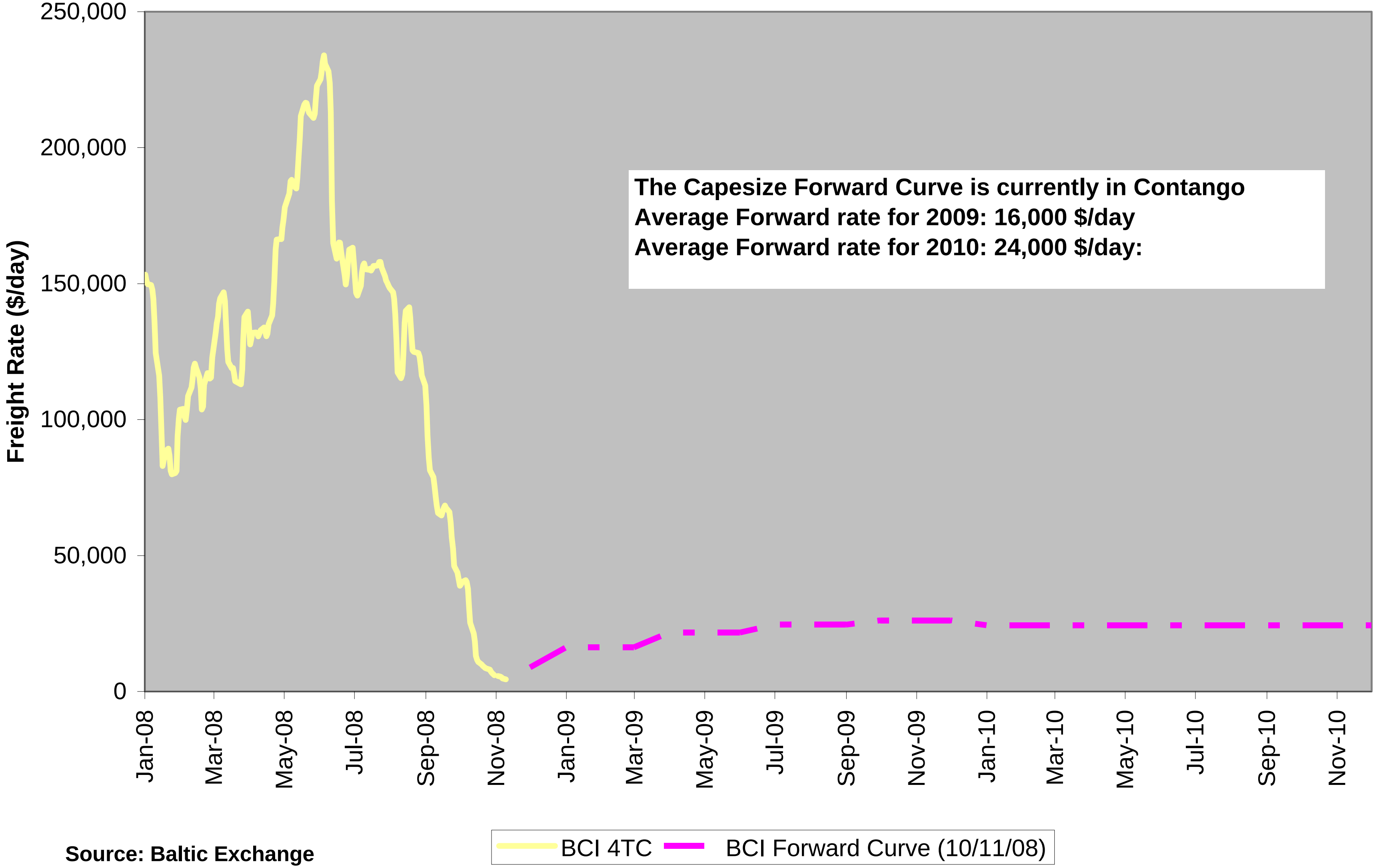
What Next?



Source: Baltic Exchange

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FFAs – Current and Future Developments

- The market has grown rapidly over the last five years
  - High volatility in the market has also attracted interest from investors outside shipping such as hedge funds
- Credit Risk and Clearing
  - More extensive use of clearing due to tighter credit requirements
  - However, initial margins and marking-to-market tie up capital
- Potential knock-on effects from defaults in the paper and/or physical markets
  - Closer links between the physical and the paper market
- Increase in trading interest in the options market
  - More trading opportunities for hedgers and investors

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