

COMMODITIES

FINANCIAL TIMES **SPECIAL REPORT** | Wednesday December 21 2011

www.ft.com/commodities-dec2011 | twitter.com/ftreports



Markets in uncertain furrow

Javier Blas says investors are having to contend with significant risks – from global economics to geopolitics and the weather

Opinions are split on the outlook for commodity prices going into the new year.

Ask a hedge fund manager or a pension fund investor which asset class they believe will suffer most in 2012 and they will probably say commodities.

Ask a physical trader the same question and the answer would be different.

These opposing views help explain current price movements, particularly for oil: financial sentiment tends to pessimism, whereas physical markets give evidence of much more confidence.

Financial Markets series

In 2011, oil has mostly traded within a narrow \$20 range, falling towards \$100 a barrel because of worries about the spread of the eurozone debt crisis and moving up to \$120 a barrel, due to low inventories and geopolitical risks.

The price of copper, iron ore, sugar and corn have experienced the same trend.

With such factors in play, one buzz word in the trading rooms of Geneva, London, New York, Houston and Singapore is “tail risk” – low probability events that can have a sizeable impact on prices.

For this reason, investors and traders are insuring themselves via the options markets, dealers say.

The main factor that worries markets is the possibility that the eurozone sovereign debt and banking crisis will worsen to the point that a major country defaults, triggering the break-up of the currency and causing a global economic slump.

Han Pin Hsi, global head of commodities research at Standard Chartered, says the main risk is that European governments do not “respond aggressively enough” to contain debt contagion until it is too late.

“Sentiment and actual demand for key commodities would subsequently dive, and commodity prices could fall substantially,” he says.

During the global financial crisis of 2008-09, the benchmark Reuters-Jefferies CRB index, a basket of commodities from copper and

Continued on Page 3

Commodities

Inside this Issue



Room for oil but not for workers
STORAGE Gregory Meyer on why capacity is being added at such a rate in a small Oklahoma town **Page 4**

La Niña rolls in for a second round
THE WEATHER Markets have stabilised after the last powerful system. A new one is now in train, says Emiko Terazono **Page 4**

Reversal of fortune
PRICE OF CRUDE Gregory Meyer notes the two main oil benchmarks diverged this year but there are moves to rebalance supply and even out the difference in prices **Page 4**

Haven turns risky but retains appeal
GOLD The traditionally safe precious metal's fortunes have been fluctuating but might rally again, writes Jack Farchy **Page 6**



Crop and ore riches skew economy
BRAZIL The South American country should not just rely on its abundant natural resources, says Henry Mance **Page 6**

Beijing will drive global natural gas demand

CHINA Leslie Hook reports on how the country's increasing needs will shape the worldwide market **Page 7**



Front Page illustration: Meeson

Contributors

Javier Blas
Commodities Editor

Jack Farchy
Commodities Correspondent

Leslie Hook
Beijing Correspondent

Henry Mance
Senior Correspondent, Brazil Confidential

Gregory Meyer
Markets Reporter

Emiko Terazono
FT.com Commodities Page Editor

Martin Brice
Commissioning Editor

Jearle Wolhuter
Production Editor

Steven Bird
Designer

Andy Mears
Picture Editor

For advertising contact:
Ceri Williams on:
+44 020 7873 6321
Fax +44 020 7873 4296
Email:
ceri.williams@ft.com



Chicago traders: commodities may become more difficult to buy and sell as a result of changes in finance

Bloomberg

Unfashionable actor takes centre stage

Trade finance

Javier Blas explains the possible impact of a change in European banking regulation

Commodities trade finance is an unfashionable actor in the banking and natural resources sector. Yet it is a critical part of the commodities market that allows the free flow of raw materials from producers to consumers.

Now the European banking crisis is threatening the commodities trade finance sector – and thus spilling over into the overall raw materials market – as French banks, the main financiers of trading houses, rein in their lending.

BNP Paribas and a handful of other European banks, including Société Générale, Crédit Agricole and ING provide the large majority of the credit lines underpinning the business of the publicity-shy Switzerland-based traders that dominate the market.

In 2008, a sharp reduction in credit to the trading industry helped push commodities prices sharply lower.

Industry executives say this time, as European banks are forced to strengthen their capital buffers, credit to the commodities trading industry is

becoming scarcer and more costly – particularly in US dollars, the currency of global commodity markets.

Jacques-Olivier Thomann, one of the most influential bankers as head of commodity trade finance at BNP Paribas and president of Geneva's commodities industry association, has warned of a potential credit crunch that some fear could exacerbate the economic downturn by hobbling trade in raw materials.

"About 25-30 per cent of credit facilities may be withdrawn," Mr Thomann told L'Hebdo, a Swiss magazine, in early December.

BNP Paribas confirmed the comments, saying the prediction referred to the global banking industry rather than specifically to its own activities. The bank declined further comment.

The scarcity of commodities trade finance is exacerbated by high raw materials prices. With oil trading above \$100 a barrel, a trading house needs to have a line of credit of about \$210m to move a supertanker, compared with just \$20m a decade ago, when oil prices were as low as \$10 a barrel. In 2008, the credit crunch was mirrored by a drop in commodities prices, reducing the overall need for finance.

But this time commodities prices are holding in spite of the reduction in credit lines. The impact of the credit crunch in commodities trade finance could be large in 2012. In its outlook for

next year, Deutsche Bank listed a "liquidity crunch in commodity trade finance" as one of the top 10 risks to global financial markets.

"History suggests the shorter duration maturity of [the commodity trade finance] market is at high risk when banks deleverage," says Tom Joyce at Deutsche Bank.

"Just as in 2008, commodity prices could fall sharply."

Julien Garran, commodities analyst at UBS, says it is "increasingly likely that the French banks will wind down their commodities trade financing business".

"History suggests the shorter duration maturity is at high risk when banks deleverage"

Tom Joyce, Deutsche Bank

The credit crunch has so far not affected the biggest houses such as Glencore, the world's largest commodities trader, Vitol – the top oil trader – and Cargill, the biggest agricultural dealer.

Banks usually protect their biggest clients first, cutting credit access to smaller second-tier trading houses, executives and analysts say.

Grant Sporre, analyst at Deutsche Bank, said, after a meeting with Glencore's senior management, that the trading house had not

seen "any drying up of funding or letters of credit for their businesses", but added: "There has, however, been a switch from European banks to US banks."

In addition to US banks, Japanese and Chinese banks are also entering the sector.

The scarcity of commodities trade finance could, however, benefit some of the largest physical traders as they would face less competition from smaller forces.

In addition, it means that some physical arbitrageurs would remain open longer, allowing traders to cash in easily. In late 2008 and early 2009 some physical arbitrageurs remained open for weeks – rather than days as usual – as smaller traders were unable to participate.

The drive by French and other continental European banks to reduce the size of their balance sheets, and thus reduce their lending to the commodities trading sector, is exacerbating the adverse impact of the new Basel III capital rules on commodities trade finance.

The new regulation, which will be phased in over the next seven years, makes the issuance of letters of credit – a common instrument in commodities trade finance – far more onerous than in the past.

While banks needed to hold capital equal to just 20 per cent of the value of letters of credit under the old Basel II rules, the new agreement raises the bar to 100 per cent, greatly increasing the cost of lending for the banks.

Commodities

Markets forced to plough an uncertain furrow

Continued from Page 1

oil to wheat and sugar, fell nearly 60 per cent.

A global slowdown triggered by the eurozone could trigger a similar drop in prices. Economic weakness has already pulled down the index, which has fallen 11 per cent since January.

Another risk to markets is economic events in China, the world's engine of commodities demand.

Its import figures are telling: the country accounts for 62 per cent of iron ore buying, 58 per cent of soybeans, 12 per cent of crude oil and 22 per cent of copper.

Analysts and traders say that even a small drop in China's imports and consumption could have a large impact on prices.

Its economy has slowed in recent months. In Decem-

The perennial nightmare is a 'hard landing' scenario in China, says one analyst

ber, Beijing said the government's official purchasing managers' index – a key gauge of manufacturing activity – fell below 50, signalling a contraction in activity, for the first time since February 2009. The PMI index dropped to 49 in November from 50.4 in October.

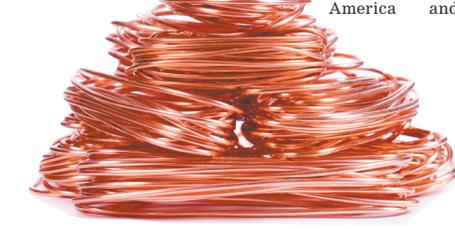
Francisco Blanch, head of commodities research at Bank of America Merrill Lynch in New York, says the "perennial commodity nightmare" is a China "hard-landing" scenario.

Markets also face significant risks that could cause prices to jump. The most important is the unstable situation in the Middle East and north Africa.

After 2011 saw the collapse of regimes in Egypt and Yemen, a civil war in Libya and chaos in Bahrain and Syria, commodities traders are bracing themselves for more instability.

The focus is on Iran, after the International Atomic

Red hot market: China buys 22 per cent of the world's copper



Energy Agency last month said that the Islamic Republic had sought to design a nuclear warhead.

The revelation has prompted the European Union to mull an embargo on Iranian oil. The US Congress has already passed stringent sanctions that will target Iran's central bank and its ability to deal in US dollars.

There is also renewed talk about a unilateral strike by Israel.

Russia also constitutes a "tail risk" for commodities markets, mostly for crude oil but also for metals such as nickel and agricultural raw materials including wheat and barley.

Earlier this month, tens of thousands of people took to the streets in Moscow to demand a rerun of elections. It was Russia's largest opposition demonstration since Boris Yeltsin took on the Supreme Soviet in 1993.

The fear about Russia is that political unrest could intensify in the run-up to the presidential elections on March 4 and after that.

Vladimir Putin, the prime minister, is likely to become president again. But the current wave of demonstrations is rejecting the Kremlin's authoritarian model of "managed democracy" by which Mr Putin has governed the country for more than a decade.

Bad weather and strikes are also an "upside" price risk, analysts say.

For the second time in a year the La Niña weather phenomenon is expected to affect producers worldwide, from coffee growers in South America to coalmine managers in Australia.

La Niña refers to cooler than normal temperatures in the Pacific Ocean, which lead to above average rainfall in south-east Asia and northern and eastern Australia, as well as a higher risk of tropical cyclones.

In the US, the Pacific Northwest and Northern Plains are wetter, while the southern states face a lack of rain.

These changes in rainfall have a big impact on commodities production.

Moreover, analysts say the series of strikes that hit commodities production in Latin America and

Africa in 2011 are likely to continue next year.

The strikes not only disrupt supply, but also increase production costs. Freeport-McMoRan Copper & Gold, the world's second largest copper producer, was able to put an end to a three-month labour dispute that has crippled production at the miner's Indonesian operations only after agreeing to pay its workers

37 per cent more.

These significant "tail risks" in commodities markets are pushing investors to buy options – contracts that give the right to buy or sell at a predetermined price and date.

Oil is indicative of the trend, with investors buying both call options – which protect against rising prices – and put options – in case they fall.

The number of outstanding call options at \$130-\$155 a barrel for December 2012 has risen more than 25 per cent over the past six months, according to data from the New York Mercantile Exchange – a clear sign of growing concern about the risk of rising prices.

At the same time, investors have been making the opposite financial bet.

According to Nymex data,

the open interest for put options at the \$45-\$60 a barrel level for next December has increased more than 33 per cent over the past six months.

The movements in the options markets for oil suggest that commodities markets will be anything but stable in 2012.

In fact instability may well be the buzzword of the new year.

J.P.Morgan

Our clients' trust is one commodity we won't trade

At J.P. Morgan, earning our clients' trust is our priority. From market making and risk management to financing and warehousing, our team works hand in hand with clients to develop comprehensive solutions to their most complex challenges. Because for us, a relationship built on trust is the only kind of relationship.

To learn more about how our team can help you reach your strategic goals, please contact us.

jpmorgan.com/commodities

J.P. Morgan is the marketing name for JPMorgan Chase & Co. and its subsidiaries and affiliates worldwide. J.P. Morgan Securities Ltd. and J.P. Morgan plc are authorised by the FSA and members of the LSE. J.P. Morgan Securities LLC is a member of NYSE and SIPC. ©2011 JPMorgan Chase & Co. All rights reserved.

Commodities

La Niña rolls in for a second round

The weather

Markets have stabilised after the last powerful system. A new one is now in train, says Emiko Terazono

The commodities markets this year felt the punch of the La Niña weather phenomenon, the strongest in the past 60 years.

Prices of commodities surged worldwide – from coffee in South America, corn in the US, to coal in Australia – as the extreme weather events of “the little girl” affected producers round the world.

Values have stabilised

but markets now face another La Niña, which has been developing since September.

Although this new La Niña is expected to be weaker, extreme weather will continue to be a factor affecting commodity prices.

Supply disruptions will be “more frequent due to changing climate patterns and the increasing number and magnitude of extreme

weather events they will cause,” says John Drzik, chief executive of Oliver Wyman Group, the consultancy.

“Floods, droughts, hurricanes and many other types of extreme weather events are all projected to increase in the next decade,” he warns.

The two consecutive years of La Niña – which brings cooler temperatures

in the Pacific Ocean, leading to higher rainfall in south-east Asia and northern and eastern Australia, and lack of rain in the south of the US – follows a year of El Niño, the opposite weather phenomenon.

So how can commodities investors mitigate the weather risks?

“Find trades that offset your risks,” says Matt Rogers, president of Commod-

ity Weather Group, a consultancy.

Notions of climate change may attract the attention of some investors but are “too macro” as a basis for hedging strategies, notes Mr Rogers. “Climate change means that both floods and droughts are more common,” he says, adding: “[It] is a bit of a blunt instrument.”

The list of weather dis-

Reversal of fortune Balancing the oil price

“All politics is local,” the Washington adage goes. As oil markets proved this year, ultimately all commodities are local too.

The price of crude is a headline financial indicator. But in 2011, commentators and investors were confronted by an almost philosophical problem: what is the price of crude?

The world’s two big oil benchmarks which, historically, traded in parallel, slowly diverged.

Brent, from the North Sea, was \$115 a barrel in mid-October. A barrel of West Texas Intermediate in the US was \$87 at the same time – a \$28 gap.

One price told a very different story about the global economy from the other. The price gap also muddied the thesis of investors who had bet money on commodities as a way to harness global growth and hedge against inflation. Oil was not following the script.

Reasons for Brent’s relative strength included the lingering impact of lower output from revolutionary Libya, a big crude supplier to Europe.

In the US, WTI’s relative weakness was partly explained by poor demand for motor fuel in an economy still not fully recovered from financial crisis.

But the best explanation for the wide spread is very local.

Thanks to resurgent production in the US and Canada, crude was flowing into the delivery point for WTI futures at Cushing, Oklahoma faster than it could flow out.

This led to concerns a glut would develop, depressing the WTI price.

Analysts were torn over how long this difference could last, with some projecting it would widen to \$50 a barrel and others arguing traders would figure out a way to move cheap

WTI-linked crude closer to the price of Brent.

On November 16, the latter seemed vindicated

when Enbridge, a Canadian pipeline company, said it would purchase 50 per cent of the Seaway pipeline running into Cushing and reverse it to run south to the Gulf of Mexico. The spread quickly narrowed to about \$10.

“Crude oil is extraordinarily efficient, internationally. Gaps that exist, exist for very short periods of time,” says James Dyer, chief executive at Blueknight Energy Partners and a senior executive at Vitol, the world’s largest independent oil trader. Blueknight owns crude oil storage tanks in Cushing.

Enbridge and its joint venture partner, Enterprise Products Partners, said the reversed line would carry 150,000 barrels a day by the middle of 2012. By early 2013, capacity would rise to 400,000 b/d.

JPMorgan, the investment bank, estimates that with the reversal, WTI crude’s discount to Brent will shrink to \$5 a barrel by the end of 2012, and just a few dollars by the end of 2013.

But some estimates show the volumes Seaway will carry are far less than the amount set to pour into Cushing in coming years, as production bounces higher in places such as the Permian Basin in west Texas, the Bakken formation in North Dakota and Canada’s oil sands.

Other projects to avert a glut at Cushing, which held a record 42m barrels of stock last April, include unit trains carrying oil directly from North Dakota to the Gulf of Mexico, barges floating crude down the Mississippi River and plans by Magellan Midstream Partners to reverse a pipeline to funnel 135,000 b/d of crude from west Texas to the Gulf coast.

“You can’t just assume that oil is oil,” says David Greely, oil analyst at Goldman Sachs, the investment bank.

“Location matters, and you need to pay attention to what is happening to the infrastructure underlying the individual markets.”

Gregory Meyer

Slipping apart: the two big oil benchmarks have diverged

Few rooms for workers but lots of room for oil

Oil storage

Gregory Meyer on why capacity is being added at such a rate in Cushing, a small town in Oklahoma

On a gentle rise across a muddy road from a cattle ranch, Terry Maxwell has just opened a park to house trailers. The impetus can be seen on the horizon: huge oil tanks in varying phases of construction.

Mr Maxwell’s land is on the outskirts of Cushing, Oklahoma, a city of 7,800 people and enough tanks to store three times as much crude as the US consumes daily. As the real estate market languishes, there is a building boom here to house hydrocarbons.

Energy companies such as BP, traders such as Vitol and banks such as Morgan Stanley, which also trades physical oil, either lease space in tanks or are building their own in the rolling country north and south of town.

Capacity has grown by 11.4m barrels, or 20 per cent, in the past year, to 66.5m barrels, according to the US Department of Energy. New projects will bring the total to 79m barrels in a year, says Lipow Oil Associates, a consultancy.

Capacity was just 32m barrels as recently as 2006. With local accommodation full, itinerant welders, equipment operators and inspectors

hired to build tanks sleep at trailer parks such as Mr Maxwell’s, where the rent is \$350 a month. “They’re building as fast as they can,” observes Mr Maxwell, himself a retired pipeline worker.

This expansion has revived fortunes in Cushing, whose faded housing stock dates to its years as an oil boom town almost a century ago.

Two hotels are planned on the main highway. Property tax revenues have swelled so much that the school district may no longer need state help, officials say.

Oil traders pay close attention to Cushing. Its tanks are the designated place to make deliveries to fulfil the benchmark West Texas Intermediate (WTI) crude futures traded on the New York Mercantile Exchange.

A web of underground pipelines unites sellers and buyers, from local producers hauling barrels in by truck to refiners. “It’s a wide spot’ in the road,” says James Dyer, chief executive of Blueknight Energy Partners, which owns 6.4m barrels of tanks there, 4m of it leased to Vitol, one of the company’s general partners.

Despite its importance as a pricing hub, Cushing is still an opaque marketplace. The energy department began measuring oil there only in 2004 and tank capacity late last year.

One company, Genscape, sends a helicopter above the complex twice a week to shoot photos and infrared video in an effort to gauge inventory for clients. Another uses satellites. “Frankly, a lot of the storage



Crude estimates: one company sends a helicopter above the Cushing complex to gauge inventory levels, another uses a satellite Bloomberg

folks don’t want you to know how much they’re storing,” says Brent Thompson, executive director of the Cushing Chamber of Commerce and Industry.

The heightened activity reflects three trends.

Oil futures markets historically tended to put a premium on prompt delivery, making it more profitable to sell barrels than store them. But in 2006 this downward sloping curve tilted upwards. It became profitable to hold barrels in a tank and sell at a higher price later.

This upward sloping futures curve, known as “contango”, hit extreme levels in recent years.

A lack of pipeline capacity to the Gulf of Mexico essentially trapped some oil in Cushing, weighing on spot prices.

“When contango blows out,

your phone is going to be ringing off the hook” with inquiries from traders seeking to lease storage, says Pete Schwinger, president of SemCrude, which manages 5m barrels of capacity at Cushing and is building 2m more.

WTI suddenly sloped downward again in late October. Mike Mears, chief executive of Magellan Midstream Partners, which leases its 12m barrels of storage in Cushing to others, says customers are “smart enough to know that you’re not going to have a contango market forever. But, if they’re signing a five-year lease, it only takes two or three strong contango markets in that five-year span to pay for this lease.”

A second trend underlying the storage boom is North American production. New

‘Extreme weather events are projected to increase in the next decade’

ruptions that have recently had an impact on commodities proves his point.

In Queensland, Australia, mining groups declared *force majeure* after extensive floods caused by high rainfall in late 2010, exacerbated by the tropical cyclone Yasi. Nearly all the big mining groups were affected.

In Colombia, widespread flooding at the end of 2010 affected its premium Arabica coffee crop and droughts have affected crop yields in the US, Brazil and Argentina.

In southern Africa, floods led to crop damage, while Sri Lanka saw a jump in rubber and tea prices due to heavy rainfall.

Most recently, prices were hit by flooding in Thailand – the worst in half a century. It led to widespread losses in agriculture and industrial production.

The country is an important link in the supply chains of global manufacturers. The floods affected the production of car industry components and the impact has been felt in steel demand – and hence

the iron ore used to make it, as car manufacturers have called for delays in their deliveries.

Rice production – the country accounts for nearly a third of global exports – was wiped out. The resulting shortage pushed up benchmark prices to a three-year high of \$650 a tonne.

The return of India to the global rice market helped diminish worries, as New Delhi lifted its four-year-old export ban on sales of non-basmati rice, filling the gap left by Bangkok.

Not all the impact of extreme weather has been negative. Some areas have benefited from changed conditions, says Matt Huddleston, principal consultant to the financial services industry at the UK Met Office.

For example, cocoa has had a bumper year as La Niña has brought extra rain in west Africa. The good harvest, however, has meant lower prices, and the price of cocoa has fallen to a three-year low.

Although the latest La Niña is expected to be

milder, it could still disrupt prices, as many companies and farmers have yet to recover from the damage of only a few months ago.

There are also worries about the lack of rain in the Black Sea region – the bumper wheat crop this year has held down the price of grains.

“It will be important to monitor the increasing dryness in the Black Sea region which has damaged the 2012/13 winter wheat crop,” say analysts at Rabobank, the Dutch lender.

Commodities



Unanimously the best bank in Lebanon.

Bank Audi SA
Audi Saradar Group
www.banqueaudi.com

Crop and ore riches skew economy

Brazil

The country should not just rely on resources, says **Henry Mance**

Brazil's natural wealth is so immense that at times the country's prosperity seems assured.

Sales of iron ore and soybeans have soared; large reserves of oil and fertilisers are starting to be exploited. This year, with its best terms of trade for at least 30 years, it may overtake the UK to become the world's sixth-largest economy.

"We have resources that you Americans had at the turn of the century," Eike Batista, the country's richest man and one of its most flamboyant cheerleaders, told a US audience this year. Brazil, he added, had in effect allowed him to "play Monopoly".

Yet Mr Batista knows that the game is not always easy. Shares in his oil company, OXG, plunged in April after its reserves were revised down.

Brazil's largest commodities companies have had disappointments too. Petrobras, the state-controlled oil company that is exploring massive deep-sea deposits, will again miss its production targets this year. And Vale, the world's largest iron ore miner, has struggled under the perception that it is dependent on China, its biggest market.

Given that commodities stocks represent more than a third of Brazil's main stock index, all this means substantial losses for equity investors in the country – one exchange traded fund alone, the iShares MSCI Brazil, holds about \$10bn of foreigners' assets.

It is also possible that the agricultural sector could stumble.

Brazil is the world's largest exporter of sugar, and one of the pioneers of sugarcane ethanol, a much-vaunted source of clean energy.

No other country has the land, water and knowhow to increase production as easily. To meet global demand, "the rest of the world



Bumper crop: demand from China is pushing up the price of Brazil's soybeans

Bloomberg

would have to increase its sugar production about three times as fast as it is currently doing, to allow Brazilian production to stay stable," says Andy Duff, an analyst at Rabobank, the Dutch lender.

However, investment in new

sugarcane fields has ground to a halt, and the country has become a net importer of ethanol.

The sector has yet to shake off the hangover of the financial crisis, with many mills still struggling with huge debts.

Moreover, although global sugar

prices are relatively high in dollar terms, they do not provide sufficient incentive for local companies – whose costs are in the local currency, which has been strong recently. The government has added to the uncertainty: it has pledged to intervene

in other countries, natural resources have tended to be either a great blessing or a great curse. For Brazil, neither interpretation seems quite correct. Instead, commodities have brought substantial benefits – but plenty of challenges.

more in the sector to keep down the price of ethanol, which is used to fuel many of the country's cars.

Soybean farmers, in contrast, are faring very well. They are expected to deliver a record crop this year and, with Chinese demand pushing up prices, have cash to invest in machines and grain silos.

There is slight bewilderment at their current good luck: as one Brazilian joke has it, the traders in Chicago – where agricultural prices are set – do not know if soybeans grow up or down.

Yet there is also faith that the growth is sustainable, and could be replicated for sugar and other crops.

This is the reason rural land prices in Brazil have tripled since 2002, according to Informa Economics FNP, the consultancy.

That includes an 18 per cent rise this year – despite a government ruling that foreign investors can no longer buy large tracts. In the south of the country, close to the ports, good farmland can cost \$14,000 a hectare, comparable to prices in the US midwest.

But what if commodity prices fall? Would the hiccups of individual companies develop into a national coughing fit?

Overall, commodity exports are about 5 per cent of gross domestic product, lower than in any other South American country. That is because of Brazil's huge internal market – roughly 200m people, many of whom have a formal job and a bank loan for the first time in their lives.

Nonetheless, "if commodity prices dropped 25 per cent and stayed there, growth could fall to about 1 per cent next year," says Neil Shearing, an economist at Capital Economics, the consultancy. With such a scenario in mind, the government is trying to rebalance the economy by helping manufacturers.

In other countries, natural resources have tended to be either a great blessing or a great curse.

For Brazil, neither interpretation seems quite correct. Instead, commodities have brought substantial benefits – but plenty of challenges.

Beijing will drive global natural gas demand

China

Leslie Hook reports on how the country's needs will shape the market

In China, energy policy is often determined by diktat. So traders of natural gas sat up and took notice when Beijing set a target for natural gas in its five-year plan for 2011-2015.

The target implies gas consumption will more than double in the next five years.

Although China is today only the fourth-largest consumer of natural gas in the world, using 109bn cubic metres last year, the country's growing demand is reshaping global markets for liquefied natural gas and redefining traditional pipeline politics.

Beijing sees natural gas as a cornerstone of its energy policy over the next decade because it burns cleaner than coal and is relatively plentiful within its borders.

"China will become the engine of global gas demand, growing at 15 per cent per annum in the coming decade," wrote Jefferies, the investment bank, in a recent report.

"China remains the fastest-growing demand centre and should become the third-largest country market by 2020, behind the US and Russia."

The key question though, is where China's gas supplies will come from.

It currently sources most of its gas domestically, importing a mere 4 per cent through international pipelines and a further 11 per cent through liquefied natural gas (LNG) shipments from abroad.

That picture is set to change dramatically as demand increases, with imports, both through pipelines and LNG, expected to grow.

In many ways, demand and supply patterns will be determined by logistics.

Right now, the key constraint on the country's gas consumption is actually a lack of supply due to insufficient infrastructure.

"The gas market has been very supply constrained," says Zhou Xizhou, associate director of IHS Cera, the consultancy, in Beijing. "There is a lot of pent-up demand."

One reason for the strong demand is that prices are set by the government and kept artificially low for many years.

This masks the true cost of expensive imports, sometimes making state-owned oil and gas companies reluctant to import natural gas and take a loss.

One of the clearest signs of the imbalances in supply and demand for gas is China's "mini-LNG" industry.

In some parts of China, LNG conversion is used on a small scale to transport



Gas-powered taxis in Xi-an: China imports 15 per cent of its needs in pipelines and as LNG shipments

Bloomberg

LNG from gas-rich inland provinces to the gas-hungry coastal provinces.

One such project, launched in Ordos in Inner Mongolia three years ago, can convert up to 200,000 tonnes of LNG a year, which is then trucked to markets across the country.

Such an arrangement is very unusual in other parts of the world, because converting gas into LNG and back again is energy intensive and typically reserved for big international shipments on seaborne markets.

Over the next several years, analysts expect that a build-up in infrastructure, including more LNG terminals and gas pipelines, will help resolve some of the demand bottlenecks.

But in the long term it is the domestic production of natural gas, particularly unconventional gas (deposits that are very hard to

extract), that could reshape supply dynamics.

China is estimated to have the world's largest recoverable reserves of shale gas, a type of natural gas trapped inside shale rock and extracted by cracking the rock open with highly pressurised water and chemicals.

"There are a lot of questions about how easy it is to extract that shale gas in China"

"There are a lot of questions about how easy it is to extract that shale gas in China. They are still at the early stages of assessing the potential."

If shale gas were to become a significant source of supply for China – which has already happened in the US – imports of LNG could fall dramatically.

China's investments in terminals and long-term supply deals have been a leading catalyst for LNG developments worldwide.

In a typical recent deal, Sinopec, the state-owned energy group, announced

"If they can really tap shale gas, it could be a long-term game changer for China's gas market," says Soozhana Choi, head of Asia commodities research at Deutsche Bank.

She cautions, however, that it is too soon to tell how the shale-gas fields will be developed.

"We don't see shale gas having a commercial impact in China until after 2020," says Mr Zhou.

"Before that, China will remain a gas importer." Pipeline plans could also damp imports: a big Chinese-funded gas pipeline between Burma and China is due to be completed in 2013; the pipeline from Turkmenistan is set to expand; and Beijing and Moscow are locked in negotiations over a new Russia-China gas pipeline as well.

So while China is without doubt driving global demand today, its future as an LNG importer is still up in the air.

this month it would spend around \$1bn to increase its stake in an LNG project in Australia, securing an additional 3.3m tonnes a year of LNG in the process.

At present, analysts believe China's shale revolution is still some way off. "We don't see shale gas having a commercial impact in China until after 2020," says Mr Zhou.

"Before that, China will remain a gas importer." Pipeline plans could also damp imports: a big Chinese-funded gas pipeline between Burma and China is due to be completed in 2013; the pipeline from Turkmenistan is set to expand; and Beijing and Moscow are locked in negotiations over a new Russia-China gas pipeline as well.

So while China is without doubt driving global demand today, its future as an LNG importer is still up in the air.

Haven turns riskier but retains its appeal

Gold

The usually safe precious metal's fortunes have been fluctuating, but it might rally again, writes **Jack Farthy**

Bewitched, bothered and bewildered – that is how many gold bulls have felt in recent months. As the eurozone crisis has ratcheted up to fever pitch, their beloved precious metal – supposedly a haven against precisely this sort of financial market turmoil – has barely budged in price.

Since mid-October, gold has traded in an uninspiring range of roughly \$1,650-\$1,750 a troy ounce.

More worryingly for its supporters, the metal

appears to be moving more closely in line with risky assets such as equities and emerging-market currencies than other havens such as US Treasuries.

"There has been a lot of disappointment with gold in the fourth quarter, especially from those who were banking on the metal's safe haven properties, given the escalating situation in Europe," says Edel Tully, precious metals strategist at UBS, the Swiss bank, in London.

The problems began in September. After hitting a record of \$1,920 early in the month, gold collapsed 20 per cent in a matter of days. It was the metal's sharpest weekly fall since 1983.

The plunge came amid a broader market sell-off, surprising some investors who had assumed that holding gold could act as a form of insurance against bullish positions in other commodities or equities.

The reason for the sharp fall was simple: as investors

were rapidly losing money on other positions, they sold their gold to raise cash.

However, it caused investors to question gold's claim to be a "safe-haven" asset. The metal's case has not been helped in the months since, when gold has tended to rise as risk appetite rises, and fall when risk appetite wanes.

The dominant theme has been a "dash for cash".

Most prominent among the investors forced to sell was John Paulson, the

'During equity market crashes, investors seek safety in the dollar, or bonds, and only sometimes gold'

hedge fund manager who shot to prominence with an enormously profitable bet against the subprime mortgage market during the financial crisis.

Over the third quarter, Mr Paulson's fund sold more than a third of its holdings of the SPDR Gold Shares exchange traded fund, equivalent to about 34 tonnes.

Elsewhere, European banks have been using their gold holdings to raise cash amid a widespread shortage of dollars in the region.

Dealers say that banks – primarily in continental Europe – have been actively lending gold in the market

in exchange for dollars. The move has pushed gold lease rates – the implied interest rate for lending gold in the market in exchange for dollars – to record lows.

The one-month gold lease rate in December hit -0.57 per cent, suggesting that a bank lending gold for one month would have to pay to do so, at an annualised rate of 0.57 per cent.

"Gold is a function of liquidity," says Walter de Wet, head of commodities research at Standard Bank. "Certainly there has been a lack of liquidity, particularly in the interbank market in Europe. That is putting a drag on gold."

But while investors are feeling bruised, few are ready to call time on bullion's decade-long rally.

"Commodity hedge funds are still involved in trading gold. It is still a popular trade," says Fabio Cortes, manager of a commodities fund of funds for Oakley Capital, the private equity firm in London. Of the metal's safe haven appeal, he adds: "It hasn't lost it – it has been reduced to some extent."

Indeed, the fundamental drivers of the surge remain in place. Central banks are buying record quantities of the metal. The so-called "official sector" bought 364

tonnes of gold in the first three quarters of this year, according to data from Thomson Reuters GFMS, the precious metals consultancy, compared with sales of more than 400 tonnes a year in the decade to 2009.

Moreover, Chinese demand is increasing rapidly as Beijing deregulates the country's gold market.

Chinese imports of gold from Hong Kong have hit record levels in recent months, and the country is on track to more than double imports from last year.

Matthew Turner, precious metals strategist at Mitsubishi, the Japanese trading house, argues that the cru-

cial determinant of whether gold lives up to its safe-haven billing is whether investors fear inflation.

"At different times investors seek different safe havens. During equity market crashes, investors tend to seek safety in the dollar, or bonds, and only sometimes gold," he says. "Other financial panics might involve investors selling government bonds or fleeing the dollar due to rising fears of inflation. In these scenarios, gold can outperform."

This suggests the trigger for gold's next move is likely to be the actions of central banks – particularly

the European Central Bank, which many investors believe will be forced to provide a backstop to the eurozone by more aggressively intervening in the sovereign bond markets.

In the second quarter of 2010 and the third quarter of this year – the two moments when the ECB moved to expand its bond-buying activities – gold demand jumped.

For next year, the ECB is likely to be the key to gold's performance.

As Ms Tully predicts, if the ECB were to embark on a policy of quantitative easing, it would have "explosive implications for gold".

www.vale.com

If it's important
to you and our
future generations,
Vale does it.

Responsibility

Sustainability has always been important to us. And that's why Vale is environmentally and socially responsible at every level of our mining operations. We promote good sustainable practices, such as protecting natural habitats within Brazil and around the world, re-using water in our processes, and investing in improving the living conditions of our communities. **Sustainability. If it's important to the planet, it's important to Vale.**

