The current dynamics of commodity markets
Dynamics of Commodity Markets

1. Key Drivers of Commodities
2. Looking Ahead
Dynamics of Commodity Markets

1. The Key Drivers of Commodities
Dynamics of Commodity Markets: Key Drivers

a. Commodities: definition and features
b. The 3 sectors (Agri, Metals and Energy) and their idiosyncrasies
c. Price formation
d. The King of Commodities: Oil
e. Gold – A very special commodity
Dynamics of Commodity Markets  

a. Definitions and Features

- Commodities *are* the essentials
- 3 main sectors: Agri, Metals and Energy
- Common features
  - Strategic by nature
  - Each with a unique nature
  - Market price
  - Mostly traded in USD
  - Future markets
What is the size of the cake?

- 4.5 Trillion USD
- 25 pct. of world trade
Dynamics of Commodity Markets  b. The Three Sectors

i. Agri commodities (aka “Softs”)

- Cereals:
  - Grains: Corn, Wheat, Barley, Rice
- Oilseeds:
  - Soybean, Palm Oil, Rapeseed
- Other Softs:
  - Cocoa, Cotton, Rubber, Coffee, Sugar
- Dairy and livestock
Specificities of Agri Commodities

- Demand is foreseeable
  - Demography
  - Urbanisation
  - Food habits

- Supply is the driving factor
  - Climate and environment
  - Crops diseases
  - Research and technology
  - Policies
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The Three Sectors - Agri

Aggregate Commodity Prices

- Nominal prices
- Real prices

HSBC resource analysts’ forecasts

Source: IMF, HSBC estimates

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When deflated, Food and Agri sub indexes, are flat over a long period.
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The Three Sectors

ii. Metals (and minerals)

• Base Metals (Raw commodities and Industrial Metals)
  ✓ Raw: Iron Ore, Coking Coal
  ✓ Ferrous: Steel, Ferro Chrome
  ✓ Non Ferrous: Copper, Aluminium, Nickel, Zinc, Lead, Tin

• Minor Metals: 27 metals Cobalt, Lithium, Magnesium, Titanium...

• Rare Earth: 17 metals – neodymium, dysprosium etc

• Precious Metals
  ✓ Gold, Silver, Platinum, Palladium
Specificities of Metals

- Demand is the driving factor
  - Economic development
  - Urbanisation
  - China
  - Electric Vehicles
- Supply is driven by long term trends
  - 5-7 year lag time from investment to production
  - No foreseeable “peak mineral” phenomenon
  - Technology
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The Three Sectors - Metals

The Rest of the World Vs China

RoW share of global consumption in 2017, %

- Population: 81%, 85%, 94%
- GDP: 85%, 87%,
- Natural Gas: 94%
- Oil: 70%
- Palladium: 69%
- Platinum: 66%
- Gold: 69%
- Zinc: 66%
- Steel: 69%
- Lead: 69%
- Copper: 69%
- Ther Coal: 69%
- Nickel: 69%
- Aluminium: 69%
- Met coal: 69%
- Iron Ore: 69%

Red: Base Metals, Black: Bulks, Blue: PGMs and precious, Green: Energy


Source: Macquarie Bank
China vs the United States:
The largest economy is not the most influential as far as commodities

Source: HSBC
iii. Energy

- Supply driven dynamics
- The Key Contenders:
  - Coal, 28pct.
  - Gas, 24pct.
  - Oil, 33pct.
  - Renewables, 4pct.


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Sources BP Energy Outlook 2017
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The Three Sectors - Energy

Sources BP Energy Outlook 2018
Global coal consumption to slow but not as fast as one believes

Gas consumption to grow strongly: coal-to-gas switch & wider availability

Oil consumption will continue to grow but is expected to plateau c.2040

Renewables growth will accelerate. They will become the second source of energy in China by 2040 ahead of oil.
Global coal consumption to slow but not as fast as one believes

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The Three Sectors - Energy

- Gas consumption to grow strongly: coal-to-gas switch & wider availability

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The Three Sectors - Energy

- Oil consumption will continue to grow but is expected to plateau c.2040

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Renewables growth will accelerate. They will become the second source of energy in China by 2040 ahead of oil.
How to assess the weight of the 3 sectors?

- By value? By volume?
- One lead: Weight in trade (RICI)
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The Three Sectors

- Agri 35 pct.
- Metals 25 pct.
- Energy 40 pct.
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- Agri 41 pct.
- Metals 20 pct.
- Energy 39 pct.
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The Three Sectors

- Agri 29 pct.
- Metals 15 pct.
- Energy 56 pct.
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e. How commodity prices are formed?

• The Fundamentals: Physical supply and demand

• The relationship with the dollar
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• Correlation is historically tight. Less so recently, but this is mainly due to oil.
How commodity prices are formed?

- The Fundamentals: Physical supply and demand
- The relationship with the dollar
- Oil price
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Commodity indices are strongly influenced by the oil price

Source S&P Dow Jones Indices
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COE REXECODE COMMODITY INDICES

- Commodity indices are strongly influenced by the oil price

Source Cercle Cyclope

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How commodity prices are formed?

- The Fundamentals: Physical supply and demand
- The relationship with the dollar
- Oil price
- Financial markets: commodities are an asset class
Financialization of commodity markets

Net investor flows into commodities have been about $25bn in 2018, bringing total assets under management to $344bn, according to RBC Capital Markets.
Financialization of commodity markets: new challenges for physical traders

- New financial players: risk premia investors with no interest in commodity fundamentals.
- Algorithms and quants are now supporting traders. According to CFTC:
  - 2/3 of CME crude oil future contracts are now automated
  - Almost 50pct of soybean contracts
  - 54% of precious metals contracts
- Growing distortions between prices and fundamentals. Hedging more difficult
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Rise in crude oil 'spreading' reflects risk premia growth
Money manager positions in futures and options in ICE Brent and Nymex WTI (million barrels equivalent)

Source: Financial Times

Price Formation

Automated trading is increasing in commodities transactions
Share of automated trades on CME (Q1)

Source: Financial Times
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c. The King of Commodities: Oil

• The bulk of commodity trade
• The most liquid market
• Prices of other commodities are highly correlated
• Dominant weight in various indexes
A Supply driven commodity as uncertainty over demand growth is low.
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- Demand growth by 1.3mbpd in 2018, 1.4mbpd in 2019 (IEA).
- Supply reached 100mbpd in September, +2.6mbpd over 2017, (IEA)

Oil: Supply vs Demand

Source International Energy Agency

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• A Supply driven commodity as uncertainty over demand growth is low.
• The importance of stocks.
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Oil: Inventories matter

Sources BMO Capital Markets Research

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Oil: Inventories matter

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- A Supply driven commodity as uncertainty over demand growth is low.
- The importance of stocks.
- Conventional vs unconventional: the new normal
Conventional vs non conventional: opposite dynamics

• Prices are kept in check between conventional and shale oil producers

• Opposite dynamics:
  o Conventional producers rely on high capex with relatively low opex
  o Shale producers run an industrial process with low capex but high opex.

• Turning on and off spigots: what is easy for shale is tricky for conventional prod

• At the right price, “Shale boys”’ production will rise fast

• US shale producers are the new swing producers. For now.
  o Logistic in the US is a limiting factor
  o the looming risk: an environmental problem
US Crude production is soaring

Source: BMO Market Research
The Shale Revolution in the US

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**Oil: New dynamics of Shale**

*Source: IEA Oil 2018 Report*

![Graphs showing the wellhead break-even by play and LTO production by play](Image)

LTO = Light Tight Oil (Shale)

*Source: IEA Oil 2018 Report*
• A Supply driven commodity as uncertainty over demand growth is low.
• The importance of stocks.
• Conventional vs unconventional: the new normal
• What is the real peak oil concern? Demand or supply?
Viable Oil Reserves

• Peak oil is now widely construed as the date when demand of oil will decline.

• Originally the world’s concern was about the availability of oil supply. Such was what peak oil meant until the EV revolution shuffled the cards.

• Yet liquid demand is likely to continue to grow - at least till 2040 (BP 2018 Energy outlook)

• Supply is ample, but very sensitive to price.

• Whilst the focus is on demand, supply is still the most important factor. Too low a price and supply dries.

• This is why oil price cannot remain lower than 50$ pbI too long. Mechanically, supply will dry up and as demands bound to grow in sync with economic development, price will immediately rebound.
Viable Reserves vs Oil Price: an illustration

Per Country Reserve Breakdown btw viable & unprofitable at the highlighted oil price

World Reserves: 1,739 bn barrels
Economically viable oil reserves by price of Brent Crude, bns of barrels

Oil reserves

THE WORLD

OPEC

Non-OPEC

viable

unprofitable

Sources: Rystad Energy, Quandl
Oil reserves
Economically viable oil reserves by price of Brent Crude, bns of barrels

OPEC
Non-OPEC
viable
unprofitable

THE WORLD

Lambert Commodities
Sources: Rystad Energy; Quandl
c.40$ pb, viable world Reserves would shrank to 561 bn barrels:

Lambert Commodities

Sources: Rystad Energy; Quandl
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Historical Perspective

Crude Oil WTI

- Financial crisis
- OPEC Price management
- Commodity super cycle
- Rebound
- Market forces
- The New Normal
- Cuts effect

Source FinViz

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Current Market

- The “fear factor”
  - Political uncertainty: tweets and trade wars
  - The forced market exit of Iran
  - The meltdown of Venezuela and Libya
  - KSA and Russia pumping
  - Demand is strong for now
  - Meanwhile the Shale Boys enjoy the ride as much as they can

Source FinViz
d. Gold, a very special metal: commodity and/or a quasi currency

- A mirror to USD
- A Geopolitical beacon
- A key play for central bankers
- Yet, physical demand is strong in India and China
- And like other precious metals, a technological play
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Net global central bank gold demand

Source: GFMS-Thomson Reuters, Metals Focus, World Gold Council

Consumer demand and market share of India and China*

Source: World Gold Council

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Gold

- Gold is the **best hedge** against conflicts
- Yet, whilst oil is affected by geopolitics, gold is not, currently

Source Capital Economics
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2. Perspectives for 2018
   a. The Backdrop
   b. Long-Short Game
   c. Final thoughts
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a. Backdrop

i. A robust economic environment

ii. China’s resilience

iii. USD’s strength
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Backdrop

I. Sound fundamentals: The World Economy is (still?) in good shape

• 45 leading economies making 80 pct. of the World GDP are in growth phase (OECD)

• if the world GDP was to keep a 3.6 - 3.7 pct. growth momentum, it would double in 20 years

• Merchandise Trade grew by 3.6 pct. in 2017– 3.2 pct. e.2018 (WTO)
Healthy Fundamentals, but some doubts

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Source IMF

July 18 outlook

October 18 outlook

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Healthy Fundamentals

Source WTO – Trade Outlook Indicator Feb 2018
Still Healthy, But...

Source WTO – Trade Outlook Indicator Aug 2018
II. China the key Stakeholder: The engine is still roaring

- 6.6 pct. Growth forecast for 2018, after 6.8 in 2017 (IMF)
- Above 6 pct growth, 11 to 12mio jobs created per year to allow the safe pursuit of urbanisation.
- High debt is concern but as Japan, it is largely in domestic hands
- USD denominated debt represents 5.9pct of GDP only (Capital Economics)
- Yet, harbingers of a potential slow down. But countermeasures taken.
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III a Stronger dollar

• The fundamentals won, finally:
  ✓ USD weakness in 2017-2018 was not sustainable:
  ✓ Widening interest rate differential with the rest of the world
  ✓ An underlying strong US Economy which was turbocharged by tax incentives
• Are we at the eve of a strong rally?
  ✓ Macro ‘s uncertainty
  ✓ Serious harm to emerging economies
• What impact on commodities?
  • For now, the correlation with industrial metals is strong
  • But supply concerns keep oil strong.
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- Correlation between dollar and industrial Metal prices still strong

Source: Thomson Reuters

Source Capital Economics

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Backdrop

- Divergence of oil recently as it is affected by supply tensions

Source Capital Economics

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Dynamics of Commodity Markets  b. Long-Short Game

- Agri: Dry summer in northern hemisphere: Bullish wheat and corn
- Metals: Cobalt, Nickel, Copper, Aluminum - Gold for geopolitics (long term bet)
- Energy: Brent back to 75 in 2019 – but fear factor and tensions could propel price beyond 100$ shortly
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c. Final Thoughts

• No new supercycle despite good economic momentum
  o A sudden demand boost is unlikely – India is not (yet) China
  o Disruption is gathering momentum

• So far the economic momentum is still strong and economists believe on its resilience.

• However, causes will have consequences. Sustained protectionism and populism are bound to take the world economy off track, eventually.
A word of caution:

Predictions tend to be wronged as soon as made, so a contrarian view to all the above might be wise!