Forex Market View

Correlation between oil prices and USD/JPY also changing

- The correlation between oil prices and the USD/JPY is unstable
- Rise in US interest rates and dollar loses steam, leading to higher oil prices, lower stocks, and a stronger yen
- Expectations of looser supply-demand weaken oil prices and send USD/JPY lower

USD/JPY forecast range (latest: noon New York time)

9 May – 8 Jun: Y106.0-110.0/$ (Y109.15/$ as of 8 May)

Forex Market View DSFE144
FICC Research Dept.

Chief FX Analyst
Yuji Kameoka
(81) 3 5555-8764
yuji.kameoka@daiwa.co.jp

Daiwa Securities Co. Ltd.

The correlation between oil prices and the USD/JPY is unstable

When oil prices and the USD/JPY have a positive correlation

The correlation between oil prices and the USD/JPY is unstable, at times positive and other times negative. Oil prices in the USD/JPY show a positive correlation when rising oil prices and an increase in US interest rates (i.e. widening of the Japan/US rate spread) strengthen the dollar and weaken the yen, and when there is a risk-on rise in share prices and yen depreciation. When the global economy is expanding, there is likely to be a tightening of oil supply-demand and increase in oil prices. Additionally, inflation expectations and rate hike expectations tend to push US long-term rates higher while the higher corporate earnings boost share prices, making it likely that both oil prices and the USD/JPY will increase. When the global economy is contracting, oil prices and the USD/JPY become more likely to decline.

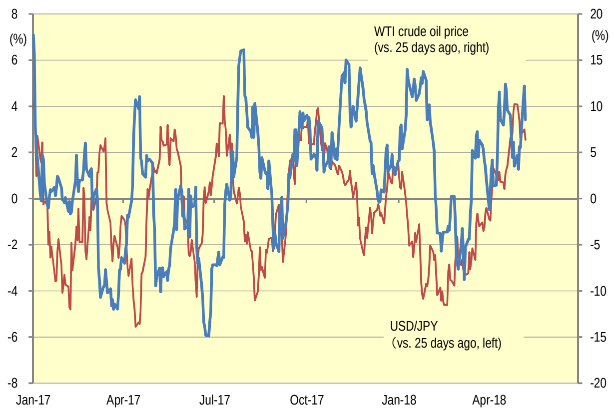
When oil prices and the USD/JPY have a negative correlation

In contrast, oil prices and the USD/JPY have a negative correlation when dollar-denominated commodity prices (goods) and the dollar (currency) show a strong negative correlation, and when the US pursues a weak dollar policy (through officials talking down the dollar) and the dollar weakens amid a risk-on increase in US share prices and rise in oil prices. This also occurs when a decline in long-term rates driven by declining oil prices causes a risk-on strengthening of share prices and weakening of the yen, as well as when a rise in long-term rates driven by rising oil prices causes a risk-off weakening of share prices and strengthening of the yen. In other words, when the USD/JPY and oil prices cause each other to move in the opposite direction, as well as when changes in oil prices and long-term interest rates create share price movement in the opposite direction.

The correlation that oil prices have with the USD/JPY and with US share prices is changing

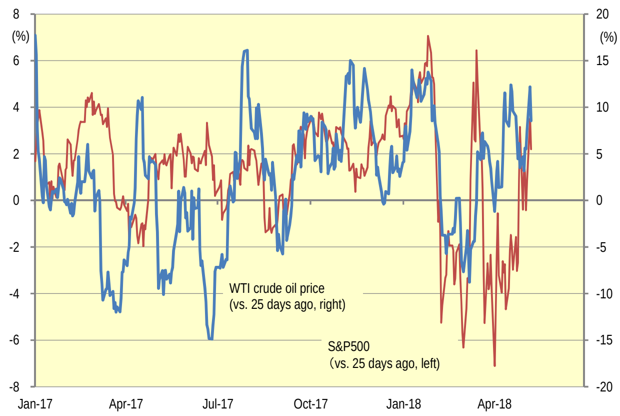
What has this correlation looked like in recent years? A comparison of the rates of change in oil prices and the USD/JPY (25-day change) shows that there are times when the two move in the same direction and times when they move in opposite directions. It is also true that US share prices, which reflect risk appetites, do not always move in the same direction as oil prices. Sometimes oil prices decline when share prices are rising, and sometimes oil prices rise when share prices are declining.

Chart: Change in Crude Oil Price and USD/JPY



Source: Thomson Reuters; compiled by Daiwa Securities.

Chart: Change in Crude Oil Price and US Stock Prices



Source: Thomson Reuters; compiled by Daiwa Securities.

Rise in US interest rates and dollar loses steam, leading to higher oil prices, lower stocks, and a stronger yen

The positive correlation that oil prices have with US share prices is weakening

Measurements of the correlation coefficient (based on the 25-day change in the 65-day moving average) that oil prices have with the USD/JPY and with US share prices show that the positive correlation between oil prices and the USD/JPY is getting stronger, while the positive correlation between oil prices and US share prices is getting weaker. The decline in the positive correlation between oil prices and US share prices is an indication that while oil prices have continued rising, US share prices have been meeting upside price resistance. This is because US corporations have been unable to raise output prices and pass on the increase in their input costs brought by higher oil prices and other factors, and this has pressured their earnings. Recently, however, there have been longer periods of rising oil prices not because of rising demand but because of concerns over the risk of a reduced supply from the Middle East, and this makes it more likely that higher prices will weaken demand. Currently, the correlation between oil prices and US share prices is just barely positive because higher oil prices have boosted energy stocks, but if oil prices rise to a level that cannot be supported by demand, share prices are likely to fall, and the correlation between oil prices and US share prices could turn negative.

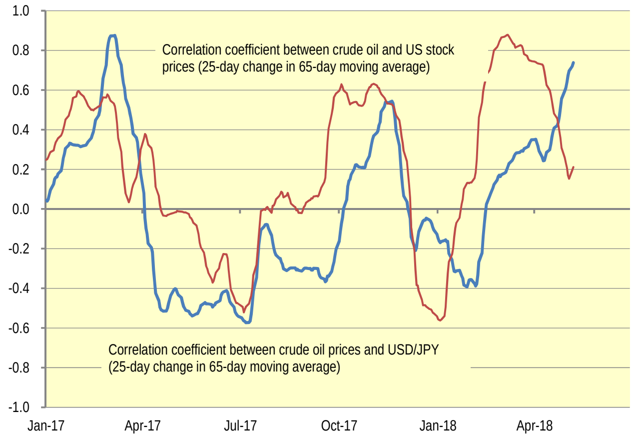
Rise in US interest rates is forming a positive correlation between oil prices and the USD/JPY

Because the USD/JPY tends to move in the same direction as risk appetite-reflecting share prices, when the correlation between oil prices and US share prices changes, the correlation between oil prices and the USD/JPY often changes in a similar manner. That has not been the case recently, however, because of dollar appreciation. The relative rise in US long-term rates that has resulted from the economic data being stronger in the US than in the euro zone has strengthened the dollar. There are signs that US long-term rates are losing their upward momentum, however. Although strong relative to other countries, US economic indicators are not improving in absolute terms, while US business sentiment is worsening. While US inflation expectations have remained high because of high oil prices, real interest rates have been declining in a reflection of sentiment. Meanwhile, Fed officials apparently see no need to quicken their pace of rate hikes because they think the risk of an economic slowdown means that although inflation may increase over the near term, continued increases in inflation over the medium term are unlikely. There is also a possibility that dollar appreciation will lose momentum because a peaking of US real interest rates will make conditions less conducive for increases in long-term nominal rates.

Rise in US interest rates and dollar loses steam, leading to higher oil prices, lower stocks, and a stronger yen

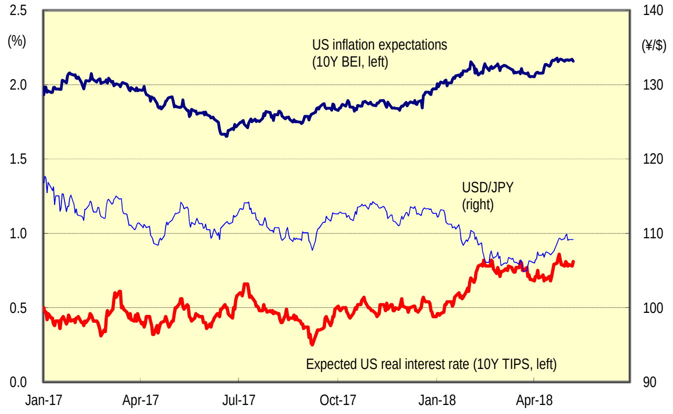
Even if oil prices rise, if an increase in US long-term rates weakens the upward pressures on the dollar, higher oil prices are likely to spark a risk-off share price decline and yen appreciation. This would probably turn the correlation between oil prices and US share prices negative and in turn weaken the positive correlation between oil prices and the USD/JPY. If oil prices are at a level commensurate with demand, the rise in oil prices is likely to be accompanied by rising share prices and a weaker yen, but if the oil price rises too much, higher oil prices are likely to be accompanied by declining share prices and a stronger yen. US President Trump announced the US will withdraw from the Iran nuclear agreement. Although the announcement of a 90-180-day grace period before economic sanctions are imposed on Iran tempered the rise in oil prices driven by concerns of geopolitical risks, there is probably a risk that the confrontation between the US and Iran will lead to higher oil prices and a stronger yen.

Chart: Correlation Coefficient Between Crude Oil Prices and USD/JPY, and Coefficient Between Crude Oil and US Stock Prices



Source: Thomson Reuters; compiled by Daiwa Securities.

Chart: US Inflation Expectations, Real Interest Rate, USD/JPY



Source: Thomson Reuters; compiled by Daiwa Securities.

Expectations of looser supply-demand weaken oil prices and send USD/JPY lower

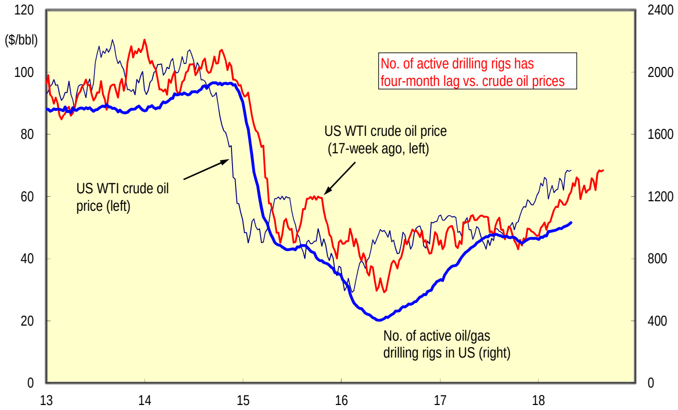
Over the longer term, oil prices and the USD/JPY should start moving in the same direction

Over the near term, oil prices and the USD/JPY may also move in opposite directions if there is a significant change in oil prices on supply concerns driven by geopolitical risks, but over the longer term we think it more likely that oil prices and the USD/JPY will move in the same direction, in accordance with the supply-demand outlook. The excess supply of oil has been eliminated by the production cuts agreed to by OPEC members and some non-OPEC producers, and this has boosted the oil price, but there are now voices calling for an increase in supply, including from Iran, which is arguing that the increase in oil prices has eliminated the need to extend the production cuts. In the US, an increase in the oil price tends to trigger an increase in the shale oil/gas rig count with about a 4-month lag, and we think the rig count and rate of growth in crude oil production are likely to continue rising for a while. Setting aside geopolitical risks, the outlook for increased supply looks likely to constrain increases in the oil price.

Expectations of looser supply-demand weaken oil prices and send USD/JPY lower

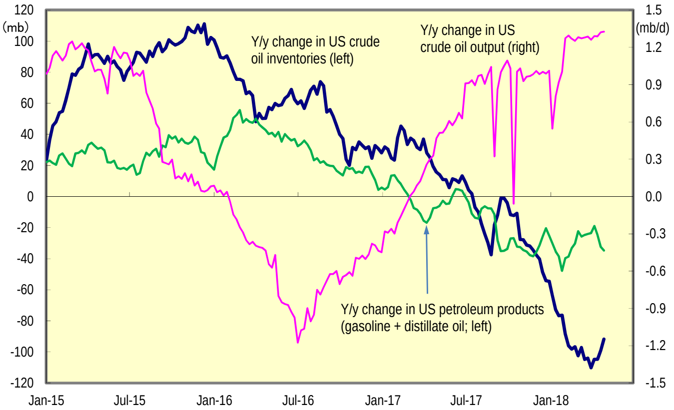
The growing rate of YoY decline in US crude oil inventories created expectations of tighter supply-demand and drove oil prices higher, but those inventories have recently started rising, and the rate of YoY decline has begun to narrow. The increased rate of growth in crude oil production and increases in inventory are fostering expectations of an easing of supply-demand, and the possibility of a decline in oil prices is emerging. If supply concerns driven by geopolitical risks abate and oil prices start declining, it could create expectations of increased demand, spark a risk-on weakening of the yen, and push the USD/JPY higher. If the oil price declines on the expectation of looser supply-demand brought by weaker demand and increased supply, however, it would likely cause a risk-off strengthening of the yen and lead to a decline in US long-term rates, thereby pushing the USD/JPY lower.

Chart: Crude Oil Prices and No. of Active Drilling Rigs in US



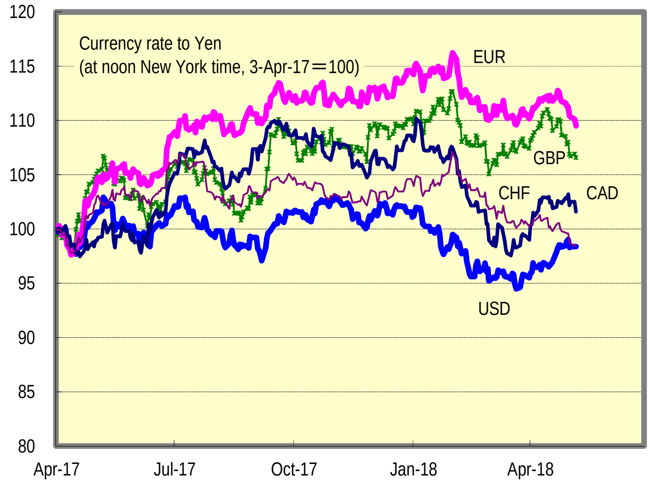
Source: Baker Hughes, Thomson Reuters; compiled by Daiwa Securities.

Chart: US Crude Oil Output, Inventories of Petroleum Products and Crude Oil



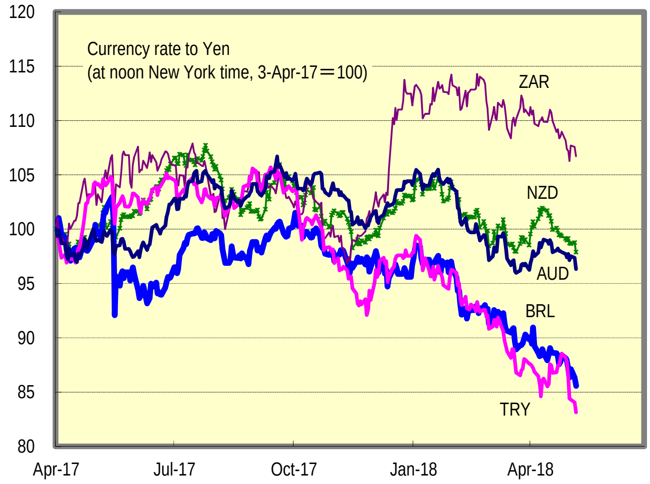
Source: US EIA, Thomson Reuters; compiled by Daiwa Securities.

Chart: Major Currencies/JPY FX Index



Source: Fed, Thomson Reuters; compiled by Daiwa Securities.

Chart: EM Currencies/JPY FX Index



Source: Fed, Thomson Reuters; compiled by Daiwa Securities.

Chart: Currency Exchange Rate Forecasts

	Actual		Forecast				
	29 Dec 2017	30 Mar 2018	Apr-Jun 2018	Jul-Sep 2018	Oct-Dec 2018	Jan-Mar 2019	Apr-Jun 2019
USD-JPY	112.7	106.2	107.0	104.0	108.0	109.0	110.0
			103-111	101-110	102-112	104-113	105-114
EUR-JPY	135.2	130.8	128.5	125.0	133.0	133.0	135.5
			124-134	122-132	123-136	128-138	130-140
AUD-JPY	87.9	81.7	80.5	78.0	83.0	83.0	84.5
			77-85	75-84	76-86	78-87	79-88
CAD-JPY	89.6	82.4	82.5	80.0	84.5	84.5	86.0
			79-87	77-86	78-88	80-89	81-90
NZD-JPY	79.8	76.9	75.0	73.0	77.5	77.5	79.0
			72-80	70-79	71-81	73-82	74-83
TRY-JPY	29.7	26.8	26.0	25.0	27.0	27.0	27.5
			23-28	23-28	24-29	25-30	25-30
ZAR-JPY	9.1	9.0	8.7	8.5	9.2	9.1	9.3
			8.3-9.3	8.2-9.2	8.3-9.5	8.6-9.6	8.7-9.7
BRL-JPY	34.0	32.1	30.5	30.0	32.5	32.0	33.0
			28-33	27-32	28-34	29-34	30-35
KRW-JPY	10.6	10.0	9.9	9.7	10.3	10.3	10.5
(100 KRW)			9.5-10.5	9.3-10.3	9.4-10.6	9.8-10.8	10.0-11.0
CNY-JPY	17.3	16.9	16.9	16.4	17.4	17.4	17.7
			16.4-17.4	16.0-17.2	16.2-17.6	16.7-17.9	16.9-18.1

Source: BIS, Fed, Thomson Reuters; compiled by Daiwa Securities.
Notes: 1) Actual shows market rates at noon NY time.
2) Forecast upper row; as of quarter end, lower row; range during quarter.

Explanatory Document of Unregistered Credit Ratings

In order to ensure the fairness and transparency in the markets, Credit Rating Agencies became subject to the Credit Rating Agencies' registration system based on the Financial Instruments and Exchange Act. In accordance with this Act, in soliciting customers, Financial Instruments Business Operators, etc. shall not use the credit ratings provided by unregistered Credit Rating Agencies without informing customers of the fact that those Credit Rating Agencies are not registered, and shall also inform customers of the significance and limitations of credit ratings, etc.

■ The Significance of Registration

Registered Credit Rating Agencies are subject to the following regulations:
1) Duty of good faith.
2) Establishment of control systems (fairness of the rating process, and prevention of conflicts of interest, etc.).
3) Prohibition of the ratings in cases where Credit Rating Agencies have a close relationship with the issuers of the financial instruments to be rated, etc.
4) Duty to disclose information (preparation and publication of rating policies, etc. and public disclosure of explanatory documents).

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■ Credit Rating Agencies

[Standard & Poor's]

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The name of the Credit Rating Agencies group: S&P Global Ratings ("Standard & Poor's")
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[Moody's]

The Name of the Credit Rating Agencies Group, etc

The name of the Credit Rating Agencies group: Moody's Investors Service, Inc. ("MIS")
The name and registration number of the Registered Credit Rating Agency in the group: Moody's Japan K.K. (FSA commissioner (Rating) No.2)

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[Fitch]

The Name of the Credit Rating Agencies group, etc

The name of the Credit Rating Agencies group: Fitch Ratings ("Fitch")
The name and registration number of the Registered Credit Rating Agency in the group: Fitch Ratings Japan Limited (FSA commissioner (Rating) No.7)

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Apr 2017

IMPORTANT

Notification items pursuant to Article 37 of the Financial Instruments and Exchange Law

If you decide to enter into a business arrangement with our company based on the information described in this report, we ask you to pay close attention to the following items.

• In addition to the purchase price of a financial instrument, our company will collect a trading commission* for each transaction as agreed beforehand with you. Since commissions may be included in the purchase price or may not be charged for certain transactions, we recommend that you confirm the commission for each transaction. In some cases, our company also may charge a maximum of ¥ 2 million (including tax) per year as a standing proxy fee for our deposit of your securities, if you are a non-resident.
• For derivative and margin transactions etc., our company may require collateral or margin requirements in accordance with an agreement made beforehand with you. Ordinarily in such cases, the amount of the transaction will be in excess of the required collateral or margin requirements**.
• There is a risk that you will incur losses on your transactions due to changes in the market price of financial instruments based on fluctuations in interest rates, exchange rates, stock prices, real estate prices, commodity prices, and others. In addition, depending on the content of the transaction, the loss could exceed the amount of the collateral or margin requirements.
• There may be a difference between bid price etc. and ask price etc. of OTC derivatives handled by our company.
• Before engaging in any trading, please thoroughly confirm accounting and tax treatments regarding your trading in financial instruments with such experts as certified public accountants.

* The amount of the trading commission cannot be stated here in advance because it will be determined between our company and you based on current market conditions and the content of each transaction etc.

** The ratio of margin requirements etc. to the amount of the transaction cannot be stated here in advance because it will be determined between our company and you based on current market conditions and the content of each transaction etc.

When making an actual transaction, please be sure to carefully read the materials presented to you prior to the execution of agreement, and to take responsibility for your own decisions regarding the signing of the agreement with our company.

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The Financial Futures Association of Japan
Japan Investment Advisers Association
Type II Financial Instruments Firms Association