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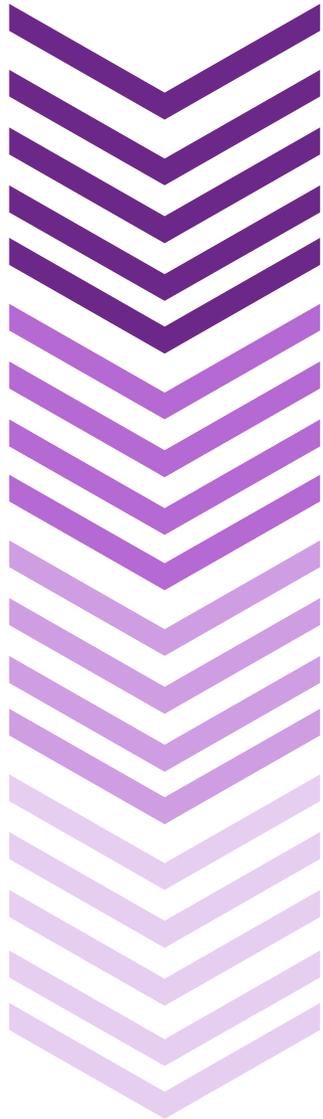


## Section 1:

# Introduction to Funding

# Funding Valuation Process

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Establish objectives (*including funding target and principles*)

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Financial assumptions

---

Longevity assumptions

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Other assumptions

---

Propose assumptions to employer

---

Gather membership data and perform valuation

---

Present [proposed assumptions and] results to employer

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Discuss results

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Propose contributions and alternative financing strategies

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Discussions / negotiation with employer to reach agreement

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Formalise paperwork (*statement of funding principles, valuation report, recovery plan and schedule of contributions*)

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## Section 2: Principles of Funding

# Principles of Funding

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- Summary of main pension terms as introduced by **Law 208(I)/2012** and relevant **European Directives**:

## Technical Provisions

The target level of assets that the Trustees following consultation with the Employer decide is appropriate to meet promised benefits.

## Funding Objective

To hold sufficient and appropriate assets to meet the **Technical Provisions**.

## Funding Principles

A set of principles for meeting the **Funding Objective**.

## Recovery Plan

A document summarising a plan of action for correcting a **shortfall** over an agreed period.

## Schedule of Contributions

A schedule setting out what contributions are payable, and when.



## Section 3:

# Membership Data / Plan Assets / Cashflows

## Membership Data

- Collection of raw data was carried out under the responsibility of the employer, by its administrative staff.
- The personal data of insured individuals were delivered to Aon Hewitt in electronic form.
- The individual data was received as at **31 December 2015**.
- All figures are in denominated **EUR**.

Data Item	31/12/2015	31/12/2014
<b>Number of active employees</b>	<b>1.649</b>	<b>1.657</b>
- Average monthly pay	€ 3.042	€ 3.043
- Average Age (years)	45,9	44,9
- Average Pensionable Service (years)	21,0	20,0
<b>Number of pensioners</b>	<b>1.516</b>	<b>1.378</b>
- Average monthly pension	€ 1.842	€ 1.856
- Average Age (years)	68,2	68,7
<b>Number of deferred members</b>	<b>147</b>	<b>278</b>
- Average monthly pension	€ 1.466	€ 1.606
- Average Age (years)	52,7	54,0
<b>Number of widows / orphans</b>	<b>280</b>	<b>273</b>
- Average annual pension	€ 1.131	€ 1.131
- Average Age (years)	75,1	74,7

## Plan Assets / FY2014 Cashflows

- The Company provided details of the Fund Assets as at **31 December 2015**.
- CYTA has also informed us of the cashflows which occurred during **FY2015**.
- All figures are in denominated **EUR**.

Year ending	31/12/2015	31/12/2014
Market Value of Assets	565.825.426	573.903.056

Cashflow	01/01/15-31/12/2015
Company Contributions	25.037.043*
Pension and Lump Sum benefits	32.446.117
Employee Contributions	2.969.039

*\* Includes deficit contributions of EUR17m payable during FY2015.*

- Given the market value of the Pension Plan Assets at 31/12/2014, and the above cash flows for the period 01/01/2015 – 31/12/2015, the average return achieved during the period was about **-0,6%**.



## Section 4:

# Valuation Method & Assumptions

# Assumptions

- The table below summarises the assumptions adopted as at 31 December 2015.

Assumptions	31/12/2015	31/12/2014
Discount Rate	2,55% (1,3% + 1,25%)	2,45% (1,2% + 1,25%)
Inflation Rate	2,00%	2,00%
Salary Increases	2016-2017: 0,00% 2018: 1,00% 2019: 1,50% 2020: 2,00% 2021+: 2,50%	2015-2017: 0,00% 2018: 1,00% 2019: 1,50% 2020: 2,00% 2021+: 2,50%
Pension Increases	2016-2017: 0,00% 2018-2020: 1,00% 2021+: 1,50%	2015-2017: 0,00% 2018-2020: 1,00% 2021+: 1,50%
SIS Supplementary Pension Increases	2016: 0,00% 2017+: 1,00%	2015-2016: 0,00% 2017+: 1,00%
Increase on MIE Limit	3,00%	3,00%
Mortality	92% of EVK2000	96% of EVK2000
Normal Retirement	Age 65 (as per Law 216(I)/2012)	Age 65 (as per Law 216(I)/2012)
Other pre-retirement exits	None	None

## Valuation Methodology – Attained Age Method

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- Different methods affect the **pace of funding**, but every method should end up with sufficient assets to meet the liabilities as they fall due (provided the assumptions prove to be right and recommended contributions are paid).
- For schemes **closed to new entrants**, the **Attained Age method** can be used as it calculates the cost of the benefits expected to accrue to members over their expected remaining membership of the scheme expressed as a percentage of their expected pensionable pay. It also allows for projected future increases in pay through to retirement or date of leaving service. The method is based on the current membership and takes no account of the possibility of new members joining the scheme. It is therefore used mainly for closed schemes where no new members are admitted as in these circumstances the **required contribution rate is reasonably stable**.
- The method used for this valuation is the **Attained Age method**.



## Section 5:

# Funding Valuation Results

## Results – Past Service Position as at 31 December 2015

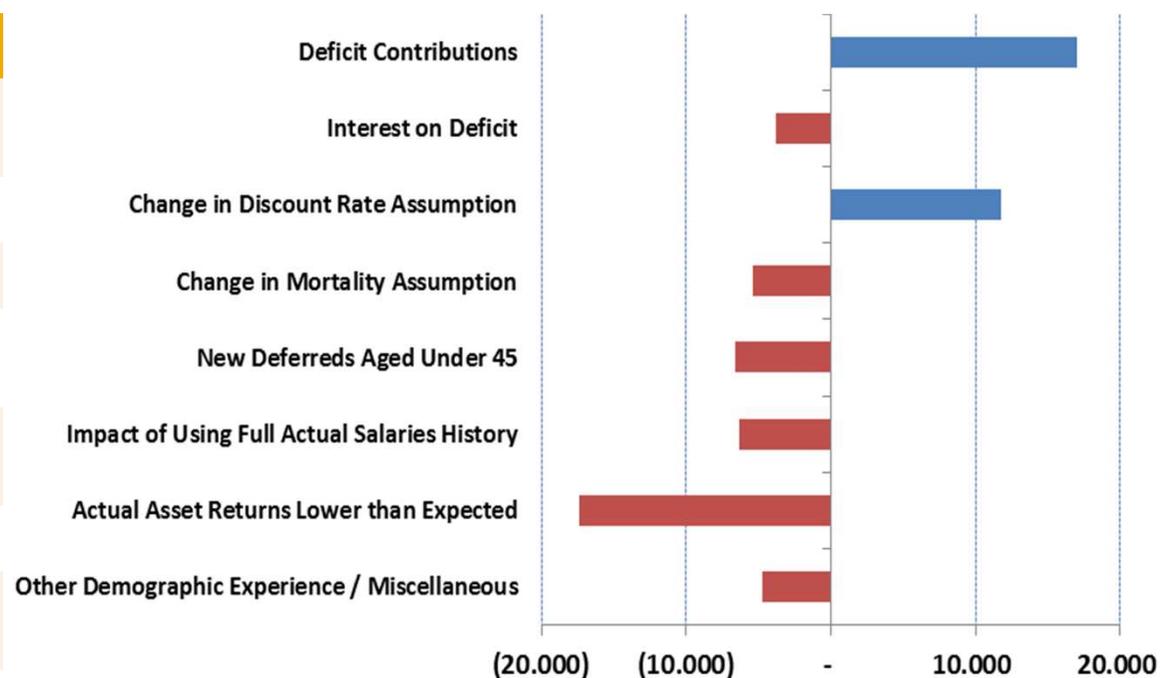
- The funding objective is to hold assets **equal** to the funding target. Therefore, we compare the market value of assets with the value of past-service ongoing liabilities.
- The table below summarizes the **past-service results**, under the chosen assumptions and methodology.
- All amounts in €.

<b>Technical Provisions</b>	<b>31/12/2015</b>
Actives	(224.067.068)
Deferreds	(44.855.308)
Pensioners	(446.977.427)
Widows / Orphans	(26.040.100)
<b>Total Funding Target / Technical Provisions</b>	<b>(741.939.903)</b>
<b>Market Value of Assets</b>	<b>565.825.426</b>
<b>Funding Surplus / (Deficit)</b>	<b>(176.114.477)</b>
<b>Funding Level</b>	<b>76,3%</b>

## Analysis of Deficit

- As at the previous funding valuation (i.e. 31/12/2014), the Fund had a past-service deficit of about **€160.500.009**.
- The past-service position has therefore worsened by **€15.614.917**.
- The table below summarises the main elements that contribute to this.

Surplus/(Deficit), € 000s	31/12/14 – 31/12/15
Surplus / (Deficit) at 31/12/2014	(160.500)
Deficit Contributions	17.000
Interest on Deficit	(3.820)
Change in Discount Rate Assumption	11.775
Change in Mortality Assumption	(5.383)
New Deferreds Aged Under 45	(6.641)
Impact of Using Full Actual Salaries History	(6.353)
Actual Asset Returns Lower than Expected	(17.436)
Other Demographic Experience / Miscellaneous	(4.756)
<b>Surplus / (Deficit) at 31/12/2015</b>	<b>(176.114)</b>



## Results – Future Service Position as at 31 December 2015

- The concept of the **Standard Contribution Rate (SCR)** is explained in detail below:
  - The SCR is the cost of benefits expected to accrue to existing members after the valuation date, expressed as a % of expected payroll.
  - In particular, for the purposes of this exercise, the SCR is expressed as a % of pensionable salary (i.e. basic pay plus COLA, excluding 13th salary).
  - The SCR ignores any past-service surplus or deficit.
  - If experience is as assumed, the above contribution rate is expected to be sufficient to finance the future service benefits.
- The table below summarizes the **future-service results**, under the chosen assumptions and methodology.

<b>Contribution Rates</b>	<b>31/12/2015</b>
<b>Standard Contribution Rate (SCR) *</b>	<b>18,4%</b>
Employees' Contribution Rate	-5,0%
<b>Employer's Contribution Rate</b>	<b>13,4%</b>
<b><i>Estimated Employer's Contribution (FY2015)</i></b>	<b>€8,1M</b>

\* *The disclosed contribution rate ignores any past-service surplus or deficit.*



# Section 6: Recovery Plan

# Introduction

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- Where a valuation shows a **funding shortfall** against the **technical provisions**, trustees must prepare a **recovery plan** setting out how they plan to meet the **funding objective**.
- A recovery plan must be prepared by the trustees to satisfy the requirements of **Article 34 of Law 208(I) 2012**, after obtaining the advice of the Scheme Actuary and after consultation with the Employer.
- The recovery plan follows the actuarial valuation of the scheme as at 31 December 2015 which has revealed a funding shortfall (technical provisions minus value of assets) of **€176.114.477**.
- To **eliminate the funding shortfall**, the trustees and the Employer need to agree the **level** and **type** of additional contributions (i.e. contributions over and above those needed to cover benefits being earned in the future) that will be paid into the Scheme.
- The trustees together with the Employer also need to agree the **period** over which the funding objective should be met. Under the agreed recovery plan, if the assumptions made are borne out in practice and future scheme experience is as expected, then the funding shortfall must be eliminated within the chosen period.

## Recovery Plan Options

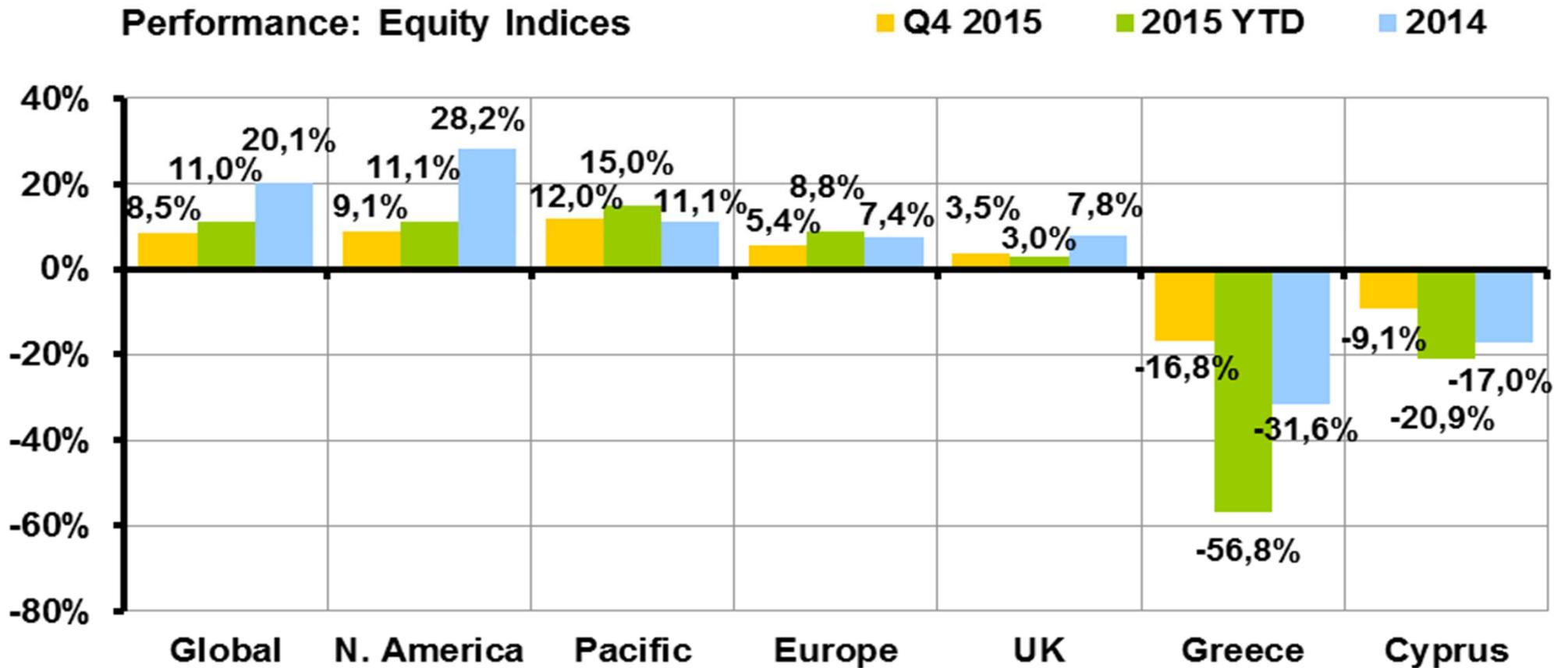
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- On the basis of our long-term assumptions there was, at the valuation date, a **funding deficit** of **€176.114.477**.
- According to global practice, it is very common for pension schemes (similar to that of CYTA) to consider the **best estimate** asset returns for the purposes of drafting the recovery plan.
- As at 31/12/2015, the Scheme's assets have an expected return of **4,40% p.a.** over the next 3 years.
- In determining the optimal recovery plan, it is very important for the Employer and the trustees to consider the issue of **affordability upfront**. Trustees should recognize that a **longer recovery plan period** may be appropriate where technical provisions reflect a particularly **low risk / prudent** approach. Recovery periods can be **extended** especially if **additional security** provided.
- The trustees together with the Employer have decided to finance the past service deficit over a **11 year** period, assuming a return on assets, for future deficit contributions only of **4,40% pa**.
- This leads to an annual deficit contribution of **EUR 17,0 million pa**.



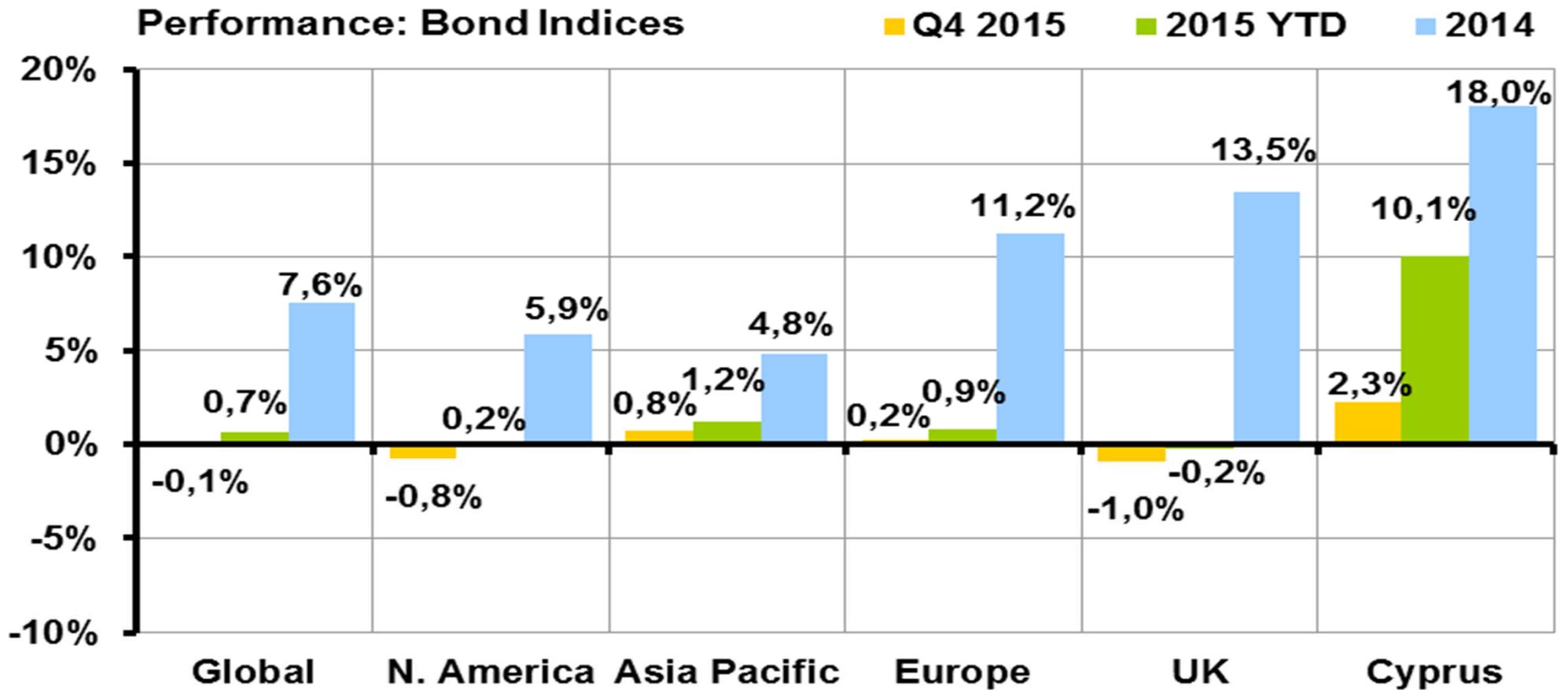
# Investment update

# Ανασκόπηση αγορών για έτος 2015 – Μετοχές



\* Αποδόσεις σε Ευρώ

## Ανασκόπηση αγορών για έτος 2015 – Ομόλογα



\* Αποδόσεις σε Ευρώ

\*\* Κύπρος: 10-χρονο Κυβερνητικό Ομόλογο με επιτόκιο 4,625% και ημερομηνία λήξης 2/3/2020



# Ενότητα 3α – Επενδυτική Στρατηγική

## Επενδυτική Στρατηγική

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- Η ΔΕ του Ταμείου έχει διεξάγει **μελέτη** για καθορισμό της στρατηγικής επενδύσεων
- Η μελέτη επικυρώθηκε τον **Νοέμβριο του 2014** με τη συμπλήρωση της Δήλωσης Αρχών Επενδυτικής Πολιτικής
- Η νέα στρατηγική είναι υπό υλοποίηση
- Η στρατηγική είναι **μακροπρόθεσμη**
- Η υλοποίηση δεν γίνεται βίαια αλλά **σταδιακά**
- Η υλοποίηση της στρατηγικής άρχισε το 2015 με στόχο τη **διασπορά** σε επίπεδο επενδυτικών κατηγοριών

## Μελέτη για καθορισμό Επενδυτικής Στρατηγικής

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- Η Στρατηγική είναι **μακροχρόνια** και **επανεξετάζεται** τουλάχιστον κάθε **3 χρόνια**
- Ο κύριος σκοπός του Ταμείου είναι να επενδύει με σύνεση ώστε να τηρηθούν όλες οι υποχρεώσεις του Ταμείου αναλαμβάνοντας ένα αποδεκτό επίπεδο κινδύνου
- Ο επενδυτικός στόχος του Ταμείου είναι η επίτευξη επίπεδο χρηματοδότησης του 100%
- Στοχευόμενη επενδυτική απόδοση τουλάχιστον ίση 4,1% (σήμερα) ανά έτος

## Επενδυτική Μακροπρόθεσμη Στρατηγική – ΔΑΕΠ

<b>Τύπος Επένδυσης</b>	<b>Κατανομή στόχος, %</b>	<b>Επιτρεπόμενα όρια, %</b>
Παγκόσμιες Μετοχές	10	5 – 15
Μετοχές Έργων Υποδομής	10	5 – 15
Ακίνητη περιουσία	24	19 – 29*
Αντισταθμιστικά Κεφάλαια	10	5 – 15
<b>Επενδύσεις “κεφαλαιουχικής ανάπτυξης”</b>	<b>54</b>	<b>34 – 74</b>
Εγχώρια Ομόλογα	18	13 – 23
Παγκόσμια Εταιρικά Ομόλογα	8	3 – 13
Καταθέσεις	20	10 – 30
<b>Επενδύσεις “εισοδήματος”</b>	<b>46</b>	<b>26 – 66</b>
<b>ΣΥΝΟΛΟ</b>	<b>100</b>	<b>100</b>

\* Η Διαχειριστική Επιτροπή θα λάβει όλα τα απαραίτητα μέτρα για να μην φτάσει η κατανομή σε αυτή την κατηγορία στο μέγιστο επίπεδο, αν και αναγνωρίζουν ότι τέτοια αύξηση μπορεί να προκύψει λόγω των ιδιαίτερων συνθηκών του Ταμείου.



## Ενότητα 3β – Υλοποίηση

# Υλοποίηση – Ομάδα αξιολόγησης και επιλογής διαχειριστών

## Global Investment Management

Kemp Ross

### Equities

Chris Riley

Byron Beene\*  
George Carvounes  
Mark Chow  
Oliver Choy  
Annie Imer  
James Jackson  
Paul Kennedy  
Adrian Kurniadjaja  
Hemant Parmar  
Corey Schier  
Phil True  
Will Tsui  
Matt Walters  
Kurt Weber  
Nicole Wubbena  
Omer Zaman  
Jean-Noel Zegerman

### Fixed Income

Lennox Hartman

Byron Beene\*  
Sean Carlin  
Kim Cash  
Mette Charles  
Peter Halligan  
Rohit Kapur  
Graham Kimber  
Erwan Pirou  
Stuart Tipton  
Frank Valle  
Paul Whelan  
Arek Zawada

### Liquid Alternatives

Peter Hill

Erol Alitovski  
Angela Cantillon  
Allen Cheng  
Lewis Fowler  
Faiyaz Hashmi  
Kevin Hrad  
Matt Plaveczyk  
Mike Pollard  
Matt Siddick  
Miriam Sjoblom  
Zornitza Taleva  
Matthew Towsey  
Chris Ullathorne

### Real Estate

Nick Duff  
Catherine Polleys

Benjamin Abramov\*  
Purvik Bhesania  
Kirloes Gerges  
Oliver Hamilton  
Chae Hong  
David Rose  
James Sexton\*  
Sarah Trombello  
Jani Venter  
Tim Zukowski

### Private Equity

Karen Rode

Benjamin Abramov\*  
Adam Belkairous  
Brigid Bower  
Christopher Brandely  
Eric Denneny  
Amy Hauke  
Ryan Hegy  
Hans Holmen  
Jorge Huitron  
Bruce Ingram  
Dan Kim  
Douglas Moore  
James Sexton\*  
Lisa Staub  
Thomas Wyss  
Shari Young-Lewis  
Michael Zaun

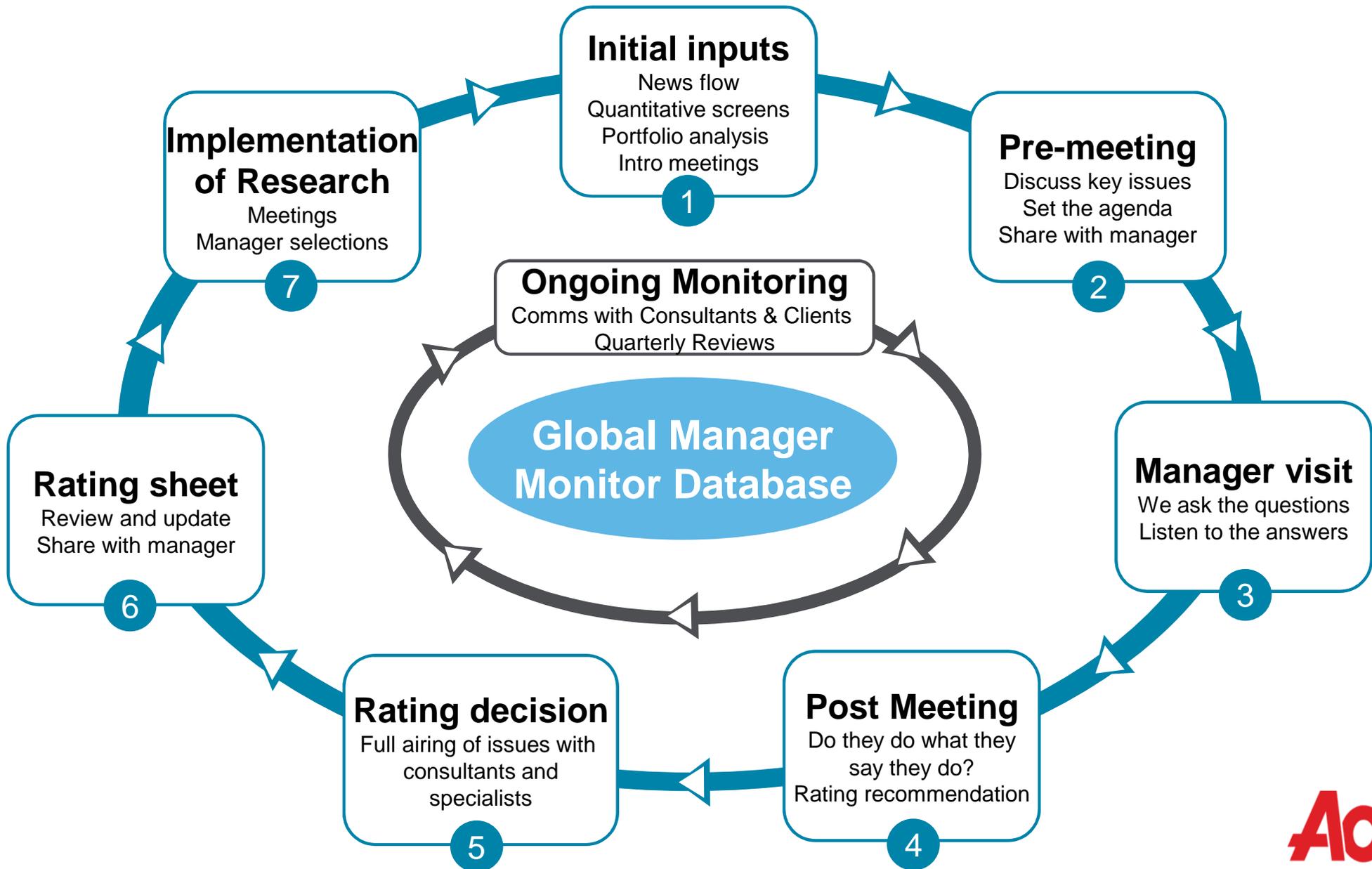
### Operational Due Diligence

Rian Akey (Global Head of ODD), Chris Goodeve-Ballard, Richard Spivey & Mark Flanagan

Seventeen Analysts in Bangalore and two support staff in London

\* Indicates the professional splits time between groups

# Διαδικασία Επιλογής



# Διαδικασία Επιλογής συν.

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**Manager universe**

**Minimum requirements: regulatory oversight, 3rd party administration, full transparency, institutional size**

**Investable universe**

**Rigorous manager research & operational due diligence process**

**AON**  
Buy-listed

## Πλάνο Υλοποίησης

Πλάνο Υλοποίησης	Ιουλ-15	Σεπ-15	Δεκ-15	Φεβ-16	Μαϊ-16	Ιουλ-16	Οκτ-16	Δεκ-16
1. Επιλογή Διαχειριστών <b>Αντισταθμιστικών Κεφαλαίων</b> (Πυρήνα)	➔							
2. Επιλογή Διαχειριστών Έργων <b>Υποδομής</b> (Πυρήνα)		➔						
3. Επιλογή Διαχειριστών Παγκόσμιων <b>Μετοχών</b> (Πυρήνα)			➔					
4. Επιλογή Διαχειριστών Παγκόσμιων <b>Ομολόγων</b> (Πυρήνα)				➔				
5. Επιλογή Διαχειριστών <b>Αντισταθμιστικών Κεφαλαίων</b>					➔			
6. Επιλογή Διαχειριστών Έργων <b>Υποδομής</b> (Δορυφόρος)						➔		
7. Επιλογή Διαχειριστών Παγκόσμιων <b>Μετοχών</b> (Δορυφόρος)							➔	
8. Επιλογή Διαχειριστών Παγκόσμιων <b>Ομολόγων</b> (Δορυφόρος)								➔

Υλοποιήθηκε η επένδυση σε Αντισταθμιστικά Κεφάλαια το 2015 ενώ το 2016 έχει ήδη υλοποιηθεί η επένδυση σε έργα υποδομής. Σύντομα θα υλοποιηθεί η επένδυση σε Ομολόγα και Παγκόσμιες μετοχές

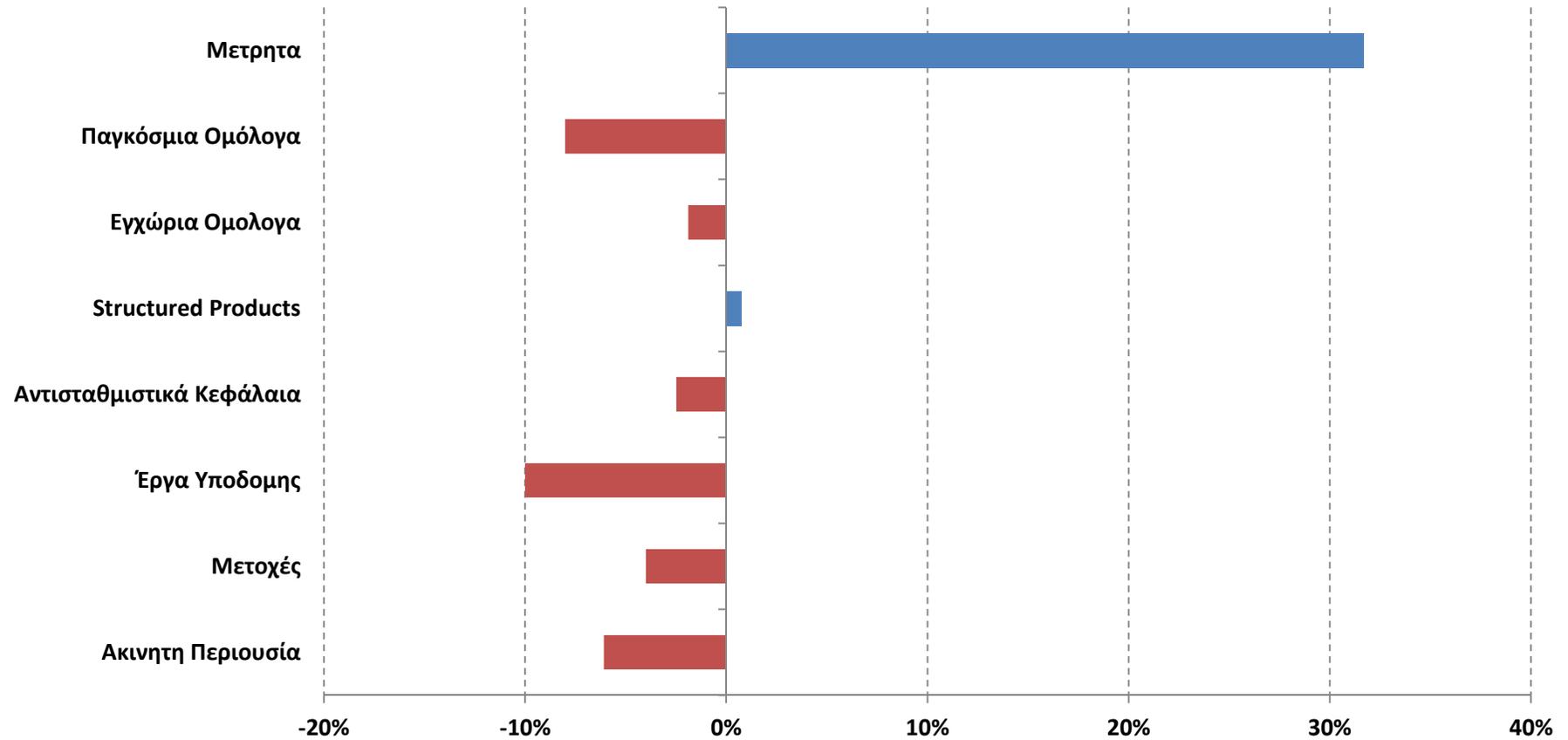


# Ενότητα 3γ – Παρακολούθηση

## Σύνολο Ταμείου

	Αξία 31/12/15	Στρατηγική	Κατονομή 31/12/15	Διαφορά
<b>Σύνολο</b>	<b>€565.825.426</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>
Ακίνητη Περιουσία	101.384.850	24%	18%	-6%
Μετοχές	34.000.423	10%	6%	-4%
Έργα Υποδομής	-	10%	0%	-10%
Αντισταθμιστικά Κεφάλαια	42.511.586	10%	8%	-2%
Structured Products	4.349.760	0%	1%	1%
Εγχώρια Ομόλογα	91.138.830	18%	16%	-2%
Παγκόσμια Ομόλογα	-	8%	0%	-8%
Μετρητα	292.439.977	20%	52%	32%

# Ταμείο vs. Στρατηγική



## Διαχειριστές Επενδύσεων - Μετοχές

<b>Manager</b>	<b>Value 31/12/2014 €</b>	<b>Value 31/12/2015 €</b>
CISCO	N/A	7.160.139
Eurobank	N/A	8.421.559
Argus	N/A	3.709.910
<b>Total</b>	<b>21.550.586</b>	<b>19.291.608</b>

<b>Διαχειριστής</b>	<b>Απόδοση 2015</b>	<b>Υπερ-απόδοση 2015</b>
CISCO	0,2%	2,4%
Eurobank	0,1%	2,3%
Argus	-5,1%	-2,9%
<b>Ολικό</b>	<b>-1,0%</b>	<b>1,3%</b>
<b>Δείκτης</b>	<b>-2,2%</b>	

## Διαχειριστές Επενδύσεων – Αντισταθμιστικά κεφάλαια

<b>Manager</b>	<b>Value 01/10/2015 €</b>	<b>Value 31/12/2015 €</b>
GSAM	N/A	21.330.257
Mesirow	N/A	21.181.330
<b>Total (στις 1/10/15)</b>	<b>43.000.000</b>	<b>42.511.586</b>

<b>Διαχειριστής</b>	<b>Απόδοση 2015 (από τη 01/10/15)</b>	<b>Υπερ-απόδοση 2015</b>
GSAM	-0,1%	-0,8%
Mesirow	-1,1%	-1,8%
<b>Total</b>	<b>-0,6%</b>	<b>-1,3%</b>
<b>Δείκτης</b>	<b>0,7%</b>	

## Παγκόσμιο Χαρτοφυλάκιο 2016

Διαχειριστής	31/12/2015	Νέες Επενδύσεις	31/05/2016
CISCO	7.160.139		7.183.978
Eurobank	8.421.559		8.191.452
Argus	3.709.910		3.636.236
<b>Σύνολο Μετοχές</b>	<b>19.291.608</b>		<b>19.011.666</b>
GSAM	21.330.257		20.444.077
Mesirow	21.181.330		20.734.120
<b>Σύνολο Αντισταθμιστικά Κεφάλαια</b>	<b>42.511.586</b>		<b>41.178.196</b>
Brookfield (2/2/16)		10.000.000	11.280.854
RARE (29/3/16)		10.000.000	10.276.052
<b>Σύνολο Έργα Υποδομής</b>		<b>20.000.000</b>	<b>21.556.906</b>
<b>Σύνολο Επενδύσεων Εξωτερικού</b>	<b>61.803.194</b>	<b>20.000.000</b>	<b>81.746.768</b>



## Questions / Discussion

Aon Hewitt is the global leader in human resource solutions. The company partners with organisations to solve their most complex benefits, talent and related financial challenges, and improve business performance. Aon Hewitt designs, implements, communicates and administers a wide range of human capital, retirement, investment management, health care, compensation and talent management strategies. With more than 29,000 professionals in 90 countries, Aon Hewitt makes the world a better place to work for clients and their employees.



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