THE FORWARD FREIGHT AGREEMENT (FFA) MARKET FOR SHIPPING

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In the very traditional maritime business, a widening array of financial instruments for speculation and investment has brought about a new awareness of screen systems for risk management and for trading (which includes pure speculation as well as more conservative arbitrages). Both exchange traded and over the counter derivatives markets for crude oil, natural gas and refined products have grown enormously in the twenty + years since NYMEX's 1983 launch of WTI futures on crude oil. In the freight markets, the inchoate futures markets of the 1980s evolved into the Forward Freight Agreements (FFA's or just "paper freight") between parties- usually an owner and a charterer. In the post Enron era, freight traders now are benefiting from a new paradigm- financial clearing, which is basically the credit guarantee from a financial entity that could step into to support an FFA commitment, if necessary.

The dynamics of the ocean freight market are not unlike those of the better known crude and oil products markets; tanker shipping people have seen the successes of their customers- where futures and derivatives markets enable users to manage extreme volatility. On the liquid side,

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seaborne movements of crude oil and petroleum products are closely intertwined with the vagaries of the underlying raw materials markets.

Rates for VLCCs- crude oil tankers of 300,000 MT deadweight (with a carrying capacity slightly in excess of 2 Million Barrels) were providing a return to owners averaging $95,000/day in 2004 (rates levels rivaling those of the early 1970s- a time when some of the great shipping fortunes were made). In 2005, hires averaging $59,000/day were seen on VLCC voyages from the Persian Gulf to Japan, according to London based Drewry Shipping Consultants. In April 2006, ships owners were netting under $25,000/ day for the same ships on the same voyages- in line with average rates for 2002. By end May 2006, rates on similar vessels had firmed to levels in excess of $40,000/ day; August 2006 saw spot rates approaching $90,000 day for such large tankers, and forward rates approaching $120,000/ day for November/ December 2006 forward slots.

With fears of Alaskan oil shortages, Middle Eastern tensions and supply disruptions in both West Africa and the Caribbean, spot tanker rates were at historical highs. As was seen in the Summer of 2006, huge amounts of hedgeable risk in tanker markets are tied to the uncertainty premiums surrounding oil supply, and, in turn, oil and product prices. As oil's vagaries evaporated, tanker rates calmed down. When December 2006 actually came around, spot VLCC's were fetching under $30,000/ day.

Financial risk management techniques are now plying their way to the dry cargo side, where China-induced waves of iron ore consumption of iron ore, and bulk raw materials such as metallurgical coal, have brought about quick and usually unpredictable shifts in demand. Consider that Singapore listed Noble Group uses its major presence in the dry bulk shipping arena to manage freight risk for its customers. Noble is working as a logistics partner with raw material producers in Australia (and elsewhere) to market their output into the seemingly re-igniting Chinese raw material markets. In this role, it uses FFA markets to protect margins.

Dry cargo rates are at record levels, and, typical of these market dynamics, forward fixing by charterers and freight operators (who then transport iron ore, coal and other commodities) has led a huge uptick in period timecharter (forward) activity. Spot rates for Capesize bulk carriers are averaging more than $80,000/day over a worldwide average of trips, with FFA rates for 2007 above $60,000/day out though end-2007. Panamaxes (similar to, but not identical with the Kamsarmaxes in the fleet of Quintana Maritime) have been hired at $45,000/day over a composite of geographical runs. FFA levels are in the mid/ upper $30,000s for 2007.

Screen trading has played a growing role in the freight markets, by the Oslo based International Maritime Exchange (Imarex), where both tanker and dry routes are traded, with a seamless link into the clearing capabilities of the Norwegian Futures and Options marketplace (NOS). Clearing of over the counter transactions in the freight rates for deepsea tanker shipments of crude oil and products were launched on NYMEX's ClearPort in the Summer of 2005, and around the same time on London's on LCH Clearnet. In 2006, the Singapore Exchange (SGX), launched its "AsiaClear" service. The impetus of these clearing activities has been the financial investors- whose ISDA swap contracts demand the creditworthiness offered by the clearing approach. The backing of these financial clearers supplements the maritime industry's historical "principal to principal" approach to managing credit and performance risk generally and is invaluable where business partners in deals are new or unknown counterparties. The Imarex screen trading system is fully integrated with the Norwegian Futures and Options Exchange's clearing role.

Freight and commodity interactions are enhanced by the ability to trade FFA's on a screen. In the dry cargo markets, over the counter coal swap markets (which can be traded through electronic arenas such as Globalcoal) have given rise to arbitrages between swap prices in Rotterdam (delivered) and Richards Bay (origin). Freight traders, in turn, have traded differentials between these freight synthetics and actual voyages booked between South Africa and North Europe. Increasingly, rates in the physical market are keyed off the levels seen in the FFA arena. Some owners, including DryShips, Quintana and Diana Shipping have actually indexed vessel hires to the freight quotes underlying the FFA markets.

Growth has come on the financial as well as raw material fronts. At the same time that cargo interests are integrating freight risk management into their programs, bankers were seeking ways to bring in a new set of counterparties other than the usual sometimes over-extended suspects- credit worthy entities that could "buy" freight from their clients. Creditworthiness of counterparties is crucial to banks and financial brokers, who are regulated entities; not surprisingly, they view the clearing aspect as critical in supporting the continued growth of the freight derivatives markets.

The FFA markets are big- although the preponderance of private deals prevents a precise measurement of their size. According to one study, by Boston based consultants Celent, tanker derivative trades (mainly done over the counter) comprised $7.5 Billion of an overall $30 Billion freight swap (notional value) marketplace for 2004, with dry cargo freight (including coal markets) accounting for the balance. The physical tanker market exceeds the size of the FFA market and has been estimated variously to be in the magnitude of $30 - $50 Billion annually. Data for 2006 suggests that cleared contracts represent roughly 15% of the FFA market.

As consolidation waves have spilled over the maritime markets (more in tankers than dry) the deals, measured in the hundreds of $Millions, have brought about huge risks to shipping companies themselves- and to two other vital groups of stakeholders- financiers (usually big banks that specialize in shipping) and investors (who might own stocks such as OMM, OSG, Torm and others). "Forward earnings visibility", which refers to future freight earning capacity with known revenues now from creditworthy sources, is critical. Rating agency Standard & Poors, in its 2006 publication "Key Rating Factors for Shipping Companies" says: "A high level of long-term contract cover with creditworthy customers is the best way to mitigate the high volatility in spot rates, which could be a key rating factor." Its discussion of revenue visibility, where time charters and leases are discussed, goes on to comment: "Shipping companies are also increasingly using forward freight agreements (FFA) to manage its spot exposure. Freight derivatives provide a means of hedging exposure to freight market risk through the trading of specified time-charter and voyage rates for forward positions."

Indeed, just like Ratings Agencies, banks analyzing shipping company credits must look at commitments under freight derivatives similarly to their view of leases and charters. In the pre-clearing environment, major shipping banks including Fortis and Royal Bank of Scotland have both reportedly worked closely with their shipowner clients in utilizing freight swaps (under "belt and suspender" type ISDA contracts) as a means of securing forward revenue, instead of the traditional "time charter"- an operating lease extending out typically two or three years. Rates are tied to indices of individual routes mainly from London's Baltic Exchange (which produces daily broker quotes for dozens of shipping routes) and several from Platts. Settle prices for forward maturities are also gathered by the Baltic Exchange; recently Imarex became an information provider feeding the Baltic.

In describing how freight swaps are used to manage risk, a representative of leading inter-dealer broker GFI, says "we are doing strip trades, mostly spread over a number of months during the calendar year." Often, such trades are designed to replicate the coverage afforded by the time charter. Bankers have seen increasing mandates to infuse risk management with derivatives into their formidable ship finance activities, ie using trades like those described by the GFI representative to provide a part of the comfort for secured loans. NYSE listed shipping companies, like OMI, OSG and General Maritime (GMR) are now employing full time traders to talk to principals and brokers in the derivatives markets; these traders may also handle energy fuels hedging. In the dry markets, NYSE traded Navios Corporation views freight as a portfolio, where risk management in the forward paper markets is combined with physical freighting activities such as time charter operation of vessels. Over the counter drybulk players such as DryShips (DRYS) have also been actively using the "paper markets" to manage their freight risks. Anyone doubting that financial shipping has melded with physical need look no further than the 3Q 2006 acquisition by financial powerhouse Morgan Stanley of privately held Heidenreich Marine- a user of the FFA markets in managing and optimizing revenues for more than 90 tankers in a range of sizes.

It takes two sides to make a market, however. Other parts of the shipping and finance communities are engaged in speculative trading in risk, contrasted with risk mitigating. The past two years have seen an influx in interest from financial players, including hedge funds. In conference presentations, speakers from the financial sector have estimated that more than 100 participants from the financial fold had entered the freight derivatives markets. The broker community, a sign of market health, now includes entrants from the financial sector such as GFI (which works through joint ventures with physical market brokers ACM), Tradition Financial, Icapp (tied in with London broker J Hyde) and Carnegie (in the Nordic markets). Major London and Oslo brokers including Clarksons, SSY, Bassoe, Lorentzen Stemoco and Platou have been able to combine intermediation in physical shipping activities with brokerage in the FFA markets.

A handful of fund managers, mainly in the London markets, have sprouted up in response to institutional interest in the freight sector.

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Though a great deal of secrecy is involved with the world of hedge funds, evidence suggests that these pools of money have played a role in the sector's growth. Typical trades for these actors include arbitrage activity- where an offsetting position is taken against a privately held or listed shipping equity. Imagine the gains in "shorting" the tanker market in August 2006 when chartering managers at leading Scandinavian tanker owners were playing it spot. Hedge funds with energy complex expertise have also been tied to some of the coal freight route arbitrage trading mentioned earlier. Broker GFI, mentioned earlier in the article, recently opened an office in South Africa to handle additional coal related activities.

Software vendors have developed systems to support management of freight positions as well as price sensitive exposures to derivatives in fuel. The vendor roster includes specialists TriplePoint Technology and SolArc- two companies offering platforms that integrate information on commodities and logistics. TriplePoint, offering "Commodity XL" boasts a client list that reads like a Who's Who of the shipping and commodities world, including Noble Group, General Maritime, Glencore (a big oil trader) and Morgan Stanley. SolArc has achieved notable successes among airlines, and oil traders- with a client roster including names like Koch Industries and Chevron. But, oil companies also own and charter tankers and barges, and SolArc, offering its "Right Angle" software, has now teamed up with Veson Nautical, a leader in the ship management software area (estimating voyage profitability and then comparing against actual results). Veson Nautical, based in Boston, has now introduced a module specifically for linking FFA trade management with its industry standard setting voyage calculations. As maritime company CFO's are realizing that, in effect, they are running portfolios of commodities (by virtue of their freight and fuel hedging and trading that must be "marked to the market" daily), such a tie-in is probably just what the risk doctor ordered.

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