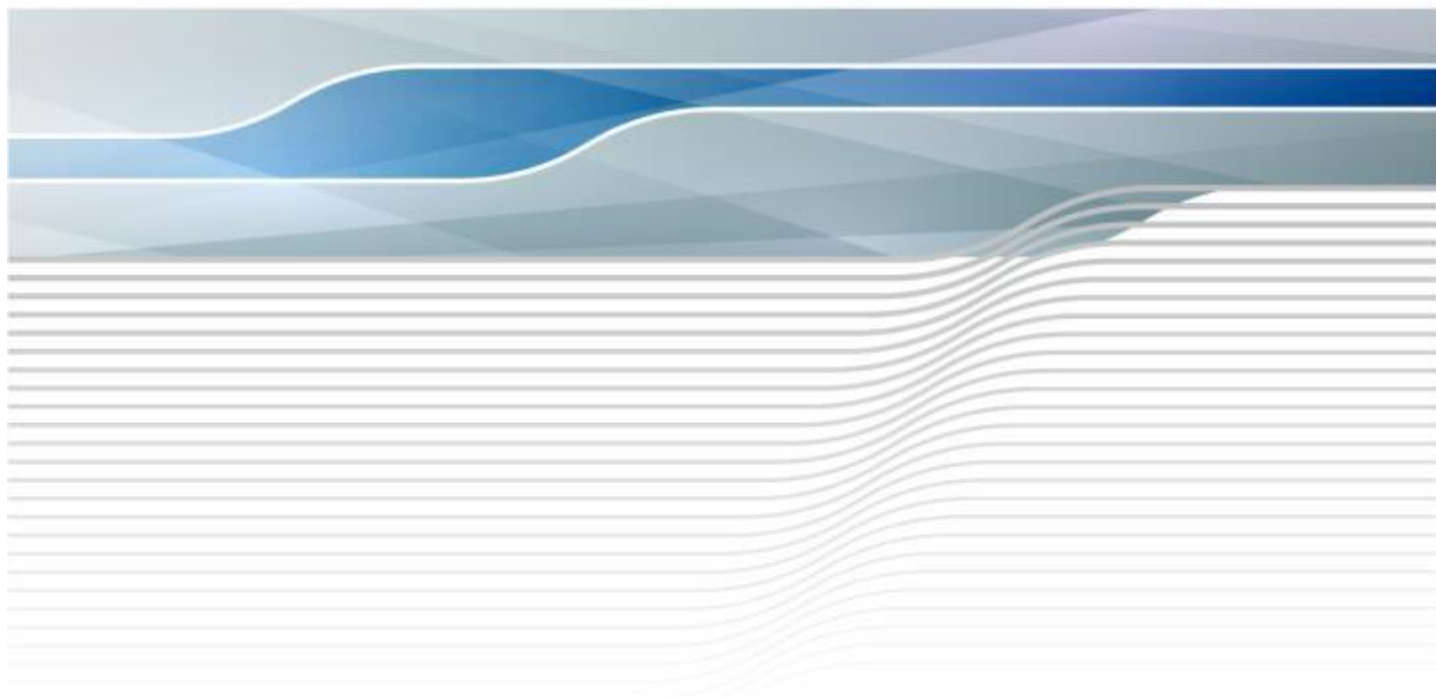


# 2017

## Annual Report

Hellenic Exchanges  
Athens Stock Exchange S.A.  
(ATHEX)



**ATHEXGROUP**  
Athens Exchange Group



## Athens Exchange Group: Performance at a glance

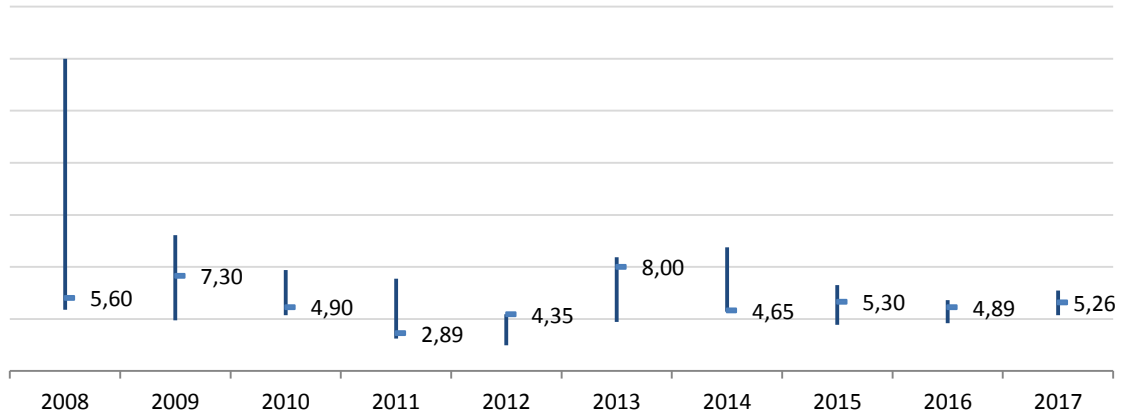
*(International Accounting Standards, amounts in €m unless otherwise noted)*

		2017	2016	Δ %
<b>Consolidated Statement of Comprehensive Income</b>				
Turnover		27,412	26,706	3%
Less: Hellenic Capital Market Commission fee		-1,063	-1,088	-2%
Total revenue		26,349	25,618	3%
Total expenses		18,366	17,598	4%
Earnings Before Interest, Taxes, Depreciation & Amortization (EBITDA)		7,983	8,020	0%
Depreciation		-3,060	-2,881	6%
Operating Result (EBIT)		4,923	5,139	-4%
Financial income / (expenses)		0,155	-1,773	-
Earnings Before Tax (EBT)		5,078	3,366	51%
Income Tax		-2,002	-1,937	3%
Earnings After Taxes (EAT)		3,076	1,429	115%
<b>Consolidated Statement of Financial Position</b>				
Cash & cash equivalents		85,851	100,017	-14%
Third party assets in ATHEX Group bank accounts		157,598	206,080	-24%
Other current assets		15,301	21,329	-28%
Non-current assets		31,649	32,194	-2%
Total assets		290,399	359,62	-19%
Third party assets in ATHEX Group bank accounts		157,598	206,080	-24%
Short-term liabilities		8,639	7,714	12%
Long-term liabilities		5,168	5,134	1%
Total equity		118,994	140,692	-15%
Total Liabilities & Stockholders' Equity		290,399	359,62	-19%
<b>Performance Indicators</b>				
EBITDA Margin	%	29,1%	30,0%	-3%
EBIT Margin	%	18,0%	19,2%	-7%
Net profit margin	%	11,2%	5,4%	110%
Return on Equity (ROE)	%	2,6%	1,0%	155%
<b>Market data</b>				
<b>ATHEX (Cash Market)</b>				
Traded value	€ bn.	14,8	15,1	-2%
Average daily trade value		58,8	60,5	-3%
Traded volume (shares)	bn.	18,2	24,0	-24%
Number of trades	m	4,4	4,7	-7%
Raised capital	€ bn.	0,9	0,2	387%
ATHEX capitalization (year end)	€ bn.	54,2	45,2	20%
ATHEX capitalization (yearly average)	€ bn.	50,2	41,3	22%
Turnover velocity (value traded ÷ average capitalization)	%	29,4%	36,5%	
<b>ATHEX (Derivatives Market)</b>				
Trade volume (contracts)	m	19,8	15,8	25%
Average revenue per contract	€	0,907	0,105	764%
<b>EXAE share</b>				
Start-of-year price (last close of the previous year)	€	4,89	5,30	-8%
Year maximum	€	6,18	5,45	13%
Year minimum	€	4,28	3,68	16%
Closing price (December 31st)	€	5,26	4,89	8%
Profit per share	€	0,04	0,03	27%
Ordinary dividend paid out (before withholding tax, year paid)	€	0,050208	0,0650	-23%
Ordinary dividend (after dividend withholding tax) paid out	€	0,0426768	0,05524	-23%
Special dividend (Share capital return) paid out (year paid)	€	0,150624	0,2600	-42%

2016 amounts which have been adjusted are shaded.

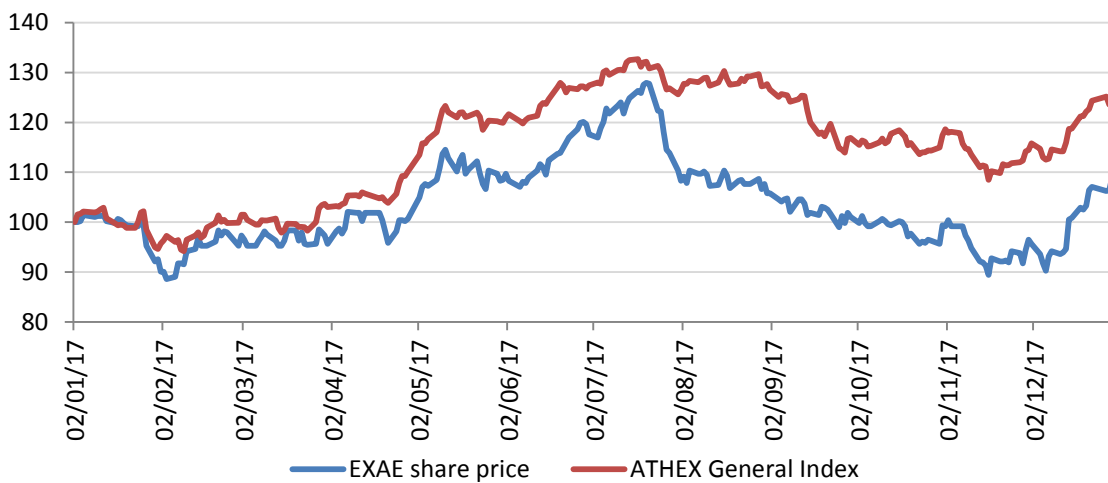
Detailed financial information is available in [Appendix I](#).

## EXAE - Share price performance

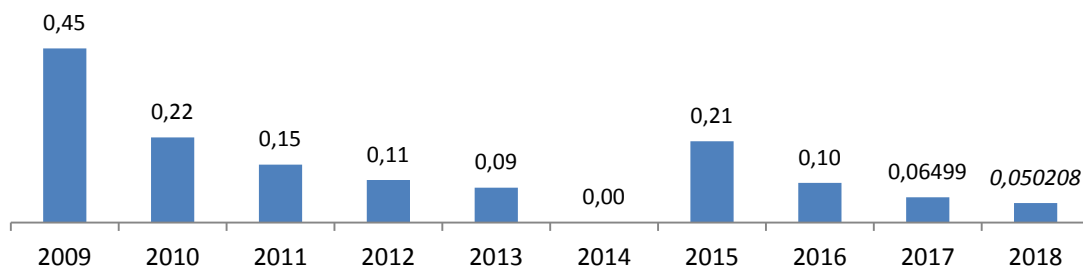


The vertical bars depict the price fluctuation of EXAE shares. The price shown is the closing price at the end of each year.

## Comparative performance - EXAE share price & ATHEX General Index (1.1.2017 = 100)



## Ordinary dividend per share (year paid, in € before taxes)



See [chapter 6.5 - Dividend policy](#) for more information.

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Message of the  
Chief Executive Officer



**ATHEXGROUP**  
*Athens Exchange Group*

## Message of the Chief Executive Officer

Dear Shareholders,



2017 was a transition year, both for the economy, as well as for the market and the Group.

In the economy, the task at hand is the return to sustainable development, the continuation of which will be determined by three interconnected factors: improvement in trust which will come as a result of the implementation of the structural changes that have been agreed and legislated, smooth return to the markets, and the level of fiscal discipline that will be adopted following the end of the program in the summer of 2018.

This gradual normalization is confirmed mainly by the course of the borrowing rates, which slowly but steadily are dropping, gradually strengthening faith in the foreign institutional community that Greece is returning to normality.

In our market, this normalization is evidenced by the significant increase in share prices and the reduction in the volatility of bank share prices, the increase in the participation of Greek investors in the trading activity of our market, and the increased interest in corporate bond issuances.

Across the world in 2017 emerging markets posted gains (+34.4%) higher than those of developed markets, while in Europe the emerging markets posted gains (+16.5%) below those of developed markets (+22.1%), with the performance of the Athens Exchange General Index (+24.7%) being closer to that of the developed European markets.

Despite the positive performance in share prices worldwide, as reflected by the increase in the capitalization of listed companies (+17.9%), and of the listed corporate bonds (+44.2%), the drop in the total traded value continued (-4.7%).

In Europe, we have on the one hand the increase, for the 7<sup>th</sup> consecutive year, of the market capitalization to GDP index, which approached in 2017 the highs of 2007, while on the other we observe a gradual reduction in turnover velocity (total traded value over average capitalization), to decade lows, which seems to indicate a structural change in the frequency with which shares change hands, which in turn may be attributed to reduced investor interest and increases surveillance of HFT (High Frequency Trading) activity.

At the Greek Exchange, in 2017, the total value traded (€14.8bn) was slightly lower (-2%) compared to 2016 (€15.1bn). The average daily traded value was €58.8m vs. €60.5m in 2016, reduced by 2.8%. The value of off-exchange transfers dropped by 18.5% in 2017 (€5.9bn) compared to 2016 (€7.3bn).

In the derivatives market, the 7.6% drop in the average revenue per contract, to €0.097 in 2017 compared to €0.105 in 2016, which is due mainly to the drop in bank share prices in the underlying market, offset the 24.1% increase in the average daily trading activity (78.7 thousand contracts) compared to 2016 (63.5 thousand contracts).



The average capitalization of the market was €50.2bn, increased by 22.7% compared to 2016 (€41.3bn). It is however notable that the performance of the banking sector continued to diverge from that of the rest of the market. In particular, the market capitalization of the banks dropped by 3.2%, while the capitalization of the rest of the market increased by 29.3%.

Activity in the primary market – new stock and bond listings - despite being significantly better in 2017 when €900m was raised compared to €200m in 2016, continues to remain low. In particular, in 2017 we had 2 company listings and 5 bond issues, with the bond market gradually forming the requisite depth and liquidity.

At the same time, the effort to differentiate our revenue streams continues, with the development of collocation services, the LEI (Legal Entity Identifier) code issuance service, and the hosting of General Meetings by listed companies on the Group's premises.

At the organizational level, 2017 was the year that saw the completion of major changes in our systems and the regulatory framework that governs the operation of our markets in order to comply with the MiFID II regulation that went into effect on 3 January 2018. These preparations also lead to the further development of new, so-called ancillary, services, that will contribute revenue in 2018, such as the ARM (Approved Reporting Mechanism) and APA (Approved Publication Arrangement) notification services. In 2018 we will also start providing support services to the Energy Market, in which the Group also holds a minority stake.

This low level of market activity – despite being better than the previous year – resulted in a slight increase in the revenues of the Group compared to 2016, which was the year with the lowest turnover since 2000, the year the parent company was founded and listed on the Exchange. The continuous commitment over the years to cost containment made fiscal year 2017– the 14<sup>th</sup> straight year - profitable, while at the same time ensuring continuous improvements in infrastructure, full adoption of European regulatory changes and significant reductions in the Group's fees, which today are on average less than 2/5 compared to 2000.

Our financial position remains strong – the cash and cash equivalents of the Group at the end of 2017 amounted to €86m and the Group is debt free. As a result, management is in a position – for the 15<sup>th</sup> straight year – to propose a combination of dividend and capital return which together with the formal completion of the share buyback program through the cancellation of the remaining treasury stock in the possession of the Company (251,000 shares), will improve the return on equity by releasing assets to shareholders. Based on the closing price at the end of 2017 (€5.26), the total proposed dividend yield, including the capital return, amounts to 3.8%.

Internationally there is a clear central focus in the direction of using capital markets as a capital raising mechanism in order to address the need for business financing following the restrictions imposed on the banking system following the credit crisis of 2008 known as banking deleveraging.

In Europe this choice is expressed by accelerating the adoption of initiatives on forming a “Capital Markets Union.” The main practical issue not only for the European – and other -markets is that it consists mainly of Small and Mid-sized Enterprises which do not have the required familiarity with capital markets, but also because of size hold limited attraction to the international investment community. Solutions to this problem are being sought, while at the same time the European Union is gradually moving to modernize the rules for allocating structural funds by increasing the use of financial instruments; all this in order to mobilize private capital to participate.

The Athens Exchange contributes to the solution of the problem of SME financing, continued in 2017 to invite Greek businesses that are extroverted, and of interest to investors, in order to inform them about the financing tools that it can provide to them.

The significant advantage of the Greek capital market is its extroversion and the excellent network providing access to the international investment community. At the end of 2017 international investors held 63.5% of the capitalization of the market – a record high in the history of the Exchange and a strong

sign of trust in our market and Greek enterprises - and carried out 56.3% of transactions, with their participation in our market increasing over the past three years.

With the development of investment banking and the mobilization of the Greek capital market ecosystem, which has in the past acquired know how and experience of the highest level in complex products and services, the Greek capital market can and must take advantage of European initiatives. It is imperative that it act as an effective capital raising mechanism, both for the privatizations that will take place, as well as in the distribution of Greek and foreign capital to private companies in developing sectors of the economy.

Dear Shareholders,

The mission of the Group is to provide its core and ancillary services competitively and with a high degree of reliability in the capital market that it operates and/or supports, in a manner that adds value both in the process of raising capital by businesses, as well as in the mechanism for managing capital for investments. We implement this mission by improving and adjusting the environment in which our infrastructure operates, by improving and expanding the products and services that we offer, and by improving our presence abroad.

2017 was a year of recovery, both for the market, as well as in the financial performance of the Group, and we have every reason to be optimistic about our performance in 2018.

The stabilization and improvement of the investment climate will spread to the Greek capital market, increasingly demonstrating its potential to be the place where the providers and users of liquidity congregate.

In addition, the challenges that concern the start of operation of the energy market in 2019 in accordance with the EU target model, as well as the structural changes that will be brought about by MiFID II in 2018 and CSDR in 2019 will find the Group ready to take advantage of its infrastructure.

Socrates Lazaridis  
Chief Executive Officer



# 01 |

The Athens Exchange Group

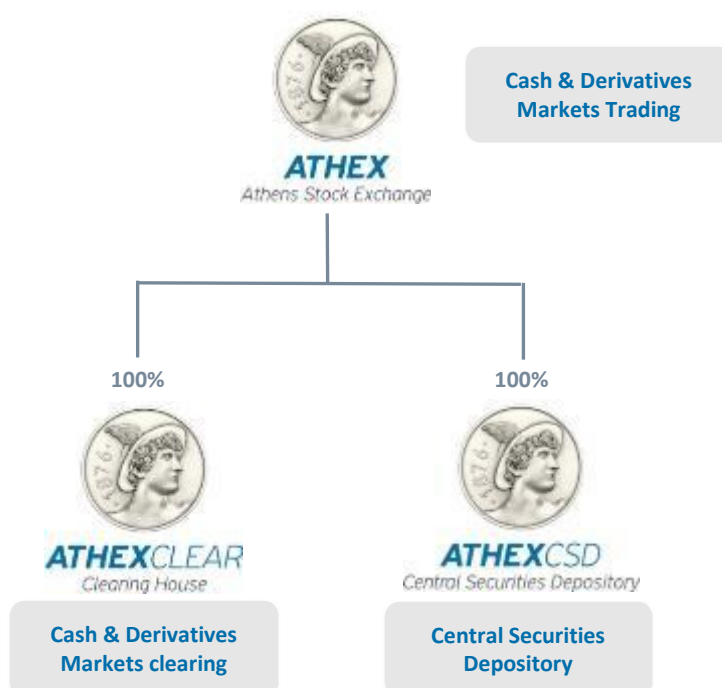


**ATHEXGROUP**  
Athens Exchange Group

## 1. The Athens Exchange Group

HELLENIC EXCHANGES - ATHENS STOCK EXCHANGE (ATHEX) is the parent company of the Group that supports the operation of the Greek capital market. The parent company and its subsidiaries operate the organized cash and derivatives markets, carry out trade clearing, settlement and registration of securities, provide comprehensive IT solutions to the Greek capital market and promote the development of capital markets culture in Greece.





The Company was founded in 2000, and its privatization was completed in 2003. The Company's shares are listed on the Athens Stock Exchange since August 2000. Following a series of corporate transformations, the Group obtained its current structure in 2013.



Name	HELLENIC EXCHANGES – ATHENS STOCK EXCHANGE SA		
Trade name	ATHENS STOCK EXCHANGE		
General Electronic Commercial Registry (GEMI)	3719101000 (former Co Register No 45688/06/B/00/30)		
Founded	2000 (Government Gazette 2424/31.3.2000)		
Duration	200 years		
Headquarters	110 Athinon Ave., 10442 Athens Greece - Tel: +30 210 336 6800		
Website	<a href="http://www.athexgroup.gr">www.athexgroup.gr</a>		
Listed (at ATHEX)	21.8.2000		
LEI	549300GSRN07MNENPL97		
ISIN	GRS395363005	FISN	ATHEX/REG SHS
CFI	ESVUFR		
OASIS	EXAE		
Bloomberg	EXAE GA	Reuters	EXCr.AT

## LEI, ISIN, FISN, CFI – what are they used for?

In an increasingly globalized financial environment, and with the gradual convergence of capital markets in the European Union, it has become imperative to be able to accurately identify market participants: issuers of securities, financial products such as stocks, bonds and derivatives etc. To facilitate market participants, the use of a number identifying standards has become mandatory.

<p><b>LEI</b> Legal Entity Identifier</p> 	<p>The Global Legal Entity Identifier (LEI) System is designed to uniquely and unambiguously identify participants in financial transactions (such as listed companies, brokerage companies et al).</p> <p>Starting on 3 January 2018, every legal person that participates in capital markets must have a LEI.</p> <p>LEI of the parent Company of the Group - listed on the Athens Exchange - HELLENIC EXCHANGES – ATHENS STOCK EXCHANGE SA: <b>549300GSRN07MNENPL97</b></p> <p>For more information <a href="http://www.gleif.org/en">www.gleif.org/en</a></p>
<p><b>ISIN</b> International Securities Identification Number</p> 	<p>ISIN (ISO 6166) is the recognized global standard for unique identification of financial instruments.</p> <p>ISIN (EXAE share): <b>GRS395363005</b></p> <p>For more information: <a href="http://www.isin.org/isin/">www.isin.org/isin/</a></p>
<p><b>FISN</b> Financial Instrument Short Name</p> 	<p>FISN (ISO 18774) aims to standardize the short names of the issuers of securities, as well as the securities issued.</p> <p>FISN is not meant to be machine-readable, but to provide a short format for essential information about a security for human use.</p> <p>FISN (EXAE share): <b>ATHEX/REG SHS</b></p> <p>For more information: <a href="http://www.anna-web.org/standards/fisn-iso-18774/">www.anna-web.org/standards/fisn-iso-18774/</a></p>
<p><b>CFI</b> Classification of Financial Instruments</p> 	<p>CFI (ISO 10962) aims to standardize the classification of financial instruments in succinct form.</p> <p>Starting on 1 July 2017, ISIN, FISN and CFI are assigned together to all new financial instruments.</p> <p>CFI (EXAE share): <b>ESVUFR</b></p> <p>For more information: <a href="http://www.anna-web.org/standards/cfi-iso-10962/">www.anna-web.org/standards/cfi-iso-10962/</a></p>

For more information - [www.athexgroup.gr/web/guest/isin](http://www.athexgroup.gr/web/guest/isin)

## Overview

### 1 Listing

In order to grow, dynamic companies of all sizes chose capital markets to raise capital. The Athens Exchange supports and facilitates the process of issuing stocks and bonds for financing companies using the tools that it develops, ensuring the tradability of the securities issued under internationally standardized rules.

### 2 Trading

The Athens Exchange operates the infrastructure necessary so that the organized markets for stocks, bonds and derivatives – on other securities or indices (such as stocks, exchange indices et al.) – ensure the level of transparency and effectiveness legislated in Europe. The Athens Exchange also operates the Alternative Market (EN.A) for smaller, dynamic companies.

### 3 Clearing

Clearing is the process followed that ensures that transactions entered into will be concluded with their settlement by covering counterparty risk. The Clearing House of the Group, ATHEXClear, provides the clearing platform and operates as central counterparty (CCP): as buyer to sellers, and seller to buyers, in order to minimize counterparty risk.

### 4 Settlement

Settlement is the process of exchanging securities and cash between buyers and sellers in order to conclude the transactions they have entered into. The recording of the various credit and debit entries into the investor accounts on the Dematerialized Securities System (DSS) by licensed Investment Services Firms and banks (DSS Operators) takes place at this stage. The ATHEXCSD subsidiary provides the relevant service following international rules and practices.




**5 Registry**  
After settlement is completed, securities are safely kept by DSS Operators in the investor accounts at DSS, where companies with listed securities (issuers) can find the owners of the securities, and owners of securities can find their portfolios. The ATHEXCSD subsidiary provides issuers with securities services for managing corporate actions (such as rights issues et al.) and payment distributions (such as dividends and interest).

**6 Market data**  
Private and professional investors make investment decisions based on market information and data. The Athens Exchange provides information on the cash, bond and derivatives market, such as real-time data, historical data, index information et al.

**7 Indices**  
In collaboration with FTSE, the Athens Exchange maintains and provides indices that track the Greek capital market and sectors; it also maintains and provides the General Index with similar rules. Indices in turn are an underlying security in other traded products such as ETFs and derivatives (futures & options).

**8 Technology**  
Information Technology systems and infrastructure are the foundations of the Group for all of the services it provides. The Group develops and supports trading, clearing, settlement and registry systems as well as the necessary network infrastructure, with a high degree of availability, and also provides the infrastructure for auxiliary services to Investment Services Firms and banks such as collocation.

## The Companies of the Group

Company	Activity
 <p><b>Hellenic Exchanges – Athens Stock Exchange SA (ATHEX)</b></p>	<p>Participation in companies and business of any legal form having activities related to the support and operation of organized capital markets, as well as the development of activities and provision of services related to the support and operation of organized capital markets, in companies that it participates and in third parties that participate in organized capital market or that support their operation.</p> <p>Organization and support of the operation of a cash market, a derivatives market, as well as other financial means (including any type of product with any kind of reference values) in Greece and abroad.</p> <p><b>LEI: 549300GSRN07MNENPL97</b></p>
 <p><b>Athens Exchange Clearing House S.A. (ATHEXClear)</b></p>	<p>Management of clearing systems and / or central counterparty, as well as comparable mechanisms with similar characteristics and / or a combination of these systems in order to carry out, in Greece and/or abroad, the activities of finalizing or reconciling or settling the finalization of transactions in financial instruments and in general the operation as a System administrator in accordance with the provisions of article 72 of Law 3606/2007 (Government Gazette A/195/17.8.2007), as it applies.</p> <p><b>LEI: 213800IW53U9JMJ4QR40</b></p>
 <p><b>Hellenic Central Securities Depository S.A. (ATHEXCSD)</b></p> <p><i>Former Thessaloniki Stock Exchange Centre S.A. (TSEC)</i></p>	<p>Settlement of off-exchange transfers in transferrable securities.</p> <p>Provision of registration and settlement on dematerialized securities, listed and non-listed on the Athens Exchange or on other exchanges or other organized cash markets.</p> <p>Provision of services concerning: distribution of dividends, interest payment, distribution of securities, intermediation in the transfer of options or stock options without consideration and carrying out any activity related to the above.</p> <p>Development, management and exploitation of the IT and operating system for registering dematerialized securities</p> <p>Carrying out commercial activities to promote and provide IT services and use / broadcast Market Data from Greece and abroad as a Data Vendor, as well as in general the promotion, distribution, support, monitoring, operation and commercial exploitation of products, systems and customized software applications based on corresponding licenses to resell and commercially exploit by the Company.</p> <p><b>LEI: 213800T8UR2VI6Q2RH18</b></p>



## Group company memberships in international professional associations



The websites of these organizations can be found in Chapter [9 For more information](#).

## Certifications

### Designated Offshore Securities Market – DOSM

On 15 July 2016 the SEC, the supervisory authority of the U.S. capital markets, recognized ATHEX as a "Designated Offshore Securities Market (DOSM)", joining a number of leading international exchanges which have already been designated as such. As a result of this designation, all kinds of securities issued in Greece and listed and traded on the Athens Stock Exchange may now be resold, without requiring the seller to form a prior reasonable belief that the buyer is outside of the United States.

### Business Continuity ISO22301:2012

The Athens Exchange has developed a comprehensive **Business Continuity Management Framework**, which is a mechanism for organizing all procedures to ensure the continuity of critical business operations of the Group in case of a catastrophic event or events which could result in a prolonged interruption of its normal operation.



## Brief History: the early years

### 1876

The Athens Stock Exchange (ASE) is founded as a self-regulated public organization. The first securities traded were Greek government bonds and the shares of the National Bank of Greece.

### 1918

ASE is transformed into a public entity.

### 1988

Law 1806/1988 sets the ground rules so that ASE can compete with other European Exchanges, by introducing new concepts in the operation and supervision of the Exchange.

### 1991

The first electronic trading system (ASIS) is put into operation at ASE, abolishing the open-outcry method.

In February 1991, the Central Securities Depository (CSD, now ATHEXCSD) is founded (law 1892/1990).

The Hellenic Capital Market Committee is founded (law 1969/1991).

### 1995

ASE is transformed into a *societe anonyme* (law 2324/1995), with the Greek State as the sole shareholder.

The Thessaloniki Stock Exchange Centre (TSEC) and Systems Development and Support House of the Capital Market (ASYK) are founded.

### 1997

The Greek state, through a private placement, sells 39.67% of the ASE share capital, while in 1998, through a second private placement, sells approximately 12% of the share capital to selected investors. In 1999 the State's stake is further reduced to 47.7%.

### 1999

The Athens Derivatives Exchange (ADEX) and the Athens Derivatives Exchange Clearing House (ADECH) begin operations, and in August 1999 the first derivative products are traded.

The share dematerialization project begins – the paper depository receipts are gradually replaced by electronic book entries in the Dematerialized Securities System (DSS). In November the OASIS electronic trading system is put into operation, replacing ASIS.

## Brief History: 2000 – 2009

### Mar. 2000

---

Hellenic Exchanges (HELEX) is founded as a holding company.

### 21 Aug. 2000

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HELEX shares are listed on the Athens Stock Exchange.

### Apr. 2001

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The ASE trading floor at 10 Sofokleous Street is closed.

### Sep. 2002

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The merger of the Athens Stock Exchange and the Athens Derivatives Exchange, both HELEX subsidiaries, is completed. The name of the new entity is “Athens Exchange” (ATHEX).

### June 2003

---

The Greek state, as part of the privatization program, sells the remaining HELEX shares it held to 7 banks. ATHEX transfers its remaining regulatory responsibilities to the Hellenic Capital Market Commission.

### Feb. 2004

---

HELEX purchases minority stakes in its subsidiaries CSD and ADECH, taking its participation to 100%.

### Mar. 2005

---

The merger with its subsidiary Systems Development and Support House of the Capital Market (ASYK) is completed.

### 30 Oct. 2006

---

The Common trading and clearing Platform between ATHEX and the Cyprus Stock Exchange is put into operation. With this cooperation, the two markets are connected and investors gain access to both markets.

### Nov. 2006

---

The merger of HELEX with its subsidiaries CSD and ADECH is completed. The name of the new company is changed to “Hellenic Exchanges S.A. Holding, Clearing, Settlement and Registry.”

## July 2007

The relocation of the departments of the Group to the new privately owned building at 110 Athinon Ave. begins. In December 2007 the historic building at 10 Sofokleous St. closes its doors for the last time as an exchange.

## Jan. 2008

The first ETF (Exchange Traded Fund), the ALPHA ETF FTSE ATHEX 20 starts trading in the Greek market.

## Feb. 2008

The operation of the Alternative Market (ENA) begins.

## Jun. 2008

Mr. Spyros Capralos, Chairman of Athens Exchange and CEO of HELEX, was elected President of the Federation of the Federation of European Securities Exchanges (FESE).

## 2 Sep. 2009

The HELEX Group was the victim of an attack by a local terrorist group, using an explosive device which was placed in a trapped vehicle in a side street of the building. The bomb blast caused extensive material damage to the building at Athinon Avenue. Despite the almost complete destruction of half of the building, the exchange operated as usual from the first day of the attack. The renovation of the building to its original state was completed in January 2010.



## Brief History: 2010 – today

### 15 July 2010

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HELEX completed the spin-off of its clearing business, which was contributed to “Athens Exchange Clearing House” (ATHEXClear), a 100% HELEX subsidiary. On the **27th of September 2010**, the restructuring of the post-trading services of the Group is completed, ATHEXClear becomes an “Investors CSD”, and the capital market begins operating under the new model.

### 16 March 2011

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The **XNET network** went into operation. XNET was designed and implemented by the Group, with the main aim to enable Exchange members and investment services firms to enrich their services providing access to international markets. Post-trading services are provided by ATHEXClear and HELEX (now ATHEXCSD) as DSS Administrator.

### 30 June 2011

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The first regular auction of 1.1m **European Union Allowances** took place through ATHEX’s OASIS trading system.

### July 2012

---

The **Hellenic Corporate Governance Council (HCGC)** began operations. The HCGC is the result of the collaboration between HELEX and SEV (Hellenic Federation of Enterprises), having the common vision and mission to constantly improve the corporate legal framework and the competitiveness of Greek enterprises and the reliability of the Greek market.

### First Half 2013

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The recapitalization of the Greek banks was completed. The capital that was raised as part of the recapitalization of the four Greek systemic banks (Alpha Bank, National Bank of Greece, Piraeus Bank, Eurobank Ergasias) amounted to €28.6bn, out of which €3.1bn was provided by the private sector and €25.5bn was provided by the Hellenic Financial Stability Fund (HFSF).

*More information on the rights issues by the Greek Banks from 2013 to 2015 in [5.1.5 Capital raised](#).*

At the same time as the new shares that arose from the abovementioned rights issues, a new financial product – **warrants** – was listed for trading at Athens Exchange.

## 19 Dec. 2013

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The restructuring of the Group was completed. With the restructuring – merger of the parent company HELEX with its 100% subsidiary Athens Exchange (ATHEX), and the concurrent spin-off of the Central Securities Depository business from HELEX to its 100% subsidiary TSEC (renamed Hellenic Central Securities Depository – ATHEXCSD), the structure of the Group is aligned with the requirements of the European Regulations (EMIR, CSDR); in addition, liquidity is transferred to the parent company. The parent company is renamed “Hellenic Exchanges-Athens Stock Exchange”, with the trade name “Athens Stock Exchange.”

## First Half 2014

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The second round of rights issues by the four systemic banks (Alpha Bank, National Bank of Greece, Piraeus Bank, Eurobank Ergasias) was completed, in order to further improve the capital base. The rights issues were subscribed by the private sector and amounted to €8.3bn, out of which €7.85bn came from abroad.

## 6 Oct. 2014

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The settlement of transactions cycle for all listed securities traded in the Organized cash market and the Alternative Market, moved to T+2 (completion of settlement within two working days following the trade), from T+3 that was in effect up to then. The change in the settlement cycle was an adjustment to the new European Regulation for Central Depositories (Central Securities Depository Regulation – CSDR), which among other has as its aim to harmonize settlement cycles across the European Union.

## 1 Dec. 2014

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Derivatives trading migrated to the OASIS cash trading system, following the necessary upgrades. On the same date, the upgraded clearing and risk management systems also went into production, completing the adjustment of the derivatives market to the new EMIR Regulation (European Market Infrastructure Regulation).

## 22 Jan 2015

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The Hellenic Capital Market Commission (HCMC) licensed ATHEXClear as a Qualified Central Counterparty (QCCP) in accordance with Regulation (EU) 648/2012 (EMIR).

## 29 Jun – 31 Jul 2015

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For the last two working days of June and the whole of July, the Exchange remains closed as a result of the bank holiday and the imposition of capital controls. Even though the Exchange reopened on 3.8.2015, restrictions on stock purchases for Greek investors remained in effect until 9 Dec 2015, negatively affecting trading activity.

## Dec 2015

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The third round of capital increases by the four systemic Banks (Alpha bank, National Bank of Greece, Piraeus Bank and Eurobank-Ergasias) was completed, increasing their capital base. The capital - raised exclusively from the private sector - amounted to €9.4bn.

## Jul 2016

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Relaunch of the corporate bond market, with two issues – the first bond traded in the Alternative Market (EN.A), by MIs Multimedia (19 Jul), and the listing of the bond issued by Housemarket, a subsidiary of the Fourlis, an ATHEX listed company (6 Oct).

*Read more about the bond market and the new listings in 2017 in [chapter 4](#).*

## Feb / Sep 2017

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On 15.2 the Group signed a Memorandum of Understanding with the “Operator of Electricity Market” (LAGIE), with the aim of organizing and operating an energy market in Greece, while on 14.9 a corresponding MoU was signed with the “Hellenic Gas Transmission System Operator” to develop a natural gas market.

*Read more in [chapter 3](#)*



## Aug. 2017

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Reaffirming the high quality of its services, the Athens Stock Exchange successfully carried out its recertification in line with the International Business Continuity Standard ISO22301: 2012.

## Nov 2017

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The Athens Exchange and FTSE Russell celebrated 20 years of successful collaboration in the creation and maintenance of the FTSE/ATHEX indices.

*More on the FTSE/ATHEX indices, and the increased importance of exchange indices in capital markets in [chapter 4](#).*







# 02

## Management Profile



**ATHEXGROUP**  
Athens Exchange Group

## 2. Management profile

### 2.1. Corporate Governance

The term “corporate governance” describes the way companies are managed and controlled. Corporate governance is a network of relations between the management of the company, the Board of Directors, shareholders, and other stakeholders. It comprises the structure through which the goals of the company are approached and set out, key operational risks are identified, the risk management system is organized, and monitoring management’s performance is tracked, as part of the implementation process.

Over the last two decades, Europe has seen a proliferation of corporate governance codes (CGCs). These codes are based on the **voluntary nature of the “comply or explain”** principle, and have by now become the norm for setting governance standards in the European Union, as a number of their provisions have been adopted by the European Commission and most other international forums.

The absence in Greece of a commonly accepted and applied CGC was the motivation for the Hellenic Federation of Enterprises (SEV) to draft the “Corporate Governance Code for listed companies” in March 2011, setting out standards of good practice for Greek companies. The CGC aims to promote the continuous enhancement of the Greek corporate institutional framework and to broader business environment as well as the improvement of the competitiveness of its members and of the Greek economy as a whole.

The **Hellenic Corporate Governance Code** which replaced the Corporate Governance Code in October 2013 is adapted to Greek law and business reality, and has been drafted on the principle of “comply or explain”, thus including issues that go beyond existing laws and regulations.

The Code does not impose obligations, but explains how to adopt best practices, and facilitates corporate governance policy making and practices that correspond to the specific conditions of each company.

The Code is available at <http://www.athexgroup.gr/web/guest/esed-hellenic-cgc>.

#### Corporate governance at the Group

For the management of the Company, proper and responsible corporate governance is a core prerequisite for the creation of value for its shareholders and for safeguarding corporate interests.

The company, being listed on the Athens Exchange, fully complies with the provisions of the law – the provisions of which supersede in any case – on corporate governance for listed companies that are included in laws 2190/1920, 3016/2002, 4449/2017 as well as decision 5/204/14.11.2000 of the BoD of the Hellenic Capital Market Commission.

The Company has adopted a Corporate Governance Code since 2011 and publishes a **Corporate Governance Statement** on an annual basis. The Statement for 2017 includes the following sections:

- **General Meeting – Shareholder rights**
  - Operation of the General Meeting - Authority
  - Shareholder participation in the General Meeting
  - Procedure for participating and voting by proxy
  - Minority shareholder rights
  - Available documents and information
- **Board of Directors**
  - Authority – Responsibilities of the Board of Directors
  - Composition – Term of office of the Board of Directors
  - Election – Replacement of members of the Board of Directors
  - Formation of the Board of Directors in a body
  - Convening the Board of Directors
  - Quorum – Majority – Member representation - Minutes
  - Delegating responsibilities of the Board of Directors to consultants or third parties
  - Obligations of the members of the Board of Directors
  - Remuneration of the Board of Directors – Remuneration policy
  - Assessment of the Board of Directors
  - Other professional commitments of the members of the BoD
- **Committees of the Board of Directors**
  - Audit Committee
  - Nomination and Compensation Committee
  - Strategic Investments Committee
  - Stock Markets Steering Committee
    - Listings & Market Operation Committee
    - Corporate Actions Committee
  - XNET Steering Committee
- **Policy of equal opportunity and diversity**
- **Matters of internal audit and risk management of the Company in relation to the reporting process**
- **Information re items of article 10 of Directive 2004/25/EC**

The full text of the Declaration for each year is included in the corresponding **Annual Financial Report**. All Financial Reports are available on the website of the Group [www.athexgroup.gr/ir](http://www.athexgroup.gr/ir) in the “Reports/Financial Statements” section.

## 2.2. Board of Directors - Composition

In accordance with the Articles of Association, the Company is managed by the Board of Directors which is composed of **thirteen (13) members**, of which two (2) have executive responsibilities and eleven (11) have non-executive responsibilities.

The Board of Directors of the Company was elected by the Annual General Meeting of shareholders on **20.5.2015**. Its term of office is four years, with the term being automatically extended until the Annual General Meeting of the shareholders of the Company which will meet or be convened after the end of its term of office.

### The Athens Exchange Board of Directors

Name	Position	Sex	Participation in BoD Committees		
			Audit	Nom	Invest.
George <b>Handjinicolaou</b>	(1) Chairman, Non-Executive	M		M	
Socrates <b>Lazaridis</b>	Vice Chairman & CEO, Exec.	M			
Alexandros <b>Antonopoulos</b>	Independent Non-Executive	M	M	C	
Konstantinos <b>Vassiliou</b>	Non-Executive	M			
Ioannis <b>Emiris</b>	Non-Executive	M			
Dimitris <b>Karaiskakis</b>	Exec. (Chief Operating Officer)	M			
Sofia <b>Kounenaki – Efraimoglou</b>	Independent Non- Executive	F		M	
Ioannis <b>Kyriakopoulos</b>	Non-Executive	M			C
Adamantini <b>Lazari</b>	Independent Non- Executive	F	M		M
Nikolaos <b>Milonas</b>	Independent Non- Executive	M	C		
Alexios <b>Pilavios</b>	Non-Executive	M			M
Dionysios <b>Christopoulos</b>	Independent Non- Executive	M			
Nikolaos <b>Chrysochoides</b>	Non-Executive	M			

C: Chairman | M: Member

The Committees of the BoD and their roles are described in [chapter 2.5](#).

#### Changes in the composition of the BoD in 2017

- (1) At the meeting of the Board of Directors on 27.12.2017 Mr. George Handjinicolaou replaced Mr. Iakovos Georganas as Chairman, non-executive member.

The biographical statements of the members of the current Board of Directors are presented below, and are also available on the website of the Company ([www.athexgroup.gr](http://www.athexgroup.gr)).

### 2.3. BoD member biographies

#### George Handjinicolaou, Chairman, Non-executive Member



Mr. George Handjinicolaou is Chairman, non-executive member, of the Board of Directors of Athens Stock Exchange (ATHEX). He also serves as Chairman of the Board of Directors of Piraeus Bank, one of the leading financial institutions in Greece.

Mr. Handjinicolaou received his PhD in Finance from the graduate school of business at New York University, where he also earned his MBA, and holds a BS degree from the Law School at the University of Athens, Greece.

His career in the financial services sector spans over 35 years, the vast majority of which was spent at global financial institutions based in London and New York.

Mr. Handjinicolaou held the position of Deputy CEO of the International Swaps and Derivatives Association (ISDA) in London for 6 years (2011-16), where he was also a member of the Board of Directors. Previously and for over 25 years, he held senior management positions in the derivatives and fixed income markets at several global financial institutions including Dresdner Kleinwort Benson, Bank of America, Merrill Lynch and UBS in London and New York, while he started his career at the World Bank in Washington, DC. Mr. Handjinicolaou also has leadership experience in Greece from his roles as CEO of TBANK and as Vice Chairman of the Greek Capital Market Commission.

#### Socrates Lazaridis – Vice Chairman & Chief Executive Officer, executive member



Socrates Lazaridis is Chief Executive Officer of Hellenic Exchanges-Athens Stock Exchange and the subsidiaries Athens Exchange Clearing House and Hellenic Central Securities Depository.

He is also Chairman of the Board of the Stock Markets Steering Committee, member of the Board of the Hellenic Capital Market Commission, Vice Chairman of the Hellenic Corporate Governance Council and Member of the Board of the American - Hellenic Chamber of Commerce.

He joined the Athens Exchange Group in 1994 and held several positions at the Central Securities Depository, the "Systems Development and Support of Capital Market" (ASYK SA) and the Athens Exchange, while he also served as member of the Board at Athens Derivatives Exchange and the Athens Derivatives Exchange Clearing House. He was also member of the Board of the LinkUp Markets and of the Federation of the European Securities Exchanges (FESE).

Born in Athens in 1962, he studied Economics at the Department of Economics in Athens University and continued his studies for an MSc (Econ) at Queen Mary College of London.

### Alexandros Antonopoulos - Independent non-executive member



Mr. Alexandros Antonopoulos was Deputy CEO of Attica Bank. He studied mathematics at Athens University and holds post graduate degrees in Operations Research (MSc) from the London School of Economics and an MBA with a major in finance from Imperial College in London.

He held the post of executive Chairman of the Consignment Deposits & Loans Fund, has held the posts of member of the BoD of Agricultural Bank, CEO in PROODOS INVESTMENTS, DIAS INVESTMENT CO, and has also held, among others, managerial posts and participated as a member in the Boards of Directors of companies at the Probank Group, EFG Eurobank Ergasias, and Ergasias Bank.

### Konstantinos Vassiliou - Non-executive member



Konstantinos Vassiliou is heading Group Corporate and Investment Banking (GCIB) and is a member of the Strategic Planning Committee and the Executive Board of Eurobank. He is responsible for the Corporate Banking Units, Large Corporate & Commercial Banking, as well as for the specialized units of Shipping, Structured Finance, Global Transaction Banking, Eurobank Equities, Investment Banking & Principal Capital Strategies and Loan Syndications & Debt Capital Markets on a group basis. Mr. Vassiliou is also member of the Board of Directors of Eurobank Factors and Eurobank Equities.

Before joining Eurobank in late 2005, Mr. Vassiliou was Country Manager for Greece, Cyprus and the Balkans region at Bank of Tokyo-Mitsubishi, based in London. Having more than 15 years of experience in Corporate & Investment Banking, he has been actively involved in most major debt financings completed in Greece and Southeastern Europe and has led some of the largest and most visible debt restructurings in Greece. Mr. Vassiliou received an MBA from the Boston University Graduate School of Management in 1998 and a B.S. in Business Administration from the Economic University of Athens in 1994. He was born in 1972.

### Ioannis Emiris - Non-executive member



Ioannis Emiris was born in Athens in 1963. He is a graduate of the Athens School of Economic Sciences and Business Administration from the Athens University of Economics and Business and holds an MBA degree from Columbia Business School, as well as a degree of Certified Public Accounting in the United States.

He has worked as a certified public accountant in Price Waterhouse in New York, while from 1991 he has been working in the field of Investment Banking in Alpha Bank. From 2004 till July 2012 he was heading the Investment Banking and Project Finance division of Alpha Bank.

During his career, he has executed significant assignments in the fields of Mergers and Acquisitions, Capital Markets, Corporate and Debt Restructurings and Privatizations, as well as Project Financings for energy, infrastructure and real estate projects in Greece and internationally.

### Dimitris Karaiskakis - Executive member



Mr. Dimitris Karaiskakis was born in 1964 in Patras, and is a graduate of the Department of Computer Engineering and Informatics at the University of Patras.

In 1986 he was employed by the Computer Technology Institute ([www.cti.gr](http://www.cti.gr)) and undertook innovation projects in software development and software architecture in general. He participated as Assistant Project Manager and Technical Manager in the management consultant project to implement the ATHEX business plan in the "Kleisthenis" program (1995-1997), which resulted in the successful execution of international procurements for the modernization of the information infrastructure of ATHEX.

In May 1997 he was hired by the IT company of ATHEX, Systems Development and Support House of Capital Market (ASYK), charged with the coordination of the Greek capital market development projects, with the most important being the implementation of the electronic trading system (OASIS), and the creation of the Derivatives Market. In June 2000 he was promoted to General Manager at the company, and when HELEX was founded, he was a member of the management team of the Group. He was also a member of the Board of Directors of the Athens Derivatives Exchange Clearing House (ADECH), and FORTHe-com.

In April 2005 he assumed the post of Director of Technological Systems and Services of the Group, coordinating and participating in projects, such as the new Data Center of the Group, the development of the ATHEX-CSE Common Platform, and the unbundling of the clearing, settlement and registration services of the HELEX Group.

In January 2011 he assumed the post of Chief Operations Officer, responsible for the central coordination and supervision of all of the operational and product development departments of the Group.

### Sophia Kounenaki - Efraimoglou – Independent non-executive member



Ms. Sophia Kounenaki-Efraimoglou has played an important role in the management of companies in the sectors of Communication, Trade, Industry and Portfolio Management as president and CEO, among which the telecommunication company Vivodi Telecom and Fortius Finance S.A., which she founded.

She is President and Managing Director of Ardittos S.A. At the same time, Ms. Sophia Kounenaki-Efraimoglou is Member of the Board of Directors of the Athens Exchange Group (ATHEX GROUP) and Vice President of the Hellenic Corporate Governance Council, a joint initiative of ATHEX Group and SEV. She is an elected Member of the Board of Directors of the Athens Chamber of Commerce and Industry and responsible for Turkey in the International Relations Department.

She is also Member of the General Council of the Hellenic Federation of Enterprises (SEV) and Vice President of "Technopoli-Acropolis" S.A. (ICT Park). Ms. Sophia Kounenaki-Efraimoglou is Treasurer of the Board of ALBA Business School and Member of the Business Advisory Council of the MBA International Program at the Athens University of Economics and Business. Moreover, she is a Member of the Advisory Board of the Institute on Economic Policy and Public Governance of the American-Hellenic Chamber of Commerce. With genuine interest in Hellenic culture and as Executive Vice President of the Foundation of the Hellenic World and Head of Cultural Center "HELLENIC COSMOS", Ms. Sophia Kounenaki-Efraimoglou plays an important role in the preservation and dissemination of our cultural heritage. She is also Member of the Board at the Peloponnese Folklore Foundation Museum.

She holds Bachelor and Master Degrees in Philosophy, Psychology, Business Administration and Computer Programming and is fluent in English, French and Italian. Ms. Sophia Kounenaki-Efraimoglou is married to Mr. Dimitris L.



Efraimoglou and is the mother of three children.

### **Ioannis Kyriakopoulos - Non-executive member**



Ioannis Kyriakopoulos is the Group Chief Financial Officer of National Bank of Greece (NBG) since September 2015 and a member of the Executive Committee. He is also Vice Chairman of the Board of Directors of NBG Pangaea and member of the Board of Directors of the Hellenic Exchanges-Athens Stock Exchanges SA.

From February 2012 until June 2015 he served in the Hellenic Financial Stability Fund as its Chief Financial and Operating Officer.

Previously he worked at NBG from 1977 until 2012. During his service he was appointed as Deputy General Manager of International Activities from April 2011 to January 2012 and as Deputy Chief Financial Officer from April 2009 until April 2011 while from August 2002 to April 2009, he was Director of the Financial and Management Accounting Division.

He holds a BSc in Mathematics and a BSc in Economics from the University of Athens and an MSc in Statistics and Operational Research from Loughborough University.

### **Adamantini Lazari - Independent non-executive member**



Mrs Dina (Adamantini) Lazari was born in Thessaloniki in 1958. She holds a degree in Economics from the Athens University of Economics & Business, a Master of Science in Industrial Relations and Human Resources Administration from the London School of Economics and a European Master in Multimedia and Audiovisual Business Administration (joint universities degree).

From 1982 to 1986 she served as an advisor at the Prime-Minister's Economic Office.

In 1986, she joined Emporiki Bank of Greece, where she worked at the Human Resources Division and subsequently at the International Division, while between 1985 and 1989 she also held the position of advisor on social policy issues at the Secretariat of the Council of Economic Policy.

From March 1994 until December 2009, she was a management consultant at Emporiki Bank, and from November 1993 until February 1999, she served as an economic advisor at the Prime-Minister's Economic Office.

During the period from 2002 to 2005, she was President and CEO of EVISAK S.A., which is a subsidiary of Emporiki Group and Alpha Bank, while from July 2008 up until she assumed her duties at ATEbank she served as Director and member of the Board of Directors of the Historic Archive of Emporiki Bank.

From November 2001 to March 2004 she served as a member of the BoD of ATEbank.

Mrs Lazari is currently a member of the Board of Directors of ETAO (Economists' Occupational Pension Fund), while she has also served as member on the BoD of various companies, as well as member of various economic affairs committees.



### Nikolaos Milonas - Independent non-executive member



Dr. Nikolaos Milonas is a Professor of Finance at the Department of Economics, at the National and Kapodistrian University of Athens where he serves as Vice Rector of Finance. He holds an M.B.A. degree from Baruch College and a Ph.D. degree in Finance from the City University of New York.

He has taught finance courses at the University of Massachusetts at Amherst, at Baruch College and at ALBA. Over the years, he has developed and administered master's level educational programs for executives in various companies.

His research work focuses on issues in capital, derivatives, and energy markets with a special emphasis in the area of institutional investing. His numerous articles have been published in prestigious academic journals including the Journal of Finance while one of his books "*Derivatives Markets and Products*" became the benchmark in the academic and professional field.

In his professional career he had assumed the role of Investments Director at an institutional investor; he was Chairman of the investment committee of mutual fund companies and has served as consultant to banks, institutional investors and securities firms. Currently he serves as CEO for two companies, member of the Board of Directors of companies among which is the Athex Group as a non-executive director and chairman of its Audit Committee.

### Alexios Pilavios - Non-executive member



He was born in Athens in 1953. He holds a B.Sc. (Econ) from the London School of Economics, a M.A. (Economics) from the University of Essex and a Ph.D. in Economics of Education from the London University Institute of Education.

From 1983 to 1991 he worked as senior officer for Ergobank (now EFG Eurobank), Commercial Bank of Greece (now Emporiki Bank) and NIBID (National Investment Bank for Industrial Development).

From 1992 to 2004 he worked for the Alpha Bank Group as CEO of Alpha Investments and Alpha Asset Management.

From April 2004 to May 2009 he served as Chairman of the Hellenic Capital Markets Commission.

From July 2009 to the present he is General Manager for Wealth Management at Alpha Bank.

Dr. Pilavios was also member of the Board of Directors of the Athens Stock Exchange (1994-1996), President of the Association of Greek Institutional Investors (1996 - 2000) and member of the Board of the Hellenic Exchanges (2000-2003). From 2007 to May 2009 he was nominated Chairman of ECONET (a group of economists) of the Committee of European Securities Regulators (CESR).

**Dionysios Christopoulos - Independent non-executive member**

Mr. Dionysios Christopoulos is an executive at the Bank of Greece, working on a wide range of bank supervisory issues at the Banking Supervision Department. He holds a Master in Finance as well as a degree in Economics, and has participated in a number of seminars and conferences in Greece and abroad on the subject of bank supervision.

In addition, he has participated in pan-European work groups tasked with determining bank operating and auditing standards at the European Supervisory Authority level.

**Nikolaos Chrysochoides - Non-executive member**

Mr. Chrysochoidis was born in Athens in 1974. He holds a degree in Economics from the University of Piraeus and an MBA in Finance and Organizational Strategy from the University of Rochester. He also holds all the certifications of the Hellenic Capital Market Commission (Certified Analyst, Investment Manager and Advisor), is certified Market Maker in the Derivatives Market of Athens Exchange, and a holder of the Series-7 General Securities Registered Representative license for the U.S. cash market; he also holds the Securities Representative Certificate and Derivatives Representative Certificate from the Securities Institute of the United Kingdom.

Mr. Chrysochoidis has worked at Donaldson, Lufkin and Jenrette in Boston and Credit Suisse First Boston Private Client Services in New York and London, is Chief Executive Officer and Exchange Representative of N. Chrysochoidis Stock Brokerage I.S.S.A. and Vice President of the Association of the Members of the Athens Exchange (S.ME.X.A.).

## 2.4. Remuneration of BoD members and executives

### Remuneration of the BoDs of the Companies of the Group - 2017

Company	Remuneration per BoD meeting (€)	Total remuneration (€)
ATHEX	160.00	30,640.00 *
ATHEXClear	160.00	10,560.00
ATHEXCSD	-	-

\* This amount includes the remuneration of the audit committee of €160 per meeting and the strategic investments committee of €140 per month.

None of the executive members of the Boards of Directors of the companies of the group (ATHEX, ATHEXClear, and ATHEXCSD) receive remuneration for their participation in the BoDs.

### Remuneration of senior executives of the Group – 2017 (rounded)

Name	Position	Remuneration (gross)
Socrates <b>Lazaridis</b>	Chief Executive Officer (CEO)	186,300
Vasilis <b>Govaris</b>	Chief Financial Officer (CFO)	88,400
Dimitris <b>Karaiskakis</b>	Chief Operations Officer (COO)	103,300
Nikolaos <b>Porfyris</b>	Deputy Chief Operations Officer (dCOO)	97,200
	<b>Total</b>	<b>475,200</b>

## 2.5. Committees of the Board of Directors

This section summarily describes the Committees of the BoD of the Company. The full description of the Committees' roles is described in the Corporate Governance Statement which forms part of the 2017 Annual Financial Report that has been published and is available on the website of the Company – [www.athexgroup.gr/ir](http://www.athexgroup.gr/ir), in section “Reports/Financial Statements.”

### Audit Committee

The Audit Committee operates as an oversight committee of the Board of Directors and its main purpose is to supervise the quality and integrity of the accounting and auditing mechanisms, as well as the process by which the financial statements are produced. The Audit Committee reports to the Board of Directors of the Company and, for matters concerning ATHEXCSD to the Board of Directors of the subsidiary company. The Audit Committee has at least three (3) non-executive members of the Board of Directors that are not involved in the operation of the Company in any way, in order to be able to pass judgment that is objective and independent without conflict of interest. In addition, the majority of the members of the Audit Committee consist of independent non-executive members.

The main responsibilities of the Committee are:

- Supervision of the Internal Audit Division
- Supervision of the external auditors
- Supervision of the Financial Statements
- Supervision of the Auditing Mechanisms

### Committee composition:

Chairman	Nikolaos Milonas
Members	Adamantini Lazari Alexandros Antonopoulos

### Nomination and Compensation Committee

The Nomination and Compensation Committee is composed of three members of the Board of Directors, of which at least two are independent members; the Committee is chaired by an independent member.

The main responsibilities of the Committee are to:

- Set Company policy on remuneration and other benefits that executive members of the management of the Company receive, in such a manner that ensures respect with the principles of transparency and corporate governance.

- Ensure that executive members of the management of the Company receive remuneration and benefits commensurate with their duties and responsibilities that are able to attract executives of high caliber and effectiveness, and that are comparable to those that are provided by other exchange groups of similar size and turnover abroad.
- Evaluate the effectiveness of executive management members during each fiscal year, always in conjunction with the targets of the approved budget and the conditions that are prevalent in the market.
- Align shareholder interests with those of executive management members and senior executives through regular or extraordinary benefits that are connected to profitability or return on equity or in general to the financial performance of the Company and the Group.
- Propose to the Board of Directors person or persons appropriate to succeed the Chairman or the Chief Executive Officer in case of resignation or permanent inability to carry out their duties for any reason during their term of office.
- Propose to the Board of Directors person or persons appropriate to replace members of the Board of Directors in case of resignation or forfeiture of office or permanent inability to carry out their duties for any reason during their term of office.
- Propose to the Board of Directors a list of persons appropriate for election by the General Meeting as members of the Board of Directors of the Company.

#### Committee composition:

Chairman	Alexandros Antonopoulos
Members	George Handjinicolaou Sofia Kounenaki - Efraimoglou

#### Strategic Investments Committee

The Strategic Investments Committee is composed of members of the Board of Directors, and its main purpose is to define investment strategy. At the meetings of the Investment Committee the Chief Financial Officer, who has been appointed as administrator of the cash assets of the Company, is present. The Strategic Investments Committee reports to the Board of Directors.

#### Committee composition:

Chairman	Ioannis Kyriakopoulos
Members	Alexios Pilavios Adamantini Lazari

### Stock Markets Steering Committee

The responsibility of the Committee are mainly to take decisions on matters concerning market access, trading in the Markets, listing of financial instruments and classifying them in Segments, notification obligations of listed companies, imposition of sanctions in accordance with Section (6) of the Athens Exchange Rulebook, as well as other matters concerning the operation of the markets and application of the Athens Exchange Rulebook, as specified in the Rulebook of operation of the Committee. Furthermore, the Committee is responsible for amending the Rulebook of the Athens Exchange and to issue decisions in execution of the Rulebook, in accordance with §7.1.3.

#### Committee composition:

1. Chairman            Socrates Lazaridis, Chief Executive Officer
2. Vice Chairman    Nikolaos Porfyrakis, Chief Business Development Officer

#### Members

3. Kimon Volikas, President of the Hellenic Fund and Asset Management Association
4. Apostolos Gkoutzinis, Partner at Milbank
5. Panagiotis Drakos, President of the Union of Listed Companies
6. Andre Kuusvek, Director for Local Currency and Capital Markets Development at the European Bank for Reconstruction and Development (EBRD)
7. Nikolaos Pimplis, Legal counsel to management, executive member of the Committee
8. Georgios Politis, Chief Executive Officer of Euroxx Securities
9. Athanasios Savvakis, President of the Federation of Industries of Northern Greece
10. George Serafeim, Associate Professor of Business Administration at Harvard Business School
11. Dionysios Christopoulos, Deputy Director, Banking Supervision Department at the Bank of Greece

### Xnet Steering Committee

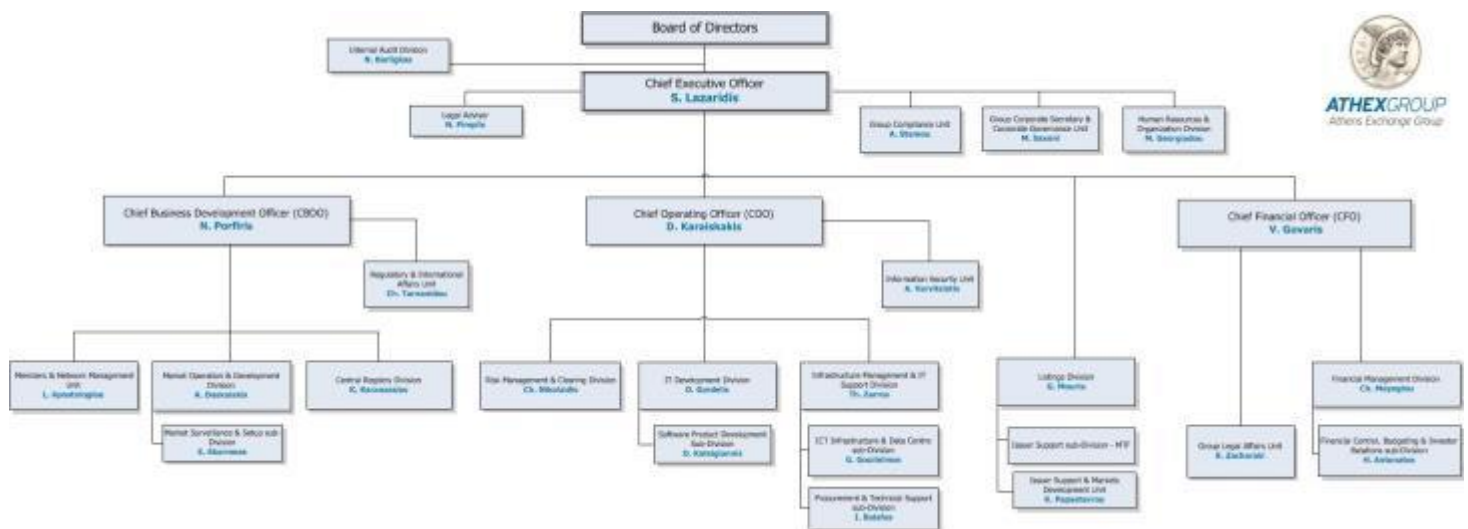
The responsibility of the Committee is to regulate any matter and necessary detail that concerns the application of the provisions of the Regulatory Framework with regards to the operation of the Xnet services, especially concerning the Xnet Network, the examination of applications and the participation of Members and Clearing Members, the risk management procedures that are applied and the determination of all types of parameters, methodologies and processes concerning this management, the procedures for settling Xnet trades and settlement, including the determination of cash settlement Entities and the particular procedures that are carried out by the Hellenic Central Securities Depository for settlement, the handling of overdue payments as well as taking related measures.

#### Committee composition:

- Chairman            Dimitris Karaiskakis, Chief Operating Officer

Members      Andreas Daskalakis, Director of Market Operation & Member Support  
 Christos Nikolaidis, Director of Risk Management and Clearing  
 Konstantinos Karanassios, Director of Central Registry  
 Dimitris Gardelis, Director of IT Development

## 2.6. Organizational structure



The Group was reorganized in March 2018, and the new organizational structure is reflected in the above organizational chart.

<http://www.athexgroup.gr/organizational-structure>

## 2.7. Operation of the Group – Legal and regulatory framework

The companies of the Athens Exchange Group have to comply with the following Laws and Regulations:

### Athens Exchange (as listed company)

Listing Directive <a href="#">Law 3371/2005</a>	“Capital Market issues and other provisions”
Prospectus Directive <a href="#">Law 3401/2005</a>	“Prospectus for the public offer of transferrable securities and listing for trading”
Transparency Directive <a href="#">Law 3556/2007</a>	“Transparency requirements for the provision of information by issuers whose transferrable securities have been listed for trading in a regulated market and other provisions.”
Corporate Governance <a href="#">Law 3016/2002</a>	“On corporate governance, salary issues and other provisions”
Takeover-bids <a href="#">Law 3461/2006</a>	“Incorporation into National Law of Directive 2004/25/EU on Public Offers”
Market abuse (MAD II) <a href="#">Law 4443/2016</a>	“Implementation of the necessary measures to comply with Regulation (EU) No 596/2014 on market abuse and repealing Directives 2003/6/EC, 2003/124/EC, 2003/125/EC and 2004/72/EC and incorporating Directive 2014/57/EU and Implementing Directive 2015/2392”
Market Abuse Regulation (MAR) <a href="#">Regulation (EU) 596/2014</a>	“Regulation (EU) No 596/2014 on market abuse and repealing Directive 2003/6/EC of the European Parliament and of the Council and Commission Directives 2003/124/EC, 2003/125/EC and 2004/72/EC”
Statutory audits <a href="#">Law 4449/2017</a>	“Mandatory audit of annual and consolidated financial statements, public oversight of audit work and other provisions” which incorporates Directive 2015/56/EU and establishes rules for the choices provided in Regulation (EU) 537/2014.
Statutory audits (Statutory Audit Regulation) <a href="#">Regulation (EU) 537/2014</a>	“Regulation (EU) No 537/2014 on specific requirements regarding statutory audit of public-interest entities and repealing Commission Decision 2005/909/EC”



## Athens Exchange (as operator of regulated markets)

<a href="#">Law 3606/2007</a>	“Markets in financial instruments and other provisions”
Markets in financial instruments (MiFIR) <a href="#">Regulation (EU) 600/2014</a>	“Regulation (EU) No 600/2014 on markets in financial instruments”.
Markets in financial instruments (MiFID II) <a href="#">Law 4514/2018</a>	“Markets in financial instruments and other provisions”, incorporating Directive 2014/65/EU (MiFID II).
Markets in financial instruments – trading venues <a href="#">Regulation (EU) 2017/584</a>	“Commission Delegated Regulation (EU) 2017/584 supplementing Directive 2014/65/EU with regard to regulatory technical standards specifying organizational requirements of trading venues”
Market abuse (MAD II) <a href="#">Law 4443/2016</a>	“Implementation of the necessary measures to comply with Regulation (EU) No 596/2014 on market abuse and repealing Directives 2003/6/EC, 2003/124/EC, 2003/125/EC and 2004/72/EC and incorporating Directive 2014/57/EU and Implementing Directive 2015/2392”
Market Abuse Regulation (MAR) <a href="#">Regulation (EU) 596/2014</a>	Regulation (EU) 596/2014 and repealing Directive 2003/6/EC of the European Parliament and of the Council and Commission Directives 2003/124/EC, 2003/125/EC and 2004/72/EC
Financial Collateral Directive (FCD) <a href="#">Law 3301/2004</a>	“Financial Collateral Agreements, application of International Accounting Standard and other provisions”
Margin Trading <a href="#">Law 2843/2000</a>	“Modernizing exchange transactions, listing of investment companies in ocean-going shipping on the Athens Stock Exchange and other provisions”
<a href="#">Law 4141/2013</a>	“Investment tools for development, provision of credit and other provisions”
Investors Compensation Scheme <a href="#">Law 2533/1997</a>	“Derivatives Exchange and other provisions”
Hellenic Deposit and Investment Guarantee Fund (TEKE) (HDIGF) <a href="#">Law 3746/2009</a>	“Hellenic Deposit and Investment Guarantee Fund (TEKE) (HDIGF), incorporation of Directives 2005/14/EU on the mandatory insurance of vehicles and 2005/68/EU on reinsurance and other provisions”
Athens Exchange Rulebook	
Alternative Market (EN.A.) Rulebook	

A core activity of ATHEX is the operation of an organized exchange market. In order to carry out this activity, it is licensed and regulated by the Hellenic Capital Market Commission.

## Athens Exchange (other activities)

Benchmark Regulation (BMR) <a href="#">Regulation (EU) 2016/1011</a>	“Regulation (EU) 2016/1011 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds”
Providers of data reporting services (APA/ARM) <a href="#">Regulation (EU) 2017/571</a>	“Commission Delegated Regulation (EU) 2017/571 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards on the authorization, organizational requirements and the publication of transactions for data reporting services providers”
<a href="#">Law 3606/2007</a>	“Markets in financial instruments and other provisions”
Markets in financial instruments (MiFID II) <a href="#">Law 4514/2018</a>	“Markets in financial instruments and other provisions”, incorporating Directive 2014/65/EU (MiFID II).
Market abuse (MAD II) <a href="#">Law 4443/2016</a>	“Implementation of the necessary measures to comply with Regulation (EU) No 596/2014 on market abuse and repealing Directives 2003/6/EC, 2003/124/EC, 2003/125/EC and 2004/72/EC and incorporating Directive 2014/57/EU and Implementing Directive 2015/2392”
Market Abuse Regulation (MAR) <a href="#">Regulation (EU) 596/2014</a>	“Regulation (EU) No 596/2014 on market abuse and repealing Directive 2003/6/EC of the European Parliament and of the Council and Commission Directives 2003/124/EC, 2003/125/EC and 2004/72/EC”

**ATHEXClear**

*ATHEXClear, an ATHEX subsidiary, operates as Central Counterparty (CCP) in exchange transactions, after obtaining a license under the European Regulation EMIR*

EMIR <a href="#">Regulation (EU) 648/2012</a>	Regulation (EU) 648/2012 and delegated Regulations (EU) 152/2013 and 153/2013 as well as Implementing Regulation (EU) 1249/2012 on OTC derivatives, Central Counterparties and Trade Repositories
<a href="#">Law 3606/2007</a>	“Markets in financial instruments and other provisions”
Markets in financial instruments (MiFIR) <a href="#">Regulation (EU) 600/2014</a>	“Regulation (EU) No 600/2014 on markets in financial instruments”.
Markets in financial instruments (MiFID II) <a href="#">Law 4514/2018</a>	“Markets in financial instruments and other provisions”, incorporating Directive 2014/65/EU (MiFID II).
Market abuse (MAD II) <a href="#">Law 4443/2016</a>	“Implementation of the necessary measures to comply with Regulation (EU) No 596/2014 on market abuse and repealing Directives 2003/6/EC, 2003/124/EC, 2003/125/EC and 2004/72/EC and incorporating Directive 2014/57/EU and Implementing Directive 2015/2392”
Market Abuse Regulation (MAR) <a href="#">Regulation (EU) 596/2014</a>	Regulation (EU) 596/2014 and repealing Directive 2003/6/EC of the European Parliament and of the Council and Commission Directives 2003/124/EC, 2003/125/EC and 2004/72/EC
Regulation of Clearing of Transferable Securities Transactions in Book Entry Form	
Regulation on the Clearing of Transactions on Derivatives	

## ATHEXCSD

*ATHEXCSD, an ATHEX subsidiary, has as its core activity the settlement of exchange transactions and securities registration, after obtaining a license to carry out these activities and audits by the Hellenic Capital Market Commission*

<a href="#">Law 3606/2007</a>	“Markets in financial instruments and other provisions”
Markets in financial instruments (MiFIR) <a href="#">Regulation (EU) 600/2014</a>	“Regulation (EU) No 600/2014 on markets in financial instruments”.
Markets in financial instruments (MiFID II) <a href="#">Law 4514/2018</a>	“Markets in financial instruments and other provisions”, incorporating Directive 2014/65/EU (MiFID II).
Settlement Finality Directive <a href="#">Law 2789/2000</a>	“Adjustment of Greek Law to European Parliament and Council Directive 98/26/EU of 19.5.1998 concerning financial instruments settlement finality and other provisions”
Market abuse (MAD II) <a href="#">Law 4443/2016</a>	“Implementation of the necessary measures to comply with Regulation (EU) No 596/2014 on market abuse and repealing Directives 2003/6/EC, 2003/124/EC, 2003/125/EC and 2004/72/EC and incorporating Directive 2014/57/EU and Implementing Directive 2015/2392”
Market Abuse Regulation (MAR) <a href="#">Regulation (EU) 596/2014</a>	Regulation (EU) 596/2014 and repealing Directive 2003/6/EC of the European Parliament and of the Council and Commission Directives 2003/124/EC, 2003/125/EC and 2004/72/EC
Dematerialized Securities System (DSS) Rulebook of Operation	



# 03

Activities of the Group  
in 2017



**ATHEXGROUP**  
*Athens Exchange Group*

## 3. Activities of the Group in 2017

### 3.1. Activity in our markets

#### New listings (IPOs)

ADMIE HOLDING	Listing in the ATHEX Main Market. The listing took place through a reduction in the share capital of DEI (PPC) and return-in-kind to shareholders, of shares in the newly formed ADMIE HOLDING, proportionally to their participation in the share capital of DEI.
BRIQ PROPERTIES REIC	Listing in the ATHEX Main Market. Share dispersion was achieved through the proportional return in kind to QUEST HOLDINGS shareholders of shares in BRIQ PROPERTIES REIC.

More on the IPOs in [chapter 4](#).

#### Corporate bonds

OPAP	Listing in the Fixed Income Segment of the ATHEX Main Market. Capital raised: €200m.
SYSTEMS SUNLIGHT	Listing in the Fixed Income Segment of the ATHEX Main Market. Capital raised: €50m.
MYTILINEOS HOLDINGS	Listing in the Fixed Income Segment of the ATHEX Main Market. Capital raised: €300m.
TERNA ENERGY FINANCE	Listing in the Fixed Income Segment of the ATHEX Main Market. Capital raised: €60m.
MLS INNOVATION	Start of trading of the 2 <sup>nd</sup> bond in the Fixed Income Segment of the ATHEX Alternative Market. Capital raised: €6m (by private placement)

More on the bond issues in [chapter 4](#).

### 3.2. Energy Exchange and Clearing House

Greece created the regulatory framework (Law 4425/2016) which sets out the steps and timeframe for adapting the local electricity market to the requirements of the European model (Target model).

The existing institutions of the Greek energy market – LAGIE as Nominated Electricity Market Operator (NEMO), ADMIE (IPTO) as Power Transmission Operator and Balancing Markets, and RAE (Regulatory Authority for Energy) as the Regulator – have assumed the responsibility for operating, supporting and developing the Greek energy market, based on both the national and the European regulatory frameworks, with the goal of unifying the European market.



Based on the above, and following European practice, a framework for collaboration has been agreed between the Athens Exchange Group and these two entities with the aim of creating a competitive and viable Greek energy market.

The key points of this collaboration are:

- The creation of two new corporate vehicles, an **Energy Exchange** and the corresponding **Clearing House**.
- Their creation as multi-stakeholder companies, giving the right to participate in the share capital to all market participants that wish to do so.

The core aim for these two corporate structures, besides their contribution to the more effective and direct adaptation of the Greek market to the European target, is to ensure the viability under competitive terms of the whole undertaking, while satisfying market participants to the benefit of the end-consumer.

The operation of the energy market under the Target Model is expected in the 2<sup>nd</sup> quarter of 2019.

### 3.3. Collaboration with the SEE Link platform

ATHEX formally joined SEE Link, the consortium of SE European Exchanges. SEE Link began operations at the end of March 2016 with the support of EBRD and represents an effort at collaboration by SE European Exchanges, with the aim of coordinating collaborating Exchanges to jointly create the conditions that will allow:



- Easy access for investors in the exchanges of the SE European countries to the markets of the region, and at the same time
- The products that are traded in these markets, as a whole, will attract interest by international investors

For the ATHEX Group collaborations through which its international presence as well as the international presence of SE Europe is enhanced are a strategic choice. Given that SEE Link is an

important development for capital markets in SE Europe, ATHEX's know-how and international client network are expected to contribute to the implementation of SEE Link's goals.

The immediate goals for ATHEX from this collaboration are:

- To allow members of Exchanges that participate in SEE Link to trade on ATHEX markets; and
- To add participating SEE Link markets to the XNET network markets.

### 3.4. XNET

XNET was designed and implemented with the main purpose being to enable ATHEX brokers, Investment Services Firms and Banks to enrich the services that they offer to international markets.

XNET takes advantage of the existing IT and operational infrastructure of the Group, in order to provide additional data dissemination services, as well as trade routing, clearing and settlement to the 17 largest international capital markets (such as the USA, Great Britain, Germany, France and many others), achieving significant economies of scale. In order to provide access to markets, selected "XNET agents" are used, thus ensuring particularly competitive fees.



An important advantage of XNET, compared to other platforms, is the fact that, after trades are settled, foreign securities are registered in the existing investor accounts in the Dematerialized Securities System (DSS) of the ATHEX Group acting as an Investors' CSD, ensuring the level of transparency, security and the ability to provide additional services to investors, similar to those provided for Greek stocks such as corporate action services.

In 2017 among others:

- The transfer of trade settlement in euro for the XNET markets (except Belgium) to a commercial account at Alpha Bank was implemented as a solution to the problem of being unable to execute trades in euro as a result of the imposition of capital controls.
- The London market in euro was activated to execute trades in Bank of Cyprus which, since January 2017 is traded on the London market in euro. During this period, trades in Bank of Cyprus were 30% of all XNET trades and the UK market in euro is 2nd by value traded, after the USA.
- Analysis, testing and implementation of the new CFI standard.
- Support for multiple clearing accounts
- New risk assignment rules as part of the support of the Bank of Cyprus
- Attracting and activating two new Members on the XNET platform, as order taking and order fulfilling Members: ARGUS STOCKBROKERS LTD and ATLANTIC SECURITIES LTD



### 3.5. Regulatory challenges (MiFID II, CSDR)

#### Regulation 2004/39/EC (MiFID II)

MiFID (Markets in Financial Instruments Directive), which went into effect in 2007, focused mainly on increasing competition between stock trading venues and protecting investors.

With the MiFIR Regulation and the MiFID II Directive, the scope of application now covers almost all financial instruments, such as bonds and derivatives. There is a clear effort to reduce off-exchange transactions, increase pre-trade and post-trade transparency in all trading venues and in all financial instrument, and increase disclosure for orders (order keeping requirements) and transactions (transactions reporting requirements).

At the same time, the amount of information and the number of fields increases significantly, and the way the European Securities Market Authority (ESMA) receives information through ISO 20022 messages is standardized for reference data, transparency reports and transaction reports.

For the Athens Exchange, this will require a significant upgrade of the OASIS trading system, the Surveillance System, the Statistical Information System as well as almost all internal systems and databases.

MiFID II / MiFIR went into effect on 3 January 2018. As a result of the new Directive, significant adjustments were made to the systems of the Group, and new services to members were developed.

#### New services

As part of the reporting obligations by participants in organized market which arose from MiFID II, it was decided to develop, promote and support the relevant services:

- **APA@ATHEX** [APA – Approved Publication Arrangement] and
- **ARM@ATHEX** [ARM – Approved Reporting Mechanism].



For more information - [www.athexgroup.gr/web/guest/athex-reporting](http://www.athexgroup.gr/web/guest/athex-reporting)

## Regulation EU 909/2014 (CSDR)

Regulation EU 909/2014<sup>1</sup> (Central Securities Depositories Regulation or CSDR) aims to improve the process of securities settlement in the European Union, as part of the overall aim of unifying European capital markets. The contents of the Regulation are a key parameter in the regulatory policy of the European Union on post-trade transparency and security in capital markets. A key requirement of the CSDR Regulation is the supervision of Central Securities Depositories (CSDs), with the starting point being the licensing of CSDs by the competent authorities, with the key criterion being the fulfilment of the terms and conditions foreseen.

In particular, the goals of the CSDR Regulation for CSDs are to:

- increase the safety of their infrastructure and dematerialize the transferable securities being kept,
- standardize the operation, license and supervise them, the risk management methods they use and the terms for providing investor access, both locally and cross-border,
- allow the provision of cross-border services using market infrastructure (organized markets, clearing houses, depositories) by making use of the “European passport” without having the obligation to domicile in the member-state where services are being offered,
- provide the option to investors on the type of account for keeping securities (end-investor accounts or collective (omnibus) accounts) in Depositories, and
- provide the option to issuing companies to select the Exchange and the Depository they wish to use in the EU for the securities they issue.

The CSDR Regulation liberalizes the provision of CSD services throughout the EU. Therefore, intra-European competition is expected to intensify over the next few years in this sector as well. The changes in the Greek capital market in order to comply with the CSDR Regulation must on the one hand allow for the swift adaptation to its requirements and on the other the transition to a new operation model characterized with lower costs and increased effectiveness for participants in the Greek capital market must respond to the new, highly competitive, pan-European environment.

The CSDR Regulation went into effect on 17.9.2014 and the CSDs of the EU – among which is the “Athens Exchange Central Securities Depository (ATHEXCSD)” of the Athens Exchange Group – are expected to comply with the Regulation’s requirements within six months of the submission of the complete licensing dossier, in order to be licensed by the appropriate regulatory authorities of the member-state of origin.

The licensing of ATHEXCSD by the Hellenic Capital Market Commission, following the timely submission of the application on 29.09.2017, is expected to be completed in 2019. A key prerequisite is the forthcoming voting of the draft law of the Ministry of Finance on the adaptation of local law to the CSDR Regulation. Public consultation took place from 15 to 25.09.2017.

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<sup>1</sup> Regulation (EU) No 909/2014 of the European Parliament and of the Council of 23 July 2014 on improving securities settlement in the European Union and on central securities depositories and amending Directives 98/26/EC and 2014/65/EU and Regulation (EU) No 236/2012.

### 3.6. Systems and services upgrades

#### Improvements in the trading model

As part of the effort to continuously adapt the trading model of the markets operated by ATHEX to the standards of other European markets, but also because various matters were identified in the existing framework that needed improvement, an analysis was made and subsequently a comprehensive proposal on the following improvements to the ATHEX trading model:

- Creation of the new Categorization Model for ATHEX stocks based on their liquidity
- Modernization of the Market Making Model in the Cash market by providing incentives to undertake market making
- More effective method for determining the closing price for equities
- Changes in the trading limits and the Volatility Interrupter parameters for equities
- Reduction in the cost of covering trades through covered sales
- Creation of a new legal framework for block trades to facilitate privatizations

#### Development of the Electronic Book Building service

The aim of the EBB (Electronic Book Building) service is the provision by ATHEX of the necessary logistical support to businesses that want to raise capital from investors.

The EBB service is provided to underwriters, advisors and financial firms for use during the capital raising process. It is a transparent mechanism for investors to express their interest to participate in capital increases, and attempts to effectively exploit the Member network of the Exchange (banks and brokerage companies) and their clients in order to provide liquidity to business proposals of businesses that seek financing.

In 2017 the Hellenic Capital Market Commission issued Decision 19/776/13.02.2017 “Determining the yield and interest rate for bonds distributed through a public offering and allocated to investors” which created the need to modify the way this service was provided.

ATHEXClear actively participated in the modification of the regulatory framework for providing this service, describing the required technical modification and auditing its implementation.

#### Completion of the migration of the DSS to a web environment

As the last step to the complete migration of the DSS [Dematerialized Securities System], one of the key IT systems of the Group, to a WEB environment, development and auditing of the client applications used for clearing trades, as well as cash settlement in Euro and foreign currencies was completed. The DSS upgrade project had begun in 2016.

At the same time, in July 2017 the connection of DSS with the new platform implemented by the cooperating settlement bank was completed; the new platform is clearly upgraded in matters of reliability and security.

Due to the critical nature of the operation of cash settlement, the availability of the old and new systems in parallel was ensured for more than one month, until it was ascertained that the new systems functioned smoothly.

### **Upgrading the ATHEXCSD interconnection to the cash settlement bank**

In 2017 the project of replacing the Alphaline and Alphadirect applications and infrastructure with the more modern Alpha Web Banking and the new service providing an interconnection through web services between ATHEXCSD and Alpha Bank systems was implemented.

Alpha Bank has been appointed as the cash settlement bank for trades that are carried out in foreign securities as part of the Investor CSD service provided by ATHEXCSD.

### 3.7. Other developments

#### Axialei service

Responding to the requirement that all legal entities that carry out transactions on transferable securities starting on 3.1.2018 need to issue a LEI code, as part of the application of the MiFID II Directive and the MiFIR Regulation, ATHEXCSD successfully provides this service.

In particular, in the last two months of 2017, in collaboration with LSE, more than 800 new LEI codes were issued to legal entities, including among them listed companies, members of the Athens Exchange and DSS operators.

#### Improving risk management

As part of the continuous improvement and automation of the risk management operation, improvements were made in the Risk Management System (RMS). Indicatively noted is the further automation of the verification of the predictive capacity of the margin model.

The aim behind the continuing development in the RMS is to increase automation in the daily monitoring of risks and to reduce manual actions in order to avoid errors.

#### Annual certification of the risk management models

In accordance with article 49 of Regulation (EU) 648/2012 (EMIR), an annual audit of the risk management models applied by ATHEXCclear must be carried out by a specialized independent consultant.

ATHEXCclear selected a consultant, and after a competition the project was assigned to a specialized foreign consultant. The work of the consultant was completed and the findings were delivered to the Hellenic Capital Market Commission, the Risk Committee and management of the company. The findings will be taken into consideration in potential future improvements in the risk management models.

#### EU-Wide Stress-Test for CCPs

ATHEXCclear participated in the second EU-wide stress test for counterparty credit risk that is being carried out by the European Securities and Markets Authority (ESMA).

ESMA requested that supervised Central Counterparties calculate potential losses and liquidity requirements that could arise from clearing member default under specific extreme scenarios.

ATHEXCclear completed these audits and the results submitted to ESMA were considered completely satisfactory, since no material weakness was detected in the ability to absorb losses or in the liquidity adequacy under these extreme scenarios.

#### Risk management – data warehouse

In order to make possible the storage and handling of a large volume of historical data that concern risk management, the project of developing a data warehouse continues.

Besides keeping data, the aim is to make it possible to gather combine information from different sources, reduce the time required for staff, and create reports in order to expand the amount of information being disseminated.





# 04

Promoting the  
Greek Capital Market



**ATHEXGROUP**  
*Athens Exchange Group*

## 4. Promoting the Greek capital market

International institutional investors have a significant presence at Athens Exchange. In the last two years, they hold in their portfolios more than 60% of the total market capitalization of the Exchange. In 2017, international institutional investors were responsible for 56% of the total daily activity by value.

This presence by international investors in the Greek economy through the exchange, a presence which has not been reduced during the present crisis, offers significant amounts of capital to the Greek economy, and to ATHEX investors, both Greek and foreign, increased liquidity.

Because of the significant presence that foreign institutional investors have at ATHEX, and in order to further promote and showcase the Greek capital market to them, roadshows are organized by ATHEX each year in major international capital centers:

- The **Annual Greek Roadshow (AGR)**, organized in **London** since 2006
- The **New York Roadshow (NYGR)**, organized in **New York** since 2008  
Starting in 2012, the roadshow was renamed "**Greek Investment Forum**" to reflect the joint organization with the American-Hellenic Chamber of Commerce (AMCHAM).

The purpose of these roadshows is to bring the Athens Exchange listed companies close to fund managers, in order to give the management of these companies the chance to present their strategy and investment plans, directly, to a large number of foreign investors.





## 6<sup>th</sup> Greek Investment Forum – New York June 21-22 2017



Messrs. Simos Anastasopoulos, President of the American Hellenic Chamber of Commerce, Dimitri Papadimitriou, Minister of Economy & Development, Penny Manis, Director of Business Programming, CNN International, Geoffrey Pyatt, Ambassador of the United States to Greece, and Socrates Lazaridis, CEO of the Athens Exchange Group



## 12<sup>th</sup> AGR – London 20-21 September 2017

The annual Roadshow of Greek listed companies, organized for the 12<sup>th</sup> straight year by the Athens Exchange took place in London.



Annual Greek Roadshow in London  
September 20-21, 2017



During the two days, more than 600 meetings took place between 120 fund managers, analysts and the 33 listed companies that participated at the roadshow. During the first day there was a briefing session “Greece: accelerating growth?”



Panelists (l to r): André Kүүsvek, Director, Local Currency & Capital Markets Development, EBRD; Rania Aikaterinari, CEO, Hellenic Corporation of Assets and Participations; George Koutsos, Partner, Deloitte Business Solutions (Moderator); Apostolos Gkoutzinas, Partner, Shearman & Sterling; Elias Athanasiou, CEO, Enterprise Greece; Ioannis Kyriakopoulos, CFO, National Bank of Greece



The keynote speakers, Alternate Minister of Finance George Chouliarakis and Minister of Economy and Development Dimitri Papadimitriou



From the sponsor award ceremony for the 12<sup>th</sup> AGR



The sponsors and the Athens Exchange team behind the 12<sup>th</sup> AGR



## Welcoming non-listed companies at the Exchange

Exchanges worldwide constantly strive to confirm the true value of the capital market to local businesses, and build a continuous, mutually beneficial relationship between companies and investors.

Towards this end, the Athens Exchange in 2017 again invited dynamic Greek companies to present their business plans to the local and international investment community.

The opening and closing ceremonies of the trading sessions at the Athens Exchange are a medium for promoting businesses to a wide audience of market participants.

### 29 May 2017

The Athens Exchange welcomed Olympian Green International, Salfo & Associates, Septona and Siamidis, prize winners in the **Greek Export Awards 2016**.



Mr. Leonidas Papakonstantinidis, President of the Union of Finance & Commercial Affairs Diplomatic Personnel of the Ministry of Foreign Affairs rings the traditional bell, flanked by Mrs. Konstantina Evaggeliou, CEO of Septona, Mr. Michalis Siamidis, CEO of Siamidis, Mr. Fotis Mavroudis, General Manager of Olympian Green International and Mr. Giorgos Salpeas, President of Salfo & Associates (with bells in their hands)

The Union of Finance & Commercial Affairs Diplomatic Personnel of the Ministry of Foreign Affairs, in collaboration with Ethos Media, organize the Greek Export Awards each year in order to showcase and reward the people, ideas and partnerships of the top exporting companies of the country.



The company produces bottles and trades in virgin olive oil, as well as in a wide range of products such as table olives, balsamic vinegar et al. It owns a modern olive-processing and bottling plant in the province of Olympia. In the Peloponnese, where it uses innovative solutions in olive oil production and bottling. In addition, it has developed a network of producers and suppliers for its products, which are exported to over 15 countries in the world.

[www.olympiangreen.com](http://www.olympiangreen.com)



SALFO & Associates was established in 1993 in Athens and provides consulting services in the management, development and design of engineering projects, focusing on transportation infrastructure, building and port projects, both in Greece and abroad.

The company today has more than 300 employees, and an active presence in Eastern Europe and the Middle East.

[www.salfo.gr](http://www.salfo.gr)



SEPTONA is a 100% Greek company that is established nowadays as one of the leading export companies of personal hygiene products to more than 70 countries around the world. It also enjoys a strong position in Greece.

[www.septona.gr](http://www.septona.gr)



In 1961 Constantin Siamidis set up a textile factory. It was the beginning of a continuous effort to develop in the textiles sector. Today the company remains family-run, producing specialized, innovative technical fabrics – anti-ballistic products (anti-ballistic vests, helmets, panels), clothing and personal protection equipment for military, police, fire suppression, industry and outdoor use.

Starting in 2010, the company produces electricity from solar energy, and operates power stations with a capacity of 2.1MW.

[www.siamidis.eu](http://www.siamidis.eu)

**14 June 2017**

The Athens Exchange welcomed Hellenic Dough, Vikos and Sunlight Recycling, prize winners in FING's (Federation of Industry of Northern Greece) **"Greek Value Northern Greece 2017."**



The President and the Executive Vice President of FING (Federation of Industry of Northern Greece) Messrs. Athanasios Savvakis and Ioannis Stavrou together with representatives from Arabatzis Hellenic Dough, Vikos and Sunlight Recycling ring the ATHEX opening bell



HELLENIC DOUGH ranks among the largest Greek frozen dough and pastry product manufacturers. Its customer base includes major companies in the frozen products sector.

Thanks to its knowledge of dough and pastry products, its professional approach and technological infrastructure, each year it develops innovative products with traditional flavors taken straight from traditional Greek cuisine.

Production is in a state-of-the-art factory in the Sindos Industrial Area of Thessaloniki using fully automated, cutting edge machinery.

[www.elzymi.gr](http://www.elzymi.gr)



A Greek company, Epirotic Bottling Industry S.A. (VIKOS S.A.) was founded in 1990 and is one of the most renowned and reputable companies in the bottled water market.

Vikos S.A. started business in 1992 by bottling natural mineral water from a homonymous source and distributing it to the Greek and foreign markets, whilst maintaining its position of main supplier to the largest supermarket chains.

[www.vikoswater.gr](http://www.vikoswater.gr)



SUNLIGHT Recycling is the Lead-acid Battery Recycling Branch of SYSTEMS SUNLIGHT S.A., expanding the business ecosystem developed by the Panos Germanos Group of Companies.

Recognizing the potential of the Greek market, and having a clear commitment to support the domestic economy, SUNLIGHT Recycling has built the most modern Lead-acid Battery Recycling Unit in Europe, which constitutes an investment of over €31 million in its first phase.

[www.sunlight-recycling.com](http://www.sunlight-recycling.com)

## Listing of ADMIE Holding – 16 June 2017



ADMIE (IPT0) HOLDING holds a 51% stake in the Independent Power Transmission Operator (IPTO or ADMIE), which is the sole asset in its portfolio. This stake was transferred from the Public Power Corporation (PPC).

The listing of the company came about as a result of the share capital decrease by PPC and capital return through distribution in kind of the shares of the newly formed company to PPC shareholders, in proportion to their participation in the share capital of PPC.

The company's mission is to be aligned with every activity relating to its affiliate ADMIE. As the Operator of the Hellenic Electricity Transmission System, ADMIE's mission is to ensure Greece's electricity supply in a safe, efficient and reliable manner while promoting the development of competition in the Greek electricity market and guaranteeing the non-discriminatory treatment of System users.

### ADMIE Holding – Summary facts

Number of shares at listing	232,000,000
Share par value	€2.12
Advisor	NBG Securities
ISIN	GRS518003009
Stock symbol	ADMIE
Listing	16 June 2017
For more information	<a href="http://www.admieholding.gr">www.admieholding.gr</a>



## BriQ Properties REIC IPO – 31 July 2017

The Exchange welcomed the 9<sup>th</sup> company of the Real Estate market segment. Share dispersion was achieved through the proportional return in kind to QUEST HOLDINGS shareholders of shares in BRIQ PROPERTIES REIC.



The Chairman of the BoD of BriQ Properties Mr. Theodoros Fessas and the CEO Mrs. Anna Apostolidou ring the opening bell on the first day of trading

After the Second World War, real estate was the backbone of investment for Greeks, and the construction industry the engine for growth for many sectors of the economy. It is logical to assume that the efficient management of resources invested in real estate through REICs may have a significant contribution in the recovery of the economy.



In addition, the REIC sector now has the critical size and number of listed companies and can adequately cover the investor needs of both Greek and international investors.

### BriQ Properties REIC – Summary facts

Number of shares at listing	11,921,531
Share par value	€2.33
Underwriter	Eurobank
ISIN	GRS517003000
Stock symbol	BRIQ
Listing	31 July 2017
For more information	<a href="http://www.briqproperties.gr/el/enimerotika_delta">www.briqproperties.gr/el/enimerotika_delta</a> [in Greek]

**Athens Exchange - Real Estate market segment (Main market)**

Company	Symbol	ISIN	IPO	Capitalization 31.12.2017 (€m)
ALPHA ASTIKA AKINHTA	ASTAK	GRS331043000	29.06.1999	91.7
REDS	KAMP	GRS106003007	05.08.1920	54.0
KEKROPS	KEKR	GRS070003009	13.07.1967	26.1
LAMDA DEVELOPMENT	LAMDA	GRS245213004	25.09.1995	586.8
GRIVALIA PROPERTIES	* GRIV	GRS491003000	12.04.2006	951.8
INTERCONTINENTAL INT'L	* INTERCO	GRS516003001	02.08.2016	59.9
BRIQ PROPERTIES	* BRIQ	GRS517003000	31.07.2017	24.4
NBG PANGAEA	* PANGAEA	GRS509003018	23.07.2009	1,226.4
TRASTOR	* TRASTOR	GRS487003006	28.06.2005	66.6
<b>Total - sector</b>				<b>3,087.7</b>

\* REIC

The companies in the market segment that manage and invest in real estate had a market capitalization of €3.1bn, corresponding to 5.7% of the total market capitalization of €54.2bn at the end of 2017.

## Corporate bonds on the Athens Exchange

In 2016, the efforts to relaunch the bond market came to fruition, with two issues. It is well known that over the past decade, and in particular since 2008, companies – in Europe and elsewhere – seek and use alternative sources of finance besides bank borrowing.

In Europe, important initiatives are being undertaken to upgrade the role of the capital market in the financing of small and medium sized enterprises. The operation of an effective market for corporate bonds – an established tool for financing businesses worldwide – will in turn upgrade the Greek capital market.

In 2017 the rate of corporate bonds issues increased, with 4 issues in the Main market and 1 in the Alternative Market. The capital raised was €616m compared to €44m in 2016.

### Corporate bond listings at the Athens Exchange 2016-2017

Issuer (stock symbol if listed)	Bond symbol	ISIN	Capital raised (€m)	Listing date
Housemarket	HOUSEMB1	GRC8081169B2	40,0	6/10/2016
OPAP (OPAP)	OPAPB1	GRC4191173B0	200,0	22/3/2017
Systems Sunlight	SUNLB1	GRC8121176B9	50,0	21/6/2017
Mytilneos (MYTIL)	MYTILB1	GRC3931176B0	300,0	28/6/2017
Terna Energy (TENERG)	TENERGFB1	GRC8131177B5	60,0	24/7/2017
<b>Total - Main Market</b>			<b>650,0</b>	
MLS Innovation (MLS)	MLSB1	GRC422116743	4,0	19/7/2016
MLS Innovation (MLS)	MLSB2	GRC4221178B3	6,0	31/8/2017
<b>Total - Alternative Market</b>			<b>10,0</b>	

These issues take advantage of the potential of the Greek capital market to finance enterprises through corporate bonds, while at the same time increase the number of investment products for investors.

## OPAP – 22 March 2017



Mr. Damian Cope, CEO of OPAP rings the opening bell at the Athens Exchange.

### OPAP bond issue – Summary facts

Duration	5 years
Number of bonds issued	200,000
Face value / issue price	€1,000 per bond
Interest rate	3.50% fixed on an annual basis (360/Actual)
Credit rating	ICAP: A Standard & Poor's: B
Advisors	EFG EUROBANK ERGASIAS NATIONAL BANK OF GREECE NATIONAL SECURITIES
Subscription	Public offer
ISIN	GRC4191173B0
Start of trading	22 March 2017
For more information	<a href="http://www.athexgroup.gr/web/guest/candidate-opap-bonds">www.athexgroup.gr/web/guest/candidate-opap-bonds</a>

## SYSTEMS SUNLIGHT– 21 June 2017



Mr. Vasili Billis, Chairman & CEO of Systems Sunlight rings the opening bell at the Athens Exchange

SYSTEMS SUNLIGHT is a global player in the field of integrated energy solutions, specializing in the development, production and marketing of batteries and energy storage systems for industrial, advanced technology and consumer applications. In its 3<sup>rd</sup> decade of sustained growth, the company today ranks among the world's top providers of energy storage solutions.

Headquartered in Greece, the company exports 84% of its production to more than 100 countries.



### SYSTEMS SUNLIGHT bond issue – Summary facts

Duration	5 years
Number of bonds issued	50,000
Face value / issue price	€1,000 per bond
Interest rate	4,25% fixed (360/Actual)
Credit rating	ICAP: B
Advisors	Euroxx Securities
Subscription	Public offer
ISIN	GRC8121176B9
Start of trading	21 July 2017
For more information	<a href="http://www.athexgroup.gr/web/guest/sunlight-sa">www.athexgroup.gr/web/guest/sunlight-sa</a>



## MYTILINEOS – 28 June 2017



Mr. Evangelos Mytilineos, Chairman and CEO of Mytilineos opens the trading session at the Athens Exchange.

#### MYTILINEOS bond issue – Summary facts

Duration	5 years
Number of bonds issued	300,000
Face value / issue price	€1,000 per bond
Interest rate	3.10% fixed, annual (360/Actual)
Credit rating	-
Advisors	NBG Securities
Subscription	Public Offer
ISIN	GRC3931176B0
Start of trading	28 June 2017
For more information	<a href="http://www.athexgroup.gr/el/web/guest/mytilinaios-sa">http://www.athexgroup.gr/el/web/guest/mytilinaios-sa</a>

## TERNA ENERGY – 24 July 2017

The Athens Exchange welcomed TERNA ENERGY FINANCE (a member of the TERNA ENERGY Group and guarantor of the issue), as part of the listing and start of trading of its corporate bond on the Exchange.



Mr. Aristotelis Spiliotis, CEO of the Company and deputy CFO of the Group (holding the bell), during the opening ceremony at the Athens Exchange.

### TERNA ENERGY FINANCE bond issue – Summary facts

Duration	5 years
Number of bonds issued	60,000
Face value / issue price	€1,000 per bond
Interest rate	3.85% fixed, annual (360/Actual)
Credit rating	ICAP: BB
Guarantor	Terna Energy
Advisor	Euroxx Securities
Subscription	Public offer
ISIN	GRC8131177B5
Start of trading	24 July 2017
For more information	<a href="http://www.athexgroup.gr/el/terna-energy-finance">http://www.athexgroup.gr/el/terna-energy-finance</a>

## 20 years of FTSE/ATHEX indices

The Athens Exchange organized an event on the occasion of the twenty year anniversary of a successful collaboration with FTSE Russell, which marked the internationalization of the Greek capital market. The large capitalization index of the Exchange, the **FTSE/ATHEX Large Cap**, the fruit of this close collaboration with one of the more popular and experienced index compilers, celebrated in 2017 twenty years of operation.

**TWENTY20**  
YEARS FTSE/ATHEX Index Series

Over this past twenty years, three structural changes have taken place internationally concerning indices:

- a significant increase in capital that is passively managed, using indices as guides for investments;
- the use of indices as a common reference point in evaluating actively managed fund performance; and
- their use as an underlying security in the creation of derivatives products for hedging purposes.



Mr. Mark Makepeace, London Stock Exchange Group Director of Information Services and Chief Executive of FTSE Russell and keynote speaker at the presentation rings the traditional bell – 1.11.2017



These developments formed the basis for the continuous increase in the number of products offered by the collaboration between FTSE Russell and the Athens Exchange, in an effort to widen the information tools available to the market. Indices as a tool can effectively bridge the financing needs with the investment selection process, in and out of Greece.

**Passive management (index investing)**

Passive management is investing in vehicles such as mutual funds or ETFs that track an index. A significant advantage of passive management is the very low management fees, which improve returns for investors.

A key argument made by those favoring passive investing, is that the high costs of active investing are a significant cost that adds up in time and ends up in the pockets of administrators and not investors.

**Active management**

Active management is the opposite of passive management, in which a fund's managers attempt to beat the market with various investment strategies and management of a portfolio's securities.

Since fund managers are remunerated for their work, this cost is something that investors must bear in mind.

In addition, there seems to be evidence that the performance of actively managed funds is not – on average – better than the performance of passively managed funds. Discussion on this topic continues actively.





# 05

The Greek  
Cash and Derivatives Market



**ATHEXGROUP**  
*Athens Exchange Group*

## 5. The Greek cash and derivatives market

The activity of the ATHEX Group is mainly in the operation of markets for securities and derivative financial products. In 2017, 51% (2016: 53%) of the operating revenue of the Group came from the trading, clearing and settlement of trades in the cash and derivatives markets.

The market showed signs of stability in 2017. Trading activity remained at approximately the same level as in 2016, capital raised increased significantly from the very low level last year, mainly through bond issues, while the total market capitalization also increased significantly.

More specifically, in the cash market:

- The value of stock trades in 2017 dropped slightly by 2%, to €14.8bn compared to €15.1bn in 2016.
- The average capitalization of ATHEX listed companies increased by 21.5%.

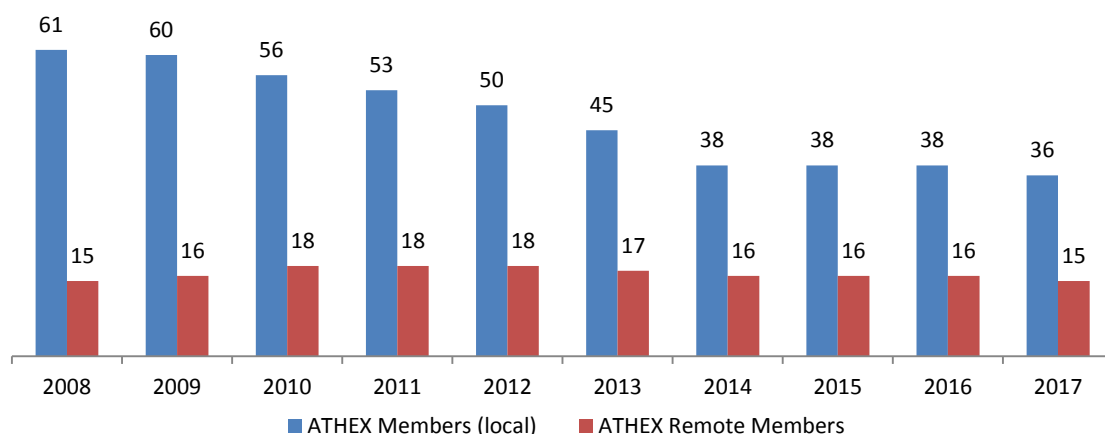
In the derivatives market, trading activity (number of contracts) was up 24.7%.

This chapter provides historical data about the cash and derivatives market that the ATHEX Group operates, data on listed companies, and comparative data with other European Exchanges. Selected market data for the period 2000 – 2017 is available in [Appendix III – Market statistics](#).

### 5.1. Cash market

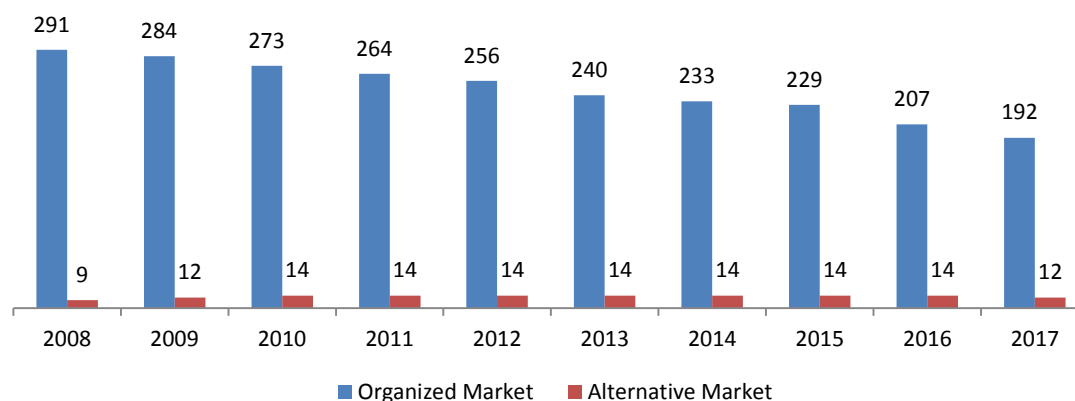
#### 5.1.1. Members – cash market

ATHEX cash market Members



### 5.1.2. Listed companies

#### Number of ATHEX listed companies



In particular, the change in the number of ATHEX listed companies in the various markets / segments is shown in the following table:

#### Listed companies in the ATHEX market segments

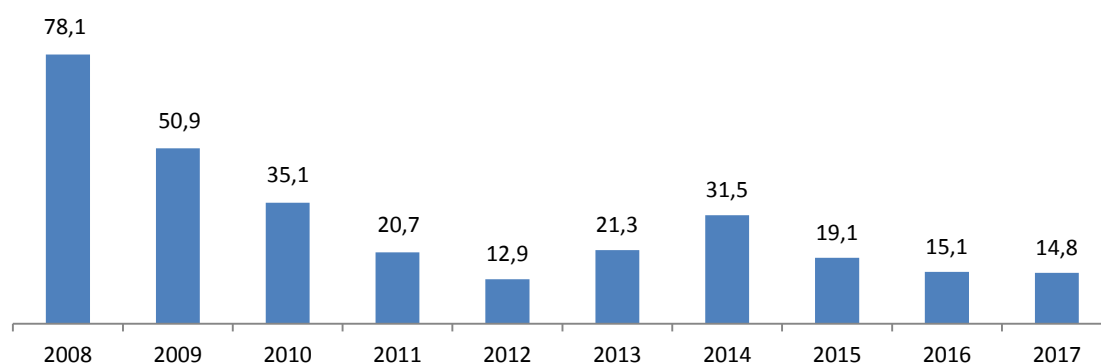
Segment	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Main Market				180	156	148	144	139	135	140
Large Cap	68	56	47							
Mid & Small Cap	144	147	133							
Special Financial Characteristics	44	40	45							
Surveillance	22	24	30	40	41	40	37	32	30	29
Suspended	13	17	18	25	39	41	38	43	27	22
Low dispersion				16	18	10	11	11	11	
Under deletion				3	2	1	3	4	4	
<b>Total - organized market</b>	<b>291</b>	<b>284</b>	<b>273</b>	<b>264</b>	<b>256</b>	<b>240</b>	<b>233</b>	<b>229</b>	<b>207</b>	<b>191</b>
Alternative market	9	12	14	14	14	14	14	14	14	12
Exchange Traded Funds	1	2	3	3	3	3	3	3	3	1

It should be noted that:

- in October 2011, the “Large Capitalization”, “Medium and Small Capitalization” segments were abolished, and all companies that were traded in those segments were listed in the Main Market.
- On 11 December 2017, the trading categories “Low Dispersion” and “Under Deletion” were abolished, and the 18 companies that were traded in them were transferred to either the Main Market (13 companies) or “Surveillance” (5 companies).

### 5.1.3. Trading activity

**ATHEX - Total trade value**  
(€bn)

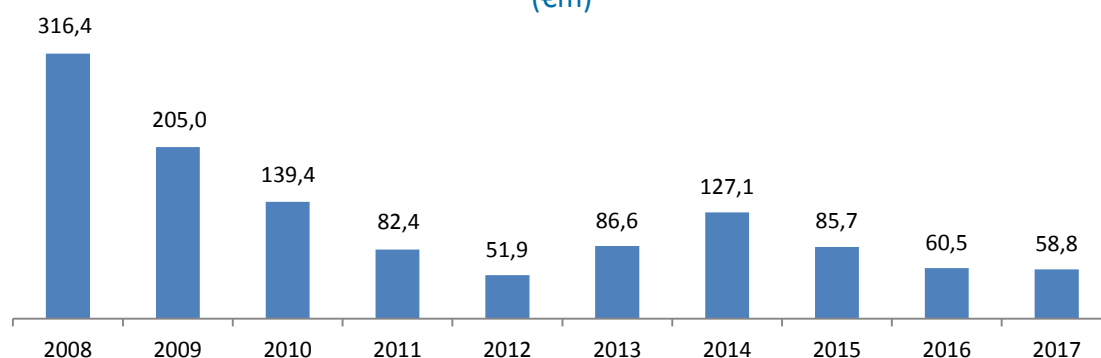


Traded value in 2017 amounted to €14.8bn vs. €15.1bn in 2016, a 2% reduction.

#### Trading activity in 2016 - 2017 per quarter

	Total traded value (€bn)		Number of trading sessions (days)		Average daily traded value (€m)	
	2017	2016	2017	2016	2017	2016
1st quarter	2,6	4,3	63	60	41,5	71,7
2nd quarter	4,7	4,9	61	61	76,9	80,2
3rd quarter	4,1	2,5	64	65	63,6	39,0
4th quarter	3,4	3,3	63	63	53,7	52,8
<b>Total</b>	<b>14,8</b>	<b>15,1</b>	<b>251</b>	<b>249</b>	<b>58,8</b>	<b>60,5</b>

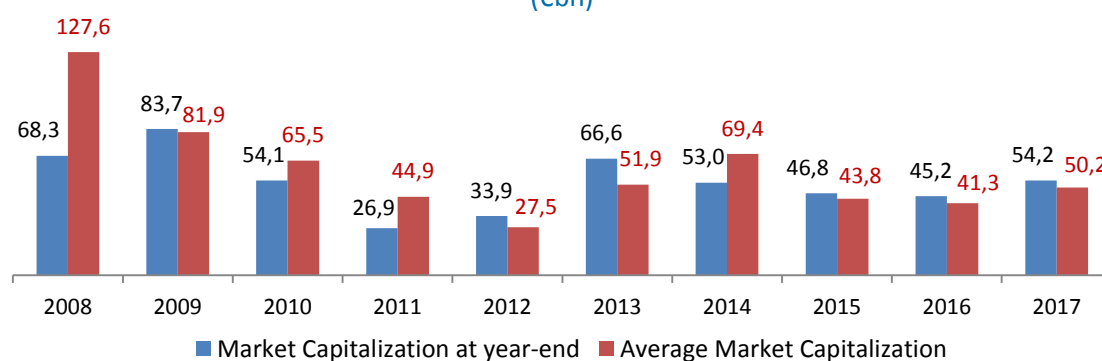
**ATHEX - Average Daily Trade Value (ADTV)**  
(€m)



It should be noted that, due to the bank holiday and the imposition of capital controls, in 2015 the Athens Stock Exchange was closed for 25 working days – the last 2 days in June (Q2) and all of July (Q3). In addition, even though the Exchange opened again on 3.8.2015, restrictions on share purchases by Greek investors remained in effect until 9.12.2015.

#### 5.1.4. Market Capitalization

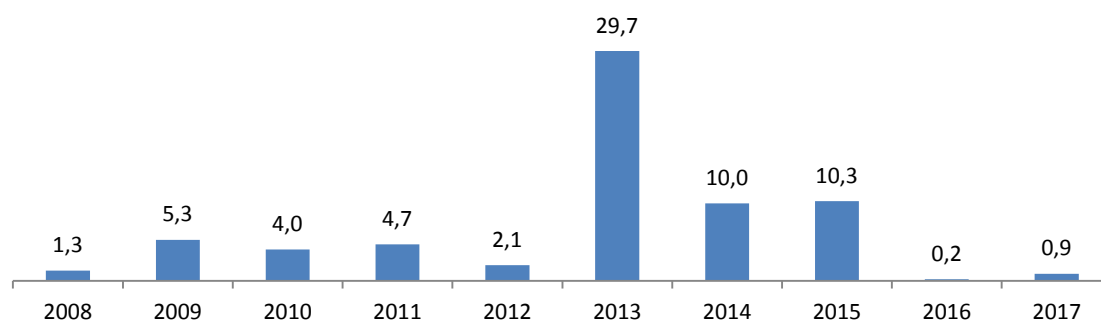
##### Athens Exchange market capitalization (€bn)



#### 5.1.5. Capital raised

The following chart shows the value of capital raised by listed companies (rights issues) and by new listings (IPOs) at the Athens Stock Exchange.

##### Capital raised (€bn, includes stock and bonds)



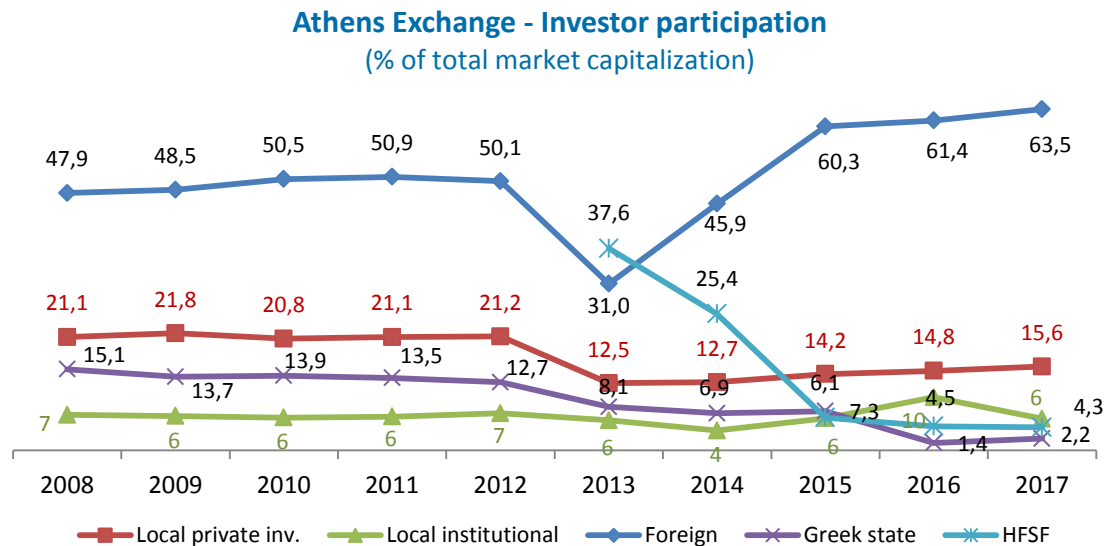
From 2013 to 2015, almost all capital raised was by the banking sector.

##### Rights issues by the systemic Banks 2013 - 2015

Bank	Capital raised (€m)			
	2013	2014	2015	Σύνολο
Alpha Bank	4,571	1,200	2,563	8,334
National Bank of Greece	9,756	2,500	2,212	14,468
Piraeus Bank	8,429	1,750	2,622	12,801
Eurobank Ergasias	6,156	2,864	2,039	11,059
<b>Total</b>	<b>28,912</b>	<b>8,314</b>	<b>9,436</b>	<b>46,662</b>

## 5.1.6. Investor participation – market capitalization

In 2017 the participation of foreign investors in the Greek market, as a percentage of the total capitalization of the market, increased to historically record level for the third straight year.

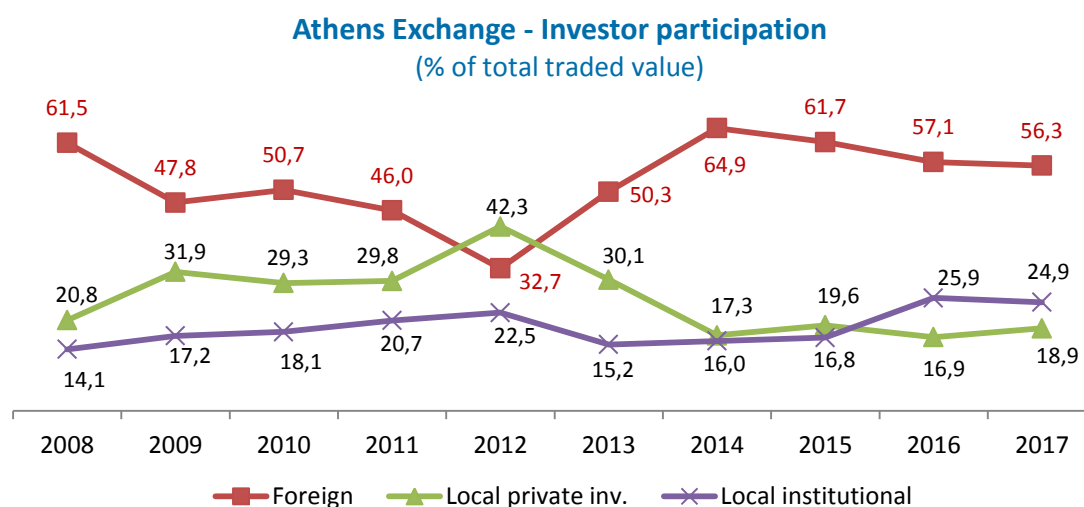


**HFSF:** Hellenic Financial Stability Fund

The appearance of HFSF in 2013 is due to its participation in the recapitalization of the Greek systemic banks that took place in 2013, when it paid approximately €27bn to acquire shares in the banks.

## 5.1.7. Investor participation – trading

The participation of foreign investors in the Greek market, as a percentage of total turnover (traded value) rose to a record high rate of 65% in 2014, and has remained at high levels over the past few years.

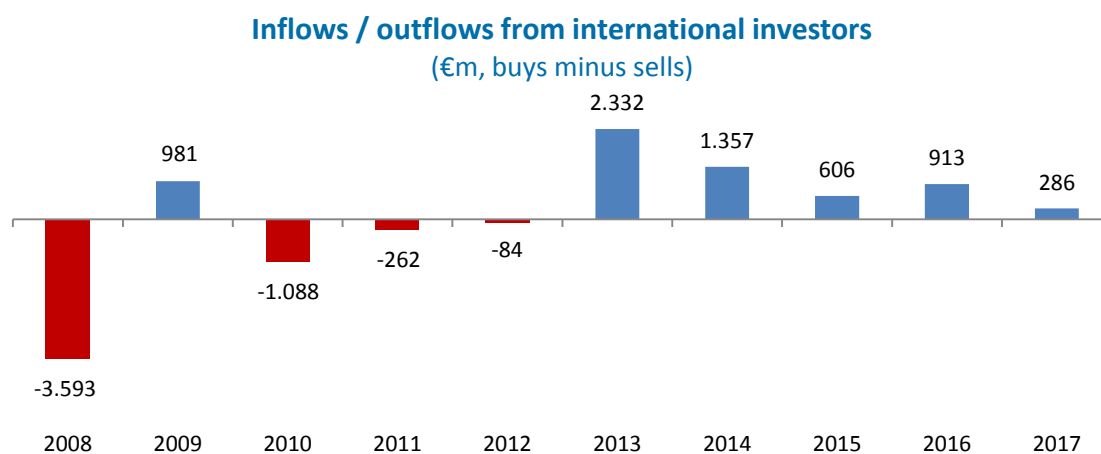




### 5.1.8. Capital flows from international investors

Capital inflows from international – that is mostly institutional – investors is a sign of trust in the Greek economy and its prospects, as these investors can with ease invest in other capital markets.

The inflows or outflows are calculating by subtracting the sales of international investors from their purchases. If the total is positive, then we have a net inflow of capital.

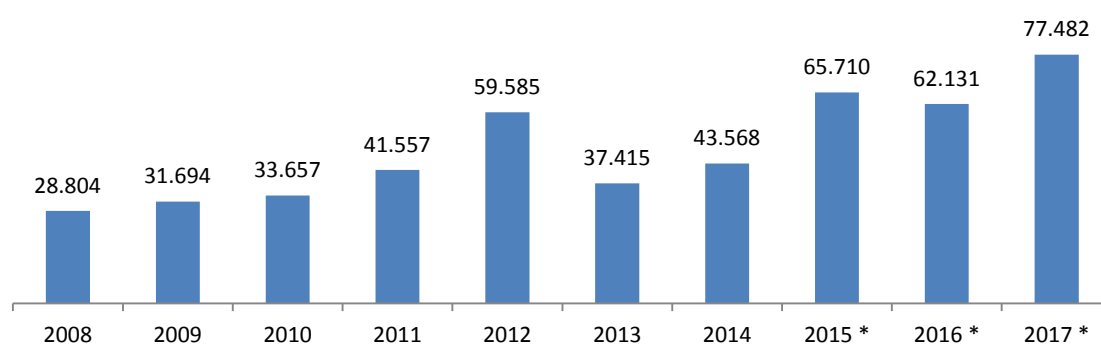


In each of the past 5 years, we observe net inflows of capital in the Athens Exchange. The largest outflows were observed in 2008, the year the world financial crisis peaked, before the start of the crisis in Greece.

## 5.2. Derivatives market

### 5.2.1. Trading activity

**ATHEX Derivatives Market - Average daily number of contracts**  
(without Repos)

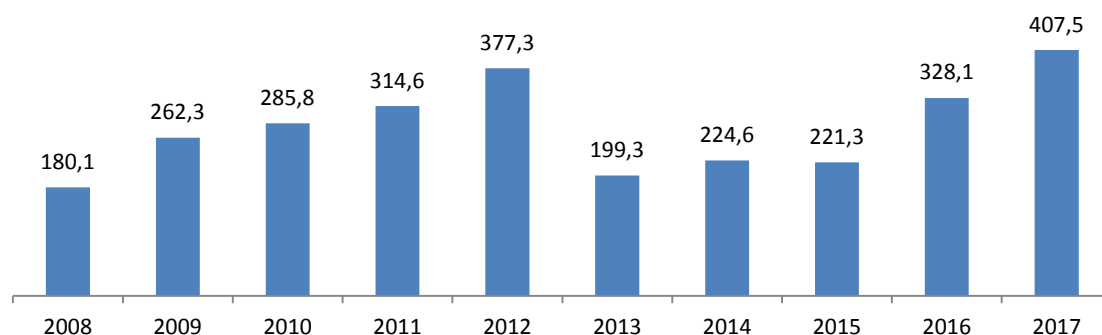


### Derivatives market - average daily number of contracts

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Stock futures	14.913	20.311	18.921	30.094	52.396	27.102	28.125	55.651	58.218	74.497
Stock options	734	273	420	256	144	75	122	60	48	98
FTSE/ATHEX Large Cap index futures	11.280	9.563	11.855	9.891	6.146	9.440	14.404	9.574	3.596	2.508
FTSE/ATHEX Large Cap index options	1.770	1.547	2.441	1.308	897	790	917	425	269	379
FTSE/ATHEX Mid Cap index futures	94	0	0	0	0	0	0	0	0	0
FTSE/ATHEX Mid Cap index options	13	0	0	0	0	0	0	0	0	0
FTSE/ATHEX-CSE bank futures	0	0	20	8	2	8	0	0	0	0
<b>Average daily number of contracts</b>	<b>28.804</b>	<b>31.694</b>	<b>33.657</b>	<b>41.557</b>	<b>59.585</b>	<b>37.415</b>	<b>43.568</b>	<b>65.710</b>	<b>62.131</b>	<b>77.482</b>
Repos	11.109	10.370	10.042	8.344	4.770	4.151	5.113	*	*	*

\* Starting on 1.12.2014, stock lending (Repos) takes place in the cash market.

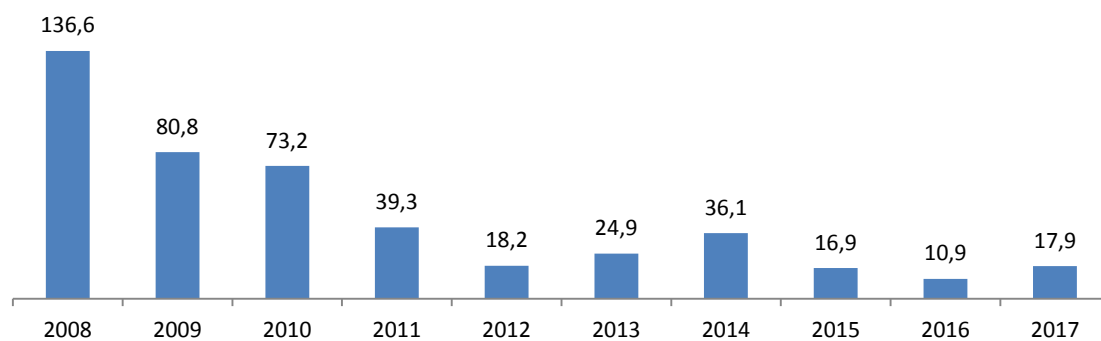
### ATHEX Derivatives Market - Open interest (thousand contracts)



### Derivatives market - open interest per product

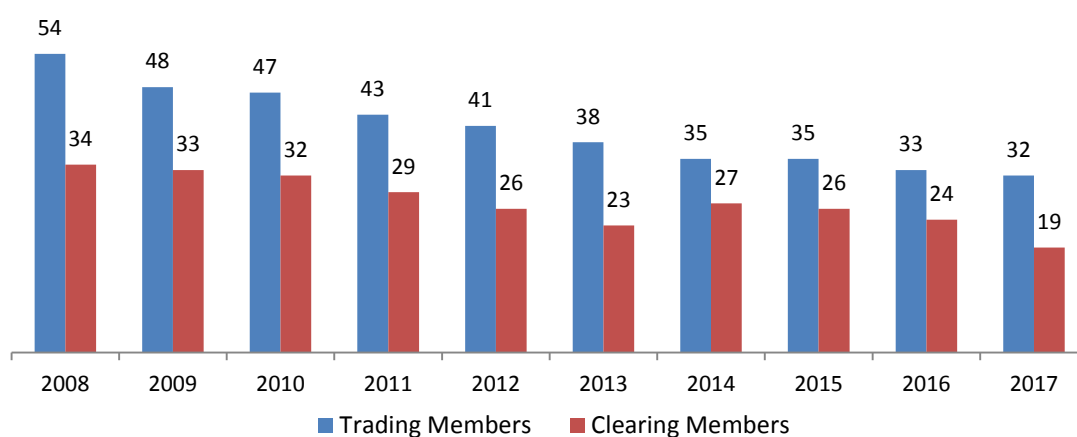
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
FTSE/ATHEX Large Cap index futures	19.304	21.561	28.601	15.228	30.816	48.533	49.209	16.066	7.705	6.383
Stock futures	149.015	228.486	247.139	288.882	337.378	146.699	167.590	201.088	317.780	395.963
FTSE/ATHEX Large Cap index options	5.460	10.650	7.925	3.796	3.177	3.289	6.505	3.214	2.306	4.250
Stock options	6.272	1.615	2.149	6.689	5.873	808	1.288	981	291	922
FTSE/ATHEX-Cyse Bank index futures	0	0	2	2	2	0	0	0	0	0
<b>Total</b>	<b>180.051</b>	<b>262.312</b>	<b>285.816</b>	<b>314.597</b>	<b>377.246</b>	<b>199.329</b>	<b>224.592</b>	<b>221.349</b>	<b>328.082</b>	<b>407.518</b>

## Avg. daily nominal traded value in the Derivatives Market (€m)



### 5.2.2. Members

#### Trading and Clearing Members in the ATHEX derivatives market



### 5.3. Listed Companies

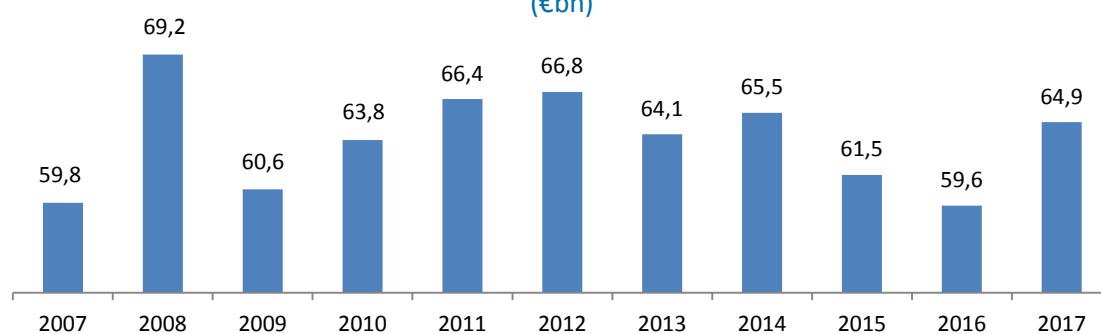
The examination of the great challenge of how the companies listed on the Athens Exchange dealt with the contraction of Greek GDP by more than 25% is quite interesting.

Financial information for the years 2007-2017 from listed companies that were in the Main Market and the Low Dispersion Segment on **30.4.2018** is included in the analysis. Banks are **excluded** from the sample, due to their particularities over the period in question.

Since companies that delisted from the Athens Exchange in the years 2007-2017 are excluded, the analysis of the financial information provided shows how the companies that managed to survive the crisis dealt with it. The data shows that the financial position of the companies has stabilized, that companies have adopted a conservative financial behavior, reducing debt, increasing cash and improving their profitability.

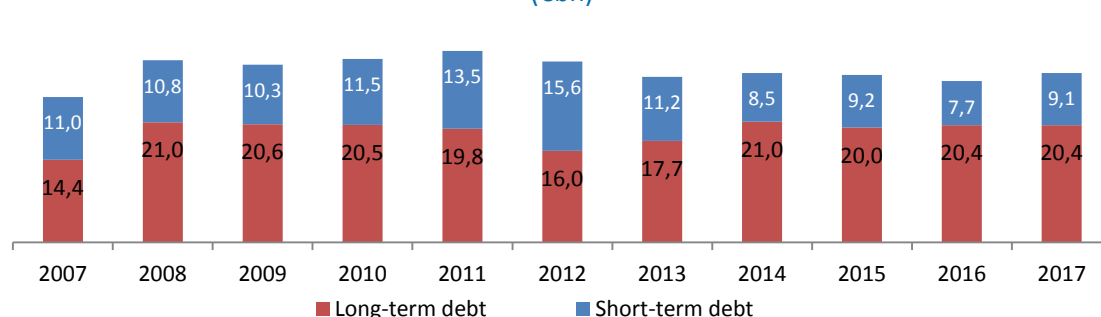
Revenue by listed companies increased by 9% in 2017, reversing the trend of the 2014-2016 period.

**Listed companies (excl. banks) - Revenue**  
(€bn)



Listed companies carried total debt of €31.8bn in 2008, while in 2017 total debt had dropped by 7% to €29.5bn.

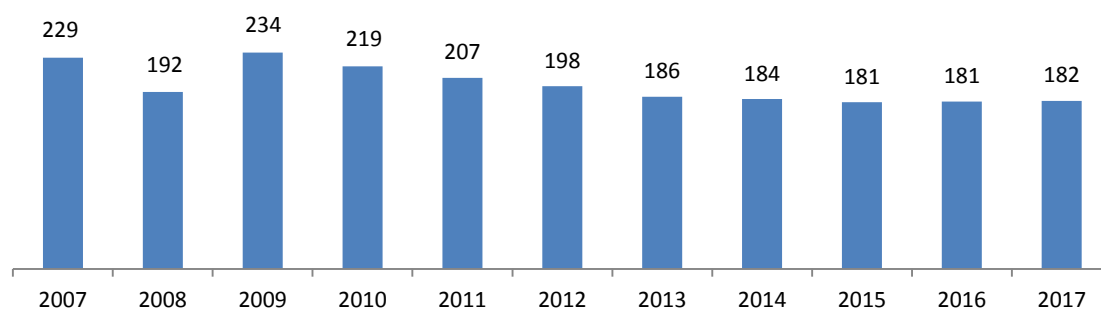
**Listed companies (excl. banks) - Debt**  
(€bn)



It is clear that there was an effort to reduce short-term debt. While initially during the crisis this relationship deteriorated, with the short to long term ratio in 2012 being 50:50, in 2017 it had significantly improved to 30:70, with short-term debt being at a lower level than in 2008.

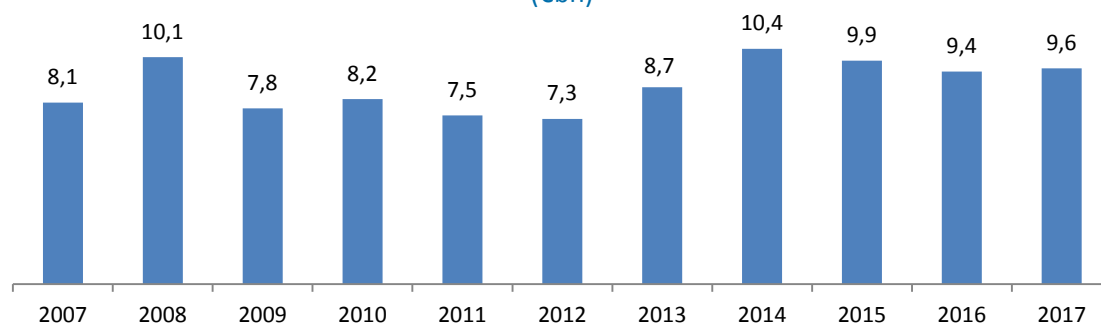
Head count in listed companies dropped by 21% in 2017 compared to 2007. It is encouraging that headcount has stabilized at current levels after continuous year-on-year drops from 2009 to 2015, and that it slightly increased in 2017 compared to the previous year.

### Listed companies (excl. banks) - Headcount (thousand persons)



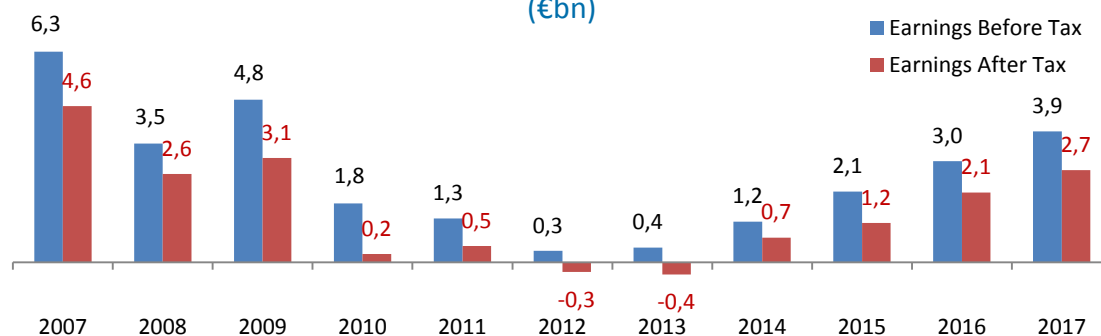
The cash and cash equivalents of the listed companies stabilized in 2017 at approximately the same level as in 2016, and slightly lower compared to 2008 (€9.6bn vs €10.1bn).

### Listed companies (excl. banks) - Cash & cash equivalents (€bn)



Finally, it looks as if the effort made by listed companies has borne fruit; while profitability was marginal in 2012-2013, it has significantly recovered since then. Earnings in 2017 for the first time during the 2008-2017 period exceed the earnings in 2008.

### Listed companies (excl. banks) - Profitability (€bn)



## 5.4. Athens Stock Exchange in Europe

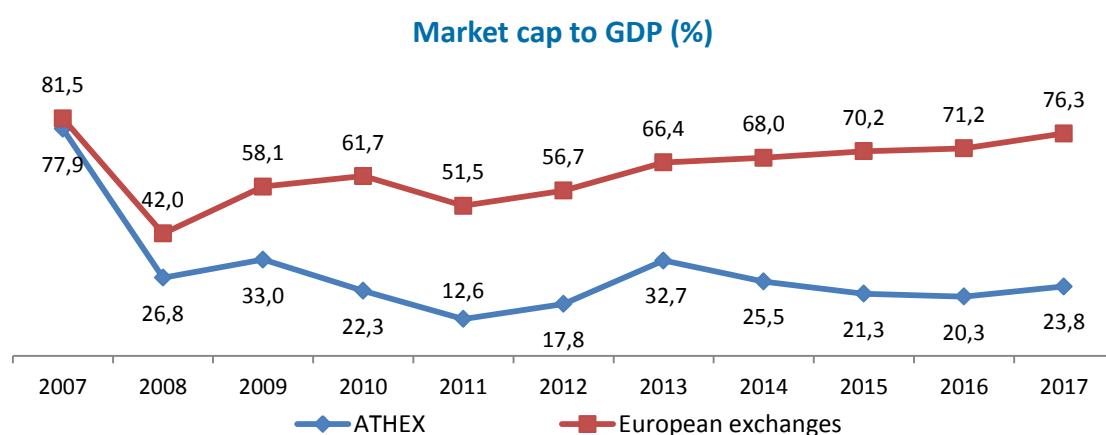
In this section Athens Stock Exchange is compared with the European exchange average.

Data in this section, including data for the Athens Stock Exchange comes from the Federation of European Securities Exchanges (FESE, [www.fese.eu](http://www.fese.eu)). FESE data includes information from exchanges that are members of this organization. The most notable exclusions are the London Stock Exchange (LSE) and Borsa Italiana, which are no longer FESE members.

It should be noted that there may be deviations in certain data between that published by FESE and that published by ATHEX, due to the homogenization of the data by the former in order to make statistics by all member exchanges comparable.

### 5.4.1. Market capitalization to GDP

In 2011 the total market capitalization of the Greek capital market to the GDP of the country dropped to 12.6%, the lowest level since 2000.

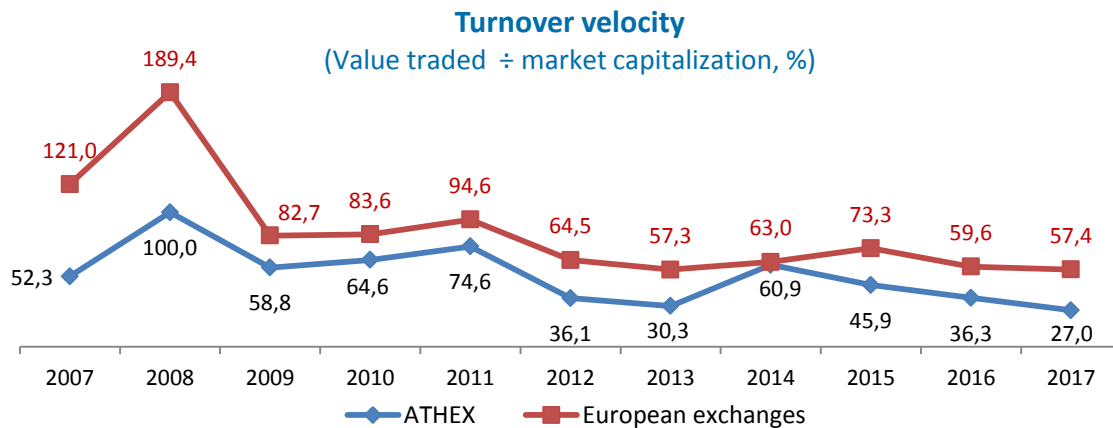


The deviation of this index for ATHEX and the European average reflects:

- The large drop that took place in all European exchanges in 2008, including ATHEX, due to the international financial crisis that intensified in the fall of that year.
- The significant deviation of the Greek index from the European average starting in 2008, as a result of the financial crisis in our country. In particular:
  - During the 2000-2007 period, the relevant index for the Greek capital market was lower than the European average by 3.6 to 11 percentage points; while
  - During the 2008-2017 period, this difference ranged from 15.2 to 52.5 percentage points, with the largest deviation being recorded in 2017.

## 5.4.2. Turnover velocity

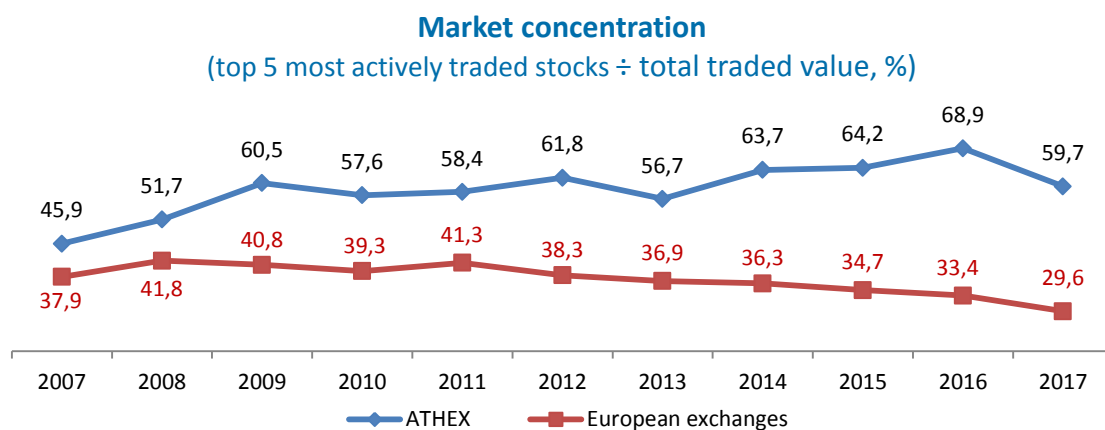
The turnover velocity of a capital market is the ratio of the traded value of that market to its total market capitalization. This index shows us the frequency with which, on average, shares change hands; if, as was the case for Athens Exchange in 2008, value traded was equal to market capitalization, then on average all listed shares changed hands once during the year.



Historically, the turnover velocity of the Greek market lags that of the other European markets. Over the past few years we observe a gradual drop in turnover velocity, both at the Athens Exchange as well as across Europe.

## 5.4.3. Market concentration

Market concentration is the ratio of the trading activity of the 5 most actively traded stocks compared to the total trading activity. The lower this ratio is, the greater is the dispersion of trading activity over a larger number of listed companies.



For the Athens Exchange, in 2017 trading activity in the 5 most actively traded stocks represented 59.7% of total trading activity, compared to the European average of 29.6%.





# 06

Stock information



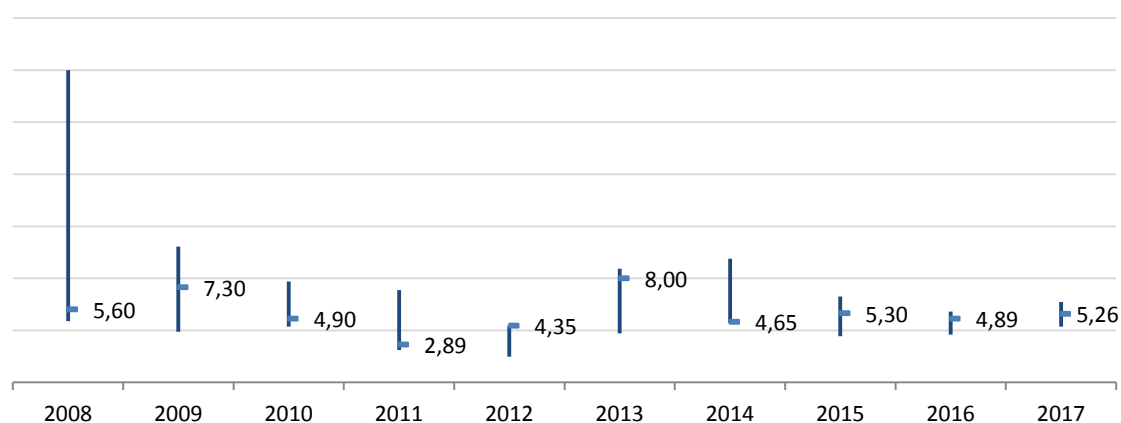
**ATHEXGROUP**  
Athens Exchange Group

## 6. Stock information

### 6.1. Stock performance

The drop in share prices on the Athens Exchange had a significant impact in the share price of the Company in recent years, as the Group raises most of its revenue both from trading activity, charging its members a fee on the value traded, as well as from the market capitalization, charging listed companies based on their capitalization.

#### EXAE - Share price performance



How to read this chart: The vertical bars depict the price fluctuation of EXAE shares. The price shown is the closing price at the end of each year.

#### EXAE share statistics - 2017

	Price (€)	Market cap. (€m)	Day	Volume (shares)	Value (€ thousand)	Day
<b>Low</b>	4,280	279,8	3/2	4.137	19,9	2/1
<b>Average</b>	5,230	341,9		95.120	478,3	
<b>High</b>	6,180	404,0	20/7	531.885	2.294,6	2/2

#### Trading sessions

↑	111
-	22
↓	118

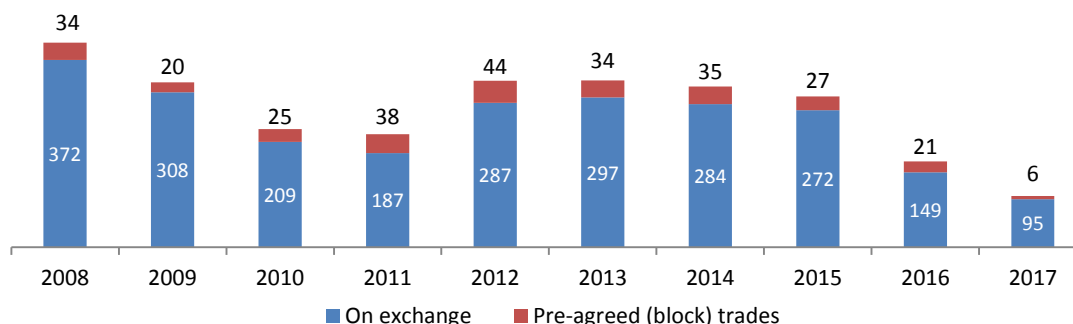
<b>Total *</b>	23.875.013	120.050,0
<b>Block trades</b>	1.559.483	7.566,2
<b>Average *</b>	95.120	478,3

\* excl. block trades

The **total trade value** of the stock in 2017 amounted to **€127.6m**, out of which €7.6m concerned block trades, while the **average daily trade value** amounted to **€478.3 thousand**.

In 2017, the average daily trade volume was **101 thousand shares**, down 40% compared to 2016. The average daily trading activity in 2017 was at the lowest level since 2002 (89 thousand shares).

### EXAE - Average daily trade volume (thousand shares)



The turnover velocity of the stock (trade value to average market capitalization) was 40% (trade value: €127.6m, average market capitalization: €315.8m) in 2017.

## 6.2. Share performance since the IPO

The share performance of the Company since its listing on ATHEX is as follows:

### EXAE share - Performance since its listing on ATHEX (21.8.2000)

Year	Share price		Share annual return (%)	Net payments to shareholders		Total return (%) (incl. payments to shareholders)	
	Start	End		Dividend (after tax)	Share capital return	Annual	Running
2000	15,41	11,37	-26,2			-26,2	-26,2
2001	11,37	7,86	-30,9	0,1908		-29,2	-47,7
2002	7,86	2,54	-67,7	0,1800		-65,4	-81,1
2003	2,54	6,54	157,5			157,5	-55,1
2004	6,54	7,60	16,2			16,2	-48,3
2005	7,60	8,96	17,9	0,2000	2,05	47,5	-24,8
2006	8,96	13,94	55,6	0,2500	1,25	72,3	17,2
2007	13,94	24,00	72,2	0,5000	0,50	79,3	89,0
2008	24,00	5,60	-76,7	0,7500		-73,5	-25,5
2009	5,60	7,30	30,4	0,4050	0,15	40,3	-10,9
2010	7,30	4,90	-32,9	0,1980	0,13	-28,4	-24,4
2011	4,90	2,89	-41,0	0,1185	0,10	-36,6	-36,0
2012	2,89	4,35	50,5	0,0825	0,08	56,1	-25,5
2013	4,35	8,00	83,9	0,0675	0,03	86,1	-1,1
2014	8,00	4,65	-41,9		0,20	-39,4	-21,6
2015	4,65	5,30	14,0	0,1890	0,11	20,4	-15,4
2016	5,30	4,89	-7,7	0,09234	0,2275	-1,7	-16,0
2017	4,89	5,26	7,6	0,05524	0,2600	14,0	-11,6
			<b>Total</b>	<b>3,2788</b>	<b>5,0875</b>		

In the table above, the column **total return – cumulative** shows the total returns an investor would obtain if they participated in the IPO and held the stock until the end of each year. Thus for example, an

investor that obtained shares at the public offering would enjoy total returns (including dividends) of 89% at the end of 2007 and -11.6% at the end of 2017.

### Total return 2000 (21.8) - 2017 (31.12)

	Price		Return (%)	Total net payment to shareholders	Total return (%) (incl. payments to shareholders)
	21.8.2000	31.12.2017			
EXAE	15,41	5,26	-65,9	8,3663	-11,6
Gen. Index	3757,83	802,37	-78,6		

Even though the performance of the stock since the public offering is negative, the share performance is better than the General Index; if the payments to shareholders are included (dividends, share capital return), the picture is significantly improved (-11.6% vs. -65.9%).

### 6.3. Share buyback programs

In 2016-2017 the Company implemented a share buyback program. The proposed program was approved by the 14th Annual General Meeting of shareholders on 20.5.2015 with the following terms:

Buyback price per share: from €1.50 to €7.00

Duration of the program: 2 years (until end of May 2017)

Purpose of the program: at least 95% of the shares that will be bought back will be cancelled - the remaining 5% of the shares may be distributed to the personnel of the Group.

The implementation of the share buyback program was delayed due to the imposition of capital controls.

The lifting of capital controls in December 2015 allowed the program to begin on 9.2.2016. Up until the end of 2016, the Company had purchased 4,035,813 shares that corresponded to 6.17% of the share capital, at an average cost of €4.62 per share, and a total cost of €18.6m, including commissions.

On the completion of the program on 20.4.2017, the Company had purchased 5,020,563 shares that corresponded to 6.78% of the share capital, at an average cost of €4.63 per share, and a total cost of €23.2m, including commissions.

At the 16<sup>th</sup> Annual General Meeting on 24 May 2017 approved the cancellation of 4,769,563 shares, corresponding to 95% of the total, as per the original terms of the program. The shares were cancelled on 26.7.2017.

On 31.12.2017 Company maintained 251,000 shares as treasury stock.

The progress of the buyback program is shown in the table below:

### Share buyback 2016-2017 - monthly buybacks

Month	Shares purchased	Total cost (incl. commissions)	Cost / share	Avg purchase volume	EXAE avg daily volume	Purchase volume - % of total volume
2/2016	337.000	1.396.247,22	4,14	22.467	152.639	15%
3/2016	468.470	2.364.839,61	5,05	23.424	257.814	9%
4/2016	323.530	1.577.297,80	4,88	20.221	264.977	8%
5/2016	527.513	2.780.113,90	5,27	43.959	262.627	17%
6/2016	498.495	2.270.445,13	4,55	33.233	202.741	16%
7/2016	442.582	1.834.496,62	4,14	23.294	117.690	20%
8/2016	224.010	958.093,21	4,28	10.182	52.764	19%
9/2016	334.377	1.390.067,65	4,16	15.199	114.767	13%
10/2016	295.727	1.303.619,02	4,41	14.786	58.634	25%
11/2016	280.296	1.309.869,35	4,67	12.741	96.567	13%
12/2016	303.813	1.449.083,77	4,77	13.226	74.926	18%
<b>Total '16</b>	<b>4.035.813</b>	<b>18.634.173,28</b>	<b>4,62</b>			
1/2017	207.619	990.613,36	4,77	22.467	152.639	15%
2/2017	295.064	1.328.955,92	4,50	22.467	152.639	15%
3/2017	281.634	1.320.940,27	4,69	23.424	257.814	9%
4/2017	200.433	970.111,35	4,84	20.221	264.977	8%
<b>Total '17</b>	<b>984.750</b>	<b>4.610.620,90</b>	<b>4,68</b>			
<b>Total</b>	<b>5.020.563</b>	<b>23.244.794,18</b>	<b>4,63</b>			

In the past the Company had implemented two share buyback programs, which reduced the number of shares outstanding.

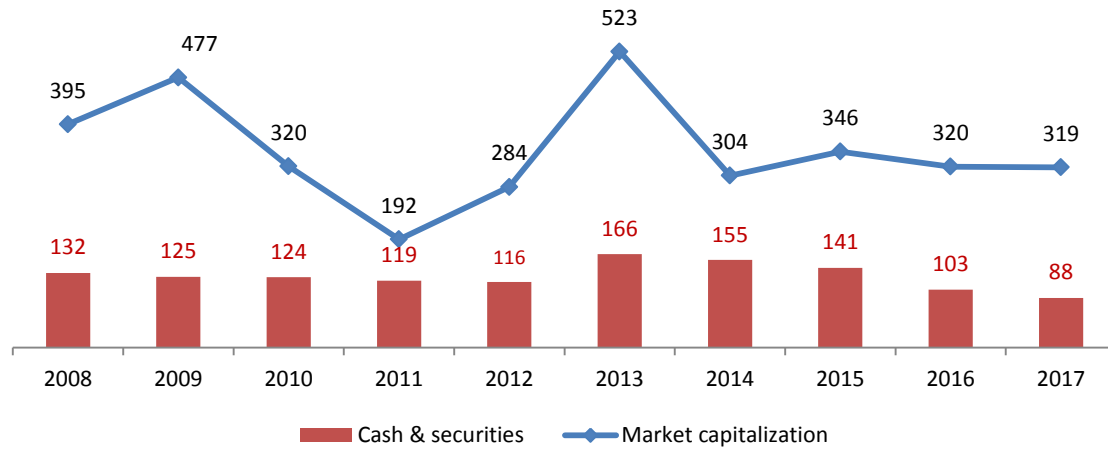
### Share buyback programs

Month - Year	Shares outstanding (before cancellation)	Cancelled shares	Shares outstanding (after cancellation)	Cancelled shares to shares outstanding (%)
Sep 2005	71.088.173	857.710	70.230.463	1,2
Jun 2009	70.485.563	5.117.000	65.368.563	7,3
Jul 2017	65.368.563	4.769.563	60.599.000	7,3

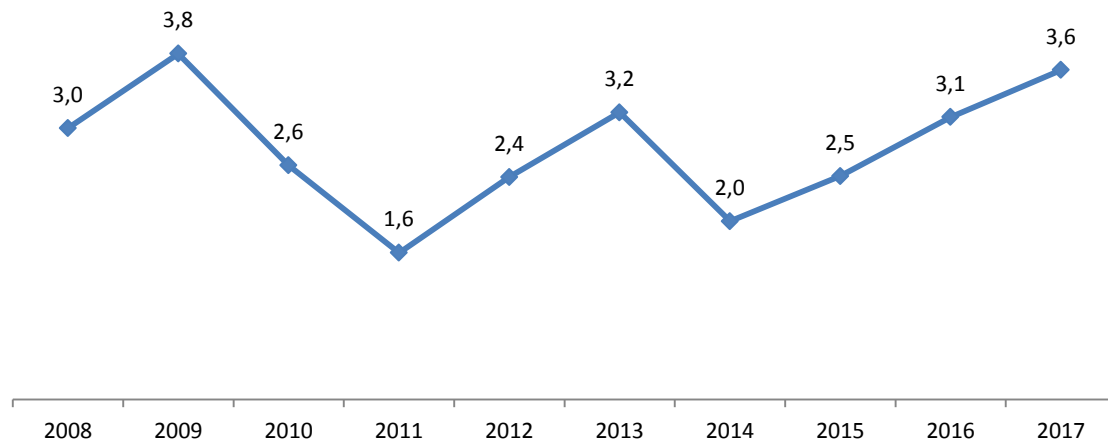
The total cost of the second program (2008-2009) was €40.7m, and 5,117,000 shares were purchased at an average price of €7.95.

## 6.4. Athens Stock Exchange (EXAE) valuation

EXAE - Market capitalization vs. cash & securities (€m)



EXAE - Market capitalization to cash & securities (times)



## 6.5. Dividend policy

The Company follows a policy of returning excess liquidity to shareholders, and plans on continuing this policy.

### Dividend policy (amounts in € per share; year paid)

Year	Dividend (before tax)	Dividend withholding tax	Dividend (after tax)	Capital return †	Total net payout to shareholders
2000		-			
2001	0,1908	-	0,1908		0,1908
2002	0,1800	-	0,1800		0,1800
2003		-			0,0000
2004		-			0,0000
2005	0,2000	-	0,2000	2,05	2,2500
2006	0,2500	-	0,2500	1,25	1,5000
2007	0,5000	-	0,5000	0,50	1,0000
2008 ‡	0,7500	-	0,7500		0,7500
2009	0,4500	10%	0,4050	0,15	0,5550
2010	0,2200	10%	0,1980	0,13	0,3280
2011	0,1500	21%	0,1185	0,10	0,2185
2012	0,1100	25%	0,0825	0,08	0,1625
2013	0,0900	25%	0,0675	0,03	0,0975
2014				0,20	0,2000
2015	0,2100	10%	0,1890	0,11	0,2990
2016	0,1026	10%	0,0923	0,23	0,3198
2017	0,06499	15%	0,05524	0,25997	0,3152
2018	0,0500	15%	0,04250	0,15000	0,1925

**Total payout 2000 - 2017**

**8,3663**

\* Starting on 1.1.2017, the dividend withholding tax increased to 15% from 10%.

† There is no withholding tax on special dividends (share capital returns).

‡ In 2008 the company implemented a share buyback program. All shares thus purchased (5,117,000), at an average price of €7.95 per share (total cost: €40.7m) were cancelled on 25.6.2009.

In 2016 and 2017, due to the existence of treasury stock, which does not receive cash distributions, the amounts per share for payment to shareholders were adjusted as follows:

#### Cash distributions in 2017

Month - Year	Shares outstanding	Record date	Treasury stock (on record date)	Amount per share	Payout	Amount per share paid out
FY2016 dividend	65.368.563	31.05.2017	5.020.563	0,06	3.922.113,78	0,06499
Capital return	65.368.563	25.07.2017	5.020.563	0,24	15.688.455,12	0,25997

#### Cash distributions in 2016

Month - Year	Shares outstanding	Record date	Treasury stock (on record date)	Amount per share	Payout	Amount per share paid out
FY2015 dividend	65.368.563	01.06.2016	1.656.513	0,10	6.536.856,30	0,10260
Capital return	65.368.563	05.07.2016	2.155.008	0,22	14.381.083,86	0,22750

**Dividend write-off:** The rights to dividends that have not been collected by shareholders are written-off in favor of the Greek State **five (5) years** after the end of the calendar year during which the corresponding financial statements had been approved by the General Meeting of shareholders.

Thus, on 31.12.2017 the dividend for fiscal year 2011 which was paid in 2012 was written off.



## 6.6. Shareholder structure

Since the listing of the Company (stock symbol: EXAE) in the main market of the Athens Stock Exchange in August 2000, several changes in its shareholder structure have taken place, with the most significant being its full privatization in September 2003. Following the divestment of the Greek State, both the participation of foreign shareholders and the free float of the Company increased, which had a positive effect on its liquidity.

### Shareholder structure - Investor type (31.12.2017)

Investor type	Number of shareholders	Number of shares	%
Banks	5	3.572.338	5,9%
Institutional investors	56	7.538.179	12,4%
Private individuals	10.155	13.001.321	21,5%
Brokerage companies	9	833.236	1,4%
ATHEX - treasury stock	1	251.000	0,4%
Other Greek investors	76	733.547	1,2%
Foreign investors	450	34.669.379	57,2%
<b>Total</b>	<b>10.752</b>	<b>60.599.000</b>	<b>100,0%</b>

### Shareholder structure - country of origin (31.12.2017)

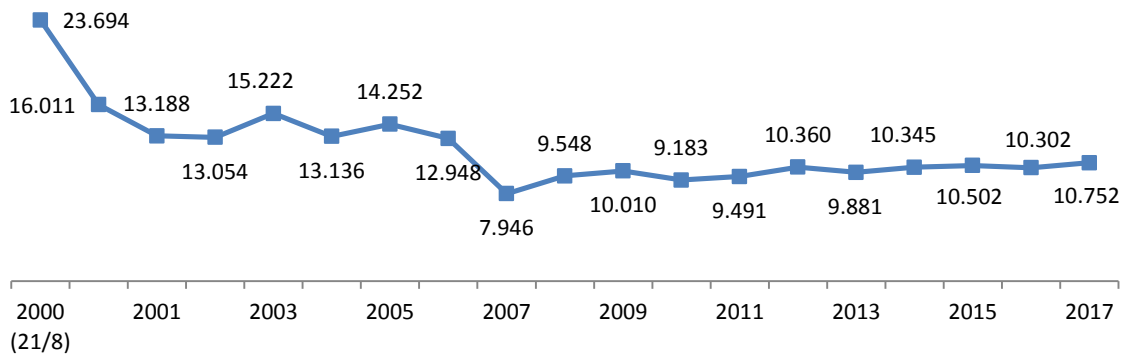
Country of origin	Number of shareholders	Number of shares	%
Greece	10.271	25.891.757	42,7%
Luxembourg	18	10.609.619	17,5%
USA	104	9.631.187	15,9%
Cayman Islands	13	7.320.747	12,1%
United Kingdom	33	1.703.696	2,8%
Norway	2	599.560	1,0%
Australia	15	582.599	1,0%
France	7	574.261	0,9%
Italy	21	570.280	0,9%
Switzerland	19	555.358	0,9%
Other states	249	2.559.936	4,2%
<b>Total</b>	<b>10.752</b>	<b>60.599.000</b>	<b>100,0%</b>

### Shareholder structure - number of shares (31.12.2017)

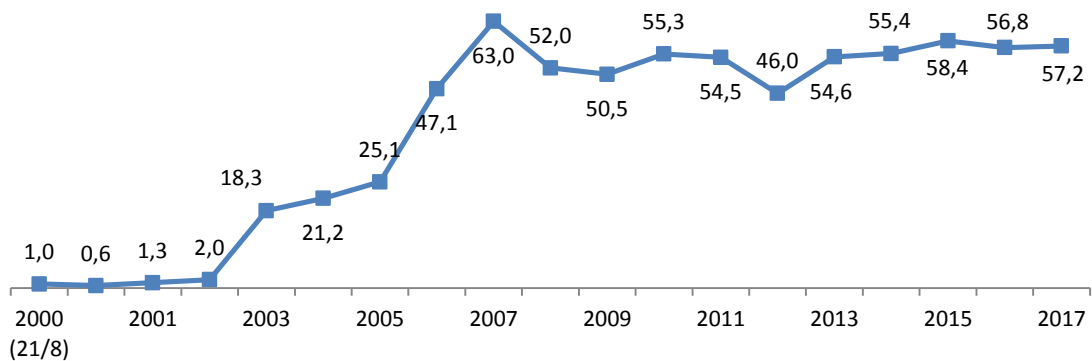
Number of shares	Number of shareholders	Number of shares	%
$x \leq 10$	267	1.338	0,002%
$10 < x \leq 100$	1.708	112.073	0,2%
$100 < x \leq 1.000$	6.326	2.487.979	4,1%
$1.000 < x \leq 10.000$	2.082	6.105.132	10,1%
$10.000 < x \leq 100.000$	280	7.967.311	13,1%
$100.000 < x \leq 1.000.000$	78	22.714.687	37,5%
$x > 1.000.000$	11	21.210.480	35,0%
<b>Total</b>	<b>10.752</b>	<b>60.599.000</b>	<b>100,0%</b>

The change in the number of EXAE shareholders, since the Company's IPO, is as follows:

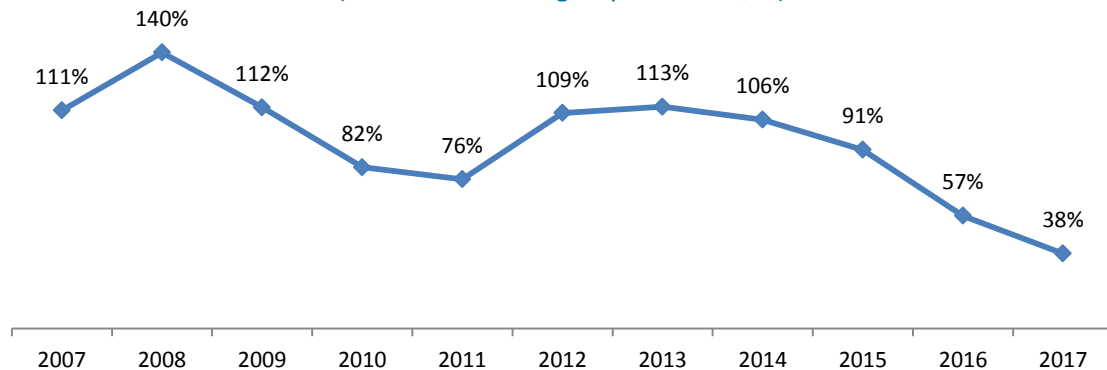
### EXAE - number of shareholders (on Dec. 31st of each year, unless otherwise noted)



### Participation of international investors in EXAE - % of share capital (on Dec. 31st of each year, unless otherwise noted)



### EXAE turnover velocity (Traded value ÷ avg. capitalization, %)



The turnover velocity of the share has been dropping over the past 4 years, and in 2017 it posted its lowest level since 2002 (29%).

## Share ownership in the Company

### Significant participations (> 5%) (31.12.2017)

Shareholder	% of the share capital of the Company
FRANKLIN TEMPLETON INSTITUTIONAL LLC (indirect participation - % based on the notification by the shareholder on 9.2.2016)	5.56%
THE LONDON AND AMSTERDAM TRUST COMPANY LTD (Direct participation - % based on the notification by the shareholder on 6.12.2013)	5.41%

### Board of Directors (31.12.2017)

Shareholder	number of shares (direct holdings)	% of the share capital of the Company
Executive members (2)	17,200	0.03%
Non-executive members (11)	1,150	0%

### Group personnel (31.12.2017)

Shareholder	number of shares	% of the share capital of the Company
Senior and middle management of the Group (11)	46,754	0.077%
Other personnel (31)	36,830	0.061%

### Analysts covering the stock

Analyst	Company	Email
Nikos Katsenos	Alpha Finance	<a href="mailto:nikos.katsenos@alphafinance.gr">nikos.katsenos@alphafinance.gr</a>
Panagiotis Kladis	Eurobank Equities	<a href="mailto:pkladis@eurobankequities.gr">pkladis@eurobankequities.gr</a>
Vangelis Karanikas	Euroxx	<a href="mailto:vkaranikas@euroxx.gr">vkaranikas@euroxx.gr</a>
Kostas Nikas	NBG Securities	<a href="mailto:Kostas.Nikas@nbgsecurities.com">Kostas.Nikas@nbgsecurities.com</a>
Dimitris Birbos	Investment Bank of Greece	<a href="mailto:dbirbos@ibg.gr">dbirbos@ibg.gr</a>
Spiros Tsangalakis	Pantelakis Securities	<a href="mailto:spiros.tsangalakis@pantelakis.gr">spiros.tsangalakis@pantelakis.gr</a>
Iakovos Kourtesis	Piraeus Securities	<a href="mailto:kourtesis@piraeus-sec.gr">kourtesis@piraeus-sec.gr</a>
Dimitris Giannoulis	ResearchGreece	<a href="mailto:dimitris.giannoulis@researchgreece.com">dimitris.giannoulis@researchgreece.com</a>
Alex Boulougouris	Wood & Co	<a href="mailto:alex.boulougouris@wood.cz">alex.boulougouris@wood.cz</a>



# 07

## Key Financial Figures of the Group



**ATHEXGROUP**  
*Athens Exchange Group*

## 7. Key financial figures of the Group

### Market performance

Average market capitalization

2017	<b>€50.2bn</b>	<b>+22%↑</b>
2016	€41.3bn	

Rights issues / New listings

2017	<b>€0.9bn</b>	<b>+339%↑</b>
2016	€0.2bn	

Trading activity (equities)

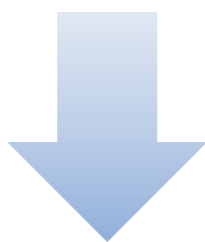
2017	<b>€58.8m</b>	<b>-2.7%↓</b>
2016	€60.5m	

*Average Daily Traded Value (ADTV)*

Trading activity (derivatives)

2017	<b>77.5</b>	<b>+25%↑</b>
2016	62.1	

*Average daily volume (thousand contracts)*



### Athens Exchange Group results

Consolidated revenue

2017	<b>€26.3m</b>	<b>+2.9%↑</b>
2016	€25.6m	

Consolidated expenses

2017	<b>€18.4m</b>	<b>+4.4%↑</b>
2016	€17.6m	

Profitability (earnings after tax)

2017	<b>€3.1m</b>	<b>+115%↑</b>
2016	€1.4m	

The revenue of the Group is derived to a large extent from the trading, clearing and settlement of stock and derivatives trades, as well as from the fees on corporates actions (rights issues, new listings) by companies.

The expenses of the Group are not variable, as they are not related with any level of production. Approximately 60% of expenses concern staff remuneration and expenses.

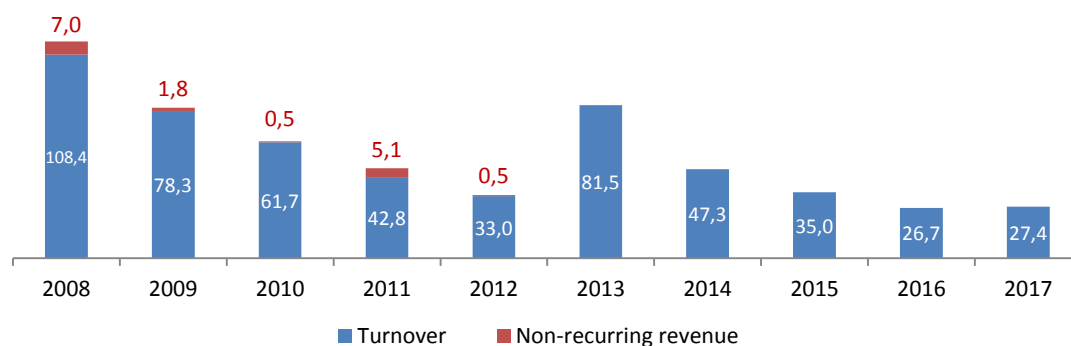
In this section, the main aspects of the financial performance of the Athens Exchange Group are presented. The financial reports, on which these figures are based on, are available on the website of the Group - [www.athexgroup.gr/web/guest/re-financial-statements](http://www.athexgroup.gr/web/guest/re-financial-statements).

Consolidated financial figures since 2004 are presented in [Appendix I](#). The Group began reporting its financial statements based on International Accounting Standards (IAS) in 2005.

## 7.1. Profit & Loss Statement – consolidated data

### 7.1.1. Revenue

Consolidated Turnover (€m)



Consolidated turnover figures include the fee to the Hellenic Capital Market Commission (which is turned over to the HCMC), but does not include non-recurring revenue.

Non-recurring revenue concerns the following items:

Fiscal year	Amount (€m)	Description
2008	7.0	€3.2m - Sale of the building at 1 Pesmazoglou St. €3.3m - Tax provision reversal et al.
2009	1.8	Claim on the tax assessed on the Hellenic Capital Market Commission (HCMC) fee for fiscal year 2000.
2010	0.5	Accounting profit from the compensation that the company received for restoring the building and the assets that were damaged and depreciated due to the bomb attack.
2011	5.1	€2.4m - Claim on the tax assessed on the HCMC fee that was paid by the Group for fiscal years 2001, 2003, 2004 and 2005. €2.7m - Extraordinary tax paid on ATHEX dividends received by HELEX, on which extraordinary tax had already been paid.
2012	0.45	Claim on the tax assessed on the HCMC fee for fiscal year 2002.

Over the past few years the Group has significantly reduced all of its main fees, such as the trading and clearing fees, fees on corporate actions, as well as fees on derivatives, thus improving the competitiveness of the Greek capital market to the benefit of investors.

## Revenue 2016 - 2017

<i>Amounts in € thousand</i>				
	2017	2016 *	% of turnover	Δ '17 - '16
Trading	4.435	4.460	16,2%	-0,6%
Clearing	8.171	8.288	29,8%	-1,4%
Settlement	1.493	1.415	5,4%	5,5%
Exchange services	3.148	3.118	11,5%	1,0%
Depository services	2.580	2.077	9,4%	24,2%
Clearinhouse serviecs	172	166	0,6%	3,6%
Data feed	3.204	3.266	11,7%	-1,9%
IT services	309	320	1,1%	-3,4%
Revenue from re-invoiced expenses	1.133	915	4,1%	23,8%
New services (XNET, CP CSE-SIBEX, IT)	2.170	2.008	7,9%	8,1%
Other services	597	673	2,2%	-11,3%
<b>Total turnover</b>	<b>27.412</b>	<b>26.706</b>	<b>100,0%</b>	<b>2,6%</b>
Regulator fee (HCMC)	-1.063	-1.088		-2,3%
<b>Total revenue</b>	<b>26.349</b>	<b>25.618</b>		<b>2,9%</b>

\* 2016 – reclassified figures, as published in the FY2017 Financial Report.

### 7.1.2. Expenses

Most of operating expenses of the Group concern personnel remuneration and expenses. In 2017, personnel remuneration and expenses amounted to 58% of operating expenses.

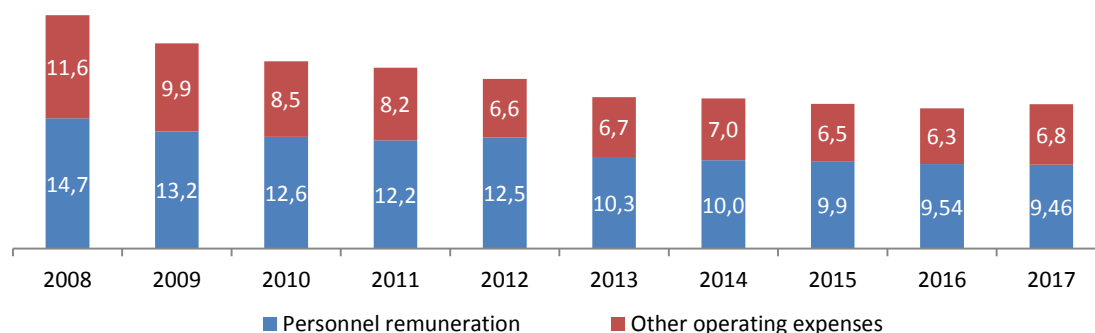
## Expenses 2016 - 2017

<i>Amounts in € thousand</i>				
	2017	2016 *	% of oper. exp.	Δ '17 - '16
Personnel remuneration & expenses	9.458	9.543	58,0%	-0,9%
Third party remuneration & expenses	810	588	5,0%	37,8%
Utilities	671	747	4,1%	-10,2%
Maintenance / IT support	1.270	1.148	7,8%	10,6%
Taxes	1.200	1.079	7,4%	11,2%
Building / Equipment management	514	556	3,2%	-7,6%
Marketing & advertising expenses	278	271	1,7%	2,6%
Participation in organizations	315	311	1,9%	1,3%
Insurance premiums	403	421	2,5%	-4,3%
Operating expenses	1.317	1.106	8,1%	19,1%
BoG - cash settlement	61	61	0,4%	0,0%
<b>Total operating expenses</b>	<b>16.297</b>	<b>15.831</b>	<b>100,0%</b>	<b>2,9%</b>
Re-invoiced expenses	977	866		12,8%
Expenses from ancillary services (XNET, CSE-SIBEX CP, IT)	1.092	901		21,2%
<b>Total expenses</b>	<b>18.366</b>	<b>17.598</b>		<b>4,4%</b>

\* 2016 – reclassified figures, as published in the FY2017 Financial Report.



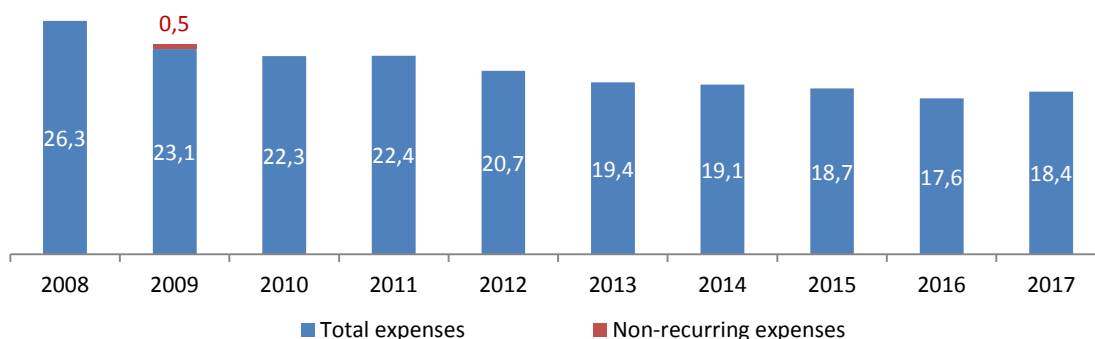
### Consolidated operating expenses (€m)



The operating expenses of the Group were reduced by 38% from 2008 to 2017. In particular, personnel remuneration and expenses were reduced by 36%, while other operating expenses were reduced by 41%.

The reduction in operating expenses of the Group made possible reductions in fees to market participants (investors, listed companies, members etc.) over the same period, increasing the Group's competitiveness without burdening shareholders.

### Consolidated total expenses (€m)



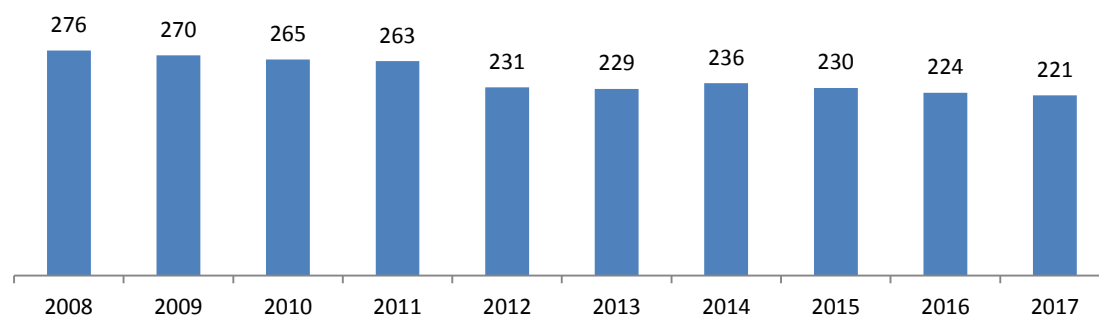
Non-recurring expenses in 2009 concern the amount of €0.5m in expenses for removing construction debris and the reconstruction following the terrorist act against the headquarters of the Group on Sep. 2<sup>nd</sup> 2009.

The total expenses of the Group were reduced by €7.9m (30%) over the past decade, from €26.3m in 2007 to €18.4m in 2017.

### 7.1.3. Personnel

From 2008 to 2017 head count dropped by 20%, from 276 to 221 employees. The gradual reduction in head count resulted in an increase in the productivity of the Group, and a reduction of personnel remuneration and expenses as a whole.

**ATHEX Group - Personnel count**  
(at the end of each year)



### 7.1.4. Profitability

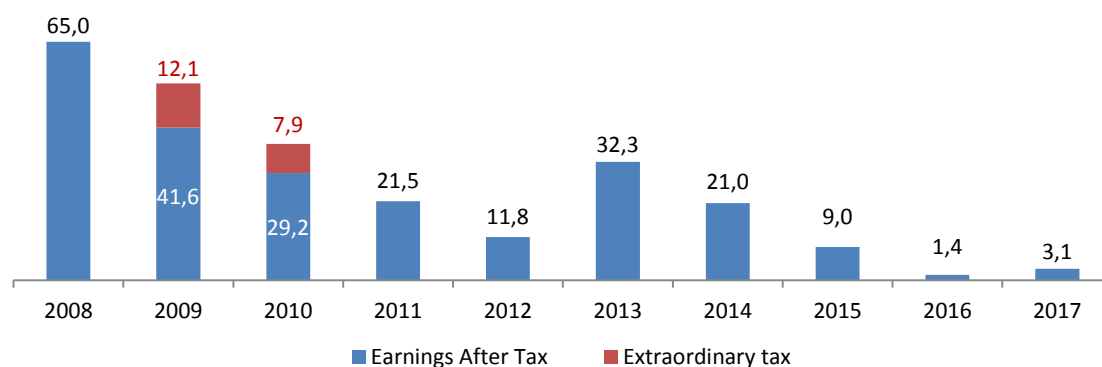
The profitability of the Group significantly increased significantly in 2017 compared to 2016, even though turnover and expenses both only slightly increased. This increase in profitability is mostly due to the valuation loss (-€2.2m) in 2016 on the portfolio of Piraeus Bank shares that the Group possesses.

#### Profitability 2016 - 2017

Amounts in € thousand

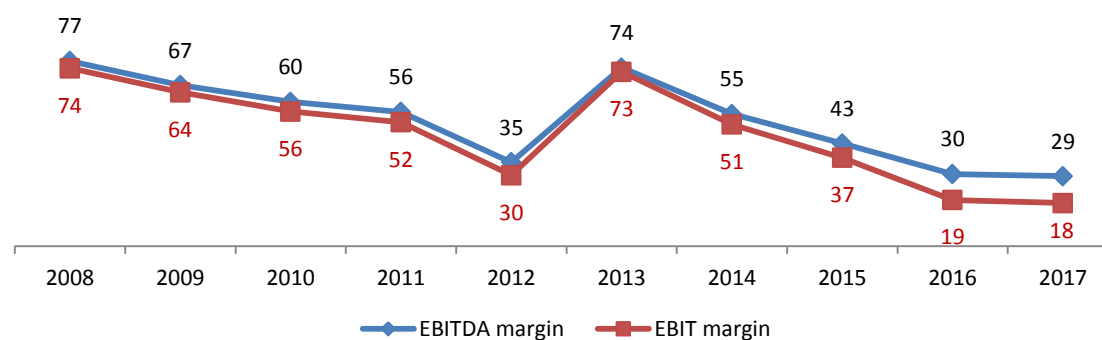
	2017	2016	Δ '17 - '16
Total revenue	26.349	25.618	2,9%
less total expenses, including new activities	-18.366	-17.598	4,4%
<b>Earnings Before Interest, Taxes, Depreciation &amp; Amortization (EBITDA)</b>	<b>7.983</b>	<b>8.020</b>	<b>-0,5%</b>
Depreciation	-3.060	-2.881	6,2%
<b>Earnings Before Interest and Taxes (EBIT)</b>	<b>4.923</b>	<b>5.139</b>	<b>-4,2%</b>
Capital income	321	577	-44,4%
Loss - valuation of securities	0	-2.219	
Financial expenses	-166	-131	26,7%
<b>Earnings Before Tax (EBT)</b>	<b>5.078</b>	<b>3.366</b>	<b>50,9%</b>
Income tax	-2.002	-1.937	3,4%
<b>Earnings After Tax (EAT)</b>	<b>3.076</b>	<b>1.429</b>	<b>115,3%</b>

## Consolidated Earnings After Tax (€m)



The extraordinary tax contributions that were assessed in 2009 (Law 3808/2009) and 2010 (Law 3845/2010) were assessed on the corporate Earnings After Tax of the companies of the Group. The consolidated effect is as shown in the table above.

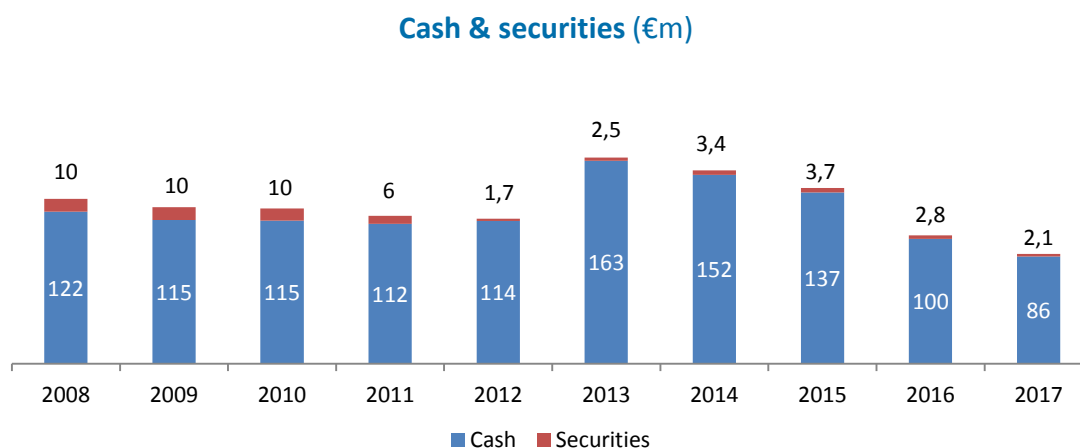
## Operating profit margins (%)



**EBITDA:** Earnings Before Interest, Taxes, Depreciation and Amortization

**EBIT:** Earnings Before Interest and Taxes

## 7.2. Cash & cash equivalents



The Group through its parent company held a bond issued by the Bank of Piraeus in its portfolio. At the end of 2015, the Company accepted the offer to exchange the Bank of Piraeus bond with shares having a value equal to the par value of the bond (€4m), at the issue price (€0.30 per share) during the rights issue of the Bank in December 2015.

As a result of the exchange, the Company obtained 13,365,316 shares of the Bank of Piraeus at a cost of €0.30 per share. Following the reduction of the number of shares outstanding (1:20 reverse split) which the Bank of Piraeus carried out on 31.7.2017, the number of shares in the possession of the Company was adjusted accordingly to 668,265 with an adjusted cost of €6.00 per share.

The adjusted share price of Piraeus Bank on 31.12.2016 was €4.18 (historical price: €0.209) and as a result the Group posted a valuation loss of €2.2m.

On 31.12.2017 the share price of Piraeus Bank was €3.07, and the Group posted a valuation loss of €0.74m.

### 7.3. Value Added Statement

The Value Added Statement shows the value that has been created by the Group during the fiscal year, and how this added value is distributed to stakeholders.

In 2017, the Group created €16.8m in added value compared to €14.3m in 2016, which corresponds to a 17.9% increase.

#### Value Added by the Group

Amounts in € thousand

	2017	2016	Δ '17 - '16
Turnover	27.412	26.706	2,6%
Other revenue	321	577	-44,4%
Other expenses	-7.874	-10.150	-22,4%
Depreciation	-3.060	-2.881	6,2%
<b>Value Added</b>	<b>16.799</b>	<b>14.252</b>	<b>17,9%</b>

The distribution of the value created by the Group is shown in the following table.

#### Distribution of Value Added

Amounts in € thousand

	2016		2015	
to shareholders (net dividend for previous FY)	2.575	15%	3.334	23%
to employees (salaries, social security, benefits)	9.458	56%	9.543	67%
to the state (taxes)	<b>4.719</b>	<b>28%</b>	<b>4.692</b>	<b>33%</b>
to creditors (interest)	0	0%	0	0%
<b>Total value distributed</b>	<b>16.752</b>	<b>100%</b>	<b>17.569</b>	<b>123%</b>
to the Group	47	0%	-3.317	-23%
<b>Value Added</b>	<b>16.799</b>	<b>100%</b>	<b>14.252</b>	<b>100%</b>

In 2017 the Group created €16.8m in added value, which was paid almost in its entirety (€16.75) to shareholders, employees and the state.

*It should be noted that the data for 2016 differs from that published in the 2016 Annual Report, due to the modification of the revenue and expenses figures of the Group (profitability remained unchanged).*

More information in Appendix I - [Value added and distributed by the Group 2004 - 2017](#).

## 7.4. Alternative Performance Measures (APMs)

### Background

An Alternative Performance Measure is an adjusted financial measurement of past or future financial performance, financial position or cash flows that is different from the financial measurement defined in the applicable financial reporting framework. In other words an APM on the one hand is not exclusively based on financial statement standards, and on the other it provides material supplementary information, excluding items that may potentially differentiate from the operating results or the cash flows.

APMs are published by the issuers during the publication of regulated information, and aim to improve transparency and promote usability as well as provide accurate and comprehensive information to investors.

Transactions with a non-operational or non-cash valuation that have a significant effect in the Statement of Comprehensive Income are considered items that affect the adjustment of the indices to APMs. These, non-recurring in most cases, items may arise among others from:

- Asset impairments
- Restructuring measures
- Consolidation measures
- Sale or transfer of assets
- Changes in legislation, compensation for damages or legal claims

APMs must always be taken into consideration in conjunction with the financial results that have been drafted based on IFRS, and in no instance should they be considered as replacing them. The Athens Exchange Group used APMs for the first time in fiscal year 2016, in order to better reflect the financial and operational performance related to the activity of the Group as such in the fiscal year in question, as well as the previous comparable period.

The APMs for the Group are presented in summary form below.

## APMs in 2016-2017

€ thousand	2017	2016	
EBITDA	7,983	8,020	-0%
<b>Adjusted EBITDA</b>	<b>8,551</b>	<b>8,595</b>	<b>-1%</b>
	<b>+7%</b>	<b>+7%</b>	

**EBITDA:** Earnings Before Interest, Taxes, Depreciation and Amortization

€	2017	2016	
EPS	0,026	0,03	-13%
<b>Adjusted EPS</b>	<b>0,060</b>	<b>0,066</b>	<b>-9%</b>
	<b>+131%</b>	<b>+120%</b>	

**EPS:** Earnings per Share

€ thousand	2017	2016	
EBIT	4,923	5,139	-4%
<b>Adjusted EBIT</b>	<b>5,491</b>	<b>5,714</b>	<b>-4%</b>
	<b>+12%</b>	<b>+11%</b>	

**EBIT:** Earnings Before Interest and Taxes

	2017	2016	
Cash flows after investment activities	10,056	2,334	+331%
<b>Adjusted cash flows after investment activities</b>	<b>10,624</b>	<b>5,128</b>	<b>+107%</b>
	<b>+6%</b>	<b>+120%</b>	

€ thousand	2017	2016	
EBT	5,078	3,366	+51%
<b>Adjusted EBT</b>	<b>5,646</b>	<b>6,160</b>	<b>-8%</b>
	<b>+11%</b>	<b>+83%</b>	

**EBT:** Earnings Before Tax

	2017	2016	
ROI	38%	27%	+41%
<b>Adjusted ROI</b>	<b>42%</b>	<b>49%</b>	<b>-14%</b>
	<b>+11%</b>	<b>+81%</b>	

**ROI:** Return on Investment

€ thousand	2017	2016	
EAT	3.076	1.429	+115%
<b>Adjusted EAT</b>	<b>3.644</b>	<b>4.223</b>	<b>-14%</b>
	<b>+18%</b>	<b>+196%</b>	

**EAT:** Earnings After Tax

	2017	2016	
ROE	2.50%	1%	+167%
<b>Adjusted ROE</b>	<b>2.96%</b>	<b>2.77%</b>	<b>+7%</b>
	<b>+18%</b>	<b>+196%</b>	

**ROE:** Return on Equity

	2017	2016	
Degree of financial self-sufficiency	90%	92%	-2%
<b>Adjusted degree of financial self-sufficiency</b>	<b>90%</b>	<b>93%</b>	<b>-3%</b>
	<b>0%</b>	<b>+1%</b>	

In accordance with the financial statements of fiscal year 2017, essentially the only items affecting the adjustment of the measures used by the Group in order to calculate APMs are the provisions against bad debts and the valuation of the shares of a listed bank that it possesses.

The detailed presentation and calculation basis is provided in the 2017 Annual Financial Report.

## 7.5. Share Capital

### Changes in share capital 2000 - 2017

Date	Number of shares	Share par value change	Share par value	Share capital (€)	Corporate action
Mar 2000 (*)	50,000,000		5.0477	252,384,446.07	Founding capital
Aug 2000 (*)	52,500,000		5.0477	265,003,668.38	Share capital increase and listing of the shares in the ATHEX Main market
Sep 2001	52,500,000		5.05	265,125,000.00	Capitalization of reserves & share capital / share par value denom. in €
Feb 2002	71,088,173		5.05	358,995,273.65	Capital increase of the Company by the contribution of shares of subsidiary companies (†) belonging to third parties
May 2005	71,088,173	(2.05)	3.00	213,264,519.00	Share capital return to shareholders
Sep 2005	70,230,463		3.00	210,691,389.00	Cancellation of treasury stock (857,710 shares)
Jun 2006	70,230,463	(1.25)	1.75	122,903,310.25	Share capital return to shareholders
Dec 2006	70,271,463		1.75	122,975,060.25	Stock options to executives of the Group (1st plan, 2nd period)
Jul 2007	70,271,463	(0.50)	1.25	87,839,328.75	Share capital return to shareholders
Dec 2007	70,376,963		1.25	87,971,203.75	Stock options to executives of the Group (1st plan, 3rd period)
Dec 2007	70,485,563		1.25	88,106,953.75	Stock options to executives of the Group (2nd plan, 1st period)
Jun 2009	65,368,563		1.25	81,710,703.75	Cancellation of treasury stock (5,117,000 shares)
Jun 2009	65,368,563	(0.15)	1.10	71,905,419.30	Share capital return to shareholders
Sep 2010	65,368,563	(0.13)	0.97	63,407,506.10	Share capital return to shareholders
Sep 2011	65,368,563	(0.10)	0.87	56,870,649.81	Share capital return to shareholders
Sep 2012	65,368,563	(0.08)	0.79	51,641,164.77	Share capital return to shareholders
Jun 2013	65,368,563	(0.03)	0.76	49,680,107.88	Share capital return to shareholders
Dec 2013	65,368,563	-	0.76	49,680,107.88	Addition of €54,553.56 difference to share premium (due to merger with ATHEX)
Jun 2014	65,368,563	(0.20)	0.56	36,606,395.28	Share capital return to shareholders
Dec 2014	65,368,563	1.62			Capitalization of untaxed reserves
	65,368,563	(1.44)	0.74	43,372,736.62	Capitalization of share premium
		0.67			Share capital reduction
Jun 2015	65,368,563	(0.11)	1.30	84,979,131.90	Capitalization of share premium
Jun 2016	65,368,563	(0.22)	1.08	70,598,048.04	Share capital return to shareholders
Jul 2017	65,368,563	(0.24)	0.84	54,909,592.92	Share capital return to shareholders
Jul 2017	60,599,000		0.84	50,903,160.00	Cancellation of treasury stock (4,769,563 shares)

(\*) Amounts in Greek drachmas have been converted in Euro based on the fixed exchange rate €1 = 340.75 GRD

(†) "Athens Derivatives Exchange", "Central Securities Depository", "Athens Derivatives Exchange Clearing House", "Thessaloniki Stock Exchange Centre", "Systems Development and Support House of the Capital Market"



## Share capital (31.12.2017)

Share capital	€50,903,160.00 Fifty million nine hundred three thousand one hundred sixty euro.
Number of shares	60,599,000 (including 251,000 shares in treasury stock)
Share par value	€0.84

## 7.6. Pricing policy

The following table presents, in summary and simplified form, the main elements of the Group's pricing policy:

Fees	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Comment
Trading (1)	1.5bp		1.25bp									Value Based 1.7.2010: 1.5bp -> 1.25bp
Trading (Block Trades)			1.0bp									Value Based
Use of Trading Infrastructure			Scalable, based on the value of trades									---
Clearing, Settlement & Registration (1)	Bundled fee 2.50bp		Post trading fees unbundled 1.7.2010									Value Based until 30.6.2010
Clearing (1)	---	---	2.0bp									Value Based
Settlement & Registration (1)	---	0.5bp / €0.50	€0.50									1.7.2010: 2.5bp -> 2.0bp + 0.50bp 27.9.2010: 0.50bp -> €0.50 / Settlement instruction
Listed Company Subscriptions			Quarterly, scalable based on the company's market capitalization [Fee Scales: Cap. €0-100m: 0.0025%; Cap. €100-250m: 0.002%; Cap. > €250m: 0.0005%]									Fees Reduced 18.12.2013 (Previously Cap. €0-100m: 0.003%)
Rights Issues			ATHEX: 5bp of the value being raised (up to €50m); 2.5bp for > €50m ATHEX CSD: scalable, capped at €180ths									Fees Reduced 18.12.2013 (Previously 10bp w/ 50% discount given in some cases)
IPOs			Scalable, based on the value of the shares being listed [Fee Scales: Cap €0-1.0bn: 4bp; €1.0- 3.0bn: 2bp; > €3.0bn: 0bp]									Fees Reduced 18.12.2013 (Previously: €0-1.5bn: 8bp; €1.5-3.0bn: 4bp; > €3.0bn: 2bp)
Average Revenue (€ / Contract (1), (3))	0.975	0.707	0.752	0.539	0.269	0.406	0.357	0.175	1.105	0.097	0.153	Fee Reductions Implemented in 2005, 2010 (Aug), 2012 and 2013 (Dec)

- The fees on the value of the trade are charged to both counterparties (buyer / seller).
- In 2010, as part of the unbundling of services, in accordance with the obligations of Law 3606/07 (complementing the MiFID requirements) and the European Code of Conduct, the post-trading services (clearing, settlement and registration) were separated, and a discrete pricing policy adopted. Thus, the single fee (2.5bp) for all post-trading services that was in effect up until 30.6.2010, was unbundled as follows:
  - Clearing: 2.0bp
  - Settlement & registration:
    - 0.5bp (1.7.2010 – 26.9.2010)
    - €0.50 / settlement instruction (starting on 27.9.2010)

3. Derivatives fees are based among other on a) the product, b) the type of investor, c) the monthly traded volume and d) the price of the underlying security (for stock futures and options). Due to this complexity in the pricing policy, the (actual) average revenue per contract (in €) is provided instead.

<http://www.athexgroup.gr/helex-price-policy>

## 7.7. Taxation

The main tax rates that affect the operation of the Greek capital market and the Athens Exchange Group are as follows:

### Taxes - rates

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Corporate income tax rate	29%	25%	25%	25%	24%	20%	20%	26%	26%	26%	29%	29%	
Value Added Tax	19%	19%	19%	19%	21/23%	23%	23%	23%	23%	23%	23/24%	24%	1.4.2005: 18% -> 19% 1.4.2010: 19% -> 21% 1.7.2010: 21% -> 23% 1.6.2016: 23% -> 24%
Withholding tax (dividends)	0%	0%	0%	0%	10%	10%	21%	25%	25%	10%	10%	15%	
Capital gains tax	0%	0%	0%	0%	0%	0%	0%	0%	15%	15%	15%	15%	
Tax on stock sales *	15bp (0,15%)						20bp (0,20%)					1.4.2011: 15 -> 20bp	

\* Applies to Greek retail investors, for shares purchased after 1.1.2009 and only for those owning > 0.5% of the share capital

### Hellenic Capital Market Commission fee

		Comment
Cash market	10% of trading revenue (starting on 30.11.1991)	Art. 1 §§9-14 Decision 54138/B' 2197/9.12.2010
	5% of revenue from MTFs (EN.A) (starting on 30.10.2007)	Art. 1 §1 Decision 46794/B' 2156/30.10.2007
	7% of revenue from clearing & settlement (starting on 30.11.1991)	Art. 79 Law 1969/1991/A-167
Derivatives market	5% of trading revenue (starting on 15.9.2006)	Art. 1 §§1-4 Decision 36730/B' 903/15.9.2006
	3.5% of revenue from MTFs (EN.A) (starting on 15.9.2006)	
	applicable rates are 50% of those for the cash market	

## 7.8. Auditors

The auditors of the companies of the Group, from 2000, the year the Company was listed on the Athens Exchange up until today, are shown in the table below:

### Auditors of the companies of the Athens Exchange Group

Fiscal Year	Year	Auditors	Auditing Company
1 <sup>st</sup>	2000-1	Theodoros Lytsioulis (SOEL Reg. No. 11251) Dimitrios Ziakas (SOEL Reg. No. 10631)	SOL S.A.
2 <sup>nd</sup>	2002	Nikolaos Moustakis (SOEL Reg. No. 13971) Dimitrios Ziakas (SOEL Reg. No. 10631)	SOL Ernst & Young
3 <sup>rd</sup>	2003	Nikolaos Moustakis (SOEL Reg. No. 13971) Dimitrios Ziakas (SOEL Reg. No. 10631)	Ernst & Young SOL S.A.
4 <sup>th</sup> -6 <sup>th</sup>	2004-2006	Nikolaos Moustakis (SOEL Reg. No. 13971) Despina Xenaki (SOEL Reg. No. 14161)	Ernst & Young
7 <sup>th</sup> -10 <sup>th</sup>	2007-2010	Konstantinos Michalatos (SOEL Reg. No. 17701) Dimitrios Sourbis (SOEL Reg. No. 16891)	PriceWaterhouseCoopers (SOEL Reg. No. 113)
11 <sup>th</sup>	2011	Marios Psaltis (SOEL Reg. No. 38081) Despina Marinou (SOEL Reg. No. 17681)	PriceWaterhouseCoopers (SOEL Reg. No. 113)
12 <sup>th</sup> -13 <sup>th</sup>	2012-2013	Panayotis Papazoglou (SOEL Reg. No. 16631) Ioannis Psihountakis (SOEL Reg. No. 20161)	Ernst & Young (SOEL Reg. No. 107)
14 <sup>th</sup> -15 <sup>th</sup>	2014-2015	Panayotis Papazoglou (SOEL Reg. No. 16631) Dimitrios Konstantinou (SOEL Reg. No. 16201)	Ernst & Young (SOEL Reg. No. 107)
16 <sup>th</sup>	2016	Dimitrios Konstantinou (SOEL Reg. No. 16201) Vassilios Kaminaris (SOEL Reg. No. 20411)	Ernst & Young (SOEL Reg. No. 107)
17 <sup>th</sup>	2017	Despina Marinou (SOEL Reg. No. 17681) Fotios Smirnis (SOEL Reg. No.52861)	PriceWaterhouseCoopers (SOEL Reg. No. 113)
18 <sup>th</sup> *	2018	<i>Despina Marinou (SOEL Reg. No. 17681) Fotios Smirnis (SOEL Reg. No.52861)</i>	<i>PriceWaterhouseCoopers (SOEL Reg. No. 113)</i>

\* Proposed, for approval by the 17<sup>th</sup> Annual General Meeting.





# 08

## Risk Management



**ATHEXGROUP**  
*Athens Exchange Group*

## 8. Risk management

### 8.1. General – Risk management environment

A major consideration of the Athens Exchange Group is the management of risk that arises from its business activities.

The Group, as organizer of the capital market, has developed a comprehensive framework for managing the risks to which it is exposed, ensuring its sustainability and development, as well as contributing to the stability and security of the capital market.

Athens Exchange Clearing House (ATHEXClear) belongs to the Group; it operates as a central counterparty (CCP) in the clearing of cash and derivatives products, and as such is obliged to satisfy the strict requirements of the EMIR regulatory framework concerning risk management, under which it has been licensed since 2015. Even though risk management at the Group concerns all companies and risk categories, it is recognized that because of its role in the market, ATHEXClear faces and must manage the most significant risk.

The internal and external legal and regulatory framework which ATHEXClear is directly subject to and the Group indirectly with regards to their obligations to monitor and manage risk, includes the Regulation of Clearing of Transferable Securities Transactions in Book Entry Form, the Regulation on the Clearing of Transactions on Derivatives and Regulation (EU) 648/2012 of the European Parliament and Council of July 4th 2012 for OTC derivatives, central counterparties, and trade repositories, known as EMIR (European Market Infrastructure Regulation).

### 8.2. Risk Strategy and Risk Management

The risk strategy of the Group is aligned with its business strategy to provide the appropriate infrastructure for the reliable, safe and unhindered operation of the capital market. In accordance with the strategy of the Group, the risk tolerance level is defined in order to satisfy market needs, limit cost for participants, maximize the exploitation of business opportunities but also ensure market security and compliance with regulatory requirements.

### 8.3. Organizational structure

Besides the comprehensive measures for ensuring the smooth operation of the systems of the Group, each organizational unit of the Group is responsible for monitoring and managing possible risks in such a way so as to react quickly and effectively in case risk events arise.

Continuing the effort of previous years, in 2017 efforts were made to strengthen the operation of risk management by ATHEXClear, in order to remain aligned with the EMIR Regulation and to follow international good practices.

In particular, as far as ATHEXClear is concerned, the organizational structure that supports risk management includes the following units:

- **Board of Directors**, which has the final responsibility and accountability regarding the management of the risk management operation of the company. In particular, the Board of Directors defines, determines and documents the appropriate level of risk tolerance and ability of the company to assume risk. In addition, the BoD and senior management ensure that the policies, processes and audits of the company are consistent with the risk tolerance level and the ability of the company to assume risk, and examine ways through which the company recognizes, reports, monitors and manages risks.
- **Risk Committee**, which advises the Board of Directors on matters of risk management.
- **Investments Committee**, which decides on the determination of limits and monitors liquidity risk, determines policies and standards for the investment strategy, financing principles, liquidity management, interest rate risk and management.
- **Risk Management Department**, of the Risk Management & Clearing Division of ATHEXClear, which is sufficiently independent from other departments of the Company, and whose main duty is the comprehensive approach to risks that ATHEXClear faces, in order to recognize them, calculate them and finally manage them. The Risk Management Department possesses the required jurisdiction, the necessary means, know-how and access to all relevant information.
- **Chief Risk Officer**, heading the Risk Management Department, who reports to the Board of Directors on matters of risk management through the Chairman of the Risk Committee, and implements the risk management framework through the policies and procedures that the Board of Directors enacts.
- **Organizational Units** which are responsible for recognizing and managing risks within their scope and participate in overall risk management at the Group.

#### 8.4. Unified risk management

The services that the Group provides involve various types and levels of risk, and it is recognized that effective risk management consists of the following:

- **Recognizing and assessing risks:** Analyzing the present and future activities of the Group, recognizing cases in which the Group is exposed to risks. The risks recognized are evaluated as to the potential exposure to loss. This includes in general the estimation of both the possibility that the loss will occur, as well as the potential effects.
- **Controlling risks:** The arrangements for managing each risk are the key to the effective management of risks and it is important that they be understood by all personnel. In addition, management is responsible to ensure the appropriate application of the unified framework for risk management and individual policies / frameworks.
- **Risk containment:** Management identifies the best method for risk containment, taking into consideration costs and benefits. As a general principle, the Group does not assume risks that pose the possibility of catastrophic or significant losses. Likewise, insuring against losses that are relatively predictable and without a material impact is avoided. The alternatives for containing risk depend on the level of tolerance of the Group against various types of risk.

- **Monitoring and reporting risks:** The Group possesses a comprehensive system for reporting and monitoring risks. In particular, the ATHEXClear Risk Management Department monitors the risk levels of the company on a continuous basis using specialized and approved risk management methods. The main assumptions, the data sources and the processes used in measuring and monitoring risk are documented and tested for reliability on a regular basis through the review and audit and the validation framework.

## 8.5. Risk categories

The Group ensures that it deals with all risks, internal or external, present or future, and especially those that have been recognized as being significant. It is recognized that each service provided by the Group can expose it to any combination of the risks mentioned below.

The usual risks to which, due to the nature of its activities, the Group is exposed to are:

### Financial risk

- Market risk (changes in exchange rates, interest rates, market prices, commodities and volatility)
- Credit risk (mainly counterparty credit risk and from the investment of own assets)
- Liquidity risk (mainly cash flows risk)

### Operating risk

Risk due to a lack or failure of internal procedures and systems, by human factor or external events which includes legal risk.

### Business risk

Risk due to new competitors, drop in transaction activity, deterioration of local and international economic conditions etc.

## 8.6. Description of categories and main risk factors

### Market risk

The Group is exposed to limited market risk in its activities. ATHEXClear, as central counterparty in the clearing of cash and derivatives products, places its financial assets only in cash at the Bank of Greece. ATHEX and ATHEXCSD invest their cash exclusively in time deposits in Greek systemic banks as well as in foreign banks with an excellent rating. In any case, the Group monitors the potential exposure that market risk can bring and calculates the capital that it must keep against market risk, in accordance with the capital requirements calculation methodology that it applies. In particular:

**Foreign exchange risk:** This risk does not materially affect the operation of the Group, given that transactions with clients & suppliers in foreign currency are very few. In particular, the risk that



ATHEXClear faces is treated as part of the risk management measures that apply to the clearing activity. ATHEXClear monitors possible exposures in foreign currencies, and calculates any capital it needs to maintain against foreign exchange risk.

### Credit risk

The Group's credit risk mainly concerns transactions in the cash and derivatives markets, in which ATHEXClear operates as Central Counterparty.

The Hellenic Capital Market Commission, with decisions 5, 6 and 7/556/8.7.2010 granted to ATHEXClear a license to manage and operate systems to clear trades on dematerialized securities (Securities System) and derivatives products (Derivatives System). In this capacity, ATHEXClear assumes the risk that Clearing Members default on their obligations to clear and settle trades, as described in the Rulebooks (credit counterparty risk). In addition, as of 22 January 2015 has been licensed as a Central Counterparty under the EMIR regulation, and has a very strict framework for managing risk.

ATHEXClear has enacted and is implementing a number of mechanisms and financial assets to cover risk, and is responsible for the smooth operation of the system in general, in conjunction with the scope and scale of trades whose clearing it has undertaken. The mechanisms that ATHEXClear applies are described in the "Regulation of Clearing of Transferable Securities Transactions in Book Entry Form," in the "Regulation on the Clearing of Transactions on Derivatives," as well as the relevant decision of the ATHEXClear BoD.

In order to obtain the status of Clearing Member, the Intermediary or Bank must conform to the minimum specific financial and operational adequacy requirements, as specified in the Clearing Rulebooks; these requirements must be continuously fulfilled during the time the Member is in operation.

Both for the cash market, as well as for the derivatives market, ATHEXClear clears trades assuming the role of Central Counterparty. In order to cover the risk against its clearing members, ATHEXClear monitors and calculates on a daily basis (end-of-day but also during the day in almost real time) the margin for each clearing account of the Clearing Members, and blocks the additional guarantees in the form of cash and/ or transferable securities.

In addition, it manages the Clearing Funds of the two markets which act as risk sharing funds to which Clearing Members contribute exclusively in cash. Based on the margins that have been blocked, the credit limits allocated to members are continuously reviewed, fulfillment of which is monitored in real time during the trading session. The minimum size of the Clearing Funds is recalculated at least on a monthly basis, in accordance with the provisions of the Rulebook, in order for its size to be adequate to cover at any time the obligations imposed by EMIR, that is the absorption of losses beyond the margins in case of a default of a group of clearing members under extreme market conditions.

The risk management models and the parameters used are examined as to their effectiveness on a daily basis and under extreme but possible scenarios (Margin/Haircut Back-Testing, Default Fund Coverage under Stress).

Besides the counterparty credit risk that ATHEXClear faces, the Group faces credit risk from equity investments. As part of its Investment Policy, specific principles are defined for investing cash. In

particular for ATHEXClear, asset investments are as a rule made at the Bank of Greece, a fact that minimizes its risk exposure.

### Liquidity risk

Liquidity risk as a whole for the Group is maintained at low levels by maintaining adequate cash.

The main liquidity risk for the Group mostly concerns transactions in the cash and derivatives markets, in which ATHEXClear operates as Central Counterparty.

In particular for ATHEXClear, the aim is to maintain an adequate liquidity level in order to ensure that it is in a position to fulfill its obligations concerning payments or settlement in all currencies that are payable, at the end of each day and / or, if required, on an intraday basis. The estimation of the size of the obligations of ATHEXClear is done both based on its business plan, as well as based on possible, but unforeseen, events.

ATHEXClear's liquidity is monitored based on the criteria imposed by EMIR. On a daily basis, and under extreme but possible market scenarios, it is examined whether cash required will be sufficient, following the default by two (2) groups of clearing members to which ATHEXClear has the greatest demand for liquidity to close-out their positions separately for each market (equities, derivatives). In addition, the overall liquidity needs of ATHEXClear are monitored on a daily basis using liquidity gap analysis.

### BANK RATINGS

			STANDARD & POOR' S				
			Outlook	Long Term Local Issuer Credit	Short Term Local Issuer Credit	Long Term Foreign Issuer Credit	Short Term Foreign Issuer Credit
ALPHA BANK AE	ALPHA GA Equity	GR	STABLE	CCC+	C	CCC+	C
EUROBANK ERGASIAS SA	EUROB GA Equity	GR	STABLE	CCC+	C	CCC+	C
NATIONAL BANK OF GREECE	ETE GA Equity	GR	STABLE	CCC+	C	CCC+	C
PIRAEUS BANK S.A	TPEIR GA Equity	GR	STABLE	CCC+	C	CCC+	C
BANK OF GREECE	TELL GA Equity	GR	#N/A	NR	NR	NR	NR
HSBC BANK PLC	MID LN Equity	GB	STABLE	AA-	A-1+	AA-	A-1+
			MOODY' S				
			Outlook	Local Long Term Bank Deposits	Foreign Long Term Bank Deposits	Subordinated Debt	Senior Unsecured Debt
ALPHA BANK AE	ALPHA GA Equity	GR	POS	Caa3	Caa3	(P)Caa3	(P)Caa3
EUROBANK ERGASIAS SA	EUROB GA Equity	GR	STABLE	Caa3	Caa3	Caa3	Caa3
NATIONAL BANK OF GREECE	ETE GA Equity	GR	POS	Caa3	Caa3	#N/A	Caa2
PIRAEUS BANK S.A	TPEIR GA Equity	GR	STABLE	Caa3	Caa3	(P)Caa3	(P)Caa3
BANK OF GREECE	TELL GA Equity	GR	#N/A	#N/A	#N/A	#N/A	WR
HSBC BANK PLC	MID LN Equity	GB	#N/A	Aa3 *-	Aa3 *-	A3 *-	Aa3 *-
			FITCH				
			Long Term Issuer Default Rating	Senior Unsecured Debt	Short Term		
ALPHA BANK AE	ALPHA GA Equity	GR	RD	C *+	C		
EUROBANK ERGASIAS SA	EUROB GA Equity	GR	RD	C *+	C		
NATIONAL BANK OF GREECE	ETE GA Equity	GR	RD	WD	C		
PIRAEUS BANK S.A	TPEIR GA Equity	GR	RD	C *+	C		
BANK OF GREECE	TELL GA Equity	GR	#N/A	#N/A	#N/A		
HSBC BANK PLC	MID LN Equity	GB	AA-	AA-	F1+		

Out of a total cash and cash equivalents of the Group of €85.8m, €55.2m is placed with Greek systemic banks.

### Operating risk

The Group does not seek to assume operating risk, but accepts that operating risk may arise as a result from system, internal procedure or human failure. In particular, it is recognized that operating risk may arise among others because of: outsourcing, surveillance and regulatory non-compliance, business continuity failure, IT systems, information security and project implementation risk.

Operating risk is maintained at acceptable levels, through a combination of good corporate governance and risk management, strong systems and audits and tolerance structures.

In 2017 there were no cases of interruptions in clearing, settlement and registration at the Group due to failure or unavailability of the IT systems or to human error. There was a very brief (lasting less than two hours) unavailability of the trading system one day due to a technical problem which was subsequently identified and fixed. There were no major damages or monetary demands due to litigation (legal and court expenses) or due to non-compliance with the supervisory framework and the contractual obligations of the Group. In addition no losses due to external events were faced.

### Measures to reduce operating risk

The Group recognizes the need to determine, estimate, monitor and reduce operating risk that is included in its operations and activities, as well as the need to maintain adequate capital, in order to manage this particular type of risk.

In particular for ATHEXClear, in accordance with the EMIR Regulation, the capital requirement for operating risk is calculated on an annual basis, using the Basic Indicator Approach (BIA); in addition, a framework for the systematic monitoring of operating risk has been implemented.

The most important measures for reducing operating risk are the implementation of a business continuity plan for all the critical services of the Group, the conclusion of insurance contracts, as well as measures for ensuring compliance to new regulations. In particular, ATHEXClear follows a specific methodology for managing operating risk, in accordance with which it carries out on a regular basis an RCSA<sup>2</sup> in order to categorize risk and determine KRIs, update the loss data base<sup>3</sup>, create regular reports and plan actions to improve risk management.

### Business continuity plan

The Group has processed and put into operation an appropriate infrastructure and a disaster recovery plan, which includes:

- **Operation of a Disaster Recovery Site:** The Group maintains a disaster recovery site for its IT systems. In addition, the Group has received the ISO-22301 business continuity certification.

<sup>2</sup> Risk Control Self-Assessment (RCSA): at regular intervals ATHEXClear organizes workshops for categorizing risk based on the degree of risk exposure at the procedures level and determining Key Risk Indicators (KRIs).

<sup>3</sup> Loss Database: the database is updated on a daily basis with operations risk events independent of the size of the damage.

- **Formation of crisis management teams and emergency incident management:** The purpose of these teams is to maintain continuity in the provision of trading services in case of an unforeseen event. They have been assigned specific responsibilities and specially trained Group executives have been assigned to them.
- **Existence of back up IT systems:** The IT systems of the Group are installed and operate in the data center at the headquarters of the Group. The data center consists of two, independent as to location, supporting infrastructure and technological services provided, individually mirrored data centers, in order to provide redundancy and high availability, ensuring continuous systems operation.

#### Insurance contracts

Operating risks which the Group is not able or does not wish to assume are transferred to insurance companies. Management of insurance contracts takes place centrally for the whole Group in order to obtain better services and more advantageous terms. In particular, coverage concerns among others third party civil liability and professional liability (DFL/PI) as well as civil liability of BoD members and executives (D&O).

#### Regulatory compliance

A Regulatory Compliance unit has been set up, having as its key objectives to ensure compliance with the legal and regulatory framework, regulations and policies, measuring and minimizing the risk of regulatory compliance and addressing the consequences of non-compliance with the legal and regulatory framework; the unit operates independently of other departments of the company with clear and separate reporting lines from those of other company activities, in accordance with the requirements of the EMIR regulation. The main responsibilities of the unit are to:

- Monitor changes in the regulatory and surveillance framework and inform the BoD, the Audit Committee and staff.
- Conduct gap analysis between the existing and future condition brought about by regulatory and surveillance changes.
- Monitor the compliance of the company with the legal and regulatory framework.
- Handle requests related to compliance matters.
- Measure and monitor compliance risk.

In particular for ATHEXClear, policies were implemented concerning conflict of interest, outsourcing, managing complaints by clearing members, remuneration of staff, executives and members of the BoD and management of its archives, in accordance with the requirements of the EMIR Regulation.

#### Business risk

The Group recognizes that it depends on macroeconomic developments and is affected by external factors such as changes in the competitive capital markets environment, changes in the international and domestic economic environment, legal and regulatory developments, changes in taxation policy and in technology etc. Such events may impact the growth and sustainability of the Group, causing a

reduction in trading activity, a drop in expected profits, inability to liquidate and / or asset impairment etc.

Within this framework, the Group continually and systematically monitors international developments and adjusts to the environment that is taking shape.

In particular, in accordance with the EMIR Regulation, the capital requirements for business risk for ATHEXClear are calculated on an annual basis.





# 09

For more information



**ATHEXGROUP**  
*Athens Exchange Group*

## 9. For more information

You can find more information about the Greek capital market and the ATHEX Group at the links provided below:

### ATHEX Market Profile

A summary description of our market.

<http://www.athexgroup.gr/ir>

### ATHEX Company Profile

A summary description of our Group.

### Group pricing policy

- Decision 24
- post-trading fee table
- Summary version

<http://www.athexgroup.gr/helex-price-policy>

### AξΙΑ Securities - Derivatives

Monthly publication containing data on investor activity in the cash and derivatives markets respectively.

<http://www.athexgroup.gr/el/web/guest/info-markets-activity-publications-axianumbers-sec>

## External links

### Hellenic Capital Market Commission

<http://www.hcmc.gr>

The site of the regulator.

### European Securities and Markets Authority (ESMA)

<https://www.esma.europa.eu>

The site of the European regulator.

### Association of National Numbering Agencies (ANNA)

<http://www.anna-web.org>

### European Association of CCP Clearing Houses (EACH)

<http://www.eachccp.eu>

### European Central Securities Depositories Association (ECSDA)

<http://ecsda.eu>

### Federation of European Securities Exchanges (FESE)

<http://www.fese.eu>

The site contains useful statistics on most major European Exchanges, updated monthly.

### Software & Information Industry Association (SIIA)

<http://www.siia.net>

### Financial Information Services Association of SIIA (FISD)

<http://www.siia.net/Divisions/FISD-Financial-Information-Services-Association>

### World Federation of Exchanges (WFE)

[www.world-exchanges.org](http://www.world-exchanges.org)

The site contains useful statistics, updated monthly.





10 |

About us



**ATHEXGROUP**  
Athens Exchange Group

## 10. About us

The Athens Exchange Group uses its position as an entity at the heart of the capital market, aims to create a better world for all. In addition it improves its sustainable operation, contributing to the support of society and the protection of the environment. In particular:

### Financial and business sustainability

- The Company follows commercial, organizational and operational practices in accordance with the rules, laws and regulations, as dictated by national and European regulatory authorities, and ensures that it receives all relevant permits for its products, services and operations.
- In the framework of its sustainable development, by monitoring all developments in the European and international market, the Company ensures that the services it provides meet the current needs of investors and all participants in the business sector that it is active in.
- The Company has a zero tolerance policy in matters of fraud, corruption and market abuse, applies appropriate measures to monitor, prevent and deal with such incidents in all its activities.

### Protecting the environment

- We continue our efforts to protect the environment through daily recycling actions, and through the adoption of simple and practical rules of operating the building in order to save energy.

### Moral and social responsibility

- We try to alleviate poverty by assisting the work of volunteer organizations that support our fellow human beings.
- We promote and support a program providing information educating high school and university students, as well as market professionals, in order to improve knowledge about capital markets. As part of this effort, the Company systematically participates in internship programs for university students.
- We support as an active member the efforts of the Greek network for Corporate Social Responsibility which aims to promote Corporate Responsibility both to the business world and to society as a whole and to strike a balance between generating profits and sustainable development.
- The Company offers a work environment of equal opportunities to all staff, respecting the rights deriving from the legislation. In addition, the Company takes care of employees' work issues and continuously invests in their professional education and development.
- The Company ensures that there is a safe work environment in accordance with national and European laws and regulations and also ensures that personnel health, safety and welfare issues are effectively managed. In this context, the Company facilitates and encourages in every possible way access to its premises for employees and visitors with disabilities.
- In order to create a work environment and conditions that help optimize employee productivity and by extension the sustainability of the Company, the Company encourages the exchange of ideas, opinions and information among employees, protects their personal and sensitive data, does not tolerate and takes the necessary measures to identify and deal with malicious or abusive intimidating conduct and harassment.

Indicative indices in 2017	Group
<b>Employees</b>	
Number of employees (year-end)	221
% of employees with full time employment	100%
Average age of the full time employees	46 years
Women employees (% of the total)	42%
Employee mobility (departures + new hires) ÷ total	3.6%
<b>Health - insurance</b>	
Days of absence due to illness per employee	4.2
Average cost of health insurance per employee	€1,700
Average contribution to private pension fund per employee	€640
Readings of Electromagnetic radiation (number)	1
<b>Training – internships</b>	
% of employees with a University degree	63%
Funds available for training per employee	€770
Number of students that did their internships	38
<b>Environment</b>	
Electricity consumption (m KWh) (1)	3.7
Recycled paper / batteries (kg)	6,600 / 74

1. Includes energy consumption for the needs of the Group. Does not include energy consumption for the Colocation service offered by the Group, as this cost is re-invoiced to the clients of this service.

### Group Operations

The Group is constantly striving to improve all aspects of its operations based on international standards. In particular:

Standard		ATHEX	ATHEXCSD	ATHEXClear
Business Continuity	ISO 22301	✓	✓	✓
International Standard on Assurance Engagements	ISAE3402	<i>The certification process is in progress, and the certificate is expected in 2018.</i>		

## Personnel profile

Company	Personnel 31.12.17
Hellenic Exchanges – Athens Stock Exchange SA (ATHEX)	112
Athens Exchange Clearing House S.A. (ATHEXClear)	24
Hellenic Central Securities Depository S.A. (ATHEXCSD)	85
<b>Total</b>	<b>221</b>

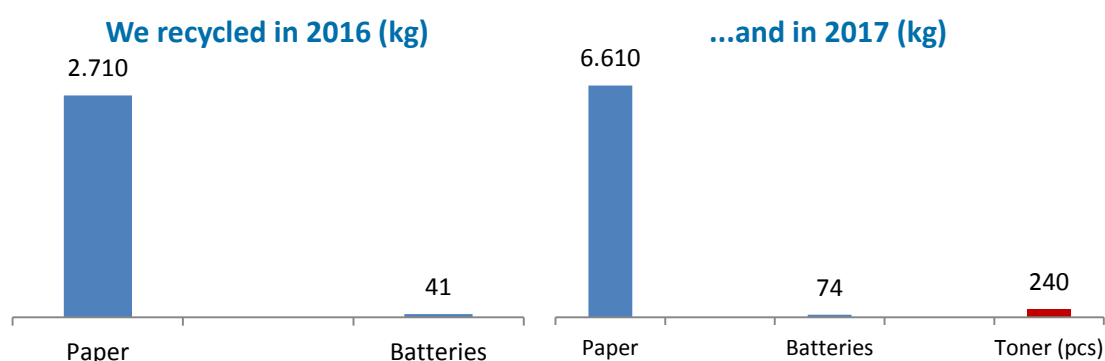
Organizational Unit	Personnel 31.12.17
Internal Audit Division	3
Office of the Chief Executive Officer (CEO)	3
Strategic Communication & Markets Analysis Division	13
Group Corporate Secretary & Corporate Governance Unit	1
Group Compliance Unit	2
Information Security & Organizational Management Unit	5
Chief Financial Officer's Office	2
Human Resources & Administrative Support Division	20
Financial Management Division	13
Group Legal Affairs Unit	3
Office of the Chief Operations Officer (COO)	2
Office of the deputy Chief Operations Officer (dCOO)	4
Issuer Support Division - MTF	17
Central Registry Division	22
Market Operation & Member Support Division	29
Risk Management & Clearing Division	16
IT Development Division	32
Infrastructure Management & IT Support Division	31
Regulatory & International Affairs Unit	2
Issuer Support & Markets Development Unit	1
<b>Total</b>	<b>221</b>

Education level	Personnel 31.12.17
Doctorate	4
Postgraduate degree	71
University degree	65
High School diploma	11
Junior High School diploma	43
Post high-school education	27
<b>Total</b>	<b>221</b>

## Blood Donations

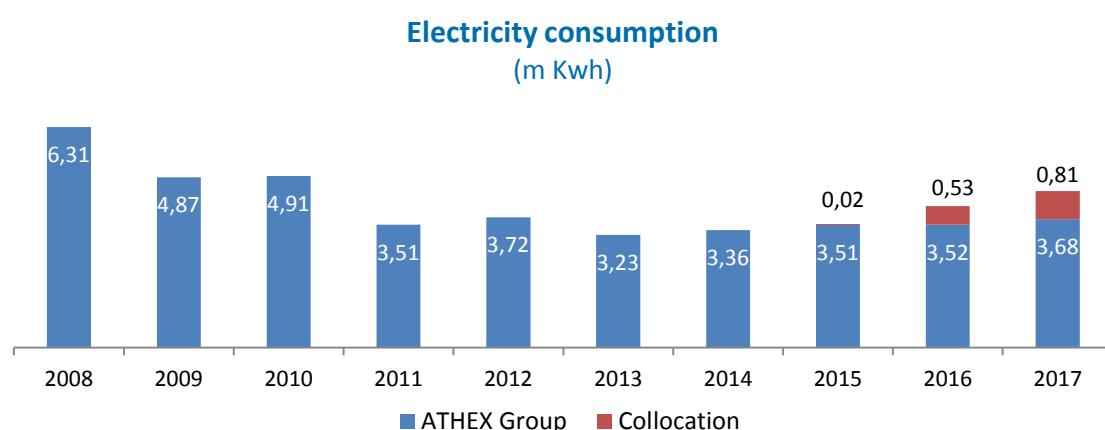
Blood drives organized	2
Personnel Participation / vials	81
Incidents covered	14

## We recycled



## Electricity consumption

Since the Group provides services exclusively it has mostly fixed operating costs and not variable (more on the expenses of the Group in [7.1.2 Expenses](#)). In particular, as far as electricity consumption is concerned, approximately 70% of the annual consumption concerns the data center, i.e. the operation of the systems and subsystems that support the operation of the market. A significant other source of consumption is cooling (A/C).



Since 2008, the first full year of operation in its new offices, the Group has reduced electricity consumption by 42%, from 6.31m Kwh to 3.68m Kwh. Electricity consumption for collocation is excluded from the calculations as is part of the service provided by the Group since the end of 2015, and this consumption is re-invoiced to clients.

## Internships

The Athens Exchange Group collaborates with Universities, Technical Institutes and public Vocational Training Institutes to promote internship programs, so as to incorporate young people faster into the workplace and develop their skills by familiarizing them with workplace reality and the application of theoretical knowledge in an actual work environment.

The Group attracts students which can implement projects useful for its future and viability. Through actual, meaningful work and evaluation, the Group has the opportunity to come in contact with potential future employees. In addition, it develops a network of potential associates in the financial sector in general, since a large number of interns, due to the nature of their employment at the Exchange, will work in this sector.

The Group provides job opportunities throughout the year in almost all of its organizational units. It mainly collaborates with the Athens University of Economics and Business, the University of Piraeus and the National Technical University of Athens; the Thessaloniki branch office of the ATHEXCSD subsidiary also collaborates with the Aristotle University of Thessaloniki and the University of Macedonia.

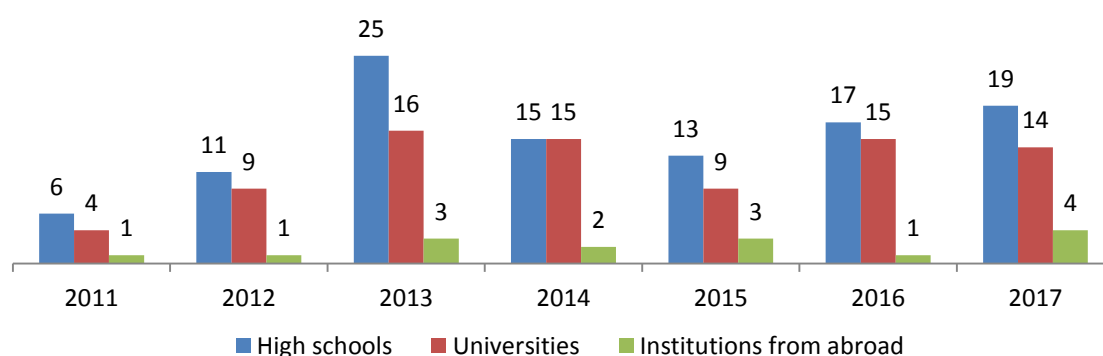
In 2017 **40 individuals** in total (35 university, 3 technical institute and 2 high school students) obtained work experience in various departments of the Group.

## Presentation of the Greek capital market – Athens Stock Exchange

The Athens Exchange Group, being interested in educating the public on the operation of the exchange and capital markets, welcomes educational visits.

In 2017 37 visits from High Schools, and Universities were hosted, including 4 visits from educational institutions from abroad.

### Presentations of the Greek Capital Market 2011 - 2017



For more information: [www.athexgroup.gr/web/guest/education-visits](http://www.athexgroup.gr/web/guest/education-visits)

<b>High school - University</b>	<b>Date</b>
Athens University of Economics & Business – Department of Business Administration	9 Jan
Athens University of Economics & Business – Department of Accounting & Finance – Laboratory for Applied Finance	10 Jan
Professional School - Hellenic Manpower Employment Organization (OAED) of Kalamaki	20 Jan
1 <sup>st</sup> High School of Salamina	27 Jan
Metropolitan College – Department of Economics and Administration	7 Feb
High School from Italy	8 Feb
9 <sup>th</sup> High School of Marousi	15 Feb
Vocational High School of Glyfada – Department of Administration and Economics	23 Feb
University of Michigan (USA)	28 Feb
Radboud University (Nijmegen, Netherlands)	1 Mar
Model High School of the Evangelical School of Nea Smyrni	9 Mar
Athens University of Economics & Business – Department of Accounting & Finance / Department of Business Administration	14 Mar
2 <sup>nd</sup> High School of Kesariani	16 Mar
University of Athens (UoA) – Department of Economics	22 Mar
Nea Genia Ziridi School	28 Mar
3 <sup>rd</sup> Vocational High School of Chalandri	30 Mar
2 <sup>nd</sup> High School of Nea Philadelphia	31 Mar
University of Athens (UoA) – Department of Economics – Postgraduate Program in Applied Economics and Finance	5 Apr
Fryganiotis High Schhol (Thessaloniki)	21 Apr
University of Athens – Law School	25 Apr
University of Piraeus - Department of Banking and Financial Management post-graduate program specializing in finance law	5 May
Athens University of Economics & Business – Department of Accounting & Finance – Laboratory for Applied Finance	11 May
Trinity Western University – School of Business (Langley - British Columbia, Canada)	12 May
University of Athens (UoA) – Research group of Law School students	15 May
Public Vocational Training Institute (IEK) of Peristeri	24 May
International School of Piraeus	29 May
2 <sup>nd</sup> Vocational High School of Athens	20 Oct
Athens University of Economics and Business	25 Oct
Athens University of Economics and Business	31 Oct
Panteion University – Department of International, European and Area Studies	9 Nov
Vocational Training Institute (IEK) Delta	15 Nov
10 <sup>th</sup> Vocational High School of Athens	22 Nov
Roger Williams University (Bristol - Rhode Island, USA)	23 Nov
2 <sup>nd</sup> High School of Argyroupoli	28 Nov
High School from Vouliagmeni	30 Nov
Morfotiko / Culture Club (Hellenic Union of Educations & Business Development)	30 Nov
2 <sup>nd</sup> High School of Alimos	5 Dec



## 6<sup>th</sup> Hellenic Company Sport Games – 6-8 October 2017

The Athens Exchange Group participated for the first time at the 6<sup>th</sup> Hellenic Company Sport Games organized by the Hellenic Organization for Company Sport & Health. The games were held at Veikou Park in Athens.







Men's 3x3 basketball – 1<sup>st</sup> place



Men's 5x5 Football – 2<sup>nd</sup> place



Women's running – Fenny Hadjistamatiou  
(3<sup>rd</sup> from left) in 3<sup>rd</sup> place



Women's Tennis – Christina Kyriazi  
(2<sup>nd</sup> from left) in 3<sup>rd</sup> place

<http://www.hocsh.org/el/content/hellenic-company-sport-games-2017>



# Appendixes



**ATHEXGROUP**  
*Athens Exchange Group*

## Appendix I – Financial data for the Athens Exchange Group 2004-2017

### Revenue 2004 – 2017 (consolidated)

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
<b>Trading</b>	4.435	4.460	5.691	9.336	6.699	4.952	7.649	12.844	18.544	28.523	40.263	42.446		
<i>Stocks</i>	3.850	3.964	4.862	8.060	5.446	3.660	5.608	10.344	n/a	n/a	n/a	n/a		
<i>Derivatives</i>	573	495	826	1.274	1.251	1.290	2.034	2.484	n/a	n/a	n/a	n/a		
<b>Clearing</b>	8.171	8.288	11.078	17.563	13.597	10.027	14.875	23.269	28.957	42.843	63.384	45.555		
<i>Stocks</i>	5.776	6.040	7.501	12.620	8.251	4.868	7.721	16.621	n/a	n/a	n/a	n/a		
<i>Derivatives</i>	1.340	1.157	1.935	2.974	2.921	3.010	4.754	5.791	n/a	n/a	n/a	n/a		
<b>Settlement</b>	1.493	1.415	1.587	1.964	14.108	767	1.221	1.718	2.003	6.452	5.994	3.736		
<b>Exchange services</b>	3.148	3.118	6.026	6.924	34.654	4.844	7.137	9.080	10.622	10.791	29.697	11.416		
<i>Rights issues</i>	194	441	3.208	2.363	30.694	1.669	2.873	4.092	n/a	n/a	n/a	n/a		
<i>Listed company subscriptions</i>	2.107	1.980	2.077	2.737	2.534	2.040	2.820	3.631	n/a	n/a	n/a	n/a		
<b>Depository services</b>	2.580	2.077	3.211	3.792	4.629	2.851	4.051	6.026	6.885	8.007	11.719	4.844		
<b>Clearinghouse services</b>	172	166	168	296	333	357	560	660	846	1.422	1.497	1.058		
<b>Market data</b>	3.204	3.266	3.206	3.627	3.766	3.940	4.256	4.142	4.400	3.986	3.891	3.463		
<b>IT services</b>	309	320	313	309	332	932	1.032	1.185	2.900	2.956	1.195	2.498		
<b>Revenue from re-invoiced expenses</b>	1.133	915	840	1.014	1.324	1.454	1.101	916						
<b>Ancillary (new) services (XNET, colocation, LEI et al)</b>	2.170	2.008	1.919	1.658	1.604	2.136	479	432						
<b>Other services</b>	597	673	996	805	420	782	451	1.386	3.184	3.387	3.594	3.236		
<b>Turnover</b>	<b>27.412</b>	<b>26.706</b>	<b>35.035</b>	<b>47.288</b>	<b>81.466</b>	<b>33.042</b>	<b>42.812</b>	<b>61.658</b>	<b>78.341</b>	<b>108.367</b>	<b>161.234</b>	<b>118.252</b>	<b>73.830</b>	<b>60.864</b>
<b>Hellenic Capital Market Commission fee</b>	-1.063	-1.088	-1.356	-2.155	-1.576	-1.076	-1.638	-2.691	-3.685	-5.727	-8.105	-7.058	-4.175	-2.973
<b>Other revenue</b>		0	0	0	0	453	5.107	477	1.775	6.999	248			
<b>Total Revenue</b>	<b>26.349</b>	<b>25.618</b>	<b>33.679</b>	<b>45.133</b>	<b>79.890</b>	<b>32.419</b>	<b>46.281</b>	<b>59.444</b>	<b>76.431</b>	<b>109.639</b>	<b>153.377</b>	<b>111.194</b>	<b>69.655</b>	<b>57.891</b>
<i>Top-5 turnover drivers</i>	21.538	21.209	29.212	41.242	73.687	26.614	37.968	55.361	69.408	94.150	148.954	107.724		
<i>Revenue from stocks (trading &amp; clearing)</i>	9.626	10.004	12.363	20.680	13.697	8.528	13.329	26.965	n/a	n/a	n/a	n/a		
<i>Revenue from derivatives (trading &amp; clearing)</i>	1.913	1.652	2.761	4.248	4.172	4.300	6.788	8.275	n/a	n/a	n/a	n/a		

Amounts in € thousand, unless otherwise noted

## Expenses 2004 – 2017 (consolidated)

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Personnel remuneration & expenses	9.458	9.543	9.869	9.958	10.328	12.532	12.201	12.603	13.215	14.686	15.493	14.805	15.649	17.589
<i>Remuneration</i>	6.695	6.619	6.954	6.973	7.159	8.332	8.768	9.356	9.914	10.635	11.209	11.093	11.118	13.265
<i>Social security</i>	1.570	1.560	1.620	1.673	1.965	1.974	2.068	2.090	2.160	2.215	2.317	2.316	2.412	2.547
<i>Termination benefits</i>	303	317	337	159	228	1.428	230	456	116	580	441	732	1.581	752
<i>Other benefits</i>	890	1.047	958	1.153	842	900	969	994	1.004	950	788	665	538	1.025
Third party remuneration & expenses	810	588	714	692	589	510	656	1.014	1.536	1.754	1.767	2.686	2.467	2.796
Utilities	671	747	877	875	891	787	791	815	1.783	1.894	1.580	1.265	1.289	1.466
Maintenance / IT support	1.270	1.148	1.191	1.497	1.524	1.343	1.750	1.753	1.795	1.898	2.514	2.546	2.592	2.877
Other taxes - VAT	1.200	1.079	1.557	1.629	985	1.166	1.321	1.138	1.175	1.149	1.319	1.371	1.212	1.755
Building / equipment management	514	556	621	663	806	721	760	831	773	708	1.008	737		
Marketing & advertising expenses	278	271	213	248	149	190	236	156	378	616	657	671	260	413
Participation in organizations expenses	315	311	282	284	331	285	310	331	313	308	247	209	368	425
Insurance premiums	403	421	420	461	516	513	505	501	385	382	530	538		
Operating expenses	1.317	1.106	388	452	413	378	510	559						
Bank of Greece - cash settlement	61	61	62	58	62	113	315	380						
Rents and insurance premiums													1.162	1.625
Other expenses			139	136	478	621	1.042	1.034	1.795	2.932	2.856	2.506	3.066	4.863
<b>Total operating expenses (OPEX)</b>	<b>16.297</b>	<b>15.831</b>	<b>16.333</b>	<b>16.953</b>	<b>17.072</b>	<b>19.159</b>	<b>20.397</b>	<b>21.115</b>	<b>23.148</b>	<b>26.327</b>	<b>27.971</b>	<b>27.334</b>	<b>28.065</b>	<b>33.809</b>
Re-invoiced expenses	977	866	925	1.021	1.118	944	1.579	1.163						
Expenses for new activities (XNET, CSE-Sibex CP, IT)	1.092	901	1.098	755	592	599	408	61						
Provisions (bad debts, extraordinary risk et al.)		824	365	400	607						810			
Non-recurring expenses									509		5.738			
<b>Total OPEX</b>	<b>18.366</b>	<b>18.422</b>	<b>18.721</b>	<b>19.129</b>	<b>19.389</b>	<b>20.702</b>	<b>22.384</b>	<b>22.339</b>	<b>23.657</b>	<b>26.327</b>	<b>34.519</b>	<b>27.334</b>	<b>28.065</b>	<b>33.809</b>
<i>OPEX excluding personnel</i>	6.839	6.288	6.464	6.995	6.744	6.627	8.196	8.512	9.933	11.641	12.478	12.529	12.416	16.220
<i>Head count (end of the year)</i>	221	224	230	236	229	231	263	265	270	276	326	326	385	417
<i>Avg. employee expenses (€)</i>	42.508	42.040	42.356	42.830	44.904	50.737	46.216	47.114	48.407	48.791	47.525	41.646	39.025	42.180
<i>Avg. employee expenses (excl. termination benefits, €)</i>	41.146	40.643	40.910	42.146	43.913	44.955	45.345	45.409	47.982	46.864	46.172	39.586	35.082	40.376
<i>Average remuneration (€)</i>	30.100	29.200	29.800	30.000	31.100	33.700	33.200	35.000	36.300	35.300	34.400	31.200	27.700	30.200

Amounts in € thousand, unless otherwise noted

## Profitability 2004 – 2017 (consolidated)

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
<b>EBITDA</b>	<b>7.983</b>	<b>8.020</b>	<b>14.958</b>	<b>26.004</b>	<b>60.501</b>	<b>11.717</b>	<b>23.897</b>	<b>37.105</b>	<b>52.774</b>	<b>83.312</b>	<b>118.858</b>	<b>83.860</b>	<b>41.590</b>	<b>24.082</b>
Depreciation	-3.060	-2.881	-2.073	-1.800	-1.420	-1.802	-1.808	-2.448	-2.573	-2.670	-1.941	-2.128	-2.951	-4.082
<b>EBIT</b>	<b>4.923</b>	<b>5.139</b>	<b>12.885</b>	<b>24.204</b>	<b>59.081</b>	<b>9.915</b>	<b>22.089</b>	<b>34.657</b>	<b>50.201</b>	<b>80.642</b>	<b>116.917</b>	<b>81.732</b>	<b>38.639</b>	<b>20.000</b>
Capital income	321	577	1.554	3.703	4.532	5.591	5.888	4.456	4.931	8.786	6.778	5.447	5.268	5.720
Dividend income														1.753
Real estate asset revaluation			-399											
Provisions against other risk			-300	-246		-800								
Profits / (losses) from securities (bonds / stocks)		-2.219	-207		-501	450	-1.988			-478	-396	-254	-532	19.429
Financial expenses	-166	-131	-83	-8	-10	-12	-12	-9	-10	-18	-12	-865		
<b>EBT</b>	<b>5.078</b>	<b>3.366</b>	<b>13.450</b>	<b>27.653</b>	<b>63.102</b>	<b>15.144</b>	<b>25.977</b>	<b>39.104</b>	<b>55.122</b>	<b>88.932</b>	<b>123.287</b>	<b>86.060</b>	<b>43.375</b>	<b>46.902</b>
Income tax	-2.002	-1.937	-4.412	-6.640	-17.730	-3.225	-4.451	-9.895	-13.531	-23.918	-32.261	-27.976	-16.257	-13.289
Tax on tax-free reserves (Law 4172/2013)					-13.088									
Extraordinary tax (Laws 3808/2009 & 3845/2010)								-7.932	-12.088					
Minority interest													-17	-15
<b>After tax profits</b>	<b>3.076</b>	<b>1.429</b>	<b>9.038</b>	<b>21.013</b>	<b>32.284</b>	<b>11.919</b>	<b>21.526</b>	<b>21.277</b>	<b>29.503</b>	<b>65.014</b>	<b>91.026</b>	<b>58.084</b>	<b>27.101</b>	<b>33.598</b>
<i>Effective consolidated income tax rate (%)</i>	<i>39,4%</i>	<i>57,5%</i>	<i>32,8%</i>	<i>24,0%</i>	<i>28,1%</i>	<i>21,3%</i>	<i>17,1%</i>	<i>25,3%</i>	<i>24,5%</i>	<i>26,9%</i>	<i>26,2%</i>	<i>32,5%</i>	<i>37,5%</i>	<i>28,3%</i>
<i>Nominal corporate income tax rate (%)</i>	<i>29,0%</i>	<i>29,0%</i>	<i>29,0%</i>	<i>26,0%</i>	<i>26,0%</i>	<i>20,0%</i>	<i>20,0%</i>	<i>24,0%</i>	<i>25,0%</i>	<i>25,0%</i>	<i>25,0%</i>	<i>29,0%</i>	<i>32,0%</i>	<i>35,0%</i>

Amounts in € thousand, unless otherwise noted

### Notes:

1. The Group began publishing its financial statements based on International Accounting Standards (IAS) in 2005 (plus 2004 as the reference year).
2. In 2011 the revenue and expense categories were modified (plus 2010 as the reference year). The 2004-2009 period figures are presented in the new reporting lines.
3. In some years, reclassification of revenue / expenses items has taken place, without affecting the totals. In those cases the reclassified figures are presented.

## Consolidated Statement of Financial Position 2004 – 2017

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
<b>Non-current assets</b>	<b>31.649</b>	<b>32.194</b>	<b>32.914</b>	<b>34.571</b>	<b>33.060</b>	<b>32.659</b>	<b>35.001</b>	<b>35.660</b>	<b>40.488</b>	<b>42.948</b>	<b>53.310</b>	<b>43.618</b>	<b>45.046</b>	<b>48.957</b>
<i>Tangible assets for own use</i>	21.465	22.707	23.122	23.271	24.320	24.745	26.124	26.969	27.851	30.294	32.080	39.582	41.101	44.049
<i>Intangible assets</i>	6.084	5.440	5.209	3.805	2.163	455	9	51	176	290	431	126	225	462
<i>Real estate investments</i>	2.791	2.996	3.200	4.494	4.697	4.902	5.158	5.415	-	-	-	-	-	-
<i>Non-current assets available for sale</i>	-	-	-	-	-	-	-	-	5.673	5.930	16.402	0	0	0
<i>Investments in subsidiaries &amp; other long term receivables</i>	68	68	68	72	72	674	1.474	1.476	4.841	4.475	3.081	3.082	2.092	2.137
<i>Deferred tax asset</i>	1.241	983	1.315	2.929	1.808	1.883	2.236	1.749	1.947	1.959	1.316	828	1.628	2.309
<b>Current assets</b>	<b>258.750</b>	<b>327.426</b>	<b>611.933</b>	<b>568.905</b>	<b>184.672</b>	<b>131.527</b>	<b>130.727</b>	<b>135.986</b>	<b>141.617</b>	<b>141.916</b>	<b>187.957</b>	<b>165.220</b>	<b>189.915</b>	<b>317.286</b>
<i>Trade receivables</i>	3.850	5.117	6.520	6.591	7.713	6.303	5.205	5.560	7.010	6.134	5.652	3.235	2.774	3.933
<i>Other receivables</i>	9.231	10.107	12.931	10.593	11.578	8.996	5.878	6.083	9.235	3.649	4.709	7.640	7.467	5.481
<i>Income tax receivable</i>	168	3.312	3.715	1.677	0	0	1.005	0	0	0	0	0	0	0
<i>Financial assets available for sale</i>	2.052	2.793	3.716	3.383	2.540	1.740	6.470	9.670	10.060	10.200	17.886	34.242	0	30.087
<i>Third party balances in Group bank account</i>	157.598	206.080	447.816	395.110	0	0	0	0	0	0	0	0	0	0
<i>Cash &amp; cash equivalents</i>	85.851	100.017	137.235	151.551	162.841	114.488	112.169	114.673	115.312	121.933	159.710	120.103	179.674	277.785
<b>Total assets</b>	<b>290.399</b>	<b>359.620</b>	<b>644.847</b>	<b>603.476</b>	<b>217.732</b>	<b>164.186</b>	<b>165.728</b>	<b>171.646</b>	<b>182.105</b>	<b>184.864</b>	<b>241.267</b>	<b>208.838</b>	<b>234.961</b>	<b>366.243</b>
<b>Equity</b>	<b>118.994</b>	<b>140.692</b>	<b>177.900</b>	<b>189.208</b>	<b>180.763</b>	<b>152.531</b>	<b>152.667</b>	<b>148.666</b>	<b>150.568</b>	<b>160.389</b>	<b>189.170</b>	<b>154.539</b>	<b>202.187</b>	<b>332.789</b>
<i>Share capital</i>	50.903	70.598	84.979	48.373	49.680	51.641	56.870	63.408	71.906	88.107	88.107	122.975	210.691	358.995
<i>Treasury stock</i>	-1.162	-18.634	0	0	0	0	0	0	0	-40.637	0	0	0	-4.711
<i>Share premium</i>	157	157	157	43.954	94.334	94.279	94.279	94.279	94.279	94.279	94.279	91.874	91.751	92.130
<i>Reserves</i>	51.819	70.119	62.584	61.598	129.523	81.971	81.449	81.162	79.398	109.065	64.758	51.255	51.401	53.990
<i>Retained earnings</i>	17.277	18.452	30.180	35.283	-92.774	-75.365	-79.936	-90.188	-95.020	-90.138	-57.687	-111.278	-151.942	-167.899
<i>Goodwill</i>	-	-	-	-	-	-	-	-	-	-292	-292	-292	0	0
<i>Non-controlling participations</i>	0	0	0	0	0	5	5	5	5	5	5	5	286	284
<b>Non-current liabilities</b>	<b>5.168</b>	<b>5.134</b>	<b>5.111</b>	<b>6.739</b>	<b>5.993</b>	<b>5.131</b>	<b>5.971</b>	<b>6.563</b>	<b>3.518</b>	<b>3.740</b>	<b>7.116</b>	<b>6.766</b>	<b>7.703</b>	<b>8.855</b>
<i>Grants and other long-term liabilities</i>	50	63	87	111	134	160	478	502	526	550	569	589	571	641
<i>Staff retirement obligations</i>	2.190	2.000	1.791	1.965	1.443	1.480	1.582	1.415	1.708	1.691	1.716	1.543	1.699	2.251
<i>Other provisions</i>	1.360	1.360	1.360	1.060	813	719	719	1.454	1.284	1.499	4.831	4.634	5.433	5.963
<i>Deferred tax liability</i>	1.568	1.711	1.873	3.603	3.603	2.772	3.192	3.192	-	-	-	-	-	-
<b>Current liabilities</b>	<b>166.237</b>	<b>213.794</b>	<b>461.836</b>	<b>407.529</b>	<b>30.976</b>	<b>6.524</b>	<b>7.090</b>	<b>16.417</b>	<b>28.019</b>	<b>20.735</b>	<b>44.981</b>	<b>47.533</b>	<b>25.071</b>	<b>24.599</b>
<i>Trade and other payables</i>	7.697	6.805	13.245	9.213	10.197	5.612	6.620	7.707	13.938	12.629	26.028	30.933	14.066	5.432
<i>Third party balances in Group bank account</i>	157.598	206.080	447.816	395.110	0	0	0	0	0	0	0	0	0	0
<i>Income tax payable</i>	0	0	0	2.531	20.171	492	0	8.248	10.422	4.455	14.976	16.149	10.348	18.552
<i>Social security</i>	942	909	775	675	608	420	470	462	467	459	489	451	657	615
<i>Deferred tax liability</i>	-	-	-	-	-	-	-	-	3.192	3.192	3.488	0	0	0
<b>Total liabilities</b>	<b>171.405</b>	<b>218.928</b>	<b>466.947</b>	<b>414.268</b>	<b>36.969</b>	<b>11.655</b>	<b>13.061</b>	<b>22.980</b>	<b>31.537</b>	<b>24.475</b>	<b>52.097</b>	<b>54.299</b>	<b>32.774</b>	<b>33.454</b>
<b>Total Equity &amp; Liabilities</b>	<b>290.399</b>	<b>359.620</b>	<b>644.847</b>	<b>603.476</b>	<b>217.732</b>	<b>164.186</b>	<b>165.728</b>	<b>171.646</b>	<b>182.105</b>	<b>184.864</b>	<b>241.267</b>	<b>208.838</b>	<b>234.961</b>	<b>366.243</b>
<b>Total equity (excluding third party balances)</b>	<b>132.801</b>	<b>153.540</b>	<b>197.031</b>	<b>208.366</b>	<b>217.732</b>	<b>164.186</b>	<b>165.728</b>	<b>171.646</b>	<b>182.105</b>	<b>184.864</b>	<b>241.267</b>	<b>208.838</b>	<b>234.961</b>	<b>366.243</b>

Amounts in € thousand, data as of 31.12 of each year

Recognition of third party balances in the Statement of Financial Position began on 31.12.2014

## Value added and distributed by the Group 2004 – 2017

Creation of added value	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Turnover	27.412	26.706	35.035	47.288	81.466	33.042	42.812	61.658	78.341	108.367	161.234	118.252	73.830	60.864
Other income	321	577	1.554	3.703	4.532	6.044	10.995	4.933	6.706	15.785	7.026	5.447	5.268	5.720
Expenses (excl. personnel & taxes)	-7.874	-10.150	-8.284	-7.796	-8.587	-7.366	-10.862	-8.607	-9.277	-10.988	-18.115	-12.277	-11.736	6.717
Depreciation	-3.060	-2.881	-2.073	-1.800	-1.420	-1.802	-1.808	-2.448	-2.573	-2.670	-1.941	-2.128	-2.951	-4.082
<b>Value Added</b>	<b>16.799</b>	<b>14.252</b>	<b>26.232</b>	<b>41.395</b>	<b>75.991</b>	<b>29.918</b>	<b>41.137</b>	<b>55.536</b>	<b>73.197</b>	<b>110.494</b>	<b>148.204</b>	<b>109.294</b>	<b>64.411</b>	<b>69.219</b>

### Distribution of added value

To shareholders (proposed div. for previous FY)	2.575	3.334	5.883	12.355	4.412	5.393	7.746	12.943	26.474	52.864	35.136	17.558	14.046	0
To employees (salaries, social security, benefits)	9.458	9.543	9.869	9.958	10.328	12.532	12.201	12.603	13.215	14.686	15.493	14.805	15.649	17.589
To the State (taxes)	4.719	4.692	7.979	11.797	34.850	7.265	9.469	23.094	33.421	30.794	41.685	36.405	21.644	18.017
To creditors (interest)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
To the Group (retained earnings)	46	-3.317	2.501	7.286	26.401	4.728	11.721	6.896	87	12.150	55.890	40.526	13.072	33.613
<b>Value Added</b>	<b>16.799</b>	<b>14.252</b>	<b>26.232</b>	<b>41.395</b>	<b>75.991</b>	<b>29.918</b>	<b>41.137</b>	<b>55.536</b>	<b>73.197</b>	<b>110.494</b>	<b>148.204</b>	<b>109.294</b>	<b>64.411</b>	<b>69.219</b>

### Dividends

Dividend per share (€)	0,0500	0,0600	0,1000	0,2100	0,0900	0,1100	0,1500	0,2200	0,4500	0,7500	0,5000	0,2500	0,2000	
Number of shares	60599000	65368563	65368563	65368563	65368563	65368563	65368563	65368563	65368563	70485563	70271463	70230463	70230463	
Total payout	3.030	3.922	6.537	13.727	5.883	7.191	9.805	14.381	29.416	52.864	35.136	17.558	14.046	0
To shareholders - € / share	0,0425	0,0510	0,0900	0,1890	0,0675	0,0825	0,1185	0,1980	0,4050	0,7500	0,5000	0,2500	0,2000	
<b>To shareholders - net payout</b>	<b>2.575</b>	<b>3.334</b>	<b>5.883</b>	<b>12.355</b>	<b>4.412</b>	<b>5.393</b>	<b>7.746</b>	<b>12.943</b>	<b>26.474</b>	<b>52.864</b>	<b>35.136</b>	<b>17.558</b>	<b>14.046</b>	<b>0</b>
Dividend withholding tax (%)	15%	15%	10%	10%	25%	25%	21%	10%	10%	0%	0%	0%	0%	
<b>To the State - withholding tax</b>	<b>454</b>	<b>588</b>	<b>654</b>	<b>1.373</b>	<b>1.471</b>	<b>1.798</b>	<b>2.059</b>	<b>1.438</b>	<b>2.942</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

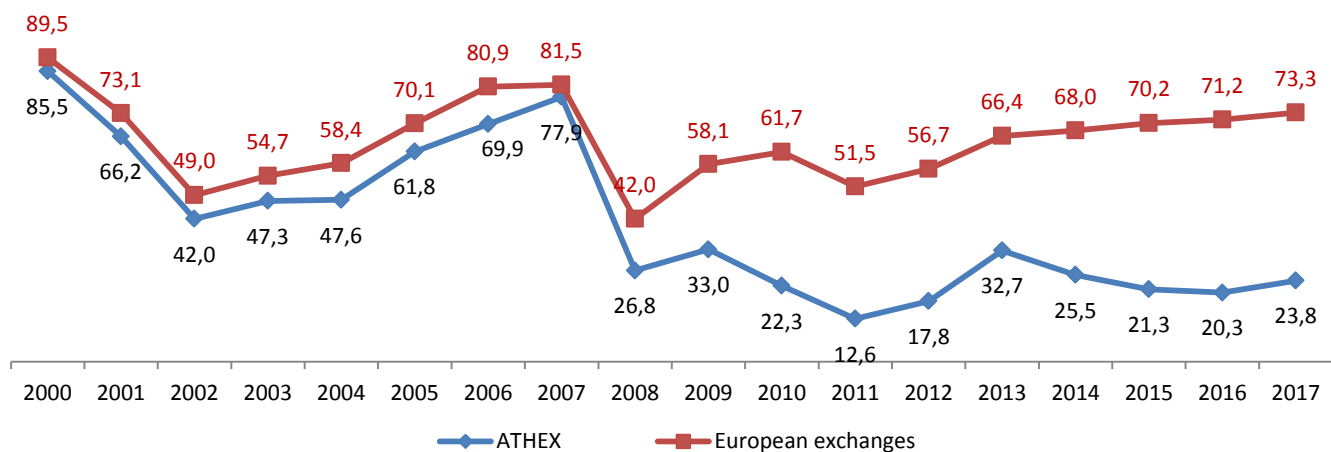
Amounts in € thousand, unless otherwise noted

Dividend information is used to calculate dividend payments to shareholders and withholding tax to the state



## Appendix II – Market statistics

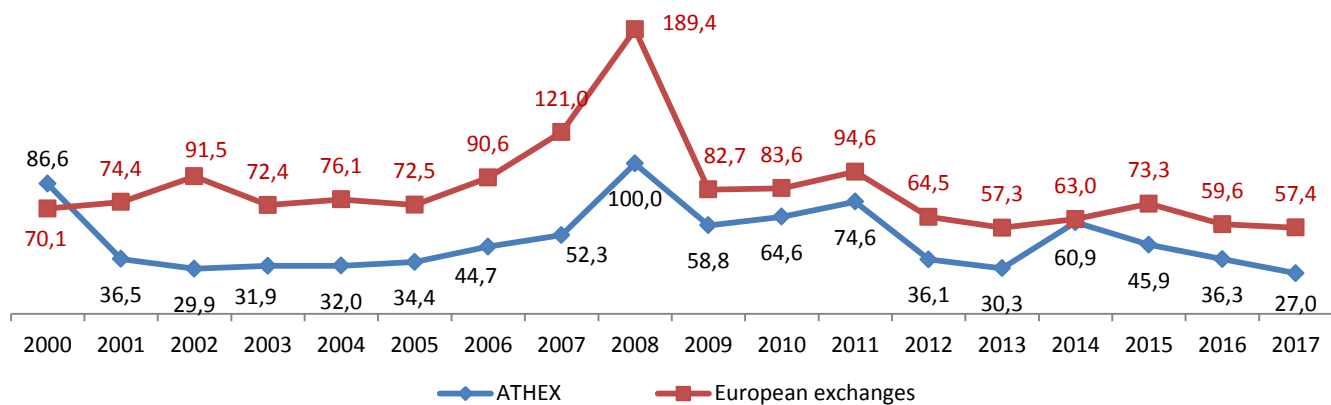
### Market Capitalization ÷ GDP (%)



**GDP:** Gross Domestic Product

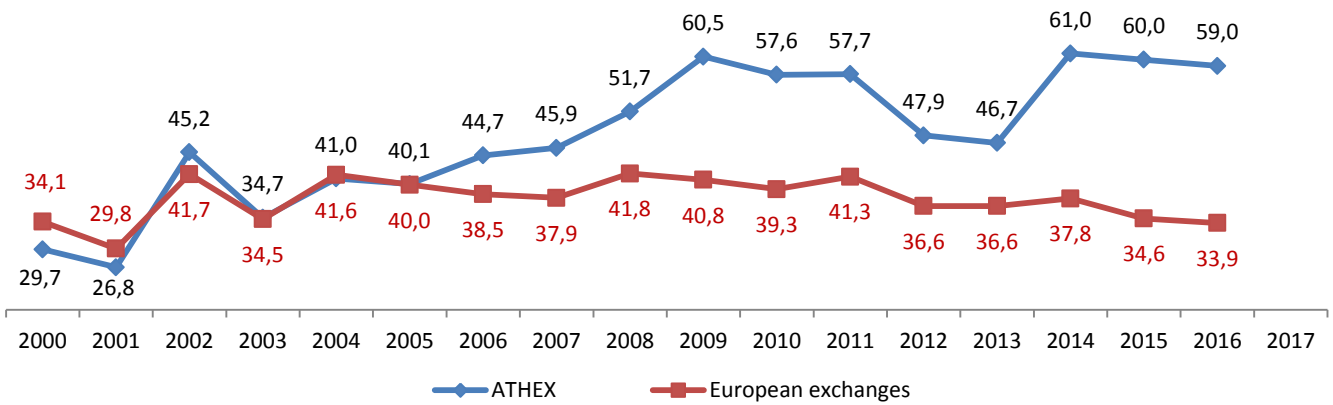
*Note: Possible changes in the data compared to previous versions of the Annual Report are mainly due to GDP restatements by Eurostat.*

### Turnover velocity (Traded value ÷ market capitalization, %)



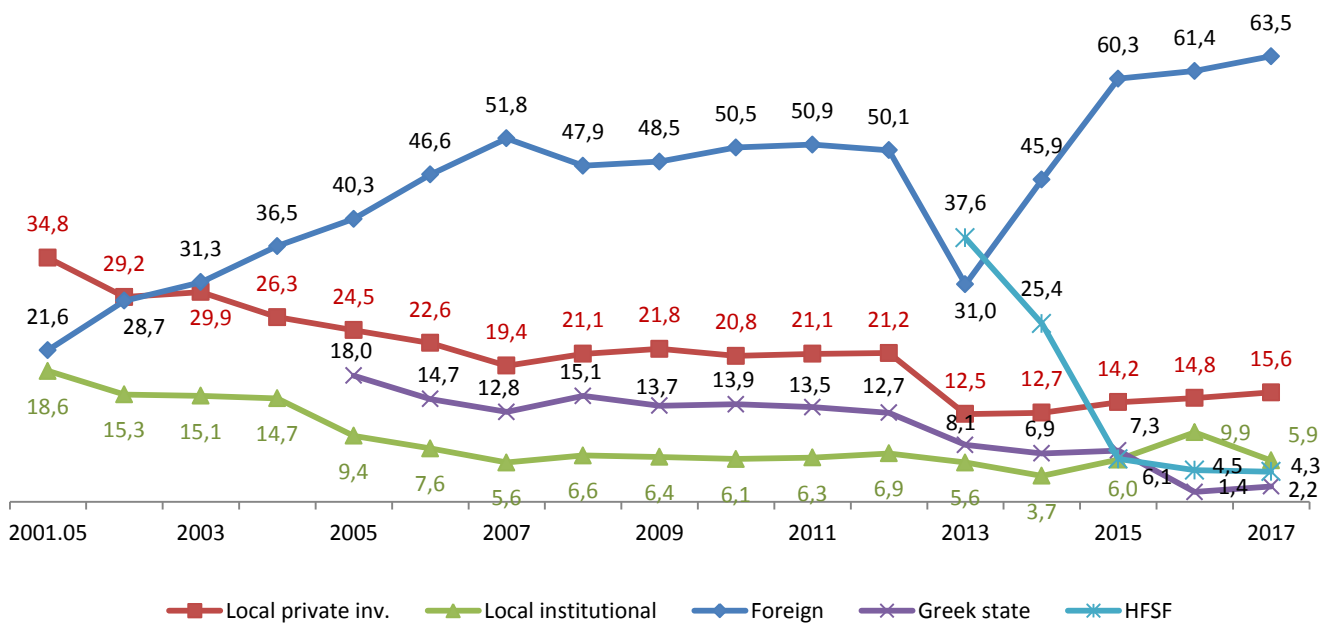
## Market Concentration

(Traded value of the 5 most actively traded stocks, as a % of the total)



## ATHEX - Investor participation

(% of total market capitalization)







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