

Whither commodities?

- Commodities trading has followed a number of phases: starting in 2008, the focus has been on oil, then electricity and then metals. In this time, banks have acquired a number of commodity assets and the physical component of their trading balance sheet has swollen to over 20%.
- A series of fines by the Federal Energy Regulatory Commission (FERC) prompted banks to drastically reduce their involvement in power markets. There is more: new rules from the London Metals Exchange encourage the sale of metals warehouses owned by banks; and the Fed is reviewing its 2003 ruling that first allowed commercial banks to trade physical commodities.
- Thus far, the effect on banks' earnings has been muted. In fact – and contrary to some analysts' views – our research shows that Top 10 banks' commodities revenues reached \$4.3bn in 1H13, 9% ahead of 1H12, thanks to demand from APAC, a surge in Brent volumes and the return of some large structural trades.
- The earnings outlook is bleak, though we also note most of 'our' banks adapted very well to shifts in the market. While we expect some banks will sell (most of?) their physical holdings, commodity trading will likely remain a significant business for others.

With the current focus on the future of physical commodities trading, we take a look at the recent history of banks' involvement in the physical markets and the rationale for competing in these markets - and then consider the future for commodities businesses.

Oil trading

Physical trading at banks has tended to follow phases, with banks focusing on areas where they see the greatest opportunity. In the aftermath of the 2007/08 financial crisis the focus was on oil, as banks benefited from oil storage trades and volatility brought significant location arbitrage opportunities. Morgan Stanley in particular had a strong position in this field, with its 49% ownership of Heidmar, a shipping firm. J.P.Morgan acquired UBS Commodities Canada in February 2009, which brought a range of transport capabilities. While Goldman Sachs hired tankers and managed operations through their Global Logistics Team, which covers all aspects of commodity logistics from researching the most cost effective logistics option in a market to managing scheduling of pipelines, tank truck and tank railcar movements and managing inventory.

The market continued to grow through to the first half of 2010, then dipped before peaking in 1Q11, shortly after which Goldman Sachs opened (in June-11) a physical oil and derivatives, natural gas liquids and coal sales and trading office in Houston. The market has now declined from these levels but remains significant; see our Client Flow Index¹ (CFI) below.

Tricumen Client Flow Index: US Oil & Gas



Source: Tricumen analysis

Electricity trading

Investment in electricity markets accelerated at the start of 2010; following a dip later that year, it then surged throughout 2011. In 2010, Goldman Sachs and Morgan Stanley already owned a number of power stations capable of supporting peak demand, while J.P.Morgan had acquired Bear Energy

¹ Client Flow (CF) Index is our proprietary model which forecasts investment banks' revenue opportunity/'wallet' from institutional and corporate clients.

with its acquisition of Bear Stearns in 2008. Banks also branched out into associated areas. For example, Goldman Sachs moved into the Latin American power market, buying coal mines in Colombia: \$200m for CoalCorp's La Francia mine in 2010; and \$400m in May-12 for two more coal mines and a port in the country. However, activity in the electricity markets was soon to hit a stumbling block as Norman Bay, the head of the Office of Enforcement at the Federal Energy Regulatory Commission (FERC), launched a series of investigations into banks' alleged manipulation of wholesale power markets in the US. This quickly resulted in series of fines, including:

- ... in Mar-12, \$245m fine to Constellation Energy Group for the alleged manipulation of New York market prices between Sept-07 and Dec-08. The fine comprises \$135m civil penalty and the return of \$110m of profits;
- ... Jan-13: \$1.7m (including \$170k of profits) to Deutsche Bank over charges it manipulated California energy markets in 2010;
- ... July-13: \$410m (including \$125m of profits) to J.P.Morgan to settle allegations of the manipulation of California power markets between Sept-10 and Nov-12. Prior to this fine, FERC also banned the bank, in Nov-12, from selling electricity at market rates in California for six months starting on 1-Apr-13 (though it may continue to trade electricity at prices determined by counterparties). In May-13, J.P.Morgan, which gained a huge electricity desk and power plants with the acquisition of Bear Stearns, reduced its presence in California power market, selling its right to market electricity from three power plants.
- .. July-13: \$488m fine to Barclays for the bank's activity in California power market 2006-08. The penalty includes the surrender of \$35m of profits but excludes the \$18m fine to the ex-Head of the trading desk and three traders; the bank said it will fight the decision. Barclays largely withdrew from Western US energy trading markets in 2011.

In June-13, the US Electricity CFI was a mere 4% of its peak Dec-11 index value. Perhaps as a result, banks have been selling power assets; notably Goldman Sachs agreed to sell Cogentrix in Sep-12 and Power Network New Mexico in Apr-13.

Tricumen Client Flow Index: US Electricity



Source: Tricumen analysis.

Metals trading

In 2010, banks started to trade physical base metals and become more involved in metals warehousing. Headline deals from this period include Goldman Sachs' Feb-10 acquisition of Metro International Trade Services, a Detroit-based metals warehouse specialist; and July-10 J.P.Morgan's acquisition (as part of its \$1.6bn takeover of Sempra Commodities) of Henry Bath, a specialist warehousing company. J.P.Morgan liked its new asset: to keep it, it sold J.P.Morgan Metals & Concentrates LLC, to Freepoint Commodities, founded in 2011 by three ex-Sempra executives.

In 2012, banks faced criticism, with suggestions that they had been delaying clients' access to metals in their warehouse in order to manipulate prices. Complaints were made to the London Metals Exchange (LME) in the latter half of 2012; more recently, in a US Senate hearing in July-13 MillerCoors' risk manager described delays of 12-18 months in receiving warehoused aluminium, which in turn raised the cost of producing cans.

The very same day, Goldman Sachs published its own views, pointing out that warehouse firms allow producers to store excess metals when the demand is weak; that c.95% of the aluminium used in

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manufacturing is sourced from outside of LME warehouse system; and that delivered-aluminium price is c.40% below their 2006 peak levels². A week later, the bank published another, and even more frank, article³, in which it, among other recommendations, offered to swap any aluminium currently in the queue for aluminium immediately available. (According to Goldman Sachs' president, Gary Cohn, there were no immediate takers.) Despite this, the LME launched a consultation in the same month on a proposal to cut warehouse queues and, in recent days, both the LME and Goldman Sachs have been named as co-defendants in a U.S. class-action lawsuit alleging anticompetitive behaviour in aluminium warehousing.

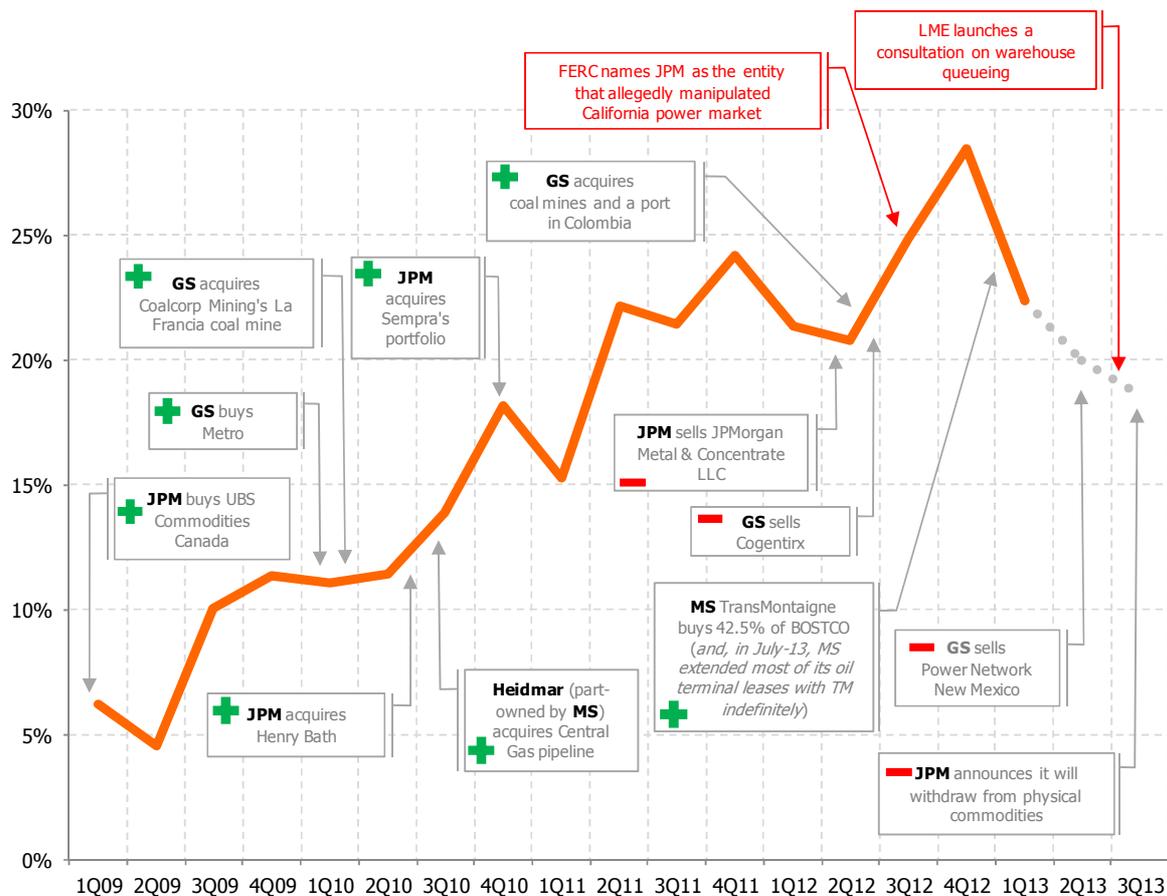
We tend to agree with Goldman Sachs that banks have not engaged in warehousing to manipulate prices: in our view, banks entered the warehousing to gain revenue and – more importantly – information about the price and flow of commodities.

At any rate, the negative news coverage and the regulators directing their attention to physical commodities may well prove a turning point and accelerate disposals of warehousing arms. Banks' involvement in warehousing was probably always intended to be a move with a limited time span. Goldman Sachs, for example, acquired Metro under a private-equity exemption with a 10-year limit to the holding period and does "...not consider it a strategic business"². We also understand that the Fed had also set a time limit for J.P.Morgan's ownership of Henry Bath.

The role of physical

In each of these phases, the role of physical commodities has been prominent. Indeed, the share of physical commodities in the three leaders' overall commodities trading balance sheet rose from 6% in 1Q09 to 28% in late 2012. This trend, however, now appears set for a reversal.

Physical % of commodities' trading balance sheet for GS, JPM and MS; with key events



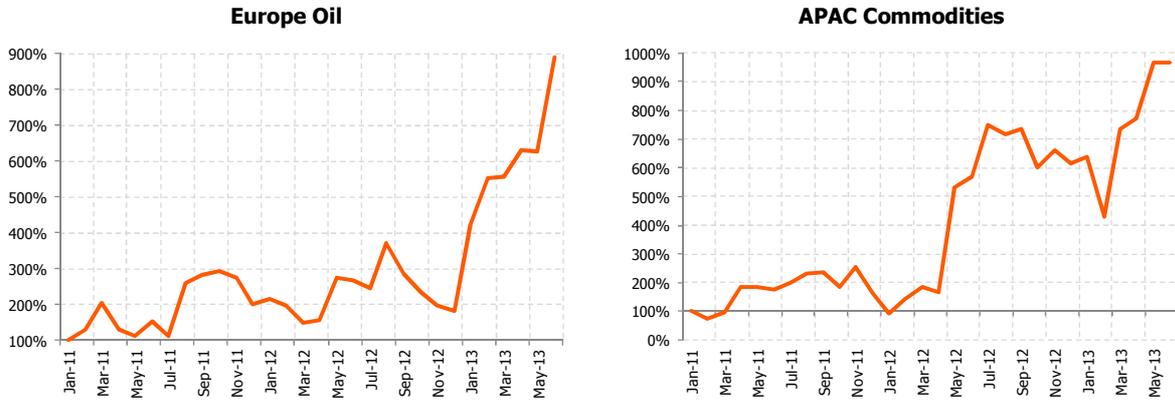
Source: Goldman Sachs, J.P.Morgan, Morgan Stanley, Tricumen analysis.

² <http://www.goldmansachs.com/media-relations/in-the-news/current/goldman-sachs-physical-commodities-7-23-13.html>
³ <http://www.goldmansachs.com/media-relations/in-the-news/current/goldman-sachs-physical-commodities-7-31-13.html>

Banks revenue grew in 1H13

In the first half of 2013, banks defied gloomy predictions: our initial analysis suggests that Top 10 among 'our' commodities players⁴ generated revenue of \$4.3bn, 9% above 1H12. Our CF Index highlights European oil, and a mix of coal, iron ore and palm oil in Asia (see below) as key drivers. There was also a return of some of the large structural trades that had dried up 12 months ago.

Tricumen Client Flow Index: Europe Oil and APAC Commodities



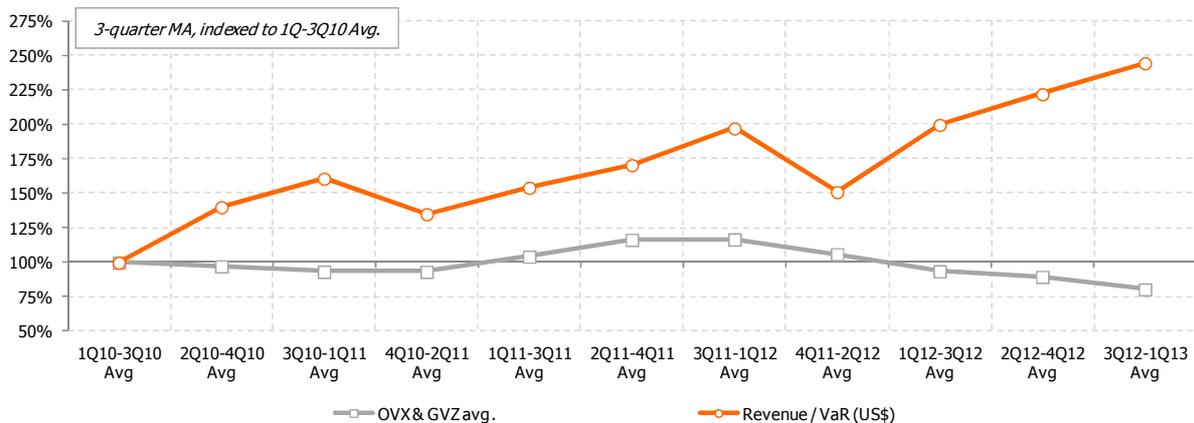
Source: Tricumen analysis.

The earnings outlook may be bleak – but banks are adaptable

However, increased regulatory oversight, reduced volumes in US electricity and US oil & gas, and changes in LME's warehousing rules all point to a decline in revenues. Physical trading contributes as much as 15-20% of the trading revenues of a top-tier bank...

... but we have little doubt some banks will mitigate the impact. Banks have, in recent times, vastly improved their ability to generate revenue from ever-diminishing value-at-risk (VaR); and do so even in markets devoid of volatility. The chart below is extracted from our June-13 'Revenue, VaR & Volatility' note; it demonstrates that banks' return on VaR continually improved in recent years – and that it surged in 2012 and 2013, despite a decline in benchmark volatility indices.

Revenue/Commodity Trading VaR vs volatility: Top 11 banks^(a), total commodities revenue



Source: CBOE, Tricumen. Note: OVX = the CBOE Crude Oil ETF Volatility Index ('Oil VIX'); GVZ = the CBOE Gold ETF Volatility Index ('Gold VIX'). (a) The Top 11 peer group comprises capital markets units of Bank of America Merrill Lynch, Barclays, BNP Paribas, Citi, Credit Suisse, Deutsche Bank, Goldman Sachs, J.P. Morgan, Morgan Stanley, Societe Generale, and UBS. (b) Tricumen product definitions. (c) Revenue excludes CVA, DVA, one-offs and dedicated prop; (d) Trading VaR normalised to 1-day holding period, 99% confidence level, and 3-year historical data. It excludes revenue from dedicated proprietary operations and some physical holdings, as both would distort peer group-wide comparisons. Further detail on our approach and methodology for VaR and SVaR is available on request.

⁴ Capital markets units of Bank of America Merrill Lynch, Barclays, BNP Paribas, Citigroup, Credit Suisse, Deutsche Bank, Goldman Sachs, J.P.Morgan, Morgan Stanley, and UBS.

Whither Commodities?

At present, it is difficult to foretell the extent to which banks will remain invested in physical commodities. Morgan Stanley appears bullish about oil; in Dec-12, MS' TransMontaigne Partners bought 42.5% of the Battleground Oil Specialty Terminal Company LLC (BOSTCO; based on the Houston Ship Channel terminal project), and in July-13, the bank extended the majority of its oil terminal leases with TransMontaigne, indefinitely. Others players remain optimistic over the future demand from Asia: it is perhaps significant that Trafigura moved its headquarters from Geneva to Singapore in mid-2012.

J.P.Morgan, by contrast, announced in July-13 that it plans to sell its physical power assets and metals warehouses along with the related oil, gas, power and coal trading desks; we would be surprised if this does not generate lots of interest. At present, J.P.Morgan plans to retain precious metals trading and vaults.

Action by regulators and law-makers – to date, chiefly FERC - may prove a decisive factor. In July-13, the Fed launched a review of its 2003 ruling that allowed commercial banks to trade physical commodities; Senator Carl Levin's Senate Permanent Subcommittee on Investigations recently revealed that it started an inquiry (thus far said to be informal) into banks' participation in commodities markets and potential conflicts; and SEC's Chairman Mary Jo White said the agency is looking into the oversight of firms that warehouse and trade physical commodities.

So what is the future direction of commodities trading at banks? In the not-too-distant past, a top-tier bank was generating commodities revenue of \$2-3bn annually, and with a compelling cost/income ratio. With regulators ramping up the investigation and demanding ever-greater capital efficiency, those times may be gone. This leaves banks with two choices. They can divest of their physical holdings and concentrate instead on precious metals and the financial side of the business, accepting that this will effectively exclude them from some the large structured trades that rely on a mix of physical and financial expertise; or, they can accept that the road ahead may be bumpy for a while and adopt a flexible approach, being ready to invest and divest in specific segments of the business as market continues to evolve.

The first is undoubtedly the safer approach, but it probably carries a stiff penalty, for if the good times return, a rebuild will be hard – at best - to carry out. As is often the case, we expect the winners will have to find innovative ways of competing, and keep a keen eye on market movements.

About Tricumen

Tricumen was founded in 2008. It quickly became a strong provider of diversified market intelligence across the capital markets and has since expanded into transaction and corporate banking coverage. Tricumen's data has been used by many of the world's leading investment banks as well as strategy consulting firms, investment managers and 'blue chip' corporations.

Situated near Cambridge in the UK, Tricumen is almost exclusively staffed with senior individuals with an extensive track record of either working for or analysing banks; and boasts what we believe is the largest capital markets-focused research network of its peer group.

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