Forex Market View

Where the USD/JPY is heading

- Long-term rates tied to US economic trend
- Real rates may have room to decline, depending on US economy
- USD/JPY level corresponds with US long-term rates and the rate of change in share prices

<u>**USD/JPY forecast range (latest: noon New York time)**</u>

17 Jul – 16 Aug: Y105.5 – 109.5/$ (Y108.35/$ as of 16 Jul)

Forex Market View DSFE246

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Long-term rates tied to US economic trend

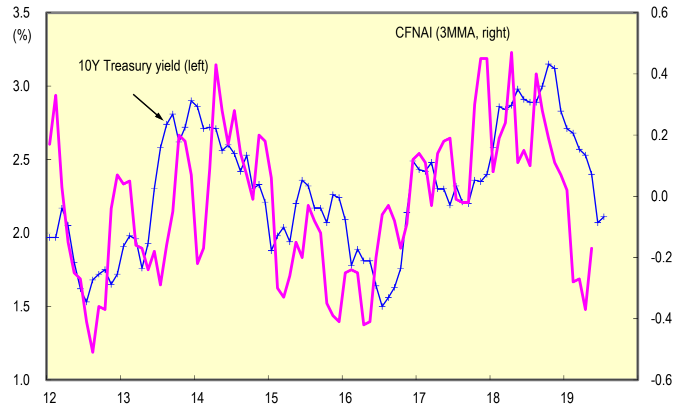
Long-term rates tied to US economic trend (1)

The USD/JPY has been regaining its linkage with US long-term rates recently. US long-term rates are a key factor affecting the USD/JPY market, and the economic trend is probably the most important of the factors affecting US long-term rates. For example, 10-year Treasury yields correlate with changes in the Chicago Fed National Activity Index (CFNAI). Because the CFNAI is slow to be released, however, it is not often that interest rates move in reaction to it. Interest rates move in anticipation of changes in the economy, and consequently often show a correlation with the CFNAI. Although there is a correlation between the respective trends of the CFNAI and interest rates, there are times when interest rates do not move in step with the index at a more granular level. The CFNAI's 3-month moving average, which dropped significantly between August 2018 and April 2019, rebounded in May, but interest rates rebounded only slightly in July. There are probably few participants who expect the index to continue climbing. Although the CFNAI has rebounded it remains negative, and therefore with US economic growth below its trend the market is unlikely to adopt an inflation bias. The prevailing view that the CFNAI will remain in negative territory may make it difficult for interest rates to rise.

Long-term rates tied to US economic trend (2)

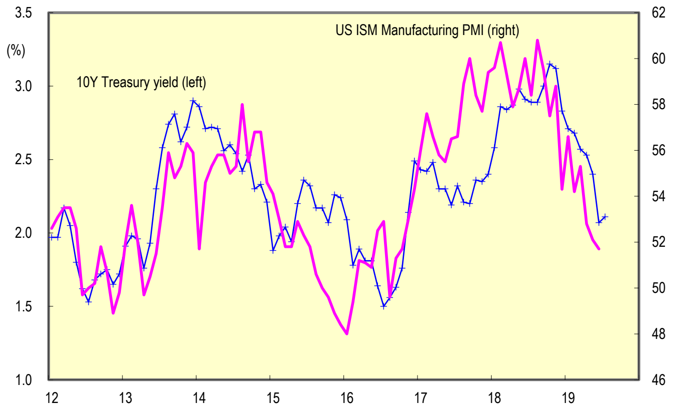
The 10-year Treasury yield also correlates with the trend in the ISM manufacturing PMI. Although interest rates sometimes move in reaction to actual changes in the PMI, it is often the case that they move in anticipation of such changes. Consequently, when a large gap opens between the two, interest rates tend to move in a direction that closes that gap. When the PMI was declining until June 2019, interest rates were also declining, but rates rebounded in July. Although this can be attributed to the larger-than-expected increase in the June US employment data and the rise in the US core CPI, if contrary to other economic indicators the July PMI is weak, interest rates are likely to decline again in August.

Chart: CFNAI and 10Y Treasury Yield



Source: Thomson Reuters; compiled by Daiwa Securities.

Chart: US ISM Manufacturing PMI and US 10Y Treasury Yield



Source: Thomson Reuters; compiled by Daiwa Securities.

Real rates may have room to decline, depending on US economy

Real rates may have room to decline, depending on US economy

When US long-term rates were in the process of declining starting in November 2018, both expected inflation (BEI) and real interest rates (the yield on inflation-indexed bonds) also declined. This was probably primarily owing to the deceleration of US economic indicators and there may be room for interest rates to decline further depending on the direction of the economic data. The 10-year real yield has recently declined to 0.33% after having peaked at 1.17% in November 2018, but it remains high relative to its bottoms of -0.02% in April 2015 and -0.06% in July 2016. US economic indicators are currently at levels not much different from where they were then, but the strong upward momentum in share prices suggests heightened expectations that the US economy will be supported by Fed rate cuts, and this may explain why real rates are high. Nevertheless, real rates would probably decline if there were strong concerns that the US economy will not stop slowing despite Fed rate cuts.

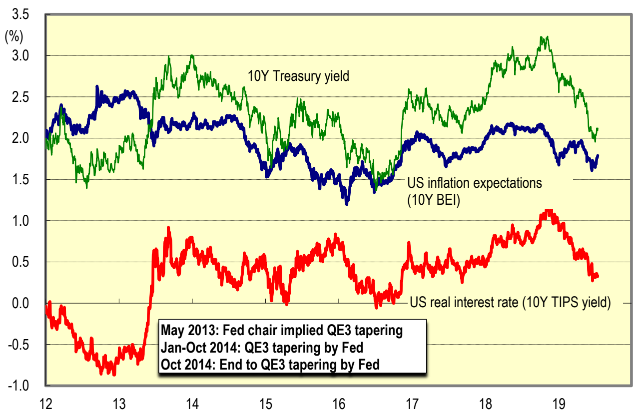
The possibility of real rates in the US declining to near zero

US real rates dropped deeper into negative territory in 2012-13 because of the Fed's open-ended purchases of MBS and Treasurys under QE3, but they have been positive ever since Fed Chairman Ben Bernanke hinted at a tapering of those purchases in May 2013. The Fed is currently cutting back on its asset reinvestments, but even if it stops shrinking its level of reinvestment in the near future, real rates are unlikely to drop as deeply into negative territory as they were then unless the Fed reintroduces quantitative easing. There is a reasonable probability of real rates declining to near zero like they did in 2015 and 2016, however.

Inflation expectations may stop rising, depending on oil prices

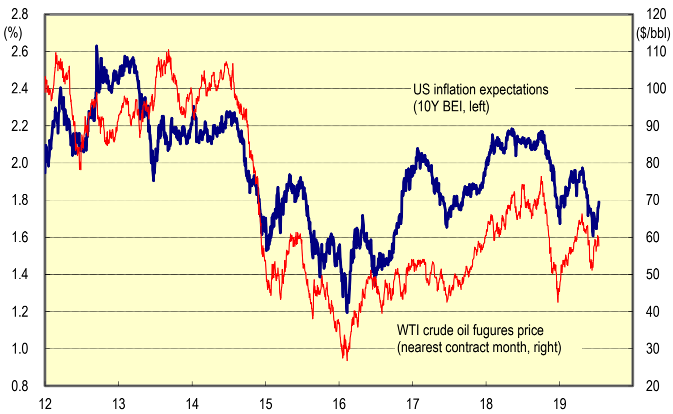
Meanwhile, the expected inflation rate has rebounded somewhat after bottoming in June 2019. One reason for this is the economic data, including the June US core CPI coming in above market expectations, but the rise in crude oil prices from June to July was also a factor. The historical record shows a correlation between inflation expectations and oil prices. The recent rise in oil prices can be attributed to concerns over supply driven by the overall embargo on Iran's oil production and the hurricane-induced decline in US oil production in the Gulf of Mexico. Nevertheless, because impacts from the hurricane have begun to fade and US oil output is expected to recover, the rise in oil prices may lose momentum. The increase in inflation expectations that sparked the recent rise in US long-term rates may also stop.

Chart: 10Y Treasury Yield, BEI, and Real Interest Rate in US



Source: Thomson Reuters; compiled by Daiwa Securities.

Chart: Crude Oil Price and 10Y US BEI



Source: Thomson Reuters; compiled by Daiwa Securities.

USD/JPY level corresponds with US long-term rates and the rate of change in share prices

Estimating the USD/JPY based on US long-term rates and the rate of change in share prices

Most of the moves in the USD/JPY in recent years can be explained by US long-term rates and the rate of change in share prices. There is often a linkage between the USD/JPY's estimated value and the direction of its actual value. When taking estimates of the USD/JPY until 2017 and extrapolating them forward, however, its real value has been cheaper than its estimated value since 2018. We attribute this to the weakening impact on the dollar from the Trump administration's protectionist trade policies and support of a weaker dollar. These dollar weakening effects have faded recently, shrinking the USD/JPY's estimation error. Calculating a target USD/JPY level using the US long-term rate (10-year Treasury yield) and rate of change in share prices (25-day change in the S&P 500) as explanatory variables produces results as follows. Using a US long-term rate of 2.1% and rate of change in share prices of +4%, both close to current levels, leads to an estimated value for the USD/JPY of 110.1. Holding the rate of change in share prices the same as now at +4%, if the long-term rate declines to 1.9%, the USD/JPY's estimated value drops to 107.6, and if it rises to 2.3%, that estimated value rises 112.6.

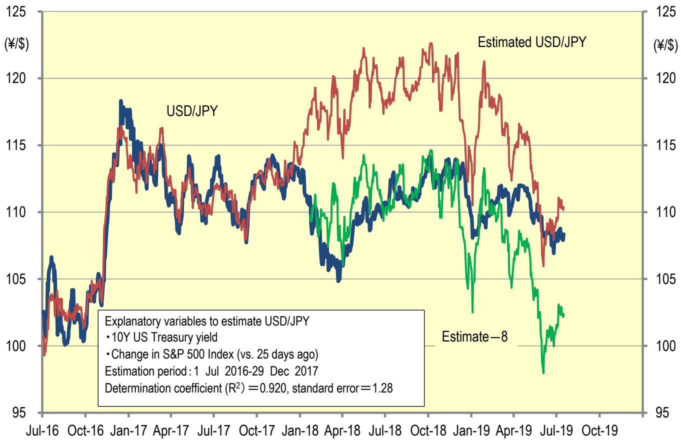
Will US long-term rates and share prices move in the same direction?

The USD/JPY changes greatly depending on what the rate of change in share prices does, however. Up until now, share prices have been rising amid a decline in US long-term rates, but this combination of factors is unlikely to last much longer. Eventually, we think long-term rates and share prices will start moving in the same direction rather than in opposite directions. If the expectation that the US economic slowdown cannot be easily contained even with a Fed rate cut starts to gain traction, share prices are likely to decline in step with declines in the US long-term rates, while if the expectation that the economy will start recovering in response to a Fed rate cut starts to gain traction, long-term rates are likely to rise in step with rising share prices.

USD/JPY level corresponds with US long-term rates and the rate of change in share prices

How the economic outlook changes in response to US economic data and corporate earnings is key to the forex market. A US long-term rate of 1.9% and rate of change in share prices of -4% suggests a target USD/JPY of 104.7, while a US long-term rate of 2.3% and rate of change in share prices of +4% suggests a target of 112.6. Keep in mind that the USD/JPY's real value is likely to be weaker than its estimated value if the pressures from the US administration's protectionism and weak dollar policy increase.

Chart: USD/JPY and Estimated USD/JPY



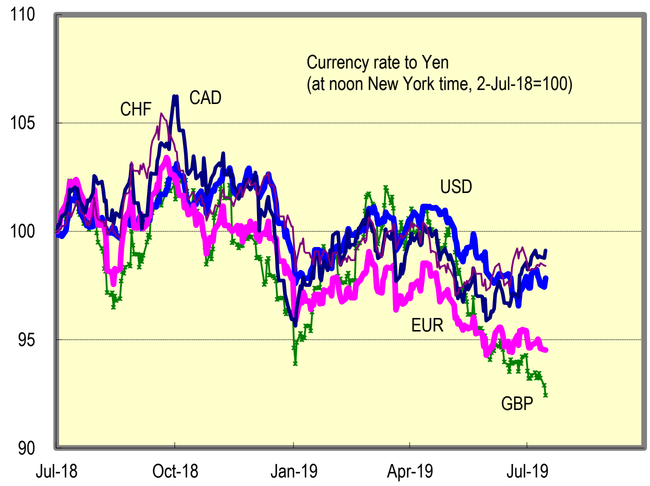
Source: Thomson Reuters; compiled by Daiwa Securities.

Chart: USD/JPY Matrix with Variables of US Long-term Rate and Change in Stock Price

	10-year US Treasury yield (%)								
	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4	2.5
12	108.0	109.2	110.5	111.8	113.0	114.3	115.5	116.8	118.0
10	107.3	108.5	109.8	111.0	112.3	113.5	114.8	116.1	117.3
8	106.5	107.8	109.0	110.3	111.6	112.8	114.1	115.3	116.6
6	105.8	107.1	108.3	109.6	110.8	112.1	113.3	114.6	115.9
4	105.1	106.3	107.6	108.8	110.1	111.4	112.6	113.9	115.1
2	104.3	105.6	106.9	108.1	109.4	110.6	111.9	113.2	114.4
0	103.6	104.9	106.1	107.4	108.6	109.9	111.2	112.4	113.7
-2	102.9	104.1	105.4	106.7	107.9	109.2	110.4	111.7	113.0
-4	102.2	103.4	104.7	105.9	107.2	108.5	109.7	111.0	112.2
-6	101.4	102.7	103.9	105.2	106.5	107.7	109.0	110.2	111.5
-8	100.7	102.0	103.2	104.5	105.7	107.0	108.3	109.5	110.8
-10	100.0	101.2	102.5	103.8	105.0	106.3	107.5	108.8	110.0
-12	99.2	100.5	101.8	103.0	104.3	105.5	106.8	108.1	109.3

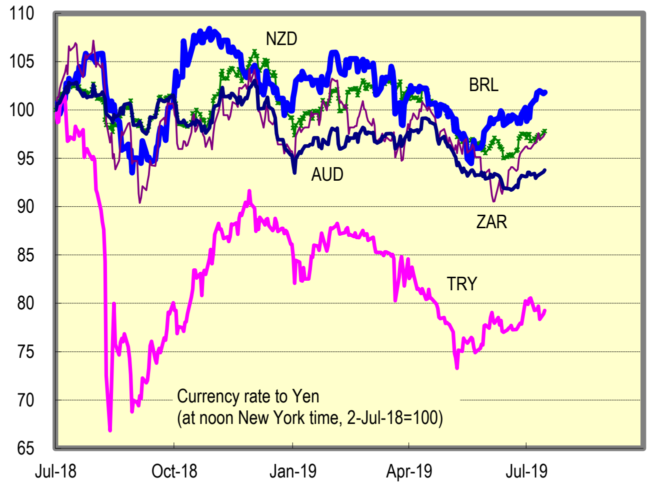
Source: Compiled by Daiwa Securities.
Notes: (1) USD/JPY estimated by assigning 10Y US Treasury yield and change in US stock price to regression formula.
(2) Vertical axis shows change in S&P 500 Stock Index (vs. 25 days ago, %).

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 29 Mar 2019	28 Jun 2019	Forecast Jul-Sep 2019	Oct-Dec 2019	Jan-Mar 2020	Apr-Jun 2020	Jul-Sep 2020
USD-JPY	110.7	107.8	107.0	105.0	105.0	106.0	108.0
			104-112	101-110	101-110	101-110	103-112
EUR-JPY	124.3	122.7	119.0	116.0	116.0	119.0	123.0
			115-127	113-125	113-125	113-125	115-127
GBP-JPY	144.2	137.0	131.5	128.0	128.0	131.5	136.0
			126-139	124-137	124-137	124-137	127-140
AUD-JPY	78.6	75.6	73.0	70.5	70.5	73.5	76.5
			81-91	68-77	68-77	68-77	70-79
CAD-JPY	82.8	82.4	80.0	78.0	78.0	80.0	82.5
			83-93	75-84	75-84	75-84	77-86
NZD-JPY	75.5	72.4	69.5	67.5	67.5	70.0	73.5
			67-76	65-74	65-74	65-74	67-76
TRY-JPY	20.0	18.7	17.8	16.8	16.8	17.7	18.7
			16-20	15-19	15-19	15-19	16-20
ZAR-JPY	7.7	7.6	7.4	7.0	7.0	7.3	7.7
			7.0-8.0	6.6-7.8	6.6-7.8	6.6-7.8	6.9-8.1
BRL-JPY	28.5	28.2	26.8	25.0	25.0	26.5	28.5
			25-30	24-29	24-29	24-29	25-30
KRW-JPY	9.7	9.3	8.9	8.5	8.5	8.8	9.1
(100 KRW)			8.6-9.6	8.2-9.2	8.2-9.2	8.2-9.2	8.5-9.5
CNY-JPY	16.5	15.7	15.3	14.8	14.8	15.2	15.7
			14.9-16.4	14.4-15.9	14.4-15.9	14.4-15.9	14.7-16.2

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.

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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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[Moody's]

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[Fitch]

The Name of the Credit Rating Agencies group, etc

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May 2018

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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