

Market framework in Greece

Executive Summary

A PwC study for BFF Banking Group

September 2020



The Report includes an analysis of the following sections and key conclusions per section are presented in this executive summary:

1. Macroeconomic Environment in Greece



2. Focused statistics for Greece vs. other similar cases in Europe (Spain, Portugal, Italy, Ireland, Cyprus)



3. COVID-19 impact in Greece (Economic & Fiscal Measures – Impact / Focused Statistics)



4. Greek firms during the crisis at a glance



5. Banking Sector in Greece (Past 12 years at a glance / Key profitability, capital adequacy and liquidity figures)



6. Factoring Business in Greece (Focused Statistics / Announced Initiatives)



7. Public-Private Partnerships (PPPs) in Greece



8. Overview of Public Administration's Procurement Process



9. Pharmaceutical Sector (Production & Sales / Public & Private Sectors Expenditures)



10. Medical Devices Sector in Europe & Greece



Appendix: “Greek firms during the crisis at a glance” Methodology & Sector Definition

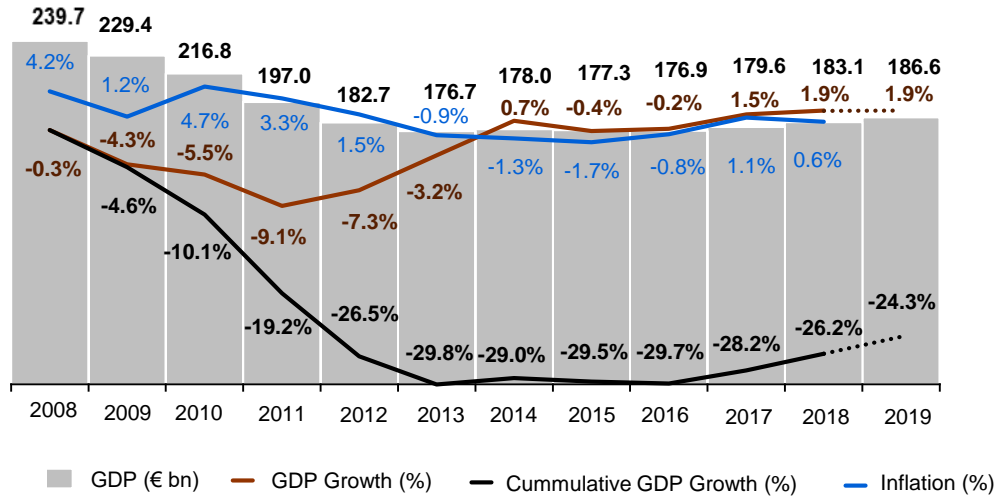
1. Macroeconomic Environment in Greece (1/2) - GDP & Gross Debt evolution during the crisis and beyond



Adverse macro-environment during the crisis – Key message

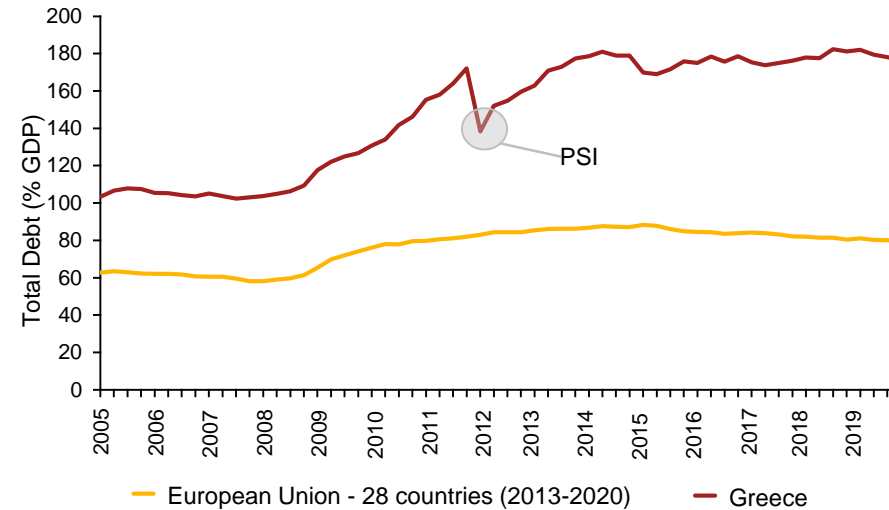
Greece has been strongly affected due to the recent crisis, having the highest public debt in the EU, while the public spending and investments have diminished. **Liquidity in the system is required for the restart of the real economy and BFF aims to contribute to this direction.**

Real GDP growth (%)



Source: European Commission (as of 30/3/2020)

General Government Gross Debt / GDP (%)

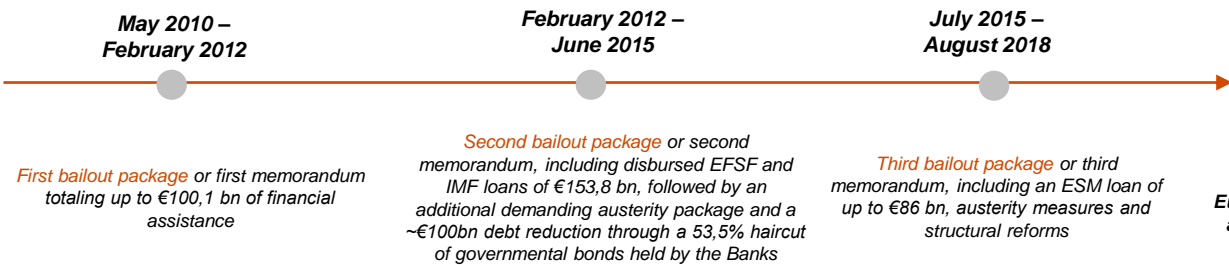


Source: Eurostat

The Greek general government debt is estimated at €337 bn or **188,8%** of GDP at the end of 2020. For 2021, the forecast is at €334 bn or **176,8%** of GDP

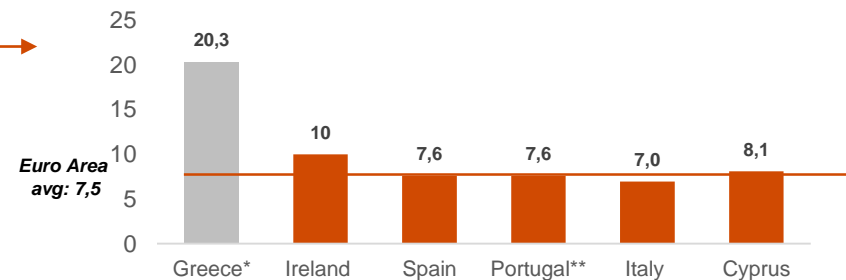
Source: Ministry of Finance, Stability Programme 2020

Economic Adjustment Programmes



Source: ESM, European Council

Weighted Average Debt Maturity of European peers (Years)



*Including extension of the EFSF loans

**Including the rollover of the EFSM loans still to be executed

Source: ECB, PDMA and the corresponding debt management authorities of each country (March. 2020)

Greece's average debt maturity lies far above the **average debt maturity** of its European peers, even when compared with other post-programme EU economies

1. Macroeconomic Environment in Greece (2/2) - Unemployment & Investments



In 2013 unemployment in Greece reached 27,5%, the highest among the countries suffering the effects of the financial crisis

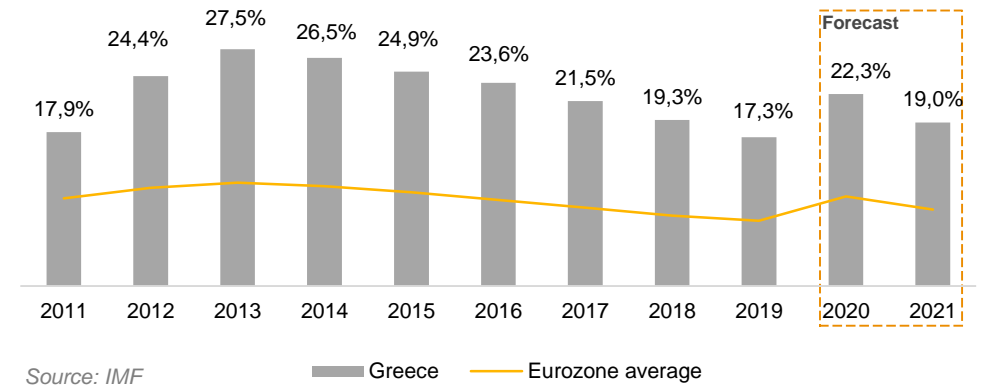


As the Greek Economy returned to growth, unemployment slowly and steadily declined and in 2019 it stood at 17,3%

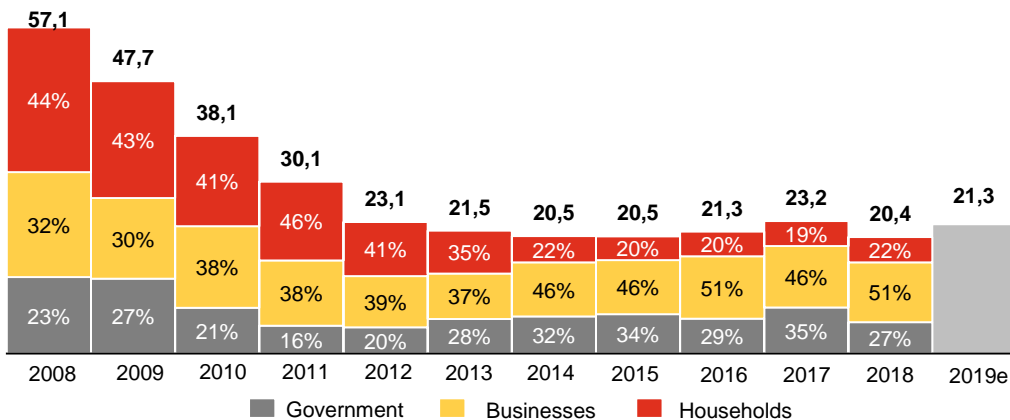


Due to the COVID-19 pandemic IMF expects an increase of unemployment to 22,3% in 2020 and a subsequent decrease to 19% in 2021, compared to a 19,9% projection for 2020 and 16,4% for 2021 from the Greek Ministry of Finance

Unemployment rate (%)



Investments in bn €



Between 2008 and 2014 investments decreased by more than €36,5 bn creating an investment gap that will impair the Greek productive capacity in the long term



The % contribution of the Greek households to the total amount fell to approximately 20%, as their disposable income plunged and the construction sector collapsed

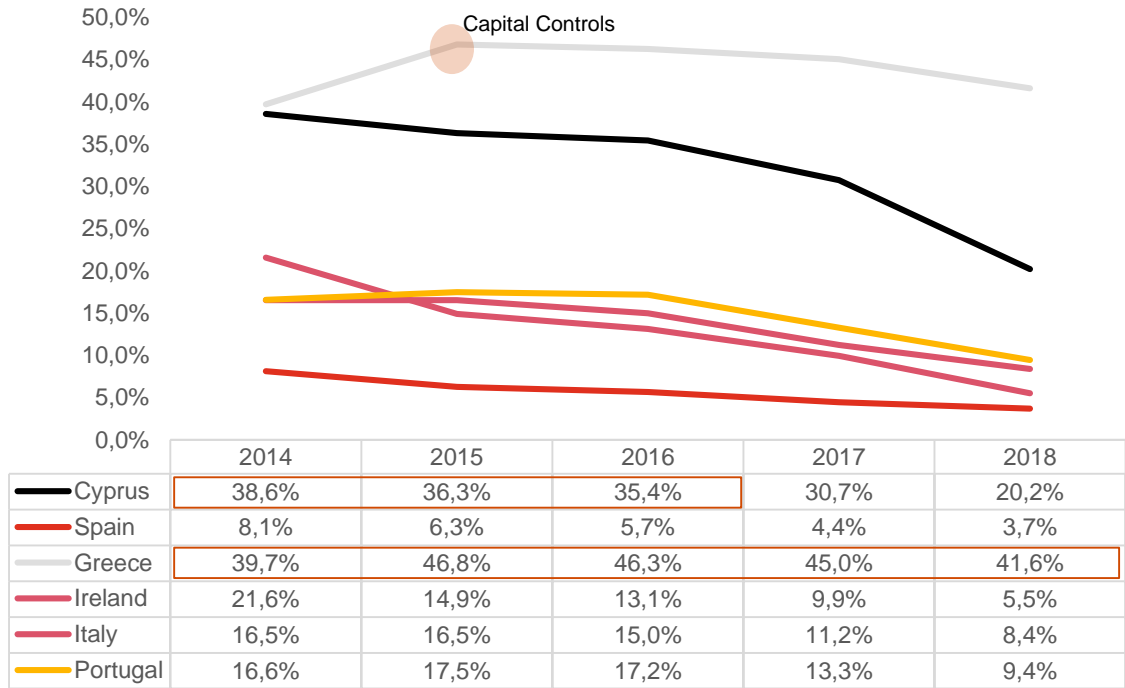


Greek businesses have increased their share, but their contribution in absolute terms remains low, while the Greek government remains a major contributor

Source: Eurostat (as of 29/07/2020), PwC Analysis based on GDP 2015 Chain Linked Prices

2. Comparing Greece vs. other similar cases in Europe (Spain, Portugal, Italy, Ireland, Cyprus)

Non-performing loans and advances per Total loans and advances %



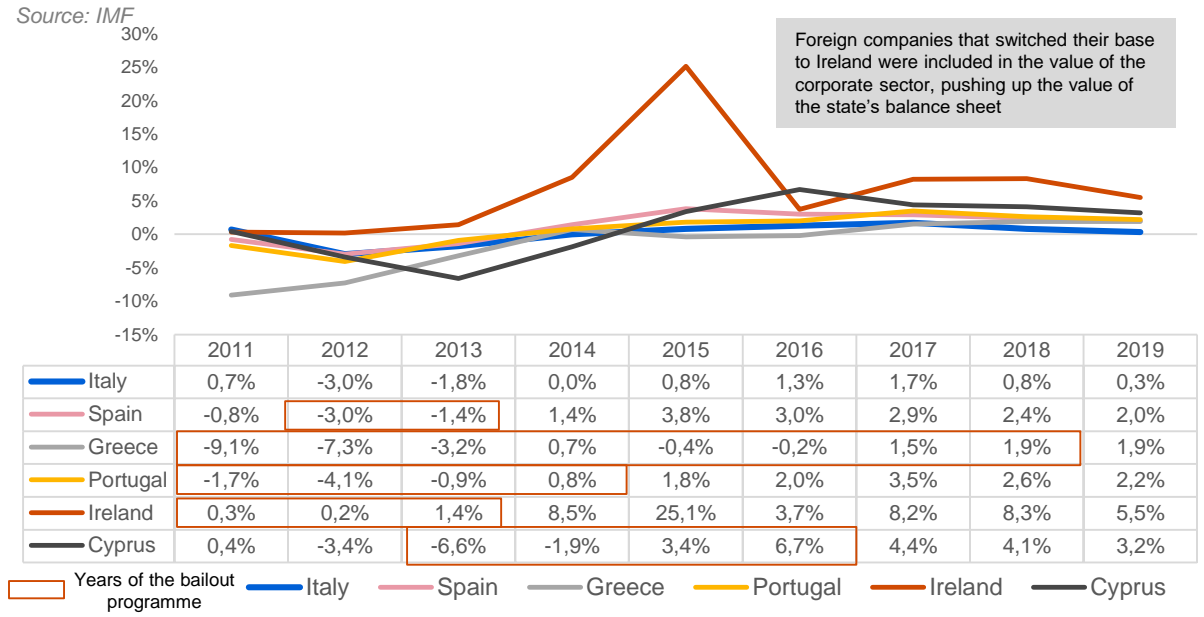
Source: ECB

ECB data refer to: Domestic banking groups and standalone banks, foreign (EU and non-EU) controlled subsidiaries and foreign (EU and non-EU) controlled branches

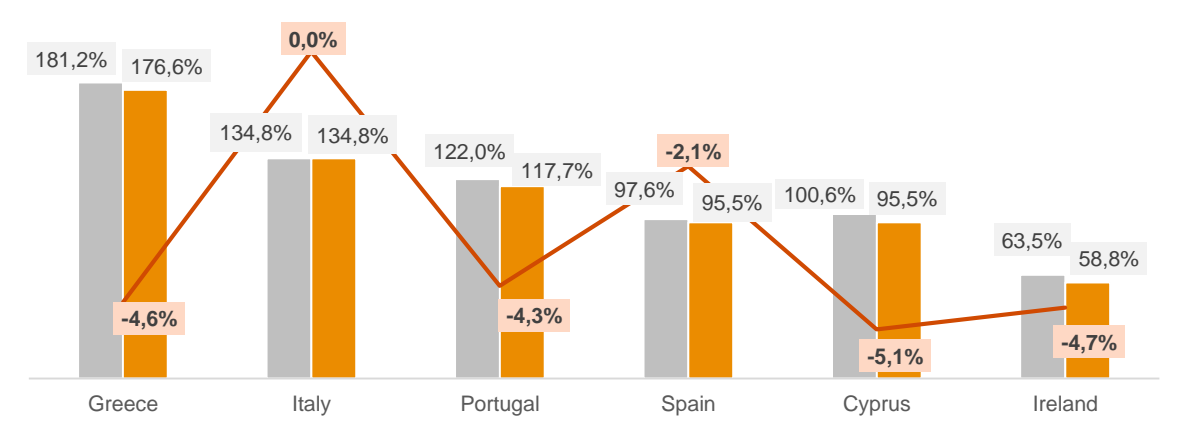
Note: Spain, Ireland & Portugal had concluded their bailout programmes during this period

Greece: highest NPE ratio in Eurozone throughout the period

Real GDP Growth for the period 2010-2019 (%)



2018 & 2019 General Government Debt as a % of GDP



3. COVID-19 impact in Greece (1/2) –

Greece may have exited the economic crisis showing signs of gradual recovery, but the **COVID-19 outbreak** is posing a **great challenge** to the country's economy going forward



COVID-19 impact – Key message

The heavy impact of the pandemic on the Greek tourism industry is expected to create a deficit, leading to an increase in DSO and in overdue payments on the NHS and the Public Sector. **Cooperation with factoring agents such as BFF is likely to alleviate the relevant effect.**

An Overview of the Fiscal Measures & The Restart Programme

34 initial measures → **-5,35% 2020 GDP impact**

Source: Ministry of Finance, Stability Programme 2020

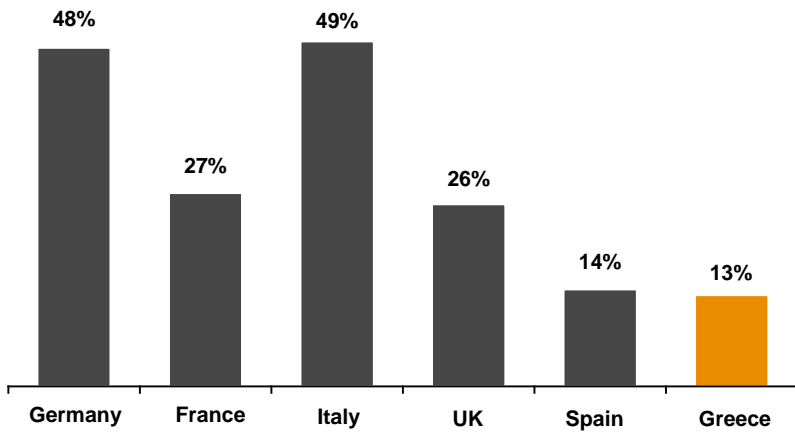
Restart Programme → **Total cost of €24 bn***

*Total cost Including Government measures, SURE, EIB, Recovery Fund

Source: Government of the Hellenic Republic – “Restart of the Greek Economy” (as of 20/05/2020)

EU agreement – Recovery Fund → **Greek package that exceeds €70 bn**

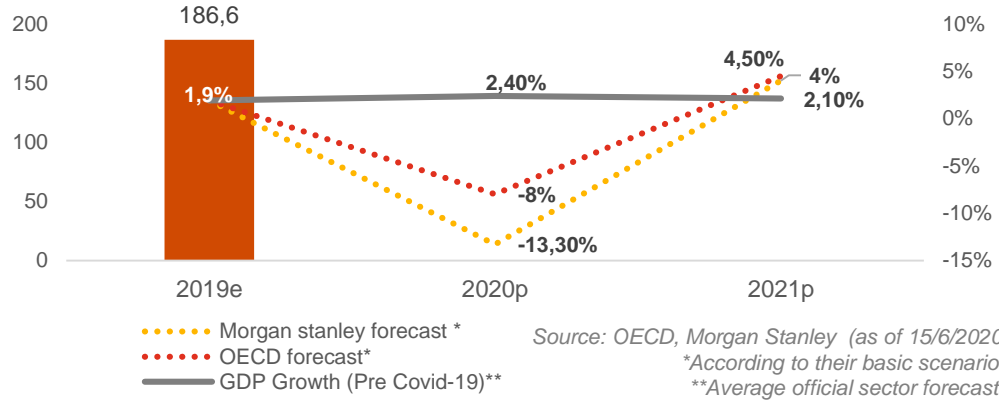
Economic & Fiscal initiatives for COVID-19 (% of GDP)



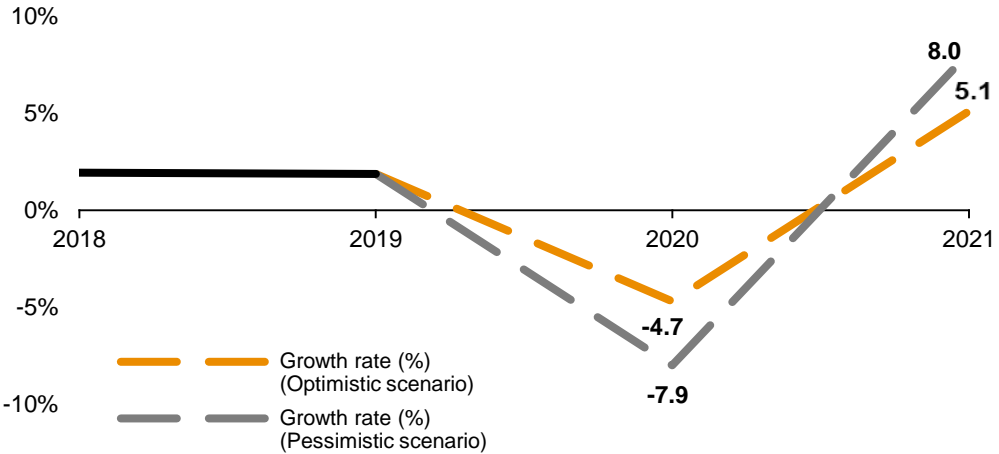
- ✓ As it stands, Greece exhibits the **lowest % contribution** of COVID-19 measures in GDP.
- ✓ This is mainly attributed to the successful **containment** of the virus.

Source: Ministry of Finance, Bruegel (as of 17/07/2020)
PwC-BFF paper

Greek GDP expected trajectory (2019e GDP in bn)



Greek GDP expected trajectory according to the Ministry of Finance



3. COVID-19 impact in Greece (2/2) - Focused Statistics concerning the spread of the virus

A global overview of cases

Italy currently exhibits the largest fatality rate at 13.5%, while the UK and France follow. Greece's rate is on the low side standing at 2.7%.

Country	Date of Initial Case	Date of Lockdown	Total Number of Cases	Total Number of Deaths	Case Fatality (Deaths/Total Confirmed cases)	Mortality (Deaths/100k of population)
China	31/12/2020	23/1/2020	89,784	4,713	5.2%	0.34
Greece	26/2/2020	16/3/2020	9,531	254	2.7%	2.37
Italy	31/1/2020	9/3/2020	262,540	35,458	13.5%	58.67
Spain	1/2/2020	15/3/2020	419,849	28,971	6.9%	62.00
Germany	27/1/2020	22/3/2020	239,010	9,285	3.9%	11.20
France	24/1/2020	16/3/2020	291,374	30,549	10.5%	45.60
UK	31/1/2020	24/3/2020	330,967	41,552	12.6%	62.49
Brazil	25/2/2020	5/5/2020	3,717,156	117,665	3.2%	56.17
USA	22/1/2020	N/A	5,821,819	179,708	3.1%	54.93

Sources: Ministry of Health, General Secretariat for Civil Protection, Hellenic Statistical Authority, Johns Hopkins Coronavirus Resource Center, National Public Health Organization (EODY), Institute for Health Metrics and Evaluation, data as of 27/08/2020

The Greek COVID-19 case in numbers

Confirmed cases	Infection Rate	Tests conducted	Patients Intubated	Deaths
9,531	0.09%	903,432	35	254

Government Mandated Social Distancing



Educational Facilities Closed: March 11th 2020

- Re-opening:
- Classes for high-school senior grade students: May 11th
 - Other grades of secondary education, private tuition, language centers: May 18th
 - Primary schools, nursery schools, kindergartens: June 1st



Non-essential services Closed: March 22nd 2020

- Re-openings:
- Certain retail shops and services (e.g. hairdressers): May 4th
 - All remaining retail shops, driving schools: May 11th
 - Archaeological sites, zoos, botanical gardens: May 18th
 - Outdoor cafes and restaurants: May 25th
 - Indoor facilities, malls, parks, hotels, open-air cinemas: June 1st



Stay-at-home Order: March 23rd 2020

Restrictions lifted within the citizens' regional units: May 4th

Restart of free travel between regions: May 18th

DINING



- Tables arranged in a safe distance.
- Staff required to wear a mask or face shield and customers are also advised to do so.
- Following a surge in COVID-19 cases in certain areas, dining and entertainment facilities remain closed from midnight to 7a.m. until 31/8/2020.
- Until 31/8/2020, customers are not allowed to remain standing in night clubs, bars, live music venues, restaurants, cafés etc.

CULTURE / ENTERTAINMENT



- A limited number of visitors are allowed to enter in archaeological sites and museums.
- The use of masks and hand sanitizer is recommended, as well as maintaining physical distancing.
- Open-air cinemas operate at 75% capacity.
- In order to contain the recent spike in COVID-19 infections, the government has set a temporary limit of 50 people for all public events and gatherings in specific regions until 31/8/2020.

4. Greek firms during the crisis at a glance

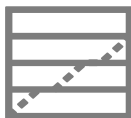
Adverse macroeconomic environment & limited funding sources during the crisis forced Greek firms to respond in order to survive

Scope: Identify the changes in the structure and dynamics of the Greek corporate economy during the crisis

Sample:

- around **2.900 companies** over the period **2008-2016**
- companies with **revenue exceeding €10 mn in any year** during the period **2008-2016**

Sample relative to the Greek economy



Direct Value Added/GDP (%)
37,2%



Corporate revenue (%)
57,8%

The corporate economy during the crisis was driven by...

<p>1</p> <p><i>a loss of demand which suppressed revenue</i></p> <ul style="list-style-type: none"> • There was a 12% decrease in revenue 	<p>2</p> <p><i>tighter trading conditions</i></p> <ul style="list-style-type: none"> • Receivables decreased by 36,3% • Stock days remained roughly the same • Payables went up by 2% 	<p>3</p> <p><i>higher cost of capital</i></p> <ul style="list-style-type: none"> • Sovereign risk from 0% to 4% • Corporate cost of debt rose by 16% during the period 2010-2012 • Cost of equity rose by 17% 	<p>4</p> <p><i>Zombies survived</i></p> <ul style="list-style-type: none"> • There are still 745 Zombies (26% of total) operating, of which 312 were Zombies in 2009 • Zombies account for €8,7 bn of trapped debt and €10 bn of payables
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...which led to

For the sectors in scope and the related definitions please refer to the Appendix section

<p>1</p> <p><i>swift cost adjustment</i></p> <ul style="list-style-type: none"> • Costs were reduced by 11,6% and the average EBIDTA margin returned to 9,7% 	<p>2</p> <p><i>lack of investment</i></p> <ul style="list-style-type: none"> • Non replacement of assets • No new technologies • No R&D • Productivity continued to go down 	<p>3</p> <p><i>a marked change in funding</i></p> <ul style="list-style-type: none"> • Debt decreased by €10 bn • Equity decreased by about €4 bn • The diminishing funding needs were satisfied by creditors' financing • Overall funding became short term 	<p>4</p> <p><i>less complexity and value added</i></p> <ul style="list-style-type: none"> • Complexity and value added diminished by 7% • Exports rose during the crisis, but their relative value added dropped
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Source: Published PwC study, "10 years of crisis"

5. Banking Sector in Greece (1/2) -

As the crisis was progressing, the Greek Banks faced **liquidity constraints** that jeopardized their survival and put **into question** their **ability to support** the real economy adequately

2008-2009: Beginning of the Global Financial Crisis (GFC)

Healthy and resilient Greek Banks:

- wide enough **deposit base** (more than €245 bn in deposits, i.e. around 100% of the GDP)
- **healthy stream of income** (net interest income at 4,4% of the RWAs or around 3% of total assets)
- among the **best-capitalized** Banks in Europe (capital adequacy ratio of around 12%)
- **differentiated operations** and earnings sources by expanding their activities to South Eastern European countries
- **private debt-to-GDP** at around 100%, significantly lower than the EU average (150%)

Source: BoG



2011-2012

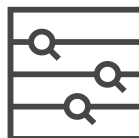
- intense **Greek public debt crisis** due to uncertainty about the viability of Greece's membership in the euro area
- Greek **Banks' ratings** became **higher than** the ratings of the **Greek state**
- Greek Banks **lost 40% of their deposits** (around €90 bn) mostly to Banks outside Greece
- total **losses** reported on Greek Banks' **balance sheets** were severe (around €45 bn)

Source: BoG

2014 Completion of Banks' 2nd recapitalization

Entirely funded by private investors, who acquired a 27% stake in Greek Banks by injecting €8,3 bn of equity

Source: HFSF activity report January-June 2014



2013 Completion of Banks' 1st recapitalization

- restructuring of the Greek public debt undermined the capital adequacy of Greek banks
- €28,6 bn capital increase of which €3 bn were covered by private investors
- between 2011-2013 another €14,7 bn was used for the resolution/liquidation of capital-deprived non-systemic Banks

Source: HFSF activity reports 2013

2015: Turbulent year

- **political instability** with consequent elections
- predominant **Grexit fear**
- Banks' share prices sunk to new lows
- massive **deposits outflows** (close to €120 bn, almost half compared to the 2009 value)
- June 2015 – **capital controls** were imposed to stabilize the outflows

Source: BoG

2015 Banks' 3rd recapitalization

- SSM's Assessment of Greek Banks, including an asset quality review (AQR) and stress tests, resulted in a capital shortfall of €14,4 bn under the adverse scenario
- €9 bn was raised from private investors
- €5,4 bn — largely representing the adverse stress test scenarios for two of the four banks — were provided by the Greek State (via the HFSF)

Source: HFSF and BoG

2019: Predominant signs of recovery

- August: **full lift of capital controls**
- Banks' structured medium-term strategies to reduce NPLs
- newly elected Greek Government enhances overall **confidence in the market**



2016-2018

- gradual signs of improvement
- gradual reduction of Banks' **dependency on central bank funding** (ECB and ELA sources)
- **NPLs around 40%** of total loans
- 2018: Greek Banks passed SSM stress tests



2020: An unprecedented challenge

The COVID-19 pandemic will lead to several challenges in the global financial systems. Consequences are yet to be seen and Greek Banks may need to reinstate their medium-term targets.

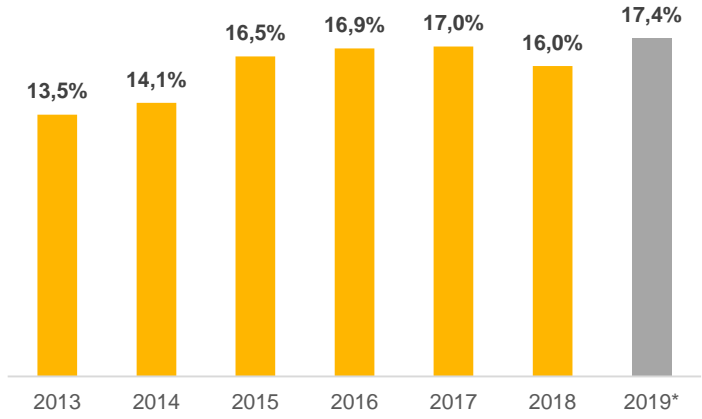
! The banking sector is in gradual recovery – Key message

The massive outflow of deposits and the struggle of the Greek lenders to service their debts forced Greek Banks to develop strategies for the NPLs reduction and take actions to improve their profitability. **BFF services** are designed to complementarily support the real economy by funding the various business initiatives of both local and multinational companies..

5. Banking Sector in Greece (2/2) -

Key profitability, capital adequacy and liquidity figures – Gradual recovery

Capital Adequacy Ratio (%)

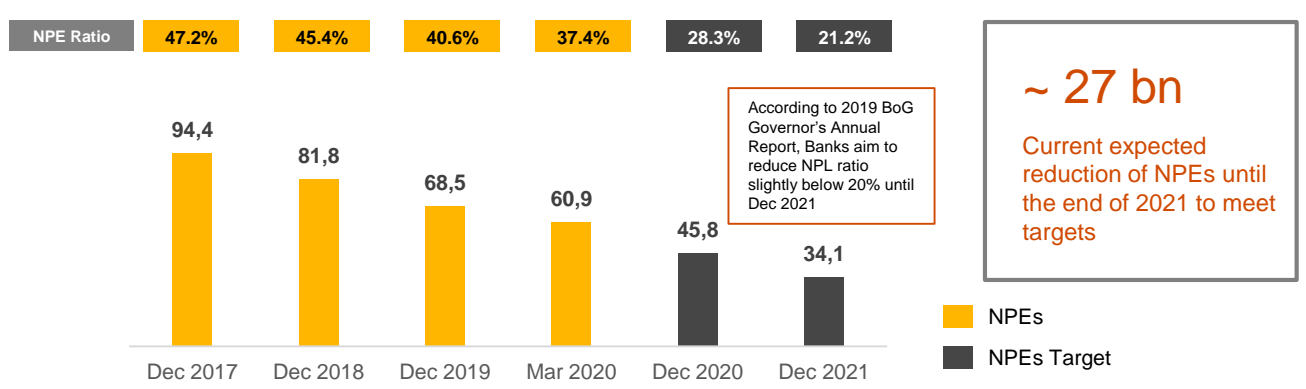


Capital adequacy ratio refers to the Total Capital divided by the Risk Weighted Assets. The ratio for the aggregated group of significant **EU institutions** (i.e. the Banks supervised by the ECB) stands at **18,43%**, as of Q4 2019*.

*Source: ECB publishes supervisory banking statistics for the fourth quarter of 2019

Source: IMF

Greek Banks' NPEs and Operational Targets Ahead (in € bn)

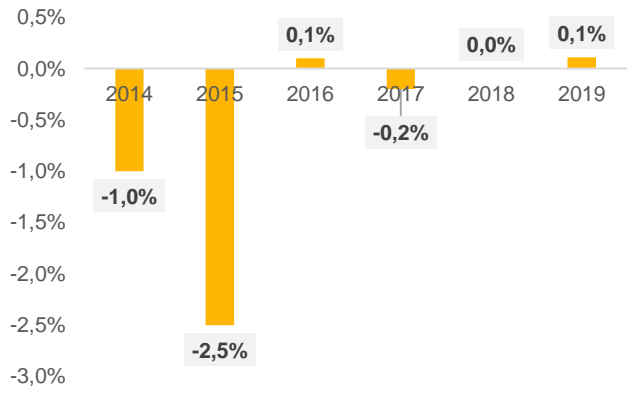


According to 2019 BoG Governor's Annual Report, Banks aim to reduce NPL ratio slightly below 20% until Dec 2021

~ 27 bn
Current expected reduction of NPEs until the end of 2021 to meet targets

Source: BoG, 2018 Governor's Annual Report
Note: Data is as of March 2020. Projections relevant to NPLs evolution due to the COVID-19 have not been released yet.

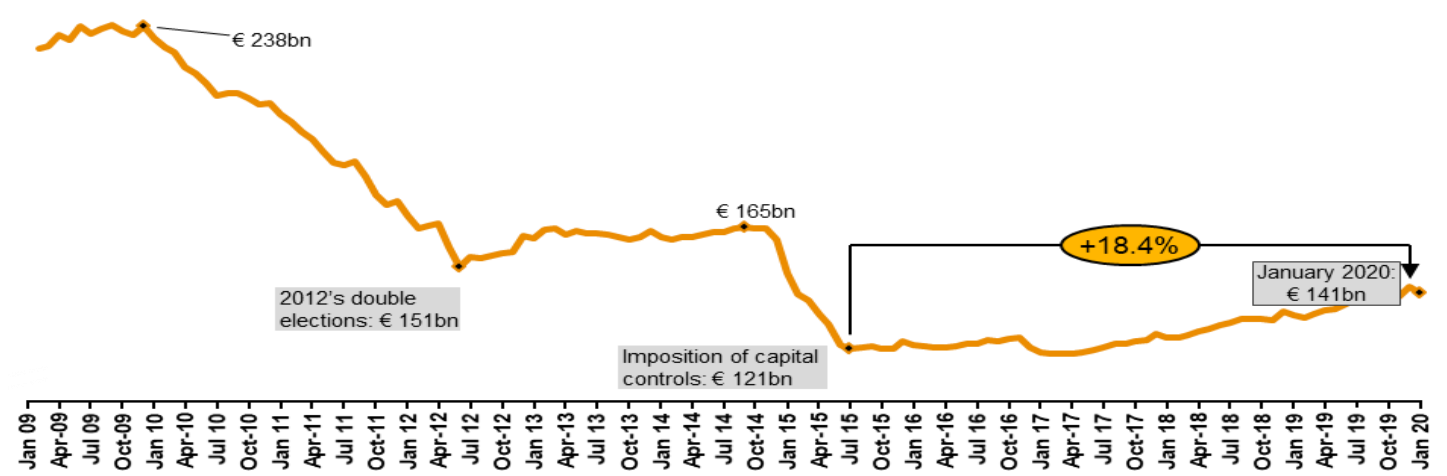
Return on Assets (RoA)



Greek Banks suffer from low levels of profitability. The high levels of NPLs and the low interest rates have hindered their profitability growth. However, during the last two years they managed to return to **positive results** with an RoA of 0,1% in 2019.

Source: IMF

Total Deposits flow



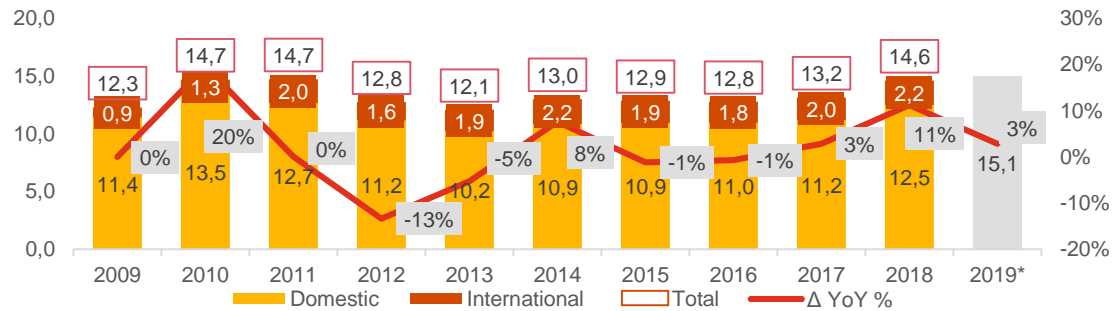
Source: Bank of Greece (as of 30/3/2020)

6. Factoring Business in Greece

As financing was a **challenge** for many Greek firms, it became evident that **factoring could support funding needs**

! Gap in the factoring market covered by BFF – Key message
 The penetration of factoring services in Greece is below the EU average, while there was a gap in the market regarding non-recourse factoring for receivables towards the Public Sector or the NHS. **BFF is currently covering the gap providing non-recourse factoring for receivables towards the above counterparties.**

Total Factoring Volume in Greece (in € bn)



Sources: EU Federation, Hellenic Factors Association (2018 Annual Report)

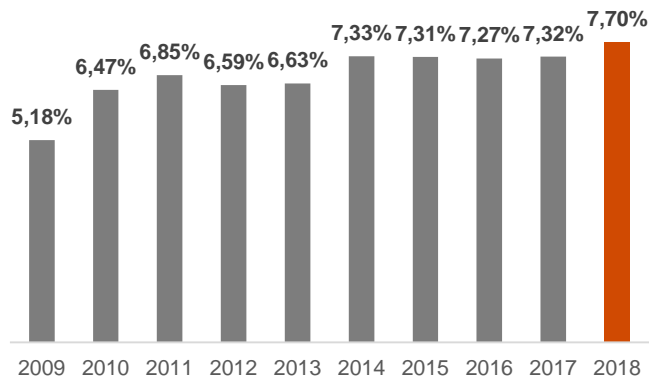
*2019 data does not include the segregation between Domestic and International Factoring

Factoring Companies Authorized by the BoG (as of October 2019)

1. A.B.C. FACTORS S.A.
2. EUROBANK FACTORS
3. OPTIMA FACTORS S.A.
4. PIRAEUS FACTORING S.A.
5. ETHNIKI FACTORS S.A.
6. FLEXFIN Factors S.A.

Note: Apart from the factoring companies authorized by the BoG, other credit institutions with factoring operations or factoring companies operate in Greece either without or with physical presence (e.g. HSBC Factoring Unit)

Factoring Turnover Progress in Greece (as % of GDP)



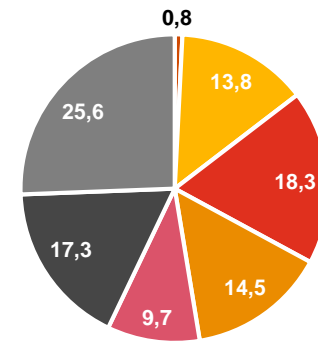
The value of factoring in 2018 represented 7,7% of the Greek GDP, a significant increase compared to 2017's value of 7,32%

As per the EUF statistics, the GDP penetration of factoring increased to 8% in 2019; however, it still lays behind the European average of more than 11%

Sources: EU Federation, Hellenic Factors Association (2018 Annual Report)

PwC-BFF paper

Factoring Market Share (%) within the EU (2019)



- Greece
- Italy
- France
- Germany
- Spain
- UK
- Other EU countries

- Factoring and commercial finance volume reached **€275 bn in 2019** covering ~280.000 European businesses and representing approximately **11,3% of the EU GDP**
- According to the FCI, approximately **640 Banks and specialized companies** are active in factoring in Europe
- **Europe is the largest factoring market worldwide**, accounting for more than half of the total world volume

Sources: FCI, EU Federation, Hellenic Factors Association (2018 Annual Report)

7. Public-Private Partnerships (PPPs) in Greece (1/3)

PPPs are being utilized as **an alternative option** for financing critical projects, combining the flexibility and expertise of the private sector with the reliability of the public sector, gaining grounds in the Greek market

Administrative Bodies

- ✓ The **Special Secretariat for Public Private Partnerships (PPPs) of the Ministry of Economy and Finance**:
 - promotes the use of PPPs
 - assists in the development of the Projects
 - monitors the implementation of the relevant contracts
- ✓ The **Inter-Ministerial Committee for Public-Private Partnerships (ICPPP)**:
 - sets the **general policy** for PPPs
 - **approves** projects on the basis of proposals by the Special Secretariat

International Partnerships

- ✓ Direct cooperation with the **European PPP Expertise Center (EPEC)** on policy matters
- ✓ The Special Secretariat for PPP is a member of the Team of PPP Specialists of the **United Nations Economic Commission for Europe (UNECE)**
- ✓ Partnership with the **World Bank Institute** on PPP capacity building for the SEM region via the establishment and operation of the South-East European and Mediterranean PPP Network



Acceptance Process at a glance

1

Proposal to the PPP Unit

The public entity submits a proposal to the PPP Unit, which then evaluates the feasibility of the specific project under a PPP scheme.

2

Decision of the ICPPP

The ICPPP decides to approve or reject any application, while the PPP Unit coordinates and monitors all contract award procedures, so as to select the private entity that will participate in the partnership.

3

Contract award procedure

Contracts are awarded based on the most economically advantageous offer or the lowest price. The minimum qualifications of the tenderers participating in the contract procedure are clearly defined by the Invitation to Tender.

- As of July 2020, **42 PPP projects** have been approved, in a total of 11 different sectors
- The **environmental sector** has the largest number of approved projects, followed by the sectors of education and information/communication technology
- There is currently only **1 approved project in the Health sector**

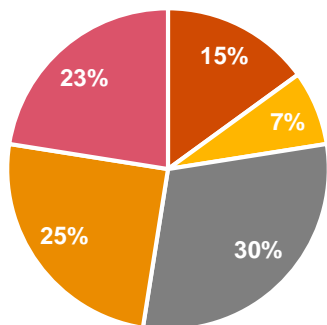


Source: The Special Secretariat for Public Private Partnerships (PPPs) of the Ministry of Economy and Finance

7. Public-Private Partnerships (PPPs) in Greece (2/3)

Focused Statistics

Project Development Budget



■ Under €10 mil.
 ■ €10-20 mil.
 ■ €20-50 mil.
■ €50-100 mil.
 ■ Over €100 mil.

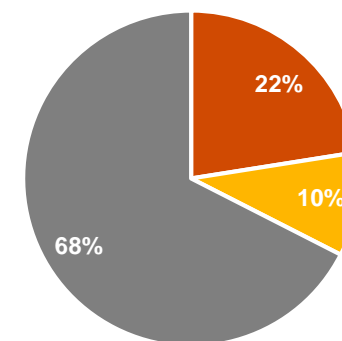
Lowest budget project: €2.500.000

- Approval by the ICPPP: 09/09/2013
- Scope: Implementation of the development and management of the new Central Fish Market parking system (entrance-exit) in Athens through a PPP, with the Central Market and Fisheries Organization SA (OKAA SA)

Highest budget project: €700.000.000

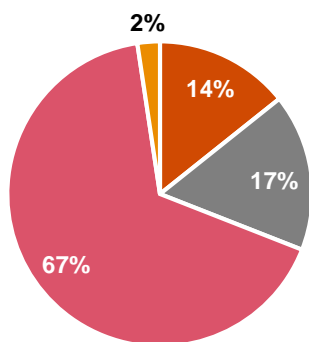
- Approval by the ICPPP: 17/01/2019
- Project: Infrastructure for ULTRAFast BROADBAND through PPP. More than 2,4 mn citizens will have access to the Internet with speed of 100Mbps (upgradable to 1 Gbps)

Type of Tendering Process



■ Closed Procedure
 ■ Open Procedure
 ■ Competitive Dialogue

Project Duration



■ 1-15 years
 ■ 16-20 years
 ■ 21-30 years
 ■ Over 31 years

- 28 projects have a duration of 21 to 30 years
- 7 projects will be active for 16 to 20 years
- 6 projects will have a lifespan of 1 to 15 years
- There is only 1 project with a duration of up to 40 years

- In the **competitive dialogue**, any private sector entity may apply for participation, following a contract notice by the contracting authority
- In an **open procedure**, anyone may submit a full tender
- Anyone may ask to participate in a **closed procedure**, but only those who are pre-selected may submit tenders

! In 2020, the Greek government is taking action for the **support and upgrade of the public health system** through the **implementation of PPPs**. Announced initiatives include strengthening the system via **key structural interventions in hospitals** around the country.

Source: The Special Secretariat for Public Private Partnerships (PPPs) of the Ministry of Economy and Finance

7. Public-Private Partnerships (PPPs) in Greece (3/3)

Announced Initiatives

Steps involved in the PPP programme



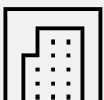
Phase 1

In the initial phase of their implementation, the **partnerships will be limited only to leasing of x-ray machines**. In other words, the government will purchase medical technological equipment (such as PET, MRI and CAT scanners and linear accelerators) and services from the private sector. This will provide free examinations to citizens, while reducing waiting time and eliminating queues. **Private companies will undertake the maintenance and upgrade of the equipment**, with the EOPYY covering the operating costs, and the government covering the salaries of the medical staff (without excluding the recruitment of staff associated with the private investors).



Phase 2

The second phase of the PPP programme includes the **provision of health services that are not covered by the existing system structure**, especially in areas with increased needs, such as in the island country or in places of tourist interest. For instance, a Hemodialysis Unit or a Rehabilitation Center could be implemented with PPPs and offer the required services through a private insurance company.



Phase 3

The final phase of the PPP programme includes an investment exclusively by the private partner for the **construction or renovation of a health unit**, with the public sector setting the standards for the operating conditions for a specific timeframe.

Pilot hospitals to be upgraded through PPP

- The programme will take place in three hospitals, two of which will be in Athens (one small and one medium-sized) and the third one will be in another city.
- On January 29th, **the Health Minister confirmed that the Attikon Hospital will be the first hospital to pilot the PPP programme**, in order to provide effective solutions for citizens in secondary healthcare.
- On February 6th, it was announced that the **General University Hospital of Larissa will be the second hospital to pilot the PPP implementation** and initiatives have started to facilitate co-operation with the private sector.
- According to estimates, the **third hospital to pilot the Swedish Model will be the Evangelismos Hospital**, however a formal relevant announcement has not been released yet.

Sources: Ministry Of Health

8. Overview of the Public Administration's Procurement Process

General Overview



Competent bodies: Each public administration body is responsible for the acquisition of the supplies required for its operation and for the relevant infrastructure projects under management.

Contracts assignment:

- During the last years the procedure has been digitalized and the competent bodies are obliged to use the National System of Electronic Public Contracts (Ε.Σ.Η.ΔΗ.Σ) during all the stages of the procurement process for assignments of an expected value greater than €60k (excluding VAT).
- Details concerning all contracts and contract tenders with a value above €1k (excluding VAT) should be uploaded to ΚΗΜΔΗΣ (Central Electronic Register of Public Contracts).
- In 2019 the total value of **contract tenders** declared at ΚΗΜΔΗΣ was € 9,28 bn.
- The total value of **signed contracts** declared was € 8,24 bn for the same period.

Key Sectors Involved



Public Administration requires a plethora of goods and services to operate efficiently, based on its current needs. However, it could be noted that the following sectors receive the largest assignments:

- 1. Construction:** Construction of civil engineering works, roads and motorways, utility projects for electricity and telecommunications, railways and underground railways.
- 2. Energy:** Companies involved in the production and supply of energy, oil and gas drilling and refining, or integrated power utility companies including renewable energy and coal.
- 3. Telecoms:** Wired & wireless telecommunication services, telecommunication-related retail activities.
- 4. Utilities:** Electricity production & trade, distribution of gaseous fuels through pipelines, collection-treatment & distribution of water supply.

10 largest contract tenders declared at the Central Electronic Register of Public Contracts (2019)

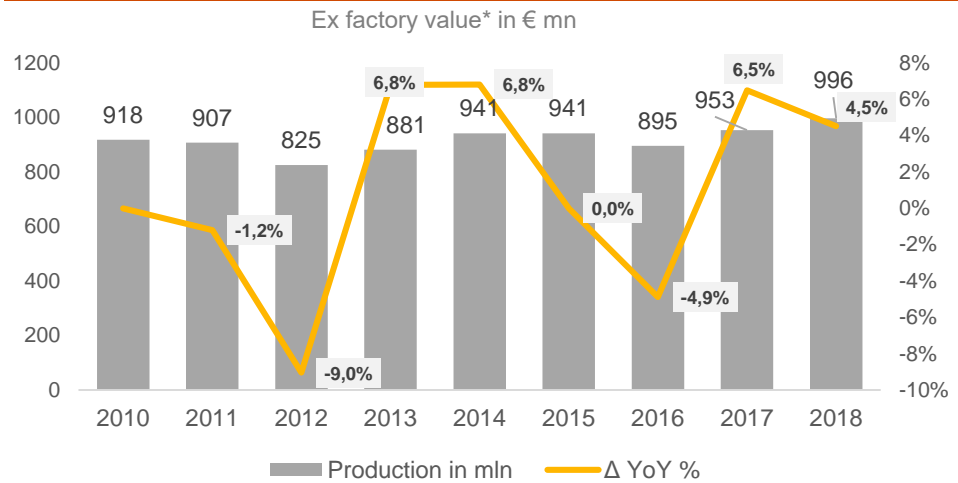
A/A	Public Body	Description (Sector)	Budgeted value in € mn (excluding VAT)
1	CRETE-ATTICA ELECTRICAL INTERCONNECTION ARIADNE SPECIAL PURPOSE LIMITED COMPANY	High Voltage Cables (Construction & Energy)	615
2	CRETE-ATTICA ELECTRICAL INTERCONNECTION ARIADNE SPECIAL PURPOSE LIMITED COMPANY	Substation Equipment (Construction & Energy)	315
3	ESPA Technology Sector (ΕΠΙΤΕΛΙΚΗ ΔΟΜΗ ΕΣΠΑ ΤΟΜΕΑ ΤΕΧΝΟΛΟΓΙΑΣ ΠΛΗΡΟΦΟΡΙΚΗΣ ΚΑΙ ΕΠΙΚΟΙΝΩΝΙΩΝ)	Telecommunication Network (Telecoms)	300
4	EYDAP S.A.	Operation of a sewage treatment plant (Utilities)	261,875
5	University of Crete	Construction Work (Construction)	205,940
6	EDSNA (SPECIAL INTERNAL ASSOCIATION OF THE PREFECTURE OF ATTICA)	Recycling equipment (Utilities)	104,700
7	Ministry of Defense	Kerosene type jet fuel (Energy)	100
8	Hellenic Electricity Distribution Network Operator	Environmental inspection services for specific activities (Energy & Utilities)	95,142
9	Ministry of Defense	Diesel oil (Energy)	90
10	Municipality of Piraeus	Real estate development services (Investment)	89,100

Source: promitheus.gov.gr

9. Overview of the Pharmaceutical Sector (1/2) - Production & Sales

Pharma industry in Greece – Key message
 The imposition of claw-back and rebates cut the public health expenditure and caused liquidity issues to aims to majority of Greek pharmaceutical companies. **BFF targets at smoothing the capital flows and supporting their liquidity needs.**

Greek pharmaceutical production



Source: The pharmaceutical market in Greece: Facts and figures 2019 (IOBE, SFEE based on data from Eurostat as per 2019)
 * Ex-factory value is the price at the factory, and does not include any other charges, such as delivery or subsequent taxes.

2018 vs 2010, total pharmaceutical sales **decreased** by €1,1 bn

€4,1 bn of sales were performed through pharmacies in 2018

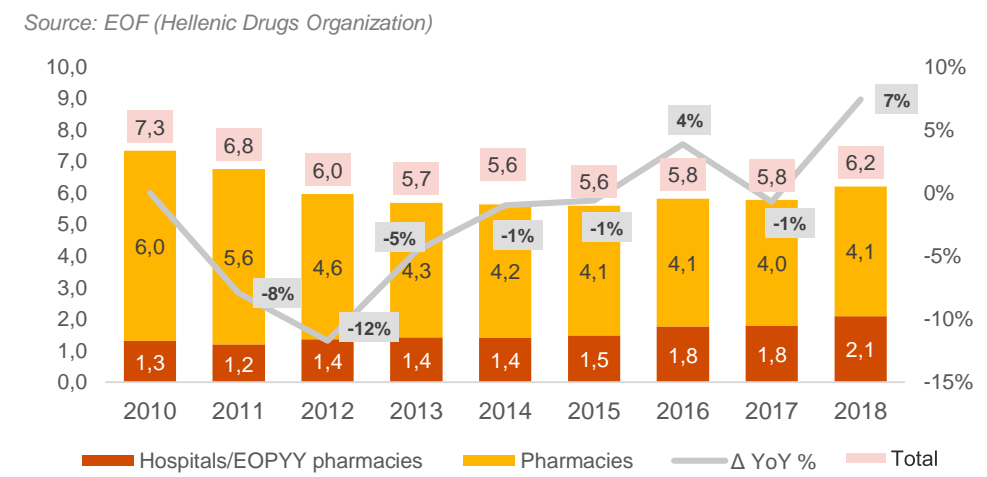
€2,1 bn of sales were performed to hospitals or EOPPY pharmacies in 2018

2018 vs 2010, **increased** production by €78 mn

As per the study “The pharmaceutical market in Greece: Facts and figures 2019”, the total added value of the pharma industry in 2017 was €559 mn**, constituting ~3% of the total added value of the manufacturing sector

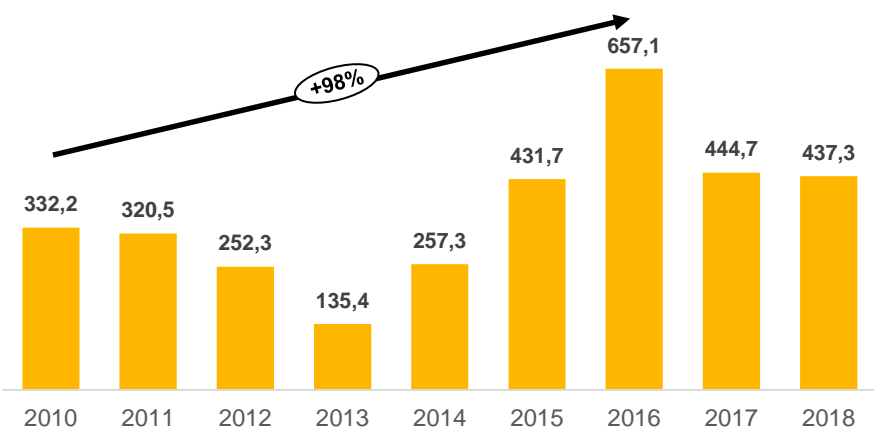
** In the 2018 year's version of the study from SFEE the estimation for the total added value for 2017 was €668 mn with the basis year being 2010. In the latest edition of 2019 the revised Eurostat Data use as a basis the year 2015, the total added value is €559 mn and it is calculated as Revenue – Cost of Sales of the pharmaceutical producers

Greek pharmaceutical sales in € bn



9. Overview of the Pharmaceutical Sector (2/2) - Public & Private Sectors Expenditures

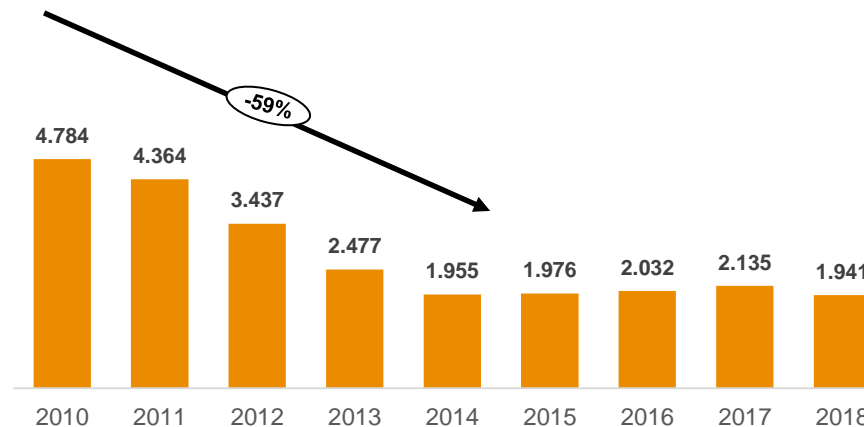
Public expenditure on appliances and durable medical goods (€ mn)



Source: Hellenic Statistical Authority – System of Health accounts

Public expenditure on appliances and durable medical goods has increased by 98% between 2010 and 2016, but dropped significantly to €437,3 mn in 2018

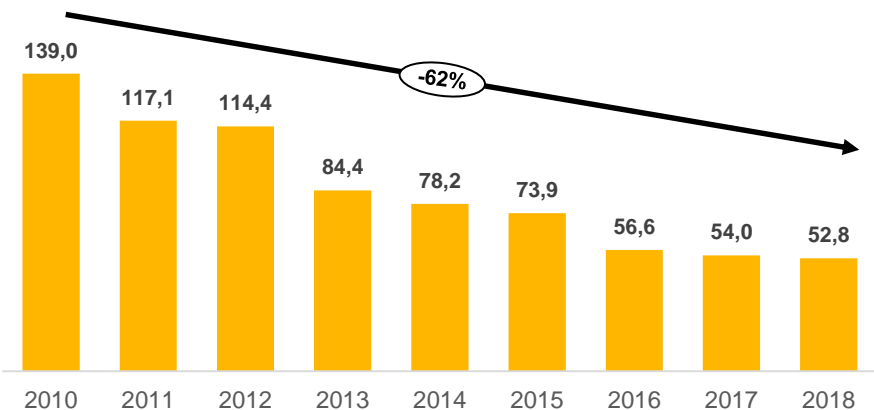
Public pharma expenditure (€ mn)



Source: Hellenic Statistical Authority – System of Health accounts

Public pharma expenditure had been decreasing from 2010 to 2014 (governmental and Social Security Funds) driven by the economic downturn. Since then, there was a small year to year increase with the exception of 2018

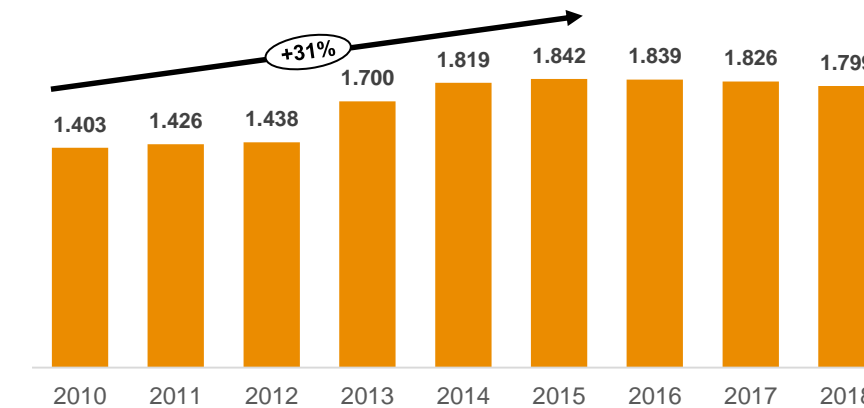
Private expenditure on appliances and durable medical goods (€ mn)



Source: Hellenic Statistical Authority – System of Health accounts

Private expenditure on appliances and durable medical goods has decreased by more than 60% over the period 2010-2018

Private pharma expenditure (€ mn)



Source: Hellenic Statistical Authority – System of Health accounts

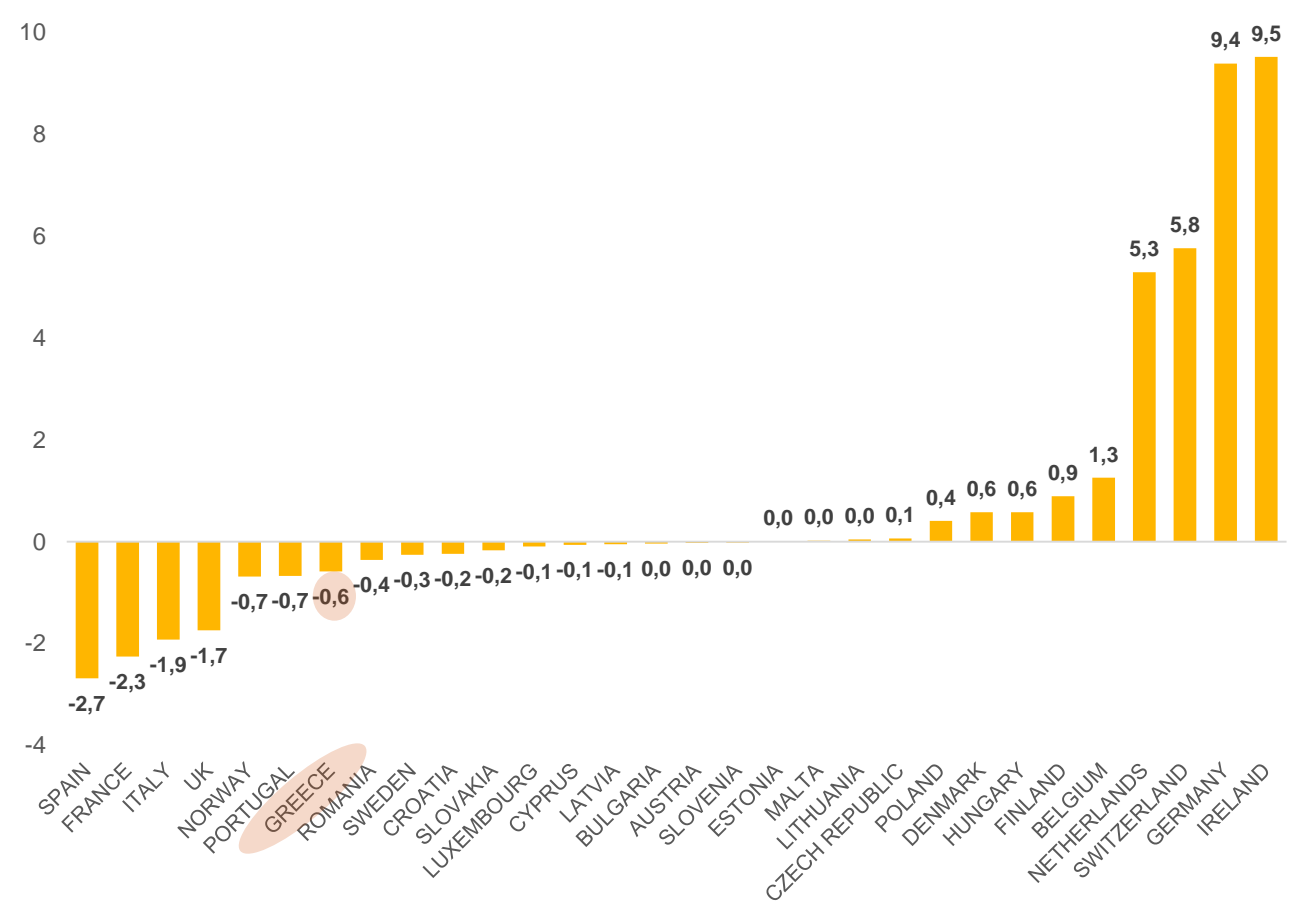
Private pharma expenditure has been increasing between 2012 and 2015 and has remained relatively stable since then, with small variances

10. Overview of the Medical Devices sector (1/3)

Figures in Europe

! Medical devices sector in Greece – Key message
 The Medical Devices sector is a profitable sector of the Greek market, but faces payment terms with long maturity and long outstanding receivables. **BFF aims to support pertinent liquidity needs through a wide range of services.**

Medical Devices trade balance in Europe (in € bn, as of 2018)



Source: Medtech Europe, The European Medical Technology Industry in figures 2020

Definition

- The Medical Devices sector refers to the production and the sale of items used in the diagnosis, prevention, monitoring and treatment of human beings
- The products of this sector may be of one use or durable goods

Medical devices sector in the EU

- According to MedTech Europe, in 2019 the medical technology field had 13.833 patents filed in the European Patent Office
- The European medical technology market is estimated at roughly €120 bn
- Germany has the highest exports of about €26.6 bn, while Ireland has the highest trade balance of approximately €9,5 bn

Medical devices sector in Greece

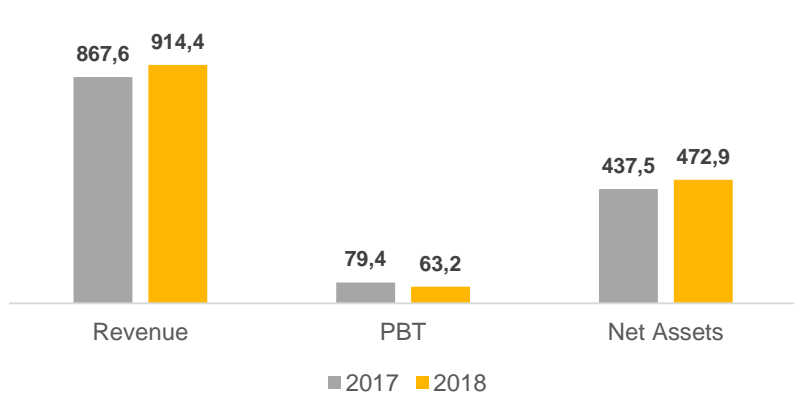
- In Greece, the sector is represented by SEIV (Association of Health – Research and Biotechnology Industry), which is a member of MedTech Europe, a multinational institution representing the industry
- Greece has a negative trade balance of €586 mn, concluding that it is an importer rather than an exporter of medical technology goods

10. Overview of the Medical Devices sector (2/3)

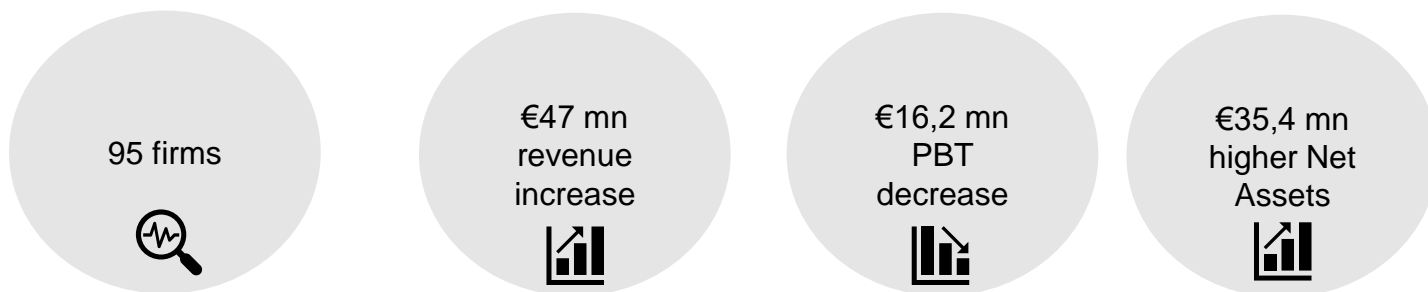
Figures in Greece

The medical devices sector remains a profitable sector with total Profits Before Tax of € 63,2 mn as of 2018

Basic indices of the sector in € mn



Focused statistics based on the sample selected – 2018 vs. 2017

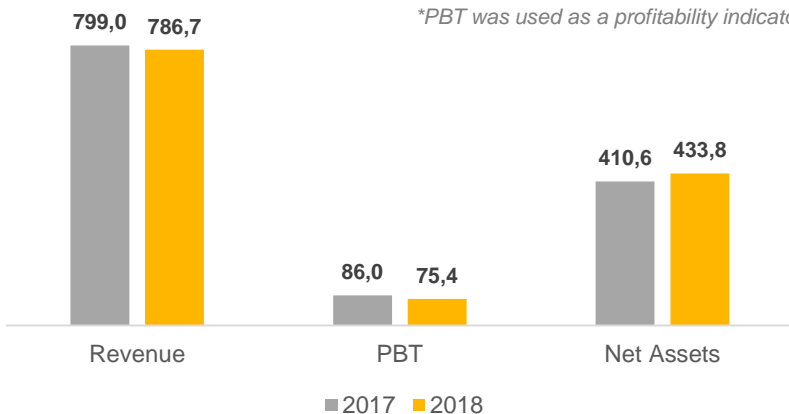


Source: Published financial statements for 2017 & 2018 at G.E.MI. The sample selection was based on the list of SEIV members - 95 S.A. and EPE (Ltd.) legal entities with published financial statements

Note: Entities with highly diversified operations and no distinction of their revenue from the Medical Devices sector were excluded

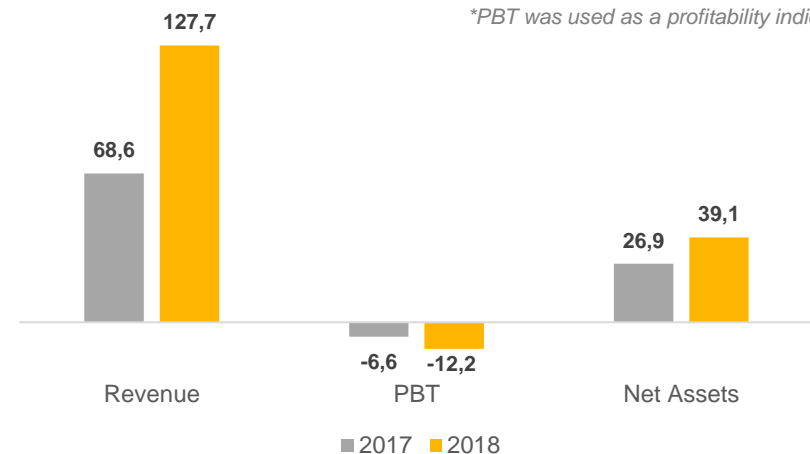
Profitable entities* figures in € mn

*PBT was used as a profitability indicator



Loss makers* results in € mn

*PBT was used as a profitability indicator

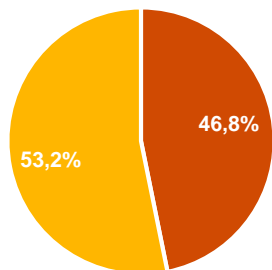


10. Overview of the Medical Devices sector (3/3)

Figures in Greece

Share of revenue

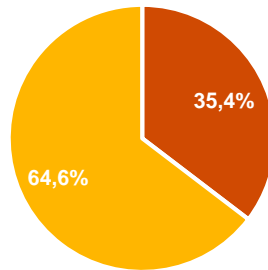
top ten vs the rest of the companies out of 95 in total, data as of 2018



■ Top ten ■ The rest

Share of profits (PBT)

top ten vs the rest of the companies out of 95 in total, data as of 2018



■ Top ten ■ The rest

Net assets (2018)

top ten vs the rest of the companies out of 95 in total, data as of 2018 in € mn

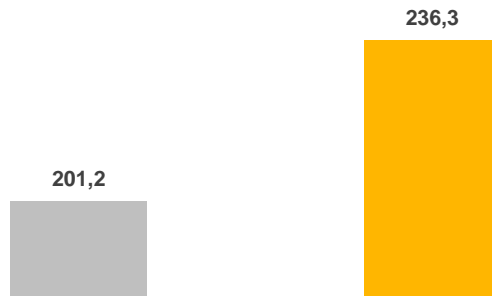


Top ten

The rest

Net assets (2017)

top ten vs the rest of the companies out of 94* in total, data as of 2017 in € mn



Top ten

The rest

*For 2017 no financial results were published for one entity included in the sample

List of top 10 companies in the medical devices sector

- The top ten firms of the sector according to their revenue in 2018 and based on the selected sample are the following:

- 1) MAVROGENNIS ANASTASIOS A.E.
- 2) MEDTRONIC HELLAS A.E.
- 3) SIEMENS HEALTHCARE A.B.E.E.
- 4) ROCHE DIAGNOSTICS HELLAS A.E.
- 5) ENORASIS AE
- 6) GE HEALTHCARE S.A. (former MEDICAL SYSTEMS HELLAS)
- 7) Y-LOGIMED A.E.
- 8) RONTIS HELLAS A.E.B.E
- 9) ARITI A.E.
- 10) MEDICARE HELLAS A.E.

- In comparison with 2017 in the top ten list there are two new additions as Rontis Hellas and Medicare replaced "PROTON A.E." and ALCON LABORATORIES

Source: Published financial statements for 2017 & 2018 at G.E.MI. The sample selection was based on the list of SEIV members - 95 S.A. and EPE (Ltd.) legal entities with published financial statements

Key Messages envisaged throughout the Report

BFF can further support the real economy in Greece and contribute to the overall growth



Adverse macro-environment during the crisis

Greece has been strongly affected due to the recent crisis, having the highest public debt in the EU, while the public spending and investments have diminished. **Liquidity in the system is required for the restart of the real economy and BFF aims to contribute to this direction.**



The banking sector is in gradual recovery

The massive outflow of deposits and the struggle of the Greek lenders to service their debts forced Greek Banks to develop strategies for the NPLs reduction and take actions to improve their profitability. **BFF services are designed to complementarily support the real economy by funding the various business initiatives of both local and multinational companies.**



Pharma industry in Greece

The imposition of claw-back and rebates cut the public health expenditure and caused liquidity issues to the majority of Greek pharmaceutical companies. **BFF targets at smoothing the capital flows and supporting their liquidity needs.**



COVID-19 impact

The heavy impact of the pandemic on the Greek tourism industry is expected to create a deficit, leading to an increase in DSO and in overdue payments on the NHS and the Public Sector. **Cooperation with factoring agents such as BFF is likely to alleviate the relevant effect.**



Gap in the factoring market covered by BFF

The penetration of factoring services in Greece is below the EU average, while there was a gap in the market regarding non-recourse factoring for receivables towards the Public Sector or the NHS. **BFF is currently covering the gap providing non-recourse factoring for receivables towards the above counterparties.**



Medical devices sector in Greece

The Medical Devices sector is a profitable sector of the Greek market, but faces payment terms with long maturity and long outstanding receivables. **BFF aims to support pertinent liquidity needs through a wide range of services.**



Appendix: Methodology & Sector Definition

Appendix (1/2)

- **There is a sample of 2.817 companies** with annual revenues in excess of €10 mn, which have complete data for the period 2009-2016
- **The companies were split into 17 PwC sectors** according to analysis on sectoral definitions provided by ICAP
- The company data were split into two periods: 2008-2009 and 2014-2016 representing the years before the crisis and the exit from it
- **The main hypothesis is that equity value is strongly related to revenue, profitability and the company's capacity to service debt**
- Multiple regression analysis led to strong statistical relations over time and sector
- The operational definition variables are analysed below:

1 **EBITDA**= Earnings before Interest, Tax, Depreciation & Amortisation

2 **Net Debt**= Outstanding Debt - Cash

3 **EBITDA (EBT) Margin**= EBITDA (EBT)/Revenue

4 **EBIT**= Earnings before Interest & Taxes

5 **Capital Employed**= Equity + Debt + Grants

6 **ROCE**= EBIT/Capital Employed

7 **EBT**= Earnings before Tax

8 **ROE**= EBT/Equity

9 **Investment**= $\Delta[\text{Gross Fixed Assets}]_{t-t-1}$

10 **Payables**= Short Term Obligations – (Short Term Debt + Short Term Portion of Long term Debt)

11 **Receivables**= Accounts Receivable

12 **Working Capital**= (Current Assets – Cash) – Payables

13 **Capacity Utilisation**= Revenue/Gross Fixed Assets

14 **DPO** = $\left[\frac{\text{Payables}}{\text{Revenues} - \text{Gross Operating Income}} \right] * 365$

15 **DSO** = $\left[\frac{\text{Receivables}}{\text{Revenues}} \right] * 365$

16 **DIO** = $\left[\frac{\text{Inventories}}{\text{Revenues} - \text{Gross Operating Income}} \right] * 365$

Sectors in scope

- | | |
|--------------------------------|----------------------------------|
| 1. Construction | 10. Other Retail |
| 2. Energy | 11. Pharmaceuticals |
| 3. Entertainment | 12. Professional Services |
| 4. Food & Beverage | 13. Telecoms |
| 5. Fuel Retail | 14. Tourism |
| 6. Health | 15. Transportation |
| 7. Heavy Industry | 16. Logistics |
| 8. Investment Companies | 17. Utilities |
| 9. Light Industry | |

Appendix (2/2)

- The companies were classified in terms of **Growth, Profitability and Debt Sustainability**
- The criteria chosen for the classification were the **Compound Annual Growth Rate of Revenue** (2008-2016), **Return on Capital Employed (ROCE)** and the **Net Debt / EBITDA**

Criteria	Star	Grey	Zombie
CAGR Revenue (2008-2016)	Greater than 5%	Between -5% and 5%	Less than -5%
ROCE	Greater than 15%	Between 0% and 15%	Less than 0% or Capital Employed <0
Net Debt/ EBITDA	Less than 1.5 or Net Debt <0	Between 1.5 and 5	Greater than 5 or EBITDA <0

- By combining the three financial variables **27 different classes** of companies were created
- According to the ranking against each of the criteria, the classes formed are combinations such as for example SGZ (Star, Grey, Zombie)
- Classes with similar characteristics were merged into **10 Groups** in order to facilitate statistical analysis & an additional grouping was performed

No	Groups	Classes	Designation	Groupings
1	Group 27	SSS	Stars	Stars
2	Group 18	SSG+SGS+GSS	Almost Stars	Almost Stars
3	Group 12	SGG+GSG+GGS	Aspiring Stars	
4	Group 9	SSZ+SZS+ZSS	Stars with Zombie aspects	Grey
5	Group 8	GGG	Good	
6	Group 6	GSZ+SGZ+ZGS+GZS+SZG+ZSG	Mixed Bags	
7	Group 4	ZGG+GZG+GGZ	Departing Good	Almost Zombies
8	Group 3	ZZS+ZSZ+SZZ	Zombies with Star aspects	
9	Group 2	ZZG+ZGZ+GZZ	Almost Zombies	Zombies
10	Group 1	ZZZ	Zombies	

Disclaimers

- This Report was developed in accordance with our engagement letter dated 10/06/2020 and is subject to the terms and conditions included therein.
- Our work was limited to publicly available information at the time we prepared the report. Accordingly, changes in circumstances after the date of this Report could affect the findings outlined herein.
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