bulletin special

The Credit Suisse magazine June 2006

# Investing in Commodities

**Soybeans & More** The Hard Facts of Soft Goods

**Wall Street Guru** Jim Rogers Runs with the Bulls

**All That Glitters** Get Ready for the Next Gold Rush

# The Basics for Beginners

**You might not know it, but you're already a commodities expert. Whether you've talked about today's outrageous gasoline prices, or the quality of your last espresso, in some shape or form you've had discussions on the topic.**

Text: Michèle Bodmer

Many of us might not have realized we were talking about commodities – myself included until a few months ago – so, perhaps it's time to take a closer look at the items that we use every day. Walk through the aisles of any major store and you will see a wealth of "soft" commodities. Coffee, cereal, orange juice, meat, bread made with wheat, and chocolate with cocoa and sugar. We are also surrounded by "hard" commodities, which are in our homes, automobiles, and in every piece of electronic equipment we use. The "hard" stuff includes industrial or precious metals, livestock, and the drivers of the energy market, crude oil, heating oil, natural gas and gasoline.

### How Are Commodities Traded?

Now you're probably wondering how these daily essentials are priced, where they come from, and how they make their way onto supermarket shelves, or into the clothing we wear, or the cars we drive. Commodities futures markets around the world make this possible. A future is a financial contract to buy or sell a specified amount of a product or financial instrument at an agreed price on or before a given date in the future. For example, farmers can sell grain months before harvest in order to lock a price for their crop. The farmer is then assured of a steady price – despite weather risks. Therefore, the buyer assumes the price risk. Compensation for assuming that risk is given by setting the price below that of the expected spot price. The closer the time of delivery, the more the price of the futures contracts converges to the spot price. Since the futures price is initially set below the expected spot price, it gradually increases as the delivery date approaches, producing a return for the buyer.

Trading in futures originated in Japan during the 18th century and was used for the trading of rice and silk. In 1948, the United States followed with its first futures market, the Chicago Board of Trade. It was founded by 82 merchants to help agricultural producers and consumers manage the price risks of harvesting, marketing and processing crops each year. Many of the largest futures exchanges around the world have their roots in agriculture, and have developed into global marketplaces not only for agricultural goods, but also for currencies and financial instruments, such as bonds. Essentially, futures markets are major financial hubs, which provide an outlet for competition among buyers and sellers while managing price risks. "Trading decisions in futures markets are made through fundamental or technical analysis," says Tobias Merath, Credit Suisse Commodities and Equities Trading analyst.

Fundamental analysis includes all factors that influence supply and demand. For the physical commodities markets in producing countries, they include economic growth and outside forces that influence prices.

Technical analysis is strictly based on inside market forces. It involves tracking past price patterns. Analysts focus on a variety of time frames, and trading decisions are based on past tendencies with the idea that these price patterns tend to repeat themselves.

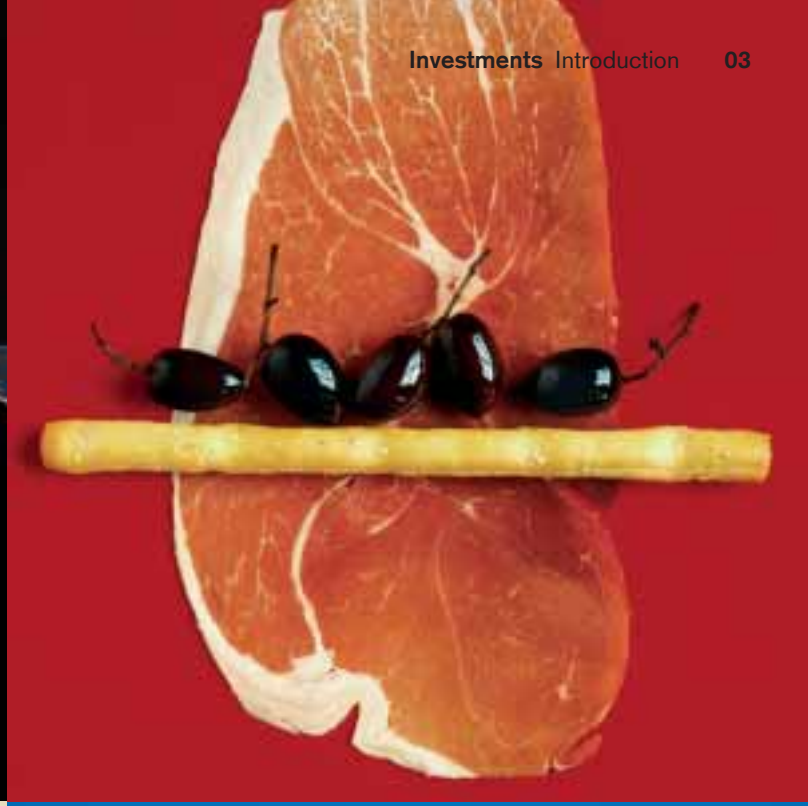
### Why Invest in Commodities Now?

The biggest catalyst for the commodities market is global economic growth. Currently, China and India are the main drivers of the boom that some financial experts have forecasted. "The integration of developing countries into the global economy presents a range of opportunities," says Giles Keating, Credit Suisse Head of Global Research. "Of the 6.5 billion people in the world, three-quarters are still outside the mainstream economy, but many are moving into the cities. To provide for them, a substantial investment is required in the provision of infrastructure, water, housing, offices, factories, sewage systems and transport." This production spurt translates into higher demand for all commodities.

Keep in mind that commodities are distinct from financial assets and react differently to changing economic conditions. "In a diversified portfolio, assets do not move in sync with each other, which limits the volatility of the portfolio and improves the consistency of returns over time," says Tobias Merath.

Before jumping in, it's important to note that investing in commodities is not as easy as investing in equities or bonds. Indices offer the simplest way of investing in commodities. "In contrast to the stocks of commodity companies, indices offer direct exposure to commodity futures and are a good way of profiting from the returns and the diversification potential that commodities offer."

Now that you're armed with some of the basics, you can decide whether to add commodities to your portfolio with the help of your financial advisor. <



**Commodities are an essential part of our daily lives. They are the raw materials that producers use to create the goods that we buy and the food that we eat.**

# A Guide to the Language of the Futures Industry

**This short glossary includes a few of the many terms used by brokers who trade commodities. However, these terms provide a good introduction to the language of the futures industry.**

Sources: Commodity Futures Trading Commission (www.cftc.gov) and the Natural Futures Association (www.nfa.futures.org)

**Arbitrage:** A strategy involving the simultaneous purchase and sale of identical or equivalent commodity futures contracts or other instruments across two or more markets in order to benefit from price discrepancy in their price relationship.

**Artificial Price:** A futures price that has been affected by a manipulation and is thus higher or lower than it would have been if it reflected the forces of supply and demand.

**At-the-Market:** An order to buy or sell a futures contract at whatever price is obtainable when the order reaches the trading facility.

**At-the-Money:** When an option's strike price is the same as the current trading price of the underlying commodity, the option is at-the-money.

**Backwardation:** Market situation in which futures prices are progressively lower in the distant delivery months. For instance, if the gold quotation for January is 360 dollars per ounce and that for June is 355 dollars per ounce, the backwardation for five months against January is 5 dollars per ounce. Backwardation is the opposite of contango.

**Bear Market (Bear/Bearish):** A market in which prices are declining. A market participant who believes prices will move lower is called a "bear". A news item is considered bearish if it is expected to result in lower prices.

**Bucketing:** Directly or indirectly taking the opposite side of a customer's order into a broker's own account or into an account in which a broker has an interest, without open and competitive execution of the order on an exchange.

**Bull Market (Bull/Bullish):** A market in which prices are rising. A market participant who believes prices will move higher is called a "bull". A news item is considered bullish if it is expected to result in higher prices.

**Buyer's Market:** A condition of the market in which there is an abundance of goods available and hence buyers can afford to be selective and may be able to buy at less than the price that previously prevailed.

**Buying Hedge (or Long Hedge):** Hedging transaction in which futures contracts are bought to protect against possible increases in the cost of commodities.

**Cash Commodity:** The physical or actual commodity as distinguished from the futures contract, sometimes called spot commodity or actuals.

**Charting:** The use of graphs and charts in the technical analysis of futures markets to plot price movements, volume, open interest or other statistical indicators of price movement.

**Churning:** Excessive trading that results in the broker deriving a profit from commissions while disregarding the best interests of the customers.

**Contango:** Market situation in which prices in succeeding delivery months are progressively higher than in the nearest delivery month; the opposite of backwardation.

**Cross-Hedging:** Hedging a cash commodity using a different but related futures contract when there is no futures contract for the cash commodity being hedged and the cash and futures market follow similar price trends (e.g., using soybean meal futures to hedge fish meal).

**Day Order:** An order that if not executed expires automatically at the end of the trading session on the day it was entered.

**Electronic Order:** An order placed electronically (without the use of a broker) either via the Internet or an electronic trading system.

**Equity:** The value of a futures trading account if all open positions were offset at the current market price.

**Frontrunning:** A process whereby a futures or options position is taken based on non-public information about an impending transaction in the same or related futures or options contract.

**Fundamental Analysis:** A method of anticipating future price movement using supply and demand information.

**Futures Contract:** An agreement to purchase or sell a commodity for delivery in the future: (1) at a price that is determined at initiation of the contract; (2) that obligates each party to the contract to fulfill the contract at the specified price; (3) that is used to assume or shift price risk; and (4) that may be satisfied by delivery or offset.

**Hedging:** The practice of offsetting the price risk inherent in any cash market position by taking an equal but opposite position in the futures market. A long hedge involves buying futures contracts to protect against possible increasing prices of commodities. A short hedge involves selling futures contracts to protect against possible declining prices of commodities.

**High:** The highest price of the day for a particular futures contract.

**In-the-Money Option:** An option that has intrinsic value. A call option is in-the-money if its strike price is below the current price of the underlying futures contract. A put option is in-the-money if its strike price is above the current price of the underlying futures contract.

**Last Trading Day:** The last day on which trading may occur in a given futures or option.

**Leverage:** The ability to control large dollar amounts of a commodity with a comparatively small amount of capital.

**Liquidity (Liquid Market):** A characteristic of a security or commodity market with enough units outstanding to allow large transactions without a substantial change in price.

**Local:** A member of an exchange who trades for his own account or fills orders for customers.

**Long:** One who has bought futures contracts or owns a cash commodity.

**Low:** The lowest price of the day for a particular futures contract.

**Margin:** An amount of money deposited by both buyers and sellers of futures contracts and by sellers of options contracts to ensure performance of the terms of the contract (the making or taking delivery of the commodity or the cancellation of the position by a subsequent offsetting trade). Margin in commodities is not a down payment, as in securities, but rather a performance bond.

**Open:** The period at the beginning of the trading session officially designated by the exchange during which all transactions are considered made "at the open".

**Opening Range:** The range of prices at which buy and sell transactions took place during the opening of the market.

**Overbought:** A technical opinion that the market has risen too steeply and too fast in relation to underlying fundamental factors.

**Oversold:** A technical opinion that the market price has declined too steeply and too fast in relation to underlying fundamental factors.

**Pit:** The area on the trading floor where trading in futures or options contracts is conducted by open outcry.

**Position:** A commitment, either long or short, in the market.

**Premium:** Refers to (1) the amount a price would be increased to purchase a better quality commodity; (2) a futures delivery month selling at a higher price than another; (3) cash prices that are above the futures price; (4) the price paid by the buyer of an option; or (5) the price received by the seller of an option.

**Put Option:** An option which gives the buyer the right, but not the obligation, to sell the underlying futures contract at a particular price (strike or exercise price) on or before a particular date.

**Quotation:** The actual price or the bid or ask price of either cash commodities or futures or options contracts at a particular time.

**Range:** The difference between the high and low price of a commodity during a given trading session, week, month, year, etc.

**Round Turn:** A completed futures transaction involving both a purchase and a liquidating sale, or a sale followed by a covering purchase.

**Short:** One who has sold futures contracts or plans to purchase a cash commodity (e.g., a food processor).

**Speculator:** A market participant who tries to profit from buying and selling futures and options contracts by anticipating future price movements. Speculators assume market price risk and add liquidity and capital to the futures markets.

**Spreading:** The simultaneous buying and selling of two related markets or commodities in the expectation that a profit will be made when the position is offset.

**Spot:** Market of immediate delivery of the product, as well as payment for the product.

**Spot Commodity:** (1) The actual commodity as distinguished from a futures contract; (2) sometimes used to refer to cash commodities available for immediate delivery.

**Spot Price:** The price at which a physical commodity for immediate delivery is selling at a given time and place. (See cash commodity)

**Strike Price (Exercise Price):** The price, specified in the option contract, at which the underlying futures contract, security, or commodity will move from seller to buyer.

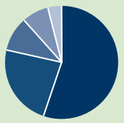
**Tick:** The smallest allowable increment of price movement for a futures contract. Also referred to as Minimum Price Fluctuation.

**Volatility:** A measurement of the change in price over a given time period.

## Soft Commodities
### Corn

Corn is a major product in our daily lives. In fact, corn components can be found in thousands of products – food, medication, cosmetics and cleansers, etc.

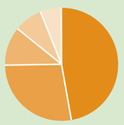
| Biggest Producers (000 tonnes) | |
|---|---|
| USA | 299,917 |
| China | 126,000 |
| EU | 52,473 |
| Brazil | 42,000 |
| Mexico | 21,000 |



2004/5: Foreign Agricultural Service U.S. Department of Agriculture (FAS-USDA)

The USDA estimates global corn production for 2006 will fall by 3.5% to 683.5 million tonnes from 708.3 million in 2005. The production decline is mainly attributable to declines in the US (42% of world production).

| Biggest Consumers (000 tonnes) | |
|---|---|
| USA | 224,420 |
| China | 131,500 |
| EU | 52,500 |
| Brazil | 38,900 |
| Mexico | 27,900 |



2004/5: Foreign Agricultural Service U.S. Department of Agriculture (FAS-USDA)

Corn use is expected to grow in the next few years, driven by ethanol use and rising Asian demand. The USDA projects consumption to increase to 686.2 million tonnes in 2006, implying a deficit of 2.7 million tonnes for 2007.

**Primary Uses**

Feed, cereal, alchohol, ethanol, fructose and penicillin

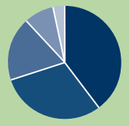
**Trends**

Due to the expected market deficit, the outlook for corn is positive. In the long term, a key catalyst for corn is ethanol. The US is reliant mostly on corn to generate ethanol, but this is still at a low level. However, corn could become a cornerstone of the US energy policy in the coming years.

## Soft Commodities
### Soybeans

Soybeans are the world's foremost provider of protein and oil. Soy is found in thousands of products, such as foods, plastics, lubricants, paints, and in biodiesel.

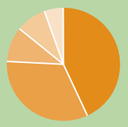
| Biggest Producers (000 tonnes) | |
|---|---|
| USA | 85,484 |
| Brazil | 64,500 |
| Argentina | 39,000 |
| China | 18,000 |
| India | 7,000 |



2004/5: Oil World; Foreign Agricultural Service U.S. Department of Agriculture (FAS-USDA)

Supply has risen due to robust production in the US, which is the world's largest soybean producer, and rising production in Argentina and Brazil, which are large exporters to the international market.

| Biggest Consumers (000 tonnes) | |
|---|---|
| China | 22,000 |
| EU | 16,859 |
| Japan | 5,000 |
| Mexico | 4,400 |
| Taiwan | 2,320 |



2004/5: Oil World; Foreign Agricultural Service U.S. Department of Agriculture (FAS-USDA)

Stocks of soy are expected to reach 53.2 million tonnes in 2005/2006. Demand in China is growing due to rising use of soy meal to feed its expanding livestock industry.

**Primary Uses**

Biodiesel, oil, haircare, hydraulic fluid, plastics and soyfoods

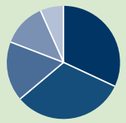
**Trends**

In the long term, the use of soy for biodiesel should support soy prices in the event that oil prices remain high. Sustained development of the emerging market economies could trigger higher population demand for meat. This would likely give the commodity, which is used as feed, a boost.

## Soft Commodities
### Cotton

Cotton is more than a source for textile production, for example, cotton seeds are a major cooking oil source. All parts of the plant, from seed to stock, are used.

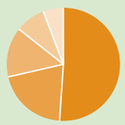
| Biggest Producers (000 bales) | |
|---|---|
| USA | 29,006 |
| China | 29,000 |
| India | 15,200 |
| Pakistan | 11,500 |
| Brazil | 5,850 |



2004/5: Foreign Agricultural Service U.S. Department of Agriculture (FAS-USDA) *In thousands of 480-pound bales

Low investment in cotton lands caused a shortage in China. The USDA expects US cotton production to decline between 5% and 10% in 2006, which would trigger a drop in world production of 5%.

| Biggest Consumers (000 bales) | |
|---|---|
| China | 36,750 |
| India | 14,500 |
| Pakistan | 10,200 |
| USA | 6,200 |
| Brazil | 4,100 |



2004/5: Foreign Agricultural Service U.S. Department of Agriculture (FAS-USDA) *In thousands of 480-pound bales

Since 1999, world cotton consumption has increased by 19%. Declining garment costs in Western countries and rising demand for clothes have induced a global increase in cotton demand, mostly from China for its textile industry.

**Primary Uses**

Textiles, cosmetics, cottonseed oil, banknotes and pharmceuticals

**Trends**

As a result of this supply-demand imbalance, the market is about to fall to into a supply shortage. According to the USDA, the cotton market is expected to have a 2.9 million bale deficit in 2006. This shortage is unlikely to recover in view of import growth from China and India.

## Soft Commodities
### Sugar

Sugar is primarily produced from sugarcane or sugar beets. Sugar is not only used as a sweetener, but also for ethanol, in cement, and for making penicillin, for example.

| Biggest Producers (000 tonnes) | |
|---|---|
| Brazil | 26,400 |
| EU | 16,506 |
| India | 15,450 |
| China | 10,730 |
| USA | 7,843 |

2004/5: Foreign Agricultural Service U.S. Department of Agriculture (FAS-USDA)

Production is expected to increase by 3.1% in 2005/2006 (the marketing year for sugar is from September to August) and 2.1% in 2006/07, according to the Economist Intelligence Unit (EIU).

| Biggest Consumers (000 tonnes) | |
|---|---|
| Russia | 3,670 |
| EU | 2,065 |
| Malaysia | 1,600 |
| USA | 1,598 |
| Korea | 1,442 |

2004/5: Foreign Agricultural Service U.S. Department of Agriculture (FAS-USDA)

The expected market deficit should come mainly on the back of solid demand from emerging markets, such as Brazil, China, India and Russia. Korea is expected to match America's sugar consumption by 2010.

**Primary Uses**

Sweeteners, preservatives, ethanol and penicillin

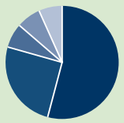
**Trends**

The long-term outlook for sugar prices remains positive. Nevertheless, the increased demand for ethanol as a viable substitute for oil and oil derivatives in the automotive industry will add more liquidity and raise the volatility of the sugar market, according to the EIU.

## Soft Commodities
### Cocoa Beans

The main use of cocoa beans is obviously chocolate, but they are also used to make cocoa butter and cosmetic creams and soaps, for example.

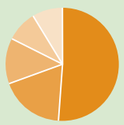
| Biggest Producers (000 tonnes) | |
|---|---|
| Ivory Coast | 1,270 |
| Ghana | 590 |
| Nigera | 165 |
| Brazil | 162 |
| Cameroon | 150 |



2004/5: ED&F Man Cocoa Ltd.

Beyond 2007, the Economist Intelligence Unit forecasts an oversupply in the cocoa market, and expects a surplus on a five-year horizon. Prices are subject to change due to possible political unrest in the Ivory Coast and Ghana.

| Biggest Consumers (000 tonnes) | |
|---|---|
| EU | 1,161 |
| USA | 415 |
| Ivory Coast | 295 |
| Brazil | 202 |
| Malaysia | 190 |



2004/5: ED&F Man Cocoa Ltd.

Consumption in Western countries is flat. The US is showing a decreasing trend, mainly due to rising concerns about health. Meanwhiel, China's appetite for chocolate is growing as purchasing power grows.

**Primary Uses**

Chocolate, cocoa powder, cocoa butter, cosmetics, pectin

**Trends**

The Ivory Coast and Ghana account for 60% of global production. Although production is strong, supply disruptions in these two countries are possible due to their politically unstable environment, which may generate price spikes in the cocoa market again.

## Soft Commodities
### Palm Oil

Demand for palm oil is rising as it is cholesterol-free, or has no trans-fats. It is used in food manufacturing and in the chemical, cosmetic and pharmaceutical industries.

| Biggest Producers (000 tonnes) | |
|---|---|
| Malaysia | 12,979 |
| Indonesia | 11,040 |
| Nigeria | 789 |
| Thailand | 663 |
| Colombia | 560 |

2003/4: The Oil World

Supply has been hit by declining production in Malaysia due to biological stress (a phenomenon where palm trees produce less after a period of high yields) and the delayed effects of drought earlier this year.

| Biggest Consumers (000 tonnes) | |
|---|---|
| China | 3,360 |
| India | 3,720 |
| Pakistan | 1,985 |
| Netherlands | 1,135 |
| UK | 755 |

2003/4: The Oil World

Three powerful catalysts are fueling demand: the fact that palm oil is TFA free, consumption in China is increasing, and demand for biodiesel in the EU is on the rise.

**Primary Uses**

Vegetable oil, margarine, biodiesel, detergents

**Trends**

Palm oil is forecast to capture the greatest share of an expanding demand and trade for vegetable oil. The EU's palm oil demand is likely to further increase as it sets out to meet its target of having biodiesel comprise 5.75% of all fuel sales by 2010 (versus 2.5% currently).

## Energy
### Crude Oil

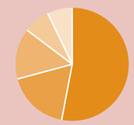
Crude oil – as petroleum directly out of the ground is called – is the single most important energy source in the world.

| Biggest Producers (Mt) | |
|---|---|
| Saudi Arabia | 487.9 |
| Russia | 456.8 |
| USA | 327.1 |
| Iran | 197.9 |
| Mexico | 190.8 |

2004: Oil & Gas Journal, Petroleum Economist, IEA, UN Yearbook of Statistics. Mt = million tonnes

The Organization of the Petroleum Exporting Countries (OPEC), a consortium of 11 countries, is responsible for 40 percent of the world's oil production and hold two-thirds of the world's oil reserves.

| Biggest Consumers (Mt) | |
|---|---|
| USA | 927.3 |
| China | 308.6 |
| Japan | 250.5 |
| Russia | 131.8 |
| Germany | 123.2 |



2004: Oil & Gas Journal, Petroleum Economist, IEA, UN Yearbook of Statistics. Mt = million tonnes

World oil consumption rose 2.7 million barrels a day in 2004, with the mature markets accounting for about one-quarter of the increase. Demand in the emerging markets rose 1.9 million barrels a day, with China using one-half of that.

**Primary Uses**

Gasoline, diesel, propane, kerosine, and plastics

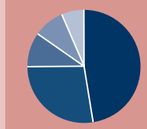
**Trends**

Economic development in Asia will be crucial to long-term growth in oil markets. China, India, and the other nations of emerging Asia are expected to experience combined economic growth of 5.5 percent per year between 2005 and 2025, the highest rate of growth in the world, according to the US Energy Information Association (EIA).

## Energy
### Coal

Coal produces more emissions and greenhouse gases than other fossil fuels, but that should change in 10 years with clean coal technology.

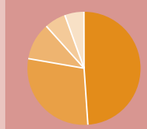
| Biggest Producers (Mt) | |
|---|---|
| China | 989.8 |
| USA | 567.2 |
| Australia | 199.4 |
| India | 188.8 |
| Russia | 127.6 |



2004: BP Statistical Review of World Energy. Mt = million tonnes

Total recoverable reserves of coal around the world are estimated at 1,001 billion tons – enough to last approximately 190 years at current consumption levels, according to the US Energy Information Association (EIA).

| Biggest Consumers (Mt) | |
|---|---|
| China | 956.9 |
| USA | 564.3 |
| India | 204.8 |
| Japan | 120.8 |
| Russia | 105.9 |



2004: BP Statistical Review of World Energy. Mt = million tonnes

China and India account for almost three-quarters of the increase in coal demand in developing countries and two-thirds of the increase in world coal demand, according to the EIA.

**Primary Uses**

Fuel, and to make coke, which is used in steel and iron

**Trends**

Coal consumption in the mature market economies is projected to rise at an even pace, from 2,067 million tonnes in 2002 to 2,261 million tonnes in 2015, according to the EIA. Its future depends on the development of technologies to extract it more efficiently, to reduce emissions and capture carbon.

## Energy
### Gasoline (Petroleum)

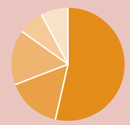
Petroleum is refined into gasoline, which powers most of the world's transportation systems. In the long term, the greatest influence on gas prices is the cost of crude oil.

| Biggest Producers (quad. Btu) | |
|---|---|
| Saudi Arabia | 19.09 |
| Russia | 17.45 |
| USA | 12.03 |
| Iran | 8.04 |
| Mexico | 7.40 |

2003 Petroleum: US Energy Information Administration. quad Btu = quadrillion British thermal units

The biggest portion of the cost of gas, about 60%, goes to the crude-oil suppliers. 10% goes to refining costs, another 10% to marketing and distribution, and about 20% to taxes, according to the US Department of Energy.

| Biggest Consumers (quad. Btu) | |
|---|---|
| USA | 39.05 |
| China | 11.38 |
| Japan | 11.32 |
| Germany | 5.53 |
| Russia | 5.50 |



2003 Petroleum: US Energy Information Administration. quad Btu = quadrillion British thermal units

Steady world oil demand, combined with modest increases in world spare oil production capacity, and risks of geopolitical instability, are expected to keep crude oil prices high through 2006, according to the Energy Information Association.

**Primary Uses**

Fuel

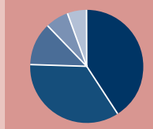
**Trends**

Although the cost of crude oil has the most impact on average gasoline prices in the long term – contributing over 50% to the retail price – local market conditions, which include the forces of supply, demand, competition, and government regulation, also have a significant impact, making it difficult to predict its future.

## Energy
### Natural Gas

Natural gas is a combustible mixture of hydrocarbon gases, including methane, ethane, propane, butane and pentane. Pure methane is used in homes for heating.

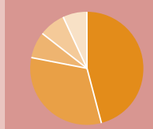
| Biggest Producers (billion m³) | |
|---|---|
| Russia | 625.0 |
| USA | 530.3 |
| Canada | 184.1 |
| UK | 100.5 |
| Netherlands | 83.7 |



2004: Oil & Gas Journal, Petroleum Economist, IEA, UN Yearbook of Statistics. billion m³ = billion cubic meters

In the last decade, the production of natural gas has grown steadily. However, it is impacted by short- and long-term issues, such as weather, permit issues, land access, pipeline infrastructure and exploration costs.

| Biggest Consumers (billion m³) | |
|---|---|
| USA | 623.0 |
| Russia | 438.9 |
| UK | 101.6 |
| Germany | 99.7 |
| Canada | 93.4 |



2004: Oil & Gas Journal, Petroleum Economist, IEA, UN Yearbook of Statistics. billion m³ = billion cubic meters

World natural gas consumption grew by 3.3% in 2004, compared with a 10-year average of 2.3%. Consumption in the U.S. stagnated in the face of high prices and industrial restructuring.

**Primary Uses**

Heating, fuel (for buses), plastics, fertilizers and anti-freeze

**Trends**

Natural gas is projected to be the fastest-growing component of world energy consumption with an average of 2.3 percent annually from 2002 to 2025, compared with projected annual growth rates of 1.9 percent for oil consumption and 2.0 percent for coal, according to Research Report International's 2005 gas outlook.

## Precious Metals
### Gold

Gold has been coveted for centuries for its unique blend of rarity, beauty and near indestructability. Central banks hold physical gold reserves as a store of wealth.

| Biggest Producers (tonnes) | |
|---|---|
| South Africa | 341 |
| Australia | 259 |
| USA | 258 |
| China | 215 |
| Peru | 173 |

2004: ILZSG & GFMS Metals Consulting

World gold mine production in 2004 dropped by 5%, the biggest loss since 1943. In 2004, output by the top three gold-producing countries decreased by 76,300kg, or 65% of the decrease in overall world mine production.

| Biggest Consumers (tonnes) | |
|---|---|
| India | 621 |
| Italy | 315 |
| Turkey | 289 |
| China | 235 |
| USA | 223 |

2003: U.S. Geological Survey (USGS)

Jewelry fabrication in 2004 increased by 129,000 kg due to higher demand in India, East Asia and Turkey. Bar hoarding also increased by 38%, due to demand in India, Japan, and Thailand. Gold used in electronics rose by 11%.

**Primary Uses**

Electronics, jewelry, dentistry and decoration (architecture)

**Trends**

Worldwide consolidation will continue in the gold industry as gold producers seek to secure their assets, cut costs, and exploit gold's higher prices. The US gold industry, which had been closing its gold mines, is expected to continue consolidatation, however. Old mines are reopening and new ones are being commissioned.

## Precious Metals
### Silver

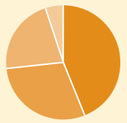
Silver conducts heat and electricity better than any other metal. It is usually found as by-product of copper, lead and zinc processing, or along with gold discoveries.

| Biggest Producers (tonnes) | |
|---|---|
| Peru | 3060 |
| China | 2800 |
| Mexico | 2700 |
| Australia | 2250 |
| Chile | 1400 |

2004: World Silver Survey 2005

Total world mine production was 20,300 tonnes in 2005, compared with 19,700 in 2004, however, demand still exceeds supply, according to the US Geological Survey (USGS) January 2006 silver report.

| Primary Uses (million ounces) | |
|---|---|
| Industrial applications | 367 |
| Jewelry & silverware | 247 |
| Photography | 181 |
| Coins & medals | 41 |



2004: World Silver Survey 2005

Demand is driven by the global rise in gross domestic product and industrial production. The deficit between fabrication demand and world supply was large in 2005 at 1,700 tonnes, according to USGS.

**Primary Uses**

Antibacterial uses, electrical, jewelry, silverware and photography

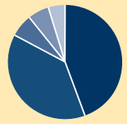
**Trends**

Demand is rising in response to fabrication demand in the jewelry and silverware markets. Meanwhile, silver use in photography fell in 2005 again due to the growth of digital photography in the amateur market. The antibacterial use of silver in trace amounts in wound care is increasing, according to the USGS.

## Precious Metals
### Palladium

Palladium is one of six the platinum-group metals (PGMs). PGMs usually are found together and are the rarest metallic elements. It is currently less costly than platinum.

| Biggest Producers (tonnes) | |
|---|---|
| Russia | 96 |
| South Africa | 82 |
| USA | 14 |
| Canada | 14 |
| Other countries | 10 |



2005: U.S. Geological Survey, Mineral Commodity Summaries, January 2006, and Platinum 2005 Interim Review

Production of PGMs is concentrated in Russia and South Africa. This fact causes market uncertainty concerning prices and availability of supply, according to the US Geological Survey (USGS), January 2006, PGM report.

| Biggest Consumers (tonnes) | |
|---|---|
| USA | 103 |
| Rest of World | 69 |
| Japan | 45 |
| Europa | 34 |

U.S. Geological Survey, Mineral Commodity Summaries, January 2006

The demand for fuel cell technology will lead to higher PGM demand. Platinum is still the primary catalyst used in fuel cells to convert hydrogen and oxygen to electricity. Palladium will play more of a role in the future, according to the USGS.

**Primary Uses**

Automotive catalysts, dental, electronics, and jewelry

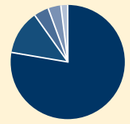
**Trends**

Until recently, only platinum could be used in diesel catalytic convertors, however, new technologies allow palladium to be used. As palladium is less expensive than platinum, it is expected that auto manufacturers will change PGM ratios in favor of palladium in the long-term, according to the USGS.

## Precious Metals
### Platinum

Platinum, another of the six the platinum-group metals (PGMs), is the most expensive and is like palladium, is used for "green" applications, such as auto catalysts.

| Biggest Producers (tonnes) | |
|---|---|
| South Africa | 170 |
| Russia | 27 |
| Canada | 9 |
| Other countries | 8 |
| USA | 4 |



2005: U.S. Geological Survey, Mineral Commodity Summaries, January 2006, and Platinum 2005 Interim Review

World resources of PGMs that can be mined economically are estimated at more than 100 million kilograms, according to the US Geological Survey (USGS), January 2006, PGM report.

| Biggest Consumers (tonnes) | |
|---|---|
| USA | 89 |
| Europa | 66 |
| Rest of World | 59 |
| Japan | 36 |

2005: U.S. Geological Survey, Mineral Commodity Summaries, January 2006

An increase in diesel car sales in Europe caused an increase in use in 2005. The sales of jewelry will drop worldwide as a result of high prices and the use of white gold or palladium, according to the USGS.

**Primary Uses**

Automotive catalysts, dental, electronics, and jewelry

**Trends**

Tighter emissions regulations in China, Europe and Japan and other parts of the world is expected to lead to higher average platinum use in catalysts, especially on light-duty diesel vehicles, as particulate matter emissions become more closely controlled, according to the USGS.

## Industrial Metals
### Aluminum

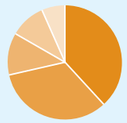
Aluminum is the second most abundant metal element after silicon. Aluminium and its alloys are used for wide range of industrial and commercial products.

| Biggest Producers (000 tonnes) | |
|---|---|
| China | 7,150 |
| Russia | 3,695 |
| Canada | 2,740 |
| USA | 2,500 |
| Australia | 1,920 |

2005: World Bureau of Metal Statistics & GFMS Consulting

Global output of aluminum in 2005 grew by 3.6% year-on-year to 23.41 million tonnes, according to GFMS Metals Consulting. China is the biggest producer, followed by Russia.

| Biggest Consumers (000 tonnes) | |
|---|---|
| China | 7,000 |
| USA | 6,100 |
| Japan | 2,200 |
| Germany | 1,820 |
| South Korea | 1,200 |



2005: World Bureau of Metal Statistics & GFMS Consulting

China remains the world's largest consumer of aluminum due to growth of its automotive sector. Cuts by the Big Three US automakers may lead to a decline from this source.

**Primary Uses**

Soda cans, airplanes, foil and high-tension power lines

**Trends**

The Asian markets overall seem to be well supplied due to a surge in Chinese exports. Demand in Europe remains weak, although it is improving in the US according to GFMS Metals Consulting.

## Industrial Metals
### Copper

Copper is used in a wide range of domestic, industrial, and technology applications. It is ductile, corrosion resistant, and a good conductor of heat and electricity.

| Biggest Producers (000 tonnes) | |
|---|---|
| Chile | 5,400 |
| USA | 1,210 |
| Peru | 1,015 |
| Indonesia | 1,000 |
| Australia | 915 |

2005: ICSG, WBMS & GFMS Metals Consulting

Though global mine capacity was projected to increase by 5.5% in 2005, it fell short of its anticipated growth owing to production shortfalls in the US and South America, according to the USGS.

| Biggest Consumers (000 tonnes) | |
|---|---|
| China | 3,670 |
| USA | 2,230 |
| Japan | 1,190 |
| Germany | 1,020 |
| South Korea | 875 |

2005: ICSG, WBMS & GFMS Metals Consulting

The construction industry is one of the main consumers of copper, which is used in wiring, in gas and water pipes, heating systems, roofs and as a structural component. China's demand for the red metal is growing with its economy.

**Primary Uses**

Electricity, coins, water pipes, microprocessors and construction

**Trends**

Despite more than 3% estimated growth in world mine and refinery production in 2005, production was insufficient to meet global demand. Global inventories of refined copper held in metal exchange warehouses continued their downward trend, falling below 100,000 tonnes during the third quarter of 2005.

## Industrial Metals
### Nickel

About 70% of nickel is used to make austenitic stainless steel, 10% for superalloys, and 20% for alloy steels, rechargeable batteries, catalysts, chemicals, and coins.

| Biggest Producers (000 tonnes) | |
|---|---|
| CIS | 270 |
| Japan | 165 |
| Canada | 145 |
| Australia | 124 |
| China | 92 |

2005: World Bureau of Metal Statistics, INSG & GFMS Metals Consulting

World nickel mine production was at an all-time high in 2005, according to the USG. The world reserve base of nickel, compiled by the USGS in 2005, is 140 Mt – around 100 times the annual global production in 2004.

| Biggest Consumers (000 tonnes) | |
|---|---|
| China | 190 |
| Japan | 180 |
| USA | 120 |
| South Korea | 105 |
| Germany | 96 |

2005: World Bureau of Metal Statistics, INSG & GFMS Metals Consulting

Consumption of nickel is dominated by the stainless steel sector, which accounts for around 70% of demand for primary nickel. World output of stainless steel has increased at an average of 10% per year, driven by China.

**Primary Uses**

Aerospace industry, rechargeable batteries and coins

**Trends**

In 2005, the International Stainless Steel Forum forecast 5% growth per annum in stainless steel production. If this proves correct, demand for nickel in stainless steel will also grow by 3% to 5% per year. High gas prices have also fueled a move to use nickel-metal hybrid (NiMH) batteries in hybrid vehicles.

## Industrial Metals
### Zinc

Zinc is used primarily as a coating on iron and steel to protect against corrosion. It is also a micronutrient essential for human, animal and plant health.

| Biggest Producers (000 tonnes) | |
|---|---|
| China | 2,500 |
| Oceania | 1,395 |
| Peru | 1,260 |
| USA | 770 |
| Canada | 680 |

2005: ILZSG & GFMS Metals Consulting

There is a shortage of zinc concentrate, the raw material used for zinc production. Little new capacity is planned despite high prices. GFMS Metals Consulting therefore expects a 200,000 tonnes deficit this year and in 2007.

| Biggest Consumers (000 tonnes) | |
|---|---|
| China | 2,715 |
| USA | 1,125 |
| Japan | 622 |
| South Korea | 515 |
| Germany | 490 |

2005: ILZSG & GFMS Metals Consulting

China is the main driver of the current bull market in refined zinc. In 2005, it imported 65% more tonnes than in 2004 as a result of growing demand from its galvanized steel and battery industries.

**Primary Uses**

Galvanizing, pharmaceuticals, die casting, construction and brass

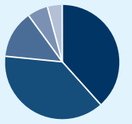
**Trends**

World zinc consumption in 2005 was greater than world production. Consequently, London Metal Exchange stocks were down by more than 200,000 tonnes in 2005. These are positive signs for continued strength of the zinc market beyond 2006, according to the US Geological Survey.

## Industrial Metals
### Tin

Most tin is used as a protective coating or as an alloy with other metals. Tin is essential to many applications for which there are no satisfactory substitutes.

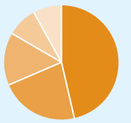
| Biggest Producers (000 tonnes) | |
|---|---|
| Indonesia | 120 |
| China | 120 |
| Peru | 42 |
| Bolivia | 19 |
| Brazil | 13 |



2005: World Bureau of Metal Statistics

Much production of tin is dependent on small miners, mainly in Indonesia and China. Chinese production is growing, but output is being used domestically. The US no longer mines tin, but it is the second biggest consumer.

| Biggest Consumers (000 tonnes) | |
|---|---|
| China | 101 |
| USA | 48 |
| Japan | 32 |
| Germany | 19 |
| South Korea | 18 |



2005: World Bureau of Metal Statistics

Demand for tin has grown by the move to lead-free solders, backed up by legislation in Europe, Japan and China. Solders that typically contain about 63% tin are being replaced with solders containing over 95% tin.

**Primary Uses**

Electronics, plating and for soldering

**Trends**

GFMS Metals Consulting expects demand for tin to grow this year, due to increased growth in the electronics sector, mainly in Japan. They forecast a slowing of global supply growth due to capacity contraints, and expect just 1.4% growth this year, compared with 4.4% in 2005.

## Industrial Metals
### Lead

Lead is a corrosion-resistant, dense, malleable metal that has been used for at least 5,000 years. Today, it is in demand for starting-lighting-ignition (SLI) batteries.

| Biggest Producers (000 tonnes) | |
|---|---|
| China | 1,040 |
| Oceania | 720 |
| USA | 430 |
| Peru | 310 |
| Mexico | 145 |

2005: ILZSG & GFMS Metals Consulting

GFMS Metals Consulting anticipates an 18,000 tonnes surplus in 2006, and a 37,000 tonnes surplus in 2007. Chinese exports of lead will remain close to 2004 levels of 450,000 tonnes.

| Biggest Consumers (000 tonnes) | |
|---|---|
| China | 1,665 |
| USA | 1,520 |
| Germany | 390 |
| South Korea | 365 |
| Japan | 280 |

2005: ILZSG & GFMS Metals Consulting

Anecdotal evidence suggests that US demand is growing. However, consumption growth remains centered on China as Western world demand fell by 0.9%. GMFS is projecting 0.7% growth in 2006 and 2007.

**Primary Uses**

Construction, power systems, batteries, radiation shields

**Trends**

GFMS expects a sharp correction in the lead market. However, it expects prices to remain above USD 1,000 per tonnes for much of 2006. It is projecting an average price of USD 1,145 per tonnes in 2006 followed by USD 900 per tonnes in 2007.

**Commodities on the Rise.** Over much of the 1980's and 1990's, commodities such as oil or gold had the image of being uninteresting, underperforming assets. This perception has changed dramatically in recent years. Since 2003, commodity markets have seen a remarkable rally. The oil price has tripled from just above 20 dollars a barrel to above 60 dollars. Gold and silver are trading at 25-year highs. As of the beginning of the year, base metals are reaching new all-time highs almost on a daily basis and prices for soft commodities are also slowly gaining pace.

The sharp increase in commodity prices is mainly due to a combination of skyrocketing demand and constrained supply. The economic rise of China and India is mainly responsible for the rapid increase in demand for commodities. In its new 5-year plan, China intends to spend 375 – 500 billion dollars on new infrastructure. A lot of this sum will be used to improve roads and railways, to upgrade the electricity grid, and to construct new buildings in China's second-tier cities. Those projects require tremendous amounts of energy and other basic materials like steel and copper. Moreover, with the rising living standard, Asian consumers are increasingly switching to Western style consumption patterns. This leads not only to rising demand for soft commodities, such as meat or coffee for Western-style food, but also to increased demand for precious metals for jewelry. Since we expect the global economy to grow by more than 4.5 percent and China to grow by as much as 10 percent this year, demand for commodities looks set to increase further.

On the supply side, capacity is still constrained. Following a 25-year low in commodity prices, the sector was reluctant to invest in capacity expansion. Even now with commodity prices soaring, investment in new capacity is increasing only very slowly. Greenfield commodity projects are very capital intensive and often have lead times up to 10 years. Many commodity producers are still not convinced that the price rally will be sustained long enough to justify new large-scale investments. We therefore believe that the bull-run is not over yet. Constrained supply and rising demand are a recipe for rising commodity prices in the coming years.

**Giles Keating, Credit Suisse Head of Global Research**

Photo: Martin Stollenwerk

# THE LEXUS RX 400h
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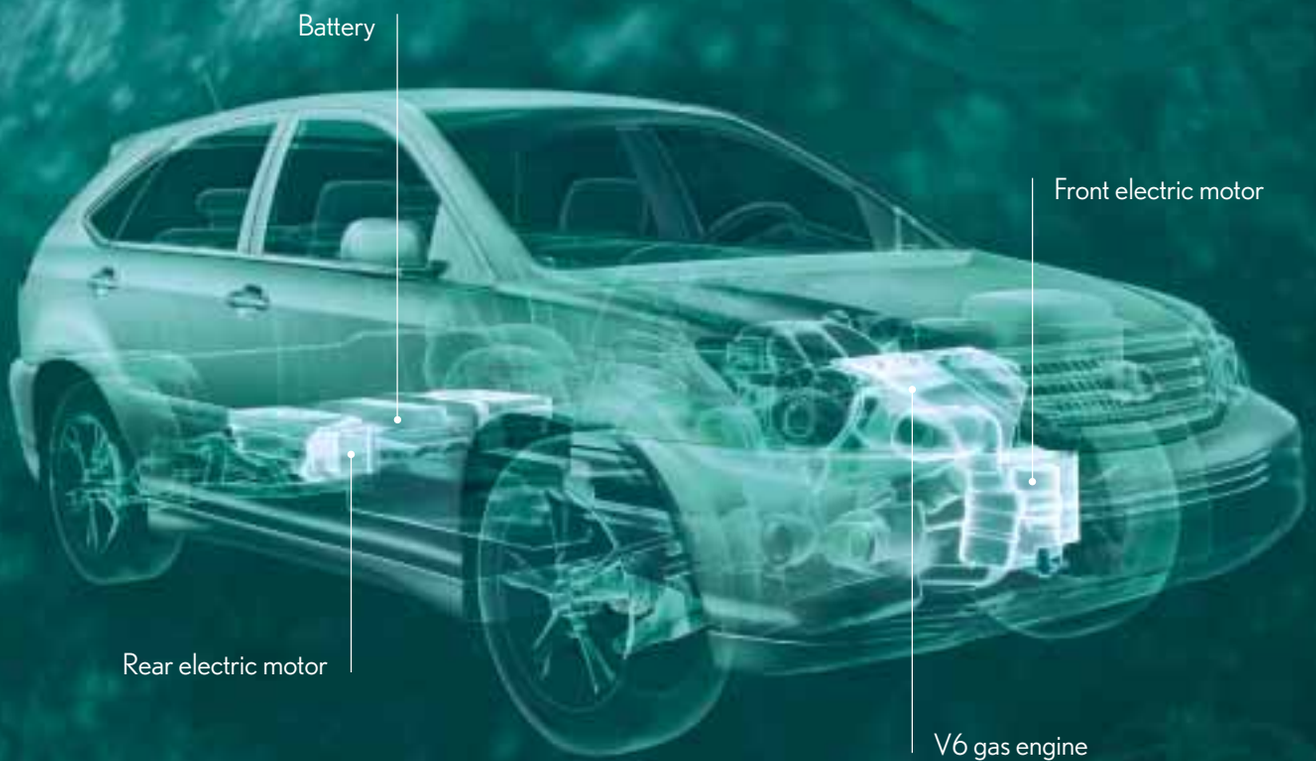


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- Combined fuel consumption: 8.1 l/100 km *
- 5-year/100 000-km warranty on all Hybrid Synergy Drive® components
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average $CO_2$ emissions of all models available in Switzerland: 200 g/km
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Soybeans are the world's foremost provider of protein and oil. This soft commodity is found in thousands of products, including foods for humans and livestock, and in plastics, lubricants and paints. As oil prices soar and the search for alternative fuel sources grows, so too has soybean demand for the production of biodiesel.



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Photo: Antonio M. Rosario, Getty

# “It’s time to ride the next bull”

Interview: Michèle Bodmer

## Wall Street legend Jim Rogers says that now is the time to take commodities seriously. He comes to this conclusion not through omniscience, but through what he calls the common sense of recognizing the most basic principle of economics: supply and demand.

Bulletin: **By age 37 you retired, after earning in your words: “More money than I ever knew existed in the world.” What’s that like?**

Jim Rogers: (laughs) Amazing. I can’t complain.

**At that time, you’d been on Wall Street for just 12 years.**

I was a novice when I arrived on Wall Street in 1968, and my inexperience was a huge advantage. Unlike most of my colleagues on Wall Street who had trouble being disloyal to a stock market that had enjoyed a two-decade long bull-run, I was looking for every opportunity to buy value cheap.

**And you found that in commodities.**

As the bear market settled in the 1970’s, I began to notice opportunities in commodities. In 1971, I bought my first CRB Commodity Yearbook, the annually published bible of commodities traders, and have bought one ever since. I studied the trends in supply and demand and found myself in the middle of my first bull market. I rode that bull for the next decade. That early self-education in commodity investing played a role in my success as co-manager of the Quantum Fund, an offshore hedge fund analyzing the worldwide flow of capital, raw materials, goods and information.

**Are most novice investors at an advantage?**

Most experienced investors could use some mental deprogramming. New investors have an advantage in that they don’t have prejudices or biases. Anybody coming into the market now doesn’t know all of the conventional wisdom about stocks, bonds and commodities, so perhaps they will look at them with a clearer head. It is a danger, however, coming into the market today with the mindset that commodities always go up and stocks and bonds never do.

**At 63, you’re an experienced investor. Do you still judge everything objectively?**

I have made most of my money investing against conventional wisdom. I think it is a good sign when people think I’m crazy, the only difference now is that they are saying I’m a crazy “old man”.

**You became optimistic about commodities again in 1998, and again met with some skepticism from other financial experts.**

Some skepticism? Huge skepticism, but that is exactly what smart investors look for. During the stock market boom, no one was investing in new productive capacity for commodities. Supply has been going down, and at the same time, demand is going up. That is called a bull market. If I’m right, this bull market has a long way to go.

**People are now picking up on this and commodities are becoming a hot topic.**

Right now, there are 70,000 mutual funds for the public to invest in stocks and bonds, and there are fewer than 10 for commodities. Compared with these facts, there is still no interest, so it’s not really true that commodities are a hot topic. Investors are still stuck on stocks and bonds.

I bet you don’t know anybody who is investing in commodities.

**That’s true.**

Most people think the only place to buy coffee is from Starbucks, and that sugar comes from the supermarket. You can buy all this stuff on an exchange and you can make >

Photo: Thomas Eugster

**Growing up in the small town of Demopolis, Alabama, Jim Rogers dreamed of retiring at 40 and seeing the world. At age five, in 1947, he began working toward his dream by picking up bottles at baseball games. A year later, he was thinking bigger. He borrowed 100 dollars from his father to buy a peanut parcher, which put him in business to sell soft drinks and peanuts at Little League games. Five years later, he'd paid of his loan and had money in the bank. By the mid-60's, after graduating from Oxford, where he studied politics, philosophy, and economics, he went to Wall Street to further test his knack for making money. By the early 70's, he co-founded the Quantum Fund, a global-investment partnership. During the next decade, the portfolio gained more than 4000 percent and he was able to retire at 37 – though he hasn't been idle. He's traveled around the world twice – once on a motorcycle and once in a car. Both trips made it into the "Guinness Book of World Records". No matter where he travels, he exercises an hour a day – he even gave this interview while pedaling a stationary bike. The man with seemingly endless energy has written two bestselling books about his travels, "Investment Biker" and "Adventure Capitalist", as well as his latest, "Hot Commodities".**

a lot of money if you know what you are doing. The point is, if you read the "Financial Times", there are eight or 10 paragraphs about commodities and the rest of the paper is devoted to stocks and bonds. There might be more interest now than seven years ago when I started talking about this, but it is nowhere near where it should be. At least you, from Credit Suisse, are here talking to me now, but at that time, there is no way that you would have come to talk to me, even if I had offered to buy you dinner. Can you imagine how many people will want to talk to me seven years from now?

**If the commodities trend is supposedly so obvious, why is it taking so long for the financial world to catch on?**

After a bull market in stocks that has lasted longer than most of the careers of today's financial managers, it is understandable that most investors and their advisors have trouble wrapping their heads around the prospect of investing in commodities. If you had come to me in 1982, and I had advised you to put your money into an S&P 500 Index fund, which I was doing, you would have thought I was insane and reported that some crazy guy was telling you to buy shares when everybody knows that shares are dead. What people didn't realize is that they were already in the early stages of a bull market for stocks that would last nearly 20 years. People aren't interested in things when they are going down, but they should be.

**How long will this commodities bull market last?**

This is not a prediction, but if history is a guide, this commodities bull market will last anywhere from 2014 to 2022. Bull markets last a long time because it takes a long time to bring new supply to market. If you and I, for example, decide to go into the lead business, we have to find a lead deposit. If we find one, we have to raise money to build the mine. Then we have to deal with unions, environmentalists, the government, etc. And we have to build a smelter. It will take years until we get this lead mine running. In the meantime, other lead mines are depleting and everyone is coming to understand that lead mines are good business, and they will all want to get one on stream by 2017. By then, other people will be saying that lead is too expensive and they will find other ways to do things. This will result in a glut of lead, and it will take 18 years on average for that glut to wear out, for the mines to start depleting and for people to start using lead again. And then, of course, you would have another bull market in lead by 2036.

**If the markets are just following historical cycles, why is it that commodities have such a bad reputation?**

A lot of people lost big money on commodities in the 80's and 90's. When people lose money on something the stories spread. Another risk is that, like stocks, commodities can be bought on margin. By law you have to put up at least 50 percent of the price of shares, but the margins on commodities are lower than 5 percent, meaning you can buy 100 dollars worth of soybeans for 5 dollars. If soybeans go up to 105 dollars, you've doubled your money. Great. If they go down 5 dollars, you're wiped out. Not so great. Smart speculators can make a ton of money buying on margin, but they can afford it. Most people can't.

**How should an investor get started in commodities?**

Do your research and make informed decisions. Don't listen to me, don't listen to anything you see on TV or read in the papers. Only invest in things you understand.

**Is it easier to invest in commodities than stocks?**

Commodities are simpler to understand for most novices, because they are tangible. Everybody who will read this article already knows a lot more than they think about commodities. Before they go to work, they drink coffee with sugar, or eat wheat or maize, and have orange juice. They wear cotton, wool or silk and drive cars with petrol, etc. In comparison, most of us did not know what a dot-com was, but were buying in anyway. Everybody knows what sugar, or chocolate, or rubber is, so they are at an advantage. All they have to do now is find out where sugar and cocoa come from, and if there will be too much or too little. It takes homework, but when you come to a conclusion that you know is right, and find something cheap, then it's time to call your broker and invest.

**I can imagine that a lot of people don't want to invest so much time.**

For those that don't have that much time, or that much interest, they should look to index investing, or buying a basket of shares. For example, if you invest in the SMI in Switzerland, essentially, you are buying into the Swiss stock market. You are not buying individual stocks. You can do the same with commodities. Studies have shown that index investors outperform active investors 80 percent of the time year after year.

Photo: Thomas Eugster

**You started your own index, the Rogers International Commodities Index and your own fund. Why?**

When I came to the conclusion that the bear market was reaching an end in 1998, my original plan was to license an existing index and start an index fund. I went to the various indexes, but realized that many change their component weightings every year. I wanted something transparent, consistent and stable. Most of the big indexes have big trading desks, or traders who trade the products and arbitrage against their customers. That's how they make a lot of money. From a customer's point of view, I decided I need a better index, so I created my own. So far, my index has done better than the others, having more than tripled since it was started in August 1998.

**As you've said, all good things must come to an end. How should investors know when the change is coming?**

The signal that a bull market is over is a series of fundamental changes in the way we live. For example, in 1972, oil went from 3 dollars a barrel to 34 dollars, and prognosticators were saying prices would hit 100 dollars a barrel by the mid-80's. President Jimmy Carter had Americans turning down their thermostats, buying smaller cars and cursing OPEC. European nations began using nuclear power instead of oil to generate electricity, further decreasing demand. Then, oil deposits were discovered in Alaska and the North Sea, increasing supply. By 1978, oil production exceeded demand and a fundamental shift took place, which should have signaled the end of the bull market. The media is also a good signal. When "Fortune" has farmers or miners on the cover, I will be getting out of commodities.

**Why get out when everyone is finally talking about commodities?**

When everyone is thinking the same way, historically that means that people aren't really thinking. That will be the top of the market, and that is the time to get out and start looking at other things. In about 2018, I will tell everyone to get out of commodities and they will all say, "You old fool. Don't you know that commodities always go up?" That is the way that the world works. In 1999, people were still saying that dotcoms always go up, and people like me were saying that it was time to get out. Everybody thought I was crazy. This time, when I say that it is time to sell commodities, I hope that some investors are listening. <

# Smart Investors Learn Mandarin

**Jim Rogers says the best way to understand the world is to see it firsthand. The aptly named "Indiana Jones of finance" practices what he preaches.**

He's traveled around the world twice, and as one might expect, he did it in extraordinary ways. In 1990, about 10 years into his "retirement", he began a motorcycle tour around the world. Two years later he'd covered 65 067 miles on land over six continents, and many more by sea, rail and air. He not only set the world record for land travel, but also learned much about the complex drivers of the world economy. What he'd seen influenced him to start his own commodities fund in 1998, just before embarking on a second trip around the world. He and his now wife, Paige Parker, traveled 152 000 miles through 116 countries in just three years, setting another Guinness World record along the way.

On his first trip, he saw, firsthand, that the demand for commodities was growing and supply was dwindling. In his second trip, he'd also developed confidence in China, whose appetite for raw materials was apparent. "The first time I traveled across China in 1988, there were no roads; I had to travel across the desert. Eleven years later, when I made the trip again, I found what I consider one of the best highway systems in the world," he says. "China's standard of living, of course, still lags behind the US and other developed nations, but the country is pure potential. Part of that potential includes the rising demand for natural resources and commodities of all kinds. It's just common sense to realize that a growing economy with 1.3 billion people needs things."

Today, China is the No. 1 consumer of copper, steel, iron ore and soybeans. It is the second-largest oil consumer in the world, using 6.6 million barrels a day, according to the US Energy Information Administration. This oil use is projected to double over the next 20 years. In comparison, the US, with a fraction of China's population, uses 15 million barrels a day. "As it becomes the No. 1 economy in the world, China will increase consumption in almost every category of commodities." During his own travels, Rogers became aware the needs of the Chinese consumer were changing. As they moved more from rural to urban areas, their incomes increased and so too have their consumption patterns. "I could see on my second trip that needs had changed. Everybody wanted a mobile phone, or motor scooter, and were generally switching to Western ways of consumption."

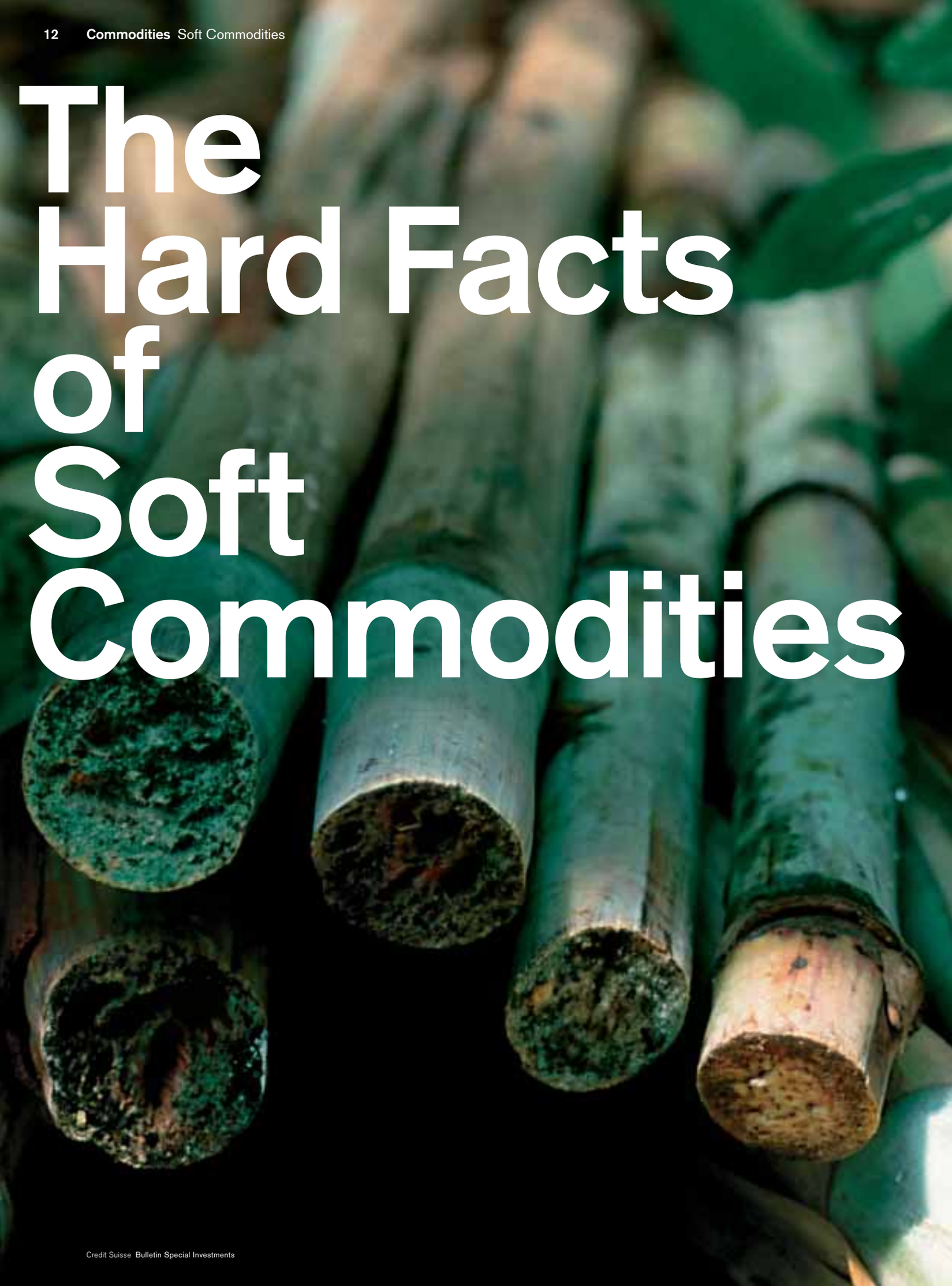
All the best capitalists live in communist China, Rogers argues, and he says one of the nation's biggest assets is its overseas citizens who are returning with their capital and expertise. In fact, there are more than 57 million Chinese living abroad, and 80 percent of investment in China comes from them. "The smart investor will be paying close attention to opportunities for cashing in on the country's growing adventure in capitalism. The best way to do that is to buy commodities – particularly during times of correction and consolidation."

He is so confident that China will be the world's next great nation that he employed a Chinese nanny for his daughter shortly after she was born. "She is 3 years old and already fluent in Mandarin," he says. "Mandarin will be the most important language in her lifetime. If you chose to ignore the rest of my advice, at least listen to this: Make sure that your children and grandchildren will learn Mandarin." As a man who stands behind his words, he is seriously considering moving to China with his family from New York. "China is a very exciting place to live right now, and will be for years to come. The experience of moving to Shanghai in 2006 would be comparable to moving to London in 1806, to New York in 1906, or to Tokyo in 1956."

But even this China enthusiast looks at the country's economic situation with his typical level headedness. "It's asinine not to expect a measure of unrest and turmoil in China. After a decade of phenomenal growth, China will stumble along the way, but those 1.3 billion consumers aren't going to disappear." He argues that even a hard landing – or two – will present golden investment opportunities. "Commodity prices will fall during those setbacks, and, as always, a lot of investors will panic. I, however, will be buying more commodities. Buying cheap is the way to make some real money." **mb**

**Learn more about Jim Rogers at: www.jimrogers.com**

# The Hard Facts of Soft Commodities



# During the past decades, soft commodities were a neglected asset class, but that may change in the medium to long-term horizon thanks to growth in the emerging markets. China, in particular, will start importing soft commodities after years of neglecting its agricultural base.

Text: Tobias Merath, Global Economics & FX Research
Hervé Prettre and Miroslav Durana, Credit Suisse Commodities and Equities Trading Research

Some economic "gurus", such as Swiss-born Marc Faber, maintain the following theory: The investment community switches assets on a regular basis, so that every asset class is expected to go through a boom and bust scenario. Now that we have seen this theory applied to technology stocks, real estate, government bonds and energy commodities, the investment community is looking for a new target, which might well be soft commodities. Marc Faber believes that soft commodities have acquired the status of a new under-owned asset class and could become the next craze. This seems to be confirmed by speculators' rising net positions in the futures markets: according to the Commodities Future Trading Commission (CFTC), net long positions in soft commodities have risen to a several year high, however, they are still at much lower levels than in the past decade.

### Soft Commodities Take Hard Hit

If the trend is toward long-term growth, why have soft commodities suffered in recent years? An increase in R&D activities is one culprit. The industry has produced cheaper alternatives to an array of products ranging from cotton to sugar. While this trend has existed as long as industry itself, it has accelerated on the back of higher investment since the 1980s. Conversely, new agricultural methods and fertilizers enable producers to obtain a higher yield on existing crops and to implement production in new territories. Unlike the case of depleting oil reserves, the growing possibilities of increasing production have seen soft commodity producers lose much of their pricing power.

Internationalization of corporations has also been a thorn in the side of this sector. Over the past 30 years, the world economy has eliminated a number of barriers and companies have internationalized. As a result, the largest staples consumers, such as Nestlé, Danone and McDonalds, have significantly increased their bargaining power and put the independent commodities producers under pressure. Parallel to the internationalization of staples buyers, however, increased capacities in the area of international freight have reduced untapped demand in some regions, thus limiting pricing pressures in some commodities markets.

Finally, soft commodities have suffered from declining interest on the part of investors. As soft commodities have seen their share of value-added decline in the industrial process, they have been dropped by investors as interesting investment alternatives in favor of technology, the Internet, materials, real estate, bonds, and more recently, industrial commodities and precious metals. This particular asset class is also perceived as risky, due to the powerful effect of the weather on prices, as well as the effect of political instability in many Third World countries.

### Demand in China Provides Long-Term Catalyst

While the reasons for overlooking soft commodities are not likely to change in the short term, some might recover on the back of several long-term trends, especially those sparked by China. The economic and population growth in China have induced rising demand for soft commodities. At the same time, China has clearly given priority to energy and metals in its development path, sacrificing agricultural land and equipment in its investment plans. As a result, land dedicated to agriculture has declined steadily to the benefit of industry – similar to Europe or the US at the start of the 20th century, or the Soviet Union in the late 1960s. >

## World population growth and diets

**The long-term demand for food is expected to rise. It is believed that this trend will boost demand for soft commodities, according to a forecast released by the Australian government.** Source: FAO

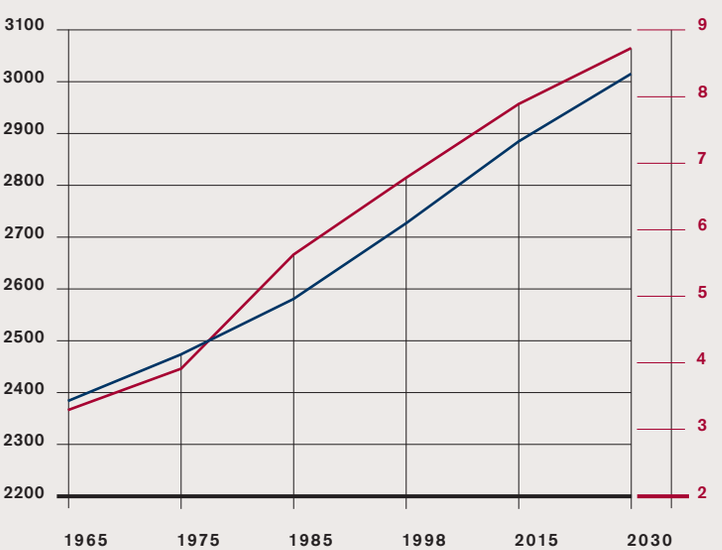



Photo: C.M. Bahr, Arco Digital Images

After years of little, if any, investment in agricultural output and productivity, and with declining land allocation for agriculture, the Soviet Union experienced a bottleneck in soft commodities in the early 1970s. Despite reforms to boost productivity and prices, the Soviet Union had to import grain from the US thus triggering a significant boost in demand for soft commodities. China is now in a similar situation. For years, heavy and light industries have been favored over agriculture to such an extent that only 30 percent of China's soil can now be used for agriculture. In 2004, China started importing wheat and even cotton for its key textile exports. China, which is the world's biggest soybean buyer, also more than doubled its soy imports last year.

Climate disorder exacerbates the shortage of local production. Assuming a stable gross domestic product (GDP) growth rate in the coming years and rising industrial exports, commodity imports are likely to increase further and create a surge in international prices. China currently imports only 2 percent of its food needs. Exane BNP Paribas estimates that this share could rise by 25 percent to 35 percent in the next few years.

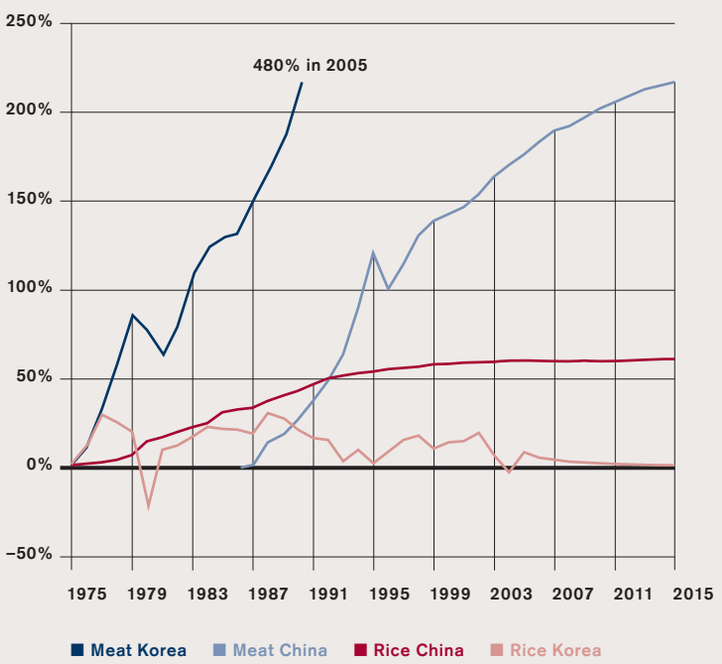
### Growing Population and Population Needs

The Chinese example can be replicated at global level, although to a lesser extent. The United Nations expects the world's population to rise from 6.3 billion to 7 billion within the next 20 years, which should trigger a constant rise in population needs. Most economic forecasters expect GDP per capita to rise in the coming decades which, together with the opening of local cultures to Western tastes – more sugar, orange juice, fish and meat, etc. – will see the average daily amount of food consumption per capita rise. (see page 13).

Asia, in particular, is going to witness a change in dietary habits: rice demand is expected to lag behind population growth, while demand for Western-style commodities will outpace by far the expected population growth. The Organisation for Economic Co-operation and Development (OECD) has reported changing food habits in South Korea and China since 1975 (see below). A clear trend emerges: rice consumption is flat, whereas meat consumption is skyrocketing.

## Expected Growth in Asian Food Demand

**Tastes are changing. In Korea for example, rice consumption has remained flat and meat consumption has skyrocketed since 1975 – a time of strong GDP per capita growth.** Source: OECD, Credit Suisse




### Underinvestment in Past Decades Could Lead to Price Hikes

Over the past century, agriculture has been neglected as an area of investment. This trend has accelerated since 1980, first in the wake of the start of the IT revolution and the opening of world markets, and again in the 1990s with the worldwide real estate boom. As a result, the amount of surface area allocated to agriculture, and the volume of investment in food production have faced a regular decline in all countries, including the US. Productivity growth has decelerated since the start of the 1990s, owing to low investment and growing mistrust of the agribusiness. As a result, there is growing concern that agriculture will in future face the same situation as oil and metals: underinvestment and declining productivity leading to a peak in production against a backdrop of rising demand. This imbalance could trigger a spike in agriculture prices.

Another risky element of soft commodities is that they are extremely weather sensitive, due to the effect of droughts or floods on crops. Scientists believe that the unusual weather patterns seen in recent years are linked to global warming and could be a harbinger of decisive climate changes. Hurricanes have already destroyed 15 percent of orange juice capacity in the US, acid rain has ruined a large share of Indian land, and the Aral Lake is considered dead, triggering a decline in agriculture activities in the region. Those are just a few examples. The Food and Agriculture Organization of the United Nations (FAO) estimates that food emergencies linked to droughts increased from 50 percent to 70 percent between 2000 and 2004. In the long term, one major threat is expected to significantly reduce crop levels – increasing global temperatures. Temperature increases have accelerated in the past decades, and several scientists and scientific bodies, including the Intergovernmental Panel on Climate Change (IPCC), have projected that global average surface temperature will increase by between 1.4°C and 5.8°C from 1990 to 2100, while sea levels could rise by up to 88 centimeters, eliminating a significant portion of land.

### High Oil Prices Put Spotlight on Alternatives

Rising oil prices, increasing dependence of Western countries on oil reserves in geopolitically unstable regions, and the growing concern surrounding oil depletion have provided incentives to search for alternative energies. Among those new energies, ethanol has been one of the fastest growing: Brazil made a decision in 2005 to allocate 50% of its annual sugar production, the highest in the world, to ethanol generation.

The US, which is spearheading ethanol production using corn, has embarked on a similar path: in his State of the Union speech, President Bush announced the goal of replacing 75% of oil imports from OPEC with local ethanol production by 2020. And finally, Europe is endeavoring to increase the share of ethanol and methanol in total gasoline consumption to 5.75% by 2010. This trend is unlikely to reverse in the coming years, which will likely spur the surging demand for corn and sugar for the purpose of gasoline substitution. <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# Solar energy warms up the silicon market

**A booming electronics industry and an overheated solar sector are making one particular metal more and more important: silicon. The second most frequently-occurring element on earth is currently achieving record prices on the world's commodity exchanges.**

Text: Ingo Malcher

The Sahara, the beach at Rio de Janeiro, a flooded gravel-pit in Switzerland: they can all play an important part in getting the world's energy problems under control. Important, and lucrative. What they have in common is that the metal silicon occurs in sand. The element with the chemical symbol Si makes up 25.8 percent of the earth's crust, making it the second most frequently occurring element after oxygen – and hence very accessible. But before any money can be made with it, it has to be purified in refineries – and that is very difficult and expensive.

Silicon is not only an element in the periodic table. It is also a commodity that is traded throughout the world. And its price is currently at a record high. It has doubled in the last 24 months, and now stands at over 50 US dollars a kilo. The trend is still upward. Vigorous global economic activity has boosted demand in the electronics industry. Silicon is essential for computers, cellphones and MP3 players. But for some time now, traders on the commodity markets have also been acting for new clients: companies in the solar energy sector. This is because silicon is the basic raw material for solar energy. As a semiconductor, light and heat make it electrically conductive.

It is a very long time since the production of solar cells was the province of loners, screwing panels together in their garages in the hope of generating power. There is now a completely new industrial sector, specializing in the production of solar collectors. Companies like the REC Group in Norway and Solarworld in Germany are among the market leaders in this young sector. The high price of oil was not the first factor that made solar energy attractive: under the Kyoto protocol, the industrialized countries undertook to reduce emissions of greenhouse gases, and they have been looking for clean energy sources ever since. The consequence: the solar energy sector is experiencing an unprecedented boom.

But this upswing is being hampered. Against a constantly growing demand for solar cells, the supply of purified silicon is very limited. Also, the global silicon market is controlled by only a handful of providers. The world market leaders include Japanese chemicals group Tokuyama, the US Hemlock corporation and German company Wacker-Chemie, based in Munich.

The result is that the price of silicon has gone through the ceiling – and is still rising. It's no wonder that commodity traders are now calling silicon "gray gold". Pure silicon forms dark-gray crystals that look a little like diamonds. It is sold throughout the world, with hundreds of thousands of tonnes traded every year. In order to make money from the new silicon boom, all producers are currently anxious to expand their production capacities. Only in January did German company Wacker Chemie begin to expand its works in Burghausen. According to the company, the new facility will boost its capacity from 5500 tonnes to as much as 9000. This sort of project does not come cheap, however, and Wacker is proposing to invest 200 million euros in the venture.

A residual risk remains. After the boom in the computer sector at the end of the 1990s, we found out how fast dreams >

**Although silicon is the second most frequently occurring element in the earth's crust after oxygen, it has to undergo complex processing before it can be used for industrial purposes. Silicon is purified in special refineries, like this one at REC Silicon in Montana, US. Only pure silicon can be used for the production of semiconductors that will then be built into MP3 players, cellphones and solar cells. At times of high demand, however, there are bottlenecks in these facilities. That is why commodity traders are already calling silicon "gray gold".**

Photos: Thomas Eugster

can come to nothing. The silicon producers were among those affected. They were left with their piles of pure silicon with nothing to do but watch the price collapse. But now the silicon sector no longer knows the meaning of the word "crisis". The price has recovered, and is still climbing. And the outlook? "Still positive", says Gøran Bye, CEO of REC Silicon in the US. "These are very good times for solar energy", he says (see interview).

REC is one of the companies that have turned a cottage industry into a real one. This Norwegian group oversees the whole of the production chain in the solar energy sector. After the silicon has been purified in refineries at great expense, it is processed into wafers. This is a complex process in which the ultra-pure metal is drawn into rods up to two meters long and 30 centimeters thick. These rods are then cut into slices just half a millimeter thick. These wafers are the basis for the manufacture of semiconductor components and solar cells. Most wafer production is in Japan and Taiwan, plus Germany, the UK and the US.

In the US the promotion of alternative energies has become a very hot topic. In his State of the Union address at the beginning of the year, US President George W Bush gave the sector new impetus by announcing an increase of 22% in budgetary funds to promote alternative energies, to reduce the nation's dependence on oil. In sunny California things became rather more concrete in January, with the announcement of the largest solar energy promotional program in US history. The PUC (Public Utilities Commission) regulatory authority initiated an >

# Solar production – from cottage industry to modern, efficient industrial sector

**The high price of silicon has actually been good for the sector, says Gøran Bye of the Norwegian REC Group. It holds no terrors for his company.**

Bulletin: **Are you pleased about the high price of oil, Mr Bye?**
Gøran Bye: The high oil price certainly helps us to increase acceptance of solar energy. But it is still more expensive than oil. Still, you could say that a rethink is going on: alternative energies are now being welcomed and promoted.

**But silicon, the element required for the production of solar cells, is also more expensive than ever before. Why is that?**
It's simply a matter of supply and demand. We have a very strong electronics industry that needs a lot of silicon, and a booming solar industry that also needs a lot of silicon. It's as simple as that.

**Is the high price holding the solar industry back?**
Believe it or not, I actually think the high price has done the sector good. That's because it has forced the industry to analyze its own production chain, and technical improvements have been made as a result. Today, we use far less silicon in production than we used to. Pure silicon no longer has any great effect on the end price of the product, at any rate not as much as it used to. I think this will have consequences for future silicon-price movements.

**So you were forced to innovate?**
Yes, but not just since the price has been high. We pioneered the industrialization of wafer production. The solar sector was a very innovative manufacturing industry with very low volumes. We industrialized the production process: we looked at all costs and all production steps in order to cut the costs per unit produced. One of the key elements in this process is to use less silicon. But that's not all: we automate as much as possible, and we employ many elements of lean manufacturing.

**Your company is the only one in the solar sector with a presence throughout the value chain. You refine the silicon, you produce the wafers and you manufacture the solar panels. Why do it all yourselves?**
The solar sector is very young, and much more remains to be done in the areas of production standards and inter-company cooperation. It was exactly the same when other industries were in their early stages. But because the sector is so young, it's important to have a presence in all areas of production, from silicon to wafer production and solar panel manufacture. This also enables us to create synergies along the production chain. The fact that we produce our silicon ourselves gives us another advantage: even though the price is currently very high and the supply limited, we always have access to purified silicon.

**Silicon is the second most frequently occurring element on earth. Why is purifying it so expensive?**
Silicon is produced in very complex chemical refineries. I recently read an announcement from another company in the sector. It said that building a refinery with annual capacity of four million kilos would cost 100 euros per kilo, i.e. around 400 million euros. Then it's three years before the refinery is up and running. That's not long compared with the oil industry, but in other sectors you can put up an assembly shop in a month.

**What role can solar energy play in future in solving the world's energy problems?**
Fossil fuels will remain the most important energy source for many years to come. But these fuels are getting more and more expensive, and more and more scarce. Also, environmental awareness is increasing, and solar energy is very clean energy. Then there's the fact that it's a good way of distributing energy. It's very easy to transport energy to poor regions of the world: you just put up solar power stations there. Global conditions for solar energy are excellent. In the world's sunniest areas – within 30 degrees of the equator, north and south – the time when most

eleven-year plan to promote solar energy on a massive scale. House-owners and companies qualify for discounts if they switch to solar energy. According to calculations by the PUC, this could supply 2,3 million Californians with power. Californian solar power generators could produce 3000 megawatts of energy, about as much as six conventional power stations. At present only 400 megawatts of electricity is generated from solar cells in the US. Once these plans have been implemented, California could become the third-largest producer of solar power after Japan and Germany.

One thing is certain: the cities of San Francisco, Los Angeles and Santa Barbara are going to look very different, with a million solar panels set to be installed on Californian roofs. <

**Upbeat about the future. Bye believes the young solar energy sector still has much potential. The political world will help it to grow.**

energy is consumed is exactly the time when the sun is shining. There is now an entire industry. I'm convinced that solar energy will play an important part in meeting the global demand for energy.

**How important?**

That remains to be seen. But we must understand that we are not thinking in short periods, say the next quarter or next year. Solar energy is a long-term project. That may seem odd to the equity markets, but I think it's important to see that this is a long-term topic. We may not experience its effects ourselves, but our children and grandchildren will. **im**

Photo: Thomas Eugster

Simplicity births timeless quality that endures. The MoDu range of furniture objects exemplifies deceptive simplicity to perfection. Three elements – basic, floor and wall – derive from a simple cube and invite the interplay of form, space and light.

# DISCOVER THE MAGIC OF TIMELESS SIMPLICITY.

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# Investments Commodities

**Commodities, cycles, commodity cycles.** All commodity markets follow cycles. The basic pattern is generally the same: when commodity prices are low, less is spent on maintenance, which leads to supply shortages – then prices rise again, ultimately giving rise to the next period of oversupply. For example, for over 20 years capital spending on the energy infrastructure stagnated throughout the world. Bottlenecks in the energy infrastructure are very difficult and expensive to eliminate. At the same time, the industrialization of Asia is putting the energy markets under a heavy strain. This is why high energy prices – and the resulting increase in investment in alternative energies – will last for years. This cycle is in turn triggering further commodity cycles. First, the renaissance of capital investment in the energy infrastructure will create a huge demand for steel, copper, aluminum etc. extending over many years. But the mining infrastructure is obsolescent, creating the basis for high and rising metal prices in the long term. Secondly, soaring energy prices are stimulating the global quest for alternative fuels. Among these are many agricultural products, like sugar and maize. It is already a relatively simple matter to produce ethanol from these and add it to diesel fuel – the resulting mixture can be used in most diesel engines. In a historical comparison, agricultural products are still very cheap – though expanding the supply is naturally neither quick nor easy. Thirdly, increasing prosperity in the newly-industrializing countries with the largest populations is automatically creating new lifestyles. All these factors suggest that the world's requirements in terms of food, energy and commodities will continue to grow in the years to come.

**Burkhard P. Varnholt**

Contents



Photo: Martin Stollenwerk

# How Can Private Investors Make Money From Commodities?

Text: Valérie Schneitter, FX Advisory & Structuring and Florence Schnydrig, Structured Derivatives

**Commodities have attracted increasing investor attention in recent years. And no wonder! Changes in commodity prices, after all, often have a very direct impact on our everyday lives. An overview of the various options for investing in commodities.**

Which motorist hasn't got annoyed about rising fuel prices recently when stopping for gas? But what's bad for one person may be good for another. While consumers are hard hit by the high cost of petrol, rising crude oil prices offer attractive returns that are acting like a magnet for investors throughout the world. This is a good example of how changes in commodity prices create opportunities for the investor. In addition to attractive potential returns, commodities are also eminently suitable for diversifying a portfolio of conventional asset classes. In 2005, Credit Suisse took an in-depth look at this topic. The conclusion: including commodities in a diversified portfolio of stocks and bonds can reduce overall risk. Allocating five percent of the portfolio to commodities can reduce overall risk by around 0.5 percent. Furthermore, commodities act as a hedge against inflation: when inflation has accelerated in the past, commodity prices have risen too.

As a result, commodities have now become a hot topic, especially among investors, and are in demand as hardly ever before. For private investors, the key question is: "How can I invest in commodities?"

Unfortunately, it is extremely difficult, if not impossible, for private investors to gain access to many commodity markets. With the exception of precious metals, commodities are mainly traded on physical-delivery futures markets. For a long time, therefore, investing in commodities was associated with considerable effort and substantial costs. A direct investment in perishable agricultural produce, for example, would require the investor to first buy the produce, then store it, before selling it again in order to realize the potential profit. In the meantime, private investors looking for an exposure to changing commodity prices now have a variety of innovative, low-cost alternatives available to them. Of these, investment funds and structured derivatives are particularly recommended.

### Investment Funds: Together, Small Investors Are Strong

The basic idea underlying any investment fund is that of collective investment. A large number of investors place their assets in a joint fund, and the fund manager invests these assets in accordance with a predefined investment strategy. Investment funds offer private investors simplified access to the commodity markets, at the same time enabling them to benefit from the expertise of experienced specialists in the financial markets.

Most investment funds that focus on commodities do not invest in the commodity markets directly, but in the shares of companies in the commodities sector – like gold-mine operators and oil companies, for example. As with other investment funds, the managers can base their stock selection on the proven sector expertise of analysts and economists who keep a constant watch on the financial and commodity markets.

Private investors should always consider the risks and rewards of any investment. Every fund has its pros and cons, and should therefore be subjected to close examination. To help private investors select funds, Credit Suisse offers its Fundlab application. Available on www.credit-suisse.com/fundlab, this creates transparency in the fund universe, enabling private investors to compare 2,600 funds from more than 55 providers.

**Structured Derivatives: Flexibility in the Service of the Investor**

An exposure to rising oil prices combined with the benefits of capital protection? This is just one of the many possibilities offered by structured derivatives, which provide attractive alternatives to conventional direct investment by allowing investors to share in the price movements of a particular underlying instrument in line with their risk profile. To this end the risk/reward properties of a conventional investment are adapted to the benefit of investors. Credit Suisse has many years' experience in the field of structured derivatives. Indeed, we received an award as the "Best Provider of Structured Products in Switzerland" at the "euromoney Private Banking Awards 2006".

The use of structured derivatives has made investing in commodities much simpler, enabling investors to benefit from changes in commodity prices on a flexible, low-cost basis. Originally, participation certificates were almost the only form of investment available in this area. But there are practically no limits to the creativity that can be employed in designing structured products, so that today the range of underlying instruments and potential risk/reward properties is wider than it has ever been.

Until a few years ago, most structured derivatives were based on metals, various types of oil and a wide range of commodity indices such as the Goldman Sachs Commodity Index®, the Rogers International Commodity Index® and the Dow Jones-AIG Commodity Index℠. Since then there has been a significant increase in the number and diversity of underlying instruments, which now include "soft commodities" such as soya beans, cotton, sugar, coffee and cocoa – not to mention various industrial metals like aluminum and copper. Foreign currencies have also attracted investor attention recently as another way of investing in commodities. One reason for this is probably the fact that the correlation between "commodity currencies" and commodity returns – especially oil and precious and industrial metals – increased during 2005. The connection between commodities and foreign currencies is complex, and it can vary over time. But the general rule is this: if a country exports more commodities than it imports, its currency will benefit from rising prices.

Structured derivatives can be designed to fit a range of investment profiles, with or without capital protection. Structures with capital protection are especially popular with private investors. We normally distinguish between two types of capital protection. On the one hand there is the traditional model offering full capital protection. Products in this category are similar to a bond, in that they repay 100 percent of the amount originally invested on maturity. Full capital protection on maturity is nothing more than a secure interest-bearing investment whose value at the end of the term will be equal to the capital-protected sum. For this reason, interest levels have a significant effect on the investment terms. The second type – conditional capital protection – is a reaction to the current low level of interest rates. Here, the capital protection is dependent on a particular condition being met. The Certificate PLUS structure, for example, was especially successful on underlying instruments from the commodity universe, oil in particular. As well as an exposure to positive movement in the price of the underlying instrument, Certificate PLUS structures also confer capital protection as long as the price of the underlying instrument does not fall below a specified level during the term. If it does, the investor still benefits on maturity from any rise in the price of the underlying instrument, but the capital protection no longer applies – which means that the investment could realize a loss.

Any investment decision must weigh up profit potential against risk. Like bonds, some structured products pay out an annual coupon – which may or may not depend on movements in the price of the underlying instrument. Other structures offer the possibility of profiting when prices either fall or rise. New, innovative variants are constantly being developed, which means that profit potential can be formulated in extraordinarily diverse ways.

**Conclusion: Keep a Cool Head**

The apparently infinite range of possibilities offered by investment funds and structured derivatives, and the equally broad spectrum of investor requirements that they satisfy, make it important to keep a cool head. First decide your objectives and your risk/reward position, then look for the appropriate structure and underlying instrument in the market. <

## Investing in commodities with structured derivatives: possible underlying instruments (examples*)

| | |
|---|---|
| **Soft commodities (agricultural and meat products)** | Orange juice, cotton, coffee, cocoa, sugar, maize, soya beans, wheat |
| **Energy** | Crude oil, natural gas, water, coal, nuclear power |
| **Precious and industrial metals** | Gold, silver, palladium, platinum, aluminum, copper |
| **Indices** | Reuters Jefferies Commodity Research Bureau (CRB®) Index, Goldman Sachs Commodity Index®, Dow Jones-AIG Commodity Index℠, Rogers International Commodity Index® |
| **Foreign currencies** | CAD (Canadian dollar), AUD (Australian dollar), NOK (Norwegian krone), ZAR (South African rand)* |

*This list is not exhaustive

**A wide selection of structured products for every need can be found at:**

**www.credit-suisse.com/structured-investments. We will be happy to advise you.**

# Certificate$^{PLUS}$ on Sugar and Maize

**This product is an example of the Certificate$^{PLUS}$. It was available for subscription from Credit Suisse in April 2006.**

Florence Schnydrig, Structured Derivatives

Certificate$^{PLUS}$ is a structured derivative that offers an attractive alternative to direct investment in an underlying asset. This Certificate$^{PLUS}$ is especially suitable if you expect sugar and maize to go up in price.

## How It Works

With the Certificate$^{PLUS}$ you participate fully in the performance of the underlying assets (here sugar and maize) upon maturity. Furthermore, you are guaranteed to receive a minimum payment, in this example 125% of the sum invested, if neither of the underlying indices breaches the barrier during the term of the certificate. For this Certificate$^{PLUS}$ the barrier has been set at 60% of the initial value of the relevant index.

If one or both indices breach the barrier even once during the entire term of the certificate, you are still exposed to 100% of the performance of the basket, but the capital protection no longer applies – which means that the investment is fully exposed to any loss.

If, for example, the index basket is showing a loss of 20% at the end of the term, the return will depend on whether either of the indices breached the barrier during the term or not.

If the barrier was breached, the initial capital is no longer protected – and the sum repaid to the investor will be USD 800, as the basket has made a 20% loss. But if the barrier was not breached, capital protection still applies and the sum paid out will be USD 1250.

## Benefits

- 100% participation on maturity in the positive performance of the index basket.
- If during the entire term neither of the indices breaches its barrier, the sum repaid corresponds to a minimum amount specified in advance (here 125% of the initial investment, i.e. USD 1250), even if the index basket closes below its initial value at the end of the term.
- If either or both of the indices breach their barriers even once during the entire term, but the basket closes above its initial value at the end of the term, you still enjoy 100% participation in this positive performance.

## Risks

- If one of the underlying assets breaches its barrier during the term and the basket is below its initial value at the end of the term, the investment is fully exposed to any losses. The return will be reduced by 1% for each percentage point by which the index basket closes below its initial value.
- If the performance of one of the underlying assets is negative, the Certificate$^{PLUS}$ may be quoted significantly below the issue price during its term – even if neither of the barriers was breached. <

| **Conditions*** | |
|---|---|
| Underlying asset | A basket consisting of the GSCI® Sugar Excess Return Index (Bloomberg:GSCCSBER Index) and the GSCI® CORN Excess Return Index (Bloomberg: GSCCCNER Index), equally weighted |
| Issuer | Goldman Sachs International |
| Barriers | 60% of the initial value of the relevant index |
| Minimum repayment on maturity | 125% if neither barrier was ever breached |
| Term | 3 years |
| Participation | 100% of performance |
| Face value | USD 1000 |
| Price | On request, plus brokerage |
| Secondary market | On normal market terms |
| Sales restrictions | US, US persons, UK, EEA |
| Securities number | 2511739 |

*These conditions relate to the product with the securities number 2511739.

**Example**

**Example: Amount repaid at the end of the term for various basket values based on the following conditions: minimum return 125%, barrier 60%.**

| **Basket value on maturity** | **Sum repaid if a barrier was breached** (USD) | **Sum repaid if neither barrier was EVER breached** (USD) |
|---|---|---|
| 70% | 700 | 1250 |
| 80% | 800 | 1250 |
| 90% | 900 | 1250 |
| 100% | 1000 | 1250 |
| 130% | 1300 | 1300 |
| 160% | 1600 | 1600 |
| 190% | 1900 | 1900 |

Source: Credit Suisse

**Further information on our current structures on commodities and foreign currencies can be found at www.credit-suisse.com/structuredinvestments.**
**We will be happy to advise you.**

# CPU on Commodities

**A Capital Protected Unit (CPU) is an example of a defensive investment product in commodities. This one was available for subscription from Credit Suisse in April 2006.**

Text: Philipp Schultze, Structured Derivatives

CPUs are structured derivatives. They are of interest to investors looking for a defensive alternative to direct investment in commodities. On maturity a fixed proportion of the initial investment – normally between 90% and 100% – is protected. In the example given it is 100%. In addition, you participate in the positive performance of the underlying index or basket at a predefined rate.

## How It Works

The sum repaid on maturity depends on the performance of the underlying index or basket. The performance of the basket is calculated from the weighted price changes in the individual commodities from their initial levels (see table at right).

If the value of the basket on maturity has risen, you receive the predefined capital protection plus the positive performance of the underlying instrument, multiplied by the participation rate (here 100%).

If the value of the basket of commodities on maturity has fallen, you receive the predefined minimum repayment, in this example 100%.

## Benefits

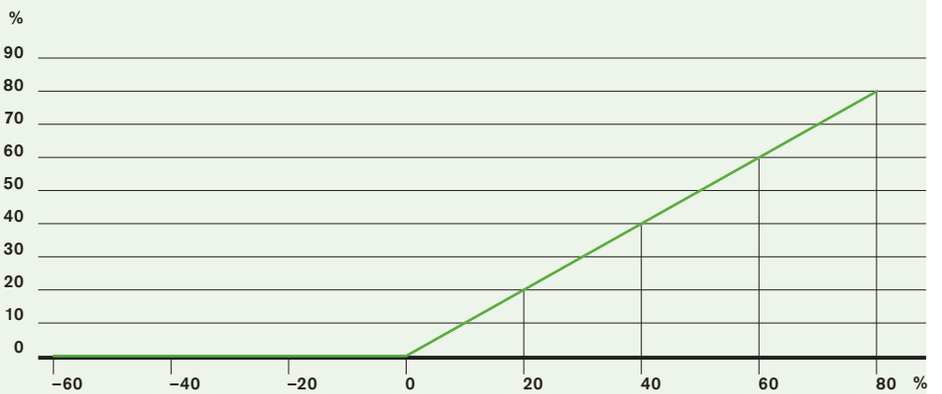
- Unlimited profit potential: on maturity you participate in the positive performance of the underlying asset, calculated from its initial fix, at the predefined rate.
- If the underlying asset falls in value, the capital you originally invested is protected at a certain percentage rate and you receive a minimum repayment on expiry.

## Risks

- The participation rate only applies on the maturity date. During its term the CPU may thus perform less well than its underlying basket.
- During the term of a CPU it may trade substantially below the protected repayment amount. <

**Basket value on maturity**

**On maturity your capital is 100% protected. In addition you participate in 100% of the positive performance of the underlying commodities basket.** Source: Credit Suisse




| Conditions* | |
|---|---|
| Underlying asset | Basket of commodities and commodity indices. For composition and weightings see table at right |
| Issuer | Goldman Sachs International |
| Participation on maturity | 100% of basket performance calculated from the initial fix |
| Capital protection on expiry | 100% (by the issuer) |
| Term | 5 years |
| Minimum repayment | CHF 1000 |
| Initial investment | CHF 1000 |
| Price | On request plus brokerage |
| Secondary market | On normal market terms |
| Sales restrictions | US, US persons, UK, EEA |
| Securities number | 2507083 |

*These conditions only apply to the product with the securities number 2507083.

**Composition of the commodities basket**

| Component | Bloomberg | weighting |
|---|---|---|
| Coal | MCARAPI2 | 15% |
| Aluminum | LOAHDY | 20% |
| Copper | LOCADY | 25% |
| Lead | LOPBDY | 10% |
| Zinc | LOZSDY | 5% |
| Crude oil (Brent) | CO1 | 15% |
| GS Precious Metals ER Index | GSPMER | 10% |

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# Digital$^{PLUS}$ CPN on Commodity Currencies

**We would like to explain how a structured derivative on commodity currencies works using the following example. The conditions are indicative: they are subject to variation in the light of changes in market conditions. This product was available for subscription from Credit Suisse in May 2006.**

Valérie Schneitter, FX Advisory & Structuring

The Digital$^{PLUS}$ CPN (Capital Protected Note) allows the investor to benefit from the appreciation in value of a selection of what are known as "commodity currencies" – those of countries that are heavy net exporters of commodities – against the euro. At the same time, the investor is able to maintain an investment in US dollars without additional exchange-rate risks.

The currencies contained in the basket were carefully selected on the basis of their relationship to the relevant commodity markets and their prospects of performing positively. Particular attention was paid to the export structures of the related national economies. Whereas, for example, South Africa is the world's largest exporter of gold and platinum, the Russian economy is sensitive to movements in the oil price. This is illustrated in table 1.

## How It Works

The sum returned by the Digital$^{PLUS}$ CPN depends on the performance of the underlying basket of currencies (the underlying asset) against the euro.

On maturity the performance of the basket of currencies is calculated from the weighted performance of each currency in the basket.

If the basket of currencies has risen against the euro or remained at its initial level, the investor receives a fixed return of 20%.

If the basket of currencies has risen by more than 20%, the amount returned by the Digital$^{PLUS}$ CPN increases accordingly.

In the event that the underlying basket unexpectedly falls against the euro, the investor enjoys 100% capital protection.

## Benefits

- Attractive, unlimited profit potential: 20% or more if the basket of commodity currencies rises against the euro or remains unchanged.
- No additional currency risk for US-dollar investors: the EUR/USD exchange-rate risk is hedged.
- 100% capital protection on maturity.

## Risks

- If the basket of currencies falls in value against the euro, the investor receives only the minimum repayment on maturity (capital protection).
- During the term of the Digital$^{PLUS}$ CPN it may trade below its minimum-repayment value. <

| Conditions* | |
|---|---|
| Underlying asset | A basket consisting of the Brazilian real (BRL), Indonesian rupee (IDR), Russian rouble (RUB) and South African rand (ZAR) against the euro (EUR), in equal weightings |
| Issuer | Credit Suisse Singapore |
| Term | 18 months |
| Return | 20% or more if the underlying asset rises in value or remains at its initial value (see "How It Works") |
| Minimum repayment on maturity | 100% |
| Initial investment | USD 1000 |
| Initial issue price | USD 1000 |
| Sales commission | 1% |
| Secondary market | On normal market terms |
| Sales restrictions | US, US persons, UK, EEA |
| Securities number | 2543840 |

*These conditions only apply to the product with the securities number 2543840.

**Table 1: Export structure**

| Country | Principal exports | Principal trading partners |
|---|---|---|
| Brazil | Transport equipment, metallurgy, iron ore, coffee, soya beans | US, Argentina, China, EU (Netherlands, Germany, Italy, UK, France) |
| Indonesia | Natural gas, veneer timber, rubber | Japan, US, Singapore, South Korea, China, Malaysia, Australia |
| Russia | Crude oil, natural gas, gold, timber, various metals | EU (Germany, Netherlands, Italy), Ukraine, China, Switzerland, US |
| South Africa | Precious metals (gold and platinum), coal, diamonds, other metals and minerals | EU (UK, Germany, Italy, Netherlands ), US, Japan, China |

Source: Credit Suisse

**Table 2: Hypothetical examples of return on maturity**

| **Performance of the basket of currencies** (in %) | **Return** (in %) |
|---|---|
| – 10 | 0 |
| 0 | 20 |
| 10 | 20 |
| 25 | 25 |

**Further information on our current structures on commodities and foreign currencies can be found at www.credit-suisse.com/structuredinvestments. We will be happy to advise you.**

# JPMorgan Global Natural Resources

**The JPMorgan Global Natural Resources Fund is well positioned to benefit from one of the great investment themes of our age – the rapid industrial development of emerging powerhouse economies, including China, India, Brazil and Russia.**

Walter H. Fodor, Investment Fund Selection

JP Morgan has over 40 years' experience in the area of commodities, having managed natural resources portfolios since 1965. Since its inception, the JP Morgan Global Natural Resources Fund (SICAV) has been managed by Ian Henderson, who has been managing natural resources portfolios since 1977. He joined JPMF in 1991 and has run the UK OEIC product since 1992 with a track record of consistent performance.

This SICAV fund was launched in December 2004 and has been registered for sale in Switzerland since January 2006. From its launch to March 31, 2006, the fund has returned 75.2%, with an annualized volatility of 23.3% (in EUR). It's a clone of the JPMF Natural Resources Fund, a UK OEIC product, which was launched in 1965.

Management of the fund is strongly influenced by Ian Henderson's top-down views and in-depth knowledge of the commodity markets. Henderson takes a long-term approach. He looks to identify anomalies between commodity pricing and top-down factors. The latter range from geopolitical to demand/supply or currency trends.

The portfolio, which invests primarily in small and mid caps, is predominantly constructed through bottom-up stock selection. To reduce the stock specific risk, the fund holds a very diversified portfolio – more than 220 names. It features allocation across the three key sub-sectors, which JP Morgan identifies as being the most representative of the natural resources sector – energy, base metals and gold and precious metals. These allocations will vary according to which sector offers the greatest potential for investment returns, based on JP Morgan's thematic view of the economic cycle.

The neutral weighting for the portfolio is 30% for energy, 30% for base metals and 30% for gold and precious metals. In addition, the fund may invest in companies involved in non-precious metals, and alternative sources of energy, such as uranium. In practice, the fund can deviate quite significantly from these percentages and the typical weighting per sub-sector is between 20% and 50%. The fund's currency is in EUR, but no currency hedge is in place. Most of the fund's holdings are denominated in CAD, GBP, AUD and USD.

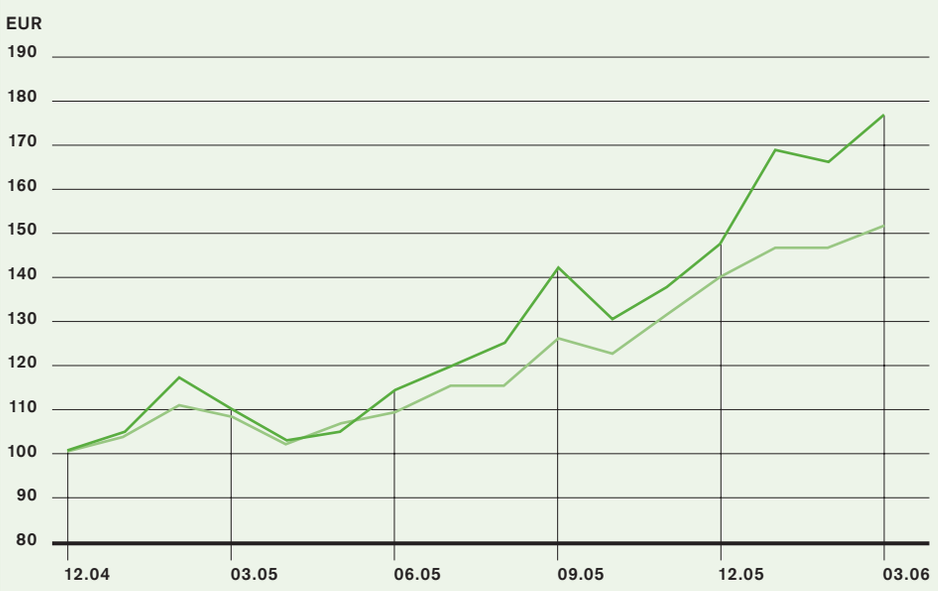
## Risks

A substantial part of the portfolio is invested in small and mid caps, which are sensitive to the economic cycle. Stock selection represents by far the largest risk component in the portfolio. <

**Swiss securities no. 2 028 508**

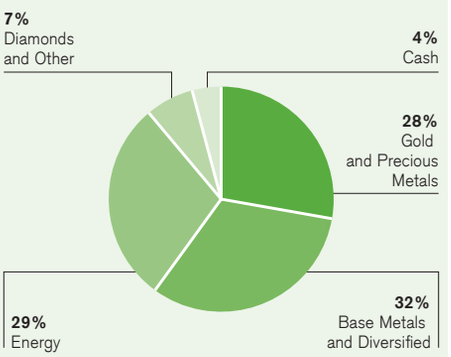
### Performance in EUR since inception

**Relative performance of the JPMorgen Global Natural Resources Fund versus MSCI World Materials.** Source: Lipper Schweiz, Credit Suisse




### Current sector allocation

Source: JPMorgan




**More information about this fund can be found under credit-suisse.com/fundlab. We will be happy to advise you.**

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“The port of Aberdeen is the hub of the oil industry. The North Sea oil rigs are supplied from here. This is where supply ships are serviced round the clock. In recent years the volume of traffic in the port has risen, and things are gradually getting tight.”

# The Chain Reaction

**All of Europe is suffering from the high price of oil – all except one small city on the east coast of Scotland. Aberdeen lives off oil, especially when the price is high – and will do so as long as drilling continues in the North Sea. The story of a profitable dependency.**

Text: Ingo Malcher Photos: Thomas Eugster

At the eastern end of the wharf, floodlights illuminate the hull of the *Kaubturm*. This supply ship (gross registered tonnage: 1582) is in dry-dock in Aberdeen undergoing a major refit. Workmen are busy welding hydraulic pipes all along the cargo area, while fitters screw aerials onto the roof of the bridge and painters abseil down the ship's side to give her a lick of blue paint.

It's Saturday night, just after nine o'clock. The water in the puddles on the wharf is freezing over and the aluminum handrail on the gang plank leading up to the *Kaubturm* is ice-cold to the touch as Andy Milno makes his way up to his office. Once inside, he rubs the palms of his hands together, unzips his fleece jacket and brews a pot of tea. "You would never have seen anything like this in the past," says Milno, shaking his head. He's the operations manager for Dales Marine Services and the embodiment of the Scottish working man – sandy-haired, with a crew-cut and designer stubble, he sports a golden chain round his neck. He looks over to the dock. "This ship is nearly thirty years old, and they're doing her up. We live in crazy times." >

The *Kaubturm* was built by the Hermann Sürken shipyard in Germany in 1978. She spent the last three years languishing in the port of Edinburgh, more or less left to rot – but just a few months ago she was bought by a US shipping company, which had her towed to Aberdeen, where it is spending nearly two million euros on making her shipshape again. "These days you have to wait two years for a new ship," says Walter Fichtl, coming through the door. "That's why they're doing it." In three weeks' time Fichtl, a ship's engineer from Bremerhaven, is supposed to set sail in the Kaubturm for Angola. "I wonder whether we'll make it," he muses.

Aberdeen at the height of the oil boom. The little Dales dockyard is hard at work 24/7. Since the oil price went through the 60-dollar mark, the oil companies have been investing keenly in extracting and exploiting North Sea oil. Everything is currently in short supply in the North Sea: ships and drilling platforms, engineers and workers, steel and aluminum. A long chain of supply snakes its way across Aberdeen – the "European Oil Capital", as the road signs proudly proclaim. The result is an economic upturn, the likes of which have not been seen by practically any other city in Europe. Unemployment stands at 1.3 percent, wages and salary rates are heading north – Aberdeen is in the grip of oil fever.

It all started in 1970, when the Forties oil field was discovered just off the coast of Scotland. The first North Sea oil was extracted five years later. Multinationals such as BP and Shell moved in, closely followed by supply companies. Until then Aberdeen had lived on fishing, agriculture and the paper industry. It was the start of a profitable dependency.

Oil has made Aberdeen rich – and periodically driven it into crisis. When the oil price slumped to nine dollars a barrel in 1986, with production costs at ten dollars, Aberdeen went down with it. Workers moved out of the city, property prices plunged, retailing stagnated. The oil price subsequently recovered, and so did Aberdeen. In 1998 the price collapsed again, leaving the city facing another meltdown – but this time the consequences were less severe. Many supply companies managed to find customers abroad. Now, at the beginning of 2006, the price is back at a record level – and Aberdeen is stretched to the limit, trying to keep the boom under control.

The most serious shortage is that of labor. Paul Graves welcomes us to his office, and with a quick "Hello, good morning" hands over his business card, before asking: "I need eleven chemical engineers – that's right, eleven – do you know of anyone?" Economic upturns can be stressful. Graves, head of the Hazell Engineering employment agency, is looking for workers for the oil industry. He strides across what used to be the cinema foyer where his offices are located. Granite columns support the ceiling. You can smell the shampoo and hairspray from the hairdressing salon one floor down. Graves is brought a cup of black tea and, without looking up from the e-mails on his screen, complains: "It's hard, really hard. We just can't find the people."

Graves is stressed out. No sooner has he sat down than he's back on his feet again. He flushes bright red, feverishly smoothing down his pale hair with one hand. He talks fast. Chemical engineers can make four or five hundred, he says. "Four or five hundred pounds a day, onshore!" he adds. The oil companies are desperate for workers. "They want to get the black stuff out of the seabed as fast as possible, while the price is still high." And Graves knows that things are only going to get worse. The average age of people working in the oil industry is 49. They'll soon be retiring, so even more new blood will be needed. He's constantly in meetings with clients, making phone calls all over the world trying to entice engineers to Scotland. It's a struggle.

But how much longer will it last? "We've already pumped out half the oil, but there's a long way to go yet." This is Alexander Kemp, Professor of Petroleum Economics, a small man in thick specs, tucked away in his cramped office in the University of Aberdeen, behind carefully-stacked piles of papers that almost reach the ceiling. "There are lots of small oil fields left in the North Sea," he says. "The only question is whether they can be exploited." In the UK sector of the North Sea, oil companies pump 1.8 million barrels a day from over 250 oil fields. The United Kingdom consumes 1.65 million barrels, and in or around 2008 it can be expected to become a net importer. Nobody is prepared to say how much oil there may still >

**top left:**
**The "Kaubturm" was built by the Hermann Sürken shipyard in Germany in 1978. She spent the last three years languishing in the port of Edinburgh – but just a few months ago she was bought by a US shipping company, which had her towed to Aberdeen, where it is spending nearly two million euros on renovating her.**

**top right:**
**Safety training on shore. "Before you can set foot on a North Sea oil platform you have to complete a two-week course that prepares you for every hazard."**

**bottom right:**
**Colin Parker is the Aberdeen harbormaster: he tries to make sure the port meets all his clients' requirements. "We need open wharves with storage facilities, solid wharves that can take the weight of heavy cranes, and all wharves need oil tanks."**


**The oil companies are desperate for workers. “They want to get the black stuff out of the seabed as fast as possible, while the price is high.” Paul Graves, head of the Hazell Engineering employment agency, is looking for oil industry workers. “It’s hard, really hard. We just can’t find the people.”**

**“Aberdeen lives off oil. But when the price collapsed in the past, so did the local economy. The oil industry’s supply chain snakes its way across the city.”**


be under the North Sea. Even the British Off-Shore Operators' Association writes: "Estimating future production is a risky business, all long-term predictions made so far have turned out to be wrong." But one thing is certain: oil production is getting harder. The oil that will be pumped out of the North Sea in future is more viscous, and therefore more expensive to extract. That's one factor.

The other is that the high price – in effect – increases supply. Oil fields that were not viable when the price was low can now be tapped at a profit. "It's the boom that's driving companies' costs," says Professor Kemp, reciting figures from memory in a monotonous tone: a drilling platform costs twice as much to lease today as it did a year ago – 100,000 dollars a day. The costs of working an oil field are now 20 percent higher than they were a year ago. Generally speaking, the costs of producing a barrel of oil rose by ten percent in 2005.

For Aberdeen it's a blessing. 900 companies in the oil sector have moved into this city of 210,000 inhabitants. 30,000 people are employed directly in the oil industry. "The high price provides the city with a sense of security," says Mike Crawford, manager of the local branch of ABB. "We are spending, more money is being invested. Here even the barbers make their living from oil." Crawford installs electrical circuits on oil platforms. He's been with ABB in Aberdeen for 28 years and has experienced both the ups and downs. In a perfectly tailored suit, with short hair, he jots down figures and arrows with a red felt-tip pen on a white board in the modest meeting room: "The high price has boosted demand," he says. "In the last 18 months we've increased our workforce by ten percent." He circles the 10. Then he pauses, and adds a question mark.

High profits are what lures companies like ABB to Aberdeen. But the art lies in managing your affairs in boom times in such a way as to enable you to survive when they come to an end. Crawford has to invest with caution if he is to avoid overcapacities, but at the same time he has to be able to satisfy demand when it is strong. But where is the line between too much and not enough? >

## Aberdeen – the "Capital of North Sea oil"

**Population:** 212,125
**Oil industry employees:** 30,000
**Languages:** 60
**Unemployment:** 1.8% (Scotland as a whole: 3.2%)
**Change in unemployment year-on-year:**
Aberdeen –0.3% (Scotland as a whole: –0.1%)
**Number of companies in the oil sector:** 900
**Number of supply ships per year:** over 5,000
**British Petroleum (BP):** BP has its headquarters for North Sea operations in Aberdeen.
**Between 1997 and 2004 the proportion of service sector jobs rose by** 16%
**Average wage in 2005:** GBP 445 per week
(Scotland: GBP 411 per week)

James Hamilton sits in the boardroom of the Balmoral Group. The wallpaper is green with white crosses, the heavy wooden furniture oozes respectability. Hamilton wears a white shirt with gold cuffs, a gold watch, a gold ring – he's a Scots version of J R Ewing. He and Balmoral are just celebrating the company's 25th anniversary: it was founded in 1980 with six people, and today employs six hundred – no mean achievement in this turbulent sector.

"Not all companies have survived: the price rose, we invested, and suddenly – bang, the price collapsed and we were left high and dry," Hamilton recounts in a deep voice. There's a corrosive smell of epoxy resin in the room from the company's assembly shops. Balmoral makes floats for drilling platforms and submarine robots, the piping between oil rigs, fire-proof rescue boats – all typical oil products.

And yet: "We had to reduce our dependency." This was done by adopting a dual strategy. Balmoral's engineers now also turn out components for wind turbines and wave-power generators, and Hamilton also went out looking for clients outside Scotland – in fact in all those places where there is oil: west Africa, Brazil, Norway, the Gulf of Mexico. Globalization secured Balmoral's base in Aberdeen: think locally, act globally.

If you want to make it right to the heart of the supply chain, you first have to sign an undertaking that you'll always keep one hand on the railing when climbing stairs. British Petroleum (BP) has its main offices on the outskirts of Aberdeen, not far from the airport. The purpose-built structure features lots of concrete and lots of steel. I sit down for a cup of coffee with Richard Grant. Business Advisor, it says on his business card. He wears square glasses, jeans and – conspicuously – no tie.

BP is the largest oil company in the UK section of the North Sea. By 2008 it plans to invest £18 billion in oil production all over the world. Among its most important challenges, Grant says, is "keeping the hardware in the water functioning." There are thousands of kilometers of pipeline lying on the seabed – every oil field is connected to the system. "That only makes economic sense if the fields have enough oil or the price is right." Grant agrees that "oil production will get harder in future." Once upon a time in the Forties oil field you could just stick a pipe in the seabed, and the oil almost gushed out by itself. Now more and more equipment has to be shipped to the North Sea to extract less and less oil. "But the higher the price, the more we can invest," says Grant.

BP has just decided to build its new headquarters for the North Sea in Aberdeen. This is good news for Colin Parker. This heavily-built man with a distinctive face drives the length of the docks in his Honda. Parker – the Aberdeen harbormaster – tries to make sure the port meets all his clients' requirements. "We need open wharves with storage facilities, solid wharves that can take the weight of heavy cranes, and all wharves need oil tanks." The oil-rig supply ships are based in the port of Aberdeen. On average they are only in port for a day, loading food, clothing, chemicals, pipeline sections, tools and cement – then they put to sea again. The last few years have brought a constant increase in the number of supply ships in Aberdeen, from 4,123 in 2000 to over 5,000 in 2004. And according to Parker's freight estimates, this trend will continue: the volume of marine traffic is growing.

Oil is Aberdeen's life-blood. How long can this go on? At BP, Grant is vague: "It could be another 30, 40, 50 or 60 years before it all comes to an end." In answer to the same question, Prof. Kemp says oil production will still be a million barrels a day in 2030. At Balmoral, Hamilton is also definite: "It can't last for ever." But Captain Parker is dismissive: he makes an assertion that can be heard every day in Aberdeen, one that is meant to be encouraging, glossing over uncertainty: "Ten years ago they were saying there would be no more oil in the North Sea in ten years." Well? It's easy to see that the city is still living well from oil. <

**top:**
**High profits are what lures companies like ABB to Aberdeen. But the art lies in managing your affairs in boom times in such a way as to enable you to survive when they come to an end. Mike Crawford, manager of the local branch of ABB, has to invest with caution if he is to avoid overcapacities, but at the same time he has to be able to satisfy demand when it is strong.**

**bottom:**
**The city uses its unspoiled natural environment and varied leisure facilities to try and attract workers.**


ABB

# Trading: Improvise and React Fast!

**Switzerland is one of the world's major centers for commodities trading, and Credit Suisse is one of the major trading banks. Bernhard Lippuner, Head of the Commodity Finance sector, on crude oil, money and risk at Credit Suisse.**

Text: Marcus Balogh

London, Singapore, Zug and Geneva: this is where the world's commodities are redistributed. Switzerland's significance may be something of a surprise at first glance. The hectic to-ings and fro-ings with orange juice or pork bellies on the Chicago commodities exchange are probably a much more familiar picture for most people. Yet Switzerland, and Geneva in particular, has gained increasingly in significance since the 1950s. At the same time, Credit Suisse has become the most important Swiss bank for commodities trading.

### Switzerland in Pole Position

But Geneva and Zug have no commodities exchange. They are not the scene for vociferous trading about the price of a barrel of oil in six months' time. "What we are talking about here is real trade, the actual buying and selling of commodities. And no spectacular images can conjure up such a mundane activity. On the other hand, the amounts of money that pour into commodities trading are spectacular," according to Bernhard Lippuner, Head of the Commodity Finance sector at Credit Suisse. In Geneva alone, crude oil trading sees several million barrels bought and sold every day – the current price per barrel is around USD 70. And even though Switzerland takes pole position worldwide in the financing of crude oil trade, crude oil is only one commodity among many. Experts estimate Geneva and Zug's annual volume of commodities trading at several hundred billions of US dollars.

### Variety Makes Millions

These enormous sums appear even more impressive when Bernhard Lippuner points out that the financing of the actual transactions represents only a part of the services involved in crude oil trading. "In addition to the current account credits, trading makes calls on a number of other banking products. Letters of credit, for example, or bank guarantees, as well as products from foreign exchange trading. It is this very variety that makes the business so attractive for banks."

### Large Margin, Large Risk

But commodities trading does have its snags. A large margin means a high risk – this is something that applies here too. "It starts with the fact that banks usually have more money invested in the transaction than the traders themselves. If something goes awry, we have to act immediately. And something can always go wrong with commodities trading." This has far-reaching consequences for Bernhard Lippuner and his team of forty. For example, if the buyer of a consignment of crude oil suddenly pulls out of the deal, Bernhard Lippuner and his team step into the breach, and if necessary handle the sale themselves. "The main thing is that we know our clients well and keep in close contact with them. Every transaction is carefully monitored. But sometimes that is not sufficient. Ideally, you should also have commodities trading in your blood," comments Lippuner.

### Adrenalin Rush

Prior to joining Commodity Finance, various team members had previous experience of the business in one form or another. Bernhard Lippuner, for example, began his career as a commodity trader. He says that in addition to his trading skills, he brought other qualities with him to the bank when he joined: flexibility, for example. "When I go home in the evening, I'm already making mental preparations for the next day. However, just twelve hours later everything can look completely different. Natural catastrophes, government decisions, scientific discoveries – commodity prices are influenced by a number of factors. And not all of them are calculable. Unless you thrive on an adrenalin-fueled atmosphere, you won't last long here. Reacting quickly, balancing risks, improvising – this is our bread and butter." <

**"Unless you thrive on an adrenalin-fuelled atmosphere, you won't last long here," says Bernhard Lippuner, Head of the Commodity Finance Sector at Credit Suisse.**

Photo: Martin Stollenwerk

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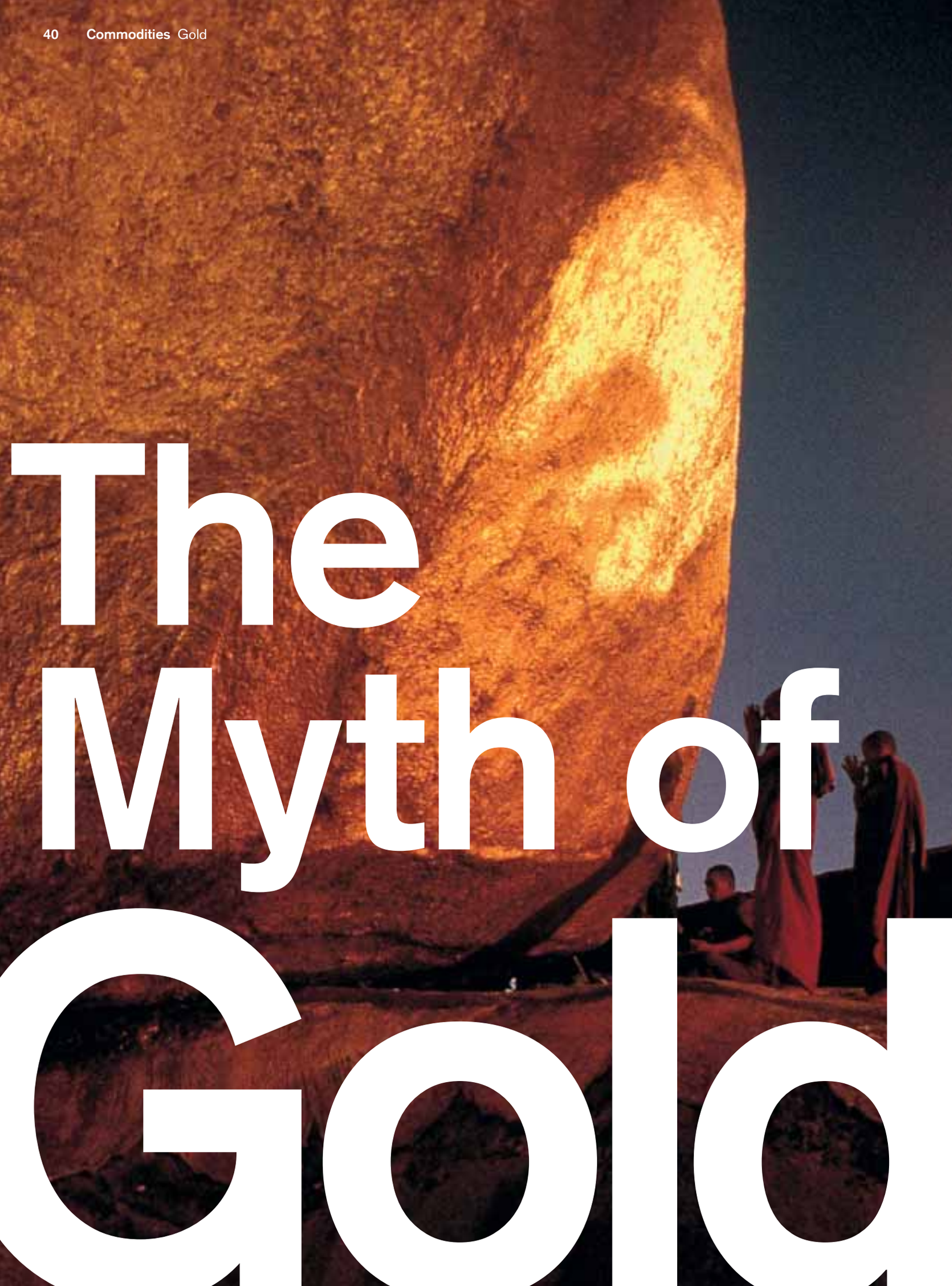


# The Myth of Gold

**For thousands of years, no other commodity has exerted such a magical fascination over mankind as gold. Its gleam gives it magical qualities. Gold is primarily associated with getting rich quick, but also with deadly greed, sun, fire – and even divine light.**

Text: Ingeborg Waldinger

In the West, way out beyond the buffalo, the redskins and the mountains, there lies an unexplored land, a land of limitless possibilities. This is the dream of thousands of "tired, poor" Europeans, and it is shared by Johann August Suter. This Swiss bankrupt has already made it as far as Missouri, trying his luck with varying degrees of success. Now endless columns of people pass him on their way westwards, always westwards. Once again he sets off, ending up in the miserable fishing village of San Francisco that was given its name by Franciscan missionaries. Suter has a vision, a vision of making the land on the Sacramento habitable, and founding "New Helvetia". Crops grow, the land blossoms. But even pioneers can be sentimental creatures: Suter's home boasts a magnificent item from good old Europe – a Pleyel piano. Where there's money… When workers begin to spot yellow grains in the sand they shovel on Suter's land, the news spreads like wildfire: gold! A flood of fortune-hunters turns "New Helvetia" into an El Dorado. In 1849 the area has as many as 80,000 prospectors – known ever since as forty-niners. When the deposits are exhausted, many settlements turn into ghost towns. The land now belongs to the State of California, and Suter wants it back – both from the State and from the 17,221 farmers who are working it. A court accepts his claim, but the people don't – and what remains of his property is torched. Suter's family and his works are no longer, and all his fight for justice brings him is derision. Stefan Zweig's story *The Discovery of Eldorado* is his literary memorial.

### The Sea: a Treasure Trove of Gold

Gold has been the planet's most sought-after mineral for thousands of years. It is found in the silt of rivers and in quartz rock, but only rarely as nuggets. Even seawater contains gold, and in colossal quantities – though the technique of extracting the estimated nine billion tonnes of gold from the oceans evidently still requires fine-tuning… The tough grind of gold extraction – leaching the stuff out with a cyanide solution and amalgamating it with mercury – is reserved for those whose voices carry little weight.

All the greater is the weight of the product – in a physical and commercial as well as symbolic sense. The precious metal doesn't rust or corrode. It is soft and malleable, very easy to work. Its gleam gives it magical qualities. Gold means sun, fire – and divine light. This symbolism is found in all great cultures. But its unearthly glow inspires all too earthly desires. The world is hungry for gold, the world revolves around gold! But the quest for this magical element is fraught with danger – and not only in Goethe's *Faust*.

Egypt was enormously rich in gold at the time of the pharaohs. It was extracted by criminals and prisoners of war in the mines of Nubia, which was known as the land of gold. The Egyptians imagined their gods as beings with "golden flesh", their kings as god-like creatures. When a pharaoh died, he climbed a golden staircase that led to the afterlife. His mummy, like that of Tutankhamun, was placed in a golden coffin with precious gifts. The rabble of contemptible treasure-hunters was not long in appearing: despite severe penalties, tomb-robbing was traditional in Egypt.

### When Even Food and Drink Turn to Gold

The Orient, too, had rich deposits of gold. Croesus and Midas are two synonyms for gold and riches. Lydia's gold made King Croesus the symbol of the wealthy man. His neighbor Midas, king of Phrygia, was granted a wish by Dionysus, the god of wine. He asked that everything he touched should turn to gold. And his wish came true, all too literally: even food and drink turned to gold at his touch. There are two sides to every coin, including gifts from the gods.

Gigantic golden statues were erected to glorify oriental rulers. At the same time gold was hoarded as trading capital. In Syria and Palestine it was soon in circulation as legal tender. It had become a political and economic factor, a strategic resource.

In the land of the Hellenes, gold may not have been abundant, but it was certainly a status symbol – although the poet Pindar also extolled it as the "son of Zeus". The Persians had mountains of gold. Alexander the Great defeated the ancestral enemy and plundered the fabulous gold storehouses of Persepolis.

### Nero Had a Villa Built of Gold

The Romans displayed a particular affinity for the yellow metal. The empire's passion for splendor culminated in Nero's golden imperial villa, the "domus aurea", where every last room was bathed in the luster of gold. Rome's thinkers castigated the base instincts that centered on this noble metal, natural philosopher Pliny deplored the unhealthy mining processes. Even the realms of the Celts and the Vikings, the Etruscans and the Teutons, gleamed with gold. It was >

Photo: Steve McCurry, Magnum Photos

panned from the rivers and mined from the mountains of central Europe, and there were significant deposits in Spain, France and Romania.

In the Middle Ages the glow of gold was interpreted as revealing the divine. Gold was used liberally in cathedrals of the baroque period to underline the power and splendor of the Church. But with the coming of the Renaissance, the uses of the yellow metal became significantly more secular. Hitherto reserved for imperial insignia, it now appears all over the residences of the nobility. The suppliers are Mexico and South America. Columbia's mythical El Dorado becomes a synonym for wonderland. The Spanish conquistadors hear of the magical gold of the Muisca tribe, whose princes – descendants of the sun god – cover their bodies with gold dust (el dorado means "the gilded man"!), cross a lake and make huge sacrifices of gold to sun and water, the bringers of growth. Although no conquistador ever witnesses this rite, the Europeans are now in the grip of gold fever. They make finds, plunder the gold of the Aztecs, Maya and Inca, melt down countless art treasures and ship the gold back to Spain. They even melt down the lifelike garden scenery – all in pure gold – concealed within the sun temple in Cuzco. To the Inca, the sun god was the mythical father of their rulers. Louis XIV later took pleasure in the symbolic identification of the ruler as the sun god. He saw himself as the personification of Apollo.

### The Golden Radiance of Nirvana

In the 19th century gold strikes in California, Australia, South Africa and Alaska triggered one gold rush after another. How blissful the Asian attitude to gold seems in comparison: in Buddhism it is the color of nirvana, of final release, of absolute blessedness. Gilded temples and monumental golden statues of the Buddha testify to this symbolism. Indian women traditionally hold gold jewelry in very high regard.

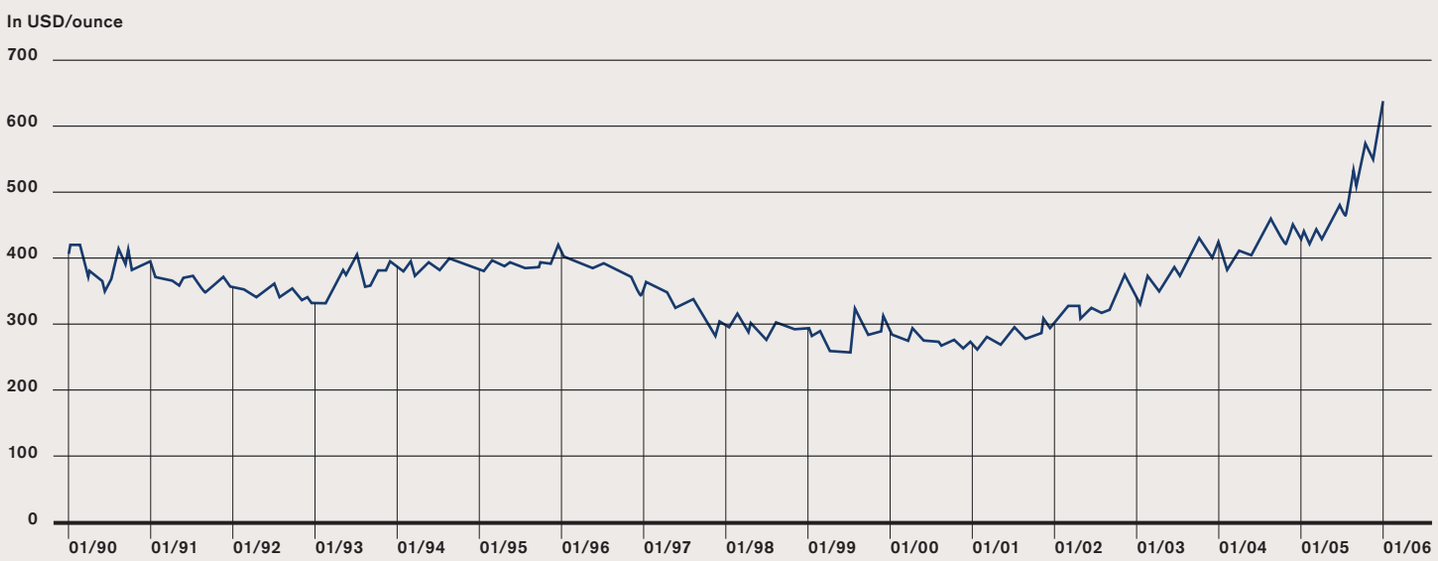
Here the rite of the gilded deities, there the dance of the Golden Calf. One day, when everyone lives by the Golden Rule, we shall perhaps see the dawn of the Golden Age. <

## Gold Reserves for Difficult Times?

**Gold has a sacrosanct place in national and private treasuries. If you have gold, you are always liquid. But the recent acceleration in the price of gold follows a long period during which it was very low. Only long-term strategies even out price risks and make gold a secure asset, though it does look as if the old rule of thumb "If the dollar rises, the gold price falls" no longer applies. The current heavy demand is stoked by fears of inflation in the West, new purchases by central banks, the booming economies of Eastern Asia and their liberalized gold markets. India's hunger for gold devours around 20 percent of global production. What is more, increased extraction costs mean stagnant production in the classical mining countries. Hopes are pinned on newly-discovered production areas in Russia, Kazakhstan, South America and Ghana.**

## The Soaring Gold Price

**At the beginning of 2005, after years of decline, fears of inflation in the West and an economic boom in the East put the gold price on a continuous upward trend.** Source: Bloomberg, Credit Suisse



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