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THE BANDWAGON STARTS TO ROLL

Banks are plunging into the commodity swaps market. Some believe that the move will open up new areas of business such as commodity-linked acquisition finance. Pioneers reckon that the newcomers will lose money because there's more to commodity swaps than expertise in financial markets.

By Julian Lewis

Banks' risk managers have a new slogan. "It's no longer good enough to say the oil price moved," they trumpet. Does that remind you of early 1980s propaganda about managing exchange and interest rates with swaps? It should, because it signals the emergence of commodity swaps. And not only swaps: the armoury of over-the-counter risk management exotica – caps, collars, floors, swaptions, structured options – is being turned by banks on the world's fragmented and highly volatile commodities markets.

"Attributing poor results to adverse commodity price movements will become less acceptable to stockholders," says Katherine MacWilliams, head of the commodity swap division at First Chicago. "This may be the last year of its acceptability, now that the products for pro-active commodity risk management are available."

"Now that something can be done about price volatility for several years into the future, management will be held just as responsible for decisions not to hedge as it will for decisions to hedge," says Gaylen Byker, advisory managing director at Banque Paribas.

Volume figures for what is still "a secretive, clubby market", in the words of one recent entrant, are hard to come by: best guesses in the industry put it at more than $10 billion. Mark Standish, manager of Shearson Lehman Hutton's commodity finance department, believes that "the market has quadrupled over the past six months". He attributes much of the increase to recent deals for Japanese clients. Sceptics say the only aspect of the market to have quadrupled recently is the number of players. Bankers mostly prefer to talk about the market's maturity in terms of the range of deal structures so far imported from financial swap markets rather than volume booked.

To date the vast bulk of commodity-hedged deals have been plain vanilla oil swaps with maturities of under five years. Other popular areas have been hedges on refined oil products such as naphtha, jet fuel, heating oil and gasoline. The long history of banks in bullion trading has led to a variety of derivatives being written, mostly on gold. A small number of base metals transactions have been done, principally in copper and aluminium, with a few in nickel.

As well as increasing volume and writing more tailored hedges in these products, bankers are looking to bring deals in new commodities. Byker points to zinc and natural gas as other commodities "with indicators of growth", such as the April launch by the New York Mercantile Exchange (Nymex) of the world's first futures contract on natural gas. The launch of a new contract indicates the existence of a volume of hedging interest which banks offering OTC commodity hedges hope to tap. Paribas recently brokered the first five-year natural gas swap, prior to the launch of ▶

the Nymex contract.

Most banks contacted by *Euromoney* say that they are also investigating writing hedges on agricultural commodities, but are concerned by the seasonal nature of demand and the many agreements which inhibit price volatility. Examples are coffee and cocoa.

First Chicago's Katherine MacWilliams: commodity-price-sensitive companies can be helped to attract more competitive financing.

The integration of commodity hedges with traditional kinds of bank lending such as project and acquisition financing is earmarked by bankers as an area of great potential growth. Some note parallels between such integrated lending packages and the role which interest rate caps played in making possible the leveraged buy-out boom of the 1980s. Others prefer a comparison with the traditional business of gold loans. MacWilliams explains the attraction for both lender and borrower: "Mitigating repayment risk, for example by the use of a floor with a production loan, will help commodity-price-sensitive companies attract more competitive financing."

Means of hedging commodity price risks have been around for centuries, in the form of various futures contracts and markets. What's more, banks have no history of trading physical commodities, with the exception of bullion. They are barred in some countries, such as the US, from doing so. Yet they are pushing the new OTC commodity hedges at every institution with a hint of exposure. So what do their customers get that existing exchange-traded futures and options don't provide?

In short, an easier life for a spread. The bankers don't put it like that, of course. "This business is the application of our interest rate and currency risk-management skills and technology to achieve some end for commodity producers and consumers," says Brian Walsh, head of international capital markets at Bankers Trust International. That end is usually a form of commodity price insurance. It is achieved by constructing more sophisticated and tailored hedges of longer maturity than the exchanges' contracts offer. "Futures markets offer limited flexibility. In addition, their contracts are not usually liquid beyond nine months," notes Martin Cherkes, vice-president at Continental Bank.

Bankers also point to their better credit standing as counterparties than traditional commodities industry players. Margin deposits aren't necessary in the OTC market, unlike on the exchanges. Some bankers mention their record of adherence to long-term contracts and note cases where *force majeure* has been invoked by commodities entities to break unadvantageous deals.

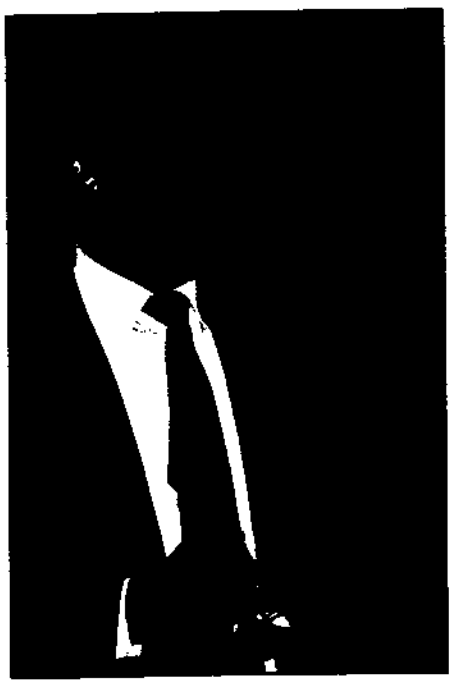
The banks differ over the need to offset every swap for a producer with a matching transaction for a commodity user, a process called back-to-backing. "We don't take commodity-price risk," says Cherkes. "To do so would be commodity speculation. We want to be commodity risk managers, which means matching opposing risks on a book level."

Louise Rowsell, vice-president at Chemical Bank, argues that "the point of banks being in this market is to be able to put a price on any forward or future by the application of our financial swap models and formulae. It is for that pricing and risk-management service that we are paid by customers. Our approach is thus to flatten our risk as rapidly as possible." She doesn't regard commodity swaps as a trading product: "We are not aiming to go short or long in excess of what is necessary to remove risk."

Chase Investment Bank director Michael Hampton noted at a recent *Euromoney* conference that Chase, widely credited as the market's pioneering bank, is "willing to warehouse positions, but we keep those positions small". He adds that Chase regards the use of exchange-traded futures to hedge swaps as always "temporary: within a reasonable amount of time we want to balance our position by entering swaps in the opposite direction."

By contrast, Walsh says that Bankers Trust seeks risk. "Our approach is not that of back-to-backing. Our style is to want to take some risk on these transactions." He doesn't mean "directional" price risk: "We manage directional risk for customers, but it is no part of our business to take a view on commodity price movements. Gaining exposure to volatility and managing it dynamically is."

Mark Ellis, vice-president, elaborates: "In essence we are selling bespoke OTC options.



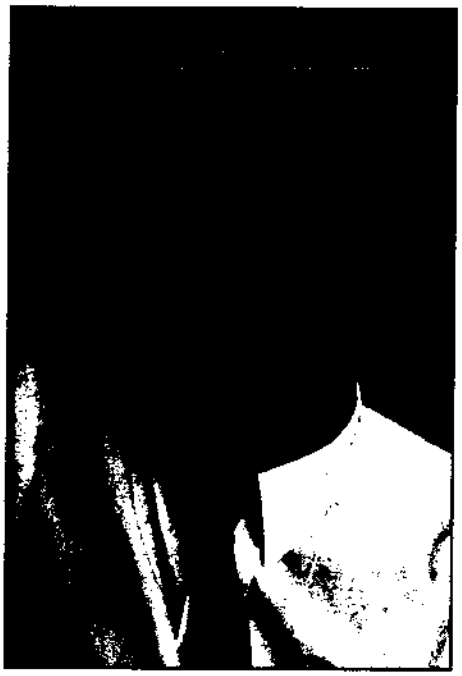
To hedge or not to hedge? Paribas' Byker says risk managers now face difficult decisions.

So we manage the risk as you would a portfolio by constantly changing the ingredients." Does Bankers run mis-matches? "Where necessary, yes. Even when the book is fully matched, the residual risk of differing strike prices on the calls and puts has to be managed."

David Hammer, vice-president of Phibro Energy, believes that the market is being held back by a lack of risk-taking: "The market is clearly in a growth stage. But for real expansion and liquidity more risk-takers are needed." During the three years in which it has been involved in the market Phibro has acted "strictly as a principal", according to Hammer, taking positions for its own book rather than back-to-backing. As a physical energy product trader, and the third-largest independent US oil refiner, Phibro is more able to take this approach: "We use the derivatives market to create hedges for our physical trading, as well as trading it." Other trading companies which play in the markets

include Metallgesellschaft, Koch Energy and Marc Rich.

Another market veteran who notes a lack of position taking is Charles Cathcart. Cathcart founded an OTC oil derivatives unit for Citicorp in 1986. The unit was subsequently closed. Since then Cathcart has operated a commodity risk-management consultancy and software house, Cathcart Associates. Several recent bank entrants to the market are among his clients. Cathcart has been looking at starting a commodity swap brokerage effort. "The market has not yet evolved to a level of liquidity and speculation where broking seems feasible," he comments. "Take the instance of a five-year, 4 million barrels per annum oil swap on Alaska North Slope crude: the shortlist of players with natural exposure to that numbers five or six. But I am hopeful that in the future, similarly to the exchange-traded markets, there will be



Commodity swaps have caught on in Japan. Shearson's Standish says they've helped the market quadruple in six months.

bold players willing to take that risk up speculatively."

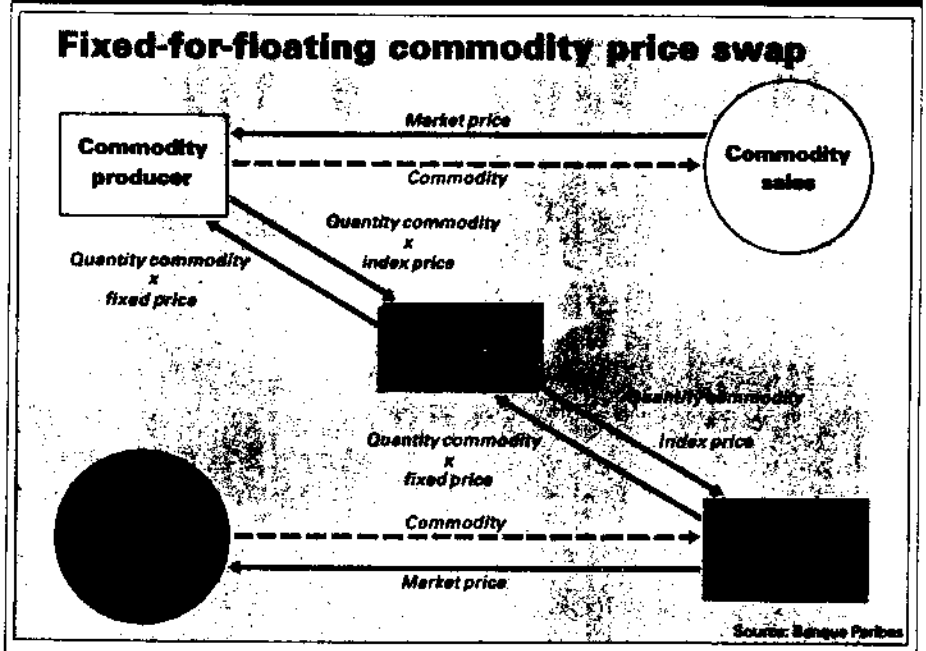
Standish at Shearson Lehman estimates that currently four players will give a competitive quote on a five-year oil swap. Another four will quote, but less competitively. Standish believes that a further four houses would like to become active. In base metals such as aluminium and copper, where maturities available are shorter, he reckons there are two competitive quoters (three in aluminium) and a further three players whose quotes are variable.

Robert Schwartz, senior vice-president at Mitsubishi Bank, contends that the lack of interbank quoting reflects the desire of some (although not all) of the market's pioneers to keep it small and illiquid, and so maintain wide spreads. "Some banks will not quote to the competition at any price," says Schwartz. He feels that growth opportunities for the market were lost by this tactic since the inevitable narrowing of spreads would have been compensated for by gains in liquidity.

Competition in the market has been increasing rapidly since a landmark decision by the Commodity Futures Trading Commission (CFTC) last April to permit commodity swaps to be booked onshore in the US. Previously London and Hong Kong were favoured for booking deals. Enticed by the prospect of a near-virgin market, commercial banks, securities houses, commodities trading companies and even insurance companies are all setting up units. "I am constantly hearing of new 'players'," says Sykes Wilford, managing director at Chase Manhattan in London and the bank's global risk manager for commodities.

Commercial banks in particular have been entering the market since around the time of the CFTC ruling. Paribas, Continental and Chemical started specific commodity swap efforts a year ago. First Chicago started its group last autumn. Other banks as diverse as Banque Indosuez, Citicorp and Mitsubishi are believed to be at various stages of advancement toward entering the market. Many other names are rumoured periodically in the market, but *Euromoney* was unable to confirm them. However, Security Pacific and ▶

How a commodity swap works

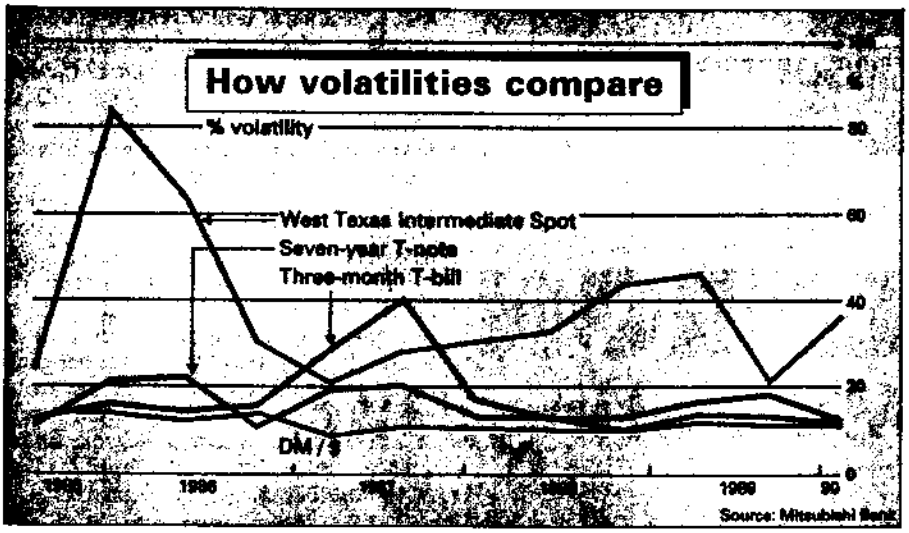


The case for commodity swaps runs like this, according to the bankers who make it: your business is manufacturing and selling copper widgets; ours is the management of risk. Pay us and your copper price will be stable for as many years as you require and we are able to match or hedge. Then you can concentrate on winning fixed-price widget contracts without seeing your profit margin evaporate as copper prices rocket or increase as copper plummets; the logic of all swaps is to sacrifice possible upside benefits for the sake of protection against potential downside. Commodity swaps are identical to financial swaps in this respect.

Commodity swaps thus mimic interest rate swaps by locking in for a customer the price of a commodity over a period of time through the exchange of fixed and floating payment streams. Typically, a producer of a commodity would agree to pay to the arranging bank a floating price based on some independently verifiable index per unit of the commodity. It may be the price which the producer receives from the spot market in his commodity. In return he receives a fixed price per unit from the bank.

If the floating price (which might be an average spot price over a six-month period) exceeds the fixed price, the producer owes the bank the difference times the number of units (for example, barrels of oil). If the floating price is under the fixed price, the difference is made up to the producer by the bank.

A swap for a commodity consumer works in reverse. The consumer pays fixed and receives floating. That way, should spot prices go above the level the consumer shows himself willing to pay by entering into the swap he is protected since the difference is made up by the bank. He cannot benefit, however, from a fall in prices since he has to give up his paper gain to the bank.



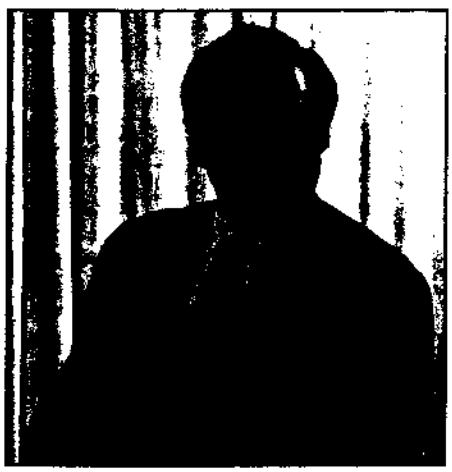
Manufacturers Hanover are definitely not currently involved.

"Banks bring tremendous networking ability and some credit ability. I don't see them as traders of the market: they are in it to service customers," says Hammer. MacWilliams confirms this approach: "The bank is very focused on certain types of industries. We are leveraging off that by tying commodity risk management in with that specialised knowledge of customers' needs." David Pryde, managing director at JP Morgan (which is not a recent entrant, having first gained permission from banking regulators in 1987), agrees that for banks "this is very much a client-driven business". He explains: "Many of our clients have significant commodity exposure. We think that the bank has the risk management skills to offer them worthwhile price protection."

Established players like Chase say they are sceptical of the new entrants' prospects. "There will be great disappointment for many of them. Nine out of ten will lose money," judges Wilford. Some observers say such comments reflect the near-monopoly that the market's pioneering banks carved out for themselves and guard jealously.

Wilford's response to that charge is that "this isn't to denigrate the newcomers: it is to say that the knowledge required to be a successful servicer in commodities is not readily transferable from financial markets." His view is that commodity swaps involve more than simply importing financial market techniques. The new players don't realise this, he believes, which is why he predicts their failure.

Cathcart cites the difficulty of arbitraging between commodities or within commodity-types as an example of the difference between financial and commodities markets: "Other than in gold the relationships are softer than in financial markets, so you don't see the same blending of transactions." Commodies can be



Nine out of ten new entrants could lose out, warns Wilford of Chase, a commodity swaps old hand.

specific to particular locations: "You cannot wire North Sea oil to Cushing, Oklahoma [where physical delivery of the Nymex West Texas Intermediate (WTI) crude oil contract is made]." Cathcart also notes the absence of any institutions comparable with central banks, meaning that the markets lack lenders of last resort.

Individual commodities markets can also have characteristics which will inhibit banks and others from writing hedges. Many are dominated by small numbers of players. Sugar has only three or four, for example. Ethylene has only two.

"There will be opportunities to bring deals in heavily-dominated commodities," says Cathcart, "But they will be one-offs, like interest rate swaps on bankers' acceptances rather than Libor."

A major constraint on the development of individual commodity sectors will be the availability of hedging instruments in them to permit laying off the risk of unmatched deals. Spot markets in physical commodities are mostly closed to banks, and are anyway regarded as too risky a source of hedges. Securities houses and trading companies have a clear competitive advantage in this respect, says Shearson's Standish, since they do trade physical commodities and so have more opportunities to hedge off-exchange.

Constructing synthetic hedges by 'rolling over' the few futures and options contracts that exist on spot commodities is fraught with risk. The purpose of a synthetic hedge is to simulate longer maturity than existing contracts offer or to correlate with a commodity lacking an underlying future. Schwartz comments: "Synthetic hedges don't protect against non-parallel price shifts. They can also expose you to geographic and product risk, say in the case of a five-year naphtha swap with Tokyo delivery hedged against WTI." Rowsell notes that rolling short-dated contracts over in this way can expose banks to technical short situations which develop on the exchanges as contracts near expiry. Hampton judges that hedging commodity swaps, compared with interest rate swaps, in general means having to use far fewer instruments of much lower liquidity, far greater volatility and a steeper forward curve.

Might the commodity exchanges respond to the emergence of the OTC market by launching new contracts aimed at its need for more hedges? Or do they resent it and regard it as an unwelcome source of competition? Chemical's Rowsell believes the relationship should be complementary. The OTC market offers longer maturities and more tailored products than the exchanges, and is a customer for their contracts.

First Chicago's MacWilliams is one of several bankers to detect increased volume and open interest in longer-dated Nymex contracts at the same time as oil consumption has been stable, suggesting that the swapping community is responsible for the rise and so benefits the exchange.

Patrick Thompson, president of Nymex, acknowledges the increase but declines to speculate on its source. Nymex is studying its relations with the OTC market, he says, and has enlisted the major swap players to give their views. No final decisions have been reached, admits Thompson, but "there is a strong possibility of longer maturity contracts being launched."

Nymex is also "at the very beginning" of reviewing the impact of specification changes to diesel and heating oil contracts on the demand for jet fuel hedges. No exchange offers jet fuel contracts. The OTC market has been successful in selling crude oil-based jet fuel hedges to airlines. Some banks such as JP Morgan manage the basis risk between the two products for customers, says Morgan's Pryde: others leave the customer carrying the risk.

In general, Thompson believes it is inappropriate for the exchange to be concerned ▶

Chemical Bank's Rowsell hopes for a complementary rather than competitive relationship with the commodity exchanges, which could help devise new contracts.

with tailoring products for the OTC market. That's partly because tailoring is the OTC market's strength and partly because the exchange's basic purpose is to reflect underlying interest in listed commodities by appealing to the broadest spectrum of market participants. Thompson thinks "there is a strong likelihood that a complementary relationship can develop" between the two markets, but judges that it is "too early" to gauge whether the apparent demand for the OTC market's products will persist.

The truth about the market's demand, report several bankers, is that it is lop-sided. Banks have been less successful in finding takers of hedges among commodity producers than consumers such as airlines, shipping companies and manufacturers.

One reason is the natural bullishness of producers, says Standish. This posture makes them reluctant to enter into agreements which limit their opportunities to benefit from price gains. Another factor affecting producers' attitudes to the market is the size of their output relative to the market's capacity to absorb volume. "At this point the market would not present an opportunity for major producers to hedge a significant amount of their output," says Schwartz. He adds that the market would be greatly boosted by the entrance of some major producers. Standish believes that because of the mismatch in sizes, the market has far more to offer small and lesser-credit producers than it does the major sovereigns and multinationals.

Ellis of Bankers Trust notes that consumers' commodity buying operations are usually not integrated with their treasuries. That illustrates the relatively short-term perspectives common among commodity players. The concept of exposure management is fairly new to them. "But I can think of gold companies which have done exceedingly well from embracing those concepts, for example by selling forward," says Ellis

The market needs more major producers, but Mitsubishi's Schwartz doubts it's yet large enough to accommodate them.

A further factor inhibiting producers is the backwardation of prices (spot prices higher than forward prices) in several commodities, including crude oil until recently. This situation would require producers to sell their commodities forward at a discount, a state of affairs which consumers would naturally be far happier than producers to lock in. Market participants contend that the availability of option-type commodity hedges such as floors shows that the market does have something to offer producers.

"Producers have mostly not reached a point where they would manage their reserves like a portfolio," says Hammer of Phibro. "A process of producer education is still needed to make them aware that the market's maturities, structures and capacity to absorb real volume over time would be useful to them." It is widely agreed in the market that the arbitrage activities of investment banks and trading companies such as Phibro have been simulating the producers' side of swap deals.

Banks hope to entice producers into the market by tying commodity hedging to traditional areas of lending. The method has particular application for poor sovereign and corporate credits and has found favour with the World Bank. Swaps can hold together complex structured financings by linking the producer's capacity to service debt to guaranteed prices for its product.

Project financing has been the most fertile area for such integration, but bankers believe it will be relevant to acquisition finance, too. Walsh sees further possibilities in the restructuring of existing debt. For example, Bankers Trust recently tied gold hedges such as puts and forwards to a US gold company's loan facilities "to protect both the borrower and the lender".

Rowsell at Chemical believes that "perhaps the major reason for a bank being in this business is to tie risk management in with the traditional bank roles of financing and advising large corporations". She continues: "That way they are freer to get on with their business since the volatility of their input and output values is reduced." She cites countertrade in oil and other commodities as instances where companies gain commodity exposure which needs to be managed and converted into a financial asset.

MacWilliams says that commodity-linked acquisition financing "may open certain industries up to leveraged buy-outs and recapitalisations where those techniques have not been seen previously". The oil industry is one example.

Byker, noting that it is a standard feature of LBOs that lenders require interest rate and currency exposure to be hedged, believes commodity hedging to be even more important in a restructuring of a commodity producer. "We estimate that a mid-sized oil producer is six to eight times more exposed to a 1% change in the price of oil as it is to a 1% change in interest rates."

Peter Hancock, head of global swaps at JP Morgan, contends that the integration of commodity swaps with their forerunners, interest rate and currency rate swap products, will also be a growth area. Examples are oil swaps denominated in yen rather than US dollars; the use of interest rate swaps to hedge the implicit interest rate risk of long-term commodity forwards, and combinations of commodity and interest rate swaps to produce synthetic equities with risk characteristics to meet investors' preferences. Hancock thinks these possibilities show OTC commodity hedges entering fully the mainstream capital markets. They will become "one instrument among many for structuring financings", he concludes. □