





# **Market Research**









Wednesday, December 17, 2014

### **Dominant Events for the Japanese Yen**

### Yellow Area

December 10

13:30 - 22:00

- Japanese Machinery **Orders and Tertiary Industry Activity**
- **RBNZ Interest Rate** Decision
- **UK Trade Balance**

### Turquoise Area

December 12

02:30 - 18:00

- Japanese Industrial **Production**
- Chinese Industrial **Production**
- Eurozone Industrial **Production**
- **US PPI and Consumer Sentiment**

### Blue Area

December 14-15

20:00 - 02:00

- Japanese Lower House Elections and Tankan **Manufacturing Index**
- **US Industrial Production**

### Purple Area

December 16

03:30 - 18:30

- Japanese Trade <u>Balance</u>
- **RBA** Meeting *Minutes*
- Eurozone PMI
- **UK CPI and Bank** Stress Test Results
- German ZEW **Economic Sentiment**

JPY Currency Index Range	0.85%	0.54%	0.69%	1.36%
Max JPY Volatility Index	2.79	1.85	2.06	3.91



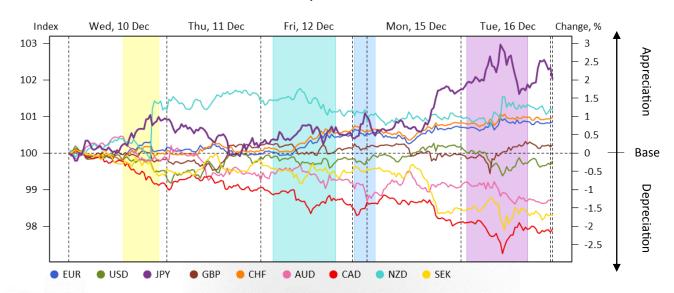




## **Relative Currency Strength**

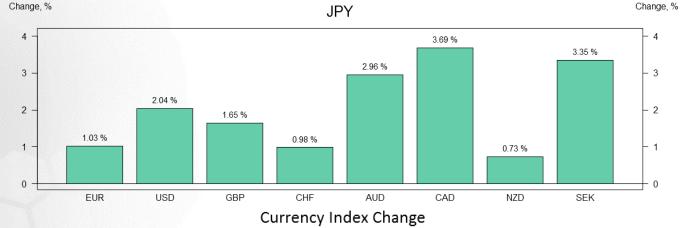
Wednesday, December 17, 2014 15:30 GMT

### **Currency Indixes**



The JPY Index was located well above the main baseline for the whole time period between December 10 and December 16, as the currency registered the fastest weekly advance among all majors. However, it is worth pointing out that JPY dominated its counterparts only in the end of the period, while on December 11-12 the leadership was taken by the New Zealand's dollar. Nevertheless, the Yen added 2.03% over five trading days, with posting the fastest rise against the Loonie and Swedish Krona by 3.69% and 3.35%, respectively. Meanwhile, Canadian dollar dropped the most, losing 2.07%.

While the majority of currencies, including US, Australian and Canadian dollars started the period with an immediate decline, the Japanese yen increased up to 101 points already in the first day on December 10. The strong advance was, however, rather surprising, as country's statistical data on core machinery orders and activity in the services industry used to be much worse than estimated. The middle of the period was marked with a rather calm development of the currency, except Monday's morning, when optimistic results of lower house elections in Japan were announced. Meanwhile, on Tuesday the Yen surged the most and reached 103 points on positive data both locally and from abroad.



Days	EUR	USD	JPY	GBP	CHF	AUD	CAD	NZD	SEK
5	0.85%	-0.22%	2.03%	0.22%	0.97%	-1.27%	-2.07%	1.19%	-1.69%
20	1.41%	1.45%	1.62%	2.38%	1.43%	-4.6%	-1.5%	-0.1%	-1.95%
130	1%	10.09%	-5.31%	1.48%	2.64%	-4.25%	2.38%	-1.99%	-5.66%
250	-1.73%	9.05%	-5.28%	5.1%	0.12%	-0.36%	-1.5%	2.13%	-7.55%



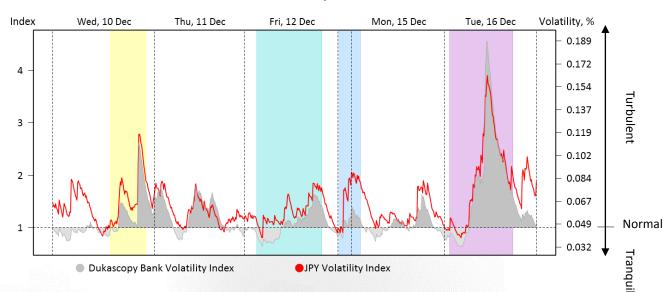


Wednesday, December 17, 2014 15:30 GMT



### **Volatility**

### Volatility



Fundamental data on machinery orders and tertiary industry activity in Japan were strongly fuelled by interest rate decision of the Reserve Bank of New Zealand and its monetary policy statement, which drove the overall volatility index of the Japanese yen above 2.5 points already on Wednesday. Except Thursday, the period was rich on other statistical data in Japan and from all around the world, which held the Yen's volatility above the baseline around 1.5-2 points. On Tuesday, however, the indicator reached its weekly maximum at 3.91 points, the highest level in many weeks, mostly due to data on Japanese trade balance, PMI indicators in some Eurozone's countries, RBA's interest rate decision, falling UK inflation and other factors.

Even though it may seem that for the most part of period volatility of the Yen was rather quiet, its index was above 1.5 points almost all the time. Especially strong impetus to the turbulence index was provided on Wednesday of the previous week and Tuesday of the current week. Concerning elevated volatility indicators, the Yen posted unusually high results, because it exceed the "normal" zone during 91% in course of the December 10-16 period. Moreover, GBP/JPY currency pair was volatile in 96% of the observed time period. Elevated turbulence for all JPY currency pairs exceeded the market average of 58%, which can also be considered as rather high, compared to a number of weeks before.

### Elevated Volatility (% of the observed period)

Market	JPY	EURJPY	USDJPY	GBPJPY	СНГЈРҮ	AUDJPY	CADJPY	NZDJPY	SEKJPY
58	91	89	91	96	88	70	88	74	90

### Volatility Index (for the observed period)

	Market	JPY	EURJPY	USDJPY	GBPJPY	CHFJPY	AUDJPY	CADJPY	NZDJPY	SEKJPY
Max	4.56	3.91	3.13	3.69	3.31	3.02	3.12	2.9	6.58	11.08
Min	0.63	0.81	0.79	0.8	0.75	0.75	0.61	0.7	0.44	0.62
Average	1.22	1.47	1.51	1.58	1.64	1.47	1.27	1.36	1.37	1.7

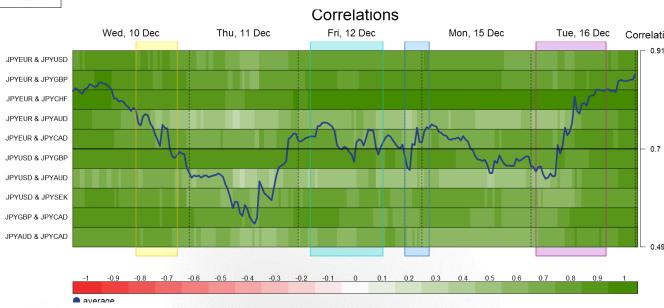




Wednesday, December 17, 2014 15:30 GMT



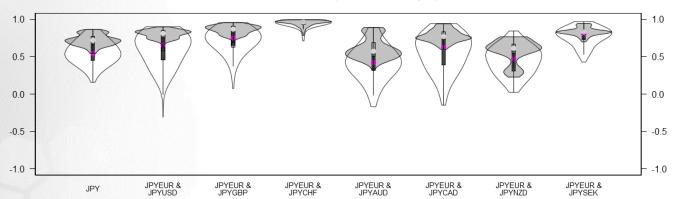
### **Currency Significance**



1.91 It seems that the previous week was rather unusual not only in terms of high volatility and strong gains of the Yen itself, but also because of very strong correlation between different JPY crosses. At the same time, we should notice that the Yen's composite was swinging both above and below the average level for almost equal periods of time. The short-term correlations during the period between JPY/EUR and other crosses of the Japanese currency ranged from 0.58% to 0.95%, marking very high correlation coefficients. Moreover, the 5-day values exceed 20-day ones by, on average, 0.10-0.15 points.

Almost all parts of the period were remarkable with synchronized developments in absolutely all yen's correlation components. It seems that fundamental data had guite the same influence on the majority of currency pairs with the Japanese yen. The composite itself reached the maximum levels just below 0.90 for two times—in the beginning and end of the period. From Friday till Tuesday's morning correlations stood around the average level of 0.72. Taking into account the minimum significance level of the composite, it was reached on Thursday around 0.55 points, when a lot of important fundamental statistics from outside Japan had some particular impact on different currency pairs, especially on those with the Australian dollar.

### Correlations (5 vs 20 days)



### Mean Correlation Coefficient (with JPYEUR)

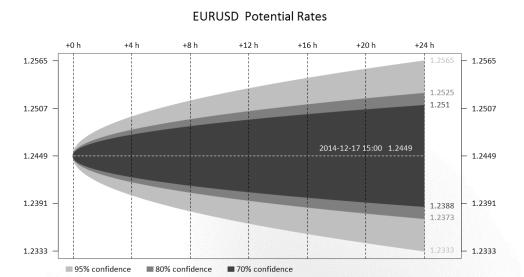
Days	JPY	JPYUSD	JPYGBP	JPYCHF	JPYAUD	JPYCAD	JPYNZD	JPYSEK
5	0.72	0.8	0.86	0.95	0.61	0.78	0.58	0.83
20	0.56	0.6	0.72	0.95	0.42	0.56	0.45	0.77
130	0.47	0.55	0.6	0.92	0.41	0.48	0.34	0.69
250	0.51	0.62	0.65	0.91	0.44	0.5	0.4	0.72



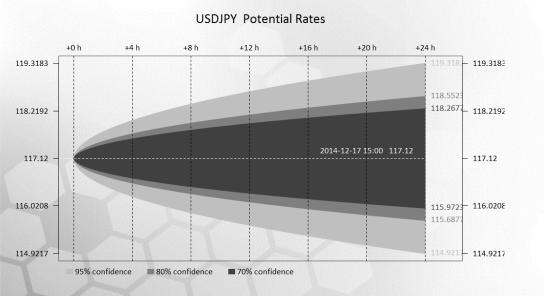


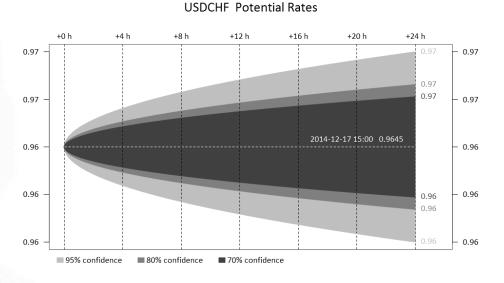
### **Confidence Intervals for Next 24 Hours**

Wednesday, December 17, 2014 15:30 GMT



#### **GBPUSD Potential Rates** +12 h +16 h +20 h +24 h 1.5867 1.5867 1.5812 1.5792 1.5787 1.5787 2014-12-17 15:00 1.5707 1.5707 1.5707 1.5627 1.5627 1.5622 1.5602 1.5547 1.5547 ■ 95% confidence ■ 80% confidence ■ 70% confidence





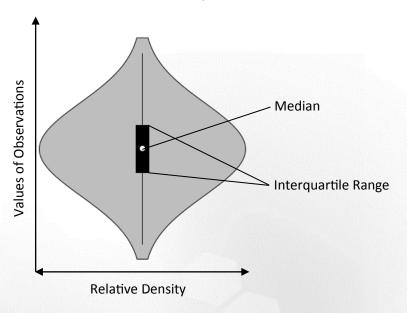




### **EXPLANATIONS**

### **Violin Plot**

Violin Plot is a combination of a Box Plot and rotated Kernel Density Plot



### Methodologies

Volatility Index
Confidence Interval























**Expert Commentary** 

DUKASCOPY

**Commodity Overview** 





### Newest releases and archive:

**Fundamental Analysis Technical Analysis Press Review** Market Research **Expert Commentary Dukascopy Sentiment Index** Trade Pattern Ideas Global Stock Market Review **Commodity Overview Economic Research Quarterly Report** Aggregate Technical Indicator

#### Additional information:

**Dukascopy Group Home Page** Market News & Research **FXSpider Live Webinars Dukascopy TV** Daily Pivot Point Levels **Economic Calendar** Daily Highs/Lows **SWFX Sentiment Index** Movers & Shakers FX **Forex Calculators Currency Converter Currency Index CoT Charts** 

#### Social networks:





#### Disclaimer

Everything in this article, including opinions and figures, is provided for informational purposes only and may not be interpreted as financial advice or solicitation of products. Dukascopy group assume no responsibility for the completeness or the accuracy of any data contained in this article. Financial figures indicated in this article have not been verified by the Dukascopy group. Views, opinions and analyses are those of the author of the article, and are not endorsed by the Dukascopy group.

Dukascopy group waive any and all warranties, express or implied, regarding, but without limitation to, warranties of the merchantability or the fitness for a particular purpose, with respect to all information in this article. Dukascopy group shall under no circumstances be responsible for any direct, indirect, consequential, contingent or any other damages sustained in connection with the use of this article.