



ATHEXGROUP
Athens Exchange Group

Annual Report

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

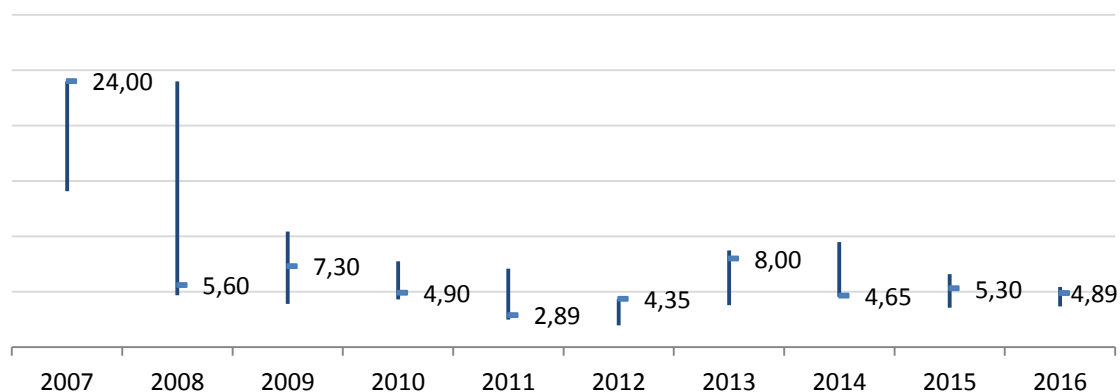
2016

Athens Exchange Group: Performance at a glance

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

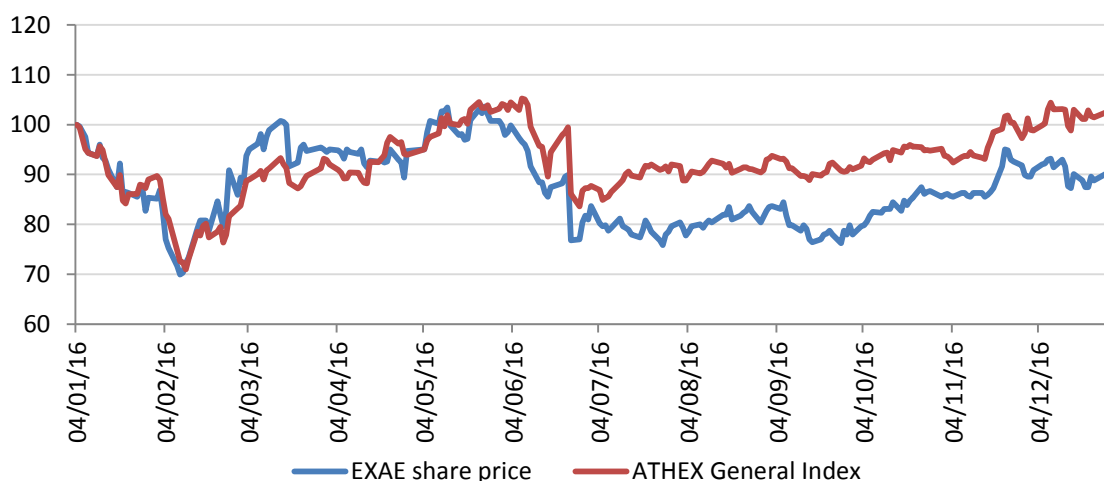
		2016	2015	Δ %
Consolidated Statement of Comprehensive Income				
Total turnover		26,955	35,035	-23%
Minus: Hellenic Capital Market Commission Fee		-1,088	-1,356	-20%
Non-recurring revenue		25,867	33,679	-23%
Operating Expenses & expenses for new activities		17,847	18,721	-5%
EBITDA		8,020	14,958	-46%
Depreciation		-2,881	-2,073	39%
Operating Result (EBIT)		5,139	12,885	-60%
Financial income / (expenses)		-1,773	0,565	-
Profits before taxes		3,366	13,45	-75%
Income Tax		-1,937	-4,412	-56%
Net profit after taxes		1,429	9,038	-84%
Consolidated Statement of Financial Position				
Cash at hand and at bank		100,017	137,235	-27%
Third party assets in ATHEX Group bank accounts		206,080	447,816	-54%
Other current assets		21,329	26,882	-21%
Non-current assets		32,194	32,914	-2%
Total Assets		359,620	644,847	-44%
Third party assets in ATHEX Group bank accounts		206,080	447,816	-54%
Short-term liabilities		7,714	14,020	-45%
Long-term liabilities		5,134	5,111	0%
Equity		140,692	177,9	-21%
Total Liabilities & Stockholders' Equity		359,620	644,847	-44%
Performance Indicators				
EBITDA Margin	%	29,8%	42,7%	-30%
EBIT Margin	%	19,1%	36,8%	-48%
Net profit margin	%	5,3%	25,8%	-79%
Return on Equity (ROE)	%	1,0%	5,1%	-80%
Market data				
ATHEX (Cash Market)				
Value of transactions	€ bn.	15,1	19,1	-21%
Average daily trade value		60,5	85,7	-29%
Transaction volume (shares)	bn.	24,0	43,1	-44%
Number of trades	m	4,7	6,0	-22%
Raised capital	€ bn.	0,2	10,3	-98%
ATHEX capitalization (year end)	€ bn.	45,2	46,8	-3%
ATHEX capitalization (yearly average)	€ bn.	41,3	43,8	-6%
Turnover velocity (value traded ÷ average capitalization)	%	36,5%	43,6%	
ATHEX (Derivatives Market)				
Trade volume (contracts)	m	15,8	15,3	3%
Average revenue per contract	€	0,105	0,175	-40%
EXAE share				
Start-of-year price (last close of the previous year)	€	5,30	4,65	14%
Year maximum	€	5,45	6,60	-17%
Year minimum	€	3,68	3,55	4%
Closing price (December 31st)	€	4,89	5,30	-8%
Profit per share	€	0,03	0,14	-79%
Ordinary dividend paid out (before withholding tax, year paid)	€	0,06499	0,1026	-37%
Ordinary dividend (after dividend withholding tax) paid out	€	0,05524	0,09234	-40%
Special dividend (Share capital return) paid out (year paid)	€	0,25997	0,2276	14%

EXAE - Share price performance

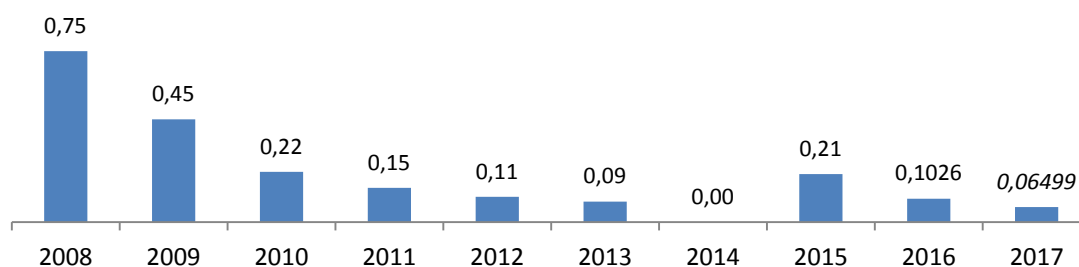


The vertical bars depict the price fluctuation of EXAE shares. The price shown is the closing price at the end of each year.

Comparative performance - EXAE share price & ATHEX General Index (1.1.2016 = 100)



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



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

Table of Contents

Message of the Chief Executive Officer	10
1. The Athens Exchange Group	16
2. Management profile	28
3. Activities of the Group in 2016	46
4. Promoting the Greek capital market	64
5. The Greek cash and derivatives market	86
6. Stock information	100
7. Key financial figures of the Group	112
8. Risk management	128
9. For more information	138
10. About us	140
Appendix I – Financial data for the Athens Exchange Group 2004-2016	146
Appendix II – Alternative Performance Measures	150
Appendix III – Market statistics	157

Message of the Chief Executive Officer



Message of the Chief Executive Officer

Dear Shareholders,



In 2016 the Athens Stock Exchange celebrated 140 years of dynamic presence and substantial contribution to the Greek economic scene with the dual role played by each capital market. That is operating on the one hand as a support mechanism for the savings choices of private individuals and professionals, and on the other as the core infrastructure of an ecosystem able to support the need by business to raise capital by providing investors a number of internationally recognized financial instruments.

This anniversary was celebrated in a year of low activity as determined by the level of turnover in the secondary market but also by the amount of capital raised in the primary market. However, in 2016 the capital market set the stage for the year to be defined in the future as the time the listed corporate bonds were relaunched.

Market activity to a large extent seems to have been affected by the uncertainty brought about by the tug of negotiations in the context of the assessment of the country's financing plan by the institutions and by the results that overturned the forecasts. I am talking about the British referendum and the elections in the United States.

This year in Europe developed markets recorded a typical increase in their share price indices (+21.5%). This performance comes after three years of back-to-back negative performances which for the past two years were in the double digits. The developed European markets index ended 2016 in negative territory (-3.4%) for the third straight year, maintaining however the trend of reducing losses from previous years. In this environment the positive performance of the Athens Exchange General Index (+1.9%) after two years of double digit negative performances brings the behavior of our market closer to developed European markets for the first time since 2013.

At the international level, developing markets posted a positive performance (+8.58%) for the first time after a number of years, despite the negative effect on prices – for the first time – from the Chinese capital market which was down 12.31% (Shanghai Compro). At the same time, the share price index of developed markets worldwide was up 5.32% with the main positive effect coming from Dow Jones (USA) at +13.42%. London's FTSE100 index also posted a typical performance – a double digit yearly increase (+14.43%), even though it was on the wake of the result on BREXIT.

Despite the positive performances of share prices as determined by the stock exchanges' composite price indices in 2016, the uncertainty about the future of the economies was expressed by the drop in trading activity which dropped by 24% at the world level (WFE) and 16% at the European level (FESE).

At the Greek Exchange, in 2016, the total value traded (€15.1bn) dropped by 21% compared to 2015 (€19,1bn) despite the fact that in 2015 the Exchange operated for 25 fewer days due to capital controls. The average daily traded value was €60.5m vs. €85.7m in 2015, reduced by 29%. The value of off-exchange transfers dropped by 20.5% in 2016 (€7.3bn) compared to 2015 (€9.2bn).

In the derivatives market, the 40% drop in the average revenue per contract, to €0.105 in 2016 down from €0.175 in 2015, which resulted from the drop in prices in the underlying market, offset the 3.3% increase in total trading activity in 2016 (15.8m contracts) compared to 2015 (15.3m contracts).

The average capitalization of the market was €41.3bn, reduced by 6% compared to 2015 (€43.8bn). It is however notable that the behavior of the banking section has continued to diverge significantly from the rest of the market. In particular, the capitalization of the banks dropped by 28.34%, while the capitalization of the rest of the market increased by 6.99%.

Despite the anemic activity in the primary market, which barely exceeded €200m in 2016, we saw the first company listing on the Exchange which obtained the required dispersion through a private placement. The company exploited the recent change in the Exchange Rulebook, adopting practices that thrive in all developed markets. Besides the effort to differentiate our revenue streams, it is worth noting the significant increase in the colocation services being provided, and the hosting of two General Meetings by listed companies on the Group's premises.

This reduced activity brought the Group's revenue in 2016 to the worst level 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 2016 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 2016 amounted to €100m and the Group is debt free. As a result, the company is in a position – for the 14th straight year – to propose a combination of dividend and capital return which together with the completion of the share buyback program will improve the return on equity by releasing assets to shareholders. Based on the closing price at the end of 2016 (€4.89), the total proposed dividend yield, including the capital return, amounts to 6.1%.

The current period is historically one of the most complex ones, mainly because material changes are taking place at the same time in at least three different sectors at the heart of the globalized economy. Thus, in the financial systems the imposed structural changes in risk management following the financial crisis of 2008 are maturing. At the same time, the digital revolution has reached such a level of maturity that it is causing significant shifts in employment in countries of the western world, without any visibility as to what the future of human work holds in this new production model in the decades ahead. Finally, technological innovations in the field of energy, coupled with geopolitical upheavals in countries that have traditionally been energy suppliers, are causing significant volatility in the cost of energy, but also a resurgence of religious conflict, spreading fear at the global level.

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 2008¹ known as banking deleveraging.

In Europe this option is expressed (and continues to be expressed more soundly after the referendum in favor of Brexit), by accelerating the adoption of initiatives on forming a “Capital Markets Union.” The position of the ECB as expressed by Yves Mersch is indicative of this view: “The Eurozone is like an airplane flying on one engine – bank financing. In order to increase the speed and stability of the airplane, it would be good to add a second engine – financing through capital markets,” but also by AFME² in its report “Why equity markets matter”.

The main practical issue not only for the European market 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. For this reason, a significant number of the reports currently being published³ deal with resolving this issue, 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 investments to participate.

Of course, the predominant factor which cannot be ignored is that the financial crisis, by affecting the levels of risks acceptable to investors, has modified the perception of not only what is considered a viable business capital structure, but also what is considered attractive⁴.

The important advantage of the Greek capital market is its extroversion and the excellent network providing access to the international investment community. At the end of 2016 international investors held 61.4% of the capitalization and carried out 57.1% of transactions, with their participation in our market increasing over the past two years.

With the development of investment banking and the activation 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 support 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

¹ OICU-IOSCO Market-Based Long-Term Financing Solutions for SMEs and Infrastructure. The study was prepared for the G20 meeting of Finance Ministers and central bankers.

² AFME - Association for Financial Markets in Europe.

³ World Federation of Exchanges-IOSCO: SME Financing and Equity Markets 2017 report.

⁴ World Bank Group: The Impact of the Global Financial Crisis on Firm's Capital Structure – 2015 report.

infrastructure operates, by improving and expanding the products and services that we offer, and by improving our presence abroad.

After a year with limited results for the Group, we have every reason to work and collaborate in 2017 with absolute optimism.

And this because together with the maturity of the conditions for the new growth phase of the Greek economy, it looks like capital markets have an internationally accepted role in gathering and distributing funds for growth.

In addition, the challenges of the new bond market and the domestic energy market, as well as the structural changes that will be brought about by CSDR and MiFID II, clearly set the course for the further dynamic development of our infrastructure.

Athens, May 2017

Socrates Lazaridis
Chief Executive Officer

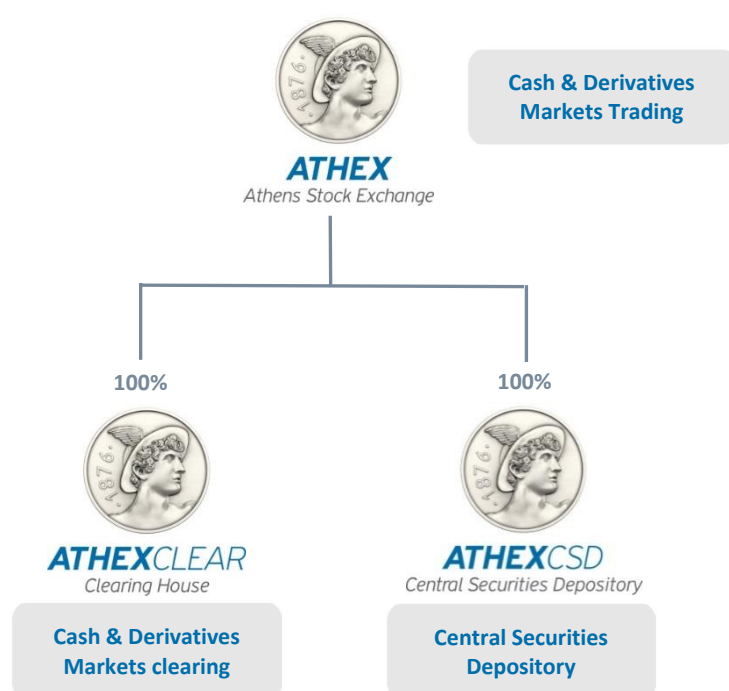
The Athens Exchange Group

01

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	www.athexgroup.gr
ISIN	GRS395363005
Listed (ATHEX)	21.8.2000
OASIS	EXAE
Bloomberg	EXAE GA
Reuters	EXCr.AT

Overview

Listing

1

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.

Trading

2

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.

Clearing

3

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.

Settlement

4

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.

Registry

5

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).

Market data

6

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.

Indices

7

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).

Technology

8

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>ATHEX Athens Stock Exchange</p> <p>Hellenic Exchanges – Athens Stock Exchange SA (ATHEX)</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>ATHEXCLEAR Clearing House</p> <p>Athens Exchange Clearing House S.A. (ATHEXClear)</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>ATHEXCSD Central Securities Depository</p> <p>Hellenic Central Securities Depository S.A. (ATHEXCSD)</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>

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

HELEX shares are listed on the Athens Stock Exchange.

Apr. 2001

The ASE trading floor at 10 Sofokleous Street is closed.

Sep. 2002

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 – 2014

15 July 2010

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

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

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 its 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 competitiveness of Greek enterprises and the reliability of the Greek market.

First Half 2013

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).

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

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

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

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

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 Dec. 2014

The ATHEX-CSE Common Platform expands to include the Sibiu Stock Exchange (SIBEX) Derivatives Market. SIBEX derivatives trading takes place on the OASIS trading platform and trades are cleared by ATHEXClear.

Events 2015-2016

22 Jan 2015

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

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

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.

May 2016

The Athens Exchange continued its efforts to develop partnerships with other capital markets, signing MoUs with the Teheran Stock Exchange (Iran) and the Shenzhen Stock Exchange (China).

Read more in [chapter 3.2](#).

Jul 2016

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 in [chapter 4](#).

Jul 2016

The SEC, the supervisory authority of the U.S. capital markets, has recognized ATHEX as a "Designated Offshore Securities Market (DOSM)". With this designation, ATHEX joins a number of leading international exchanges which have already been designated as DOSM. 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.

Read more in [chapter 3.4](#).

Management profile

02

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 2016 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
 - 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**
- **Risk strategy and risk management**
- **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 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.
Iakovos Georganas	Chairman, Non-Executive	M		M	
Socrates Lazaridis	Vice Chairman & CEO, Exec.	M			
Alexandros Antonopoulos	Independent Non-Executive	M	M	C	
Konstantinos Vassiliou	Non-Executive	M			
Ioannis Emiris	Non-Executive	M			
Dimitris Karaiskakis	Exec. (Chief Operating Officer)	M			
Sofia Kounenaki – Efraimoglou	Independent Non- Executive	F		M	
Ioannis Kyriakopoulos (1)	Non-Executive	M			C
Adamantini Lazari	Independent Non- Executive	F	M		M
Nikolaos Milonas	Independent Non- Executive	M	C		
Alexios Pilavios	Non-Executive	M			M
Dionysios Christopoulos	Independent Non- Executive	M			
Nikolaos Chryssochoides	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 2016

- (1) At the meeting of the Board of Directors on 22.02.2016 Mr. Ioannis Kyriakopoulos replaced Mrs. Paula Hadjisotiriou as 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).

2.3. BoD member biographies

Iakovos Georganas, Chairman, Non-executive Member



Mr. Iakovos Georganas is non-executive Chairman of the Hellenic Exchanges-Athens Stock Exchanges S.A., the Hellenic Central Securities Depository S.A., as well as non-executive Vice Chairman of the Board of Directors of Piraeus Bank Group.

Mr. Georganas studied at the Graduate School of Economic and Commercial Sciences in Athens (Business Administration, 1955) and at Harvard Business School (Advanced Management Program, Spring 1979). In July 1958, he joined the Economic Development Financing Organization at the graduate staff entry level. This wholly state owned, for profit, long term-credit organization evolved into the Hellenic Industrial Development Bank (ETBAbank). In January 1991, after 33 years of service with ETBAbank, he left with the rank of First Deputy Governor and he was also a Governor of ETBAbank from 2002 to 2003.

Mr. Georganas was also Chairman of the Athens Exchange Clearing House (AthexClear) S.A., Vice Chairman and Member of the Capital Market Commission (January 1989 to January 1991), member of the executive committee of the Board of Directors of the Hellenic Banks' Association, member of the Committee of Long-Term Credit Institutions of the European Community as well as member of the BoD of the Hellenic Federation of Enterprises and the Institute of Economic and Industrial Research.

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



Socrates Lazaridis is CEO of the Athens Exchange Group. He is also Chairman of the Board of the Stock Markets Steering Committee, member of the Board of the Hellenic Capital Market Commission, 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 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 National & Kapodistrian University of Athens and continued his studies for an MSc (Econ) at Queen Mary College of London. In 1987 he founded "Effect Ltd", which specialized in software development for the capital markets industry.

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) 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.

Sofia 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-Eraimoglou 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 with an insurance company; 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 Chryssochoides - Non-executive member



Mr. Chryssochoidis 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. Chryssochoidis 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. Chryssochoidis 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 - 2016

Company	Remuneration per BoD meeting (€)	Total remuneration (€)
ATHEX	160.00	28,920.00 *
ATHEXClear	160.00	8,160.00
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, ATHEXCSD) receive remuneration for their participation in the BoDs.

Remuneration of senior executives of the Group – 2016

Name	Position	Remuneration (gross)
Socrates Lazaridis	Chief Executive Officer (CEO)	186,287.44
Vasilis Govaris	Chief Financial Officer (CFO)	88,076.89
Dimitris Karaiskakis	Chief Operations Officer (COO)	103,345.28
Nikolaos Porfyris	Deputy Chief Operations Officer (dCOO)	96,136.87
Total		473,846.48

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 2016 Annual Financial Report that has been published and is available on the website of the Company – 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 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 to 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	Iakovos Georganas 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 determine 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 Investments Committee reports to the Board of Directors.

Committee composition:

Chairman	Ioannis Kyriakopoulos
Members	Alexios Pilavios Adamantini Lazari

Stock Markets Steering Committee

The responsibilities 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 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:

Chairman	Socrates Lazaridis, Chief Executive Officer
Vice Chairman	Nikolaos Porfyris, Deputy Chief Operating Officer
Members	Panagiotis Drakos, President of the Union of Listed Companies
	Eleftherios Kourtalis, President of the Hellenic Federation of Enterprises-Textile Industries
	Michail Karamanof, Chief Executive Officer of Karamanof Securities
	Kimon Volikas, President of the Hellenic Fund and Asset Management Association
	Athanasios Savvakis, President of the Federation of Industries of Northern Greece
	Dionysios Christopoulos, executive at the Bank of Greece
	Apostolos Patrikios, Attorney, Committee Secretary

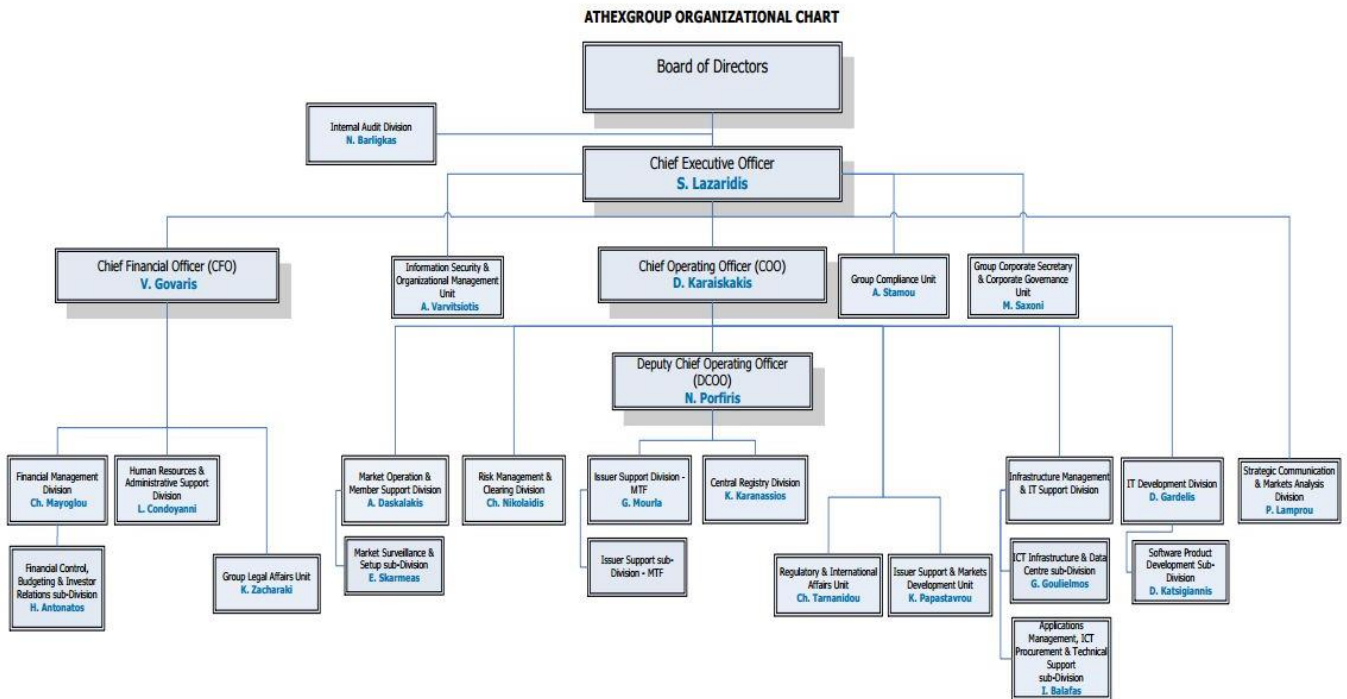
Xnet Steering Committee

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 in relation with 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



<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 Law 3371/2005	“Capital Market issues and other provisions”
Prospectus Directive Law 3401/2005	“Prospectus for the public offer of transferrable securities and listing for trading”
Transparency Directive Law 3556/2007	“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 Law 3016/2002	“On corporate governance, salary issues and other provisions”
Takeover-bids Directive Law 3461/2006	“Incorporation into National Law of Directive 2004/25/EU on Public Offers”
Market Abuse Directive (MAD) Law 3340/2005	“On the protection of the Capital Market from the actions of persons that possess inside information and market abuse actions”
Market Abuse Regulation (MAR) Regulation (EU) 596/2014	Regulation (EU) 596/2013 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

Athens Exchange (as operator of regulated markets)

Markets in Financial Instruments Directive (MiFID) Law 3606/2007	“Markets in financial instruments and other provisions” that incorporates the MiFID Directive”
Market Abuse Directive (MAD) Law 3340/2005	“On the protection of the Capital Market from the actions of persons that possess inside information and market abuse actions”
Market Abuse Regulation (MAR) Regulation (EU) 596/2014	Regulation (EU) 596/2013 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) Law 3301/2004	“Financial Collateral Agreements, application of International Accounting Standard and other provisions”
Margin Trading Law 2843/2000	“Modernizing exchange transactions, listing of investment companies in ocean-going shipping on the Athens Stock Exchange and other provisions”
Law 4141/2013	“Investment tools for development, provision of credit and other provisions”

Investors Compensation Scheme Law 2533/1997	“Derivatives Exchange and other provisions”
Hellenic Deposit and Investment Guarantee Fund (TEKE) (HDIGF) Law 3746/2009	“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.

ATHEXClear

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

EMIR Regulation (EU) 648/2012	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
MiFID Law 3606/2007	“Markets in financial instruments and other provisions” that incorporates the MiFID Directive
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

MiFID Law 3606/2007	“Markets in financial instruments and other provisions” that incorporates the MiFID Directive.
Settlement Finality Directive Law 2789/2000	“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”
Dematerialized Securities System (DSS) Rulebook of Operation	

Activities of the Group in 2016

03

3. Activities of the Group in 2016

3.1. Activity in our markets

New listings (IPOs)

INTERCONTINENTAL INTERNATIONAL REIC	<p>Listing in the ATHEX Main Market. Issue covered by: private placement</p> <p><i>This is the first company to take advantage of the option provided by the Regulatory framework of the Exchange to perform a primary listing and obtain the required dispersion through a private placement.</i></p> <p>Capital raised: €14.5m.</p>
CENERGY HOLDINS S.A. (member of the VIOHALCO SA/NV Group of companies)	<p>Dual listing in the ATHEX Main Market, following the completion of the cross-border merger by absorption of the listed companies CORINTH PIPEWORKS S.A. & HELLENIC CABLES S.A.</p>

Rights issues

NEXANS HELLAS S.A., EUROCONSULTANTS S.A. and TRASTOR REIC	<p>Rights issue, through the exercise of the preemption right by old shareholders.</p> <p>Capital raised: €41.9m</p>
ATHENA S.A.	<p>Rights issue, through the capitalization of liabilities and waiving of the preemption right by old shareholders in favor of J&P - AVAX S.A.</p> <p>Capital raised: €35m</p>
GEK TERNA S.A., NIREUS S.A. and MARFIN INVESTMENT GROUP S.A.	<p>Listing of new shares issued from the conversion of existing convertible bonds.</p>

Corporate bonds

FORTHNET S.A.	<p>Listing in the Fixed Income Segment of the ATHEX Main Market. Issue covered by: public offer and private placement</p> <p>Capital raised: €70m.</p>
HOUSEMARKET S.A.	<p>Listing in the Fixed Income Segment of the ATHEX Main Market. Issue covered by: public offer, using Electronic Book Building (EBB).</p> <p>Capital raised: €40m.</p>
M.L.S. MULTIMEDIA S.A.	<p>Start of trading in the 1st bond in the Bond Segment of the ATHEX Alternative Market.</p> <p>Capital raised: €4m (by private placement)</p>

Corporate transformations

SIDMA S.A. STEEL PRODUCTS	Merger by absorbing the non-listed company PANELKO S.A.
VIOHALCO SA/NV	Absorbed the listed company ELVAL and the non-listed companies DIATOUR, MANAGEMENT AND TOURISM S.A., ALCOMET S.A. and EUFINA S.A.
NIREUS S.A.	Merger by absorption of the non-listed company SEAFARM IONIAN S.A.
AUTOHELLAS S.A.	Merger by absorption of the non-listed companies TECHNOCAR S.A. and VELMAR S.A.
JUMBO S.A.	Merger by absorption of the non-listed company TANOSIRIAN S.A.

3.2. Development of an Electronic Book Building service for bonds

The aim of the **EBB** (Electronic Book Building) **service** is the provision by ATHEX of the necessary technical 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 it capital raises, 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 proposal of companies that seek financing.

In 2016 the service provided was expanded to support bond issues; at the same time the procedure were improved in order to fulfil the demands of those involved. Towards this end, changes were necessary both in the legal framework as well as in the IT systems of the Group that support the service.

The whole undertaking was successfully completed with the use of the EBB service in the issuance of the first bond, by Housemarket S.A., in the Main Market (you can read more on that issuance in [chapter 4](#)).

Provision of this service, as well as its further development in 2017 to better support the needs of the market, gives the Exchange a central role in supporting issuers as well as underwriters, with the advantage of simplified processes and the ability to contain the cost of a primary offering, thus facilitating capital raising through the Exchange.

3.3. Regional cooperation

Cooperation with the capital market of Iran

Starting in January 2016, in implementation of the Joint Comprehensive Plan of Action, the Iranian capital market is gradually been integrated in the international financial environment. In April 2016, the Iranian Capital Market Commission joined the International Organization of Securities Commissions (IOSCO) as an Associate Member.

In May 2016, a Memorandum of Understanding with the Hellenic Capital Market Commission was signed, while in July of that year, during the official visit by Athens Stock Exchange executives in Tehran, MoUs were signed between ATHEX and Tehran Stock Exchange (TSE), as well as between the respective Depositories (ATHEXCSD and the Central Securities Depository of Iran – CSDI).



Messrs. Mohammadreza Mohseni, CEO of CSDI and Socrates Lazaridis during the signing ceremony.



Mr. Socrates Lazaridis and Dr. Hassan Ghalibaf Asl, Chairman and CEO of the Tehran Stock Exchange.

With these MoUs, the two sides intend to explore and gauge market participant (Members, institutional investors, custodians et al) interest for:

- The development and listing of products (e.g. ETFs, Listed Funds, etc.) that will enable investors in the two markets to access the two countries' markets and get exposure to their economies.
- Cooperation in infrastructure (trading, clearing, settlement, technology) in order to achieve market access which will allow for mutual business development and further internationalize the two markets.

The Securities and Exchange Organization (SEO) and the Central Securities Depository of Iran (CSDI) reciprocated with a visit to Athens.



Dr. Bahador Bijani, Vice Chairman of the Securities & Exchange Organization and Dr. Mohammadreza Mohseni, CEO of the Central Securities Depository of Iran, ring the opening bell on 9 September 2016.

ATHEX provided advisory services to the Central Securities Depository of Iran (CSDI) with the goal of facilitating the project of connecting the depositories for securities and cash settlement, corporate actions and Registry. From ATHEX the technical model at the level of ISO 15022 messages that will be used for the connection was defined and provided for consultation with the Iranian side.

Even though it has not been put into production, pending the finalization of the connection, the agreement on a technical model whose implementation is feasible without significantly differentiating the manner by which other connections in western markets operate will support the opening of the Iranian market to international investors through Greece.

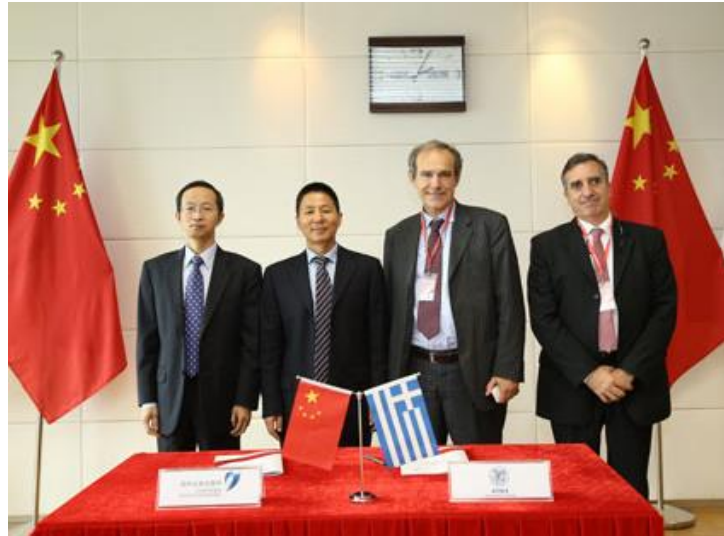
Cooperation with the Shenzhen Stock Exchange (SZSE)

The Athens Exchange has concluded a number of meetings and agreements in order to convert the positive investment climate towards Greece to specific investments by local and government entities and companies, institutional and private Chinese investors. In particular, on 24.04.2016 it signed a MoU with the Shenzhen Stock Exchange. The purpose of the MoU is, among others, to explore the possibility of listing Exchange Traded Funds (ETFs) in the 2 markets (a Greek ETF in China and a Chinese in Greece), as well as to expand the XNET network for trading and post-trading services offered by the Athens Exchange.

Towards this end, the initial meetings with Chinese mutual fund managers took place, in order to obtain an understanding about the terms and conditions on which investment interest by Chinese investors could be expected, in conjunction with the existence of restrictions (quota) on outgoing private

investments from China. It should be noted that the Athens Exchange is recognized by the Mandatory Provident Fund Schemes Authority of Hong Kong.

In mid-November, the Athens Exchange supported the efforts of the Hellenic-Chinese Economic Council – in which it is an active participant – to have a Greek presence with a stand at the China Hi-Tech Fair in Shenzhen. During the Fair, there were presentations on the investment possibilities in Greece together with the State owned Assets Supervision and Administration Commission of Shenzhen Municipality (SASAC) and its companies such as Shenzhen Airport and Shenzhen Energy.

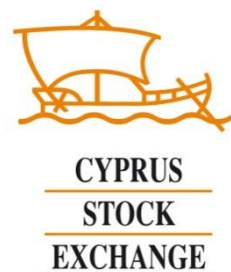


Cyprus Stock Exchange (CSE) – Sibiu Stock Exchange (Sibex)

2016 was the second year of collaboration with SIBEX, during which the goals was to further develop the markets and the collaboration in general. 2016 also marks the ten-year collaboration that began with the ATHEX-CSE Common Platform in a production environment o 30 October 2006.

Among others:

- ATHEX provided support and provide consulting services to SIBEX with regards to the design of derivatives products with Greek bank stocks as underlying securities.
- As part of the collaboration in developing Energy markets, there was a joint participation in the **Horizon 2020** program. The participation was jointly with CSE and Sibex and 6 other partners (entities, research and educational institutions), and in particular the call titled “Making the energy efficiency market investible”. The University of Sibiu was one of the abovementioned partners.
- The Group during the year was in close collaboration with CSE and the Bank of Cyprus for the delisting of the latter from the Athens Exchange and its transfer to the London Stock Exchange (LSE), with a dual listing at CSE. Within this framework, a project for providing services to CSE has been prepared.



It should be noted that SIBEX is in official discussions with the Bucharest Stock Exchange (BVB) concerning a takeover of the former by the latter.

3.4. XNET

XNET was designed and implemented by the Athens Exchange Group 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 an environment where XNET network participants with a Greek settlement bank continue to be affected by capital controls, in 2016 we had an increase:

- in the number of participants, by 3 (PERVANAS, MERIT and MAVRIKIS), and the number of markets, as Frankfurt was added to the network.
- in trading activity by 5% compared to 2015.

It is important that, to support and maintain this positive response in the XNET Services Network, the following actions have already been planned and implemented:

- Trade settlement in the German market was transferred from CBF to Citi, thus allowing trade execution in that market, and
- The transfer of trade settlement in euro of XNET markets (except Belgium) to a commercial account at Alpha Bank was implemented, as a solution to the inability of XNET participants with a Greek settlement bank to trade in euro.

Continuing the effort to develop the XNET service:

- The ability to trade in peripheral German markets and in the market trading in Euro in London was added.
- The migration of the Spanish market to a two-day settlement cycle (T+2) was supported.
- Managing days that are working days for settlement services but holidays for clearing processes in foreign markets was implemented.
- The option to settle in euro outside of Target2 (at a commercial settlement bank) was supported, in order to support the required checks concerning capital controls and to make possible the use of foreign capital for stock purchases for XNET members with a Greek settlement bank.

In order to support all of the above, changes were made to the DSS and also to peripheral clearing, settlement and pricing systems.

3.5. Regulatory challenges (MiFID II, CSDR)

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.

Members also have new, significantly increased requirements, and the Exchange is planning to offer value to its Members and in particular to Investment Services Firms with the addition of new services such as:

- Comprehensive service for Order Record Keeping containing the information fields required by MiFID II – ORC@ATHEX service
- Obtaining a license from the Hellenic Capital Market Commission to provide Transaction Reporting services for all markets where clients carry out transactions (Approved Reporting Mechanism) – ARM@ATHEX service
- Obtaining a license from the Hellenic Capital Market Commission to provide Approved Publication Arrangement services by providing bilateral trade information within one minute to data feed providers with which it is connected – ARM@ATHEX service

MiFID II / MiFIR goes into effect on 3 January 2018.

CSDR

The Central Securities Depositories Regulation (CSDR, Regulation (EU) 909/2014) 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 CSDR is the supervision of Depositories, with the starting point being the licensing of Depositories by the competent authorities, with the key criterion being the fulfilment of the terms and conditions foreseen.

In particular, the goals of CSDR for Depositories 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 infrastructures (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.

CSDR liberalizes the provision of depository 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.

CSDR went into effect on 17.9.2014 and the Central Securities Depositories 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 by the spring of 2018, in order to be licensed by the regulatory authorities of the member state of origin.

3.6. ATHEX - “Designated Offshore Securities Market” by the SEC

On July 15 2016, the U.S. Securities and Exchange Commission (SEC), the supervisory authority of the U.S. capital markets, has recognized the "Hellenic Exchanges - Athens Stock Exchange S.A. (ATHEX) as a **"Designated Offshore Securities Market (DOSM)"** within the meaning of Rule 902 (b) of Regulation S under the U.S. Securities Act of 1933, as amended (Securities Act).

With this designation, ATHEX joins a number of leading international exchanges which have already been designated as DOSM.

Benefits of the designation

The designation of Hellenic Exchanges-Athens Stock Exchange S.A. (ATHEX) as DOSM provides several advantages to both investors and issuers.

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.

Prior to that, investors who wished to sell such securities (i.e., equity or debt securities issued by ATHEX listed companies in a private placement under the U.S. securities laws) had to take certain measures to ascertain the location of the purchaser prior to re-selling.

With this designation, investors will be able to resell such securities without having to follow procedures to ensure that the securities are not being purchased by a buyer in the United States or a U.S. person.

As a result, trading in the securities listed on ATHEX will be further facilitated.

- A more liquid resale market is expected to develop, which is likely to make private placements of Greek securities issued by ATHEX-listed companies more attractive to U.S. investors.
- Moreover, the DOSM designation will also facilitate the dissemination of research reports during offerings of securities (including private placements of debt and equity securities) by issuers whose shares traded on ATHEX for at least twelve months.

Legal background

Regulation S provides a "safe harbor" for offers of securities made outside the United States. An offering of securities, whether private or public, made by an issuer outside of the United States in reliance on Rule 903 of Regulation S need not be registered under the Securities Act. The "safe harbor" provided by Rule 904 of Regulation S applies to re-sales of securities by persons other than the issuer, a distributor or persons acting on their behalf. An offer or sale of securities that satisfies the conditions of Rule 904 is deemed to occur outside the United States and therefore is not subject to the registration requirements of the Securities Act.

The availability of the Rule 904 resale "safe harbor" is contingent on two general conditions:

- (i) the offer or sale must be made in an "offshore transaction", and
- (ii) no "directed selling efforts" may be made by the issuer, a distributor, any of their respective affiliates or any person acting on their behalf.

For a resale to be considered an "offshore transaction", the offer cannot be made to a person in the United States. Specifically, at the time when the buy order is originated, the buyer must be physically outside of the United States or the seller must reasonably believe that the buyer is outside of the United States. However, Regulation S also provides that, instead of researching the location of the buyer, the seller may execute the resale transaction on or through the facilities of a "designated offshore securities market" (provided there has been no pre-arranged sale in the United States). In this case, the location of the buyer is of no significance.

Accordingly, provided that there no directed selling efforts in the United States, re-sales of securities listed on ATHEX by persons who are not issuers, distributors or their affiliates will now automatically qualify as 'offshore transactions' under Regulation S.

3.7. Technology upgrades

Migration of the DSS to a web environment

The technological opening of access allows project development and provision of services to members and markets to which it was not until now possible, but also provides greater flexibility to current users of DSS and reduces operating risk.

The development of a client application of the Dematerialized Securities System (DSS) with the use of internet technologies has made it possible to provide safe access to post-trading processes to a greater number of clearers and custodians, beyond the geographical and technological restrictions of the closed ATHEX Exchange Trade Network. In addition, it upgraded the DSS core software to the latest version supported by the provider Oracle.

In order to complete the project and put the platform into production, a full review of the system (forms, processes, reports) was required, in order to ensure its correct operation.

Implementation of a “Paperless office” with the use of remote signatures

The goal of the project is to transform all communication processes that make use of a manual signature (proposal memos, committee minutes, approvals etc.) into digital processes incorporating workflow technologies and “remote digital signature” – remote (server site) signing at the Group (i.e. the use of a recognized digital signature without an intermediary medium or device such as smart card / smart reader, USB token etc).

The electronic flow of documents will, besides improving process execution in time and cost, also assist through automated categorization and filing in the creation of a reliable repository of documents, with the option version control, browsing and search, which is a compliance issue in EU Regulations EMIR and CSDR.

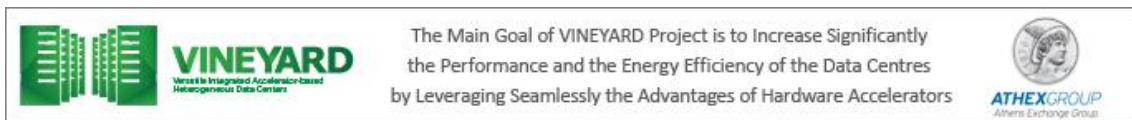
This particular remote digital signature technology, over the past year and a half is enjoying widespread acceptance in Europe/Americas, while the competent regulating authority has defined a new international standard (ETSI EN 419).

At the same time, the Athens Exchange as Certification Authority (CA) signed on 6 June 2016 a Memorandum of Cooperation with DocuSign (www.docusign.com), a leader in digital signature and workflow collaboration worldwide.

The goal of this strategic collaboration, as part of which the Athens Exchange as a provider of Digital Signatures/ Certificates will participate as the only Trusted Service Provider (TSP) from Greece, in a closed network of TSPs worldwide, is to further promote and provide digital signatures / certificates, both in Greece as well as abroad.

Participation in the European project VINEYARD

Since February 2016, the Group participates in the consortium that is implementing the Versatile Integrated Accelerator-based Heterogeneous Data Centres (VINEYARD) project, which has a 3-year duration. It is a research project aiming to increase the efficiency of data centers and reduce energy through hardware accelerators.



The project is financed by the Horizon 2020 European program (<http://vineyard-h2020.eu/en/>), and has the advantage that technologies developed during the project will allow the Exchange to significantly increase the efficiency and at the same time reduce the energy consumption of the systems used to execute financial applications, such as the applications for trading in the cash and derivatives markets, clearing and settlement of trades, and calculating trade risk in real time.

3.8. Other developments

Covered sales

This is a new functionality that allows sales without consuming credit limit, provided that the shares to be sold are blocked before the activation of the sale order in the trading system.

With this new functionality, the resources committed by market participants are reduced, thereby reducing cost, while maintaining the same level of market safety.

In order to implement the covered sales functionality, significant changes had to be made both to the regulatory framework of operation of the market, as well as in the IT systems for trading, clearing, and risk management.

EU-Wide Stress-Test for CCPs

ATHEXClear participated in the second phase of the EU-wide stress test for counterparty credit risk that was carried out by the European Securities and Markets Authority (ESMA). ESMA demanded that supervised Central Counterparties calculate possible losses that could arise from clearing member default under new, increased extreme market condition factors.

ATHEXClear completed these test successfully, as there was no essential weakness in the ability to absorb losses under these extreme scenarios.

Rebalancing the FTSE Large Cap index

Following requests by Members, and in order to stimulate investor interest and increase market liquidity, it was decided to rebase the FTSE/ATHEX Large Cap index.

At the same time, it was decided to increase the nominal value of the Index Futures by a factor of four. This adjustment significantly reduced the cost of trading in this particular product (as a percentage of its face value).

Electricity market

The strategic choice for ATHEX to expand into new products, services and markets, by significantly diversifying its portfolio and revenue sources, while also utilizing its infrastructure and know-how to achieve economies of scale was, following an initial feasibility study, the starting point for collaborating with all involved in the Greek energy market, in order to achieve the national target of adapting to the European model of market operation (Target Model).

Annual certification of the risk management models

As part of the annual update of the risk management models, in accordance with Article 49 of Regulation (EU) 648/2012 (EMIR), ATHEXClear was audited by an independent specialized external consultant.

During the audit, that was carried out in accordance with the provisions of Article 47 of Regulation (EU) 153/2013 concerning Technical Standards, no deviation was found for the provisions and requirements of EMIR; and no significant finding was recorded.

3.9. Hellenic Corporate Governance Council

The Hellenic Corporate Governance Council (HCGC) was founded in 2012, as a result of the collaboration between ATHEX and SEV (Hellenic Federation of Enterprises). The purpose of the HCGC is to monitor the implementation of the Hellenic Corporate Governance Code by Greek business and in general to operate as an entity specializing in spreading corporate governance principles in order to increase trust of foreign and local investors in the Greek market.



The HCGC operating actively and interactively deals with:

- The constant adjustment of the Hellenic Corporate Governance Code to the conditions and demands of the international and internal market.
- The support and training of Greek businesses in order for them to understand the principles of the Code and learn how to effectively implement them.
- Monitoring and evaluating compliance with the Code, as well as publishing relevant reports with statistical information and suggestions for improvement based on the results, in order that the practices of the Code are better implemented, rather than businesses being targeted.

The HCGC is a member of the European Corporate Governance Codes Network and an expert contributor to the annual Doing Business survey of the World Bank for the Protecting Investors Index (www.doingbusiness.org).

The composition of the 15 member Council, as well as the Committees and work groups of the HCGC follow the principle of diversity, since specialists in the fields of audit, investing, business, supervision, legal, consulting, bank and capital markets participate.

HCGC activities in 2016

In 2016, the Hellenic Corporate Governance Council (HCGC), following the publication of the “Hellenic Corporate Governance Code for Listed Companies,” moved a step further in the development, promotion and dissemination of good corporate governance in Greece. It drafted the **“Special Practices of Good Corporate Governance for Non-Listed Companies”** which is addressed to all forms of non-listed companies, such as start-ups, companies with a single shareholder-manager, family business, joint ventures, as well as subsidiaries of listed companies.

The sectors covered by the Special Practices of Good Corporate Governance for Non-Listed Companies are: the Board of Directors and its Members, remuneration, internal audit system, risk management, regulatory compliance, relations with shareholders, relations with other stakeholders, IT systems and family companies.

HCGC organized a special event on March 23rd 2016 at the Athens Exchange in order to present the draft of the “Special Practices of Good Corporate Governance for Non-Listed Companies.” After the event, the draft was put to open consultation for a period of ten (10) weeks. After the comments that were received are taken into consideration and discussed by the work group, and following the meeting of

the 15-member Council of the HCGC in October 2016, the “Special Practices of Good Corporate Governance for Non-Listed Companies” are expected to be published in the first quarter of 2017.

In order to inform, train and raise awareness among young people in matters of corporate governance, HCGC organized in May a special two-day conference on the “Hellenic Corporate Governance Code” for students in the “Audit and taxation” post-graduate program of Panteion University.

As a member of the European Corporate Governance Codes Network, HCGC participates in the “European wide Corporate Governance Study” of the European Confederation of Directors Associations (ecoDa) in collaboration with Mazars Greece. The goal of the project is to assist in the European Commission’s challenge to inform EU member states about the measures that have been taken to adopt Directive 2014/208/EU on the quality of reports submitted on corporate governance (“comply or explain”).

At the same time, HCGC in cooperation with the Athens Exchange continues to develop the internet platform for monitoring and evaluating the implementation of the Hellenic Corporate Governance Code by listed companies, and is collaborating with EY Greece in order to draft a manual titled “Internal Audit and Risk Management Framework” that will replace Appendix IV of the Hellenic Corporate Governance Code.

In November, HCGC signed a contract for the provision of consulting services in matters of corporate governance to a public interest corporate entity, and in particular with the drafting of a Corporate Governance Code, rules concerning the monitoring and reporting framework, as well as with the audit framework, including training. This project has been provided by the Structural Reform Support Service (SRSS) of the European Commission.

Hellenic Corporate Governance Code

The absence in Greece of a widely accepted and applied of Corporate Governance Code (CGC) was the stimulus for the Hellenic Federation of Enterprises (SEV) to draft the “Corporate Governance Code for listed companies” in March 2011. The Code specified best practices standards for corporate governance for Greek companies. The aim of the CGC was to continuously improve the Greek corporate regulatory framework and corporate climate overall, as well as the increase of the competitiveness of Greek businesses and the Greek economy as a whole.

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

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

The Code concerns Greek Societes Anonymes headquartered in Greece and includes two types of provisions:

- **“General Principles”**, which are general guidelines for to all companies, listed and private; and
- **“Special practices”**, which further develop the corresponding general principle and guide its application as part of the regulatory and ownership profile of listed companies.

The Code consists of four Sections and five Annexes:

Section A – The Board and its members

The first section deals with the BoD and its members and includes practical guidance and directions concerning the performance of their statutory duties. In addition, it recommends the creation of Committees that will assist the BoD in carrying out its duties. The Code recommends that the internal regulations of the company should determine the matters which the BoD decides, as well as the core, non-assignable functions of the BoD.

Section B – Internal Controls

The second section sets out general guidelines and special practices for the System of Internal Control (SIC). The SIC is specified in a separate annex titled “Guidance on the internal control framework.”

Section C – Remuneration

The third section deals with BoD member remuneration, proposing a framework for determining remuneration for executive and non-executive members of the Board in accordance with the recommendations of the European Commission.

Section D – Relations with shareholders

The fourth section concerns relations with shareholders and includes guidelines in order to provide quality information and inform investors on corporate affairs, and have them actively participate in taking core strategic decisions, as well as ensuring easy and equal access to information concerning General Shareholders Meetings for minority shareholders.

Annexes

The five annexes aim to facilitate businesses to implement the Code:

- i. Exemptions for smaller listed companies
- ii. Guidelines for preparing the Corporate Governance Statement
- iii. Guidelines for the disclosure of BoD member remuneration
- iv. Guidance on the internal control framework
- v. List of special practices of the Code above and beyond those required by law

The full text of the Cod is available at <http://www.athexgroup.gr/web/guest/esed-hellenic-cgc>

Promoting the Greek capital market

04

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 approximately 60% of the total market capitalization of the Exchange. In 2016, international institutional investors were responsible for 57% 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.



5th Greek Investment Forum – New York June 21-22 2016



5th Greek
Investment
Forum
in NY
June 21|22, 2016



Sponsors:



Morgan Stanley



NBG Securities

PIRAEUS SECURITIES



11th AGR – London 21-22 September 2016

The annual Roadshow of Greek listed companies, organized for the 11th straight year by the Athens Exchange with the support of Bloomberg took place in London.



During the two days, more than 500 meetings took place between 100 fund managers, analysts and the 26 listed companies that participated at the roadshow.



During the second day there was a briefing session “Greek capital markets speeding up the real economy”. Mr. Alexis Charitsis, Deputy Minister of Economy, Development & Tourism, delivered the keynote address.

There followed a panel presentation with Prof. Anthony Bartzokas, Board Director at EBRD, Mr. Nicholas Jennett, Deputy Director General at the European Investment Bank (EIB) and Dr. Platon Monokroussos, Eurobank Group Chief Economist and Chairman of the Scientific Council of the Hellenic Bank Association.

Mr. Antonis Ntatzopoulos, Chairman of the Hellenic Bankers Association UK (HBA) was the moderator.





From the speech by the Deputy Minister of Economy, Development & Tourism Mr. Charitsis



From the sponsor award ceremony for the 11th AGM

Sponsors:



Venue sponsor:



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 2016 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.

13 January 2016

The Athens Exchange welcomed B&T Composites, Haitoglou Bros and Pindos, prize winners in FING's (Federation of Industry of Northern Greece) **"Greek Value Northern Greece 2015."**



The President of FING (Federation of Industry of Northern Greece) Mr. Athanasios Savvakis, the Mayor of Thessaloniki Mr. Giannis Boutaris, and representatives of B&T Composites, Haitoglou Bros and Pindos ring the Opening Bell at ATHEX.



B&T Composites provides a full range of composites solutions for high-end industrial, marine, automotive and consumer goods as well as GRP/GRE products for industries and infrastructures.

www.btcomposites.gr



Since 1924, Haitoglou Bros, through a combination – wherever that is possible – of traditional production methods and the use of state-of-the-art equipment and cutting-edge technology, produces sesame-based traditional products of high nutritional value, perfectly integrated into the Mediterranean Diet.

<http://haifoods.com>



The Pindos agricultural poultry cooperative, the largest poultry cooperative in Greece, since 1958 has been charting an upwards course in the Greek and the export market, through the quality of its products, consumer trust, and business activity.

www.pindos-apsi.gr

10 May 2016

The Athens Exchange welcomed Systems Sunlight, Demo, Raymetrics and Sychem, prize winners in the **Greek Export Awards 2015**.

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.



Mr. Samuel Zisis, representative of the Board of Directors of the Union of Finance & Commercial Affairs Diplomatic Personnel of the Ministry of Foreign Affairs, and Messrs. Vasilios Bilis, CEO of Systems Sunlight, Dimitrios Demos, Vice Chairman of Demo, Giorgos Georgousis, CEO of Raymetrics and Alexandros Ifantis, Chairman and CEO of Sychem ring the closing bell at ATHEX



Demo S.A. Pharmaceutical Industry is an industrial and commercial organization established in 1965 and active in the production and sales of pharmaceutical products. We are one of the major pharmaceutical manufacturers in Greece with a very strong presence in the hospital market, ranking first among the pharmaceutical companies in terms of sold units.

www.demo.gr



Raymetrics has been in operation since 2002, making it probably the first atmospheric LIDAR company in the world. Over the last 14 years they have developed a range of highly customizable products suitable for academic uses, commercial uses (aviation, mining, heavy industry), and operational uses (meteorology, environmental).

www.raymetrics.com

** Atmospheric lidar is a class of instruments that uses laser light to study atmospheric properties from the ground up to the top of the atmosphere.*



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 3rd decade of sustained growth, the company today ranks among the world's top providers of energy storage solutions.

www.systems-sunlight.com



Sychem is a fast growing engineering company which designs, manufactures and operates both water treatment plants and geothermal energy systems. Its water treatment systems utilize several methods of water filtration that create high quality water suitable for industrial and commercial use. These effective water treatment solutions based on membrane technology reduce energy costs and provide supreme performance.

The company's geothermal solutions use sea and ground water to provide cooling and heating.

www.sychem.gr

20 July 2016

The Athens Exchange welcomed Epsa, Eza, Gaea, Incelligent and Taxibeat, on the occasion of their being showcased in the documentary and event titled “Greek Crisis Success Stories” by the Greek Liberties Monitor and the Friedrich Naumann Foundation.



Mr. Aris Kefalogiannis, CEO of Gaea, Mr. Michalis Tsaoutos, General Manager of Epsa, Mr. Athanasios Syrianos, Chairman & CEO of Eza, Mr. Nikos Drandakis, CEO of Taxibeat and Mr. Vassilis Koulouris, Commercial Director of Incelligent ring the closing bell at the Athens Exchange.



Since 1924 Epsa operates continuously and with great success in the Greek market. The factory facilities are located in Agria, a picturesque seaside village of Pelion. Epsa is the product that has proven in its 90 year history that it is the only Greek soft drink that held high and maintained its quality and taste.

<http://epsa.gr>



The Company was founded in 1988 as the subsidiary of a German beer manufacturing group; one year later it bought the factory in Atalanti. In 1996 it produces its first Greek label, upgrading the quality of Greek beer. During this time, EZA becomes a leader in draft beer.

Since 2011, EZA, as a wholly Greek company, charts an independent strategy, actively participating in the decentralized development of the Greek economy.

www.eza.gr



Gaea was founded in 1995. Our name didn't come about by accident; in ancient Greek mythology, Gaea was Mother Earth—a symbol of fertility and the goodness of the earth. As such, our vision has been to introduce the world to the benefits of the Greek Mediterranean diet by combining exquisite Greek products based on olive oil with our penchant for tradition and simplicity.

<http://gaea.gr>



Incelligent is a startup developing innovative software for the intelligenet management of wireless networks (Mobile / Wi-Fi). By combining knowledge management methods, big data analysts and other cutting edge technologies, it accurately forecasts the future condition of a network, providing the ability to rapidly optimize its main operational parameters.

www.sychem.gr



Taxibeat is creating a new transportation experience in the city, by connecting thousands of passengers with professional drivers available nearby.

<https://taxibeat.gr>

Listing of new Attica Bank shares – 18 January 2016

The Athens Exchange welcomed Attica Bank (ATT) on the occasion of the listing of the 2,270,026,033 new common registered shares that were issued as a result of the rights issue by the bank.

This successful rights issue completed the recapitalization of the Greek banks, as in December 2015 the Greek systemic banks also successfully completed their rights issue, raising €9.4bn from private investors, mainly foreign.

Rights issues by the systemic banks in 2015

Bank	Raised capital (€m)	Start of trading of the new shares
Alpha Bank	2,563	2/12/2015
National Bank of Greece	2,212	14/12/2015
Piraeus Bank	2,622	8/12/2015
Eurobank Ergasias	2,039	2/12/2015
Total	9,436	



The Chairman of Attica Bank BoD Mr. Ioannis Gamvrilis and the CEO Mr. Alexandros Antonopoulos ring the opening bell on Monday 18 January 2016

Listing of new NBG Pangaea shares – 20 January 2016

The Athens Exchange welcomed **NBG Pangaea REIC** (former MIG Real Estates REIC), following the successful completion of its corporate transformation.



NBG PANGAEA



The Chairman of the Board of Directors of NBG Pangaea Mr. Christos Protopapas and the CEO Mr. Aristotelis Karytinios ring the opening bell.

Key points in the regulatory framework or Greek REICs

Asset requirements

At least **80%** of assets must be invested in real estate.

Development costs must not exceed **40%** of real estate investments

The value of each property must not exceed **25%** of the total value of investments

Movable and immovable assets used for operating purposes must not exceed **10%** of assets.

Profit distribution / borrowing

At least **50%** of annual net after tax profits

Earnings related to goodwill from the sale of real estate are **not** necessarily included in distribution

Total borrowing must not exceed **75%** of assets

Legal requirements

Minimum capital required to incorporate **€25m.**

Mandatory listing in an organized market operating in Greece.

Headquarters must be in Greece.

Source: Law 2778/1999, as it applies, information from NBG Pangaea corporate presentation

ATHEX – EBRD seminar “The Capital market touch” – 1 March 2016

The Athens Exchange, as part of its effort to highlight the solutions and financing tools available to Greek Small and Medium-sized Enterprises (SMEs) organized, in cooperation with the European Bank for Reconstruction and Development (EBRD) a seminar at the Exchange on the topic: "The capital market touch"- Financing enterprises and projects. Trends, tools and solutions. Attracting available international liquidity through the stock market.



EBRD Director Mr. Andre Kuusvek receives a copy of the traditional bell from ATHEX CEO Mr. Socrates Lazaridis

Key points

- The new trend to finance enterprises and development projects through the capital markets.
- There is availability of capital from international investors provided that the principles of transparency, corporate governance and adequate free dispersion are adhered to.
- There is widespread use of [Listed Private Equities](#) / [Listed Funds](#) for financing SMEs and startups, innovative and export enterprises.
- The local exchange is ready to implement internationally acceptable financing solutions.



Corporate bonds on the Athens Exchange

In 2016, the efforts to relaunch the bond market came to fruition, with two issues, completing an important step towards creating a corporate bond market in Greece. This has been achieved to a large extent in other competitor countries, such as Spain.

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 Greece, in the midst of the crisis with the concomitant liquidity problems, the corporate bond markets issued under Greek law can become one such alternative source of financing, allowing dynamic, growing companies access to capital.

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.

These two 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. The aim is for this initiative by the first two companies to be followed soon by more issues by other Greek companies.

MLS Multimedia bonds start of trading – 19 July 2016

The Athens Exchange welcomed MLS Multimedia, on the occasion of the start of trading of its corporate bond. This issued launched the **Fixed Income Segment** of the Athens Exchange **Alternative Market**, which operates as a Multilateral Trading Facility (MTF) in accordance with the provisions of law 3606/2007.



Mr. Ioannis Kamatakis, Chairman & Chief Executive officer of MLS Multimedia, and Mr. Evaggelos Charatsis, Chairman and Chief Executive Officer of Beta Securities, ring the closing bell at the Athens Exchange.

MLS Multimedia bond issue – Summary facts

Duration	4 years
Number of bonds issued	400
Face value / issue price	€10.000 per bond
Interest	5.30% fixed on an annual basis (360/Actual)
Credit rating	B
Advisor	Beta Securities
Subscription	Private placement
ISIN	GRC422116743
Start of trading	19 July 2016
For more information	www.mls.gr?pid=210&la=1 http://www.athexgroup.gr/el/web/guest/company-prospectus

Listing of Housemarket bonds on ATHEX – 6 October 2016

The Athens Exchange welcomed Fourlis Group, in the market opening ceremony of the exchange, on the occasion of the listing in ATHEX Main Market of the corporate bond issued by Housemarket, a company of the Group.

Housemarket bond issue – summary facts

Duration	5 years
Number of bonds issued	40,000,000
Nominal value / issue price	€1 per bond
Interest rate	5.00% fixed on an annual basis (360/Actual)
Credit rating	BB
Advisor	Euroxx Securities.
Underwriters	National Bank of Greece, Investment Bank of Greece, Euroxx Securities, Pantelakis Securities
ISIN	GRC8081169B2
Start of trading	6 October 2016
For more information	www.athexgroup.gr/housemarket-ae



Highlight from the ceremony commemorating the start of trading of the bond issues by Housemarket, with the Chairman of the BoD of the Fourlis Group Mr. Vassilis Fourlis ringing the opening bell.

Among the noteworthy aspects of this corporate bond listing is the subscription through a public offer, the utilization of the **Electronic Offering Book (EOB)**, which improves the book building process in terms of time and efficiency, as well as the participation of private investors. In particular, private investors received 32.5% of the issue, while special investors 67.5%.



This listing exploits the potential of the Greek Capital Market to provide business financing through corporate bonds and, at the same time, it increases investment choices for investors. The share dispersion achieved, in conjunction with the activity by the approved market makers, creates the conditions for having liquidity in the secondary market.

Intercontinental International REIC IPO – 2 August 2016

The Athens Exchange welcomed Intercontinental International REIC, on the occasion of the listing of its shares on the Main Market of the Athens Exchange. This is the first IPO after two years that makes use of the new regulatory framework to achieve the required dispersion of shares through a private placement offer book, a process compatible with international practice.

Intercontinental International REIC IPO – summary information

Number of shares (before the IPO)	7,875,000
New shares	2,625,000 (through private placement)
Total number of shares listed	10,500,000
Issue price	€5.52 per share
Capital raised	€14,490,000
Dispersion	25%
Listing advisor	NBG Securities
ISIN	GRS516003001
Listing	2 August 2016
For more information	http://www.ici-reic.com



INTERCONTINENTAL INTERNATIONAL
REAL ESTATE INVESTMENT COMPANY
"THE PANEUROPEAN INVESTOR"

OLP, COSCO and HRADF at the Exchange - 10 August 2016

The Athens Exchange welcomed COSCO (China COSCO Shipping Corporation Ltd) as well as HRADF (Hellenic Republic Asset Development Fund), on the occasion of the transfer of Piraeus Port Authority (PPA) shares.



Mr. Wan Min, Director of the Board, President of China COSCO Shipping Corp. Ltd and Mr. Stergios Pitsiorlas, Chairman of the HRADF (TAIPED) ring the opening bell at the Athens Exchange.

In particular Cosco Hong-Kong, a subsidiary of COSCO Shipping, becomes the main shareholder of the Piraeus Port Authority. It is the first cross-border acquisition by the Chinese group.

COSCO Shipping will undertake the implementation of an investment plan that will optimize the performance of the port, strengthen its international position, and enable PPA to fully exploit its potential and to turn it into one of the leading ports of Europe. Furthermore, the operation of a harbor with high standards will enhance trade times between Asia and Europe and contribute to employment in the country through the creation of new jobs and the recovery of the Greek economy.

Welcoming Cenergy Holdings– 21 December 2016

The Athens Exchange welcomed Cenergy Holdings on the occasion of the listing of its shares, following the completion of the cross-border merger of the listed companies Corinth Pipeworks and Hellenic Cables.

The company focuses on the long term creation of added value through its subsidiaries that operate in dynamic and developing markets, such as those of energy transport, renewable energy and telecommunications. The company's portfolio includes:



- **Corinth Pipeworks**, one of the most important producers of steel pipes internationally, with uses in energy projects and in particular the transportation of liquid and gas fuel, as well as an important supplier of the construction sector for hollow beams
- **Hellenic Cables**, one of the largest cable manufacturers in Europe. The company manufactures cables for energy and telecommunication for a number of sectors such as the transportation and distribution of electricity, renewable energy, the oil and gas industry, telecommunications, construction et al.



The Chief Executive Officers of Cenergy Holdings Messrs. Alexis Alexiou and Apostolos Papavasileiou ring the opening bell at the Athens Exchange.

The strengthening of the company is very important for the development of industry in Greece, since the core of its industrial production facilities is located in Greece. The choice of the new corporate structure, with the headquarters in Brussels and the parallel listing of its shares on Euronext Belgium and the Athens Exchange is an honor and an important sign of confidence in the Greek capital market.

The Greek cash and derivatives market

05

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 2016, approximately 52.5% (2015: 52.4%) of the operating revenue of the Group came from the trading, clearing and settlement of trades in the cash and derivatives markets.

The state of the Greek economy negatively affected as was natural both share prices and trading activity in the Greek capital market.

In the cash market:

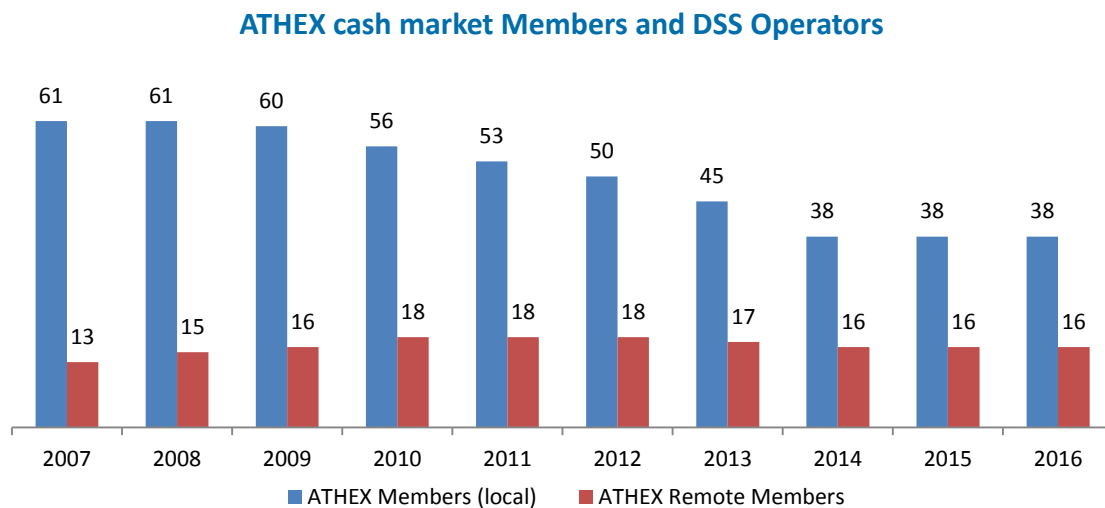
- The value of stock trades in 2016 dropped by 21%, to €15.1bn compared to €19.1bn in 2015.
- The average capitalization of ATHEX listed companies dropped by 6%.

In the derivatives market, trading activity (number of contracts) was up 3.3%.

The remainder of this chapter provides historical data about the cash and derivatives market that the ATHEX Group operates.

5.1. Cash market

5.1.1. Members – cash market



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:

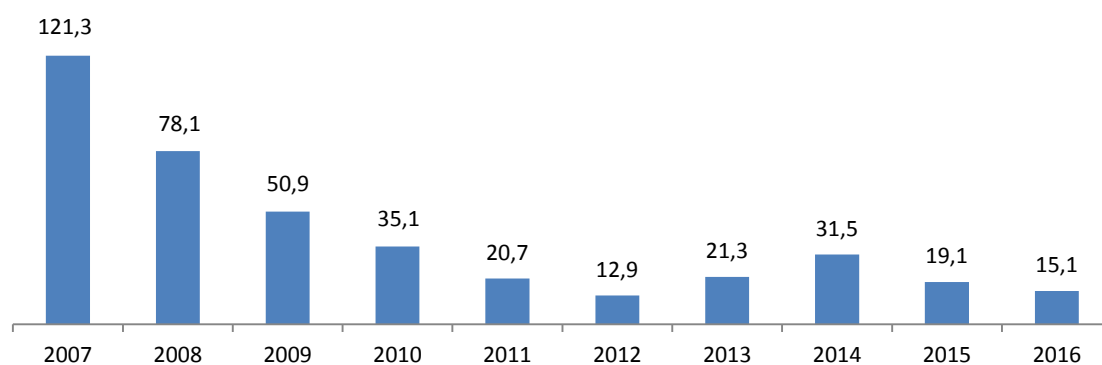
Listed companies in the ATHEX market segments

Segment	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Main Market					180	156	148	144	139	135
Large Cap	87	68	56	47						
Mid & Small Cap	166	144	147	133						
Special Financial Characteristics	21	44	40	45						
Surveillance	19	22	24	30	40	41	40	37	32	30
Suspended	10	13	17	18	25	39	41	38	43	27
Low dispersion					16	18	10	11	11	11
Alternative market					3	2	1	3	4	4
Total - organized market	303	291	284	273	264	256	240	233	229	207
Alternative market		9	12	14	14	14	14	14	14	14
Exchange Traded Funds		1	2	3	3	3	3	3	3	3

It should be noted that in October 2011, with the adoption of the new market model, 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.

5.1.3. Trading activity

ATHEX - Total trade value (€bn)

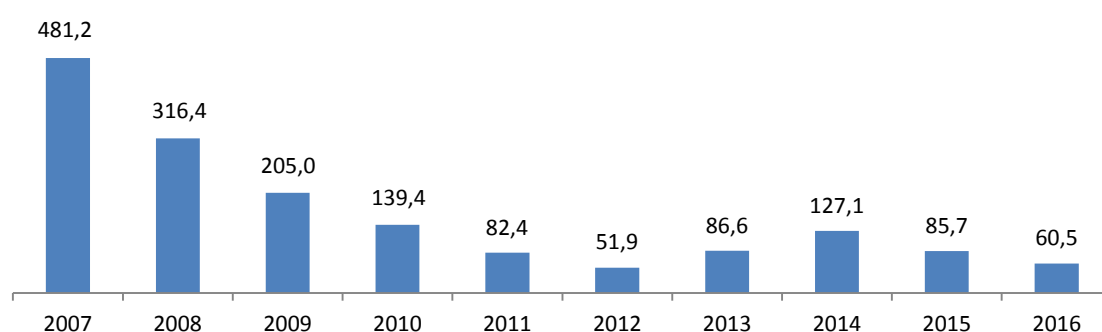


Traded value in 2016 amounted to €15.1bn vs. €19.1bn in 2015, a 21% reduction.

Trading activity in 2016 per quarter

	Total traded value (€bn)	ATHEX trading sessions (days)	Average daily traded value (€m)
1st quarter	4,4	60	71,7
2nd quarter	4,9	61	80,2
3rd quarter	2,5	65	39,0
4th quarter	3,3	63	52,8
Total	15,1	249	60,4

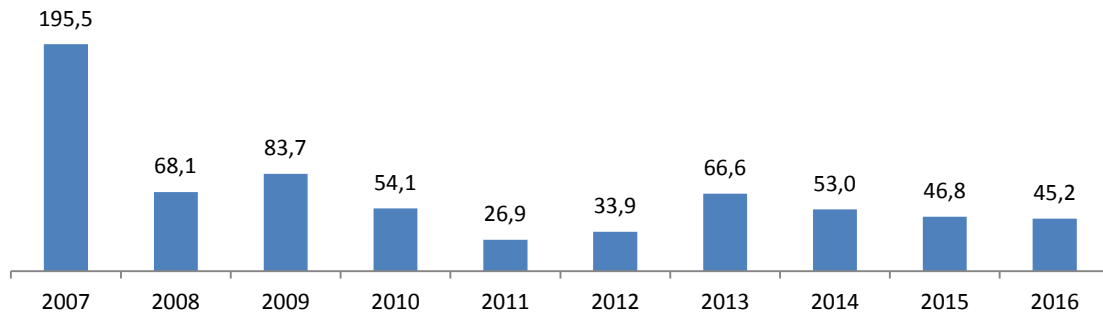
ATHEX - Average Daily Trade Value (ADTV) (€m)



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

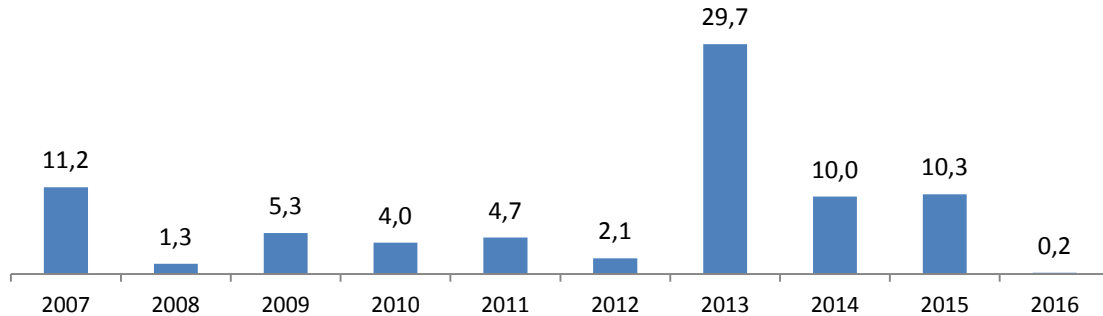
ATHEX market capitalization
(data at the end of the year, €bn)



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)



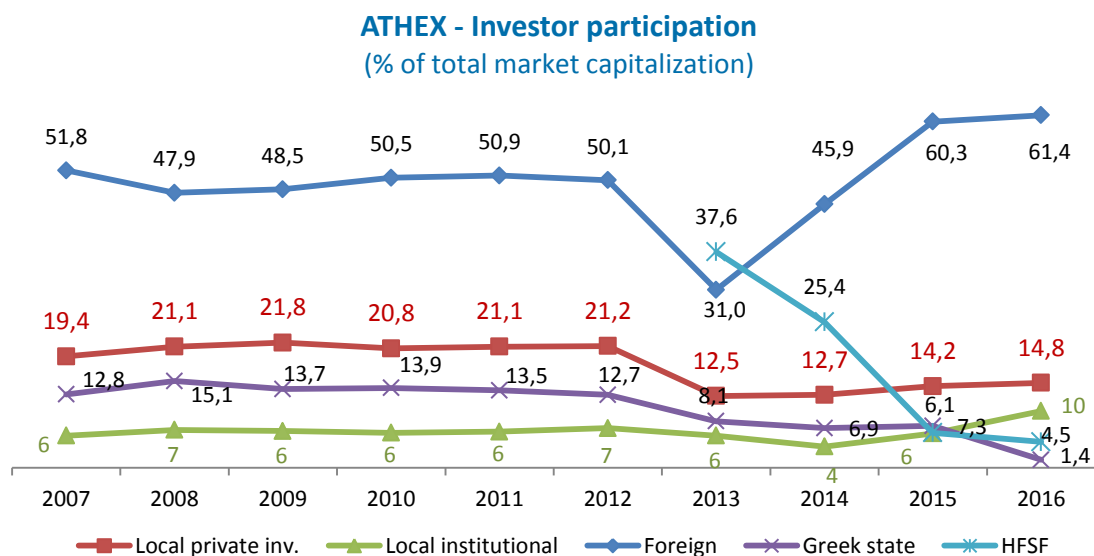
From 2013 to 2015, almost all capital raised was from the banking sector.

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
Total	28,912	8,314	9,436	46,662

5.1.6. Investor participation – market capitalization

Despite the continuing recession, the participation of foreign investors in the Greek market, as a percentage of the total capitalization of the market, increased to historically high levels at the end of 2016.

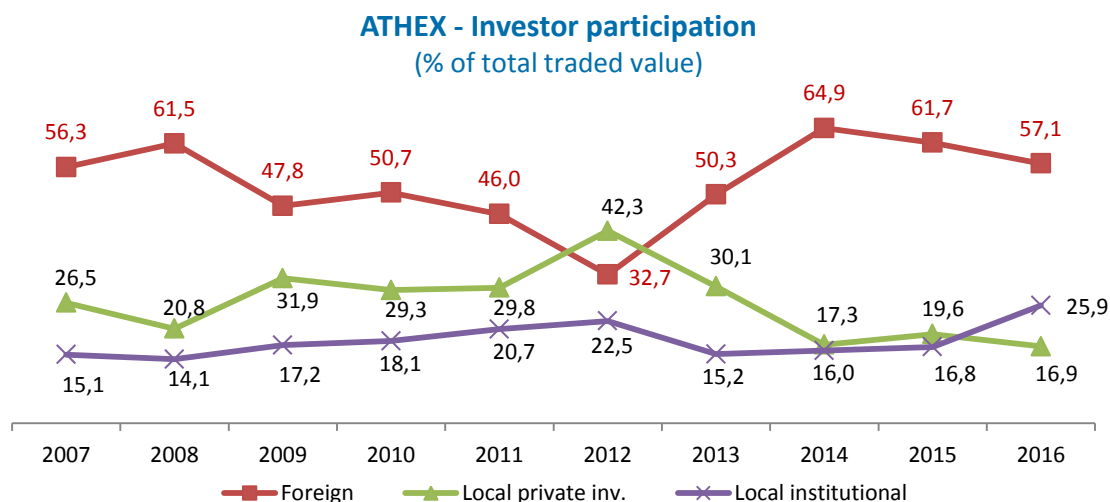


HFSF: Hellenic Financial Stability Fund

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

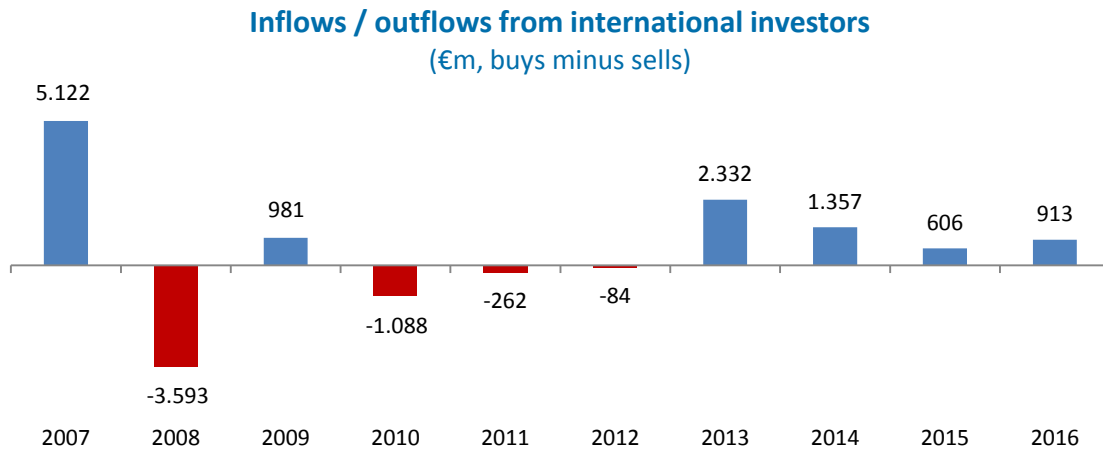
Despite the continuing recession, the participation of foreign investors in the Greek market, as a percentage of total turnover (traded value) rose to a record high rate of 65% in 2014, and has remained close to those levels in 2015-2016.



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.

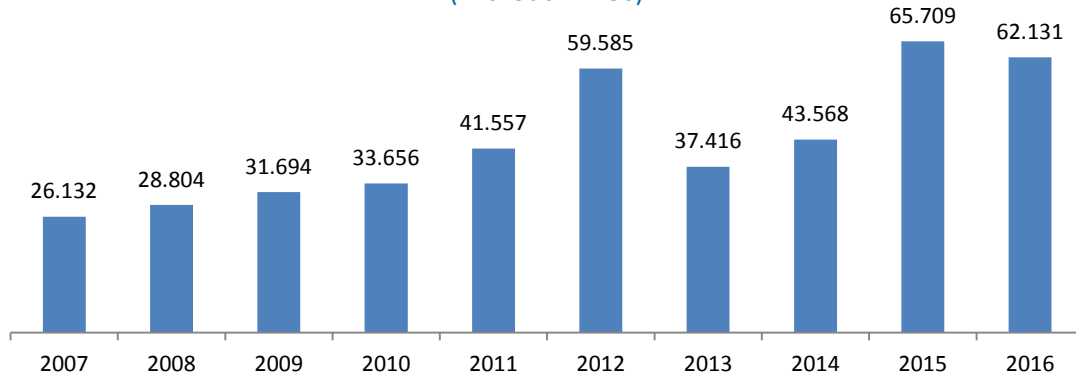


In each of the past 4 years, we observe net inflows of capital in the Athens Exchange. The largest outflows were observed in 2008, the year the world financial crisis peaked, before the start of the crisis in Greece.

5.2. Derivatives market

5.2.1. Trading activity

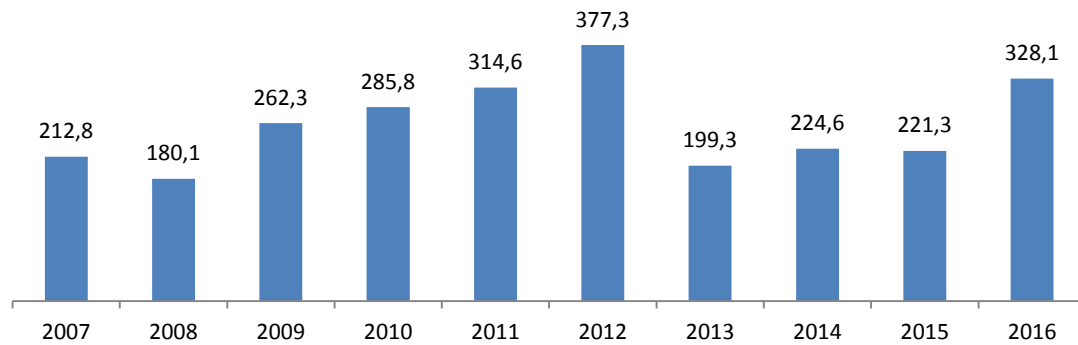
**ATHEX Derivatives Market - Average daily number of contracts
(without REPOs)**



Derivatives market - average daily number of contracts

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Stock futures	12.308	14.913	20.311	18.921	30.094	52.396	27.102	28.125	55.651	58.218
Stock options	424	734	273	420	256	144	75	122	60	48
FTSE/ATHEX Large Cap index futures	10.273	11.280	9.563	11.855	9.891	6.146	9.440	14.404	9.574	3.596
FTSE/ATHEX Large Cap index options	2.347	1.770	1.547	2.441	1.308	897	790	917	425	269
FTSE/ATHEX Mid Cap index futures	609	94	0	0	0	0	0	0	0	0
FTSE/ATHEX Mid Cap index options	156	13	0	0	0	0	0	0	0	0
FTSE/ATHEX-CSE bank futures	0	0	0	27	8	2	8	0	0	0
Average daily number of contracts	26.117	28.804	31.694	33.664	41.557	59.585	37.415	43.568	65.710	62.131

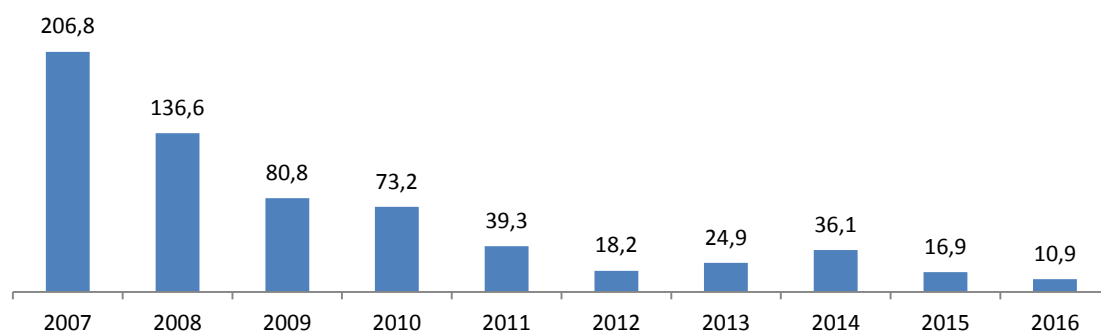
ATHEX Derivatives Market - Open interest (thousand contracts)



Derivatives market - open interest per product

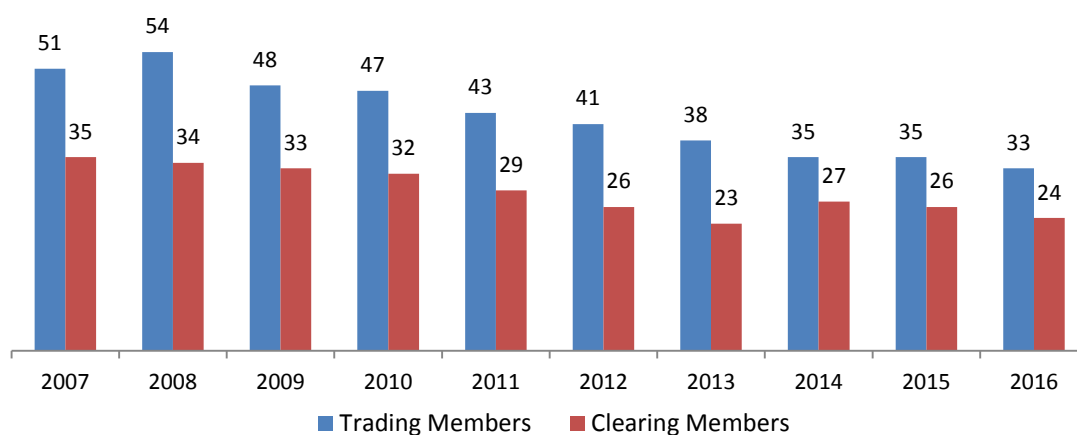
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
FTSE/ATHEX Large Cap index futures	24.837	19.304	21.561	28.601	15.228	30.816	48.533	49.209	16.066	7.705
Stock futures	166.515	149.015	228.486	247.139	288.882	337.378	146.699	167.590	201.088	317.780
FTSE/ATHEX Large Cap index options	9.868	5.460	10.650	7.925	3.796	3.177	3.289	6.505	3.214	2.306
FTSE/ATHEX Mid Cap index futures	648	0	0	0	0	0	0	0	0	0
FTSE/ATHEX Mid Cap index options	203	0	0	0	0	0	0	0	0	0
Stock options	10.744	6.272	1.615	2.149	6.689	5.873	808	1.288	981	291
FTSE/ATHEX-Cyse Bank index futures	0	0	0	2	2	2	0	0	0	0
Total	212.815	180.051	262.312	285.816	314.597	377.246	199.329	224.592	221.349	328.082

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

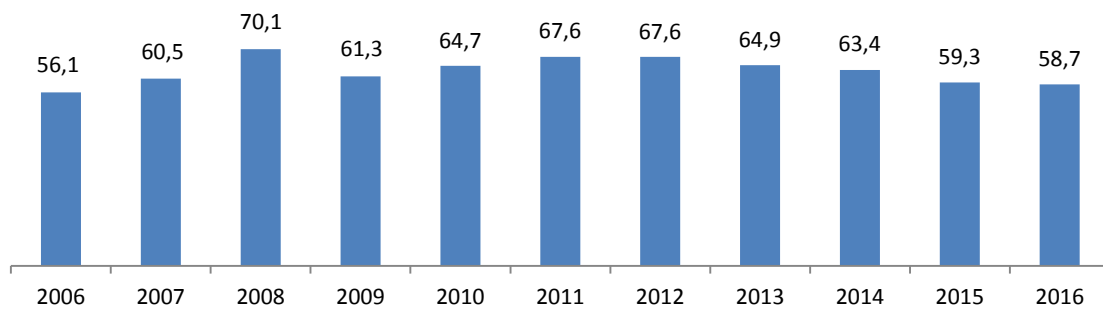
The examination of the great challenge of how the companies listed on the Athens Exchange dealt with the contraction of Greek GDP by more than 25% is quite interesting.

Financial information for the years 2006-2016 from listed companies that were in the Main Market and the Low Dispersion Segment on **28.4.2017** 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 2006-2016 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.

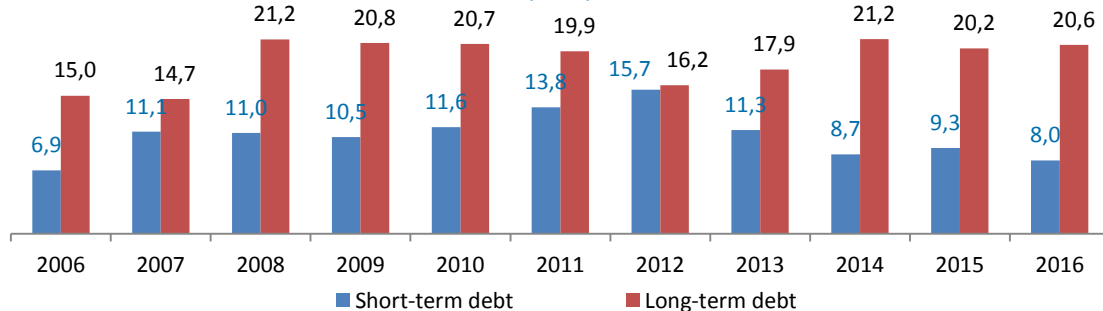
Following a cycle of increases, the turnover of listed companies dropped by 16% during the crisis (2008-2016).

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



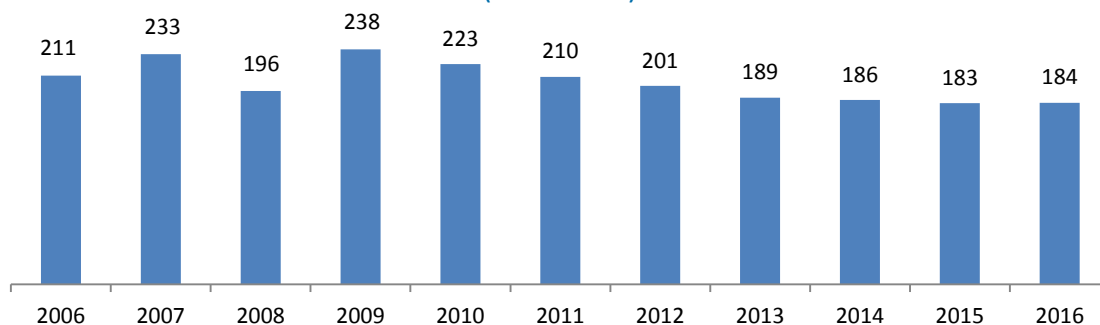
Listed companies carried total debt of €32.2bn in 2008, while in 2016 total debt had dropped by 11% to €28.6bn. It is clear that there was an effort to reduce short-term debt. While initially during the crisis this relationship deteriorated, with the short to long term ratio in 2012 being 40:60, in 2016 it had significantly improved to 30:70, with short-term debt being at 10-year lows.

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



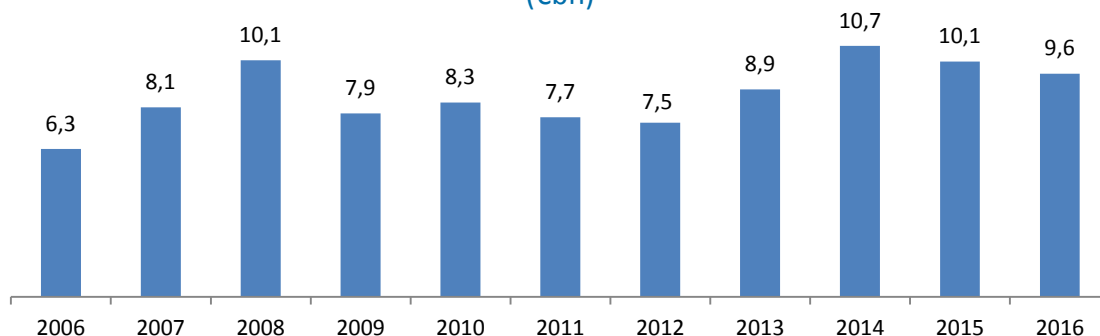
Head count in listed companies dropped by 6.1% in 2016 compared to 2008, and 13% compared to 2006. There is an encouraging sign in its stabilization at current levels, following continuous reductions from 2009 to 2015.

Listed companies (excl. banks) - Employees (thousands)



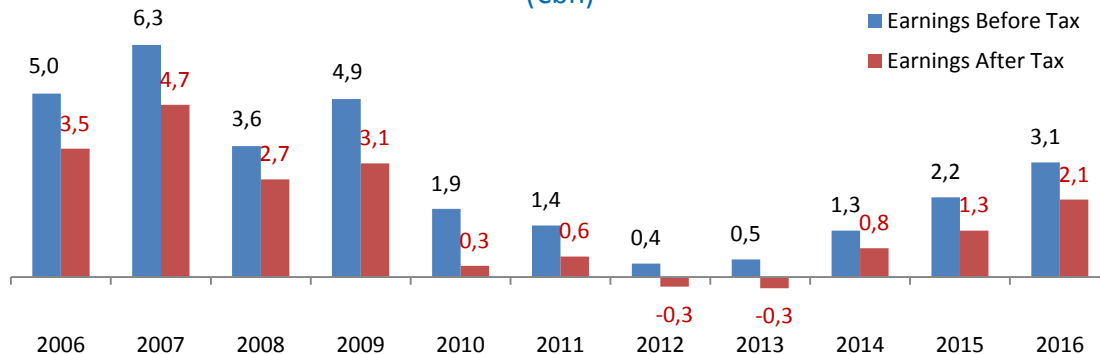
The significant recovery of listed company cash and cash equivalents of listed companies, which in 2016 returned to 2008 levels (€9.6bn compared to €10.1bn), is typical of the defensive strategy by companies to accumulated cash faced with intense uncertainty in recent years.

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 2016 however are still below the pre-crisis levels (-14% in 2008-2016).

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



5.4. Athens Stock Exchange in Europe

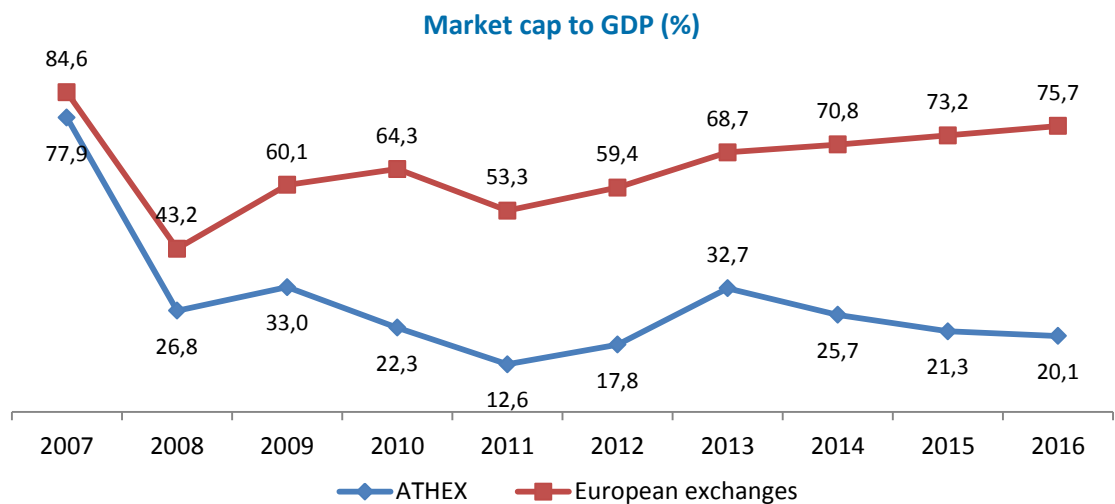
In this section Athens Exchange is compared with the European exchange average.

Data in this section, including data for the Athens Stock Exchange comes from the Federation of European Securities Exchanges (FESE, www.fese.eu). 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.

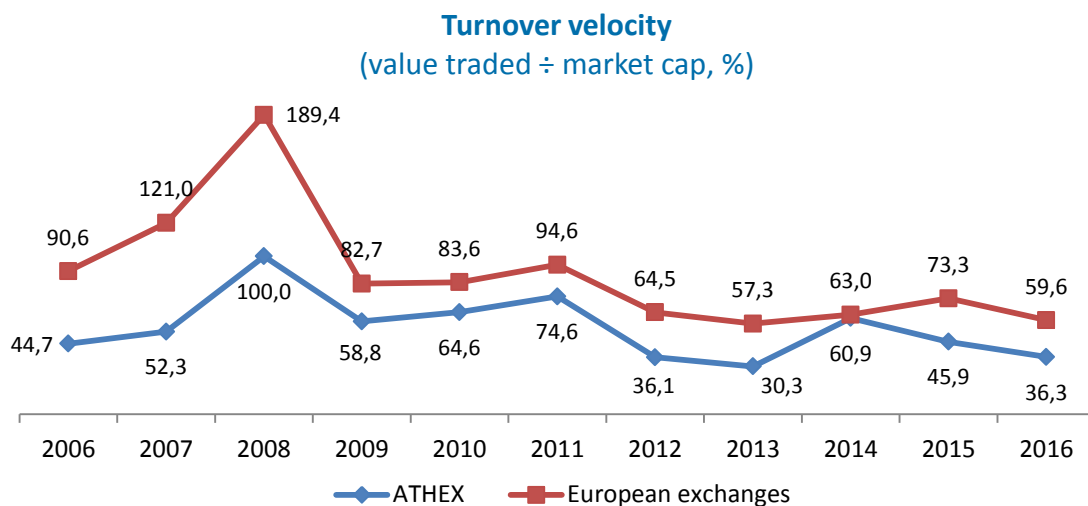


The deviation of this index for ATHEX and the European average reflects:

- 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 4 to 12.7 percentage points; while
 - During the 2008-2016 period this difference ranged from 16.4 to 55.6 percentage points, with the largest deviation being recorded in 2016.

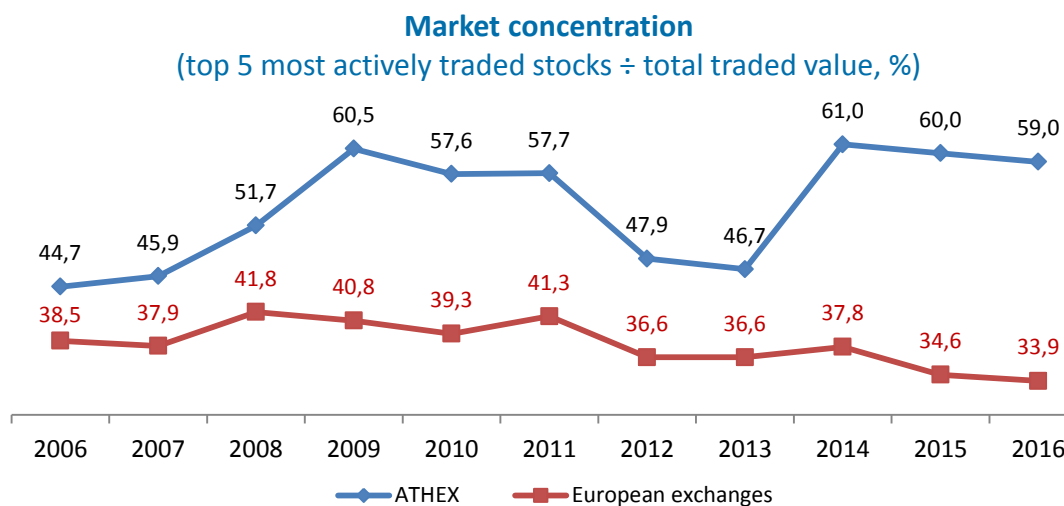
5.4.2. Turnover velocity

The turnover velocity of a capital market is the ratio of the traded value of that market to its total market capitalization.



Historically, the turnover velocity of the Greek market lags that of the other European markets. On the other hand, in the last few years we observe a relative convergence of the European average and the ATHEX average.

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.

For the Athens Exchange, trading activity in the 5 most actively traded stocks represented 59% of total trading activity, compared to the European average of 33.9%.

Stock information

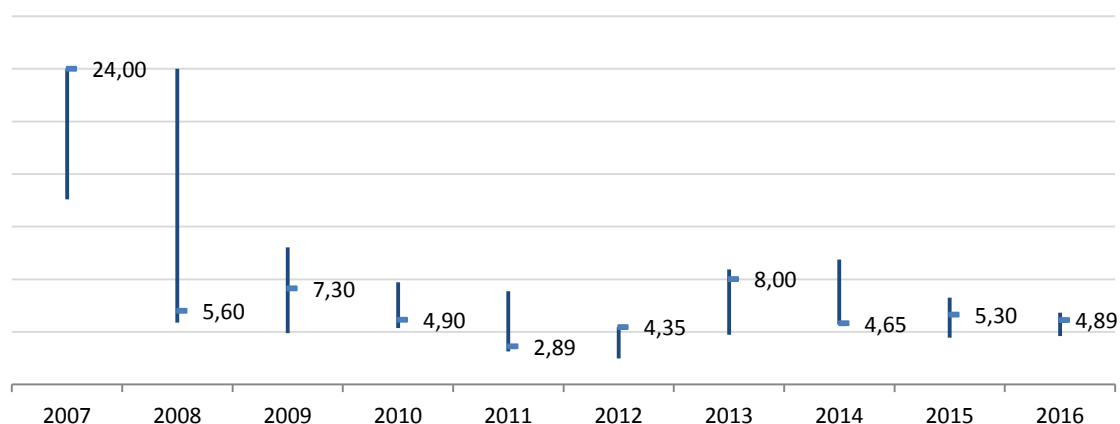
06

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 - 2016

	Price (€)	Market cap. (€m)	Day	Volume (shares)	Value (€ thousand)	Day
Low	3,68	240,6	9/2	8.248	34,4	9/8
Average	4,57	298,4		148.748	691,2	
High	5,45	356,3	25/5	1.912.598	8.657,5	2/3

Trading sessions

↑	119
-	14
↓	116

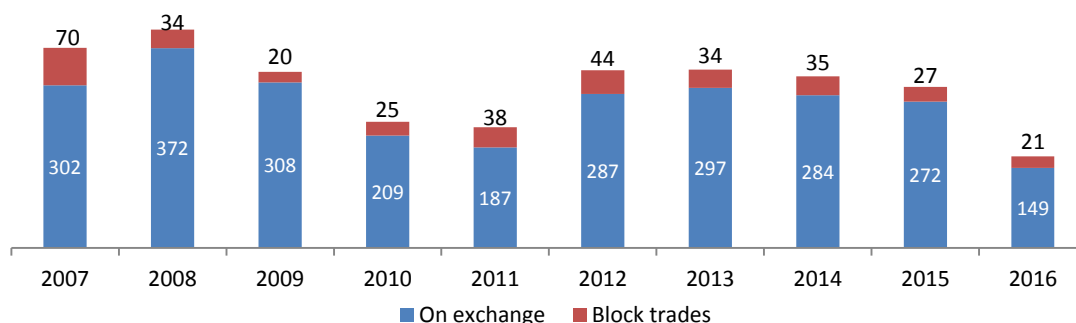
Total *	37.038.211	172.100,8
Block trades	5.351.096	24.327,2
Average *	148.748	691,2

* excl. block trades

The **total trade value** of the stock in 2016 amounted to **€196.4m**, out of which €24.3m concerned block trades, while the **average daily trade value** amounted to **€691.2 thousand**.

In 2016, the average daily trade volume was **149 thousand shares**, down 45% compared to 2015. The average daily trading activity in 2016 was at the lowest level since 2002 (75 thousand shares).

EXAE - Average daily trade volume (thousand shares)



The turnover velocity of the stock (trade value to average market capitalization) amounted to 65% (trade value: €196.4m, average market capitalization: €300.5m) in 2016.

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 (%) ncl. 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
Total				3,2236	4,8275		

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 -16.0% at the end of 2016.

Total return 2000 (21.8) - 2016 (31.12)

	Price		Return (%)	Total net payment to shareholders	Total return (%) (incl. payments to shareholders)
	21.8.2000	31.12.2014			
EXAE	15,41	4,89	-68,3	8,0511	-16,0
Gen. Index	3757,83	628,75	-83,3		

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 (-16.0% vs. -68.3%).

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 corresponding 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 corresponding 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.

The proposal of the BoD at the Annual General Meeting is to cancel 4,769,563 shares, corresponding to 95% of the total, as per the original terms of the program. The Company will keep 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%
Total '16	4.035.813	18.634.173,28	4,62			
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%
Total '17	984.750	4.610.620,90	4,68			
Total	5.020.563	23.244.794,18	4,63			

In the past the Company had implemented two share buyback programs, which reduced the number of shares outstanding. In particular, the number of shares was reduced as follows:

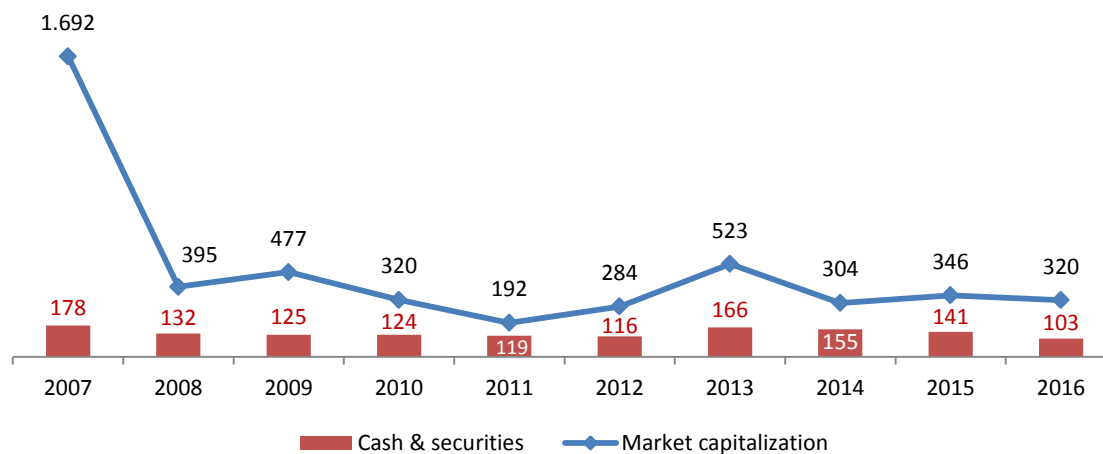
Previous share buyback programs

Month - Year	Shares outstanding (before cancellation)	Cancelled shares	Shares outstanding	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

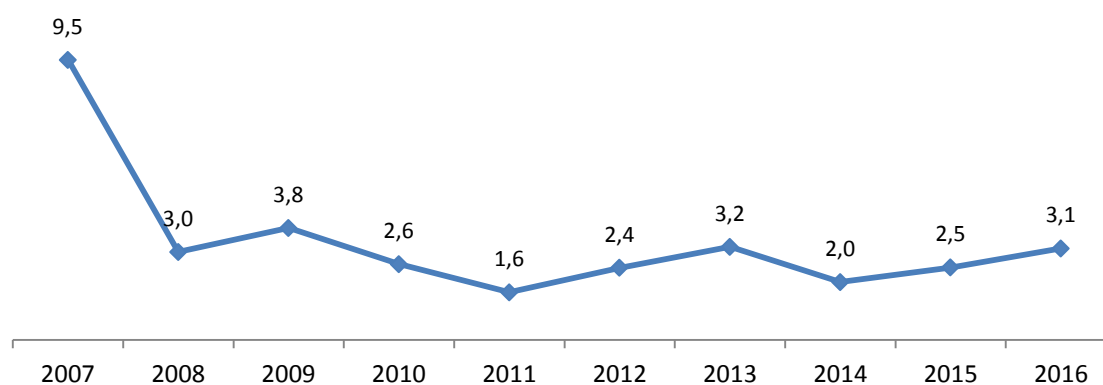
The total cost of the second program (2008-2009) was €40.7m, and 5,117,000 shares were purchased at an average price of €7.95.

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
Total payout 2000 - 2016					8,0511

* 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	30.05.2017	5.020.563	0,06	3.922.113,78	0,06499
Capital return	65.368.563		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	1/6/2016	1.656.513	0,10	6.536.856,30	0,10260
Capital return	65.368.563	5/7/2016	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 31.12.2016 the dividend for fiscal year 2010, which was paid in 2011, 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 (31.12.2016)

Investor type	Number of shareholders	Number of shares	%
Banks	5	3.366.046	5,1%
Institutional investors	55	8.479.525	13,0%
Private individuals	9.738	11.096.641	17,0%
Brokerage companies	11	637.281	1,0%
ATHEX - treasury stock	1	4.009.513	6,1%
Other Greek investors	45	663.716	1,0%
Foreign investors	447	37.115.841	56,8%
Total	10.302	65.368.563	100,0%

Shareholder structure - country of origin (31.12.2016)

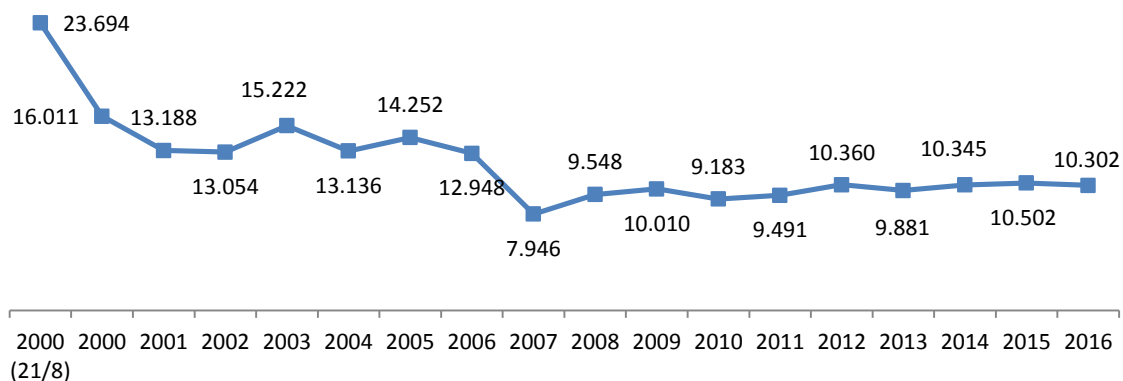
Country of origin	Number of shareholders	Number of shares	%
Greece	9.855	28.252.722	43,2%
USA	119	11.494.291	17,6%
Luxembourg	18	8.928.992	13,7%
Cayman Islands	14	6.260.930	9,6%
United Kingdom	33	4.465.951	6,8%
Norway	2	819.003	1,3%
Canada	13	696.582	1,1%
France	6	551.755	0,8%
Australia	13	494.690	0,8%
Italy	20	472.473	0,7%
Other states	209	2.931.174	4,5%
Total	10.302	65.368.563	100,0%

Shareholder structure - number of shares (31.12.2016)

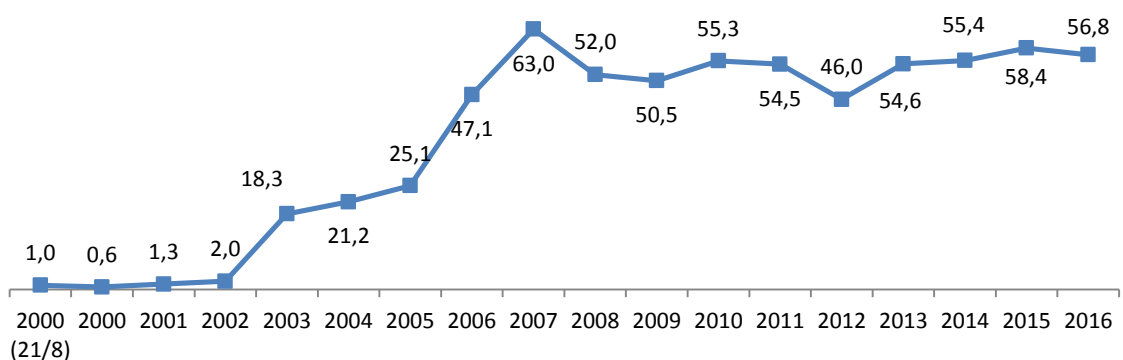
Number of shares	Number of shareholders	Number of shares	%
$x \leq 10$	274	1.345	0,002%
$10 < x \leq 100$	1.738	114.908	0,2%
$100 < x \leq 1.000$	6.129	2.318.935	3,5%
$1.000 < x \leq 10.000$	1.802	5.321.493	8,1%
$10.000 < x \leq 100.000$	272	8.365.754	12,8%
$100.000 < x \leq 1.000.000$	77	25.355.460	38,8%
$x > 1.000.000$	10	23.890.668	36,5%
Total	10.302	65.368.563	100,0%

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)



Share ownership in the Company

Significant participations (> 5%) (31.12.2016)

Shareholder	% of the share capital of the Company
HELLENIC EXCHANGES – ATHENS STOCK EXCHANGE (treasury stock) (Direct participation - % based on the notification by the shareholder on 30.12.2016)	6.17%
FRANKLIN TEMPLETON INSTITUTIONAL LLC (indirect participation - % based on the notification by the shareholder on 9.2.2016)	5.16%
THE LONDON AND AMSTERDAM TRUST COMPANY LTD (Direct participation - % based on the notification by the shareholder on 6.12.2013)	5.01%

Board of Directors (31.12.2016)

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

Group personnel (31.12.2016)

Shareholder	number of shares	% of the share capital of the Company
Senior and middle management of the Group (11)	49,204	0.075%
Other personnel (31)	36,610	0.056%

Key financial figures of the Group

07

7. Key financial figures of the Group

Market performance

Average market capitalization

2016	€41.3bn	-5,7%↓
2015	€43.8bn	

Rights issues / New listings

2016	€0.2bn	-98%↓
2015	€10.3bn	

Trading activity (securities)

2016	€60.5m	-29%↓
2015	€85.7m	

Average Daily Traded Value (ADTV)

Trading activity (derivatives)

2016	63.5	-7,5%↓
2015	68.6	

Thousand contracts



Athens Exchange Group results

Consolidated revenue

2016	€25.9m	-23%↓
2015	€33.7m	

Consolidated expenses

2016	€17.8m	-4,7%↓
2015	€18.7m	

Profitability (earnings after tax)

2016	€1.4m	-84%↓
2015	€9.0m	

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. More than 60% of expenses concern staff remuneration and expenses.

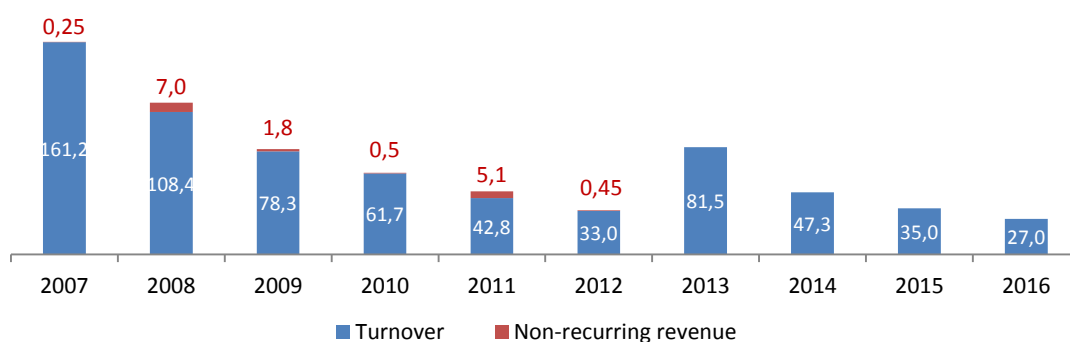
In this section, the main aspects of the financial performance of the Athens Exchange Group are presented. The financial reports, on which these figures are based on, are available on the website of the Group – www.athexgroup.gr/ir.

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
2007	0.25	Profit from the sale of equipment.
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 to 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 2015 - 2016

Amounts in € thousand	2016	2015 *	% of turnover	Δ '16 - '15
Trading	4.460	5.691	16,5%	-21,6%
Clearing	8.305	11.078	30,8%	-25,0%
Settlement	1.398	1.587	5,2%	-11,9%
Exchange services	3.118	6.026	11,6%	-48,3%
Depository services	2.077	3.211	7,7%	-35,3%
Clearinghouse services	166	168	0,6%	-1,2%
Data feed	3.266	3.206	12,1%	1,9%
IT services	320	313	1,2%	2,2%
Revenue from re-invoiced expenses	915	840	3,4%	8,9%
New services (XNET, CP CSE-SIBEX, IT)	2.008	1.919	7,4%	4,6%
Other services	922	996	3,4%	-7,4%
Total turnover	26.955	35.035	100,0%	-23,1%
Regulator fee (HCMC)	-1.088	-1.356		-19,8%
Total revenue	25.867	33.679		-23,2%

* 2015 – reclassified figures (totals not affected).

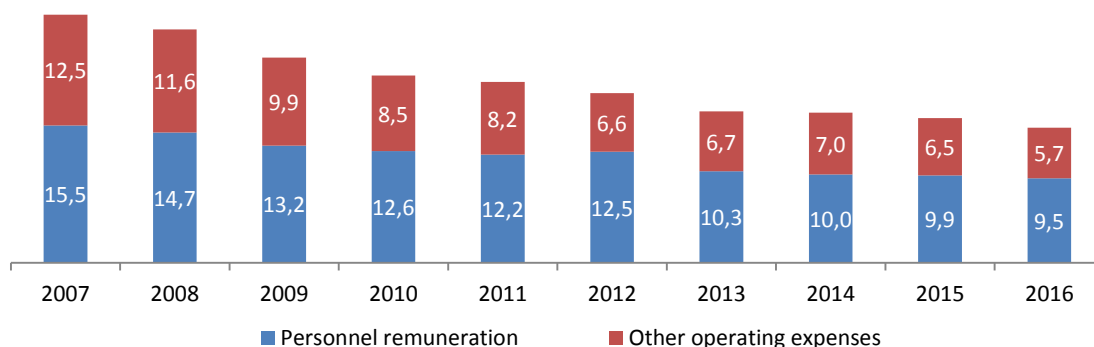
7.1.2. Expenses

Most of operating expenses of the Group concern personnel remuneration and expenses. In 2016, personnel remuneration and expenses amounted to 63% of operating expenses.

Expenses 2015 - 2016

Amounts in € thousand	2016	2015	% of oper. exp.	Δ '16 - '15
Personnel remuneration & expenses	9.543	9.869	62,6%	-3,3%
Third party remuneration & expenses	588	714	3,9%	-17,6%
Utilities	747	877	4,9%	-14,8%
Maintenance / IT support	1.148	1.191	7,5%	-3,6%
Taxes	1.079	1.557	7,1%	-30,7%
Building / Equipment management	556	621	3,6%	-10,5%
Marketing & advertising expenses	271	213	1,8%	27,2%
Participation in organizations	311	282	2,0%	10,3%
Insurance premiums	421	420	2,8%	0,2%
Operating expenses	385	388	2,5%	-0,8%
BoG - cash settlement	61	62	0,4%	-1,6%
Other expenses	146	139	1,0%	5,0%
Total operating expenses	15.256	16.333	100,0%	-6,6%
Re-invoiced expenses	866	925		-6,4%
Expenses from new services (XNET, CSE-SIBEX CP, IT)	901	1.098		-17,9%
Provisions for bad debts	824	365		125,8%
Total expenses	17.847	18.721		-4,7%

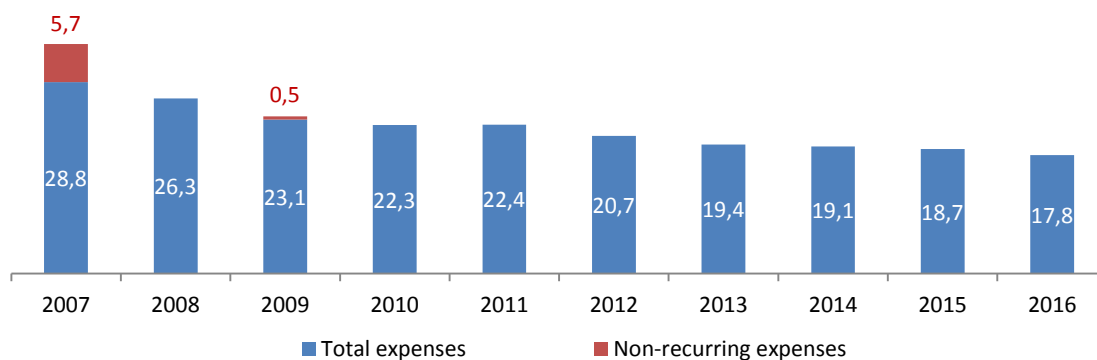
Consolidated operating expenses (€m)



The operating expenses of the Group were reduced by 45% from 2007 to 2016. In particular, personnel remuneration and expense were reduced by 38%, while other operating expenses were reduced by 54%.

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 concern the following:

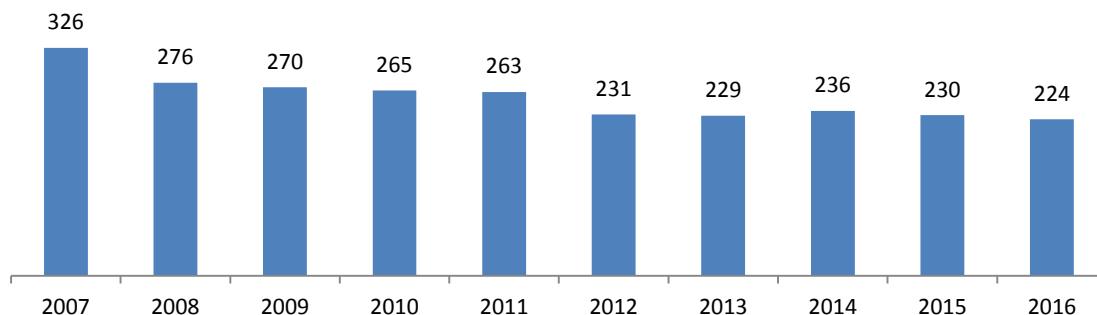
Fiscal year	Amount (€m)	Description
2007	5.7	€4.7m – Relocation expenses / equipment upgrade in the new building. €1.0m – Donation to fire victims.
2009	0.5	Expenses concerning the removal of construction debris and reconstruction following the terrorist act against the headquarters of the Group on Sep. 2nd.

The total expenses of the Group were reduced by €11m (38%) over the 2007 to 2016 period, from €28.8m in 2007 to €17.8m in 2016.

7.1.3. Personnel

From 2007 to 2016 head count dropped by 31%, from 326 to 224 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
(as of the end of each year)



7.1.4. Profitability

The profitability of the Group dropped significantly in 2016 compared to 2015. This drop is due mainly to the revenue reduction resulting from the drop in trading activity on the Athens Exchange.

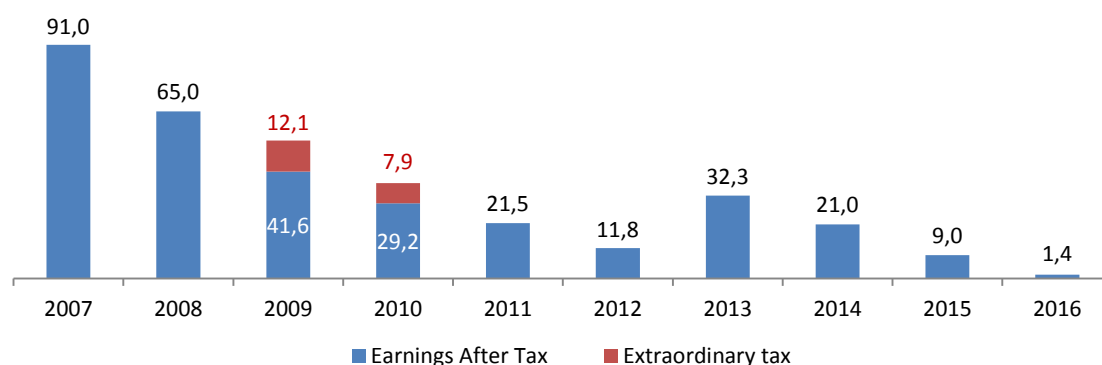
In 2016 the results were also significantly affected by the devaluation of the portfolio of Piraeus Bank shares that the Group possesses.

Profitability 2015 - 2016

Amounts in € thousand

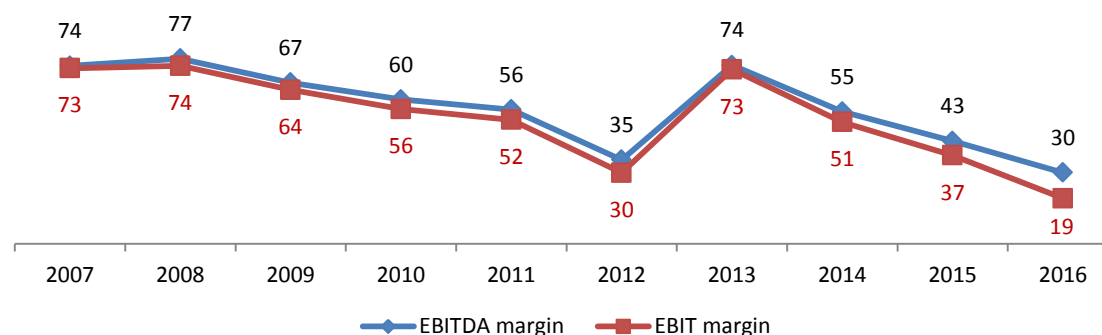
	2016	2015	Δ '16 - '15
Total revenue	25.867	33.679	-23,2%
less total expenses, including new activities	-17.847	-18.721	-4,7%
Earnings Before Interest, Taxes, Depreciation & Amortization (EBITDA)	8.020	14.958	-46,4%
Depreciation	-2.881	-2.073	39,0%
Earnings Before Interest and Taxes (EBIT)	5.139	12.885	-60,1%
Capital income	577	1.554	-62,9%
Revaluation of real estate assets	0	-399	
Provision to cover other risk	0	-300	
Loss - valuation of securities	-2.219	0	
Bond derecognition	0	-207	
Financial expenses	-131	-83	57,8%
Earnings Before Tax (EBT)	3.366	13.450	-75,0%
Income tax	-1.937	-4.412	-56,1%
Earnings After Tax (EAT)	1.429	9.038	-84,2%

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.

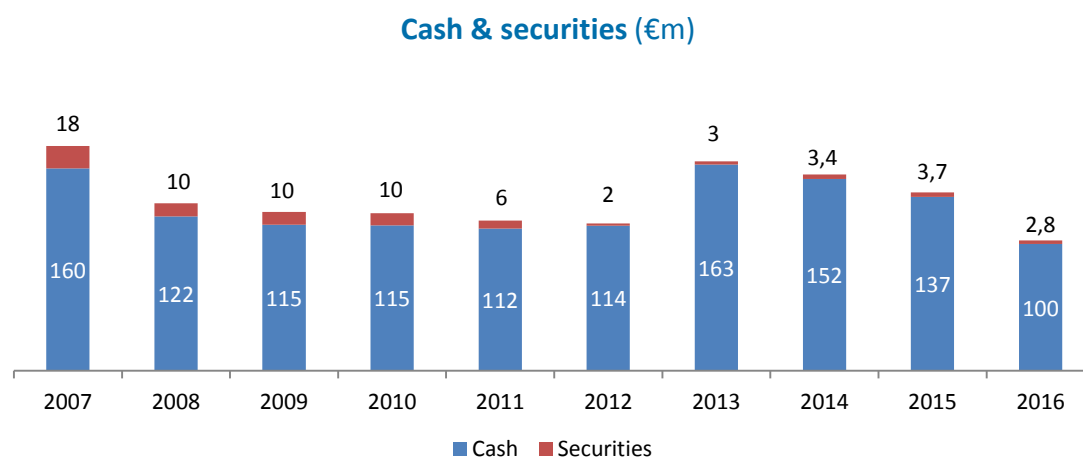
Operating profit margins (%)



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 possesses 13.4m Bank of Piraeus shares.

The share price of Piraeus Bank on 31.12.2016 was €0.209 and as a result the Group posted a valuation loss of €1.2m.

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 2016, the Group created €15.1m in added value compared to €26.2m in 2015, which corresponds to a 42.5% reduction.

Value Added by the Group 2015-2016

Amounts in € thousand

	2016	2015	Δ '16 - '15
Turnover	26.955	35.035	-23,1%
Other revenue	577	1.554	-62,9%
Other expenses	-9.575	-8.284	15,6%
Depreciation	-2.881	-2.073	39,0%
Value Added	15.076	26.232	-42,5%

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)	3.334	22%	5.883	22%
to employees (salaries, social security, benefits)	9.543	63%	9.869	38%
to the state (taxes)	4.692	31%	7.979	30%
to creditors (interest)	0	0%	0	0%
Total value distributed	17.569	117%	23.731	90%
to the Group	-2.493	-17%	2.501	10%
Value Added	15.076	100%	26.232	100%

In 2016 the Group created €15.1m in added value, and paid in total €17.6m to shareholders, employees and the state. Since the total value distributed was higher than the value added, it reduced by €2.5m the value that remained at the Group.

More information in Appendix I - [Value added and distributed by the Group 2004 - 2016](#).

7.4. Alternative Performance Measures (APMs)

Background

The Alternative Performance Measure (APM) 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 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 correct and comprehensive information of 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 other 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 it be considered that they replace them. The Athens Exchange Group is using these adjusted 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 2015-2016

€ thousand	2016	2015	
EBITDA	8,020	14,958	-46%
Adjusted EBITDA	8,745	15,123	-42%
	+9%	+1%	

EBITDA: Earnings Before Interest, Taxes, Depreciation and Amortization

€	2016	2015	
EPS	0.03	0.14	-79%
Adjusted EPS	0.07	0.15	-53%
	+133%	+7%	

EPS: Earnings per Share

€ thousand	2016	2015	
EBIT	5,139	12,885	-60%
Adjusted EBIT	5,864	13,050	-55%
	+14%	+1%	

EBIT: Earnings Before Interest and Taxes

	2016	2015	
Cash flows after investment activities	2,334	6,143	-62%
Adjusted cash flows after investment activities	5,278	7,241	-27%
	+126%	+17%	

€ thousand	2016	2015	
EBT	3,366	13,450	-75%
Adjusted EBT	6,310	14,521	-57%
	+87%	+8%	

EBT: Earnings Before Tax

	2016	2015	
ROI	27%	70%	-61%
Adjusted ROI	50%	75%	-34%
	+86%	+8%	

ROI: Return on Investment

€ thousand	2016	2015	
EAT	1,429	9,038	-84%
Adjusted EAT	4,373	10,109	-57%
	+206%	+12%	

EAT: Earnings After Tax

	2016	2015	
ROE	0.94%	5%	-81%
Adjusted ROE	2.87%	5.64%	-49%
	+206%	+13%	

ROE: Return on Equity

	2016	2015	
Degree of financial self-sufficiency	92%	90%	+2%
Adjusted degree of financial self-sufficiency	94%	91%	+3%
	+2%	+1%	

As presented above in the analysis of individual APMs, the picture of the Athens Exchange Group significantly improves. In particular, excluding non-recurring provisions and valuation of assets in fiscal years 2015 and 2016, the picture in almost all APM measures is improved in both fiscal years.

The detailed presentation and calculation basis is provided in [Appendix II – Alternative Performance Measures](#).

7.5. Share Capital

Changes in share capital 2000 - 2016

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 denomination 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	210,691,89.00	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	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				Capitalization of untaxed reserves
	65,368,563	1.62			Capitalization of share premium
	65,368,563	(1.44)	0.74	43,372,736.62	Share capital reduction
Jun 2015	65,368,563	0.67			Capitalization of share premium
		(0.11)	1.30	84,979,131.90	Share capital return to shareholders
Jun 2016	65,368,563	(0.22)	1.08	70,598,048.04	Share capital return to shareholders

(*) 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"

Current share capital (28.4.2017)

Share capital	€70,598,048.04 Seventy million five hundred ninety eight thousand forty eight euro & four cents.
Number of shares	65,368,563
Share par value	€1.08

7.6. Pricing policy

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

Fee												Comment
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Trading (1)	2bp	1.5bp	1.5bp	1.5bp	1.25bp	1.25bp	1.25bp	1.25bp	1.25bp	1.25bp	1.25bp	Value Based 1.7.2010: 1.5bp-> 1.25bp
Trading (Block Trades)	2bp	1.0bp	1.0bp	1.0bp	1.0bp	1.0bp	1.0bp	1.0bp	1.0bp	1.0bp	1.0bp	Value Based
Block Trades (% of Total)	20.1%	22.8%	17.0%	9.1%	6.3%	8.9%	5.1%	15.6%	11.4%	11.4%	8.4%	Value Based
Direct Market Access (DMA)	0.5bp	Fee abolished on 1.4.2007										-
Use of the Trading Infrastructure	-	-	Scalable, based on the value of trades									-
Clearing, Settlement & Registration (1)	2.5bp	2.5bp	2.5bp	2.5bp	2.5bp	Post trading fees unbundled 1.7.2010						Value Based, until 30.6.2010
Clearing (1)	-	-	-	-	2.0bp	2.0bp	2.0bp	2.0bp	2.0bp	2.0bp	2.0bp	Value Based
Settlement & Registration (1)	Post trading fees bundled until 30.6.2010				0.5bp / €0.50	€0.50	€0.50	€0.50	€0.50	€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 (0.05%) of the value being raised (up to €50m); 2.5bp for > €50m ATHEX CSD: scalable, capped at €180 thousand											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, 2)	0.999	1.002	0.975	0.707	0.752	0.539	0.269	0.406	0.357	0.175	0.126	Fee Reductions Implemented in 2005, 2010 (Aug), 2012 and 2013 (Dec)

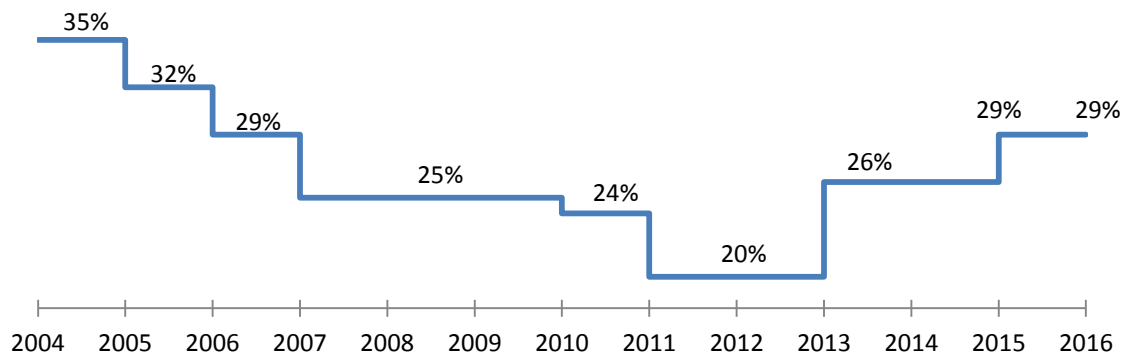
- The fees on the value of the trade are charged to both counterparties (buyer / seller).
- In 2010, as part of the unbundling of services, in accordance with the obligations of Law 3606/07 (complementing the MiFID requirements) and the European Code of Conduct, the post-trading services (clearing, settlement 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)
- 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

Corporate income tax rate



Tax	Rates												Comment
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Corporate Income Tax	32%	29%	25%	25%	25%	24%	20%	20%	26%	26%	29%	29%	-
Value Added Tax (VAT)	18%/19%	19%	19%	19%	19%	21%/23%	23%			23%			1.4.2005: 18 -> 19% 1.4.2010: 19 -> 21% 1.7.2010: 21 -> 23%
Hellenic Capital Market Commission Fee	Cash Market 10% of trading revenue (starting on 30.11.1991) 5% of revenue from MTFs (EN.A) (starting on 30.10.2007) 7% of revenue from clearing & settlement (starting on 30.11.1991) Derivatives Market 5% of trading revenue (starting on 15.9.2006) 3.5% of revenue from clearing & settlement (starting on 15.9.2006) (applicable rates are 50% of those for the cash market)												Art. 1 §§9-14 Decision 54138/B' 2197/9.12.2010 Art 1 §1 Decision 46794/B' 2156/30.10.2007 Art. 1 §§1-4 Decision 36730/B' 903/15.9.2006 Art 79 Law 1969/1991/A-167
Withholding Tax (Dividends)	(no withholding tax)					10%	10%	21%	25%	25%	10%	10%	-
Tax on Stock Sales	15bp (0.15%)					20bp					1.4.2011: 15bp -> 20bp (0.20%)		
Capital Gains Tax	No capital gains tax										15%	Applies to Greek private investors, for shares purchased after 1.1.2009 and for those owning > 0.5%	

7.8. Auditors – fees

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

Risk management

08

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 the organizer of a 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 qualified 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).

In light of these regulatory requirements, the Group applies a comprehensive plan to improve risk management in order to continue to provide high quality services.

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

In 2016 risk management continued to be strengthened and restructured, for ATHEXClear, in order to be harmonized with the EMIR Regulation. In particular, beyond the specific measures for the smooth operation of the systems of the Group, each organizational unit of the Group is responsible to monitor and manage possible risks in such a way so as to react quickly and effectively in case risk events arise.

In particular, as far as ATHEXClear is concerned, the risk management environment is shaped by the participation of 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 in 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 offered 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 from the operation of ATHEXClear as Central Counterparty, and from investing 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, including legal risk.

Business risk

Risk due to new competitors, drops 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 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.

Interest rate / Price risk: The Group is exposed to the risk that the value of the securities it holds changes. On 31.12.2016 the Group held (through Hellenic Exchanges – Athens Stock Exchange) shares of Piraeus Bank as a result of the exchange of Piraeus Bank bonds with a face value of €4,000,000 for shares of an equal value during the recent recapitalization of the bank. In particular, it received 13,365,316 shares with a par value of €0.30 per share. The market price of these shares on 31.12.2016 was €0.209.

In accordance with IFRS 39, the Company charged 9M 2016 results with the €2.2m loss (30.09.2016 share price: €0.134), while on 31.12.2016 it recorded the positive change of the fourth quarter (share price €0.209 from €0.134) amounting to €1,002 thousand to Other Comprehensive Income. If the price of the stock deviates by more than 10 basis points on 31.12.2016 (from €0.209 to €0.209209) the valuation difference revenue would change by ±€3 thousand.

Credit risk and liquidity risk

The credit risk and liquidity risk of the Group mainly concerns the transactions in the cash and derivatives markets, in which ATHEXClear operates as Central Counterparty, as described in the following paragraphs.

Besides the counterparty credit risk that ATHEXClear faces, the Group faces credit risk only from the investment of its cash in Greek banks and foreign banks with an excellent rating that operate in Greece. As part of its Investment Policy, specific principles are defined for investing cash. Specifically for ATHEXClear, asset investments are as a rule made at the Bank of Greece, a fact that minimizes its risk exposure.

Credit counterparty risk

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).

Concentration risk is low, because risk is not concentrated on one client.

Liquidity risk

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

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.

The Group does not have loans or other obligations over 12 months.

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 2016 there were very limited cases of interruptions in trading due to unavailability of the IT systems, which were examined, the causes were solved, and measures were taken in order that they not reappear. There was no significant interruption in other activities (trading, clearing, settlement, registration) of the Group that was due to failure or unavailability of IT systems or to human error. 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.

8.7. 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, 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 of reducing operating risk are the implementation of a business continuity plan, taking-out 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 RCSA⁵ in order to categorize risk and determine KRIs, update the loss data base⁶, 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.
- **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).

⁵ 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).

⁶ Loss Database: the database is updated on a daily basis with operations risk events independent of the size of the damage.

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.

Specifically for ATHEXClear, policies were implemented concerning conflicts 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 the 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.

For more information

09

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>

Other Useful links

Federation of European Securities Exchanges

<http://www.fese.eu>

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

World Federation of Exchanges

www.world-exchanges.org

The site contains useful statistics, updated monthly.

Hellenic Capital Market Commission

<http://www.hcmc.gr>

The site of the regulator.

European Securities and Markets Authority

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

The site of the European regulator.

About us

10

10. About us

Personnel profile

Company	Personnel 31.12.16
Hellenic Exchanges – Athens Stock Exchange SA (ATHEX)	97
Athens Exchange Clearing House S.A. (ATHEXClear)	23
Hellenic Central Securities Depository S.A. (ATHEXCSD)	104
Total	224

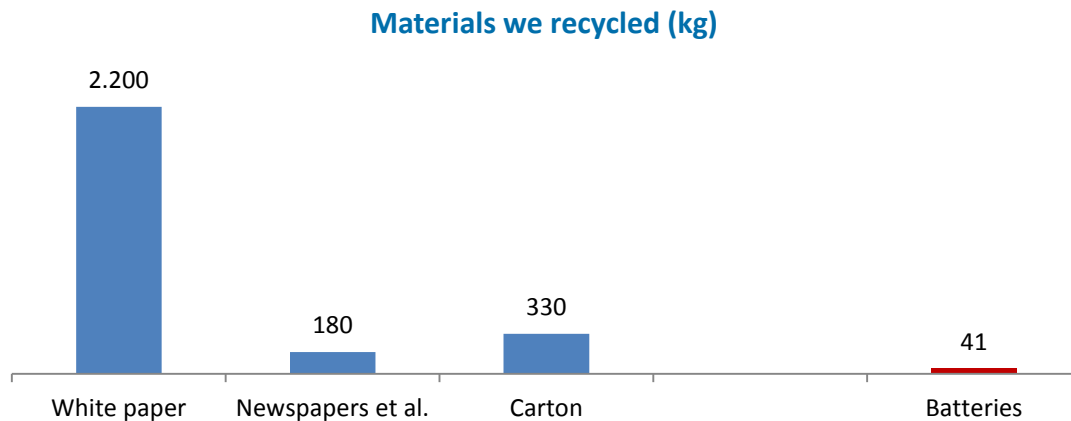
Organizational Unit	Personnel 31.12.16
Internal Audit Division	4
Chief Executive Officer (CEO)	1
Office of the Chief Executive Officer (CEO)	2
Strategic Communication & Markets Analysis Division	13
Group Corporate Secretary & Corporate Governance Unit	1
Group Compliance Unit	2
Information Security & Organizational Management Unit	7
Chief Financial Officer's Office	2
Human Resources & Administrative Support Division	21
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)	2
Issuer Support Division - MTF	17
Central Registry Division	23
Market Operation & Member Support Division	30
Risk Management & Clearing Division	14
IT Development Division	33
Infrastructure Management & IT Support Division	32
Regulatory & International Affairs Unit	1
Issuer Support & Markets Development Unit	1
Total	224

Education level	Personnel 31.12.16
Doctorate	5
Postgraduate degree	71
University degree	71
High School diploma	12
Junior High School diploma	37
Post high-school education	28
Total	224

Blood Donations

Blood drives organized	2
Personnel Participation / vials	89
Incidents covered	10

We recycled



Internships

The Athens Exchange Group is particularly sensitive to its social role, with it promotes by supporting Greek Universities. It develops its collaboration 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 this process of 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.

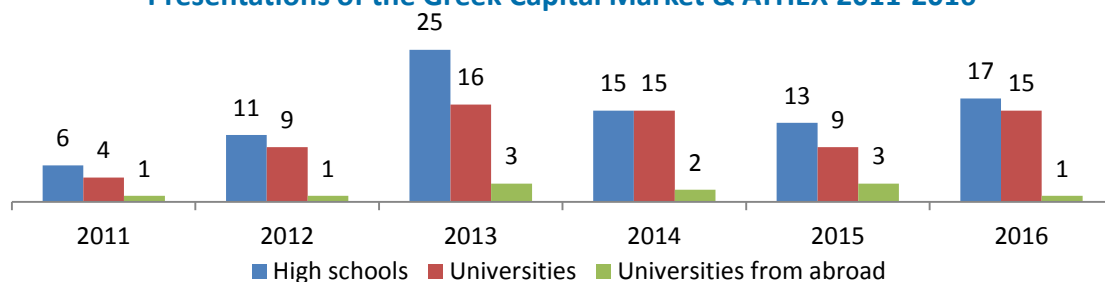
The Group provides job opportunities throughout the year in almost all of its organizational units. It mainly collaborates with the Athens University of Economics and Business, the University of Piraeus and the National Technical University of Athens; the Thessaloniki branch office of the ATHEXCSD subsidiary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

In 2016 **34 persons** in total (30 university, 2 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

High school - University	Date
1 st Vocational High School of Haidari – 12 th grade	12 Jan
5 th High School of Vyronas	14 Jan
High School of Filothei – 10 th grade	25 Jan
American College of Greece (Deree College)	9 Feb
High School of Kallipoli	12 Feb
High School from Kamatero	24 Feb
University of Athens – Department of Mathematics	25 Feb
Athens College – 9 th grade	1 Mar
School from the island of Chios	7 Mar
1 st Vocational High School of Athens – Management and Finance	9 Mar
University of Piraeus - Department of Banking and Financial Management	24 Mar
3 rd Vocational High School of Chalandri	31 Mar
High School of Pylos	7 Apr
2 nd High School of Moschato	12 Apr
Athens University of Economics & Business	14 Apr
Technological Education institute of Sterea Ellada – School of Management & Economics	19 Apr
6 th High School of Acharnes	21 Apr
University of Athens – Law Department	22 Apr
University of Macedonia - Department of Accounting and Finance	26 May
Aristotle University of Thessaloniki & Group of students from Cyprus	27 May
Athens University of Economics & Business – post-graduate students	13 Jun
Case Western Reserve University - - Weatherhead School of Management, Cleveland Ohio USA	21 Jun
2 nd High School of Gerakas	10 Nov
Athens University of Economics and Business – Accounting & Finance Department	14 Nov
Sivitanidios Public School of Trades and Vocations	15 Nov
Avgouleia-Linardatos School- 11 th grade / 2 nd High School of Acharnes	22 Nov
Saint Paul High School - Orientation department, economics studies	23 Nov
University of Peloponnese	5 Dec
Panteion University – group of Erasmus program students	12 Dec

Presentations of the Greek Capital Market & ATHEX 2011-2016



23rd CEE Capital Markets Sports Tournament – 14-16 October 2016



23 CEE Capital Markets Sports Tournament

Athens Stock Exchange | Thessaloniki 2016

The Athens Exchange organized, for the second time after 2008, the 23rd CEE Capital Markets Sports Tournament. This event is a tradition among exchanges and other capital markets entities for more than two decades.

On Saturday 15 October, 140 participants from 10 capital market entities of the region participated in the athletic activities.



Panoramic view during the opening ceremony of the Tournament



Venue sponsor



In-kind sponsors



<http://sport.athexgroup.gr/>

Appendices



Appendix I – Financial data for the Athens Exchange Group 2004-2016

Revenue 2004 – 2016 (consolidated)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Trading	4.460	5.691	9.336	6.699	4.952	7.649	12.844	18.544	28.523	40.263	42.446		
Stocks	3.965	4.862	8.060	5.446	3.660	5.608	10.344	n/a	n/a	n/a	n/a		
Derivatives	495	826	1.274	1.251	1.290	2.034	2.484	n/a	n/a	n/a	n/a		
Clearing	8.305	11.078	17.563	13.597	10.027	14.875	23.269	28.957	42.843	63.384	45.555		
Stocks	6.057	7.501	12.620	8.251	4.868	7.721	16.621	n/a	n/a	n/a	n/a		
Derivatives	1.158	1.935	2.974	2.921	3.010	4.754	5.791	n/a	n/a	n/a	n/a		
Settlement	1.398	1.587	1.964	14.108	767	1.221	1.718	2.003	6.452	5.994	3.736		
Exchange services	3.118	6.026	6.924	34.654	4.844	7.137	9.080	10.622	10.791	29.697	11.416		
Rights issues	441	3.208	2.363	30.694	1.669	2.873	4.092	n/a	n/a	n/a	n/a		
Listed company subscriptions	1.980	2.077	2.737	2.534	2.040	2.820	3.631	n/a	n/a	n/a	n/a		
Depository services	2.077	3.211	3.792	4.629	2.851	4.051	6.026	6.885	8.007	11.719	4.844		
Clearinghouse services	166	168	296	333	357	560	660	846	1.422	1.497	1.058		
Market data	3.266	3.206	3.627	3.766	3.940	4.256	4.142	4.400	3.986	3.891	3.463		
IT services	320	313	309	332	932	1.032	1.185	2.900	2.956	1.195	2.498		
Revenue from re-invoiced expenses	915	840	1.014	1.324	1.454	1.101	916						
New services (XNET, CSE-Sibex Common Platf., IT)	2.008	1.919	1.658	1.604	2.136	479	432						
Other services	922	996	805	420	782	451	1.386	3.184	3.387	3.594	3.236		
Turnover	26.955	35.035	47.288	81.466	33.042	42.812	61.658	78.341	108.367	161.234	118.252	73.830	60.864
Hellenic Capital Market Commission fee	-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
Other revenue	0	0	0	0	453	5.107	477	1.775	6.999	248	0	0	0
Total Revenue	25.867	33.679	45.133	79.890	32.419	46.281	59.444	76.431	109.639	153.377	111.194	69.655	57.891
Top-5 turnover drivers	21.226	29.212	41.242	73.687	26.614	37.968	55.361	69.408	94.150	148.954	107.724		
Revenue from stocks (trading & clearing)	10.022	12.363	20.680	13.697	8.528	13.329	26.965	n/a	n/a	n/a	n/a		
Revenue from derivatives (trading & clearing)	1.653	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 – 2016 (consolidated)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Personnel remuneration & expenses	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>	6.619	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>	1.560	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>	317	337	159	228	1.428	230	456	116	580	441	732	1.581	752
<i>Other benefits</i>	1.047	965	1.039	842	900	969	994	1.004	950	788	665	538	1.025
Third party remuneration & expenses	588	714	692	589	510	656	1.014	1.536	1.754	1.767	2.686	2.467	2.796
Utilities	747	877	875	891	787	791	815	1.783	1.894	1.580	1.265	1.289	1.466
Maintenance / IT support	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	1.079	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	556	621	663	806	721	760	831	773	708	1.008	737		
Marketing & advertising expenses	271	213	248	149	190	236	156	378	616	657	671	260	413
Participation in organizations expenses	311	282	284	331	285	310	331	313	308	247	209	368	425
Insurance premiums	421	420	461	516	513	505	501	385	382	530	538		
Rents and insurance premiums												1.162	1.625
Operating expenses	385	388	452	413	378	510	559						
Bank of Greece - cash settlement	61	62	58	62	113	315	380						
Other expenses	146	139	136	478	621	1.042	1.034	1.795	2.932	2.856	2.506	3.066	4.863
Total operating expenses (OPEX)	15.256	16.333	16.953	17.072	19.159	20.397	21.115	23.148	26.327	27.971	27.334	28.065	33.809
Re-invoiced expenses	866	925	1.021	1.118	944	1.579	1.163						
Expenses for new activities (XNET, CSE-Sibex CP, IT)	901	1.098	755	592	599	408	61						
Provisions (bad debts, extraordinary risk et al.)	824	365	400	607	0	0	0	0	0	810	0	0	0
Non-recurring expenses	0	0	0	0	0	0	0	509	0	5.738	0	0	0
Total OPEX	17.847	18.721	19.129	19.389	20.702	22.384	22.339	23.657	26.327	34.519	27.334	28.065	33.809
<i>OPEX excluding personnel</i>	5.713	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>	224	230	236	229	231	263	265	270	276	326	326	385	417
<i>Avg. employee expenses (€)</i>	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>	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>	29.200	29.800	30.000	31.100	33.700	33.200	35.000	36.300	35.300	34.400	31.200	27.700	31.800

Amounts in € thousand, unless otherwise noted

Profitability 2004 – 2016 (consolidated)

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
EBITDA	8.020	14.958	26.004	60.501	11.717	23.897	37.105	52.774	83.312	118.858	83.860	41.590	24.082
Depreciation	-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
EBIT	5.139	12.885	24.204	59.081	9.915	22.089	34.657	50.201	80.642	116.917	81.732	38.639	20.000
Capital income	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	-131	-83	-8	-10	-12	-12	-9	-10	-18	-12	-865		
EBT	3.366	13.450	27.653	63.102	15.144	25.977	39.104	55.122	88.932	123.287	86.060	43.375	46.902
Income tax	-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
After tax profits	1.429	9.038	21.013	32.284	11.919	21.526	21.277	29.503	65.014	91.026	58.084	27.101	33.598
<i>Effective consolidated income tax rate (%)</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>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.

Value added and distributed by the Group 2004 – 2016

Creation of added value	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Turnover	26.955	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	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)	-9.575	-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	-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
Value Added	15.076	26.232	41.395	75.991	29.918	41.137	55.536	73.197	110.494	148.204	109.294	64.411	69.219

Distribution of added value

To shareholders (proposed div. for previous FY)	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)	9.543	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)	4.692	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
To the Group (retained earnings)	-2.493	2.501	7.286	26.401	4.728	11.721	6.896	87	12.150	55.890	40.526	13.072	33.613
Value Added	15.076	26.232	41.395	75.991	29.918	41.137	55.536	73.197	110.494	148.204	109.294	64.411	69.219

Dividends

Dividend per share (€)	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	65368563	65368563	65368563	65368563	65368563	65368563	65368563	65368563	70485563	70271463	70230463	70230463	
Total payout	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	0,0510	0,0900	0,1890	0,0675	0,0825	0,1185	0,1980	0,4050	0,7500	0,5000	0,2500	0,2000	
To shareholders - net payout	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
Dividend withholding tax (%)	15%	10%	10%	25%	25%	21%	10%	10%	0%	0%	0%	0%	
To the State - withholding tax	588	654	1.373	1.471	1.798	2.059	1.438	2.942	0	0	0	0	0

Amounts in € thousand, unless otherwise noted

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

Appendix II – Alternative Performance Measures

An Alternative Performance Measure (APM) 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 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 correct and comprehensive information of investors.

The European Securities and Markets Authority (ESMA/2015/1415el) published the final guidelines on the Alternative Performance Measures (APMs) that apply starting on 3 July 2016 to companies with transferable securities traded in organized exchanges.

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 other 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 it be considered that they replace them. The Athens Exchange Group is using these adjusted 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 definition, analysis and calculation basis of the APMs used by the Group is presented below. Items that affect the adjusted are itemized in a table at the end of this chapter.

Adjusted EBITDA

$$\text{Adjusted EBITDA} = \text{Earnings Before Interest, Taxes, Depreciation \& Amortization (EBITDA)} - \text{Items affecting the adjustment}$$

€ thousand	2016	2015	Deviation
EBITDA	8,020	14,958	(46)%
Provisions against bad debts	824	365	126%
Termination benefits	150	0	
Reversal of unused provisions	(249)	(200)	25%
Adjusted EBITDA	8,745	15,123	(42)%
Deviation	9%	1%	

In 2016 adjusted EBITDA was 9% higher compared to EBITDA, while compared to 2015, adjusted EBITDA is 42% lower, and improved by 8.7%.

Adjusted EBIT

$$\text{Adjusted EBIT} = \text{Earnings Before Interest \& Taxes (EBIT)} - \text{Items affecting the adjustment}$$

€ thousand	2016	2015	Deviation
Earnings Before Interest and Taxes (EBIT)	5,139	12,885	(60)%
Provisions against bad debts	824	365	126%
Termination benefits	150	0	
Reversal of unused provisions	(249)	(200)	25%
Adjusted EBIT	5,864	13,050	(55)%
Deviation	14%	1%	

In 2016 adjusted EBIT was 14% higher compared to EBIT, while compared to 2015, adjusted EBIT is 55% lower, i.e. improved by 8.3%.

Adjusted EBT

Adjusted EBT = Earnings Before Tax - Items affecting the adjustment

€ thousand	2016	2015	Deviation
EBT	3,366	13,450	(75)%
Provisions against bad debts	824	365	126%
Termination benefits	150	0	
Reversal of unused provisions	(249)	(200)	25%
Share valuation	2,219	0	
Provision to cover other risks	0	300	(100)%
Bond de-recognition	0	207	(100)%
Building values estimation	0	399	(100)%
Adjusted EBT	6,310	14,521	(57)%
Deviation	87%	8%	

In 2016 adjusted EBT was 87% higher compared to EBT, while compared to 2015, adjusted EBT is 57% lower, i.e. improved by 24%.

Adjusted EAT

Adjusted EAT = Earnings After Tax (EAT) - Items affecting the adjustment

€ thousand	2016	2015	Deviation
Earnings After Tax (EAT)	1,429	9,038	(84)%
Provisions against bad debts	824	365	126%
Termination benefits	150	0	
Reversal of unused provisions	(249)	(200)	25%
Share valuation	2,219	0	
Provision to cover other risks	0	300	(100)%
Bond de-recognition	0	207	(100)%
Building values estimation	0	399	(100)%
Adjusted EAT	4,373	10,109	(57)%
Deviation	206%	12%	

In 2016 adjusted EAT was 206% higher compared to EAT, while compared to 2015, adjusted EAT is 57% lower, i.e. improved by 32%.

Adjusted EPS

$$\text{Adjusted EPS} = \frac{\text{Net Profit attributable to the owners of the parent Company} - \text{items affecting the adjustment}}{\text{Average number of shares during the period}} \times 100$$

€ thousand	2016	2015	Deviation
Earnings Per Share (EPS) (€)	0.03	0.14	(79)%
Net other comprehensive income	2,135	8,948	(76)%
Provisions against bad debts	824	365	126%
Building values estimation	0	399	(100)%
Termination benefits	150	0	
Share valuation	2,219	0	
Provision to cover other risks	0	300	(100)%
Bond de-recognition	0	207	(100)%
Reversal of unused provisions	(249)	(200)	25%
Share valuation	(711)	209	(440)%
Termination provision	5	(119)	(104)%
Adjusted Other Comprehensive Income	4,373	10,109	(57)%
Average number of shares	63,340,793	65,368,563	(3)%
Adjusted EPS (€)	0.07	0.15	(53)%
Deviation	133%	7%	

In 2016 adjusted EPS was 133% higher compared to EPS, while compared to 2015, adjusted EPS is 53% lower, i.e. improved by 32.9%.

Adjusted cash flows after investments

$$\begin{aligned} &\text{Adjusted cash flows after} \\ &\text{investments} \\ &(\text{cash flows before financial} \\ &\text{activities in the Statement of Cash} \\ &\text{Flows}) \\ &= \text{Net cash flows} \\ &\text{from operating} \\ &\text{activities} \\ &- \text{Net cash flows} \\ &\text{from investment} \\ &\text{activities} \\ &- \text{Items affecting} \\ &\text{the adjustment} \end{aligned}$$

€ thousand	2016	2015	Deviation
Net cash flows from operating activities	4,250	7,046	(40)%
Net cash flows from investment activities	(1,916)	(903)	112%
Cash flows after investment activities	2,334	6,143	(62)%
Items affecting the adjustment	2,944	1,071	175%
Adjusted cash flows from investment activities	5,278	7,214	(27)%
Deviation	126%	17%	

In 2016 adjusted cash flows after investments were 126% higher, while compared to 2015 adjusted cash flows after investments is 27% lower, i.e. improved by 56.5%.

Adjusted ROI

$$\text{Adjusted Return on Investment (ROI), \%} = \frac{\text{Profits Before Taxes + Interest \& related expenses – items affecting the adjustment (a)}}{\text{Total liabilities (reduced by third party cash \& cash equivalents) + average interest bearing liabilities during the year (b)}} \times 100$$

€ thousand	2016	2015	Deviation
Return on Investment (ROI)	27%	70%	(61)%
Earnings After Tax	3,366	13,450	(75)%
Interest & related expenses	131	(83)	(258)%
Items affecting the adjustment	2,944	1,071	175%
Total (a)	6,441	14,438	(55)%
Total liabilities – Third party cash & cash equivalents (b)	12,848	19,131	(33)%
Adjusted Return on Investment (ROI) (a)/(b)	50%	75%	(34)%
Deviation	86%	8%	

In 2016 adjusted ROI was 86% higher compared to ROI, while compared to 2015, adjusted ROI is 34% lower, i.e. improved by 44.3%.

Adjusted ROE

$$\text{Adjusted Return on Equity (ROE), \%} = \frac{\text{Profits After Taxes – items affecting the adjustment}}{\text{Total Equity (average)}} \times 100$$

€ thousand	2016	2015	Deviation
Return on Equity (ROE)	0.94%	5%	(81)%
Net earnings for the period	1,429	9,038	(84)%
Items affecting the adjustment	2,944	1,071	175%
Total	4,373	10,109	(57)%
Average total Equity	152,358	179,171	(15)%
Adjusted Return on Equity (ROE)	2.87%	5.64%	(49)%
Deviation	206%	13%	

In 2016 adjusted ROE was 206% higher compared to ROE, while compared to 2015, adjusted ROE is 49% lower, i.e. improved by 39.5%.

Adjusted Degree of Financial Self-Sufficiency

$$\text{Adjusted Degree of Financial Self-Sufficiency} = \frac{\text{Total Equity – items affecting the adjustment}}{\text{Total Balance sheet – third party cash assets}} \times 100$$

€ thousand	2016	2015	Deviation
Degree of Financial Self-Sufficiency	92%	90%	2%
Total Equity	140,692	177,900	(21)%
Items affecting the adjustment	2,944	1,071	175%
Total (a)	143,636	178,971	(20)%
Total Balance Sheet - Third party cash & cash equivalents (b)	153,540	197,031	(22)%
Adjusted Degree of Financial Self-Sufficiency (a/b)	94%	91%	3%
Deviation	2%	1%	

In 2016 the Adjusted Degree of Financial Self-Sufficiency was higher by 2 percentage points compared to the Degree of Financial Self-Sufficiency, while compared to 2015, the Adjusted Degree of Financial Self-Sufficiency is increased by 3 percentage points, i.e. it is improved by 50%.

Items affecting the adjustment

As presented above in the analysis of individual APMs, the picture of the Athens Exchange Group significantly improves. In particular, excluding non-recurring provisions and valuation of assets in fiscal years 2015 and 2016, the picture in almost all APM measures is improved in both fiscal years.

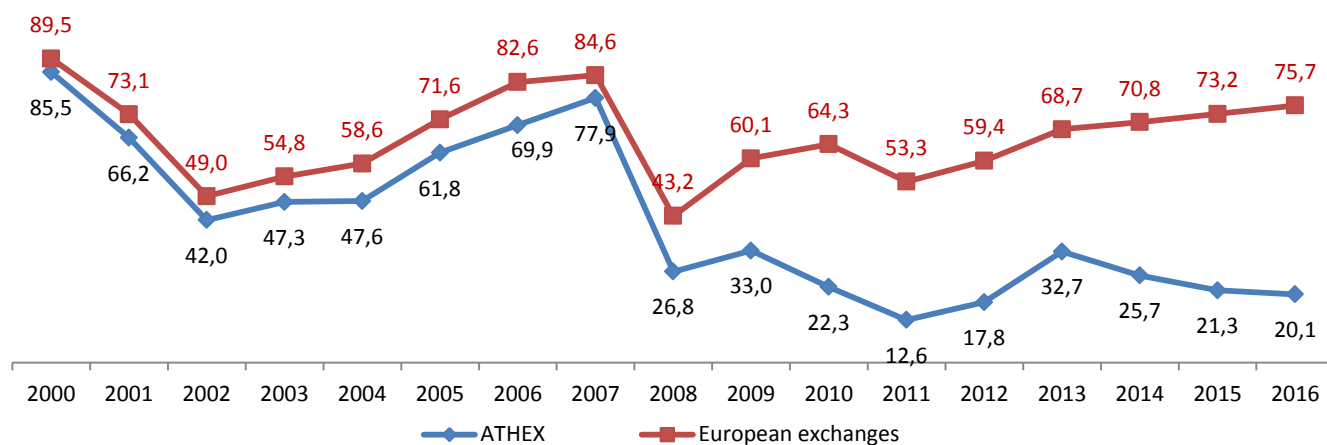
In order to more conservatively present financial data to shareholders and investors, the Group records items in the results that worsen the picture of the financial statements. Excluding these charges we end up at APMs, which the Group has begun publishing on 31.12.2016.

The itemized data that affects the adjustment of APMs for fiscal years 2016 and 2015 are shown below:

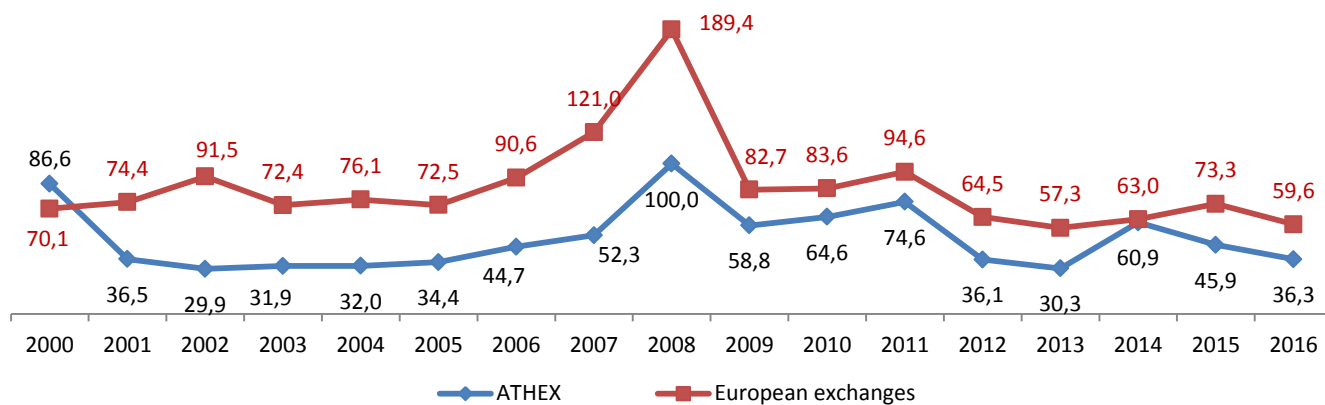
€ thousand	2016	2015
Statement of Comprehensive Income		
Provisions against bad debts	(824)	(365)
Building values estimation	0	(399)
Termination benefits	(150)	0
Share valuation	(2,219)	0
Provision to cover other risks	0	(300)
Bond de-recognition	0	(207)
Reversal of unused provisions	249	200
Total	(2,944)	(1,071)
Other Comprehensive Income		
Share valuation	711	(209)
Termination provision	(5)	119
Grand total	(2,238)	(1,161)

Appendix III – Market statistics

Market Capitalization ÷ GDP (%)

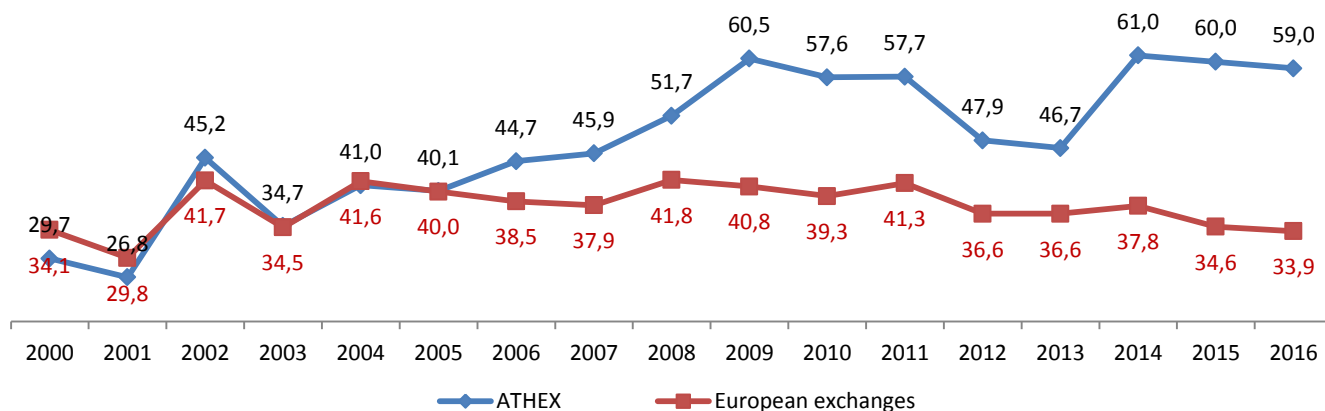


Turnover velocity
(Trade value ÷ market capitalization, %)



Market Concentration

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



ATHEX - Investor participation

(% of total market capitalization)

