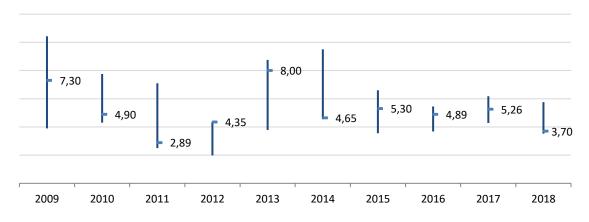


#### Athens Exchange Group: Performance at a glance

(International Accounting Standards, amounts in €m unless otherwise noted)		2018	2017	Δ%
Consolidated Statement of Comprehensive Income				
Turnover		26,586	27,412	-3%
Less: Hellenic Capital Market Commission fee		-1,019	-1,063	-4%
Total revenue		25,567	26,349	-3%
Total expenses		18,185	18,366	-1%
Earnings Before Interest, Taxes, Depreciation & Amortization (EBITDA)		7,382	7,983	-8%
Depreciation		-3,504	-3,060	15%
Operating Result (EBIT)		3,878	4,923	-21%
Financial income / (expenses)		0,130	0,155	-
Earnings Before Tax (EBT)		4,008	5,078	-21%
Income Tax		0,981	-2,002	-149%
Earnings After Taxes (EAT)		3,027	3,076	-2%
Consolidated Statement of Financial Position				
Cash & cash equivalents		74,608	85,851	-13%
Third party assets in ATHEX Group bank accounts		153,358	157,598	-3%
Other current assets		12,573	13,249	-5%
Non-current assets		35,533	33,701	5%
Total assets		276,072	290,399	-5%
Third party assets in ATHEX Group bank accounts		153,358	157,598	-3%
Short-term liabilities		7,289	8,639	-16%
Long-term liabilities		4,687	5,168	-9%
Total equity		110,738	118,994	-7%
Total Liabilities & Stockholders' Equity		276,072	290,399	-5%
Performance Indicators				
EBITDA Margin	%	27,8%	29,1%	-5%
EBIT Margin	%	14,6%	18,0%	-19%
Net profit margin	%	11,4%	11,2%	1%
Return on Equity (ROE)	%	2,7%	2,6%	6%
Market data				
ATHEX (Cash Market)				
Traded value	€ bn.	13,9	14,8	-6%
Average daily trade value	E DII.	55,7	58,8	-5%
Traded volume (shares)	bn.	9,3	18,2	-49%
Number of trades	m	5,1	4,4	16%
		5,1	4,4	10%
Raised capital	€ bn.	0,45	0,91	-50%
ATHEX capitalization (year end)	€ bn.	45,0	54,2	-17%
ATHEX capitalization (yearly average)	€ bn.	52,2	50,2	4%
Turnover velocity (value traded ÷ average capitalization)	%	26,5%	29,4%	
ATHEX (Derivatives Market)				
Trade volume (contracts)	m	14,1	19,8	-29%
Average revenue per contract	€	0,142	0,097	46%
EXAE share				
Start-of-year price (last close of the previous year)	€	5,260	4,890	8%
Year maximum	€	5,760	6,180	-7%
Year minimum	€	3,520	4,280	-18%
Closing price (December 31st)	€	3,700	5,260	-30%
Profit per share	€	0,064	0,042	52%
Ordinary dividend paid out (before withholding tax, year paid)	€	0,050000	0,05021	0%
Ordinary dividend (after dividend withholding tax) paid out	€	0,0450000	0,04268	5%
Special dividend (Share capital return) paid out (year paid)	€	0,110000	0,15062	-27%
2017 amounts which have been adjusted are shaded				

2017 amounts which have been adjusted are shaded.

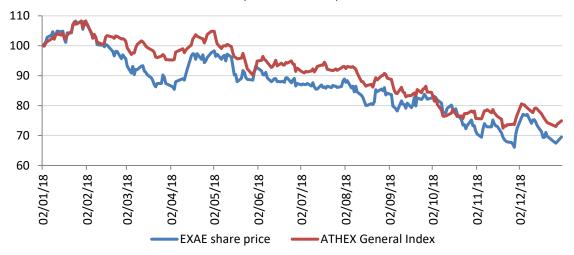
Detailed financial information is available in <u>Appendix I</u>.



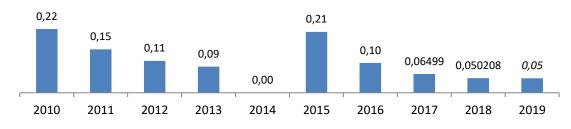
**EXAE - Share price performance** 

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** (1.1.2018 = 100)







See <u>chapter 6.5 - Dividend policy</u> for more information.

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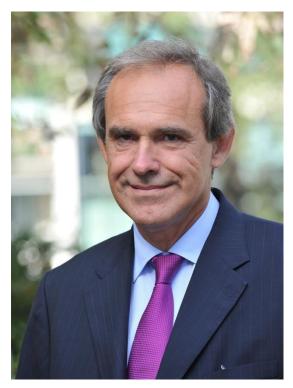
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Message of the Chief Executive Officer



# **Message of the Chief Executive Officer**

Dear Shareholders,



2018 began with high expectations and the hope that it would go down in history as the year of significant recovery of the Greek capital market to the prospect of the exit of the Greek economy form the long Memorandum period. It ended however as a year during which the average value of transactions dropped by 5.6% to  $\xi$ 55.7m, while market capitalization dropped by 17%, ending the year at  $\xi$ 56bn.

Internationally, in 2018 markets posted significant drops, creating the core dilemma for investors in such cases, namely whether they are facing a short-term market correction, or a reversal of the economic climate having a longer-term duration.

In particular, the drop in index values both in developed markets internationally as well as in Europe was the largest since the 2008 crisis, while a similar double digit negative performance was posted by developing markets both in Europe and across the world.

Of course, subsequently the positive performance by indices worldwide this year strengthens the view

that 2018 was a correction with significant intensity, affected by a level of uncertainty that manifested itself on the change in economic and monetary policy in the USA, apparent already at the end of 2017, but also from the significant positive returns of the past.

The performance of the Greek market indices was at the top of the global trend both in 2018 and in the first few months of 2019, which could possibly be evaluated as a token of the degree of confidence in the future of the Greek economy and the opportunities that the investment community sees.

The behavior of the Greek market in 2018 seems to have been characterized by the duration of consultations on some developmental and preventive options in the economic policy of the post-Memorandum period, the revelations about unlawful practices in the International activities, of what was considered for a decade as a Greek export phenomenon - the company Folli Follie - and the uncertainty caused for the future of Greek banks on the occasion of the investment options announced by specific foreign investors.

However, the overall picture of the performance of capital market in 2018 allow us to characterize it as the year of the Middle Capitalization.

In particular, the characteristics of 2018 were:

- The transaction value of the FTSE Mid Cap increased by 50.9%
- The turnover velocity of the FTSE Mid Cap stocks was higher for the first time since 2007 than the turnover velocity of the FTSE Large Cap stocks

• The spread of the FTSE Mid Cap index dropped more than 60%, to the lowest level since 2008.

Additionally, the following elements arose during the year:

- The average capitalization of the banks dropped by €1.3bn (-14.3%), while the average capitalization of non-bank stocks increased by 8.1%.
- The valuation of the banks was at the historically low 10.1% of total market capitalization at the end of 2018.
- In the derivatives market, there was a 27.7% drop (compared to 2017) in trading activity, measured in contracts. In the results of the Group however, this drop was more than made up by the 46.4% increase in the average revenue per contract.
- The average daily value of off-exchange (OTC) transfers increased by 13.3% in 2018 (€13.4m) compared to 2017 (€11.8m).
- In the primary market, listed companies raised a total of €450m compared to €965m in 2017.
- In addition, four new corporate bonds were issued, totaling €241.5m.
- Furthermore, we had the IPO of a company in the Main Market (€4.2m) which while small in size, nevertheless was the first to take advantage of the Electronic Book Building (EBB) and the first from the Venture Capital companies to be listed.
- Trading activity in 2018 was the second lowest in the past 20 years, following 2012.

The low level of trading activity in the cash market in 2018, together with the low level of capital raised, led to a loss-making 3<sup>rd</sup> quarter of the year from operations, the first such quarter since the company was founded and listed on the exchange in 2000.

Despite this loss-making 3<sup>rd</sup> quarter, the unwavering commitment to containing operating expenses resulted in fiscal year being profitable, for the 15<sup>th</sup> year in a row.

At the same time, the effort to differentiate our revenues beyond our core business continues with increased intensity, by further developing services already on offer – collocation, LEI (Legal Entity Identifier) code issuance, organizing General Meetings for listed companies at the Group's premises, and – starting in 2018 - the provision of ARM (Approved Reporting Mechanism) and APA (Approved Publication Arrangement) services.

The establishment of the Hellenic Energy Exchange (HenEx), in which the Group has invested approximately €1m for a 21% stake, could be characterized as being a success of historical significance in 2018. Besides from its stake in HenEx, the Group has agreed to provide support services for its operation, both at the technology level as well as in terms of financial and administrative management. The market is expected to complete its transformation, and to begin operating in accordance with the European Union's "target model" at the end of the second half of 2019, at which time the technological infrastructure support program will be launched by the Group.

In collaboration with the Hellenic-American Chamber of Commerce and with the support of the World Federation of Competitiveness Councils (GFCC) and the Foreign Ministry, at the end of 2018 we announced the launch of the Roots program, an initiative to showcase competitive and commercially usable SME and Start-Ups business plans that have reached a stage of maturity. The aim of Roots is to guide the participating companies and to develop skills that will enable them to effectively communicate their business proposal to interested investors.

This initiative is part of the adoption in Greece of the global trend towards the utilization of capital markets as a mechanism for raising capital. In Europe, this option is expressed by the acceleration of the Capital Markets Union initiatives that have been adopted. The major practical issue for the European-and not only-market, is that it consists mainly of small and medium-sized enterprises (SMEs) which do not have the required familiarity with capital markets, and are also of limited attractiveness for the International investment community. In this direction, the Group has moved by organizing for the first time in 2018 two local roadshows for Small Caps and Mid-Caps, significantly enhancing the visibility of small and medium-sized enterprises in the investment community.

In October 2018 the Athens Exchange hosted, for the first time in Greece, the General Assembly and Annual Meeting of the World Federation of Exchange, thus promoting the ATHEX brand to global capital markets. The WFE is the leading global industry association for exchanges and central counterparties, with 70 full members representing more than 200 capital market infrastructure providers. It was noted with satisfaction by the organizers, that the level of participation by WFE members at the Meeting in Athens was a historical record. The impact of ATHEX brand internationally was confirmed by the development of its participation in the privatization tender of Boursa Kuwait which took place in 2018 and was successfully concluded for the consortium set up at the initiative of the ATHEX Group in 2019. Recognizing the importance of SMEs in the economies of the capital markets where its members are active, the WFE published on the first day of the Convention a report on SMEs.

In 2018, a dynamic "restart" of the Hellenic Corporate Governance Council (HCGC) took place with Harvard Business School Professor George Seraphim, a person of international stature in the field of ESG, assuming the Presidency, and with the participation of the Hellenic Association of Banks. Recently, the Hellenic Fund and Asset Management Association [ETHE] was added as a full member.

In the internal market, the effort to broaden the reach of the ATHEX brand included in 2018 the elaboration of the study "Financing through the stock market and a new development model" by IOBE [Foundation for Economic and Industrial Research]. The study was presented to the Greek capital market with commentary by the Minister of Finance Euclid Tsakalotos and the governor of the Bank of Greece Yiannis Stournaras.

At the same time, Professor Michalis Riginos' book "Athens Exchange, development and circumstance" was published, which records the role and history of the Athens Exchange from 1880 to 1940.

2019 is a year where great effort will be focused on the implementation of a series of critical changes at different levels such as the replacement of obsolete technology, the alignment of the ATHEXCSD operating model with the requirements of European CSDR, the expansion of the use of know-how on existing information systems for trading, clearing and settlement to support the energy market and Boursa Kuwait.

As every stock market must, of course, special focus will be placed on exploiting the primary market to raise capital for businesses. Besides the traditional mechanisms, we will now have the Roots program as well as the bond market.

It is obvious that among our key targets remains the incorporation of international trends in the Greek capital market.

For this reason, initiatives that are blooming internationally such as ESG and the strengthening of the local institutional investor base, as well as the use of capital market for small and medium sized enterprises though the provisions of institutional incentives, must gain the broader interest by businesses, the financial sector and the State itself.

Dear Shareholders,

Our financial position remains strong – the cash and cash equivalents of the Group at the end of 2018 amounted to  $\notin$ 74.6m and the Group is debt free. As a result management, consistent in its policy, is in a position – for the 16<sup>th</sup> straight year – to propose a combination of dividend and capital return which will improve the return on equity. Based on the closing price at the end of 2018 ( $\notin$ 3.70), the total proposed dividend yield, including the capital return, amounts to 4.3%.

With the proposed capital return, and current level of cash balance, and equity, ensures the implementation of our commitment to return any excess liquidity to you, our shareholders.

Socrates Lazaridis Chief Executive Officer May 2019

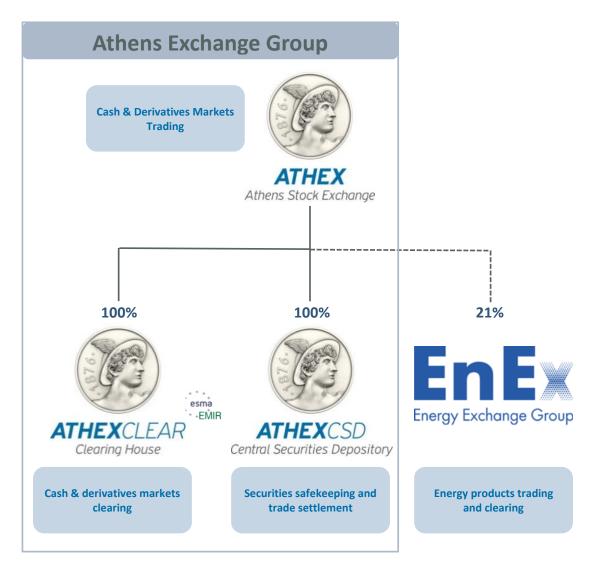
D1 The Athens Exchange Group



# 1. The Athens Exchange Group

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

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



In 2018 the Group obtained a minority stake (21%) in the Energy Exchange. More information in <u>Chapter</u> <u>3.2. Energy Exchange and Clearing House</u>.

Name	HELLENIC EXCHANGES – ATHE	ENS STOCK EXCHAN	IGE 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 24	424/31.3.2000)		
Duration	200 years			
Headquarters	110 Athinon Ave., 10442 Athens Greece - Tel: +30 210 336 6800			
Website	www.athexgroup.gr			
Listed (at ATHEX)	21.8.2000			
LEI	549300GSRN07MNENPL97			
ISIN	GRS395363005	FISN	ATHEX/REG SHS	
CFI	ESVUFR			
OASIS	EXAE			
Bloomberg	EXAE GA	Reuters	EXCr.AT	

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

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

(1) LEI Legal Entity Identifier	The Global Legal Entity Identifier (LEI) System is designed to uniquely and unambiguously identify participants in financial transactions (such as listed companies, brokerage companies et al). Starting on 3 January 2018, every legal person that participates in capital markets must have a LEI. <u>www.gleif.org/en</u>
(2) ISIN International Securities Identification Number	ISIN (ISO 6166) is the recognized global standard for unique identification of financial instruments. <u>www.isin.org/isin/</u>
FISN Financial Instrument Short Name	FISN (ISO 18774) aims to standardize the short names of the issuers of securities, as well as the securities issued. FISN is meant for human, not machine use. www.anna-web.org/standards/fisn-iso-18774/
<b>CFI</b> Classification of Financial Instruments	CFI (ISO 10962) aims to standardize the classification of financial instruments in succinct form. Starting on 1 July 2017, ISIN, FISN and CFI are assigned together to all new financial instruments. www.anna-web.org/standards/cfi-iso-10962/

For more information - <u>www.athexgroup.gr/web/guest/isin</u>

### Overview of the core operations of the Group

#### Listing



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

#### Trading

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

### Clearing

**3**<sup>t</sup>

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

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

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

Private and professional investors make investment decisions based on market information and data. The Athens Exchange provides information o the cash, bond and derivatives market, such as realtime data, historical data, index information et al.

#### Indices

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

#### Technology

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

The Compar	nies of the Gr	oup
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Company	Activity
Athens Stock Exchange	The 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. The organization and support of the operation of a cash market, a derivatives market,
Hellenic Exchanges – Athens Stock Exchange SA	as well as other financial means (including any type of product with any kind of reference values) in Greece and abroad.
(ATHEX)	LEI: 549300GSRN07MNENPL97
ATHEXCLEAR Clearing House	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.
Athens Exchange Clearing House S.A.	Law 3606/2007 (Government Gazette A/195/17.8.2007), as it applies.
Athens Exchange Clearing House S.A. (ATHEXClear)	Law 3606/2007 (Government Gazette A/195/17.8.2007), as it applies. LEI: 213800IW53U9JMJ4QR40
Clearing House S.A.	
Clearing House S.A. (ATHEXClear)	LEI: 213800IW53U9JMJ4QR40 Settlement of off-exchange transfers on transferrable securities. The 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. The 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. The development, management and exploitation of the IT and operating system for
Clearing House S.A. (ATHEXClear)	LEI: 213800IW53U9JMJ4QR40 Settlement of off-exchange transfers on transferrable securities. The 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. The 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.

### Group company memberships in international professional associations











Accelerating Innovation in Technology, Data & Media



FISD Financial Information Services Association of SIIA



The websites of these organizations can be found in Chapter <u>9 For more information</u>.

### Certifications

#### **Designated Offshore Securities Market – DOSM**

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

#### **Business Continuity ISO22301:2012**

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



### **Brief History: the early years**

### 1876

The Athens Stock Exchange (ASE) is founded as a self-regulated public organization. The first securities traded where 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 openoutcry 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 – today

### 15 July 2010

HELEX completes the spin-off of its clearing business, which is 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** goes 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** takes place through ATHEX's OASIS trading system.

### July 2012

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

### 1<sup>st</sup> Half 2013 / 1<sup>st</sup> Half 2014 / Dec. 2015

The recapitalization of the Greek banks is 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).

 $1^{st}$  half 2014: The second round of rights issues by the four systemic banks is completed. The rights issues were subscribed exclusively by the private sector and amounted to €8.3bn, out of which €7.85bn came from abroad.

December 2015: The third round of capital increases by the four systemic Banks is completed. The capital - raised exclusively from the private sector - amounted to €9.4bn.

More information on the rights issues by the Greek Banks from 2013 to 2015 in <u>5.1.5</u> <u>Capital</u> <u>raised</u>.

At the same time as the new shares that arose from the rights issues of the banks in 2013, 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 spinoff 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."

### 6 Oct. 2014

The settlement of transactions cycle for all listed securities traded in the Organized cash market and the Alternative Market, moves 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 migrates to the OASIS cash trading system, following the necessary upgrades. On the same date, the upgraded clearing and risk management systems also went into production, completing the adjustment of the derivatives market to the new EMIR Regulation (European Market Infrastructure Regulation).

### 22 Jan 2015

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.

### Jul 2016

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

Read more about the bond market and the new listings in 2018 in <u>chapter 4</u>.

### Nov 2017

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

### 1<sup>st</sup> Half 2018

The "Hellenic Energy Exchange" (HenEx) begins operating. It is one of the core pillars of the target-model of the European Union, with the aim of creating a single European energy market.

In 2019 the Energy Exchange will begin operating with the start of the four new energy markets which will replace the mandatory pool model that is in effect today, as foreseen by the "road map" for implementing the Target Model that has been set up by the responsible bodies



Read more in <u>chapter 3.2</u>

### **Oct. 2018**

In October 2018 the Athens Exchange hosts in Greece for the first time the General Assembly and Annual Meeting of the World Federation of Exchange (WFE), an opportunity to promote the ATHEX brand to international capital markets. The WFE is the leading industry association for Exchanges and Central Counterparties (CCPs) in the world.

Read more in chapter 4

### Dec. 2018

The Athens Exchange, in collaboration with the Hellenic-American Chamber of Commerce, and the support of the Global Federation of Competitiveness Councils (GFCC) and the Ministry of Foreign Affairs, announce the launch of the Roots Program, which aims to facilitate access to capital by Greece Small and Medium sized Enterprises.

Read more in <u>chapter 4</u>



ATHEXGROUP Athens Exchange Group

# 2. Management profile

### 2.1. Corporate Governance

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

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

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

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

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

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

### **Corporate governance at the Group**

For the management of the Company, proper and responsible corporate governance is a key 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 – whose provisions supersede in any case – on corporate governance for listed companies that are included in laws 4548/2018, 3016/2002, 4449/2017 as they apply, as well as decision 5/204/14.11.2000 of the BoD of the Hellenic Capital Market Commission; as market operator it applies the provisions of Law 4514/2018 " and ESMA guidelines 71-99-598 EBA/GL/2017/12/21.3.2018 on the suitability assessment of the members of the governing body of the market operators and the providers of market reference data services.

The Company has adopted a Corporate Governance Code since 2011 and publishes a Corporate Governance Statement on an annual basis. The Statement for 2018 includes the following sections:

#### General Meeting – Shareholder rights

- o Operation of the General Meeting Authority
- Shareholder participation in the General Meeting
- o Representation at the General Meeting
- Collective and individual 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
- o Convening the Board of Directors
- o Quorum Majority Member representation Minutes
- o Delegating responsibilities of the Board of Directors to consultants or third parties
- $\circ \qquad \text{Remuneration of the Board of Directors} \text{Remuneration policy}$
- o Assessment of the Board of Directors
- o Other professional commitments of the members of the BoD

#### • Committees of the Board of Directors

- Audit Committee
- Nomination and Compensation Committee
- Strategic Investments Committee
- Stock Markets Steering Committee
  - Listings & Market Operation Committee
  - Corporate Actions Committee
- o XNET Steering Committee
- Policy of equal opportunity and diversity
- Matters of internal audit and risk management of the Company in relation to the reporting process
- Information re items of article 10 of Directive 2004/25/EC

The full text of the Declaration for each year is included in the corresponding **Annual Financial Report**. All Financial Reports are available on the website of the Group <u>www.athexgroup.gr/ir</u> 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.

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

#### **The Athens Exchange Board of Directors**

C: Chairman | M: Member

The Committees of the BoD and their roles are described in <u>chapter 2.5</u>.

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 (<u>www.athexgroup.gr</u>).

## 2.3. Board of Directors member biographies

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



George Handjinicolaou is non-executive Chairman of the Board of Directors of Athens Stock Exchange. He also serves as Chairman of the Board of Directors of Piraeus Bank, Chairman of Piraeus Bank Group Cultural Foundation, and Chairman of the Hellenic Bank Association.

He is non-executive Chairman of the Board of Directors of the subsidiary Hellenic Central Securities Depository and non-executive member of the Board of Directors of the Athens Exchange Clearing House.

He is also a member of the LIBOR Oversight Committee, a member of the ICE Swap Rate Oversight Committee and a member of the PRIME Finance Panel of Experts.

Mr. Handjinicolaou received his PhD in Finance from New York University, where he also earned his MBA. He has a law degree from the Law School at the University of Athens.

For most of his 35 year career, he has held senior positions in international financial institutions in London and New York.

Mr. Handjinicolaou held the position of Deputy CEO of the International Swaps and Derivatives Association (ISDA) in London (2011-16), where he was also a member of the Board of Directors. Previously and for over 25 years, he held senior management positions in the derivatives and fixed income markets at several global financial institutions including Dresdner Kleinwort Benson, Bank of America, Merrill Lynch and UBS in London and New York.

Mr. Handjinicolaou started his career at the World Bank in Washington, DC. In addition, he also has leadership experience in Greece having held the position of CEO of TBANK and Vice Chairman of the Hellenic Capital Market Commission.

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



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

He is also Chairman of the Stock Markets Steering Committee, Member of the Board of the American - Hellenic Chamber of Commerce, Member of the Board of the Council on Competitiveness of Greece and Vice Chairman of the Federation of Euro-Asian Stock Exchanges (FEAS).

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

#### **Alexandros Antonopoulos - Independent non-executive member**



Mr. Alexandros Antonopoulos 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 was Deputy CEO of Attica Bank, 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



Mr. Konstantinos Vassiliou is deputy Chief Executive Officer, Group Corporate and Investment Banking (GCIB) at Eurobank Ergasias, and a member of the Strategic Planning Committee, the Executive Board, the Group Asset and Liability Committee (G-ALCO), the Management Risk Committee, the Central Credit Committee, the People Advisory Committee and the Communications Committee at Eurobank.

He is also a member of the Board of Directors of Eurobank Factors and Eurobank Equities.

In the past Mr. Vassiliou was also General Manager, head of Global Corporate Clients & Debt Capital Markets (2008-2014) and Senior Director, head of Debt Capital Markets (2005-2008) at Eurobank.

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 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.

He was the Chief Executive Officer of the Hellenic Republic Asset Development Fund from August 2012 until July 2014. In 2014 he was appointed Executive General Manager of Private and Investment Banking in Alpha Bank.

During his career, he has executed significant assignments in the fields of Mergers and Acquisitions, Capital Markets, Corporate and Debt Restructurings and Privatisations, 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 (<u>www.cti.gr</u>) and undertook innovation projects in software development and software architecture in general. He participated as Assistant Project Manager and Technical Manager in the management consultant project to implement the ATHEX business plan in the "Kleisthenis" program (1995-1997), which resulted in the successful execution of international procurements for the modernization of the information infrastructure of ATHEX.

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

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

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

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



Mrs. 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 of various companies, among which the telecommunication company Vivodi Telecom and Fortius Finance S.A., which she founded. In addition, from 1993 to 2001 she taught at the Accounting, Business Administration and IT departments of the Technical Education Institute of Piraeus.

Mrs. Efraimoglou is Vice Chairman of the BoD of the Foundation of the Hellenic World, President and Managing Director of Ardittos S.A - a company of the Foundation of the Hellenic World, and President of the Education and Integration of Immigrants and Refugees Institute of the Foundation of the Hellenic World.

She is an elected President of the National Chamber of the Network of Greek Women Entrepreneurs, as well as an elected member of the BoD of the Athens Chamber of Commerce and Industry (ACCI), President of the ACCI Center for Womens' Entrepreneurship, and is responsible for Bulgaria, USA, New Zealand, FYROM and Australia in the International Relations section of ACCI. She is Treasurer of the Board of the ALBA Graduate Business School, and a member of the General Council of the Hellenic Federation of Enterprises (SEV). In 2008, as part of the BoD of SEV she led the creation of the Hellenic Corporate Governance Code and promotion to enterprises, as well as the subsequent founding of the Hellenic Corporate Governance Council, and is at present a member of its 15-person Council.

She is 2nd Vice Chairman of Technopoli-Acropolis S.A., Vice Chairman of the BoD of the Greek-Latin American Business Council, General Secretary of the BoD of the Greek-Asian Business Council, a member of the Non-Executive Directors' Club, and a member of the Business Advisory Council of the MBA International Program at the Athens University of Economics and Business.

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. Kounenaki-Efraimoglou plays an important role in the preservation and dissemination of our cultural heritage. She is also a Member of the Board at the Peloponnese Folklore Foundation Museum, and a member of the Advisory Committee of Maniatakeion Foundation.

She holds Bachelor and Master Degrees in Philosophy, Psychology, Business Administration and Computer Programming and is fluent in English, French and Italian.

She has been honored by ACCI and the region of Attica for her successful business activity, as well as the Association of Smyrnaeans, the Hellenic Navy, the Hellenic National Defense General Staff, the municipality of Filothei-Psychiko, the Unesco group and the institution of Tourism Awards for her cultural contribution to the country.

Ms. Sophia Kounenaki-Efraimoglou is married to Mr. Dimitris L. Efraimoglou and is 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 Hellenic Exchanges-Athens Stock Exchanges.

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 1986 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 non-executive member of the BoD of Selonda and a member of the Audit Committee, a member of the BoD of Perseus - a subsidiary of Selonda - and a member of the Audit Committee and Advisor to the Board - Domius Capital Advisors LLP (a consulting company headquartered in London).

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

#### Nikolaos Milonas - Independent non-executive member



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

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

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

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

#### **Alexios Pilavios - Non-executive member**



Mr. Alexios Pilavios is presently non-executive Chairman of Alpha Asset Management and Vice Chairman of ABC Factoring. He is also Chairman of the Athens Exchange Clearing House, an independent non-executive member of the BoD of Mytilineos and a member of the BoD of the Hellenic American Educational Foundation.

He has very extensive experience in the banking sector, investment management and capital markets.

During his thirty-five year carrier he has held senior posts in the local financial sector. He served as Chairmen of the Hellenic Capital Markets Commission (2004-2009), and as General Manager at Alpha Bank (head of the Wealth Management Unit), and a member of the Executive Committee of the Bank (2009 - 2017).

For a number of years, he was Chief Executive Officer at Alpha Investments and Alpha Asset Management (1992-2004). From 1996 to 2000 he was also President of the Association of Greek Institutional Investors.

Before his tenure at the Alpha Bank Group he held senior management positions at ErgoBank, Emporiki Bank and NIBID (National Investment Bank for Industrial Development).

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

#### **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., a member of the Boards of Directors of the Athens Stock Exchange (EXAE) and of NBG Asset Management. He is also a Vice President of the Association of the Members of the Athens Exchange (S.ME.X.A.).

# **2.4.** Remuneration of BoD members and executives

Company	Remuneration per BoD meeting (€)	Total remuneration (€)	
ATHEX	160.00	32,240.00 *	
ATHEXClear	160.00	9,280.00	
ATHEXCSD	-	-	

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

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

#### **Remuneration of senior executives of the Group – 2018** (rounded)

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Name	Position	Remuneration (gross)
Socrates Lazaridis	Chief Executive Officer (CEO)	184,400
Vasilis Govaris	Chief Financial Officer (CFO)	87,600
Dimitris <b>Karaiskakis</b>	Chief Operations Officer (COO)	104,900
Nikolaos <b>Porfyris</b>	Chief Business Development Officer (CBDO)	107,900
	Total	484,800

# 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 2018 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.

In carrying out its duties, the Audit Committee oversees (i) the financial information process, (ii) the external audit process, (iii) the effectiveness of the internal audit systems, and (iv) the evaluation of the operation of the Internal Audit Division, and reports directly to the Board of Directors of the Company.

Besides its responsibilities to the Company, the Audit Committee, as part of its responsibilities at the Group level, is informed on a regular basis on matters relating to the internal and external audits of the subsidiary company "Hellenic Central Securities Depository" (ATHEXCSD).

The Audit Committee has at least three (3) non-executive members of the Board of Directors that are not involved in the operation of the Company in any way, in order to be able to pass judgment that is objective and independent without conflict of interest. In addition, the majority of the members of the Audit Committee consists of independent non-executive members.

The main responsibilities of the Committee are:

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

#### Committee composition:

Chairman	Nikolaos Milonas, independent member
Members	Adamantini Lazari, independent member
	Alexandros Antonopoulos, independent member

#### **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:

- 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.
- Evaluate the suitability of the structure, the size, the composition and the performance of the Board of Directors and its Committees, and submit proposals to its concerning any required changes.
- Evaluate the knowledge, skills and experience of the members of the Board of Directors individually and as a whole, and submit relevant reports to the Board of Directors
- 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.
- Design and further development of principles and policy rules concerning the system of remuneration (e.g. Remuneration Policy) of the member of the Board of Directors, including the executive members of the Board of Directors and senior executives in a manner that ensures compliance with the principles of transparency and corporate governance.

#### Committee composition:

Chairman	Alexandros Antonopoulos, independent member of the BoD
Members	George Handjinicolaou, non-executive Chairman of the BoD
	Sofia Kounenaki – Efraimoglou, independent member of the BoD

#### **Strategic Investments Committee**

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

- Determine the short term and the long term investment goals.
- Monitor implementation of those goals.
- Draft reports to the Board of Directors at regular time intervals, detailing the results of the investment policy and describing possible deviations from the goals and performance that have been set.

#### Committee composition:

Chairman	Ioannis Kyriakopoulos, non-executive member of the BoD
Members	Alexios Pilavios, non-executive member of the BoD
	Adamantini Lazari, non-executive member of the BoD

#### **Stock Markets Steering Committee**

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

#### Committee composition:

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

Members

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

The Committee decided to set up the following sub-Committees:

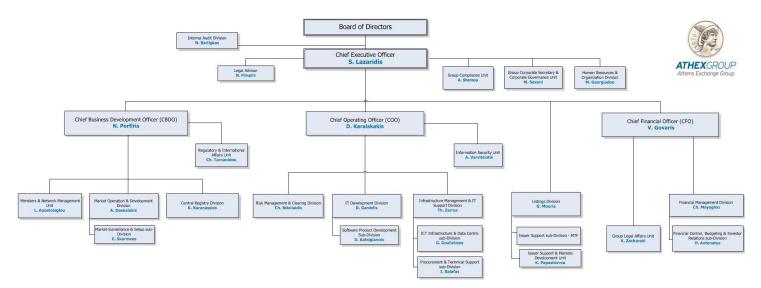
- Listings & Market Operation Committee
- Corporate Actions Committee

#### **Xnet Steering Committee**

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

#### Committee composition:

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



# 2.6. Organizational structure

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

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



Activities of the Group in **2018** 



# 3. Activities of the Group in 2018

# 3.1. Activity in our markets

New listings (IPOs)	
CNL CAPITAL	Listing in the ATHEX Main Market, through a rights issue, by public offer.
	Capital raised: €4.2m

More on the IPOs in <u>chapter 4</u>.

Corporate bonds	
GEK TERNA	Listing in the Fixed Income Segment of the ATHEX Main Market. Capital raised: €120m.
CORAL	Listing in the Fixed Income Segment of the ATHEX Main Market. Capital raised: €90m.
B&F	Listing in the Fixed Income Segment of the ATHEX Main Market. Capital raised: €25m.
DELTA TECHNICAL	Start of trading in the Fixed Income Segment of the ATHEX Alternative Market. Capital raised: €6.5m

More on the bond issues in <u>chapter 4</u>.

# 3.2. Energy Exchange and Clearing House

The "Hellenic Energy Exchange" (HenEx) has begun operating. It is one of the core pillars of the targetmodel of the European Union, with the aim of creating a single European energy market.

As mentioned in the information note of the Ministry of the Environment, the Energy Exchange is a prerequisite to the restructuring of the wholesale electricity market, to the benefit of market participants and end-consumers, as it aims to:



- Couple the Greek market to other European markets.
- Increase competition and transparency, which will have a direct effect in reducing energy costs and providing better prices to households and businesses.
- Ensure the safety of energy supply, diversification of energy sources in the energy mix, as well as further increase the participation of renewable energy sources (RES). Law 4512/2018 amends law 4425/2016 on the restructuring of the Greek electricity market, implementing European Regulations and Directives in order to complete the single European energy market, the so-called Target Model.

In 2019 the Energy Exchange will begin operating with the start of the four new energy markets which will replace the mandatory pool model that is in effect today. This is foreseen by the "road map" for implementing the Target Model that has been set up by the responsible bodies, which received the "green light" by the representatives of the Institutions at the recent negotiations.

	Share cap. (€)	Shares	%
LAGIE [Operator of Electricity Market]	1.100.000	11.000	22%
ADMIE [Independent Power Transmission Operator – IPTO]	1.000.000	10.000	20%
DESFA [Hellenic Gas Transmission System Operator]	350.000	3.500	7%
Athens Exchange	1.050.000	10.500	21%
European Bank for Reconstruction and Development (EBRD)	1.000.000	10.000	20%
Cyprus Stock Exchange *	500.000	5.000	10%
Total	5.000.000	50.000	100%

#### HenEx shareholders

\* The Athens Exchange paid up its participation amounting to €1,550,000 on 27.06.2018, obtaining 31% of the share capital; on 18.12.2018, ATHEX transferred 10% of the share capital, i.e. 5,000 shares with a par value of €500,000, to the Cyprus Stock Exchange for €500,000.

# 3.3. Hellenic Corporate Governance Council

The Hellenic Corporate Governance Council (HCGC) operates as a Non-Profit Organization, is an entity specializing in the spread of corporate governance principles and strives to develop a culture of good governance in the Greek economy and society. The overall action plan includes: the formation of positions on the regulatory framework, the submission of proposals, participation in consultations and working groups, the organization of educational and information activities, the monitoring and evaluation of corporate governance practices and implementation of corporate governance codes, the provision of assistance tools and the scoring of the performance of Greek enterprises.

Having completed its first cycle of operation, HCGC in 2018 has entered into a phase of participatory and administrative expansion, further increasing its work and strengthening its role. Within this context, besides the founding members (ATHEX and SEV – Hellenic Federation of Enterprises), the Hellenic Bank Association (HBA) has joined as a regular member. In the same context, a new Management Board has been elected, the other bodies of HCGC have been renewed, and a Working Committee has been formed, with the responsibility to implement the HCGC action plan, organize individual actions (conferences, events, promotional activities), find donors and other sources of financing, as well as fulfill and implement HCGC's specific objectives.

The activities of HCGC for 2018 include the continuation of the provision of consulting services to the Hellenic Corporation of Assets and Participations (HCAP) in matters of Corporate Governance. In particular, HCGC the dividend policy for HCAP, a project that was assigned by "Expertise France" (a French state international technical assistance organization) as part of the technical assistance being provided to the Greek government.

In addition, HCGC participates in the Perakis Commission to reform corporate law 2190/1920 (law 4548/2018) and in the work group of the Hellenic Capital Market Commission to amend law 3016/2002 on corporate governance.

# 3.4. Regulatory challenges (MiFID II, CSDR)

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

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

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

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

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

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

#### **New ATHEX DATA reporting services**

As part of the reporting obligations by participants in organized market which arose from MiFID II, in 2018 the following services became commercially available:

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





For more information - www.athexgroup.gr/web/guest/athex-reporting

#### Regulation EU 909/2014 (CSDR)

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

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

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

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

• provide the option to issuing companies to select the Exchange and the Depository they wish to use in the EU for the securities they issue.

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

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

Within that framework, ATHEXCSD actively participates in the adjustment process of the Greek capital market to the new environment, especially concerning the licensing of the Company in accordance with the CSDR Regulation in 2019. A significant development in that direction is the publication of law 4569/2018 "I) Central Securities Depositories, II) Adjustment of Greek law to the provisions of Directive (EU) 2016/2258 and other provisions, and III) Other provisions of the Ministry of Finance" (Government Gazette A' 179/11.10.2018).

# 3.5. Other developments

#### **Axialei service**

Responding to the requirement that all legal entities that carry out transactions on transferable securities starting on 3.1.2018 need to issue a Legal Entity Identifier (LEI) code, in 2018 ATHEXCSD provided the following services:

- Issuance of 1,127 new LEI codes
- 1,216 LEI codes were renewed
- 14 LEI codes were transferred from another provided to ATHEXCSD
- 8 LEI codes were transferred from ATHEXCSD to another provider

#### Improving risk management

In order to fulfill the observations and proposals of the Hellenic Capital Market Commission to improve the ATHEXClear's risk management model, a project to evaluation alternative improvements was undertaken, with the following prerequisites:

- To fully cover regulatory requirements
- To fit with the particular characteristics of the Greek market
- Not unjustifiably increase the cost for participants

The new model was certified by an independent specialized consultant, was presented to the Hellenic Capital Market Commission and the College and, following a decision by the Board of Directors, will go fully into production in the second quarter of 2019. In particular, the introduction of a collateral valuation limit went into effect in January 2019, in order to ensure the ability to liquidate them even under conditions of low liquidity.

#### Launch of the Roots program

In December 2018 the Roots program was launched, with informational events in Athens and Thessaloniki.

The Roots program (<u>www.roots-program.com</u>) is an initiative by the Athens Exchange that is being implemented in collaboration with the Hellenic-American Chamber of Commerce, with the support of the Global Federation of Competitiveness Councils (GFCC) and the Ministry of Foreign Affairs, and aims to facilitate access to capital by Small and Medium Sized Enterprises (SMEs) through capital markets, by offering them support in the preparation and presentation of the investment proposals, in accordance with rules and best practices that are accepted internationally.

#### Risk management – data warehouse

In order to make possible the storage and handling of a large volume of historical data that concern risk management, the project to develop a data warehouse that had begun in 2017 was completed.

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

Utilizing the new infrastructure, the design and implementation of reports was completed that to a large extent automate the production and dissemination of information to investors in accordance with international standards (IOSCO disclosure standards), as well as specialized data to the regulatory authority.

#### Annual certification of the risk management models

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

The project was assigned to a specialized consultant, who delivered the final report on the findings of the audit, which was submitted to the Hellenic Capital Market Commission, the Risk Committee and the Board of Directors of ATHEXClear. The overall result of these audits is that there are no critical findings, and that the models examined are conservative enough.



Promoting the Greek Capital Market



# 4. Promoting the Greek capital market

International institutional investors have a significant presence at Athens Exchange. In the last four years (20015-2018), they hold in their portfolios more than 60% of the total market capitalization of the

Exchange, a historically high level. In 2018, international institutional investors were responsible for 55% 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).

In addition, in 2018 the roadshow schedule included two new events:

• The ATHEX Mid Cap Conference, in Athens

•

• The ATHEX Small Cap Conference, also in Athens

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.

Greek



# 7<sup>th</sup> Greek Investment Forum – New York June 19-20 2018

Organizers

From the sponsor awards ceremony for the 7th Greek Investment Forum



# 13<sup>th</sup> AGR – London 19-20 September 2018



19-20 September 2018

The annual Roadshow of Greek listed companies, organized for the 13<sup>th</sup> straight year by the Athens Exchange took place in London.

During the two days, more than 620 meetings took place between 96 institutional investors that were represented by 130 analysts and fund managers, and the 33 listed companies that participated at the roadshow.

On the second day a presentation by the Minister of Finance Mr. Euclid Tsakalotos took place.



The sponsor award ceremony for the 13<sup>th</sup> AGR



The keynote speakers Messrs. Euclid Tsakalotos, Minister of Finance, and George Handjinicolaou, Chairman of the Athens Exchange Group.

### **General Assembly of the World Federation of Exchanges**

In October 2018 the Athens Exchange hosted in Greece for the first time the General Assembly and Annual Meeting of the World Federation of Exchanges (WFE), thus promoting the ATHEX brand to capital markets

across the world. The WFE is the leading global industry association for exchanges and central counterparties.



More than 300 participants were hosted, and the Annual Meeting schedule included 14 speeches and

panel sessions that were also open to non-WFE members, in addition to the Working Committee sessions, the Board of Directors, and the Federation's 58<sup>th</sup> Annual Meeting, which were only open to WFE members.



During the first day of the WFE 58<sup>th</sup> Annual Meeting, the new members of its Board of Directors were elected.

In addition, the World Federation of Exchanges admitted 6 new members, taking the total number of full members to 70, a historical high. With the addition of the 6 new members, WFE now represents more than 200 market infrastructure providers.



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# ELVALHALCOR – 1 February 2018

On the 1<sup>st</sup> of February 2018 trading began on the shares of ELVALHALCOR in the Main Market of the Athens Exchange. The start of trading concerns the new shares that resulted from the merger of ELVAL by HALCOR.



ELVALHALCOR is a modern and dynamic metal processing company with international reach and high specialization in the aluminum and copper sectors. The company has more than 80 years of experience and know-how and emerged in 2017 from the union of two leading Greek industries, Elval - one of the largest European aluminum rolling industries, and Halcor - the largest producer of copper pipes in Europe. ELVALHALCOR has a strong production base, with 12 modern factory units in Greece, Bulgaria and Turkey and has a strongly extrovert orientation, with a significant commercial presence in over 102 countries.



ELVALHALCOR is at the leading edge of technology in its sectors, and carries out significant investments in modernizing the equipment and production processes at its plans; it employs specialized and experienced technical and scientific staff. It is a point of reference in the non-ferrous metals sector and effectively addresses the challenges of an ever-changing environment.

, , ,	
Number of shares at listing	375,241,586
Share par value	€0.39
Advisor	none
ISIN	GRS281101006
Stock symbol	ELHA
Listing	01 February 2018
For more information	www.halcor.com

### Welcoming non-listed companies at the Exchange – 15 March 2018

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 2018 again invited dynamic Greek companies to present their business plans to the local and international investment community.

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

The Athens Exchange welcomed Apivita, Baresquare, Coco-Mat, Megas Yeeros, VYRA and Trikalinos, which took part in the Six Success Stories project and were included and showcased in a documentary titled "Six Crisis Success Stories II" organized by the Greek Liberties Monitor and the Friedrich Naumann Foundation. Company representatives presented their business models and plans in the HERMES hall of the Athens Stock Exchange, with the goal of bringing to the limelight businesses that take initiatives and stand out in the domestic and global economic environment.



The closing bell at the Athens Exchange was rung by Messrs. Nikolaos Koutsianas, Chairman & CEO of Apivita, Giorgos Grigoriadis, EO of Baresquare, Marios Sofroniou Vice-chairman of Coco-Mat, Nikolaos Loustas Vice-chairman & CEO of Megas Yeeros, Christina Tratari CEO of VYRA, Zafeiris Trikalinos CEO of Trikalinos, Agis Pistiolas Chairman of the ELLA-DIKA MAS Initiative, and Athanasios Syrianos CEO of EZA (Greek Brewery of Atalanti).

# 2018 Annual Report



The company is active in the creation and development of beauty products and services that promote a harmonious way of life, based on the Greek nature with its rich biodiversity and unique bee society with the high organic value products.

#### www.apivita.com



COCO-MAT was founded in 1989 in Athens and produces mattresses and home furniture. It began its activity with handmade mattresses from natural products. In 1992 it expanded in furniture and linen. In 1997 it expanded internationally by opening its first store in Madrid. In 2017 the company had more than 100 stores in 17 countries. A large part of its business activity is supplying hotels internationally.

www.coco-mat.com

The company develops software, artificial intelligence, data science, digital and big data, and is based in Thessaloniki.

www.baresquare.com



Megas Yeeros was founded in 2007 with the vision of making yeero a product consumed internationally. The urgent need to upgrade the quality of yeero and meta products in the Greek market was the impetus for the creation of Megas Yeeros. Megas Yeeros is a market leader, and is the only company of its kind that has two production facilities, in Greece and in the United States. The company is the largest producer of yeero, not only in Greece but also in Europe.

www.megasyeeros.gr

# 2018 Annual Report





Since 1856, Trikalinos Family has produced and sold Grey Mullet Bottarga Known in Greece as Avgotaraho. Today, in keeping with tradition and a vision for tomorrow, Trikalinos Company innovates, continuing to produce superior quality products of high nutritional value.

www.trikalinos.gr

Vyra.com is a comprehensive boat renting platform. Today, 3 years after it began operating, vyra.com is the no. 1 purely Greek platform covering the whole of the Mediterranean, with plans to expand in more exotic destinations such as the Caribbean and Thailand.

https://vyra.com

### Launch of the Roots Program – 5 December 2018

Athens Exchange, in collaboration with the American-Hellenic Chamber of Commerce and with the support of the Global Federation of Competitiveness Councils (GFCC) and the Hellenic Ministry of Foreign Affairs, announced the launch of the Roots program, which is aimed at strengthening small and medium entrepreneurship in Greece. The press conference was honored by the presence of the US Ambassador to Greece, Geoffrey R. Pyatt.

Roots is an initiative to promote competitive and commercially viable business plans of small and mediumsized enterprises (SMEs), primarily by facilitating their access to investment capital in accordance with internationally accepted rules and best practices.



Προετοιμασία ΜμΕ για άντληση κεφαλαίων Preparing SMEs to access capital markets

The program aims to familiarize SMEs with the various financial tools for raising capital, through the markets of Athens Exchange, while providing access to an international network of accomplished professionals active in the capital market, as well as in the business and academic communities. The goal of Roots is to provide guidance to participating companies and help them develop skills that will enable them to effectively communicate their business proposals to interested investors. At the same time, the program seeks to bolster the capital market ecosystem and make optimal use of dynamically evolving European trends, for the financing of the new competitive productive fabric.



Messrs. George Handjinicolaou, Chairman of the Athens Exchange Group, Simos Anastasopoulos, President of the Hellenic-American Chamber of Commerce, Socrates Lazaridis, CEO of the Athens Exchange Group and Geoffrey R. Pyatt, US Ambassador in Greece.

### **Corporate bonds on the Athens Exchange**

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

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

In 2018 the issuance of corporate bonds continued, with 3 issues in the Main market and 1 in the Alternative Market. The capital raised was €241.5m compared to €616m in 2017.

lssuer				
(stock symbol if listed)	Bond symbol	ISIN	Capital raised (€m)	Listing date
Housemarket	HOUSEMB1	GRC8081169B2	40,0	6/10/2016
OPAP (OPAP)	OPAPB1	GRC4191173B0	200,0	22/3/2017
Systems Sunlight	SUNLB1	GRC8121176B9	50,0	21/6/2017
Mytilineos (MYTIL)	MYTILB1	GRC3931176B0	300,0	28/6/2017
Terna Energy (TENERG)	TENERGFB1	GRC8131177B5	60,0	24/7/2017
Gek Terna (GEKTERNA)	<b>GEKTERNAB1</b>	GRC1451184D4	120,0	5/4/2018
Coral	CORALB1	GRC8161185B1	90,0	14/5/2018
B&F	BANDFB1	GRC8171186B7	25,0	27/6/2018
Total - Main Market			885,0	
MLS Innovation (MLS)	MLSB1	GRC422116743	4,0	19/7/2016
MLS Innovation (MLS)	MLSB2	GRC4221178B3	6,0	31/8/2017
Delta Technical	DELTECHB1	GRC815117CD9	6,5	2/2/2018
Total - Alternative Market			16,5	

### **Corporate bond listings at the Athens Exchange 2016-2018**

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

#### DELTA TECHNICAL – 2 February 2018

The Delta Technical Group includes 20 companies which provide complete solutions - equipment and construction - in Renewable Energy Sources (RES) projects, as well as in electricity generation.

Delta Technical was the first in Greece to implement innovative applications in heat pumps and in the use of biomass. The subsidiaries of the Group are gradually developing a private portfolio of RES projects and also invest in various other sectors such as real estate and tourism.



#### **DELTA TECHNICAL bond issue – Summary facts**

Duration	7 years	
Number of bonds issued	6,500	
Face value / issue price	€1,000 per bond	
Interest rate	5.50% fixed annually	
Credit rating	A credit rating was not sought	
Advisors	Beta Securities	
Subscription	Private placement	
ISIN	GRC815117CD9	
Start of trading	02 February 2018	
For more information	www.athexgroup.gr/el/delta-techniki-sa	

#### **GEK TERNA – 5 April 2018**

The GEK TERNA Group of companies is one of the largest Greek business groups. With a turnover of €1.4 billion, and a backlog from signed contracts of more than €2.2 billion, the Group currently holds a leading position in the sectors of infrastructure, clean energy, energy production and trading, concessions, mining and real estate development. The Group is also active in the fields of waste management and plant management.

Duration	7 years
Number of bonds issued	120,000
Face value / issue price	€1,000 per bond
Interest rate	3.95%
Credit rating	ICAP: BB
Advisors	National Securities
Subscription	Public Offer
ISIN	GRC1451184D4
Start of trading	05 April 2018
For more information	www.athexgroup.gr/web/guest/gek-terna-sa

#### CORAL – 14 May 2018

CORAL S.A. PETROLEUM AND CHEMICAL PRODUCTS is a continuation of "Shell Hellas S.A.", which was acquired in 2010 by "Motor Oil Hellas." It has been active in Greece since 1926 and has the exclusive rights to use the Shell name in petrol stations in Greece; this exclusivity was extended on 26.03.2014 for a 10 year period (until 31.12.2023). In addition, the Issuer has the exclusive rights to use the Shell name in Serbia, Montenegro, Albania, North Macedonia and Cyprus.



The Deputy CEO of MOTOR OIL Mr. Petros Tzannetakis rings the traditional opening bell at the Athens Exchange.

Duration	5 years
Number of bonds issued	90,000
Face value / issue price	€1,000 per bond
Interest rate	3.00%
Credit rating	ICAP: BB
Advisors	Alpha Bank
Subscription	Public Offer
ISIN	GRC8161185B1
Start of trading	14 May 2018
For more information	www.athexgroup.gr/web/guest/coral-sa

#### **CORAL bond issue – Summary facts**

#### B&F - 27 June 2018

The B&F Group, counting more than 38 years of experience and knowledge, is today one of the largest and most dynamic Groups in the field of women's garments in Greece, with a presence in another 20 countries globally.

The core Group activities involve the design, third-party construction and trade of women's garments, shoes and accessories of the BSB and Lynne brands. The B&F Group is steadily expanding in Greece and an ongoing penetration in markets abroad, through two subsidiaries in Romania and Cyprus and through representatives in the central European markets.



Mrs. Sofia Bithara, Chairwoman of the Board of Directors and Mr. Vassilis Bitharas, Vice Chairman of the BoD and CEO of B&F ring the traditional opening bell at the Athens Exchange.

5 years
Up to 25,000
€1,000 per bond
4.95% fixed annually (360/Actual)
ICAP: B
Euroxx Securities
Public Offer
GRC8171186B7
27 June 2018
www.athexgroup.gr/web/guest/b-f-sa

#### **B & F bond issue – Summary facts**





# 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 2018, 51% (2017: 51%) of the operating revenue of the Group came from the trading, clearing and settlement of trades in the cash and derivatives markets.

Trading activity was slightly down, the capital raised through the market – mainly through bond issues – dropped significantly, while the capitalization of the market slightly increased.

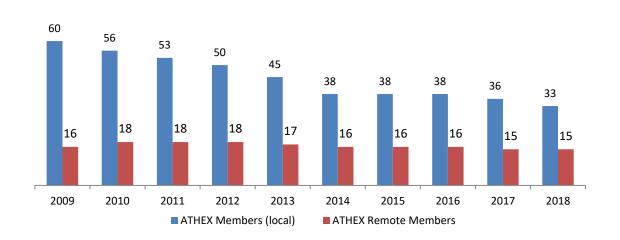
More specifically, in the cash market:

- The value of stock trades in 2018 dropped by 6%, to €13.9bn compared to €14.8bn in 2017.
- The average capitalization of ATHEX listed companies increased by 4%.

In the derivatives market, trading activity (number of contracts) dropped by 28.5%.

This chapter provides historical data about the cash and derivatives market that the ATHEX Group operates, data on listed companies, and comparative data with other European Exchanges. Selected market data for the period 2000 – 2018 is available in <u>Appendix III – Market statistics</u>.

### 5.1. Cash market



**ATHEX cash market Members** 

#### 5.1.1. Members – cash market



**Number of ATHEX listed companies** 

#### 5.1.2. Listed companies

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

Segment	2009	2010	2011	2012	2013	2014	2015	<b>2016</b>	2017	<b>2018</b>
Main Market			180	156	148	144	139	135	140	135
Large Cap	56	47								
Mid & Small Cap	147	133								
Special Financial Characteristics	40	45								
Surveillance	24	30	40	41	40	37	32	30	29	28
Suspended	17	18	25	39	41	38	43	27	22	15
Low dispersion			16	18	10	11	11	11		
Under deletion			3	2	1	3	4	4		
Total - organized market	284	273	264	256	240	233	229	207	191	178
Alternative market	12	14	14	14	14	14	14	14	12	12
Exchange Traded Funds	2	3	3	3	3	3	3	3	1	1

#### Listed companies in the ATHEX market segments

It should be noted that:

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



ATHEX - Total trade value

#### 5.1.3. Trading activity

Traded value in 2018 amounted to €13.9bn vs. €14.8bn in 2017, a 6% reduction.

	Total traded value (€bn)		Number of tr sessions (da	-	Average daily traded value (€m)	
	2018	2017	2018	2017	2018	2017
1st quarter	4,5	2,6	62	63	72,0	41,5
2nd quarter	3,8	4,7	60	61	64,1	76,9
3rd quarter	2,4	4,1	64	64	37,0	63,6
4th quarter	3,2	3,4	63	63	50,5	53,7
Total	13,9	14,8	249	251	55,7	58,8

ATHEX - Average Daily Trade Value (ADTV)

#### Trading activity in 2017 - 2018 per quarter



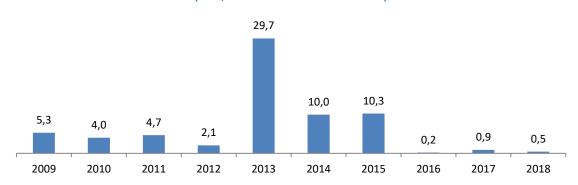
It should be noted that, due to the bank holiday and the imposition of capital controls, in 2015 the Athens Stock Exchange was closed for 25 working days – the last 2 days in June (Q2) and all of July (Q3). In addition, even though the Exchange opened again on 3.8.2015, restrictions on share purchases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



#### 5.1.4. Market Capitalization

#### 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.





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

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

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

#### 5.1.6. Investor participation – market capitalization

In 2018 the participation of foreign investors in the Greek market, as a percentage of the total capitalization of the market, remained at the historical high levels reached in 2017.

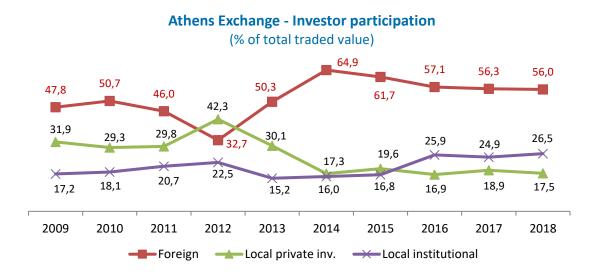


HFSF: Hellenic Financial Stability Fund

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  $\leq 27$ bn to acquire shares in the banks.

#### 5.1.7. Investor participation – trading

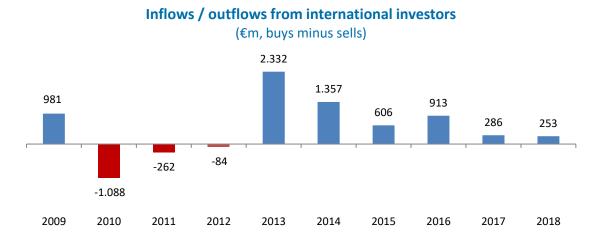
The participation of foreign investors in the Greek market, as a percentage of total turnover (traded value) rose to a record high rate of 65% in 2014, and has remained at high levels over the past few years.



#### 5.1.8. Capital flows from international investors

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

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

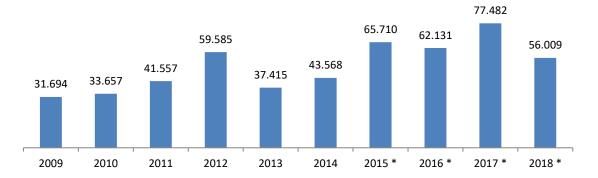


In each of the past 6 years, we observe net inflows of capital in the Athens Exchange. The largest outflows (€3.5bn) were observed in 2008, the year the world financial crisis peaked, before the start of the crisis in Greece.

### 5.2. Derivatives market

#### 5.2.1. Trading activity

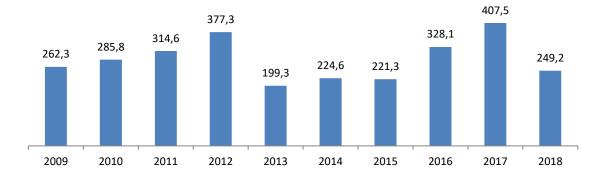




#### Derivatives market - average daily number of contracts

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Stock futures	20.311	18.921	30.094	52.396	27.102	28.125	55.651	58.218	74.497	53.063
Stock options	273	420	256	144	75	122	60	48	98	47
FTSE/ATHEX Large Cap index futures	9.563	11.855	9.891	6.146	9.440	14.404	9.574	3.596	2.508	2.573
FTSE/ATHEX Large Cap index options	1.547	2.441	1.308	897	790	917	425	269	379	326
FTSE/ATHEX-CSE bank futures	0	20	8	2	8	0	0	0	0	0
Average daily number of contracts	31.694	33.657	41.557	59.585	37.415	43.568	65.710	62.131	77.482	56.009
Repos	10.370	10.042	8.344	4.770	4.151	5.113	*	*	*	*

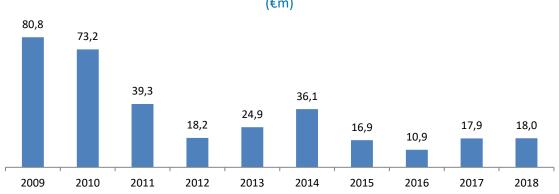
\* Starting on 1.12.2014, stock lending (Repos) takes place in the cash market.



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

### Derivatives market - open interest per product

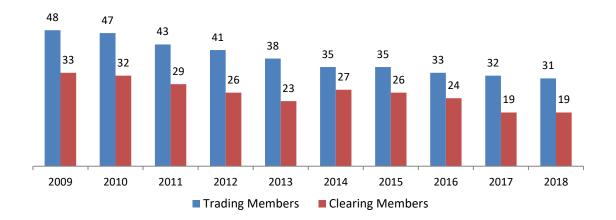
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
FTSE/ATHEX Large Cap index futures	21.561	28.601	15.228	30.816	48.533	49.209	16.066	7.705	6.383	4.635
Stock futures	228.486	247.139	288.882	337.378	146.699	167.590	201.088	317.780	395.963	242.066
FTSE/ATHEX Large Cap index options	10.650	7.925	3.796	3.177	3.289	6.505	3.214	2.306	4.250	1.383
Stock options	1.615	2.149	6.689	5.873	808	1.288	981	291	922	1.099
FTSE/ATHEX-Cyse Bank index futures	0	2	2	2	0	0	0	0	0	0
Total	262.312	285.816	314.597	377.246	199.329	224.592	221.349	328.082	407.518	249.183



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

### 5.2.2. Members

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



### 5.3. Athens Stock Exchange in Europe

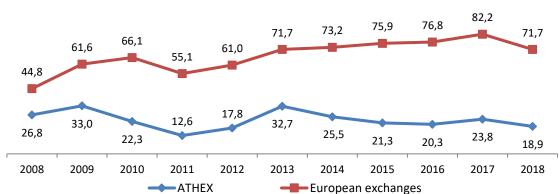
In this section Athens Stock Exchange is compared with the European exchange average.

Data in this section, including data for the Athens Stock Exchange comes from the Federation of European Securities Exchanges (FESE, <u>www.fese.eu</u>). 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 not included in all of the years in question.

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.

#### 5.3.1. 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.



#### Market capitalization to GDP (%)

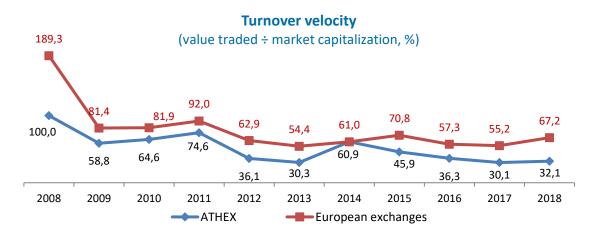
The deviation of this index for ATHEX and the European average reflects:

- The large drop that took place in all European exchanges in 2008, including ATHEX, due to the international financial crisis that intensified in the fall of that year.
- The significant deviation of the Greek index from the European average starting in 2008, as a result of the financial crisis in our country. In particular:
  - During the 2000-2007 period, the relevant index for the Greek capital market was lower than the European average by 3.6 to 11 percentage points; while
  - During the 2008-2017 period, this difference ranged from 15.2 to 58.4 percentage points, with the largest deviation being recorded in 2017.

#### 5.3.2. Turnover velocity

The turnover velocity of a capital market is the ratio of the traded value of that market to its total market capitalization. This index shows us the frequency with which, on average, shares change hands; if, as was

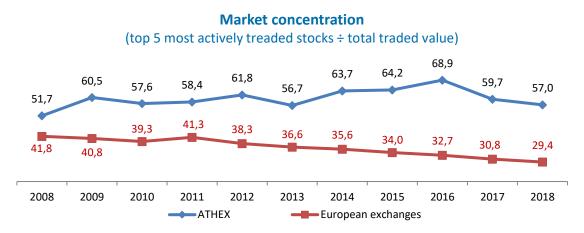
the case for Athens Exchange in 2008, value traded was equal to market capitalization, then on average all listed shares changed hands once during the year.



Historically, the turnover velocity of the Greek market lags that of the other European markets. Over the past few years we observe a gradual drop in turnover velocity, both at the Athens Exchange as well as across Europe; this trend was only reversed in 2018.

#### 5.3.3. Market concentration

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



For the Athens Exchange, in 2018 trading activity in the 5 most actively traded stocks represented 59.0% of total trading activity, compared to the European average of 29.4%.

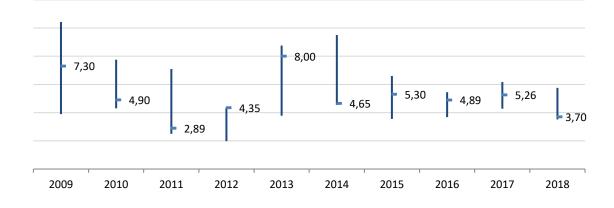




### 6. Stock information

#### 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.

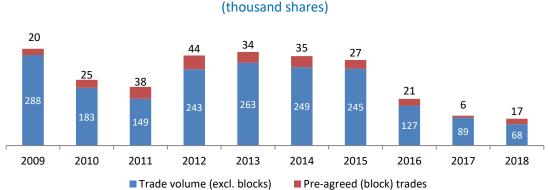
	Price (€)	Market cap. (€m)	Day	Volume * (shares)	Value * (€ thousand)	Day
Low	3,515	212,1	28/11	4.137	19,9	7/8
Average	4,638	303,1		68.226	328,8	
High	5,760	349,1	25/1	291.304	9,1	6/2
Tra	ading sessions		Total *	16.988.350	81.873,8	
	<b>^</b> 105		Block trades	4.280.153	19.171,0	
	- 13					
	<b>V</b> 131		Average *	68.226	328,8	
			* excl. block trade	'S		

#### FXAF share statistics - 2018

excl. block trades

The total trade value of the stock in 2018 amounted to €101.0m, out of which €19.2m concerned block trades, while the average daily trade value amounted to €328.8 thousand.

In 2018, the average daily trade volume was 85.4 thousand shares (out of which 17.2 thousand in block trades), down 10% compared to 2017. The average daily trading activity in 2018 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) was 36.1% (trade value: €101.0m, average market capitalization: €279.9m) in 2018, the lowest level since 2002 (28.7%).

### 6.2. Share performance since the IPO

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

				Net pay	ments to	Total re	turn (%)
	Share	price	Share	share	holders	(incl. payments	to shareholders
			annual	Dividend	Share capital		
Year	Start	End	return (%)	(after tax)	return	Annual	Running
2000	15,41	11,37	-26,2			-26,2	-26,2
2001	11,37	7 <i>,</i> 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 <i>,</i> 60	-76,7	0,7500		-73,5	-25,5
2009	5,60	7,30	30,4	0,4050	0,15	40,3	-10,9
2010	7,30	4,90	-32,9	0,1980	0,13	-28,4	-24,4
2011	4,90	2,89	-41,0	0,1185	0,10	-36,6	-36,0
2012	2,89	4,35	50,5	0,0825	0,08	56,1	-25,5
2013	4,35	8,00	83,9	0,0675	0,03	86,1	-1,1
2014	8,00	4,65	-41,9		0,20	-39,4	-21,6
2015	4,65	5,30	14,0	0,1890	0,11	20,4	-15,4
2016	5,30	4,89	-7,7	0,09234	0,2275	-1,7	-16,0
2017	4,89	5,26	7,6	0,0552415	0,25997	14,0	-11,6
2018	5,26	3,70	-29,7	0,0426768	0,1506239	-26,0	-20,4
			Total	3,3215	5,2381		

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

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 -20.4% at the end of 2018.

#### Total return 2000 (21.8) - 2018 (31.12)

	Pri	ce		Total net payment	<b>Total return</b> (%) (incl. payments to
	21.8.2000	31.12.2018	Return (%)	to shareholders	shareholders)
EXAE	15,41	3,70	-76,0	8,5596	-20,4
Gen. Index	3757,83	802,37	-78,6		

Even though the performance of the stock since the public offering is negative, the share performance is better than the General Index; if payments to shareholders are included (dividends, share capital return), which amounted to & 5996 per share, the picture is significantly improved (-20.4% vs. -76.0%).

### 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 in 2015.

The lifting of capital controls in December 2015 allowed the program to begin on 9.2.2016. On the completion of the program on 20.4.2017, the Company had purchased 5,020,563 shares that corresponded to 6.78% of the share capital, at an average cost of  $\leq$ 4.63 per share, and a total cost of  $\leq$ 23.2m, including commissions.

The 1<sup>st</sup> Repetitive General Meeting on 9 June 2017 approved the cancellation of 4,769,563 shares, corresponding to 95% of the total, as per the original terms of the program. The shares were cancelled on 26.7.2017.

The 1<sup>st</sup> Repetitive General Meeting on 13 June 2018 approved the cancellation of the remaining 251,000 shares, as per the original terms of the program. The shares were cancelled on 8.8.2018.

On 31.12.2018 the Company did not possess any treasury stock.

Share bu	yback 2016	2017 - monthly	buybacks	5		
	Shares	Total cost (incl.	Cost /	Avg purchase	EXAE avg	Purchase volume
Month	purchased	commissions)	share	volume	daily 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			

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

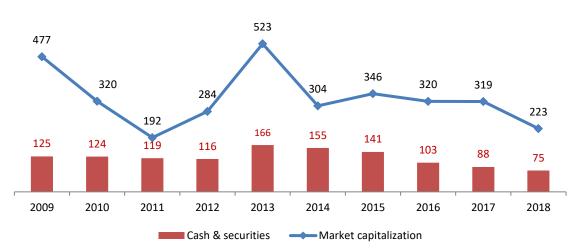
Share buyback 2016-2017 - monthly buybacks

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

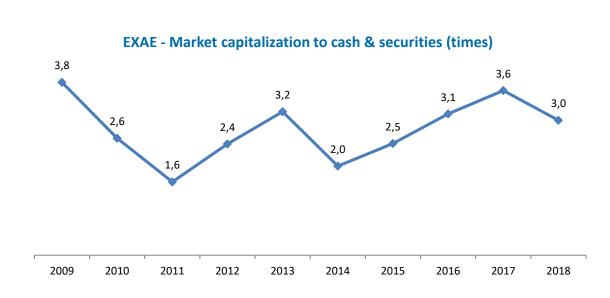
#### Share buyback programs

Month -	Shares outstanding		Shares outstanding (after	Cancelled shares to
Year	(before cancellation)	<b>Cancelled shares</b>	cancellation)	shares outstanding (%)
Sep 2005	71.088.173	857.710	70.230.463	1,2
Jun 2009	70.485.563	5.117.000	65.368.563	7,3
Jul 2017	65.368.563	4.769.563	60.599.000	7,3
Aug 2018	60.599.000	251.000	60.348.000	0,4

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



### 6.5. Dividend policy

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

	Dividend	Dividend	Dividend	<b>Capital return</b>	Total net payout to
Year	(before tax)	withholding tax	(after tax)	+	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
2019	0,0500	10%	0,0450	0,11	0,1550

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

Total payout 2000 - 2018 8,5588

Starting on 1.1.2017, the dividend withholding tax increased to 15% from 10%. Law 4603/2019 (art. 65) reduces the withholding tax to 10%.

- <sup>+</sup> There is no withholding tax on share capital returns.
- In 2008 the company implemented a share buyback program, instead of a share capital return. More information in <u>Chapter 6.3, Share buyback programs</u>.

In 2016, 2017 and 2018, 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 distributio	ons in 2018					
	Shares	Record	Treasury stock	Amount per		Amount per
Month - Year	outstanding	date	(on record date)	share	Payout	share paid out
FY2017 dividend	60.599.000 0	06.06.2018	251.000	0,05	3.029.950,00	0,050208
Capital return	60.599.000 0	07.08.2018	251.000	0,15	9.089.850,00	0,1506239

#### Cash distributions in 2017

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

#### **Cash distributions in 2016**

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

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

Thus, on 31.12.2018 the dividend for fiscal year 2012 which was paid in 2013 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 (31.12.2018)**

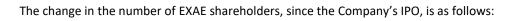
		,	
Investor type	Number of shareholders	Number of shares	%
Banks	5	3.578.332	5,9%
Institutional investors	47	6.961.407	11,5%
Private individuals	9.946	12.932.141	21,4%
Brokerage companies	11	569.088	0,9%
ATHEX - treasury stock	0	0	0,0%
Other Greek investors	78	808.823	1,3%
Foreign investors	399	35.498.209	58 <i>,</i> 8%
Total	10.486	60.348.000	100,0%

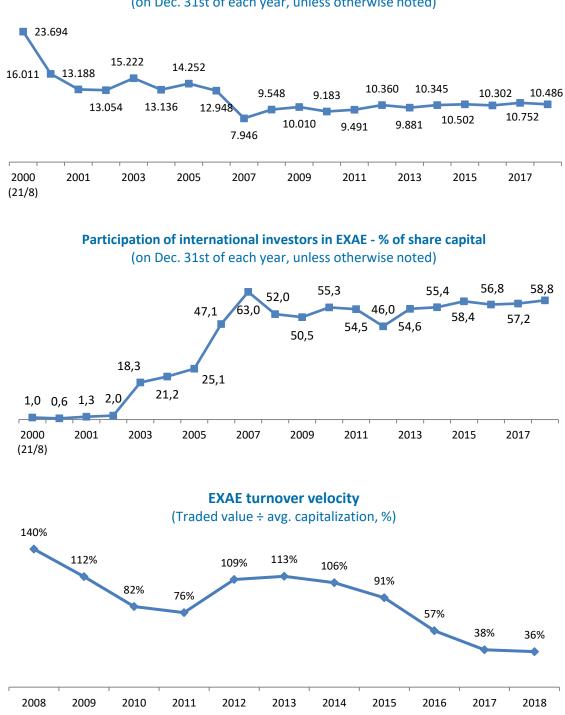
#### Shareholder structure - country of origin (31.12.2018)

Country of origin	Number of shareholders	umber of shareholders Number of shares	
Greece	10.087	24.849.791	41,2%
USA	92	11.169.093	18,5%
Luxembourg	13	10.066.244	16,7%
Cayman Islands	7	4.827.193	4,3%
Ireland	10	2.622.201	4,3%
United Kingdom	36	2.507.049	4,2%
Italy	20	565.442	0,9%
Malta	1	559.090	0,9%
France	6	462.209	0,8%
Singapore	2	425.500	0,7%
Other states	212	2.294.188	3,8%
Total	10.486	60.348.000	100,0%

#### **Shareholder structure - number of shares** (31.12.2018)

	/			
%	Number of shares	Number of shareholders	Number of shares	
0,002%	1.456	279	x ≤ 10	
0,2%	108.593	1.657	10 < x ≤ 100	
4,0%	2.402.381	6.117	100 < x ≤ 1.000	
10,3%	6.231.936	2.086	1.000 < x ≤ 10.000	
12,5%	7.536.402	265	10.000 < x ≤ 100.000	
32,9%	19.875.120	69	100.000 < x ≤ 1.000.000	
40,1%	24.192.112	13	x > 1.000.000	
100,0%	60.348.000	10.486	Total	





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

The turnover velocity of the share has been dropping over the past 6 years, and in 2018 it posted its lowest level (36%) since 2002 (29%).

### Share ownership in the Company

### Significant participations (> 5%) (31.12.2018)

Shareholder	% of the share capital of the Company
FRANKLIN TEMPLETON INSTITUTIONAL LLC (indirect participation - % based on the notification by the shareholder on 9.2.2016)	5.56%
THE LONDON AND AMSTERDAM TRUST COMPANY LTD (direct participation - % based on the notification by the shareholder on 6.12.2013)	5.41%
SCHRODERS PLC (indirect participation - % based on the notification by the shareholder on 19.12.2018)	5.07%

### Board of Directors (31.12.2018)

Shareholder	number of shares (direct holdings)	% of the share capital of the Company
Executive members (2)	17,200	0.029%
Non-executive members (11)	1,150	0,002%

### Group personnel (31.12.2018)

Shareholder	number of shares	% of the share capital of the Company
Senior and middle management of the Group (9)	42,504	0.070%
Other personnel (30)	40,949	0.068%

Analysis covering th	e stock	
Analyst	Company	Email
Nikos Katsenos	Alpha Finance	nikos.katsenos@alphafinance.gr
Panagiotis Kladis	Eurobank Equities	pkladis@eurobankequities.gr
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### Analysts covering the stock



Key Financial Figures of the Group



# 7. Key financial figures of the Group

### **Market performance**

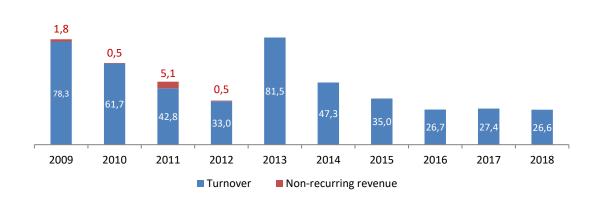


The revenue of the Group is derived to a large extent from the trading, clearing and settlement of stock and derivatives trades, as well as from the fees on corporates actions (rights issues, new listings) by companies.

The expenses of the Group are not variable, as they are not related with the level of production. Approximately 55% of expenses (in 2018) 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 - <u>www.athexgroup.gr/web/guest/re-financial-statements</u>.

Consolidated financial figures since 2004 are presented in <u>Appendix I</u>. The Group began reporting its financial statements based on International Accounting Standards (IAS) in 2005.



**Consolidated Turnover** (€m)

#### 7.1. Profit & Loss Statement – consolidated data

# 7.1.1. Revenue

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.

Fiscal year	Amount (€m)	Description
2009	1.8	Claim on the tax assessed on the Hellenic Capital Market Commission (HCMC) fee for fiscal year 2000.
2010	0.5	Accounting profit from the compensation that the company received for restoring the building and the assets that were damaged and depreciated due to the bomb attack.
2011	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.
2011		€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.

Non-recurring revenue concerns the following items:

#### Revenue 2017 - 2018

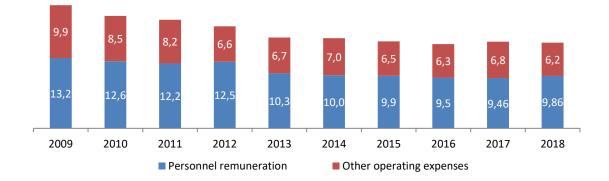
Amounts in € thousand	2018	2017	% of	Δ '18 - '17
	2018	2017	turnover	Δ 10 - 17
Trading	4.299	4.435	16,2%	-3,1%
Clearing	7.914	8.171	29,8%	-3,1%
Settlement	1.378	1.493	5,2%	-7,7%
Exchange services	2.975	3.148	11,2%	-5,5%
Depository services	2.443	2.580	9,2%	-5,3%
Clearinhouse serviecs	126	172	0,5%	-26,7%
Data feed	2.891	3.204	10,9%	-9,8%
IT services	468	309	1,8%	51,5%
Revenue from re-invoiced expenses	1.114	1.133	4,2%	-1,7%
New services (XNET, CP CSE-SIBEX, IT)	2.336	2.170	8,8%	7,6%
Other services	642	597	2,4%	7,5%
Total turnover	26.586	27.412	100,0%	-3,0%
Regulator fee (HCMC)	-1.019	-1.063		-4,1%
Total revenue	25.567	26.349		-3,0%

#### 7.1.2. Expenses

Most of operating expenses of the Group concern personnel remuneration and expenses. In 2018, personnel remuneration and expenses amounted to 61% of operating expenses.

Expenses 2017 - 2018				
Amounts in € thousand	2018	2017 *	% of oper. exp.	Δ '18 - '17
Personnel remuneration & expenses	9.860	9.458	61,2%	4,3%
Third party remuneration & expenses	633	810	3,9%	-21,9%
Utilities	692	671	4,3%	3,1%
Maintenance / IT support	1.386	1.270	8,6%	9,1%
Taxes	1.154	1.200	7,2%	-3,8%
Building / Equipment management	491	514	3,0%	-4,5%
Other operating expenses	1.885	2.374	11,7%	-20,6%
Total operating expenses	16.101	16.297	100,0%	-1, <b>2</b> %
Re-invoiced expenses	962	977		-1,5%
Expenses from ancillary services (XNET, CSE- SIBEX CP, IT)	1.122	1.092		2,7%
Total expenses	18.185	18.366		-1,0%

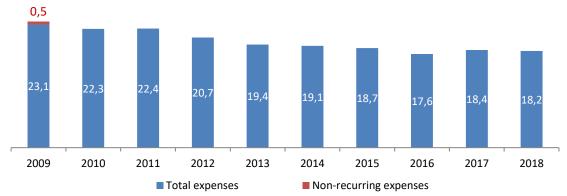
\* 2017 – reclassified figures, as published in the FY2018 Financial Report.



#### **Consolidated operating expenses** (€m)

The operating expenses of the Group were reduced by 30% from 2009 to 2018. In particular, personnel remuneration and expenses were reduced by 25%, while other operating expenses were reduced by 37%.

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



#### **Consolidated total expenses** (€m)

Non-recurring expenses in 2009 concern the amount of  $\notin 0.5m$  in expenses for removing construction debris and the reconstruction following the terrorist act against the headquarters of the Group on Sep.  $2^{nd}$  2009.

The total expenses of the Group were reduced by €4.9m (21%) over the past decade, from €23.1m in 2009 to €18.2m in 2018.

#### 7.1.3. Personnel

From 2009 to 2018 head count dropped by 16%, from 270 to 227 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.

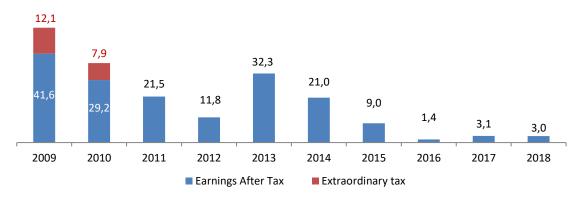


#### 7.1.4. Profitability

The profitability of the Group dropped slightly (-1.6%) in 2018 compared to 2017.

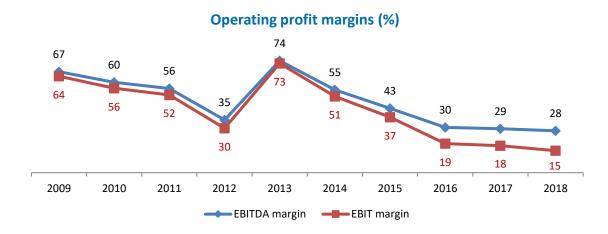
#### Profitability 2017 - 2018

Amounts in € thousand	2018	2017	Δ '18 - '17
Total revenue	25.567	26.349	-3,0%
less total expenses, including ancillary services	-18.185	-18.366	-1,0%
Earnings Before Interest, Taxes, Depreciation & Amortization (EBITDA)	7.382	7.983	-7,5%
Depreciation	-3.504	-3.060	14,5%
Earnings Before Interest and Taxes (EBIT)	3.878	4.923	-21,2%
Capital income	565	321	76,0%
Real estate revaluation loss	-300	0	
Financial expenses	-135	-166	-18,7%
Earnings Before Tax (EBT)	4.008	5.078	-21,1%
Income tax	-981	-2.002	-51,0%
Earnings After Tax (EAT)	3.027	3.076	-1,6%



#### **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.



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

**EBIT:** Earnings Before Interest and Taxes



### 7.2. Cash & cash equivalents

Cash & securities (€m)

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 ( $\leq 4$ m), at the issue price ( $\leq 0.30$  per share) during the rights issue of the Bank in December 2015.

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

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

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

On 31.12.2018 the share price of Piraeus Bank was  $\leq 0.84$ , and the Group posted a valuation loss of  $\leq 1.49$ m.

### 7.3. Alternative Performance Measures (APMs)

#### Background

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

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

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

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

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

The APMs for the Group are presented in summary form below. The detailed presentation and calculation of APMs is included in the 2018 Annual Financial Report.

#### APMs in 2017-2018

€ thousand	2018	2017	
EBITDA	7,382	7,983	-8%
Adjusted EBITDA	7,337	8,551	-14%
	-1%	+7%	

EBITDA:	Earnings	Before	Interest,	Taxes,	Deprecia	tion	and
Amortiza	ition						

€ thousand	2018	2017	
EBIT	3,878	4,923	-21%
Adjusted EBIT	3,833	5,491	-30%
	-1%	+12%	

€	2018	2017	
EPS	0.064	0.042	+52%
Adjusted EPS	0.054	0.060	-10%
	-15%	+43%	

EPS: Earnings per Share

	2018	2017	
Cash flows after investment activities	4,614	10,056	-91%
Adjusted cash flows after investment activities	1,131	10,624	-89%
	+29%	+6%	

**EBIT:** Earnings Before Interest and Taxes

€ thousand	2018	2017	
EBT	4,008	5,078	-21%
Adjusted EBT	4,263	5,646	- <b>2</b> 4%
	+6%	+11%	

 2018
 2017

 ROI
 35%
 38%
 -8%

 Adjusted ROI
 37%
 42%
 -13%

 +37%
 +42%

EBT: Earnings Before Tax

€ thousand	2018	2017	
EAT	3,027	3,076	-2%
Adjusted EAT	3,282	3,644	-10%
	+8%	+18%	

EAT: Earnings After Tax

ROI: Return on Investment

	2018	2017	
ROE	2.70%	2.50%	+8%
Adjusted ROE	2.92%	2.96%	-1%
	+8%	+18%	

**ROE:** Return on Equity

	2018	2017	
Degree of financial self- sufficiency	90%	90%	0%
Adjusted degree of financial self-sufficiency	88%	90%	- <b>2%</b>
	- <b>2</b> %	0%	

In accordance with the financial statements for fiscal year 2018, the items that affect the adjustment of the indices used by the Group in order to calculate APMs are the valuation of the shares of a listed bank that it possesses, the change in the value of its properties due to an assessment, as well as the provisions for bad debts, as detailed in the table below:

### 7.4. Share Capital

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

#### Changes in share capital 2000 - 2018

Date	Number of shares	Share par value change	Share par value	Share capital (€)	Corporate action
Jul 2017	65,368,563	(0.24)	0.84	54,909,592.92	Share capital return to shareholders
Jul 2017	60,599,000		0.84	50,903,160.00	Cancellation of treasury stock (4,769,563 shares)
Aug 2018	60,599,000	(0.15)	0.69	41,813,310.00	Share capital return to shareholders
Aug 201	60,348,000		0.69	41,640,120.00	Cancellation of treasury stock (251,000 shares)

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

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

### Share capital (31.12.2018)

Share par value	€0.69							
Number of shares	60,348,000							
Share capital	Forty one million six hundred forty thousand one hundred twenty euro.							
Share capital	€41,640,120.00							

### 7.5. Pricing policy

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

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

- 1. The fees on the value of the trade are charged to both counterparties (buyer / seller).
- 2. 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

#### 7.6. Taxation

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

Taxes - rates
---------------

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Comment
Corporate income tax rate	25%	25%	25%	24%	20%	20%	26%	26%	26%	29%	29%	29%	
Value Added Tax	19%	19%	19%	21/23%	23%	23%	23%	23%	23%	23/24%	24%	24%	1.4.2005: 18% -> 19% 1.4.2010: 19% -> 21% 1.7.2010: 21% -> 23% 1.6.2016: 23% -> 24%
Withholding tax (dividends)	0%	0%	0%	10%	10%	21%	25%	25%	10%	10%	15%	15%	
Capital gains tax	0%	0%	0%	0%	0%	0%	0%	15%	15%	15%	15%	15%	
Tax on stock sales *					:	20bp (0,2	20%)						1.4.2011: 15 -> 20bp

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

### Hellenic Capital Market Commission fee

	Comment
10% of trading revenue (starting on 30.11.1991)	Art. 1 §§9-14 Decision 54138/B' 2197/9.12.2010
5% of revenue from MTFs (EN.A) (starting on 30.10.2007)	Art. 1 §1 Decision 46794/B' 2156/30.10.2007
7% of revenue from clearing & settlement (starting on 30.11.1991)	Art. 79 Law 1969/1991/A-167
5% of trading revenue (starting on 15.9.2006)	Art. 1 §§1-4 Decision 36730/B' 903/15.9.2006
3.5% of revenue from clearing & settlement (starting on 15.9.2006)	
applicable fee rates are 50% of those for the cash market	
79 59 3.	6 of revenue from clearing & settlement (starting on 30.11.1991) 6 of trading revenue (starting on 15.9.2006) 5% of revenue from clearing & settlement (starting on 15.9.2006)

## 7.7. Auditors

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

		<u> </u>	
Fiscal Year	Year	Auditors	Auditing Company
1 <sup>st</sup>	2000-1	Theodoros Lytsioulis (SOEL Reg. No. 11251) Dimitrios Ziakas (SOEL Reg. No. 10631)	SOL S.A.
2 <sup>nd</sup>	2002	Nikolaos Moustakis (SOEL Reg. No. 13971) Dimitrios Ziakas (SOEL Reg. No. 10631)	SOL Ernst & Young
3 <sup>rd</sup>	2003	Nikolaos Moustakis (SOEL Reg. No. 13971) Dimitrios Ziakas (SOEL Reg. No. 10631)	Ernst & Young SOL S.A.
4 <sup>th</sup> -6 <sup>th</sup>	2004-2006	Nikolaos Moustakis (SOEL Reg. No. 13971) Despina Xenaki (SOEL Reg. No. 14161)	Ernst & Young
7 <sup>th</sup> -10 <sup>th</sup>	2007-2010	Konstantinos Michalatos (SOEL Reg. No. 17701) Dimitrios Sourbis (SOEL Reg. No. 16891)	PriceWaterhouseCoopers (SOEL Reg. No. 113)
11 <sup>th</sup>	2011	Marios Psaltis (SOEL Reg. No. 38081) Despina Marinou (SOEL Reg. No. 17681)	PriceWaterhouseCoopers (SOEL Reg. No. 113)
12 <sup>th</sup> -13 <sup>th</sup>	2012-2013	Panayotis Papazoglou (SOEL Reg. No. 16631) Ioannis Psihountakis (SOEL Reg. No. 20161)	Ernst & Young (SOEL Reg. No. 107)
14 <sup>th</sup> -15 <sup>th</sup>	2014-2015	Panayotis Papazoglou (SOEL Reg. No. 16631) Dimitrios Konstantinou (SOEL Reg. No. 16201)	Ernst & Young (SOEL Reg. No. 107)
16 <sup>th</sup>	2016	Dimitrios Konstantinou (SOEL Reg. No. 16201) Vassilios Kaminaris (SOEL Reg. No. 20411)	Ernst & Young (SOEL Reg. No. 107)
17 <sup>th</sup> -18 <sup>th</sup>	2017-2018	Despina Marinou (SOEL Reg. No. 17681) Fotios Smirnis (SOEL Reg. No.52861)	PriceWaterhouseCoopers (SOEL Reg. No. 113)
19 <sup>th</sup> *	2019		PriceWaterhouseCoopers (SOEL Reg. No. 113)

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

\* Proposed, for approval by the 18<sup>th</sup> Annual General Meeting.



Risk Management



# 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.

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

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

## 8.2. Risk Strategy and Risk Management

In accordance with the strategy of the Group, the risk tolerance level is defined in order to correspond with ATHEXClear's capital adequacy, satisfy the needs of the market, limit costs for participants, maximize the exploitation of business opportunities but also ensure market security and compliance with regulatory requirements.

## 8.3. Organizational structure

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

Continuing the effort of previous years, in 2018 efforts are made to strength the operation of risk management by ATHEXClear, in order to remain aligned with the EMIR Regulation and to follow international good practices.

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

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

## 8.4. Risk categories

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

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

#### **Financial risk**

- Counterparty risk (credit risk from the default of the clearing obligations by one or more clearing member counterparties)
- Market risk (changes in exchange rates, interest rates, market prices, commodities and volatility), mainly as a result of the appearance of counterparty risk
- Credit risk (mainly from the investment of own assets)
- Liquidity risk (mainly cash flows risk), mainly as a result of the appearance of counterparty risk

#### **Operating risk**

Risk due to a lack or failure of internal procedures and systems, by human factor or external events, including legal risk. Risk corresponding to the security of the IT systems, as in the majority of companies, is now becoming very important, and appropriate measures to contain it are being taken.

#### **Business risk**

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

## 8.5. Description of categories and main risk factors

### 8.5.1. Market risk

The Group is exposed to limited market risks in its activities. Potential losses from market risk may arise if there is a clearing member default (counterparty risk), since ATHEXClear is required to transact to cover the portfolios of the defaulted member. In any case, the Group monitors the potential exposure that may lead to market risk and calculates potential funds that it may need to hold against market risk in accordance with the methodology for calculating capital requirements that it applies.

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

### 8.5.2. Counterparty and Credit risk

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

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

ATHEXClear has enacted and is implementing a number of mechanisms and financial assets to cover risk, and is responsible for the smooth operation of the system in general, in conjunction with the scope and scale of trades whose clearing it has undertaken. The mechanisms that ATHEXClear applies are described in the "Regulation of Clearing of Transferable Securities Transactions in Book Entry Form," in the "Regulation on the Clearing of Transactions on Derivatives," as well as the relevant decisions 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 corresponding 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 by at least two (2) groups of clearing members against which ATHEXClear has the greatest loss from the close-out of their positions in each market (cash, derivatives) separately, 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), and are validated on an annual basis by an external, independent specialized consultant.

Besides the counterparty credit risk that ATHEXClear faces, the Group faces credit risk from the investment of its own assets. As part of its Investment Policy, specific principles are defined for investing cash assets. Specifically for ATHEXClear, asset placements are as a rule made at the Bank of Greece, a fact that minimizes its risk exposure.

At the other companies of the Group, short term asset placements not exceeding three months take place at Greek Systemic Banks, in accordance with the Investments Policy set by the Strategic Investments Committee of the ATHEX Group.

The ratings of the Greek Systemic Banks by an International Rating Agency are shown below:

				STAI	NDARD & POO	R'S	
			Outlook	Long Term Local Issuer Credit	Short Term Local Issuer Credit	Long Term Foreign Issuer Credit	Short Term Foreign Issuer Credit
ALPHA BANK AE	ALPHA GA Equity	GR	STABLE	B-	В	B-	В
EUROBANK ERGASIAS SA	EUROB GA Equity	GR	STABLE	В-	В	B-	В
NATIONAL BANK OF GREECE	ETE GA Equity	GR	STABLE	B-	В	B-	В
PIRAEUS BANK S.A	TPEIR GA Equity	GR	STABLE	B-	В	B-	В
BANK OF GREECE	TELL GA Equity	GR	#N/A	NR	NR	NR	NR
HSBC BANK PLC	MID LN Equity	GB	STABLE	A	A-1	A	A-1

### BANK RATING VALUES

Out of total cash and cash equivalents of the Group amounting to €74.6m, approximately €45m is deposited in Greek systemic banks, and the remaining approximately €29.6m at the Bank of Greece.

### 8.5.3. Liquidity risk

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

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

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

ATHEXClear's liquidity is monitored based on the criteria imposed by EMIR. On a daily basis, and under extreme but possible market scenaria, 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.

### 8.5.4. 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, risks from IT systems, information security and project implementation.

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

In 2018 there were no cases of interruptions in clearing, settlement and registration at the Group due to failure or unavailability of the IT systems or to human error. Two – limited in duration – cases of trading systems non-availability were recorded due to technical problems, which were subsequently identified and fixed. There were no major damages or monetary demands due to litigation (legal and court expenses) or due to non-compliance with the supervisory framework and the contractual obligations of the Group. In addition no losses due to external events were faced.

#### Measures to reduce operating risk

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

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

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

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

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

#### **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 to 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). There are also insurance contracts covering fire and other risk for the buildings and the work and accounting equipment of the Group.

#### **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. The main responsibilities of the unit are to:

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

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

### 8.5.5. Business risk

The Group recognizes that it depends on macroeconomic developments and is affected by external factors such as changes in the competitive capital markets environment, changes in the international and domestic economic environment, legal and regulatory developments, changes in taxation policy and in technology etc. Such events may impact the growth and sustainability of the Group, causing a reduction in trading activity, a drop in expected profits, inability to liquidate and / or asset impairment etc.

In this context, 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.

The Group is in the process of reviewing the framework for evaluating, categorizing and managing business risk by utilizing the existing model and the relevant experience at ATHEXClear.



For more Information



# 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 <u>market</u> . ATHEX Company Profile A summary description of our <u>Group</u> .	http://www.athexgroup.gr/ir
Group pricing policy - Decision 24 - post-trading fee table - Summary version	http://www.athexgroup.gr/helex-price-policy
<b>A{IA Securities - Derivatives</b> Monthly publication containing data on investor activity in the cash and derivatives markets respectively.	http://www.athexgroup.gr/el/web/guest/info-markets-activity- publications-axianumbers-sec

### **External links**

Hellenic Capital Market Commission	http://www.hcmc.gr	The site of the regulator.
European Securities and Markets Authority (ESMA)	https://www.esma.europa.eu	The site of the European regulator.
Association of National Numbering Agencies (ANNA)	http://www.anna-web.org	
European Association of CCP Clearing Houses (EACH)	http://www.eachccp.eu	
European Central Securities Depositories Association (ECSDA)	http://ecsda.eu	
Federation of European Securities Exchanges (FESE)	http://www.fese.eu	The site contains useful statistics on most major European Exchanges, updated monthly.
Software & Information Industry Association (SIIA)	http://www.siia.net	
Financial Information Services Association of SIIA (FISD)	http://www.siia.net/Divisions/FISD- Financial-Information-Services- Association	
World Federation of Exchanges (WFE)	www.world-exchanges.org	The site contains useful statistics, updated monthly.





## 10. About us

The Company follows commercial, organizational and operational practices in accordance with the rules, laws and regulations, as dictated by national and European regulatory authorities, and ensures that it receives all relevant permits for its products, services and operations.

In the framework of its sustainable development, by monitoring all developments in the European and international market, the Company ensures that the services it provides meet the current needs of investors and all participants in the business sector that it is active in.

The Company has a zero tolerance policy in matters of fraud, corruption and market abuse, applies appropriate measures to monitor, prevent and deal with such incidents in all its activities.

We support as an active member the efforts of the Greek network for Corporate Social Responsibility which aims to promote Corporate Responsibility both to the business world and to society as a whole and to strike a balance between generating profits and sustainable development.

## **Employees and society**

We promote and support a program providing information educating high school and university students, as well as market professionals, in order to improve knowledge about capital markets. As part of this effort, the Company systematically participates in internship programs for university students.

The Company ensures that there is a safe work environment in accordance with national and European laws and regulations and also ensures that personnel health, safety and welfare issues are effectively managed. In this context, the Company facilitates and encourages in every possible way access to its premises for employees and visitors with disabilities.

The Company offers a work environment of equal opportunities to all staff, respecting the rights deriving from the legislation. In addition, the Company takes care of employees' work issues and continuously invests in their professional education and development.

In order to create a work environment and conditions that help optimize employee productivity and by extension the sustainability of the Company, the Company encourages the exchange of ideas, opinions and information among employees, protects their personal and sensitive data, does not tolerate and takes the necessary measures to identify and deal with malicious or abusive intimidating conduct and harassment.

We try to alleviate poverty by assisting the work of volunteer organizations that support our fellow human beings.

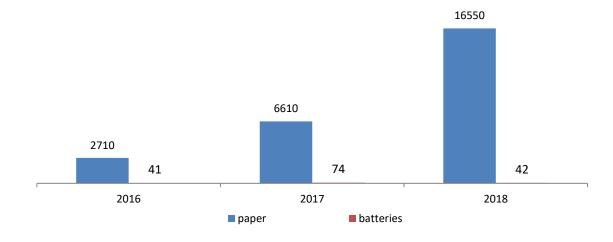
Indicative indices in 2018	Group
Employees	
Number of employees (year-end)	227
% of employees with full time employment	100%
Average age of the full time employees	46 years
Women employees (% of total)	39%
Women employees in senior management positions (%)	15%
Voluntary turnover (%)	6.7%
Involuntary turnover (%)	0%
Health - insurance	
Days of absence due to illness per employee	3.7
Average cost of health insurance per employee	€1,670
Average contribution to private pension fund per employee	€604
Education – internships	
Education – training (hours per employee)	30
Funds available for training per employee	€625
Number of students that did their internships	30

## Environment

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

Indicative indices in 2018		Group
Environment		
Electricity consumption (m KWh)	(1)	4.48
Electricity consumption		96%
(% of total energy consumption)	(1)	5078
Electricity from renewable energy sources (% of total)	(1)	0%
Scope 1 emissions (tonnes of CO <sub>2</sub> equivalent)	(1)	180,5
Scope 2 emissions (tonnes of CO <sub>2</sub> equivalent)	(1)	4.211,2
Recycled paper / batteries (kg)		16,550
Recycled paper / batteries (kg)		42

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



We recycled (kg)...

## Recycling





# Personnel profile

Company	Personnel 31.12.18
Hellenic Exchanges – Athens Stock Exchange SA (ATHEX)	113
Athens Exchange Clearing House S.A. (ATHEXClear)	26
Hellenic Central Securities Depository S.A. (ATHEXCSD)	88
Total	227

Organizational Unit	Personnel 31.12.18
Internal Audit Division	4
Office of the Chief Executive Officer (CEO)	3
Information Security & Organizational Management Unit	26
Issuer Support Division	20
Group Compliance Unit	2
BoD Support & Corporate Governance Unit	1
Office of the Chief Operating Officer (COO)	3
IT Development Division	30
Risk Management & Clearing Division	16
Infrastructure Management & IT Support Division	36
Information Security Unit	4
Office of the Chief Business Development Officer (CBDO)	3
Central Registry Division	23
Market Operation & Development Division	26
Members & Network Management Unit	11
Regulatory & International Affairs Unit	2
Office of the Chief Financial Officer (CFO)	2
Financial Management Division	12
Information Security & Organizational Management Unit	3
Total	227

Education level	Personnel 31.12.18
Doctorate	5
Postgraduate degree	76
University degree	74
High School diploma	11
Junior High School diploma	38
Post high-school education	23
Total	227

## **Blood Drives**

Blood drives organized	2
Personnel Participation / vials	95
Incidents covered	5

## Internships

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

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

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

In 2018 **33 individuals** in total (27 university, 3 technical institute and 3 high school students) obtained work experience in various departments of the Group.

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

The Athens Exchange Group, being interested in educating the public on the operation of the exchange and capital markets, welcomes educational visits. In 2018 30 visits from High Schools, and Universities were hosted, including 1 visit from an educational institution from abroad.



For more information: www.athexgroup.gr/web/guest/education-visits

Appendixes



# **Appendix I – Financial data for the Athens Exchange Group 2004-2018**

## Revenue 2004 – 2018 (consolidated)

	2018	2017	<b>2016</b>	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Trading	4.299	4.435	4.460	5.691	9.336	6.699	4.952	7.649	12.844	18.544	28.523	40.263	42.446		
Stocks	3.690	3.850	3.964	4.862	8.060	5.446	3.660	5.608	10.344						
Derivatives	590	573	495	826	1.274	1.251	1.290	2.034	2.484						
Clearing	7.914	8.171	8.288	11.078	17.563	13.597	10.027	14.875	23.269	28.957	42.843	63.384	45.555		
Stocks	5.443	5.775	6.040	7.501	12.620	8.251	4.868	7.721	16.621						
Derivatives	1.405	1.340	1.157	1.935	2.974	2.921	3.010	4.754	5.791						
Settlement	1.378	1.493	1.415	1.587	1.964	14.108	767	1.221	1.718	2.003	6.452	5.994	3.736		
Exchange services	2.975	3.148	3.118	6.026	6.924	34.654	4.844	7.137	9.080	10.622	10.791	29.697	11.416		
Rights issues	330	194	441	3.208	2.363	30.694	1.669	2.873	4.092						
Listed company subscriptions	2.007	2.107	1.980	2.077	2.737	2.534	2.040	2.820	3.631						
Depository services	2.443	2.580	2.077	3.211	3.792	4.629	2.851	4.051	6.026	6.885	8.007	11.719	4.844		
Clearinghouse services	126	172	166	168	296	333	357	560	660	846	1.422	1.497	1.058		
Market data	2.891	3.204	3.266	3.206	3.627	3.766	3.940	4.256	4.142	4.400	3.986	3.891	3.463		
IT services	468	309	320	313	309	332	932	1.032	1.185	2.900	2.956	1.195	2.498		
Revenue from re-invoiced expenses	1.114	1.133	915	840	1.014	1.324	1.454	1.101	916						
New services (XNET, CSE-Sibex Common Platf., IT)	2.336	2.170	2.008	1.919	1.658	1.604	2.136	479	432						
Other services	642	597	673	996	805	420	782	451	1.386	3.184	3.387	3.594	3.236		
Turnover	26.586	27.412	26.706	35.035	47.288	81.466	33.042	42.812	61.658	78.341	108.367	161.234	118.252	73.830	60.864
Hellenic Capital Market Commission fee	-1.019	-1.063	-1.088	-1.356	-2.155	-1.576	-1.076	-1.638	-2.691	-3.685	-5.727	-8.105	-7.058	-4.175	-2.973
Other revenue							453	5.107	477	1.775	6.999	248			
Total Revenue	25.567	26.349	25.618	33.679	45.133	79.890	31.966	41.174	58.967	74.656	102.640	153.129	111.194	69.655	57.891
Top-5 turnover drivers	20.522	21.538	21.209	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)	9.133	9.625	10.004	12.363	20.680	13.697	8.528	13.329	26.965						
Revenue from derivatives (trading & clearing)	1.995	1.913	1.652	2.761	4.248	4.172	4.300	6.788	8.275						

# Expenses 2004 – 2018 (consolidated)

	2018	2017	<b>2016</b>	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
Personnel remuneration & expenses	9.860	9.458	9.543	9.869	9.958	10.328	12.532	12.201	12.603	13.215	14.686	15.493	14.805	15.649	17.589
Remuneration	6.631	6.695	6.619	6.954	6.973	7.159	8.332	8.768	9.356	9.914	10.635	11.209	11.093	11.118	13.265
Social security	1.647	1.570	1.560	1.620	1.673	1.965	1.974	2.068	2.090	2.160	2.215	2.317	2.316	2.412	2.547
Termination benefits	544	303	317	337	159	228	1.428	230	456	116	580	441	732	1.581	752
Other benefits	1.038	890	1.047	958	1.153	842	900	969	994	1.004	950	788	665	538	1.025
Third party remuneration & expenses	633	810	588	714	692	589	510	656	1.014	1.536	1.754	1.767	2.686	2.467	2.796
Utilities	692	671	747	877	875	891	787	791	815	1.783	1.894	1.580	1.265	1.289	1.466
Maintenance / IT support	1.386	1.270	1.148	1.191	1.497	1.524	1.343	1.750	1.753	1.795	1.898	2.514	2.546	2.592	2.877
Other taxes - VAT	1.154	1.200	1.079	1.557	1.629	985	1.166	1.321	1.138	1.175	1.149	1.319	1.371	1.212	1.755
Building / equipment management	491	514	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		
Operating expenses	1.885	2.374	1.106	388	452	413	378	510	559						
Bank of Greece - cash settlement			61	62	58	62	113	315	380						
Other expenses				139	136	478	621	1.042	1.034	1.795	2.932	2.856	2.506	3.066	4.863
Total operating expenses (OPEX)	14.216	13.923	15.831	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	962	977	866	925	1.021	1.118	944	1.579	1.163						
Expenses for new activities (XNET, CSE-Sibex CP, IT)	1.122	1.092	901	1.098	755	592	599	408	61						
Provisions (bad debts, extraordinary risk et al.)			824	365	400	607						810			
Total OPEX	16.300	15.992	18.422	18.721	19.129	19.389	20.702	22.384	22.339	23.657	26.327	34.519	27.334	28.065	33.809
OPEX excluding personnel	4.356	4.465	6.288	6.464	6.995	6.744	6.627	8.196	8.512	9.933	11.641	12.478	12.529	12.416	16.220
Head count (end of the year)	227	221	224	230	236	229	231	263	265	270	276	326	326	385	417
Avg. employee expenses (€)	44.018	42.508	42.040	42.356	42.830	44.904	50.737	46.216	47.114	48.407	48.791	47.525	41.646	39.025	40.066
Avg. employee expenses (excl. termination benefits, €)	41.589	41.146	40.643	40.910	42.146	43.913	44.955	45.345	45.409	47.982	46.864	46.172	39.586	35.082	38.353
Average remuneration (€)	29.600	30.100	29.200	29.800	30.000	31.100	33.700	33.200	35.000	36.300	35.300	34.400	31.200	27.700	30.200

## Profitability 2004 – 2018 (consolidated)

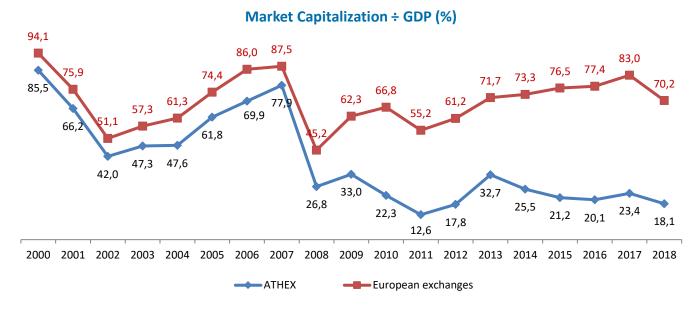
	2018	2017	<b>2016</b>	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004
EBITDA	7.382	7.983	8.020	14.958	25.758	60.501	11.717	23.897	37.105	52.774	83.312	118.858	83.860	41.590	24.082
Depreciation	-3.504	-3.060	-2.881	-2.073	-1.800	-1.420	-1.802	-1.808	-2.448	-2.573	-2.670	-1.941	-2.128	-2.951	-4.082
EBIT	3.878	4.923	5.139	12.885	23.958	59.081	9.915	22.089	34.657	50.201	80.642	116.917	81.732	38.639	20.000
Capital income	565	321	577	1.554	3.703	4.532	5.591	5.888	4.456	4.931	8.786	6.778	5.447	5.268	5.720
Dividend income															1.753
Real estate asset revaluation				-399											
Provisions against other risk				-300	-246		-800								
Profits / (losses) from securities (bonds / stocks)			-2.219	-207		-501	450	-1.988			-478	-396	-254	-532	19.429
Financial expenses	-135	-166	-131	-83	-8	-10	-12	-12	-9	-10	-18	-12	-865		
EBT	4.008	5.078	3.366	13.450	27.407	63.102	15.144	25.977	39.104	55.122	88.932	123.287	86.060	43.375	46.902
Income tax	-981	-2.002	-1.937	-4.412	-6.640	-17.730	-3.225	-4.451	-9.895	-13.531	-23.918	-32.261	-27.976	-16.257	-13.289
Tax on tax-free reserves (Law 4172/2013)						-13.088									
Extraordinary tax (Laws 3808/2009 & 3845/2010)									-7.932	-12.088					
Minority Interest														-17	-15
After tax profits	3.027	3.076	1.429	9.038	20.767	32.284	11.919	21.526	21.277	29.503	65.014	91.026	58.084	27.101	33.598
Effective consolidated income tax rate (%)	24,5%	39,4%	57,5%	32,8%	24,2%	28,1%	21,3%	17,1%	25,3%	24,5%	26,9%	26,2%	32,5%	37,5%	28,3%
Nominal corporate income tax rate (%)	29,0%	29,0%	29,0%	29,0%	26,0%	26,0%	20,0%	20,0%	24,0%	25,0%	25,0%	25,0%	29,0%	32,0%	35,0%

#### 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 2006-2009 period figures are presented based on the new reporting lines. For 2004-2005 no such breakdown is available.
- 3. In some years, reclassification of revenue / expenses items has taken place, without affecting the bottom line (profitability). In those cases the reclassified figures are presented.

## **Consolidated Statement of Financial Position 2004 – 2018**

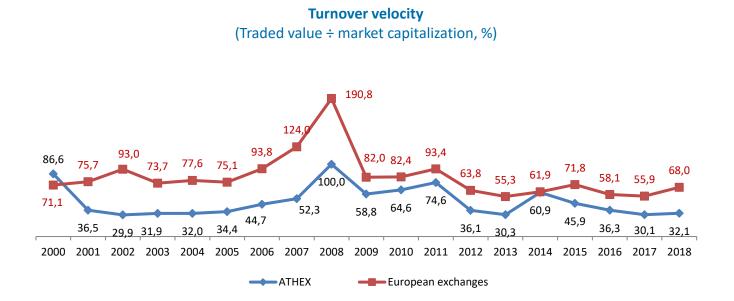
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	
Non-current assets	35.533	33.701	32.194	32.914	34.571	33.060	32.659	35.001	35.660	40.488	42.948	53.310	43.618	45.046	48.957	
Tangible assets for own use	23.551	21.465	22.707	23.122	23.271	24.320	24.745	26.124	26.969	27.851	30.294	32.080	39.582	41.101	44.049	
Intangible assets	6.549	6.084	5.440	5.209	3.805	2.163	455	9	51	176	290	431	126	225	462	
Real estate investments	2.287	2.791	2.996	3.200	4.494	4.697	4.902	5.158	5.415	-	-	-	-	-	-	
Fin. assets at fair value through comprehensive income	561	2.052	-	-	-	-	-	-	-	-	-	-	-	-	-	
Non-current assets available for sale	-	-	-	-	-	-	-	-	-	5.673	5.930	16.402	0	0	0	
Investments in subsidiaries & other long term receivables	1.118	68	68	68	72	72	674	1.474	1.476	4.841	4.475	3.081	3.082	2.092	2.137	
Deferred tax asset	1.467	1.241	983	1.315	2.929	1.808	1.883	2.236	1.749	1.947	1.959	1.316	828	1.628	2.309	
Current assets	240.539	256.698	327.426	611.933	568.905	184.672	131.527	130.727	135.986	141.617	141.916	187.957	165.220	189.915	317.286	
Trade receivables	3.118	3.850	5.117	6.520	6.591	7.713	6.303	5.205	5.560	7.010	6.134	5.652	3.235	2.774	3.933	
Other receivables	9.081	9.231	10.107	12.931	10.593	11.578	8.996	5.878	6.083	9.235	3.649	4.709	7.640	7.467	5.481	
Income tax receivable	374	168	3.312	3.715	1.677	0	0	1.005	0	0	0	0	0	0	0	
Financial assets available for sale	-	-	2.793	3.716	3.383	2.540	1.740	6.470	9.670	10.060	10.200	17.886	34.242	0	30.087	
Third party balances in Group bank account	153.358	157.598	206.080	447.816	395.110	0	0	0	0	0	0	0	0	0	0	
Cash & cash equivalents	74.608	85.851	100.017	137.235	151.551	162.841	114.488	112.169	114.673	115.312	121.933	159.710	120.103	179.674	277.785	
Total assets	276.072	290.399	359.620	644.847	603.476	217.732	164.186	165.728	171.646	182.105	184.864	241.267	208.838	234.961	366.243	
Equity	110.738	118.994	140.692	177.900	189.208	180.763	152.531	152.667	148.666	150.568	160.389	189.170	154.539	202.187	332.789	
Share capital	41.640	50.903	70.598	84.979	48.373	49.680	51.641	56.870	63.408	71.906	88.107	88.107	122.975	210.691	358.995	
Treasury stock	0	-1.162	-18.634	0	0	0	0	0	0	0	-40.637	0	0	0	-4.711	
Share premium	157	157	157	157	43.954	94.334	94.279	94.279	94.279	94.279	94.279	94.279	91.874	91.751	92.130	
Reserves	50.201	51.819	70.119	62.584	61.598	129.523	81.971	81.449	81.162	79.398	109.065	64.758	51.255	51.401	53.990	
Retained earnings	18.740	17.277	18.452	30.180	35.283	-92.774	-75.365	-79.936	-90.188	-95.020	-90.138	-57.687	-111.278	-151.942	-167.899	
Goodwill	-	-	-	-	-	-	-	-	-	-	-292	-292	-292	0	0	
Non-controlling participations	0	0	0	0	0	0	5	5	5	5	5	5	5	286	284	
Non-current liabilities	4.687	5.168	5.134	5.111	6.739	5.993	5.131	5.971	6.563	3.518	3.740	7.116	6.766	7.703	8.855	
Grants and other long-term liabilities	50	50	63	87	111	134	160	478	502	526	550	569	589	571	641	
Staff retirement obligations	1.794	2.190	2.000	1.791	1.965	1.443	1.480	1.582	1.415	1.708	1.691	1.716	1.543	1.699	2.251	
Other provisions	1.360	1.360	1.360	1.360	1.060	813	719	719	1.454	1.284	1.499	4.831	4.634	5.433	5.963	
Deferred tax liability	1.483	1.568	1.711	1.873	3.603	3.603	2.772	3.192	3.192	-	-	-	-	-	-	
Current liabilities	160.647	166.237	213.794	461.836	407.529	30.976	6.524	7.090	16.417	28.019	20.735	44.981	47.533	25.071	24.599	
Trade and other payables	6.305	7.697	6.805	13.245	9.213	10.197	5.612	6.620	7.707	13.938	12.629	26.028	30.933	14.066	5.432	
Third party balances in Group bank account	153.358	157.598	206.080	447.816	395.110	0	0	0	0	0	0	0	0	0	0	
Income tax payable	0	0	0	0	2.531	20.171	492	0	8.248	10.422	4.455	14.976	16.149	10.348	18.552	
Social security	984	942	909	775	675	608	420	470	462	467	459	489	451	657	615	
Deferred tax liability	-	-	-	-	-	-	-	-	-	3.192	3.192	3.488	0	0	0	
Total liabilities	165.334	171.405	218.928	466.947	414.268	36.969	11.655	13.061	22.980	31.537	24.475	52.097	54.299	32.774	33.454	
Total Equity & Liabilities	276.072	290.399	359.620	644.847	603.476	217.732	164.186	165.728	171.646	182.105	184.864	241.267	208.838	234.961	366.243	
Total equity (excluding third party balances)	122.714	132.801	153.540	197.031	208.366	217.732	164.186	165.728	171.646	182.105	184.864	241.267	208.838	234.961	366.243	
Amounts in € thousand, data as of 31.12 of each year						Recognition of third party balances in the Statement of Financial Position began on 31.12.2014										

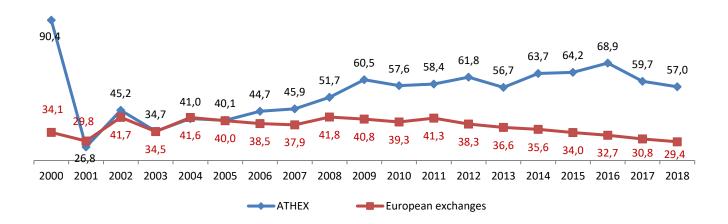


# **Appendix II – Market statistics**

**GDP:** Gross Domestic Product

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





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



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