Commodity Finance and Shipping Finance

Ship Finance Tied to Commodities

Anyone following bulk shipping must also follow the underlying markets for raw materials. In recent weeks, two such generators of maritime cargo- offshore oil, and iron ore have been gaining an outsized share of the commodities news. In a system dating back to the 1960's, late March has traditionally been the time that buyers (steel mills) and sellers (iron ore miners) agreed on a contract price for the year's shipments. The high stakes but cordial mechanism for setting a benchmark price between one group of mills and a major miner, with other buyers and sellers then following, came unglued in 2009. After a time of disruption in all commodity markets, following what analysts have described as a bubble that burst, the Chinese steel mills failed to agree with miners and bought ore based on a spot price.

China has been a major force in bulk commodities, indeed causing the commodity bubble, in the years since 2003 (when China joined the World Trade Organization, considered to be the modern-day "opening" of China). A recent Goldman Sachs presentation at the annual Connecticut Maritime Association conference detailed overall expectations of 2010's seaborne iron ore movements exceeding one billion tons, compared with 684 million tonnes, five years earlier. The dramatic growth in the ore trade, rising at a double digit pace in 2006 – 2008, fueled the huge run-up on vessel hires prior to the plunge beginning in 3Q 2008.

In the waning days of March, 2010, raw markets were hit with a bombshell when word emerged that miners (in Australia and Brazil) and Asian steel mills would henceforth be purchasing ore based on quarterly prices, rather than a figure agreed annually and priced across the board. Presciently, Goldman Sachs had cautioned in its presentation (at a panel one week prior to word of the new pricing arrangement) that: "Shorter-term coal and iron ore contracts should amplify volatility in the freight market", under a section aptly titled "There are always risks to China." Goldman added that market participants should: "Expect periods of high rates based on short-term dynamics, but expect Capesize rates to average in the $30-40,000/day range for 2010." These expectations are in line with transactions reported by vessel brokers. One recent "fixture", of three years duration, by Cosco Bulk of a newbuild Capesize, was booked at USD 31,000/day. Shorter term market transactions, for durations of six months out to a year, are presently worth in the region of USD35,000/day. These levels, in turn, are closely aligned with settling prices in the Forward Freight Agreement (FFA) marketplace.

Commodity pricing practices are an important determinant of shipping practice, and will become infused into discussions of equipment finance, though not instantly. Precedents can be found in the markets for crude oil and refined products, which moved towards spot pricing in the 1980s with the rise of futures trading. In the late 1990's, thermal coal (sometimes called "steam coal", burned by producers of electric power) pricing shifted away from lengthy contracts into prices based on a nascent market in commodity derivatives. New York based banker Joe Markey, from KeyBanc Capital Markets, specializing in Jones Act (U.S. flag) equipment, told JTF: "Here in the US coal is still shipped to utilities under very long term contracts which allow, in some cases, even small ship owners to get long term financing." Like coal, iron ore contracts have buttressed vessel finance in the past.

In the iron ore business, a derivatives market has been in the making for several years. Heavyweights such as Deutsche Bank, Morgan Stanley and Credit Suisse are reported to be trading swaps on this raw material. The Intercontinental Commodities Exchange (ICE), a leading force in energy derivatives (including coal contracts) confirmed that trades had been done through its newly launched a cleared iron swap contract (priced according to a Platts index previously used in over the counter deals), with commodities giant Cargill being one party to the first transaction. The Singapore Exchange (SGX) is also offering an iron ore swap, tied to a different index.

One expert on both iron ore and freight markets, Mikal Boe, Singapore based Director at Freight Investor Services Ltd. (FIS), one of several brokers also developing the swaps market, told JTF: "The move to spot ore is at the moment only a move to spot pricing of ore. It is the same old supply contracts which are simply being re-priced." Another expert, Jeffrey Landsberg, from the Commodore Research consultancy in New York, told JTF: "In the physical market, with spot commodity prices (particularly iron ore and freight) so volatile, it is becoming increasingly obvious that long term contracts don't make much sense."

Landsberg, pointing to media reports of steel buyers' objections to the new ore pricing regime, said: "Long term contracts are used to help estimate costs in advance, but having short term contracts and then hedging with derivatives is a way to still lock in the company's costs, in advance." FIS's Mikal Boe added: "We do see a strong move towards a more spot oriented trading market for physical iron ore, though this will evolve over years, rather than months. Many contracts already in place have a long time to run." Thus it will go with shipping, with Boe saying: "…the freight market would see a shift from Contracts of Affreightment ("COA"s) to spot voyages and shorter term time charters which in turn would feed the volatility of freight rates."

One top Wall Street analyst, Ole Slorer, from Morgan Stanley (MS), opined on impacts facing owners, telling his following of institutional clients and hedge funds: "The shift towards more frequent re-pricing increases volatility and potentially creates uneven iron ore purchase patterns throughout the year." Among important changes likely in the marketplace, the new ore pricing paradigm is likely to increase the impact of "landed costs"; providing grist for both political and economic analysts. The experts see a commercial advantage (along with political wins) for Australian miners- the shorter distance to Asian destinations (compared to Brazil) provides the opportunity for Australian ore producers to undercut Brazil on pricing. By mid April, Chinese buyers were already pushing back. Oppenheimer's Scott Burk, whose equity research (post pricing announcement) emphasized a pullback in Capesize shipments, wrote: "China's insistence on an annual agreement may draw discussions out longer."

The advent of futures and derivatives markets in the energy (oil, products and, now, thermal coal) and agricultural business have enabled financial protection, even though physical transactions are done in markets with spot pricing. Iron ore market participants will no doubt follow the same trail, to the benefit of ICE, SGX, FIS and other intermediaries and facilitators. So it goes with shipping. Reviewing likely scenarios stemming from ebbs and flows of ore cargo, MS's Ole Slorer says: "This opens doors to periods of rate spikes and the drops that follow, as well as increased port congestion. Therefore, the freight derivative market for bulkers may become more appealing as companies try to hedge against freight volatility, in our view."

Futures and derivatives been a salve for shipowners and commodity producers, in a volatile world. In recent years, the shipping companies have created the buffer of "synthetic time charters", which protect the top line, using the sale of derivatives, while the owner can operate vessels in volatile spot employment. According to market participants, the technique may be employed even when physical market time charters out (another means of achieving financial protection) are not available. Teekay Corporation ("TK" NYSE), General Maritime Corporation ("GMR") and Overseas Shipholding Corporation ("OSG") have all utilized this technique for risk management. The result is that the banker-facing side of income statements is buffered from market vicissitudes, while the owners are still able to meet customer requirements of trading in spot markets. <<<SEE SIDEBAR>>>

A group of shipping bankers interviewed by JTF did not see major instant changes in the complexion of ship finance resulting from changes in the ore market. Lambros Varnavides, Head of Shipping at Royal Bank of Scotland (RBS), said: "I do not think the change in the iron ore pricing mechanism will be that significant on the pure shipping side as most of the iron ore will still be exported from Brazil and Australia as is the situation at present." Provided that an industry is structured as an oligopoly (highly concentrated on the sell side), ore can still be shipped under long term shipping contracts, even though each cargo might be priced differently from the last.

The RBS banker hinted at logistical consequences of a shipping market where freight is controlled by the miners and large receivers (steel mills), telling JTF: "There will still be a need for the major producers and consumers to have control of a good part of their tonnage requirements on a long term basis and they would be in a position to offer contracts as before." A prime example illustrating Varnavides' point is the more than USD 3 billion of large or carrying ships by ordered at various Asian shipyards by Brazilian behemoth Vale.

Harald Serck-Hanssen, the Global Head of Shipping and Logistics at DNB Nor, acknowledged that the quarterly pricing regime could: "…most likely will reduce COAs and increase the spot activity in this market," adding that: "Today we estimate that only around 25% of iron ore trade volume is shipped on a spot basis." Varnavides, from RBS, again emphasizing the commercial aspects of the mining business, said: "The price of the ore for this purpose is not so significant as the marginal producers could not replace the production from Brazil or Australia." In his view, the oligopoly is not going away. If this is correct, big company supply programs will continue to set the tone.

Vale's most recent tranche of vessel orders consists of eight Very Large Ore Carriers (VLOCs), contracted with the Korean yard STX, at a price of roughly USD 110 million each (reflecting late 2009's market bounceback), to be employed in long term COAs inked with STX Panocean. Where freight is broken out separately in sales terms, low shipping costs are paramount. With a fleet of huge VLOC's (of approximately 400,000 dwt each, more than twice the capacity of a typical 180,000 Capesize vessel), Vale can at least partly counteract its geographical disadvantage on shipments into China, compared to Australia. The nature of the economies of scale are elucidated in an August 2008 (height of the bubble) analysis of the drybulk sector by analysts at CIMB Investment Bank in Malaysia. The team, Raymond Yap and David Y.K. Lee, offered that: "To a Chinese buyer of iron ore from Brazil, chartering the VLOC is a much more compelling option <than a Capesize>…" The differential is magnified in a strong market, where long time ownership is compared against high Capesize rates. Using Summer, 2008 hires, the CIMB team cited huge advantages of using larger vessels versus Capesize; they modeled a freight savings of between 57% and 65% on Brazil /China runs.

Importantly, though, these scale advantages of big ships do **not** endure through lower points of the freight cycle, a fact not lost on shipping bankers who must be aware of underlying material dynamics when proposing financing. In their research report, the CIMB analysts also pointed out: "….At the 10-year breakeven <using a 10 year cost analysis>, VLOC freight cost on 250,000 dwt vessels trading between Brazil and Beilun or Baoshan in China, is only US$30.80/MT (per metric ton), or US$37.80/MT at the five-year breakeven…" . Owning the big vessels was obviously cheaper, for a shipper, than paying the prevailing spot rates during the expanding bubble just prior to the 2008 Olympics. Yet recent spot freights are below these CIMB-calculated breakevens for large vessels, Reported April, 2009 vessel fixture reports show a cost of Brazil / China spot Capesize fixtures to be around USD 24 to USD 25 / MT.- slightly **below** the breakeven on the VLOC.s (in long term trades).

In the major iron ore trades, with large absolute capital requirements for vessels, there are a number of potential consequences, but these will play out over time. With the large buyers and sellers, a move towards project financings with limited recourse to the cargo side of the business (a feature in LNG markets several years ago) is a very likely development. In this world of big vessels, cooperation between shipowners and large users is already evident in the Chinese model. In a recent example between state owned entities, the large mill- Baosteel, and the vessel operator- China Shipping, have combined to form a joint venture Hong Kong Haibo Shipping, which has now launched its first of six VLOCs.

Another emerging direction in bulk carrier finance will be borrowed from the tanker side, where breakeven revenues necessary to cover debt service, will dictate charter terms. The result, well documented when looking at listed company disclosures, is charters with a minimum base rate topped off with a profit split, or an index-responsive price mechanism. <SEE SIDEBAR>

<SIDEBAR- MINIMUMS, PROFIT SPLITS and SYNTHETICS>

Bankers should be aware of the Required Freight Rate (RFR) concept; really the result of taking annual equipment costs (including debt service) and then dividing by yearly cargo deliverability. Ideally, the minimum financing component (often expressed in USD/day), after being worked back to USD/ MT, will be well below the prevailing spot freight levels in the raw material trades- which reflect the differential between raw material prices at origin and destination markets. However, ideal conditions usually don't exist in the real markets. In the Brazilian ore examples, the CIMB analysts put the "freight cost" (including a financial, operating and fuel components) at USD 30.80/MT assuming a ten year calculation. The financial component, embedded in the USD/MT cost, works back to around USD 14/MT. Bankers should be quick to confirm that the financial component (plus some allowance for continued operation) will be covered, if a potential borrower comes to the institution, with a COA in hand.

Bankers looking at ore trades will find precedents in the tanker charter markets, where multiple flavours of deals have been done. A minimum rate (which will include amounts sufficient to cover debt service) goes to the owner; the charter is then layered with mechanisms where the owner can share in tanker market upside. The needed minimum may well calculate back to a level that is below a long term market average, but that is a side issue. Most importantly, the owner (who would be the borrower from shipping banks), in agreeing to the level, protects the downside and keeps "optionality" on participating in market spikes upward. One user of this tool has been Omega Navigation (traded on Nasdaq with symbol "ONAV"), which operates a group of small and midsized tankers chartered to various oil traders and to other owners. One of its Panamax tankers "*OMEGA KING*" trades in a one year time charter to the Danish owner and pool operator Torm, rated at a minimum of USD16,500/day plus a split, on actual market earnings above this level. A group of similarly sized vessels in the ONAV fleet, but with "Ice Class" capabilities (and therefore a higher Capex and debt service), are chartered to ST Shipping (part of the well known trader Glencore) at minimums of USD 25,500/day, with a 50/50 split on actual earnings above the floor.

In the dry markets, as charterers are more adept at using derivatives markets, similar structures are also evolving. At Genco Shipping and Trading ("GNK"), a trio of Capesize bulkers built 2007 and 2008, each on time charter to Cargill, at a base rates ranging between USD 45,000/day and USD 65,000/day. A profit split above the base is tied to time charter rates included within the Baltic Capesize Index (a proxy for actual market operation). Using the rate quotes, available on a daily basis, (rather than actual earnings which might be available months later) reduces accounting complexities and hastens financial settlement.

In contrast to minimums with profit splits, "Synthetic charters" seek to reduce volatility, with mechanics that are similar to interest rate and currency swaps that many bankers are familiar with. Rates are "fixed" by selling FFA's tied to a particular vessel type, usually VLCC's and Suezmaxes, in the tanker trades. In the case of OSG, the company's 4Q 2009 results state: "The Company has entered into FFAs and related bunker swaps as hedges for reducing the volatility of earnings from operating the Company's VLCCs in the spot market. These derivative instruments seek to create synthetic time charters. The impact of these derivatives, which qualify for hedge accounting treatment, are reported together with time charters entered in the physical market under Fixed Earnings."

From the perspective of shipping banks financing vessels for established clients, not much might change, at least initially. Referring to concerns about a move towards spot transportation, DNB's Serck-Hannsen told JTF: "… I think the impact on ship financing will be limited. In theory one should see a somewhat lower debt level on these vessels as the cash flow will be less predictable. However, in practice where you have a well established shipowner most banks will look at the strength of the total balance sheet. Thus these changes should have a limited impact on the financing of the vessels." Christos Kokkinis, Group Shipping Head at Alpha Bank in Greece, had a similar sentiment, telling JTF: "Our bank's financing strategy is mainly based on long term relationships with customers who make the decisions about spot or time charter operation. Overall, small differentiations may occur in terms of financing percentages." He also distinguished his institution from larger banks, explaining that, at Alpha Bank, commodity finance is not handled by the shipping department.

One top New York-based banker offered his perspective. He said: "When we look at financings, we look at the principals' track record, including the borrowers' ability to handle changes in market conditions. We rarely delve into the level of details of commodity pricing. We take much more of 'story" approach towards the companies we are lending to. Part of the story is their past successes in managing a 'portfolio' of contract types. Having said that, we'd of course look carefully at extending debt to an owner is purely spot, without COAs or period timecharters."

Serck-Hanssen, the Norwegian banker, was quick to note: "For vessels financed on a pure project basis the situation may be different, but we are not very active in this market." The New York based banker picked up a similar theme, saying: "Within the framework of a client with a portfolio, if the were able to gain a five to seven year freight contract, to a highly rated charterer, we might consider putting that vessel into a separate tranche with a higher advance rate."

THE OIL DRILLING SIDEBAR (written prior to DEEPWATER HORIZON)

Unlike iron ore, which is closely followed by a small nucleus of buyers, sellers and intermediaries, developments in the crude oil and petroleum products venues are widely followed, within the business community and by the populous at large. An announcement by President Obama, saying that previously untapped areas of the U.S. Outer Continental Shelf would be opened up for oil exploration, was the subject of considerable commentary. In spite of all the media buzz devoted to Obama's move, there is ultimately very little in the way of significance for the transportation industry in this announcement.

One school of thought suggests that Obama's move is highly calculated (based on politics, not project economics or petroleum engineering) to pave the way and gain support, in Congress, for a bigger objective- U.S. climate control legislation. For a variety of reasons, experts across the political spectrum feel that little, if any, exploratory drilling would actually occur in the “new” areas, in Atlantic Ocean, along the coast of Maryland and Virginia. Actual production (after possible discoveries are made) is even less likely, according to these wags. Besides the obvious benefits to owners of drilling rigs (who would conduct exploration), the service vessel (OSV) sector, supporting any actual drilling, would see increased activity.

In the U.S. Gulf of Mexico (GOM), the well established exploitation of offshore oil finds, which began off Louisiana in the 1950s, has moved out into deeper waters. Even in the oil rich region, pipelines and not tankers are performing all of the transport, including new production from Shell’s massive “Perdido” field (off the Texas coast), just coming online. The service and support sector, rather than the tanker sector, have been the beneficiaries. However, the first of two Jones Act (U.S. flag) shuttle tankers (a coastal design adapted for shuttle work), owned by Overseas Shipholding Group (OSG) is expected to begin its run from Petrobras-operated fields (south of New Orleans but beyond pipeline reach) in the GOM, in 2Q 2010. The second ship, also built at the Aker Yard (and also priced around USD 115 million), is expected to deliver into its Petrobras charter in time for a 2Q 2011 production commencement. In spite of extensive exploration in the deep reaches of the GOM, additional shuttle tanker orders have not been forthcoming.

Further south, offshore Brazil continues to capture the attention of oil people and bankers, as the South American giant has reaffirmed its plans for creating a massive shipbuilding industry. At a late March 2010 briefing, in New York, to the Brazilian American Chamber of Commerce, Almir Barbassa, Petrobras’s CFO, described his company’s massive multi-year capital expenditure program. Spending is expected to equate to USD 47 billion in 2010, exceeding that of other oil companies, follow a league-leading USD 35 billion spend in 2009- exploration and production accounted for about USD 16 billion of this. Good cash flows support this spending (EBITDA in 2009 was USD 29 billion) but Petrobras is in the midst of a massive borrowing binge- Barbassa said that USD 34.9 billion was raised in 2009 (refer to JTF ???), with an average life of 10.6 years. Pointing to a trio of bonds, worth USD 5.25 billion, coming due in 2019 - 2010, Barbassa explained that production from Brazil’s “sub-salt” fields would be online at that time, and that: “…we are going to produce a lot of income prior to the maturity of these bonds.”

Current Petrobras plans call for construction of more than two dozen massive drilling rigs at Brazilian yards with minority investment by foreign partners (refer to JTF ???). As contemplated ***presently***, at least some of these assets would be owned by Petrobras- rather than outside contractors. In discussing this equipment, the CFO said: “…now…we are requiring the companies that are going to make construction proposals…to choose the kind of rig, …and to make proposals for building not one…not two, but at least seven rigs…” The objectives, as Barbassa explained, are to keep take advantage of the learning curves, well known to shipbuilders, and to build economies of scale- which will keep costs low. Looking through the lens of the builders, he said “…we will guarantee that they will have seven or eight years of jobs, and get the return on their investment.”

Onshore infrastructure is also a priority for Brazil. Overall, Brazilian borrowers continue to be important players in the international capital markets. Milena Zaniboni, Chief Analyst handling Brazilian ratings at Standard & Poors (S & P), speaking about infrastructure specifically, said: "…when you look at the large corporates, they've taken upon themselves the burden of the infrastructure investment." The private sector will continue to play an outsized role there, with Zaniboni saying: "It's not that easy for government to just turn on the key and start planning investments…we think that the partnership with the private sector is the best way to go." She said that S & P was gaining increasing comfort with the stability of regulatory regimes in Brazil.

Stability notwithstanding, changes may be on the horizon with Petrobras, which could indirectly impact funding of transport related projects. In his talk, CFO Barbassa described a series of bills in front of the Brazilian congress that would shift the present regime of oil concessions towards one where Petrobras (partially privatized but still closely linked to the state) becomes the dominant producer. Transport bankers must monitor the impact of these changes on Petrobras's plans for building the big oil rigs- but also on the large fleet of tankers and supporting vessels to be built by Transpetro, a unit of Petrobras. For example, Brazilian politicians may wish to counteract increased state involvement in the commodity side (with the move towards ownership of oil- a national treasure), with a visible demonstration of private sector ownership of metal- in the form of transport or drilling assets. As with offshore Virginia (in Obama's backyard), such decisions- the subject of purely conjecture at this point, could be driven more by politics than by ease of drilling or financing.

Looking to the future of PPP in Brazil, Milena Zaniboni, the S & P analyst said: "We will see institutional investors play a bigger role in the financing of these projects." Her colleague, Arthur Simonson, who heads up Project Financing- Americas at S & P, described Brazil as ripe for the PPP model (where more than 50% of projects, in S & P's worldwide portfolio, gain investment grade ratings), with private sector investors willing and able to take on risks