

GREEK ECONOMY

[Bloomberg Ticker: GKGNGDPY:IND]

March 20, 2019

www.vrs.gr

Quarterly Macro Note

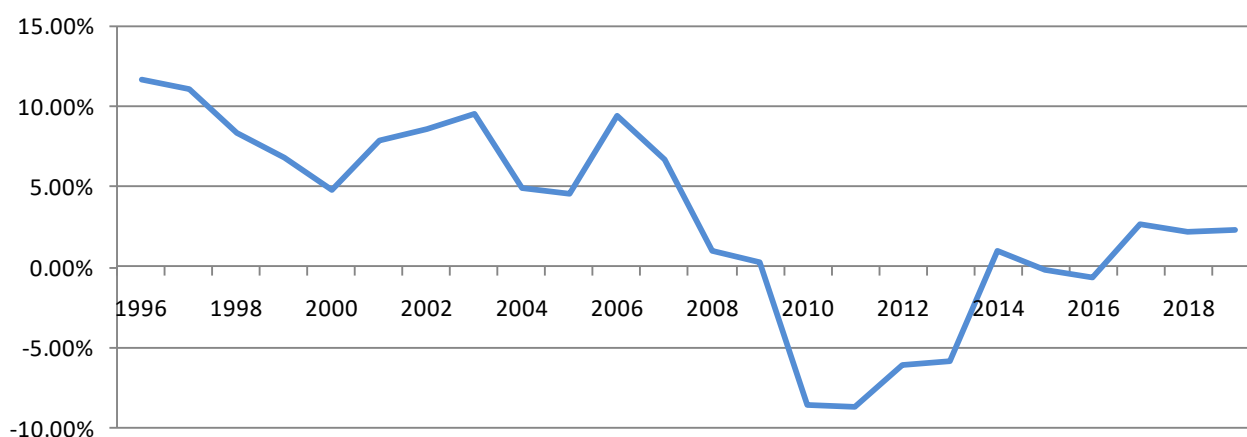
Major Highlights

- **The Greek economy grew at a rate above 2.0% in 2018** and is expected to continue edging up in the coming years, offsetting negative impacts from the deterioration in the global environment and other exogenous or idiosyncratic sources of risk, **although the economy's recovery remains heavily reliant on the continuing implementation of structural reforms**. Provisional data show that GDP grew at 2.20% (y-o-y, seasonally-adjusted) in 2018-Q4, compared to the same period in 2017 and had a greater than 2.1% growth rate for the first three quarters of 2018 (ELSTAT). By taking advantage of strong external demand, Greece managed to increase its market shares in global trade.
- **Greek debt closed at € 358.949 bn** of which € 253.1 bn is from the European Stability Mechanism and € 105.8 bn are bonds and other short-term assets issued by the Greek Government.
- **Net exports have become the main driver of growth** in the first three quarters of the year, and for the whole year as well, led by tourism and non-oil goods. Another major force for the increase of aggregate demand was the growth of private consumption, which was supported by employment growth.
- **Consumer confidence had almost returned to pre-2008 heights by the end of 2018**, thus private consumption is likely to remain a major contributor to growth in 2019. Goods' exports are projected to weaken but should remain on an increasing trend even though the EU area shows signs of slowdown.
- **The labor market has been improving with unemployment falling to 18.0%, down from 20.8% in 2017**. Full-time and dependent employment growth remains the main force of employment gains, while part-time employment and self-employment growth remains subdued. So unemployment, while still high, will continue to fall with the rise of employment by 1.5% (European Commission) indicating an increase in labor productivity based on quarterly national accounts. Wages are rising and private consumption is growing after prolonged stagnation. However, spare capacity remains high.
- **The Greek economy has managed to reach a turning point in its recovery due to the release of a new 10 year government bond with yield at 3.9%** a decrease from the expected 4.13%. Investor orders for the sale exceeded 11.8 billion euros. After the exit from the series of bailout programs, the following successful sale of a 5-year bond that rallied 2.5 billion euros in January along with the fact that Moody's Investors Service has recently raised Greece's sovereign credit rating to B1 from B3, gave a fresh boost to the government's bond-selling plan following European Commission criticism that the government was dragging its feet on key economic reforms. Meanwhile Greek stocks lost ground in 2018, but they started the year with an offensive increase of ASE General Index and hence there is a lot of interest regarding the future of Greek markets.

GDP (Gross Domestic Product) Growth, Greece

(Period 1996 - 2019)

March 20, 2019



Source: Hellenic Statistical Authority (ELSTAT)

Please see important disclosure and disclaimer statements at the end of this report.

Economic Summary (beginning of 2019)	
GDP	↑
Inflation	↓
Debt to GDP	↑
Unemployment	↓
Income from Tourism	↑
Income from Shipping	↑
Stock Market	↓
10-Year Government Bond Yield	↓
Economic Sentiment Index	↑
Business Confidence Index	↓
Real Estate Price	↑

Important Note:

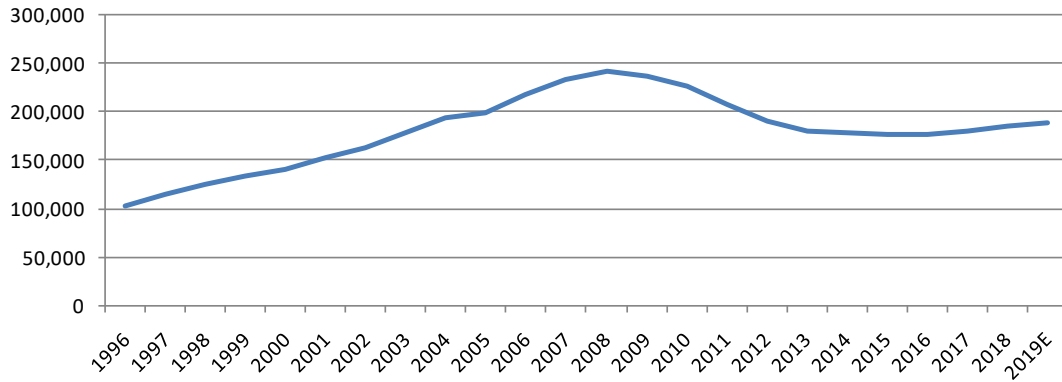
Information contained herein is based on data obtained from recognized statistical services, issue reports or communications, or other sources, believed to be reliable. However, such information has not been verified by VRS, and VRS does not make any representation as to its accuracy and completeness. 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.

This report has been prepared in collaboration with the Athens University of Economics and Business (AUEB) Students' Investment & Finance Club. Contributors: Apostolos Gaitanis, Georgios Asmanis and Ilias Arvanitakis.

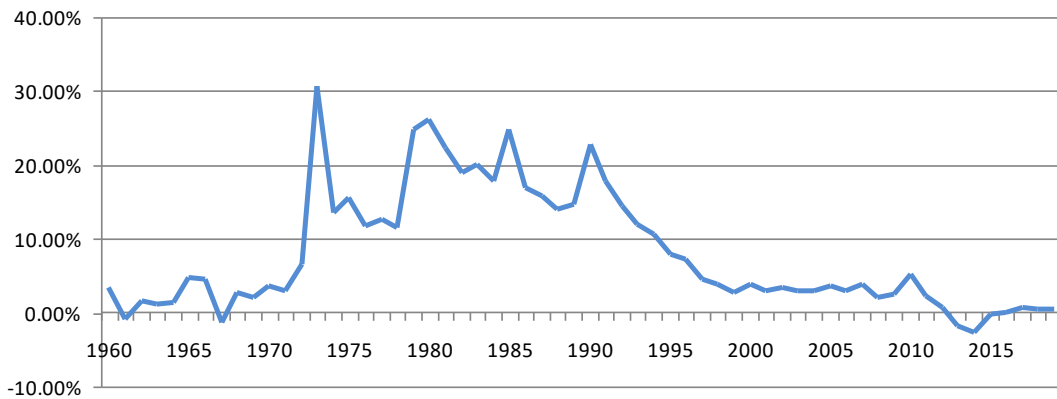
GREEK ECONOMY - TABLES & GRAPHS

GDP, Period 1996 – 2019E (in € million)



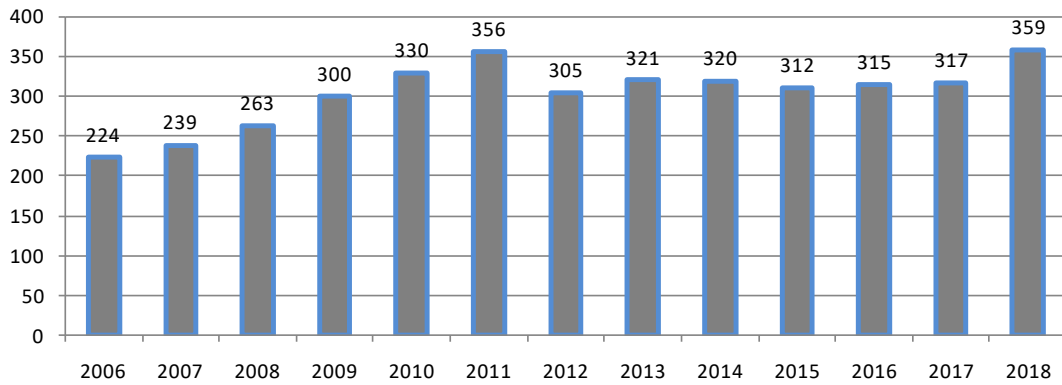
Source: ELSTAT

Inflation, Period 1960 – February 2019



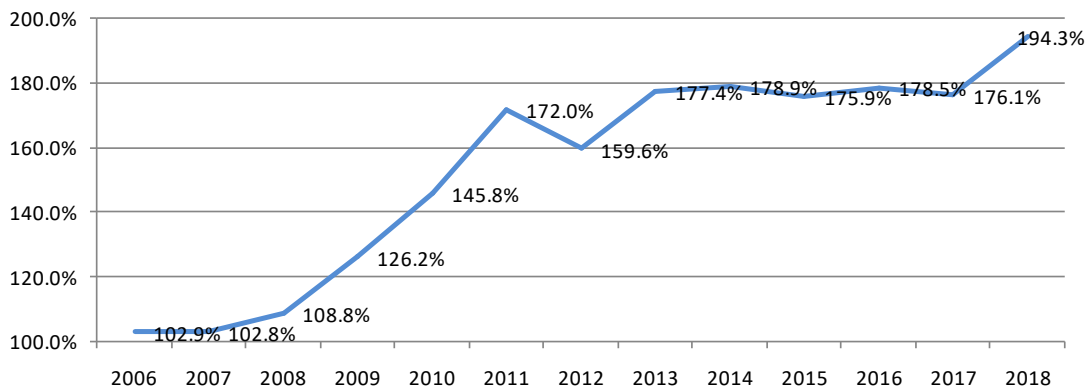
Source: ELSTAT

Public Debt, Period 2006 – 2018 (in € billion)



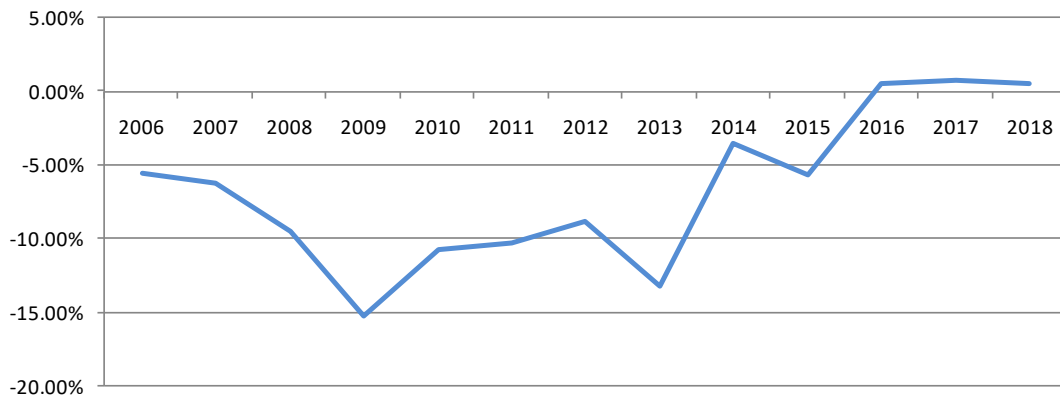
Source: ELSTAT

Debt to GDP, Period 2006 – 2018



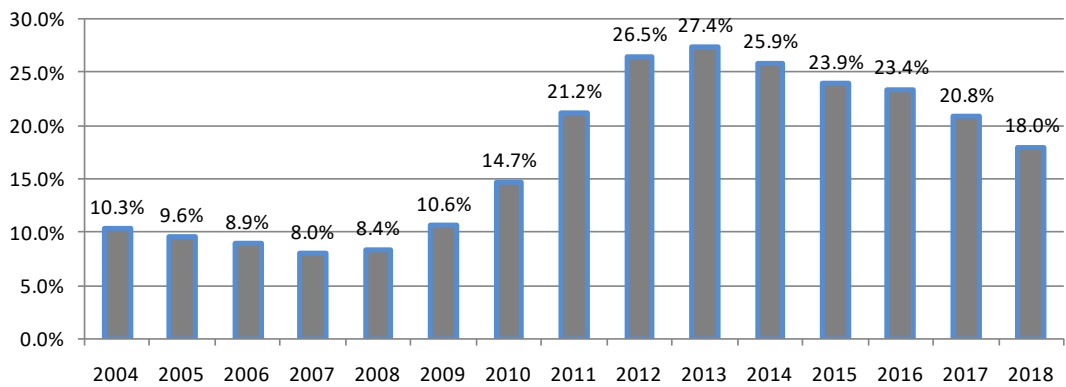
Source: ELSTAT

Budget Balance [Surplus / (Deficit)] to GDP, Period 2006 – 2018



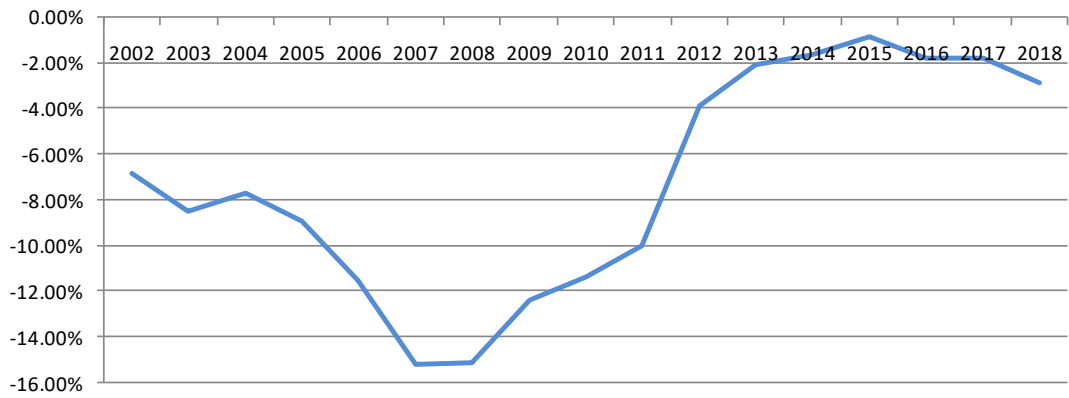
Source: ELSTAT

Unemployment, Period 2004 – 2018



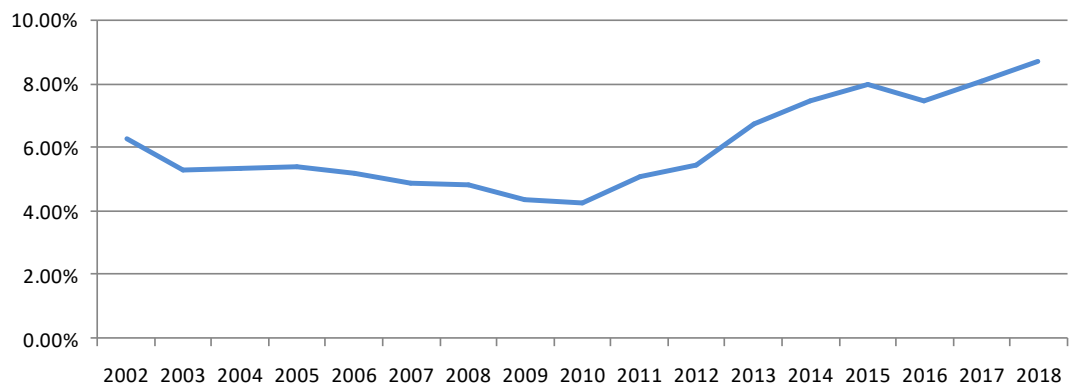
Source: ELSTAT

Balance of Payments to GDP, Period 2002 – 2018



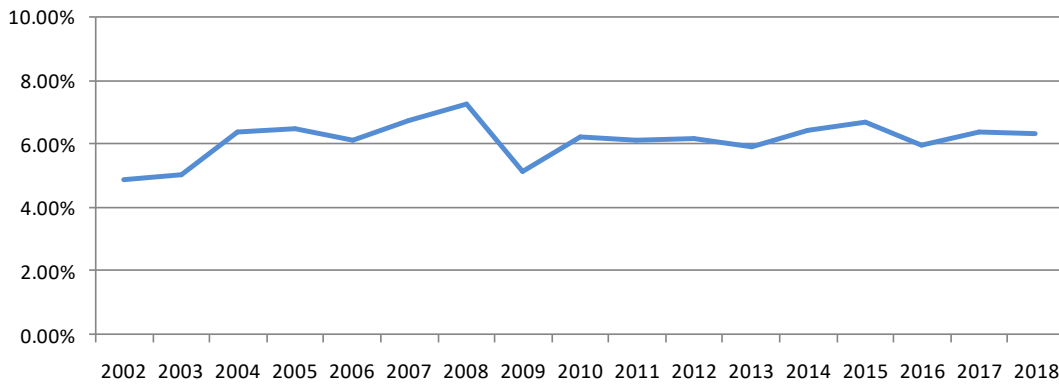
Source: Bank of Greece

Income from Tourism to GDP, Period 2002 – 2018



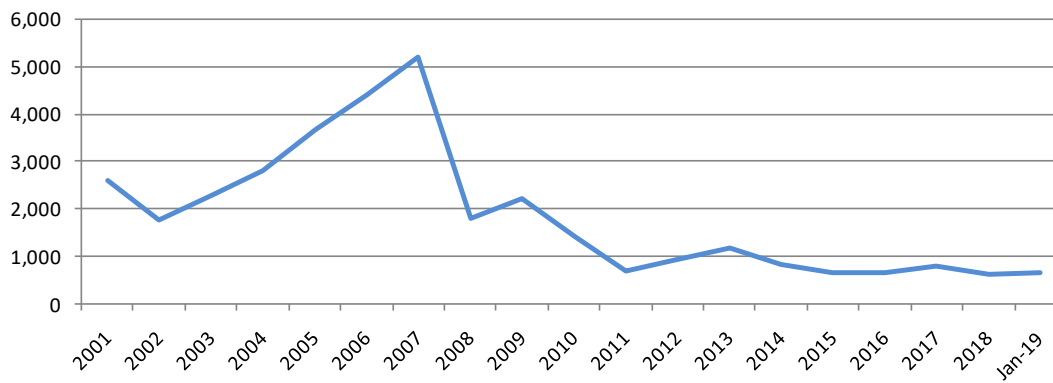
Source: Bank of Greece

Income from Shipping to GDP, Period 2002 – 2018



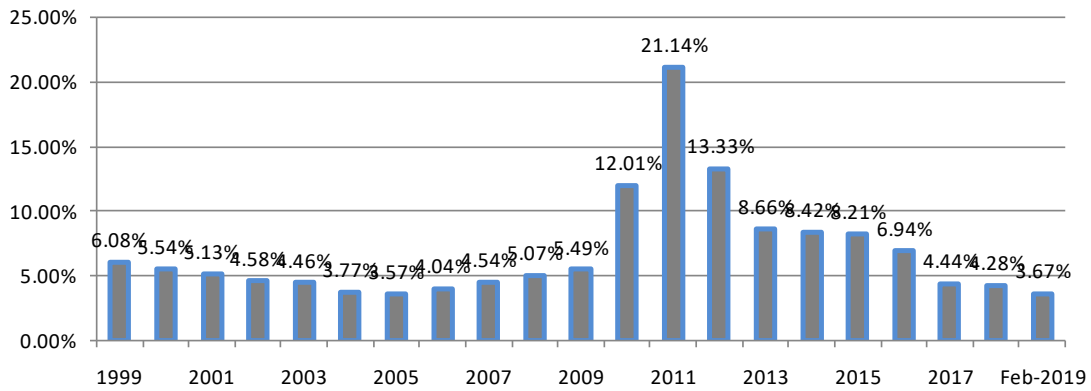
Source: Bank of Greece

Stock Market, Athens Exchange General Index (points), Period 2001 – January 2019



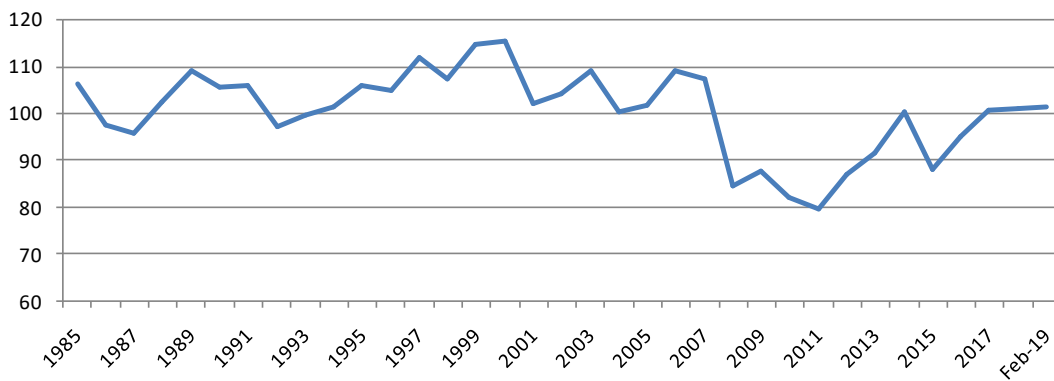
Source: Bank of Greece, Athens Exchange

10-Year Government Bond Yield, Period 1999 – February 2019



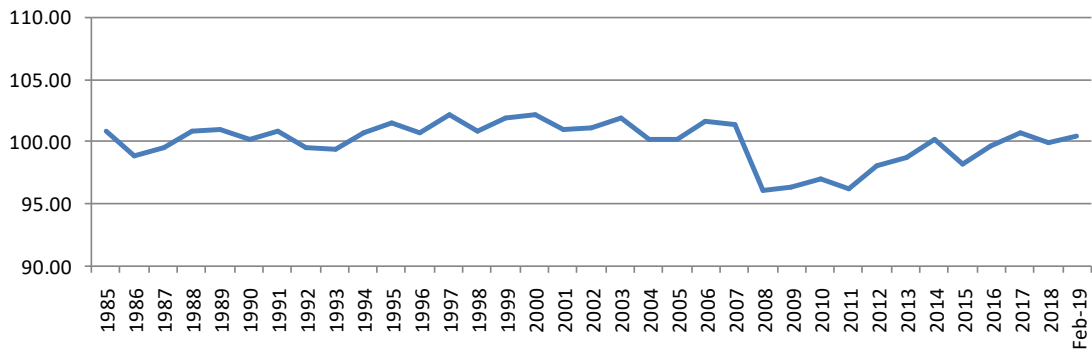
Source: Bank of Greece

Economic Sentiment Index (points), Period 1985 – February 2019



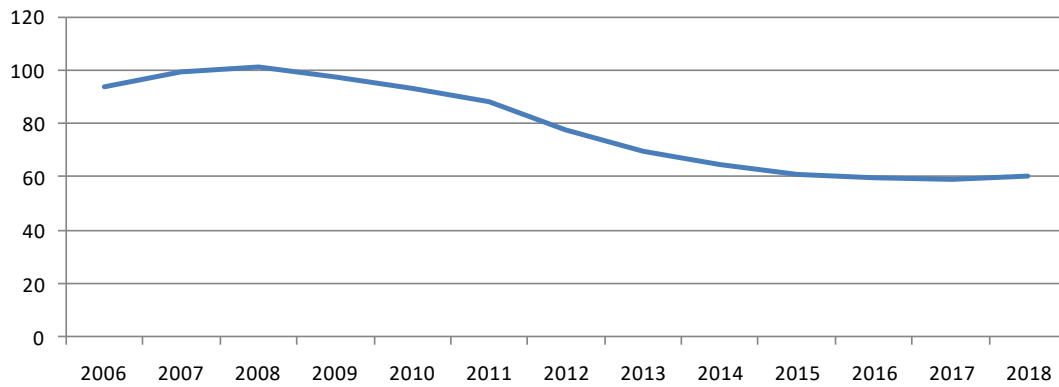
Source: European Commission

Business Confidence Index (points), Period 1985 – 2018



Source: OECD

Real Estate Prices Index (points), Period 2006 – 2018



Source: Bank of Greece

 Greek Sovereign Ratings, Period 1992 – 2018

Credit Rating

Year	Moody's	Standard & Poor's	Fitch
1992	-	BBB-	-
1993	-	BBB-	-
1994	-	BBB-	-
1995	-	BBB-	BBB-
1996	-	BBB-	BBB-
1997	-	BBB-	BBB
1998	-	BBB	BBB
1999	-	A-	BBB+
2000	-	A-	A-
2001	-	A	A
2002	A1	A	A
2003	A1	A+	A+
2004	A1	A	A
2005	A1	A	A
2006	A1	A	A
2007	A1	A	A
2008	A1	A	A
2009	A2	BBB+	BBB+
2010	Ba1	BB+	BBB-
2011	Ca	CC	CCC
2012	C	B-	CCC
2013	Caa3	B-	B-
2014	Caa1	B	B
2015	Caa3	CCC+	CCC
2016	Caa3	B-	CCC
2017	Caa2	B-	B-
2018	B3	B+	BB-

 Important Interest Rates (Duration 1 Year), Period 2002 – 2018

Year	Households' Deposit Rate	Corporates' Deposit Rate	Mortgage Rate	Loan to Corporates (up to € 1 million)	Loan to Corporates (above € 1 million)
2002	2.93%	3.10%	4.42%	5.76%	4.50%
2003	2.22%	2.35%	4.31%	5.13%	3.78%
2004	2.30%	2.20%	4.21%	5.04%	3.77%
2005	2.39%	2.32%	3.86%	5.41%	3.93%
2006	3.47%	3.48%	4.36%	6.30%	5.16%
2007	4.52%	4.33%	4.76%	6.83%	5.79%
2008	5.36%	4.36%	4.92%	6.18%	5.07%
2009	2.10%	1.18%	3.08%	4.70%	3.24%
2010	3.68%	3.29%	3.67%	5.87%	5.00%
2011	4.88%	3.76%	4.17%	6.90%	6.21%
2012	4.70%	4.15%	3.04%	6.06%	5.88%
2013	2.82%	2.65%	2.81%	5.81%	4.83%
2014	1.82%	1.85%	2.93%	5.18%	4.61%
2015	1.02%	1.14%	2.69%	5.04%	5.15%
2016	0.70%	0.85%	2.83%	5.07%	4.50%
2017	0.60%	0.93%	2.99%	4.58%	4.66%
2018	0.58%	0.87%	3.13%	4.25%	3.48%

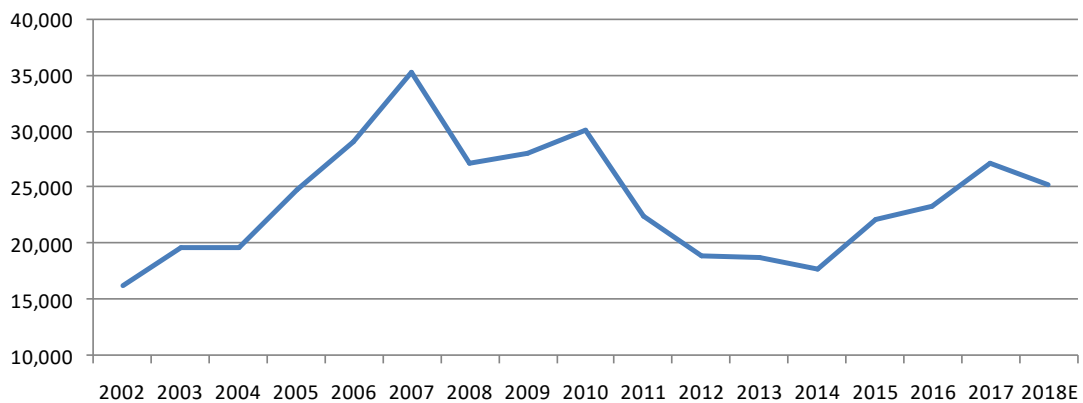
Source: Bank of Greece

Annual Changes of Major Economic Figures, Period 2010 – 2018

Year	GDP	Output of goods and services	Gross value added	Final consumption expenditure	Gross capital formation	Exports of goods and services	Imports of goods and services
2010	-4.84%	-5.63%	-6.00%	-4.70%	-11.53%	10.79%	1.65%
2011	-8.41%	-8.84%	-8.80%	-8.31%	-18.80%	5.82%	-3.69%
2012	-7.64%	-5.00%	-7.10%	-7.66%	-21.71%	3.74%	-5.28%
2013	-5.52%	-4.60%	-5.17%	-5.96%	-14.38%	-0.01%	-5.42%
2014	-1.11%	-1.40%	-1.45%	-1.88%	1.53%	5.47%	3.69%
2015	-0.78%	-2.84%	-0.82%	-1.61%	-14.38%	-3.29%	-10.12%
2016	-0.43%	-1.84%	-1.64%	-0.98%	11.82%	-5.13%	-2.72%
2017	2.11%	4.00%	2.20%	1.28%	11.32%	12.05%	12.84%
2018	2.49%	3.53%	2.07%	0.91%	7.43%	12.24%	9.66%

Source: ELSTAT

Foreign Direct Investment, Period 2001 – 2018E



Source: Bank of Greece

NOTES

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. 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	Bloomberg	Date	Disclosure
Economy, Greece	GKGNLDPY:IND	March 20, 2019	--

None of the following disclosures is applicable for the present report:

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: only 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.

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 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 not and will not receive any compensation for providing a specific recommendation or view in this research report.

VRS EQUITY RESEARCH TEAM

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

INVESTMENT RESEARCH & ANALYSIS JOURNAL

Dr. Efstratios Livanis
 Assistant Editor

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.

© VRS (VALUATION & RESEARCH SPECIALISTS)

104 Aioulou Str., 105 64, Athens, Greece | Tel:+30 210 3219557, Mob:+30 6945 851420

29, Rue Alphonse Munchen, L-2172 Luxembourg, Grand Duchy of Luxembourg | Tel:+352 661 337 023

Email: info@vrs.gr | info@valueinvest.gr

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