

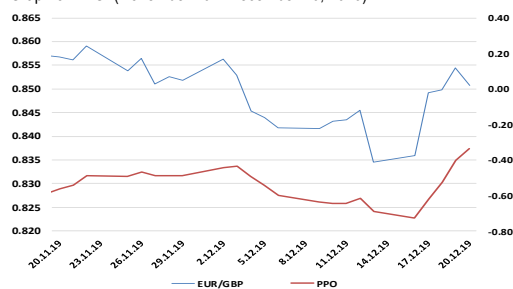
VRS (Valuation & Research Specialists)

VRS Research Team | Analysts:
Ieropoulos Efsthios, Vouzoulidou Konstantina,
Vouzounerakis Michalis
info@vrs.gr ; info@valueinvest.gr

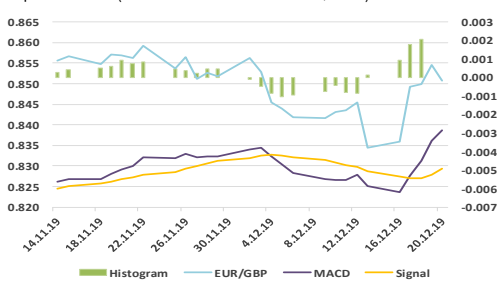
Graph 2: **Candle Chart** (November 18 - December 20, 2019)



Graph 3: **PPO** (November 20 – December 20, 2019)



Graph 4: **MACD** (November 14 – December 20, 2019)



Important Note:

Information contained herein is based on data obtained from recognized statistical services, issue reports or communications, or other sources, believed to be reliable. However, such information has not been verified by VRS, and VRS does not make any representation as to its accuracy and completeness. Opinions, estimates, and statements nonfactual in nature expressed in its research represent VRS's judgment as of the date of its reports, are subject to change without notice and are provided in good faith and without legal responsibility. In addition, there may be instances when fundamental, technical and quantitative opinions, estimates, and statements may not be in concert. Neither the information nor any opinion expressed shall constitute an offer to sell or a solicitation of an offer to buy any shares, warrants, convertible securities or options of "covered companies" by no means. Valuation & Research Specialists (VRS) are the sole creators and distributors of this report.

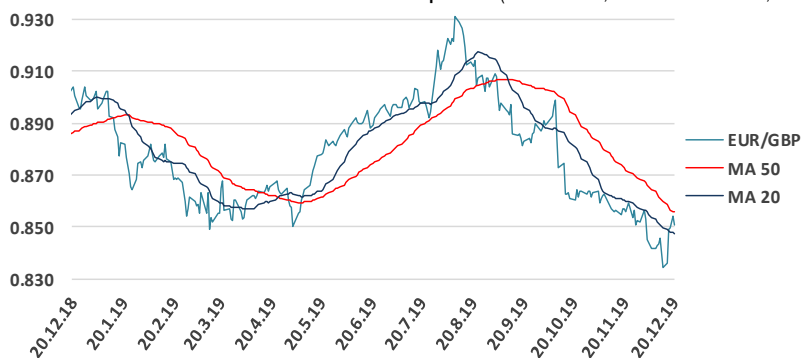
EUR/GBP: 0.8507

[Bloomberg Ticker: EURGBP:CUR] **British Pounds per 1 Euro**

Graph Analysis

According to Graph 1 (covering the period December 2018 – December 2019), there has been a quite volatile pattern for EUR/GBP exchange rate. During the period, there were three secondary movements. The first was a downward trend formed from December 2018 until May 2019. Thereafter, a bullish trend was observed until the middle of August 2019 when the rate hit the peak of the period, whereas right afterwards a reversal trend followed until the mid-December 2019. During the period, the support levels were formed at 0.83 whilst resistance levels settled at 0.93. Graph 2 depicts information about daily fluctuations since early November 2019, with quite a lot volatile trading sessions. Over the past period, PPO (Graph 3) indicated a sell signal, which was also supported by the fact that the exchange rate crossed below both the short-term and the mid-term moving averages (Graph 1) and by MACD which was below the zero line (Graph 4).

Graph 1: **Euro / British Pound (EUR/GBP)
FX Spot Rate** (December 20, 2018 – December 20, 2019)



Fundamental Analysis

The upward movement of EUR/GBP in early December 2018 could be attributed to Prime Minister Theresa May's Brexit proposal which was rejected by the British parliament. However in the following days, May won a confidence vote supported by most of the parliament, causing a sideways trend. | In January 2019, a few hours before the vote on the withdrawal agreement there was a belief that no-deal Brexit was going to be avoided, leading traders to trust sterling and lead the currency higher. | At the beginning of February 2019, the Bank of England cut the growth forecast for 2019, from 1.7% to 1.2%, which caused the fall of the pound. In the second half of the month, more expectations prevailed in the market over a no-deal Brexit. | During March 2019, there was a sideways trend due to May's "new divorce deal" disposal by British lawmakers and the compromise between UK and E.U. over article 50 of Brexit. | The announcement of Brexit's delay, at the end of March, resulted in the ascending course of EUR/GBP, at the beginning of April. On the last week of April 2019, a statement by ECB's President reinforced expectations that interest rates would remain low, putting the pair into a downward trend. | In May, the results of the UK local elections and the increase of German industrial output increased the EUR/GBP. | During June 2019 the pair continued the bullish movement because of Theresa May's resignation and also because of concerns over a stable growth in the UK economy during Q2 2019. | In July, the exchange rate continued its upward trend following the election of the Conservative party's leader, Boris Johnson, in combination with Mario Draghi's modest reaction over the European slowing economy. On August 9th, 2019, the exchange rate reached its peak of the examined period with the rest of the month seeing a reversal trend following various political developments such as the statements made by Jeremy Corbyn (Labor Party's leader) and Britain's finance minister opinion over Brexit procedures. | At the first part of September 2019, the euro fell as the ECB policymakers announced a new bond-buying program and also because of the cut of the main deposit rate to -0.5% to stimulate the economy. In the second part of the same month, the EUR/GBP pair traded between 0.88-0.89, following Bank of England's decision to maintain the key interest rate unchanged at 0.75%. The development also led to some further erosion of the pound through the first 10 days of October. | Later on, after the second week of October, the meeting of Boris Johnson with the Irish counterpart over Brexit negotiations started to cause an increase in British pound. | In November 2019, the stable decline of the exchange rate could be attributed to the rise of the bribery scandal of Latvia's Central Bank Governor and also to reports that Nigel Farage's Brexit Party would not contest additional seats in December's U.K. general election. | In the first 13 days of December, the pound continued to rise ahead of the UK elections and in view of the lead of Conservative party and its ultimate victory on December 13th. Thus the EUR/GBP pair reached the lowest point of the period under consideration. | Finally, in the following days and up to December 20th, the pair recovered after British Prime Minister Boris Johnson put a no-deal exit from the European Union back on the table.

VRS (Valuation & Research Specialists)

VRS Research Team | Analysts:
Ieropoulos Efstathios, Vouzoulidou Konstantina,
Vouzounerakis Michalis
info@vrs.gr ; info@valueinvest.gr

Examined Period	December 20, 2004 – December 20, 2019
Standard Deviation	0.0783
Average	0.8066
Range	0.1495
Range (%)	21.321%
Max	0.9747
Min	0.6552
Max Daily Range	0.0722
Min Daily Range	0.0014

Examined Period	December 20, 1999 – December 20, 2019
Standard Deviation	0.0991
Average	0.7663
Range	0.2090
Range (%)	32.570%
Max	0.9747
Min	0.5736
Max Daily Range	0.0722
Min Daily Range	0.0005

Important Note:

Information contained herein is based on data obtained from recognized statistical services, issue reports or communications, or other sources, believed to be reliable. However, such information has not been verified by VRS, and VRS does not make any representation as to its accuracy and completeness. Opinions, estimates, and statements nonfactual in nature expressed in its research represent VRS's judgment as of the date of its reports, are subject to change without notice and are provided in good faith and without legal responsibility. In addition, there may be instances when fundamental, technical and quantitative opinions, estimates, and statements may not be in concert. Neither the information nor any opinion expressed shall constitute an offer to sell or a solicitation of an offer to buy any shares, warrants, convertible securities or options of "covered companies" by no means. Valuation & Research Specialists (VRS) are the sole creators and distributors of this report.

EUR/GBP: 0.8507

[Bloomberg Ticker: EURGBP:CUR] **British Pounds per 1 Euro**

Graph Analysis

Graph 5: Euro / British Pound (EUR/GBP)
FX Spot Rate (December 20, 2004 – December 20, 2019)



Graph 6: Euro / British Pound (EUR/GBP)
FX Spot Rate (December 20, 1999 – December 20, 2019)



VRS (VALUATION & RESEARCH SPECIALISTS)

VRS - vrs.gr Value Invest - www.valueinvest.gr Investment Research & Analysis Journal – www.iraj.gr

DISCLOSURE STATEMENT (1)

VRS (VALUATION & RESEARCH SPECIALISTS) is an independent Financial Research & Consulting Firm, with presence and offices in Athens and Luxembourg, providing advanced equity research and valuation reports as well as value-related advisory services to local and international institutions, business entities and individual clients. VRS services include valuations of intangible assets, business enterprises, and fixed assets. VRS's focus business is in providing independent equity research to its institutional and retail clients / subscribers.

VRS is not a brokerage firm and does not trade in securities of any kind. VRS is not an investment bank and does not act as an underwriter for any type of securities.

VRS accepts fees from the companies it covers and researches (the "covered companies"), and from major financial institutions. The sole purpose of this policy is to defray the cost of researching small and medium capitalization stocks which otherwise receive little research coverage. In this manner VRS can minimize fees to its clients / subscribers and thus broaden investor's attention to the "covered companies." VRS analysts are compensated on a per-company basis and not on the basis of their recommendations. Analysts are not allowed to solicit prospective "covered companies" for research coverage by VRS and are not allowed to accept any fees or other consideration from the companies they cover for VRS. Analysts are also not allowed to trade in the shares, warrants, convertible securities, or options of companies they cover for VRS.

Furthermore, VRS, its officers, and directors cannot trade in shares, warrants, convertible securities or options of any of the "covered companies." VRS accepts payment for research only in cash and will not accept payment in shares, warrants, convertible securities or options of "covered companies" by no means.

To ensure complete independence and editorial control over its research, VRS follows certain business practices and compliance procedures, which are also applied internationally. Among other things, fees from "covered companies" are due and payable prior to the commencement of research and, as a contractual right, VRS retains complete editorial control over the research process and the final equity analysis report.

Information contained herein is based on data obtained from recognized statistical services, issue reports or communications, or other sources, believed to be reliable. However, such information has not been verified by VRS, and VRS does not make any representation as to its accuracy and completeness. Opinions, estimates, and statements nonfactual in nature expressed in its research represent VRS's judgment as of the date of its reports, are subject to change without notice and are provided in good faith and without legal responsibility. In addition, there may be instances when fundamental, technical and quantitative opinions, estimates, and statements may not be in concert. Neither the information nor any opinion expressed shall constitute an offer to sell or a solicitation of an offer to buy any shares, warrants, convertible securities or options of "covered companies" by no means.

DISCLOSURE CHECKLIST

Covered Security	Bloomberg	Rate	Date	Disclosure
EUR/GBP Exchange Rate	EUR/GBP	GBP 0.8507 per EUR 1	December 20, 2019	----

1. VRS has acted as financial consultant for the covered company within the past 24 months.
2. VRS has sent the research report to the covered company, prior to publication or dissemination, for factual verification.
3. VRS has changed the contents of the initially sent report, with respect to: factual changes have been made.
4. VRS has received compensation from the covered company for the preparation of this research report.
5. VRS produces research reports for this company on systematic basis.
6. VRS produces research reports for this company on demand basis.
7. VRS has produced a research report for this company within the past 12 months.

Please contact **VRS (VALUATION & RESEARCH SPECIALISTS)** for further information on Equity Research Related Fees.

VRS(VALUATION & RESEARCH SPECIALISTS)

VRS - vrs.gr Value Invest - www.valueinvest.gr Investment Research & Analysis Journal – www.iraj.gr

DISCLOSURE STATEMENT (2)

The current research report as well as other statements that VRS may proceed with may include future statements, regarding the future financial performance of a company or another entity or product, as well as strategies and expectations. Statements about the future may typically include expressions such as “trend”, “prospect”, “opportunity”, “course”, “believe”, “possibly”, “expect”, “current”, “intention”, “estimate”, “forecast”, continuation”, “remain”, “maintain”, “target” and other similar expressions or future or hypothetical verbs such as “will”, “must”, “could”, “may be” and other expressions.

VRS (VALUATION & RESEARCH SPECIALISTS) caution that forward-looking statements are subject to numerous assumptions, risks and uncertainties, which change over time. Forward-looking statements speak only as of the date they are made, and VRS assumes no duty to and does not undertake to update forward-looking statements. Actual results could differ materially from those anticipated in forward-looking statements and future results could differ materially from historical performance.

In addition to factors previously disclosed in VRS reports and those identified elsewhere in this communication, the following factors, among others, could cause actual results to differ materially from forward-looking statements or historical performance: (1) the introduction, withdrawal, success and timing of business initiatives and strategies; (2) changes in political, economic or industry conditions, the interest rate environment or financial and capital markets, which could result in changes in demand for products or services or in the value of assets under management; (3) the impact of increased competition; (4) the impact of capital improvement projects; (5) the impact of future acquisitions or divestitures; (6) the unfavorable resolution of legal proceedings; (7) the extent and timing of any share repurchases; (8) the impact, extent and timing of technological changes and the adequacy of intellectual property protection; (9) the impact of legislative and regulatory actions and reforms and regulatory, supervisory or enforcement actions of government agencies; (10) terrorist activities and international hostilities, which may adversely affect the general economy, domestic and local financial and capital markets, as well as specific industries; (11) the ability to attract and retain highly talented professionals; (12) fluctuations in foreign currency exchange rates; (13) the impact of changes to tax legislation and, generally, the tax position of the covered company.

COMPLIANCE WITH EU DIRECTIVES and GREEK LAWS

VRS prepares its equity research reports in a best effort to comply with the provisions of the EU Directive 2003/6/EK of the European Commission (L 339/73/24.12.2003, L 096/16/2003), the Guidelines 2003/125/EK and the Decision 4/347/12.7.2005 of the Hellenic Capital Markets Committee, as well as with the provisions of article 14, Greek Law 3340/2005, and the relevant clarifications with regard to the legal obligations of equity analysts. VRS analysts are certified by international institutions as well as by the Hellenic Capital Markets Committee. The latter may request from VRS analysts to justify their views and conclusions with regard to this research report.

ANALYST CERTIFICATION

The views expressed in this report accurately reflect the personal views of the undersigned analyst(s) about the subject issuer and the securities of the issuer. In addition, the undersigned lead analyst(s) has (have) not and will not receive any compensation for providing a specific recommendation or view in this research report.

VRS Equity Research Contributors

Dr. Nicholas Georgiadis, ngeorgiadis@valueinvest.gr
Dr. Georgios A. Savvakis, gsavvakis@valueinvest.gr
Dr. John Theodorou, jtheodorou@valueinvest.gr
Zoe Vassiliou, zvassiliou@valueinvest.gr
Maria Papadopoulou, mpapadopoulou@valueinvest.gr

Investment Research & Analysis Journal

Dr. Efstratios Livanis
Assistant Editor

Actuarial Studies & Support Services

Dr. Charalampos Fytros
FHAS, CFA
Chfytros@valueinvest.gr

Please contact **VRS (VALUATION & RESEARCH SPECIALISTS)** for further information on Equity Research Related Fees.

VRS (VALUATION & RESEARCH SPECIALISTS)

VRS - vrs.gr Value Invest - www.valueinvest.gr Investment Research & Analysis Journal – www.iraj.gr

DISCLOSURE STATEMENT (3)

REGULATION (EU) No 596/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

VRS (VALUATION & RESEARCH SPECIALISTS) prepares its equity research reports in a best effort to comply with the provisions of Regulation (EU) No 596/2014 (market abuse regulation) of the European Parliament and of the Council. This Regulation establishes a common regulatory framework on insider dealing, the unlawful disclosure of inside information and market manipulation (market abuse) as well as measures to prevent market abuse to ensure the integrity of financial markets in the Union and to enhance investor protection and confidence in those markets. In addition:

- (a) The market abuse regulation (MAR) seeks to ensure that European Union (EU) regulation keeps pace with market developments to combat market abuse on financial markets as well as across commodity and related derivative markets (i.e. markets trading primary products such as gold, wheat, etc., and financial instruments based there upon).
- (2) It explicitly bans the manipulation of benchmarks (such as the London Interbank Offered Rate — known as the LIBOR).
- (3) It reinforces the investigative and sanctioning powers of the regulators appointed by EU countries to ensure the proper functioning of their financial markets.
- (4) It ensures a single EU rulebook while reducing administrative burdens on smaller and medium-sized issuers where possible.

In this regulatory framework, VRS has also been aware of the following: (1) Persons who produce or disseminate investment recommendations or other information recommending or suggesting an investment strategy shall take reasonable care to ensure that such information is objectively presented, and to disclose their interests or indicate conflicts of interest concerning the financial instruments to which that information relates. (2) Public institutions disseminating statistics or forecasts liable to have a significant effect on financial markets shall disseminate them in an objective and transparent way. (3) Regulatory technical standards have been developed in order to determine the technical arrangements for the categories of person in relation to objective presentation of investment recommendations or other information recommending or suggesting an investment strategy and for disclosure of particular interests or indications of conflicts of interest.

Please contact **VRS (VALUATION & RESEARCH SPECIALISTS)** for further information on Equity Research Related Fees.