Crude Oil Update

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Macroeconomic and Fixed Income Research
7 February 2020

Executive summary

- Crude markets faced a sharp price correction fueled by a sudden and unexpected contraction in Chinese demand amid extraordinary measures to contain the diffusion of the new 2019-nCov virus.

- Assuming that the epidemic peaks in mid-February, we expect **prices could recover ground** over the next months driven by three main factors:
  - **OPEC+ commitment** to maintain global markets close to balance;
  - The **threat of U.S. sanctions against Russian crude producers** due to their trade relationships with Maduro's regime in Venezuela;
  - **Persisting supply disruptions** in several countries, including Libya.

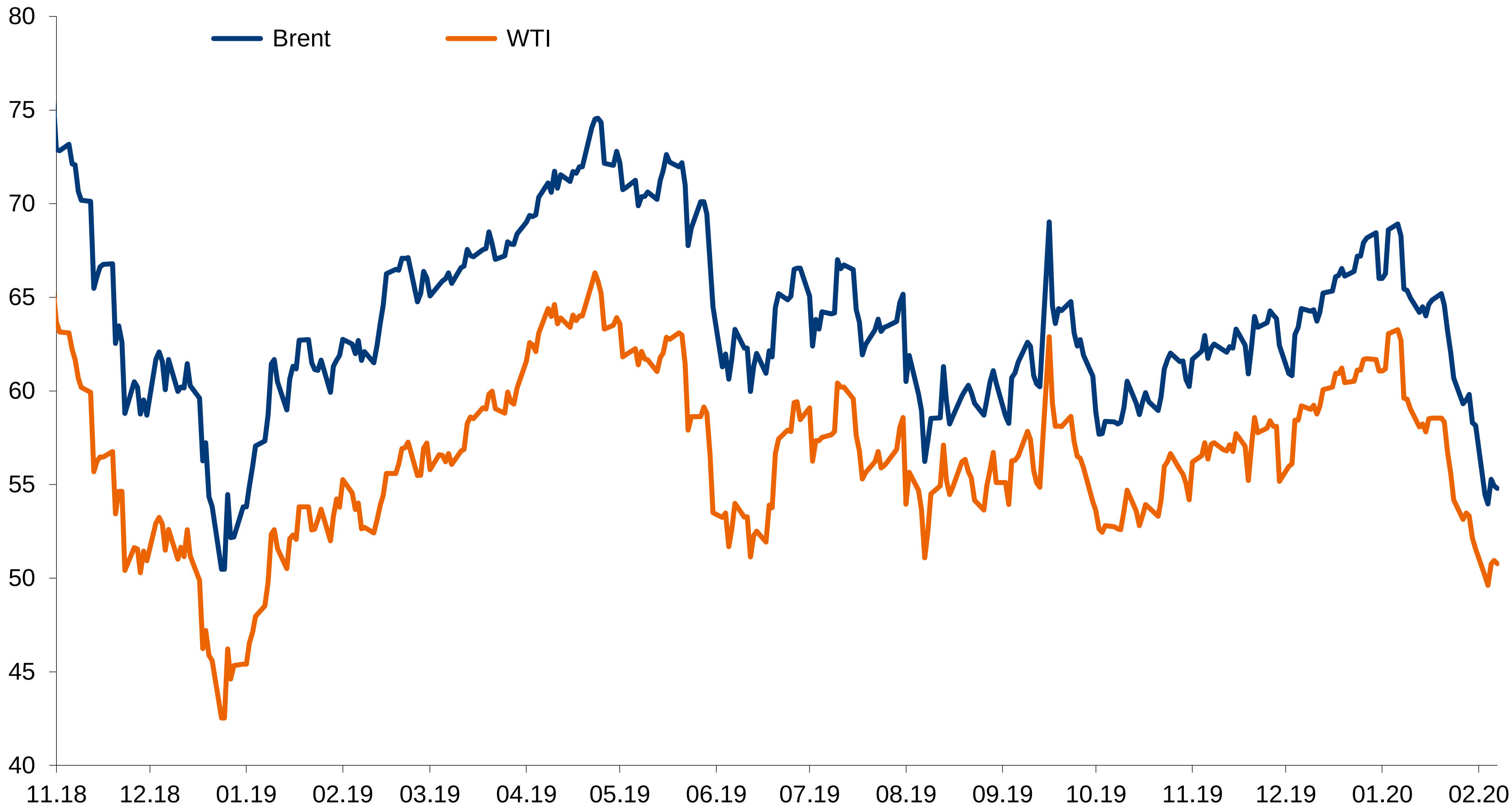
- **Negative fundamentals, but support from geopolitical risks:**
  - Physical markets are very well supplied; The most bullish factors: geopolitical risks in the Middle East, and the threat of U.S. sanctions against Russian companies. However, given the persistent oversupply, price spikes driven by rising risk premia fade quickly.

- **Macro and financial drivers:**
  - A **negative** (although modest) **macroeconomic impact** will become clear over the next weeks;
  - **Market sentiment and risk on/risk off swings** remain important drivers and fuel portfolio rotations.

Agenda

Fear after a sharp decline in Chinese demand

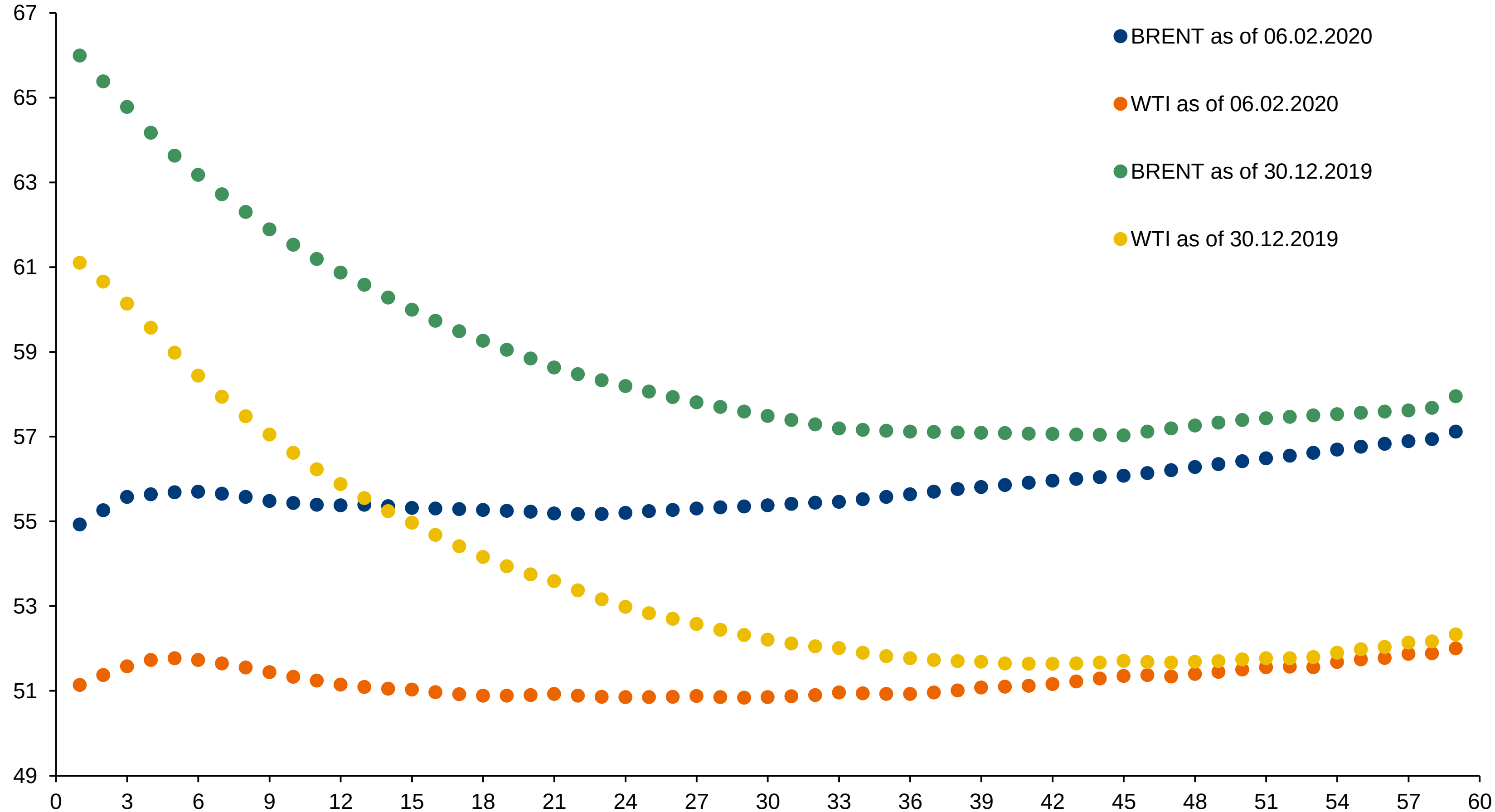
Brent and WTI crude prices in USD/barrel



Source: Intesa Sanpaolo on Bloomberg data

Forward curves reverted in contango, signalling oversupply…

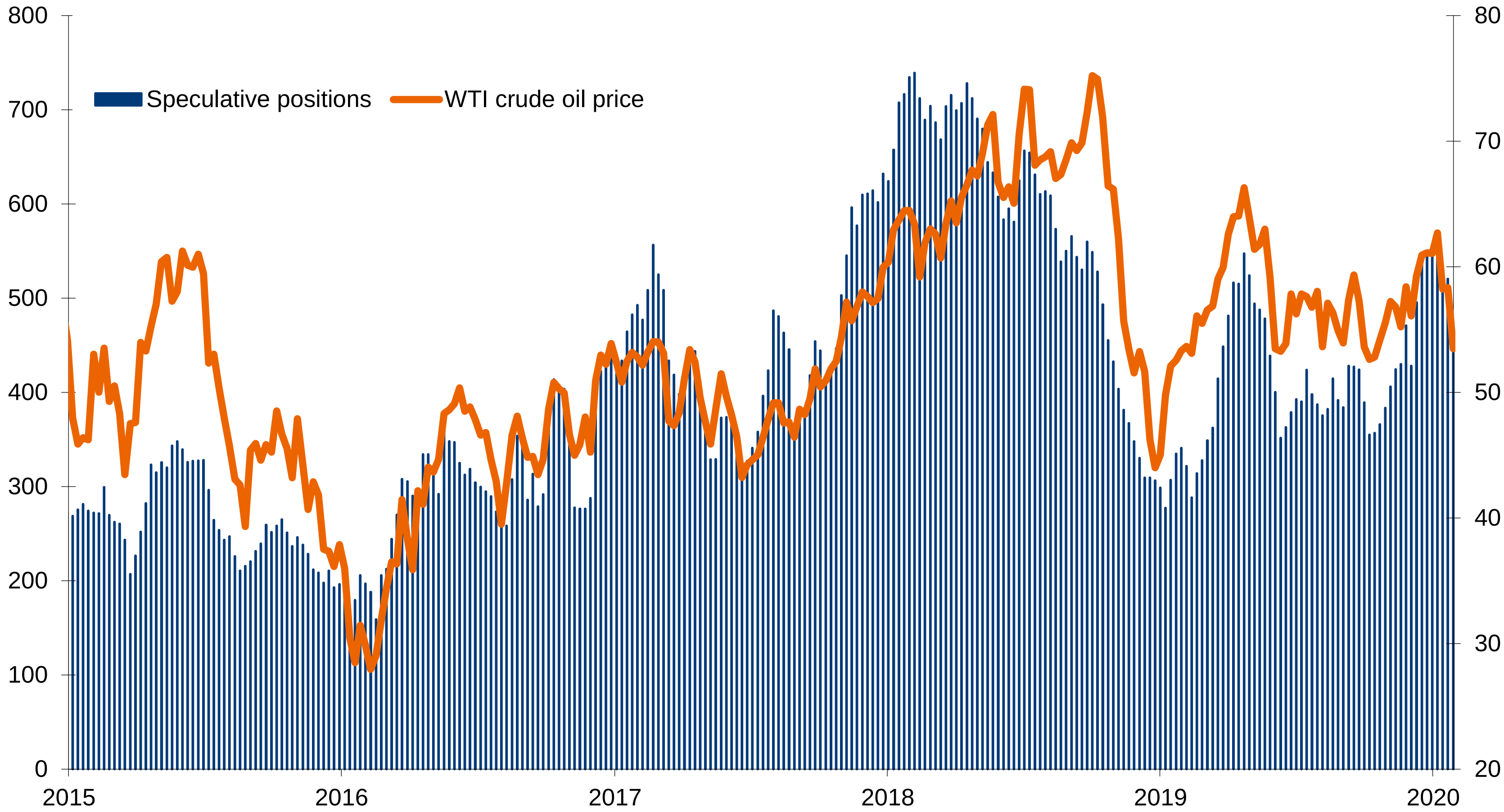
Brent and WTI forward curves in USD/barrel



Source: Intesa Sanpaolo on Bloomberg data

…and fuelling liquidation of long non-commercial positions

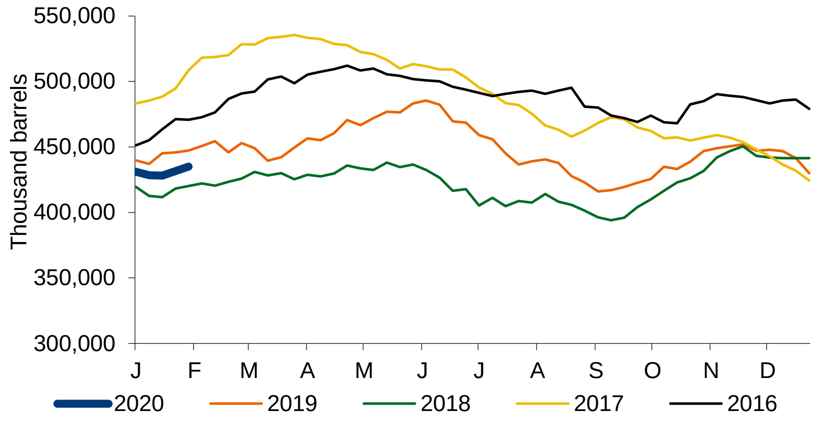
Speculative positions and WTI crude oil price (right hand scale)



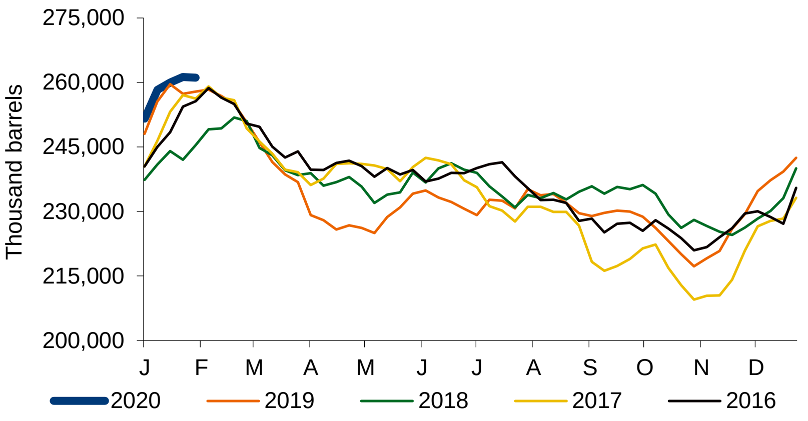
Source: Intesa Sanpaolo on data from the U.S. Commodity Futures Trading Commission (CFTC)

U.S. commercial inventories

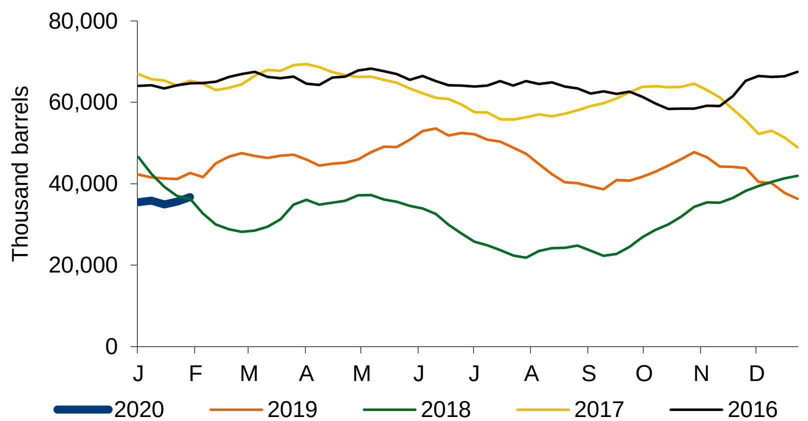
Total crude oil stocks



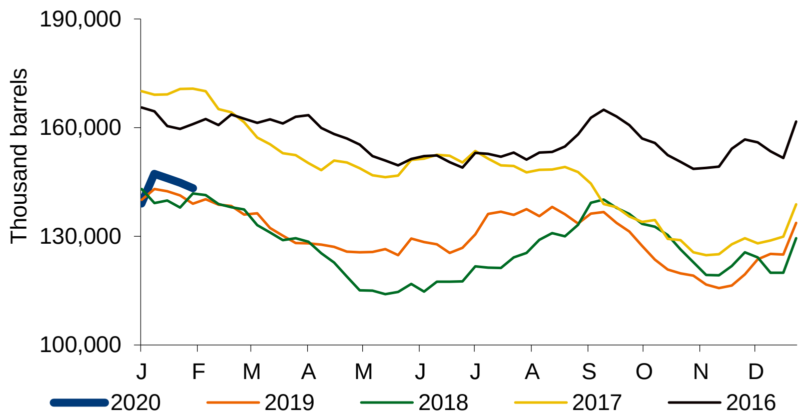
Gasoline stocks



Crude oil stocks at Cushing



Distillate stocks



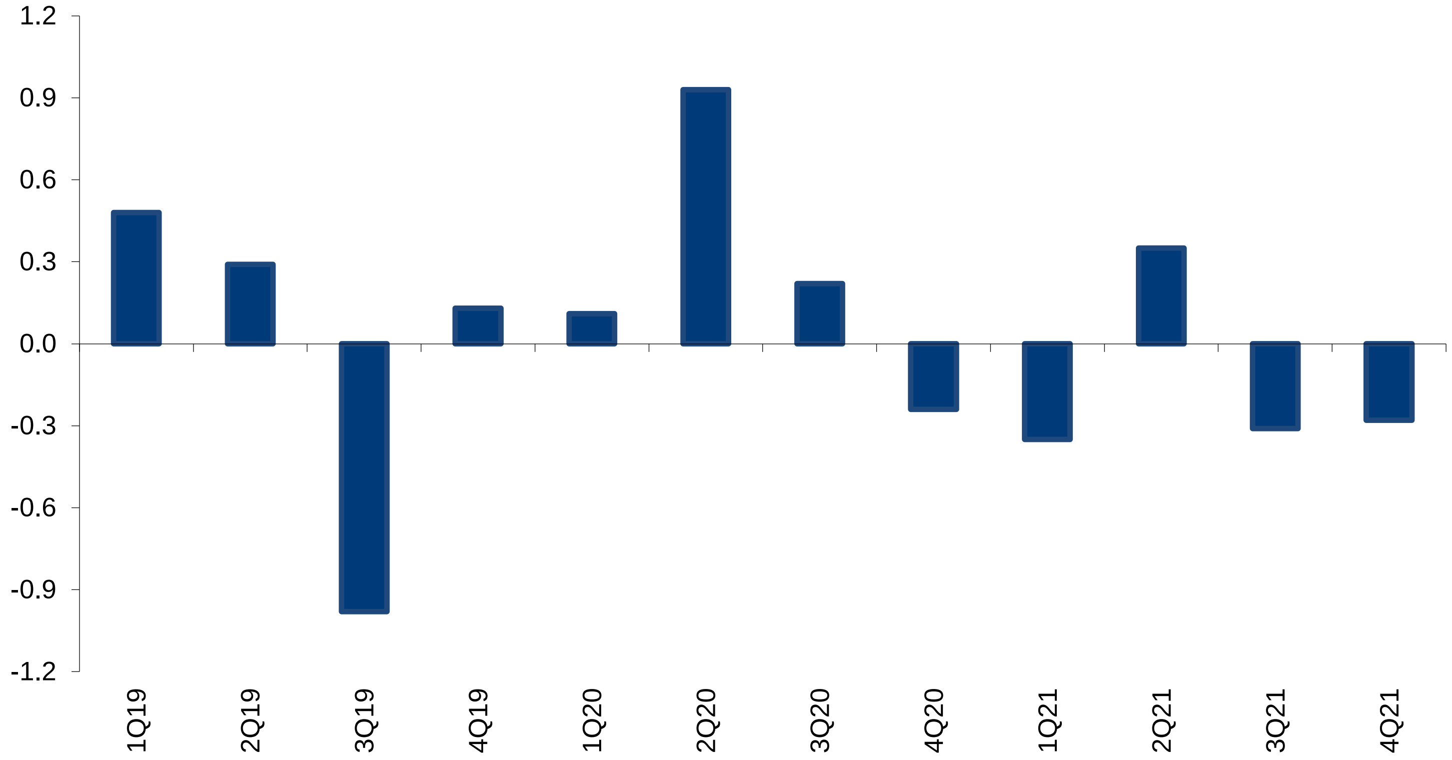
Source: Intesa Sanpaolo on U.S. Department of Energy (DoE) data

Agenda

Weak fundamentals in 2020, a balance in 2021

Even before the spread of the 2019-nCov, all the main forecasters were expecting **a well supplied market** in 2020, despite the significant geopolitical risks. The market could become tighter in 2021.

U.S. Energy Information Administration (EIA), estimated global market balance in mb/d



Source: Intesa Sanpaolo on EIA data

Back in surplus in 2020

The market was expected to move from a balance in 2019 to a **surplus of about +0.3 mb/d in 2020**. In its first estimate, the U.S. EIA envisaged a balanced market in 2021.

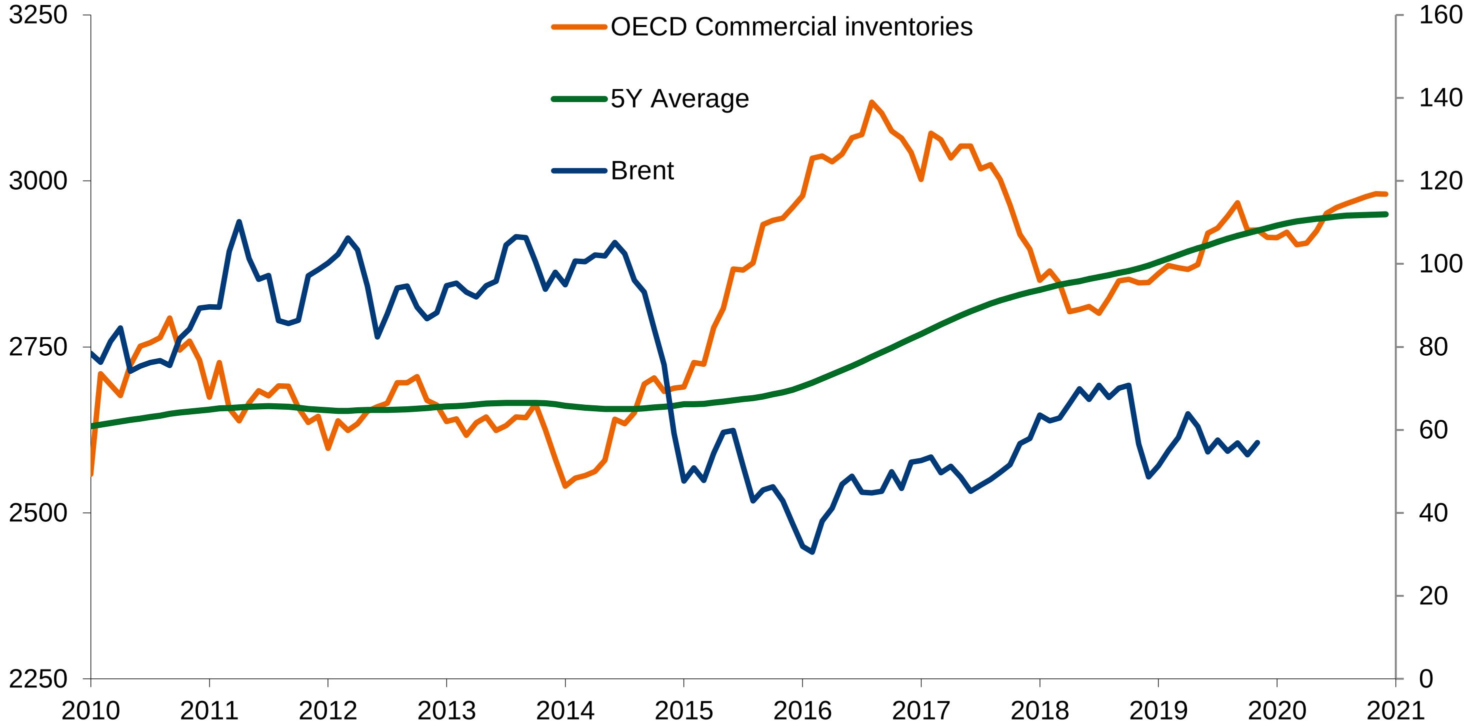
U.S. Energy Information Administration forecasts, in mb/d							
US EIA, STEO JAN. 2020	**"World Demand"**	**"Non-OPEC Supply"**	**US Supply**	**"OPEC LNG Supply"**	**"OPEC Crude Supply"**	**"Call on OPEC crude*"**	**"Market balance**"**
2019	100.8	65.5	12.2	5.4	29.8	29.8	0.0
2020	102.1	68.1	13.3	5.1	29.2	28.9	0.3
y/y change	1.3	2.6	1.1	-0.4	-0.6	-0.9	
2021	103.5	69.0	13.7	5.1	29.3	29.4	-0.1
y/y change	1.4	0.9	0.4	0.0	0.1	0.5	

Source: Intesa SanPaolo on data from the US Energy Information Administration (EIA), Short-Term Energy Outlook Jan. 2020.
** "Call on OPEC crude = World Consumption - Non OPEC Supply - OPEC LNG supply"*
*** "Market balance = OPEC crude supply - Call on OPEC crude"*

OECD stocks set to continue their expansion

OECD crude and oil products' stocks are expected to grow **above their 5-years average** over the next quarters.

OECD commercial stocks in mb vs. their 5-years average, Brent price (right hand scale)

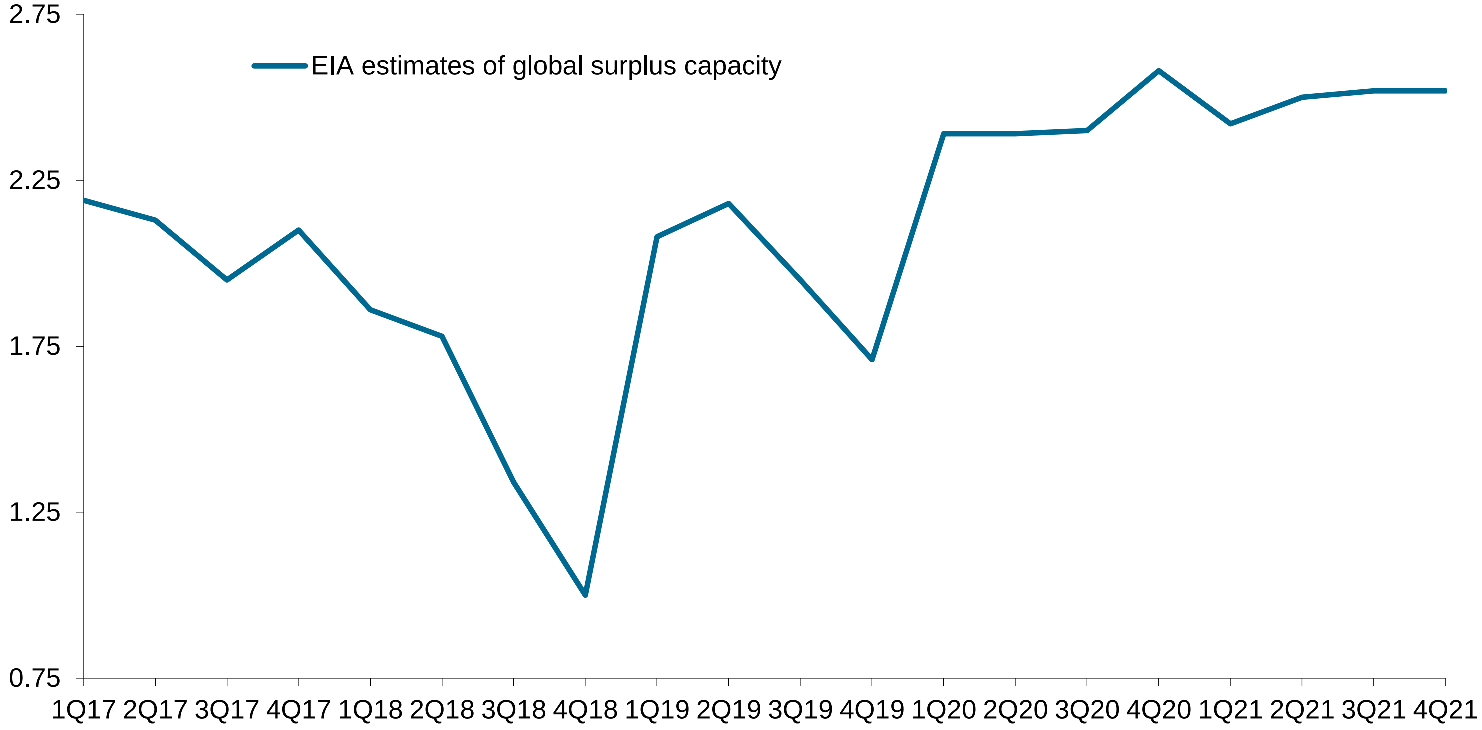


Source: Intesa Sanpaolo on Bloomberg data, U.S. EIA forecasts

A stable and elevated global spare capacity

EIA estimates that the global spare capacity would remain high over the foreseeable future.

EIA estimates of global surplus capacity in mb/d

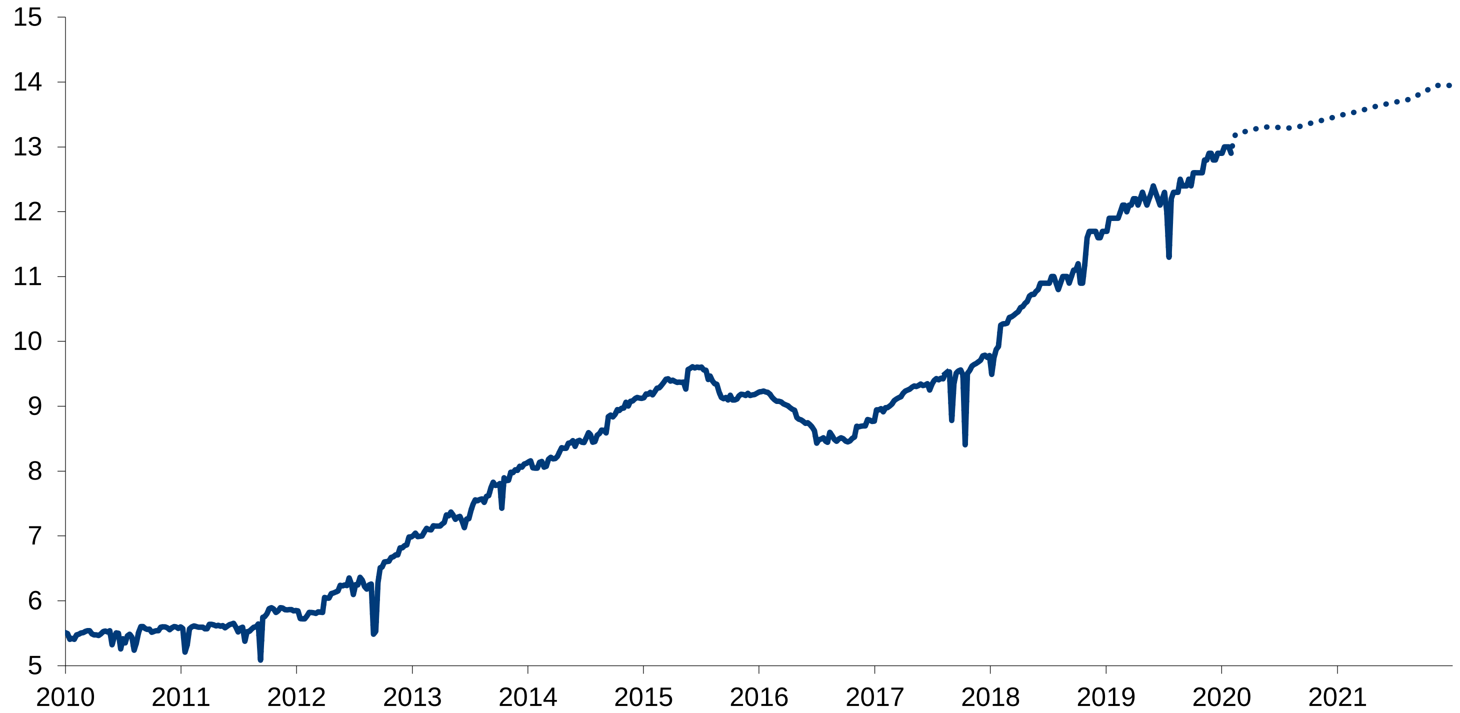


Source: Intesa Sanpaolo on U.S. EIA data

U.S. supply: stellar growth

Over the next two years, the U.S. output is expected to grow by about 1.0 mb/d, from the actual 13.0 mb/d up to about 14.0 mb/d in 4Q21.

U.S. domestic crude production, in mb/d

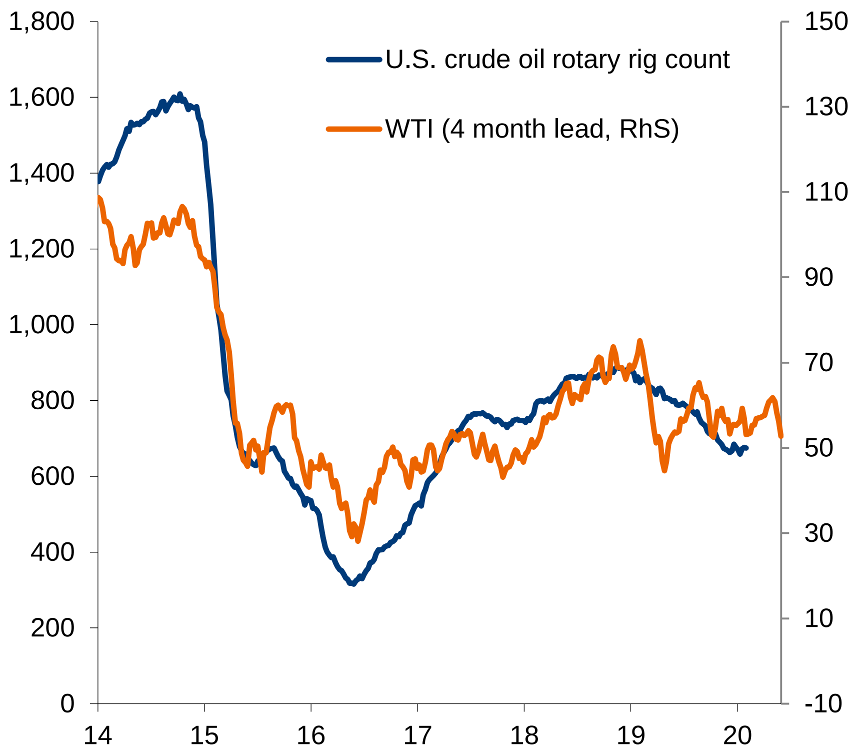


Source: Intesa Sanpaolo on Bloomberg data, U.S. EIA forecasts

So far, declining oil rig count

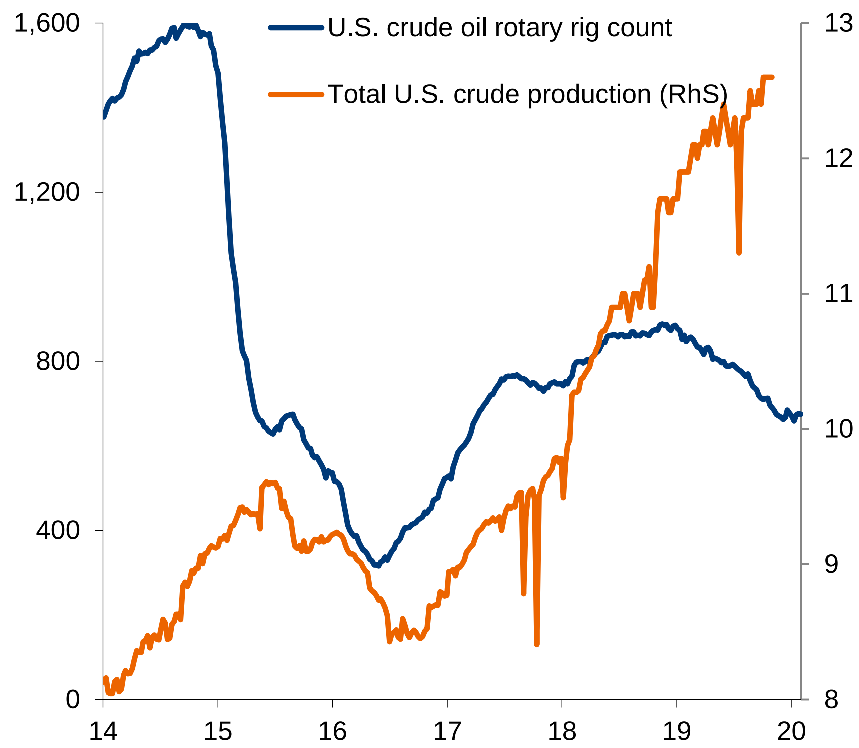
Oil rig count declined over the past quarters. The future path is also dependent upon economic conditions and geopolitical developments.

U.S. crude oil rig count and WTI crude price



Source: Intesa Sanpaolo on Bloomberg, Baker Hughes data

U.S. crude oil rig count and U.S. crude output



Source: Intesa Sanpaolo on Bloomberg, U.S. EIA data

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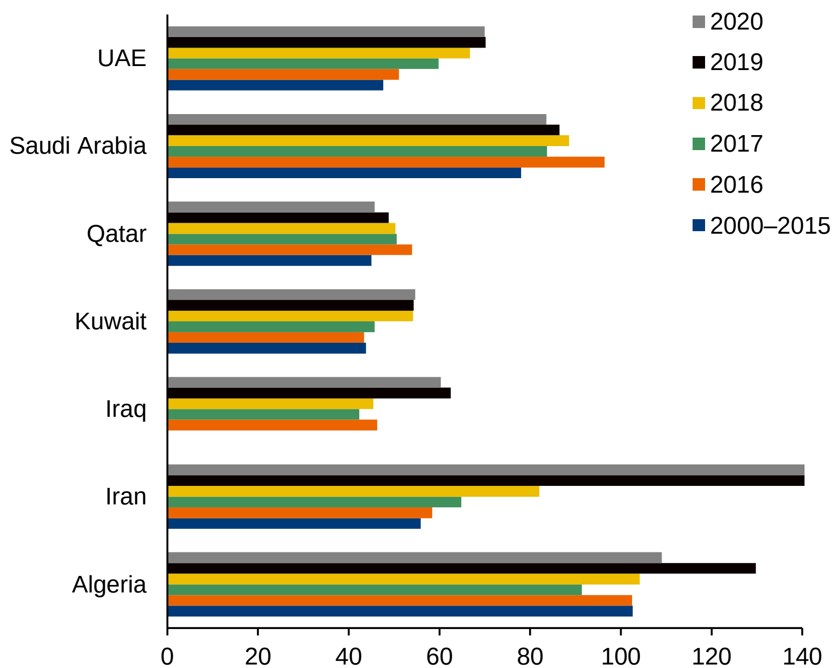
Saudi Arabia needs higher prices

A stable and high crude price is necessary to finance spending and attract capitals. Saudi Arabia needs foreign investments to diversify its economy and finance its 2030 goals and it needs U.S. support to strengthen its regional hegemony against Iran.

Fiscal Breakeven Oil Prices in USD/barrel for selected OPEC countries…



…and for MENA producers

Fiscal Breakeven Oil Prices

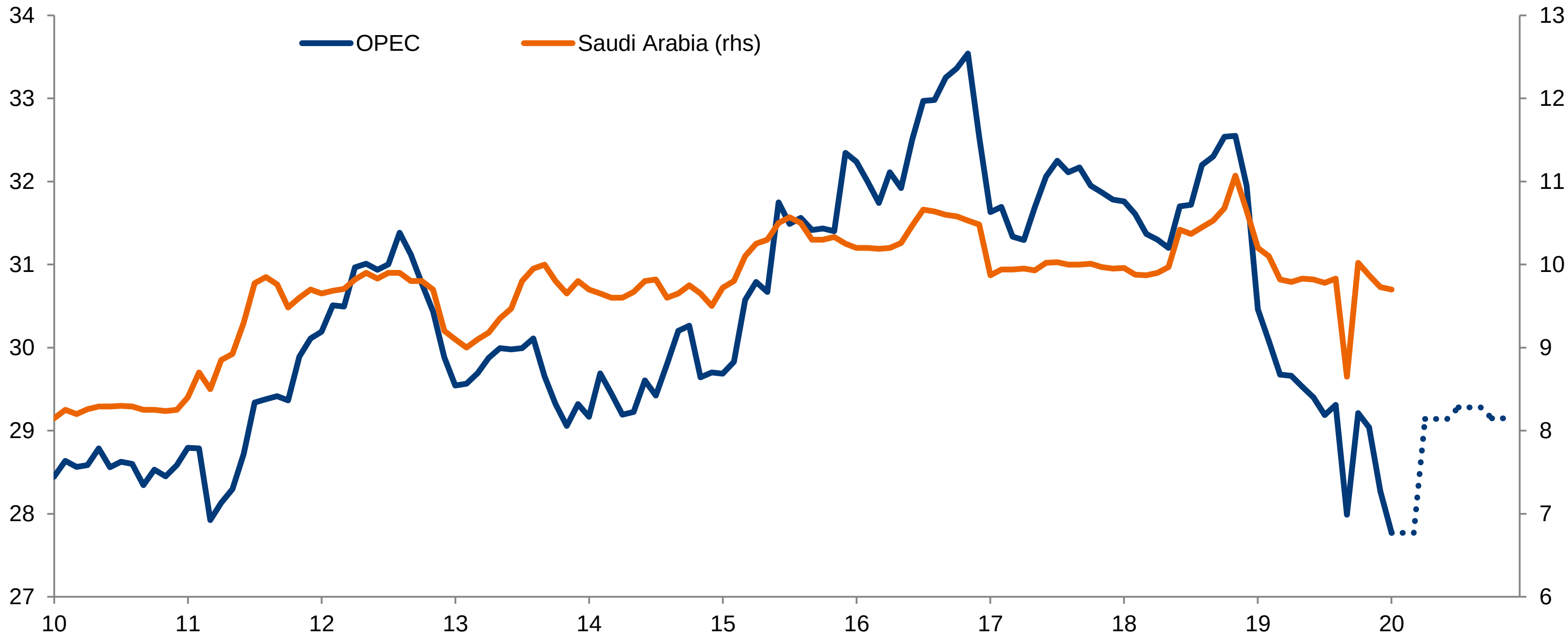
	Average				Projections	
	2000–15	2016	2017	2018	2019	2020
Algeria	102.6	102.5	91.4	104.2	129.8	109.0
Bahrain	74.1	105.7	112.6	118.4	95.1	91.8
Iran	55.9	58.4	64.8	82.0	155.6	194.6
Iraq	…	46.3	42.3	45.4	62.5	60.3
Kuwait	43.8	43.4	45.7	54.2	54.3	54.7
Libya	70.4	244.5	102.8	95.6	94.8	99.7
Oman	62.5	101.7	96.9	99.5	87.3	87.6
Qatar	45.0	54.0	50.6	50.3	48.8	45.7
Saudi Arabia	78.0	96.4	83.7	88.6	86.5	83.6
United Arab Emirates	47.6	51.1	59.8	66.7	70.2	70.0
Yemen	197.1	364.0	125.0	…	…	…

Source: Intesa Sanpaolo on IMF Regional Economic Outlook Middle East and Central Asia, Oct. 2019

OPEC must cut even more

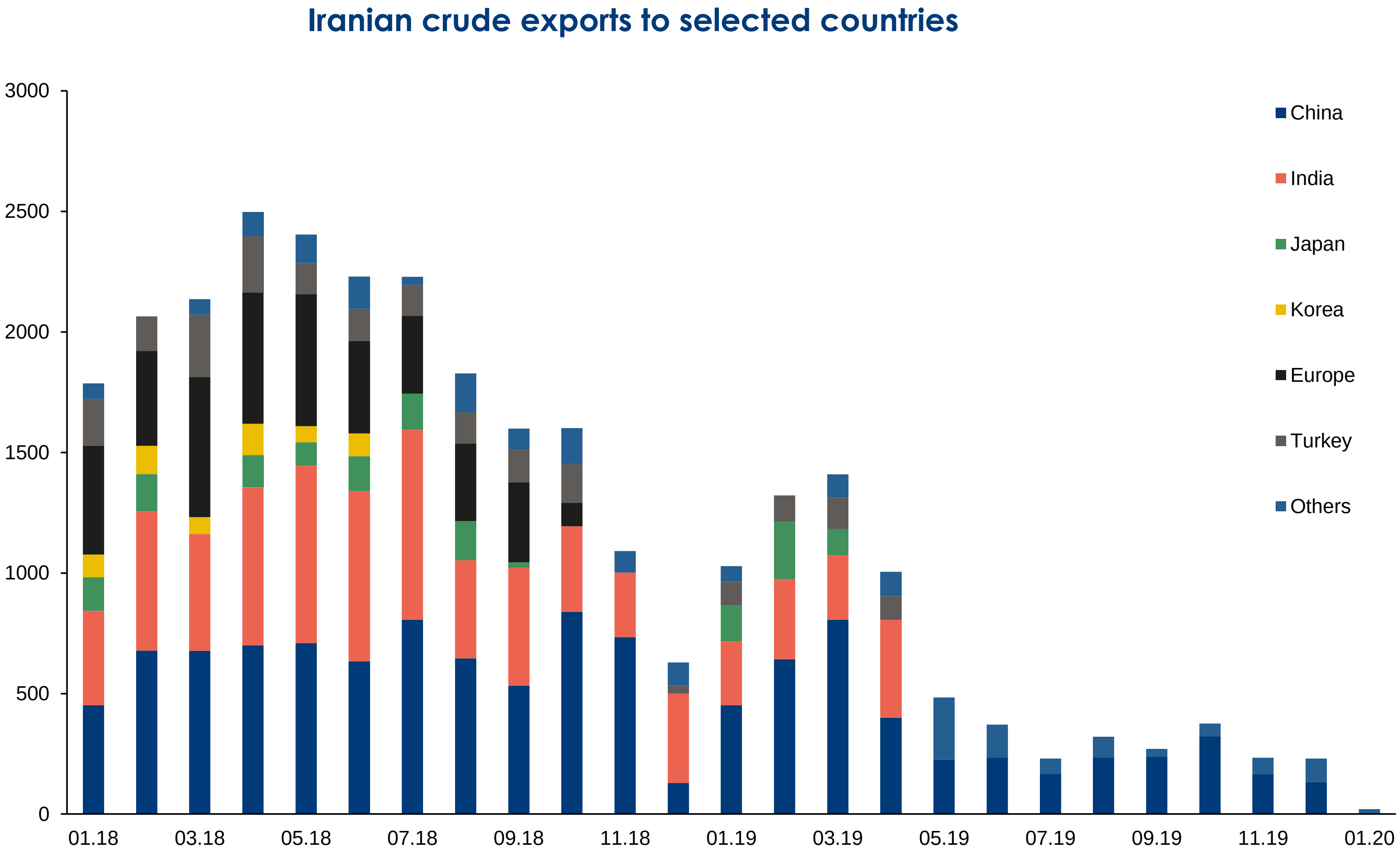
The OPEC+ deal, rolled over at the end of 2018, led to deeper than earlier expected output cuts, amid unexpected supply disruptions in several countries. The group now is evaluating to deepen cuts by an extra 0.6 mb/d to an exceptional level of 2.7 mb/d. The next ministerial meeting is scheduled in March, 5-6th.

Cumulative OPEC output and Saudi output (right hand scale) in mb/d



Source: Intesa Sanpaolo on Bloomberg data, U.S. EIA forecasts

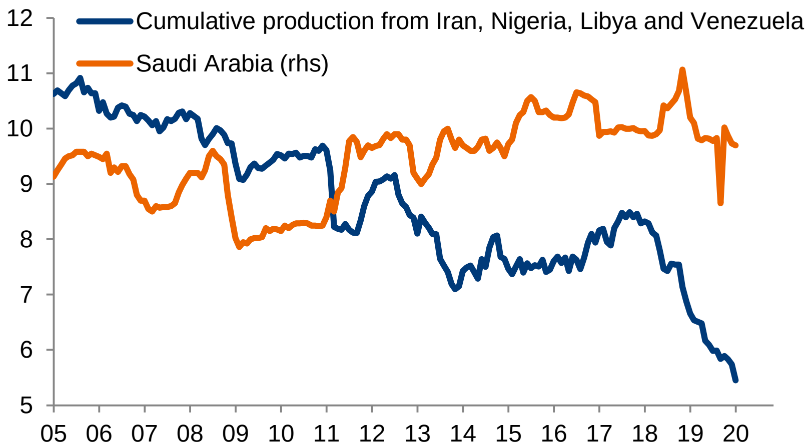
Iran: exports at a record low

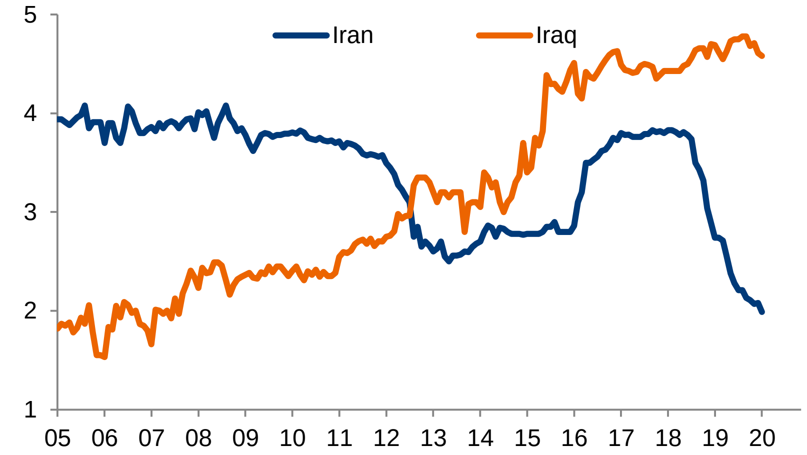


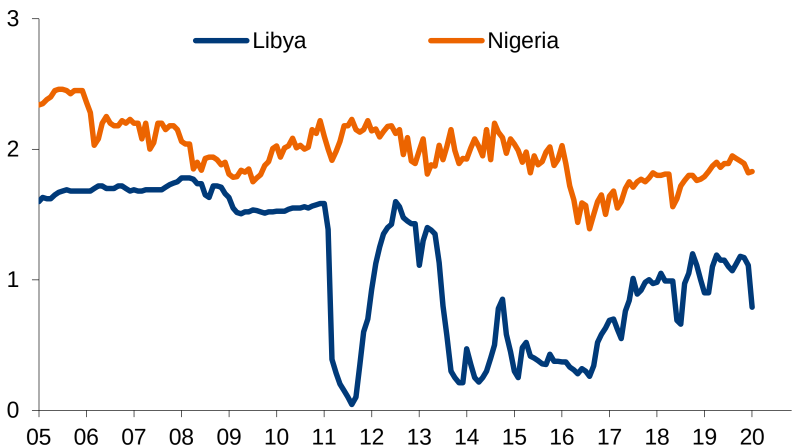
Source: Intesa Sanpaolo on Bloomberg data, thousand barrels per day

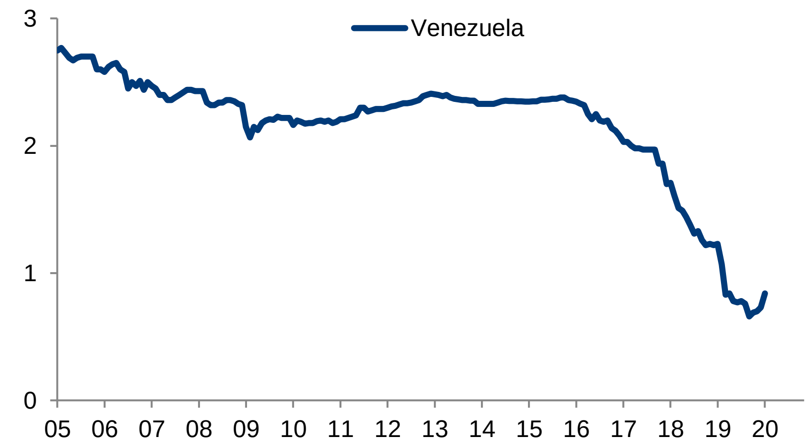
Lower output in Iran Venezuela and Libya

Output in selected OPEC countries in mb/d









Source: Intesa Sanpaolo on Bloomberg data

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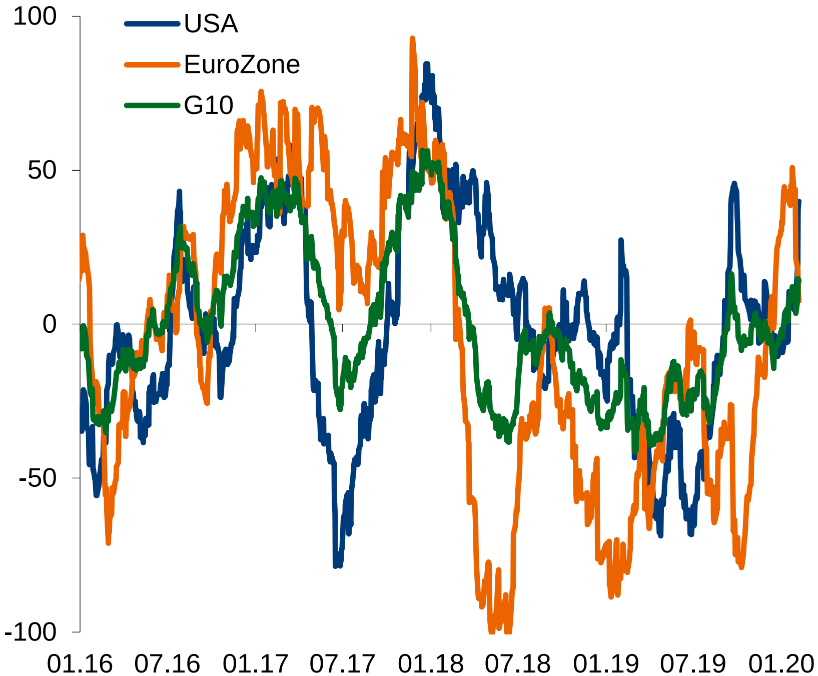
Now, most macroeconomic surprises are positive

In most areas, macroeconomic surprises turned positive. Data will probably turn less positive when the impact of lower economic activity in China becomes clear.

Citi economic surprise indexes for developed…



Source: Intesa Sanpaolo on Citi data

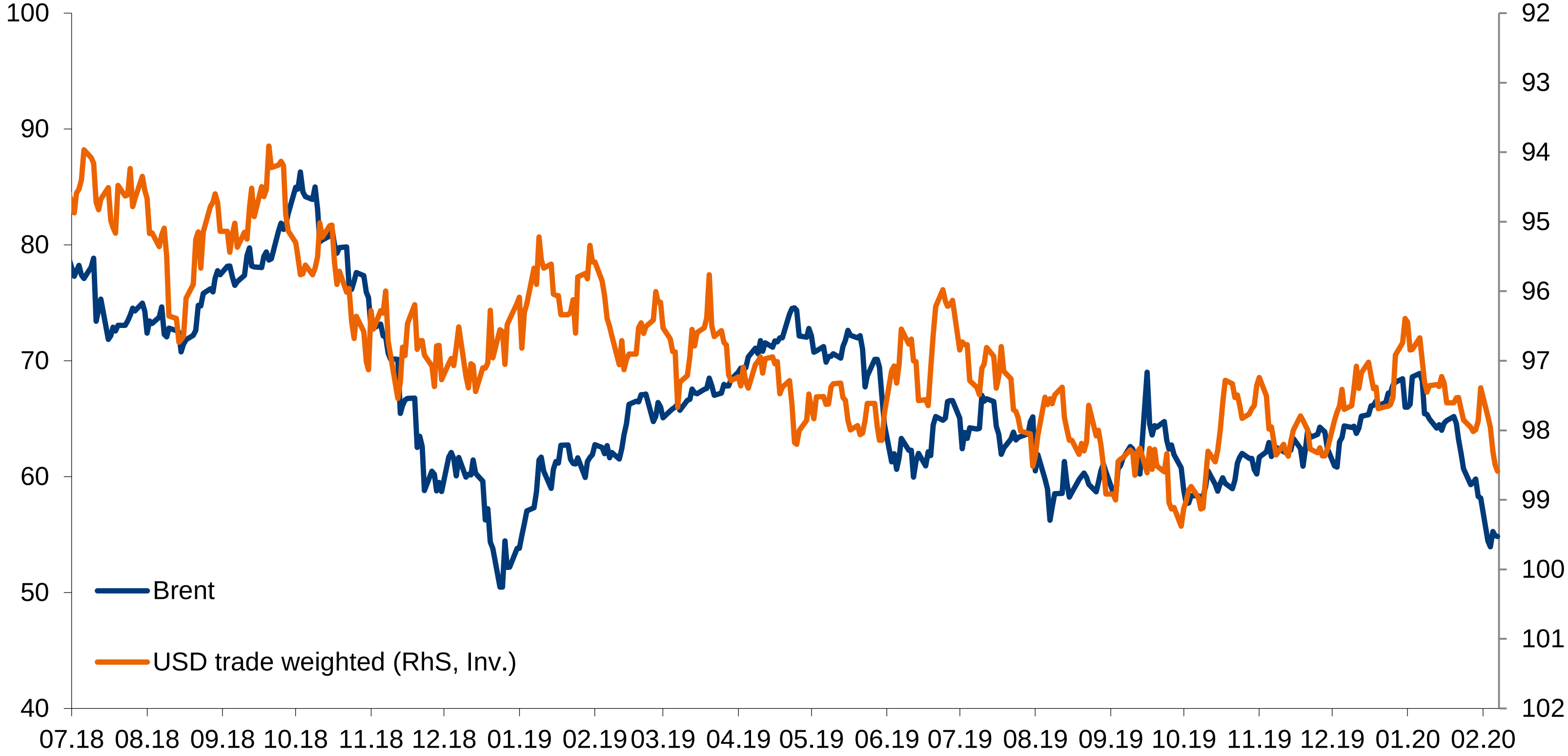
…and emerging markets

Source: Intesa Sanpaolo on Citi data

Correlation with the U.S. dollar

The negative correlation between crude oil and the trade weighted U.S. dollar remains strong.

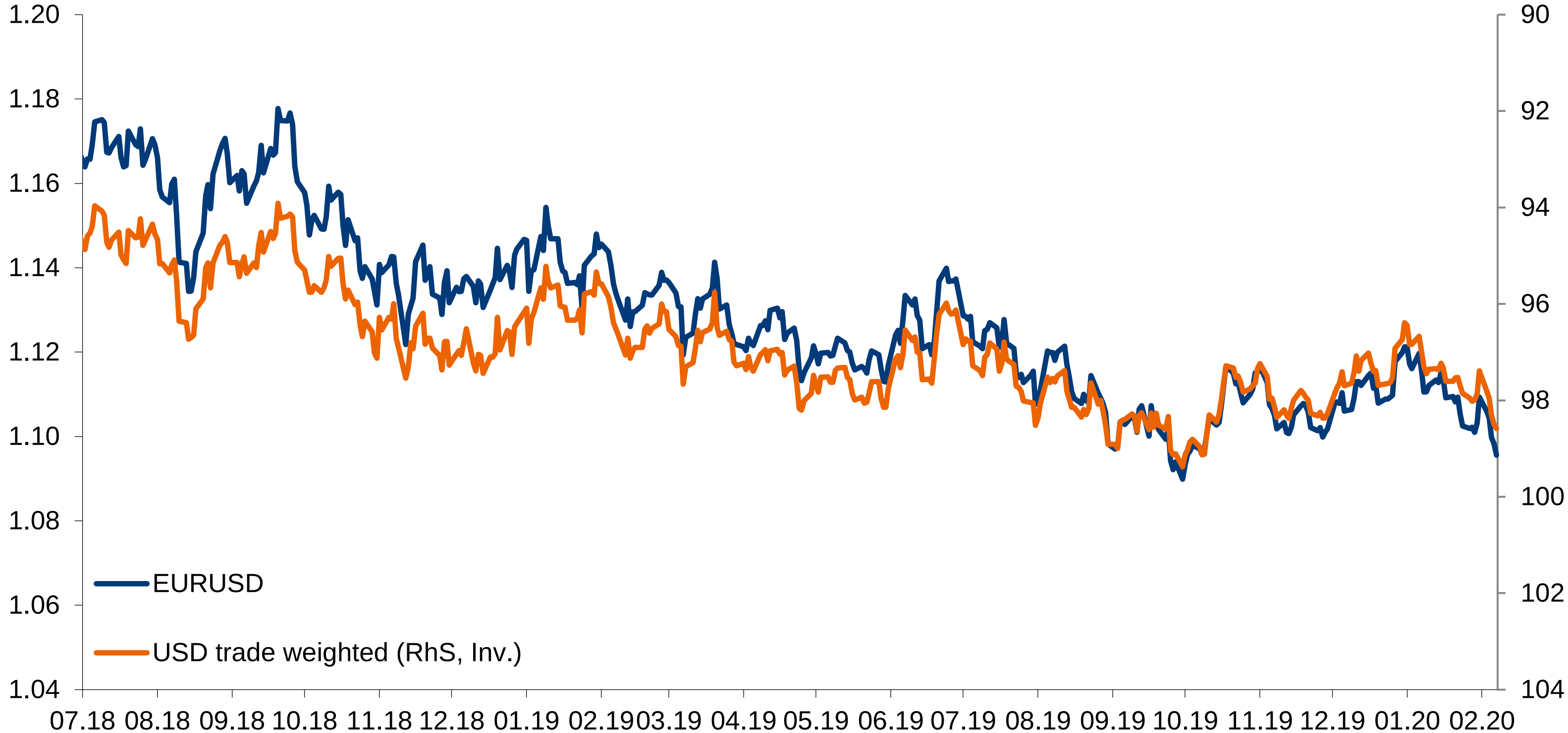
Brent and trade weighted U.S. dollar (right hand scale)



Source: Intesa Sanpaolo on Bloomberg data

Our forecasts on forex markets

Euro and trade weighted U.S. dollar



Intesa Sanpaolo forecasts

	-24m	-12m	-6m	-3m	-1m	06-03-20	+1m	+3m	+6m	+12m	+24m
EUR/USD	1.24	1.14	1.12	1.11	1.12	1.1002	1.10	1.12	1.15	1.17	1.20
USD/JPY	110	110	106	109	108	109.86	109	110	111	112	114
GBP/USD	1.39	1.29	1.22	1.29	1.32	1.2985	1.32	1.35	1.38	1.40	1.45
EUR/CHF	1.16	1.14	1.09	1.10	1.08	1.0711	1.09	1.10	1.12	1.13	1.15

Source: Intesa Sanpaolo forecasts and Bloomberg data

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Our baseline scenario

Assuming that the epidemic peaks in mid-February, we expect crude prices could recover ground over the next months driven by three main factors:

- **OPEC+ commitment** to maintain global markets close to balance, possibly deepening their output cuts by an extra 0.6 mb/d to a cumulative 2.7 mb/d and extending their output limitations up to end-2020;
- The **threat of U.S. sanctions** against Russian crude producers due to their trade relationships with Maduro's regime in Venezuela;
- **Persisting supply disruptions** in several countries, including Libya. Geopolitical risks remain a serious concern, although in our baseline scenario we do not envisage new persistent disruptions to energy supplies or transit from the Hormuz Strait.

- **Longer term**, we expect a widespread **decline in commodity prices** driven by expectations of a lower demand growth, especially from China.

Both in the short and in the long term, **crude prices remain vulnerable to speculative flows**. We are especially concerned by **crude forward curves switching in contango**: the main risk is that crude oil is no longer perceived as an attractive asset to hold in financial portfolios, due to its negative roll yields.

Our price forecasts

Price forecasts as of 07 February 2020									
ICE BRENT		**1Q20**	**2Q20**	**3Q20**	**4Q20**	**2020**	**2021**	**2022**	**2023**
05/02/2020	ISP forecasts	58.0	62.0	65.0	62.0	61.8	60.0	55.0	58.0
05/02/2020	BBG Median	62.1	62.0	61.5	60.0	62.1	63.0	62.0	65.8
07/02/2020	Forward	56.1	55.6	55.6	55.4	55.7	55.3	55.4	55.9
NYMEX WTI		**1Q20**	**2Q20**	**3Q20**	**4Q20**	**2020**	**2021**	**2022**	**2023**
05/02/2020	ISP forecasts	53.0	57.0	60.0	57.0	56.8	55.0	50.0	53.0
05/02/2020	BBG Median	58.3	57.0	57.0	57.0	58.0	58.0	57.8	63.5
07/02/2020	Forward	53.0	52.0	51.9	51.6	52.1	51.0	50.9	51.1

Source: Intesa Sanpaolo forecasts and Bloomberg data

Appendix

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This document has been prepared in accordance with the following method.

Macroeconomic Data

Comments on macroeconomic data are prepared based on macroeconomic and market news and data available via information providers such as Bloomberg and Refinitiv-Datastream. Macroeconomic and interest rate forecasts are prepared by the Intesa Sanpaolo Research Department, using dedicated econometric models. Forecasts are obtained using analyses of historical-statistical data series made available by the leading data providers and also on the basis of consensus data, taking account of appropriate connections between them.

Forecasts in the Energy Sector

Comments on the Energy Sector are prepared based on macroeconomic and market news and data available via information providers such as Bloomberg and Refinitiv-Datastream. Unless otherwise stated, consensus estimates come from the leading international energy Agencies, primarily the IEA (International Energy Agency – which deals with this sector on a global scale), the EIA (Energy Information Administration – an institute that deals specifically with the US energy sector) and OPEC. Forecasts are prepared by the Intesa Sanpaolo Research Department, using dedicated models..

Forecasts in the Metals Sector

Comments on the Metals Sector are prepared based on macroeconomic and market news and data available via information providers such as Bloomberg and Refinitiv-Datastream.

Unless otherwise specified consensus estimates on precious metals come mainly from GFMS, the long-established forecasting agency based in London. The forecasts cover gold, silver, platinum and palladium. Forecasts are prepared by the Intesa Sanpaolo Research Department, using dedicated models.

Unless otherwise stated, consensus estimates for industrial metals come mainly from Brook Hunt, an independent forecasting agency which has prepared statistics and predictions on metals and minerals since 1975, and from the World Bureau of Metal Statistics (WBMS), an independent research body on the global market of industrial metals which publishes a series of monthly, quarterly and annual statistical analyses. Forecasts are prepared by the Intesa Sanpaolo Research Department, using dedicated models.

Forecasts in the Agricultural Sector

Comments on the Agricultural Sector are prepared based on macroeconomic and market news and data available via information providers such as Bloomberg and Refinitiv-Datastream.

There are several consensus estimates on agricultural products. Each individual country has its own internal statistics agency that estimates and forecasts crops, production capacity, the product supply quantities and, above all, the amount of land available for cultivating a particular product, in both absolute and percentage terms.

At an international level, the main agencies are: the USDA (United States Department of Agriculture) which, in addition to providing data on the US territory, also deals in general with the grain industry worldwide through the FAS (Foreign Agricultural Service); the Economist Intelligence Unit of the Economist Group which deals with all agricultural products on a global scale; and CONAB (Companhia Nacional de Abastecimento), the Brazilian Government agency that deals with agriculture (with a particular focus on coffee) and which also provides some insight into the entire South America.

Forecasts are prepared by the Intesa Sanpaolo Research Department, using dedicated models.

Technical levels

Comments on technical levels are based on market news and data available via information providers such as Bloomberg and Refinitiv-Datastream. Interest rate technical level forecasts are prepared by the Intesa Sanpaolo Research Department, using dedicated technical models. Forecasts are obtained using analyses of historical-statistical data series made available by the leading data providers and also on the basis of consensus data, taking account of appropriate connections between them. There is also a further in-depth study linked to the choice of appropriate derivatives that best represent the sector or the specific commodities on which one intends to invest.

Recommendations

Negative Outlook: a Negative Outlook recommendation for a sector is a wide-ranging indication. It not only indicates deteriorating price conditions of the indices or futures that best represent the commodity in question (thus the reduction of a price performance), but it also implies the deterioration in the forecasts on production, weather and input supplies (like water or energy) that characterize these sectors more than other financial instruments.

Neutral Outlook: a Neutral Outlook recommendation for a sector is an indication that includes a multitude of aspects. It indicates that the combination of price forecasts of indices and futures and all the conditions of production, weather and input supplies (like water or energy) will lead to a sideways movement in prices or inventories or production capacity, recording, therefore, void or minimum performances for the sector under examination.

Positive Outlook: a Positive Outlook recommendation for a sector is an indication covering a wide range of areas. It not only indicates net improvements in price conditions of the indices or futures that best represent the commodity in question (thus a positive price performance), but it also implies the improvement in the forecasts on production, weather and input supplies (like water or energy) that characterize these sectors more than other financial instruments.

Frequency and validity of forecasts

Market indications refer to a short period of time (the same day or the following days, unless stated otherwise in the text). Forecasts are developed over a time span of between one week and 5 years (unless specified otherwise in the text) and have a maximum validity of three months.

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