

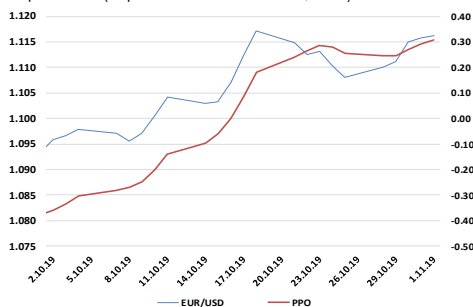
VRS (Valuation & Research Specialists)

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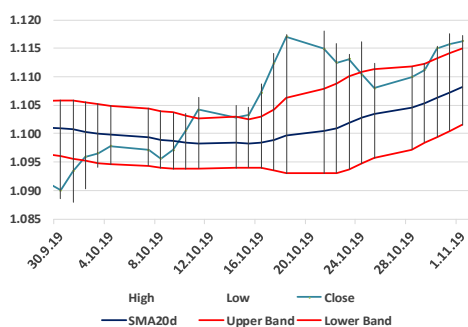
Graph 2: **Candle Chart** (September 30 - November 1, 2019)



Graph 3: **PPO** (September 30 – November 1, 2019)



Graph 4: **Bollinger Bands** (September 30 – November 1, 2019)



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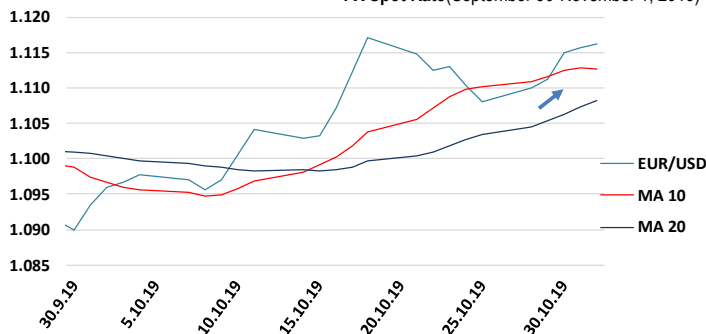
EUR/USD: 1.1157

[Bloomberg Ticker: EURUSD:CUR] **US Dollars per 1 Euro**

Graph Analysis

According to Graph 1, there has been an overall bullish trend for the EUR/USD exchange rate. During the examined period, there were three secondary movements. More specifically, the exchange rate followed an upward trend until October 18th hitting the highest level of the period. The second movement was a downward trend which lasted until October 25th, followed by an upward pattern that emerged until the last day of the period. Regarding the support levels, they seemed to be formed broadly at 1.090 while resistance levels were formed at around 1.12. Looking at the candlesticks in Graph 2, there were many day-to-day fluctuations with mainly positive candle bars being formed during most of October 2019. On the last trading sessions, the EUR/USD exchange rate crossed above the 10-day moving average providing a potential buy signal, further supported by PPO (Graph 3), which continued moving into positive territory. In contrast, the price crossed above the upper band of Bollinger Bands indicating a potential sell signal (Graph 4).

Graph 1: **Euro / US Dollar(EUR/USD)
FX Spot Rate**(September 30-November 1, 2019)



Fundamental Analysis

On September 30th, the single currency completed the biggest quarterly drop in over a year in third quarter of 2019 combined with a subdued inflation in Germany. | At the beginning of October, the dollar lost ground against the euro on data showing that unemployment fell in the Euro area and the manufacturing weakness started to reverse. | From October 2nd to 3rd, the USD was left under pressure because of the private payrolls growth that slowed in September and the fears that the US Federal Reserve may cut further interest rates this year. Moreover, the euro was under pressure as German Services PMI touched a three-year low. | On October 4th, the dollar inched lower as investors worried about political risk in the United States and ongoing trade war with China. | From October 7th to 8th, the dollar rose slightly as a result of the possible negotiation between China and the U.S. and the concerns about Germany's economy that has fallen into recession in Q3. | On the following two trading sessions, the currency pair followed an upward trend due to U.S.-China deal's uncertainty and the increased chances of Fed cut following weak US CPI Data. | On October 11th, the greenback dropped to a three-month low, as safe-haven buying eased and risk sentiment improved due to the U.S.-China trade negotiations and Brexit developments. Furthermore, speculations of a more dovish Fed, combined with weaker US data led to the support of the euro. | On October 14th, the USD gained ground because of the twists about the agreement between America and China as an additional round of tariffs on Chinese imports would likely be imposed if a trade deal had not been reached on time according to U.S. Treasury Secretary Steven Mnuchin. | From October 15th to October 17th, the euro appreciated due to a weakness seen in the US economy and the announcement from British Prime Minister Boris Johnson that the Brexit deal had been sealed and it would be voted by the UK parliament. | On October 18th, the U.S. dollar plummeted to its lowest price since late August as world stocks slipped because of China's lowest growth rate in the last three decades. | On October 21st, after a 3-week upside momentum in the pair, the EUR/USD closed on the red area because of the uncertainty in the Brexit deal. | On October 22nd, European shares edged lower as progress in China-U.S trade talks was offset by mixed corporate earnings which led the currency pair to a downward trend. | On October 23rd, the pair regained ground after European Union leaders considered Britain's request for a Brexit delay, and were expected to provide an extension until January; the pair also benefited by the release of advanced PMIs in France. | On October 24th to 25th, the greenback rose after the release of better-than-expected U.S. manufacturing PMI data in comparison to Germany's PMI data that fell below forecasts. | On October 28th, the euro rebounded as S&P 500 Index surpassed its previous intraday all-time high lending some support to the euro. Also EU agreed to delay Britain's exit for up to three months. | On the last three days of October, the dollar experienced losses, after the Federal Reserve cut interest rates for the third time this year signaling at the same time that its rate-cut cycle might be at a pause. | On November 1st, the single currency maintained its gains against the greenback as investors sold dollars due to expectations that the United States would soon join an economic slowdown.

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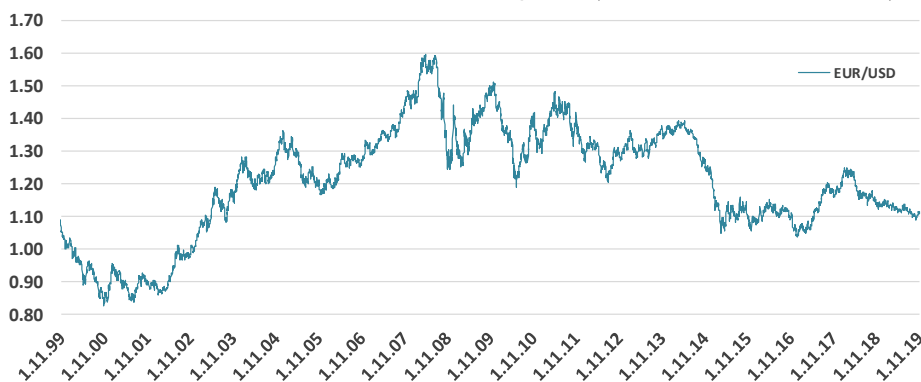
EUR/USD: 1.1157 [Bloomberg Ticker: EURUSD:CUR] **US Dollars per 1 Euro**

Graph Analysis

Graph 5: Euro / US Dollar (EUR/USD)
FX Spot Rate (November 1, 2004 – November 1, 2019)



Graph 6: Euro / US Dollar (EUR/USD)
FX Spot Rate (November 1, 1999 – November 1, 2019)



Examined Period	November 1, 2004 – November 1, 2019
Standard Deviation	0.1234
Average	1.2720
Range	-0.1325
Range (%)	-10.770%
Max	1.5988
Min	1.0387
Max Daily Range	0.0534
Min Daily Range	-0.0023

Examined Period	November 1, 1999 – November 1, 2019
Standard Deviation	0.1671
Average	1.2081
Range	0.0454
Range (%)	4.314%
Max	1.5988
Min	0.8273
Max Daily Range	0.0534
Min Daily Range	-0.0023

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EUR/USD Exchange Rate	EUR/USD	USD 1.1157 per EUR 1	November 1, 2019	----

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