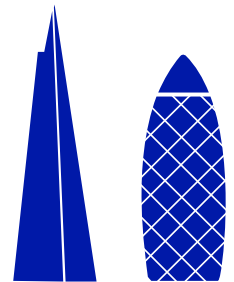




27 OCTOBER 2017

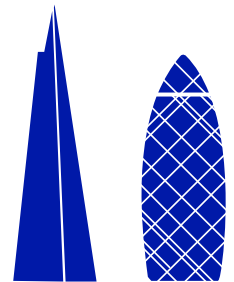
# Annual Members' Meeting 2017



EVERY JOURNEY MATTERS

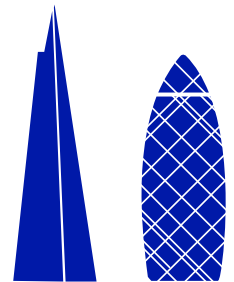
## Welcome and Introduction

# Maria Antoniou Chair of Trustees



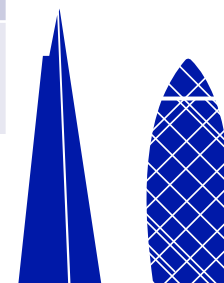
# Housekeeping

- Fire alarm and exit
- Toilets
- Mobile phones / Smartphones
- Breaks
- Refreshments



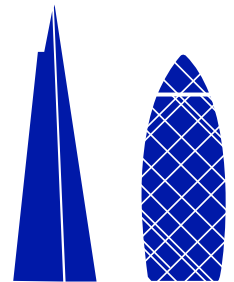
# Agenda

Time	Topic	Owner
11.00	Welcome and Introduction	Maria Antoniou (Chair of Trustees)
11.10	Review of the Year	Stephen Field (Fund Secretary)
11.25	What do your trustees actually do?	Ian Pittaway (Sackers & Partners)
11.40	Actuarial Update	Gareth Oxtoby (Willis Towers Watson)
11.55	Investment Update	Ed Francis (Willis Towers Watson)
12.15	Open Forum – Questions & Answers	Maria Antoniou (Chair of Trustees)
12.45	Refreshments and Informal Discussions	All
13.15	Close	All

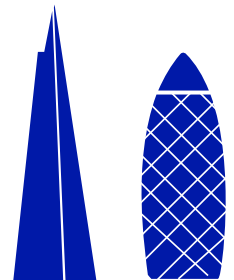


## Review of the Year

# Stephen Field Fund Secretary



## 6 Trustee Structure



# <sup>7</sup>Governance

There are six sub committees who are responsible for looking after different aspects of the Fund as follows:

**Operations Committee  
(8 Members)**

**Number of meetings scheduled and held 5**

**Investment Committee  
(8 Members)**

**Number of meetings scheduled and held 4**

**Audit Committee  
(6 Members)**

**Number of meetings scheduled and held 3**

**Actuarial Valuation Committee  
(4 Members)**

**Number of meetings scheduled and held 6**

**Appeals Committee  
(6 Members)**

**Number of meetings scheduled 5 and 1 held**

**Alternatives and Liability Hedging Committee  
(4 Members)**

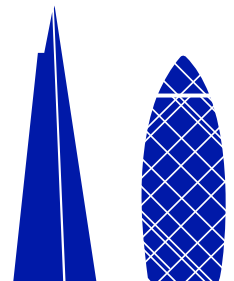
**Number of meetings scheduled 10 and 11 held**

**Plus**

**Annual Committee Chair's  
(4 Members)  
Number of meetings scheduled and held 1**

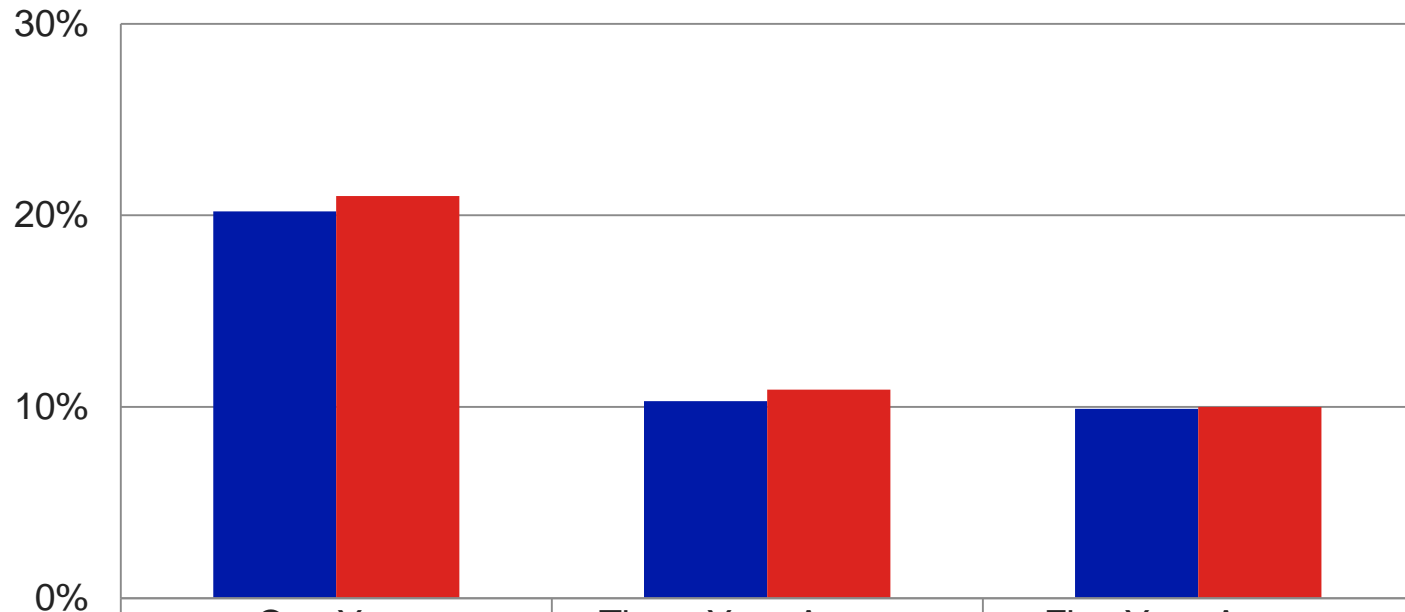
**Plus**

**Trustee Board  
(18 Members)  
Number of meetings scheduled and held 5**



# Investment Return

**Annual Return**



■ Fund

20.2%

10.3%

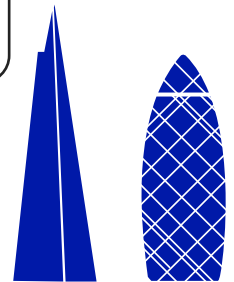
9.9%

■ Benchmark

21.0%

10.9%

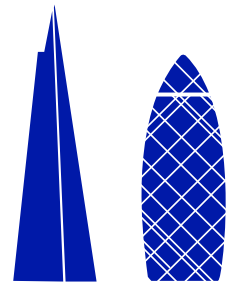
10.0%



# Investment

## Investment – Managers

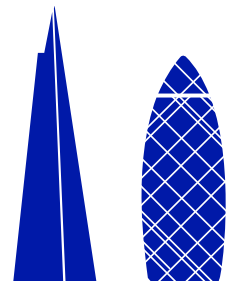
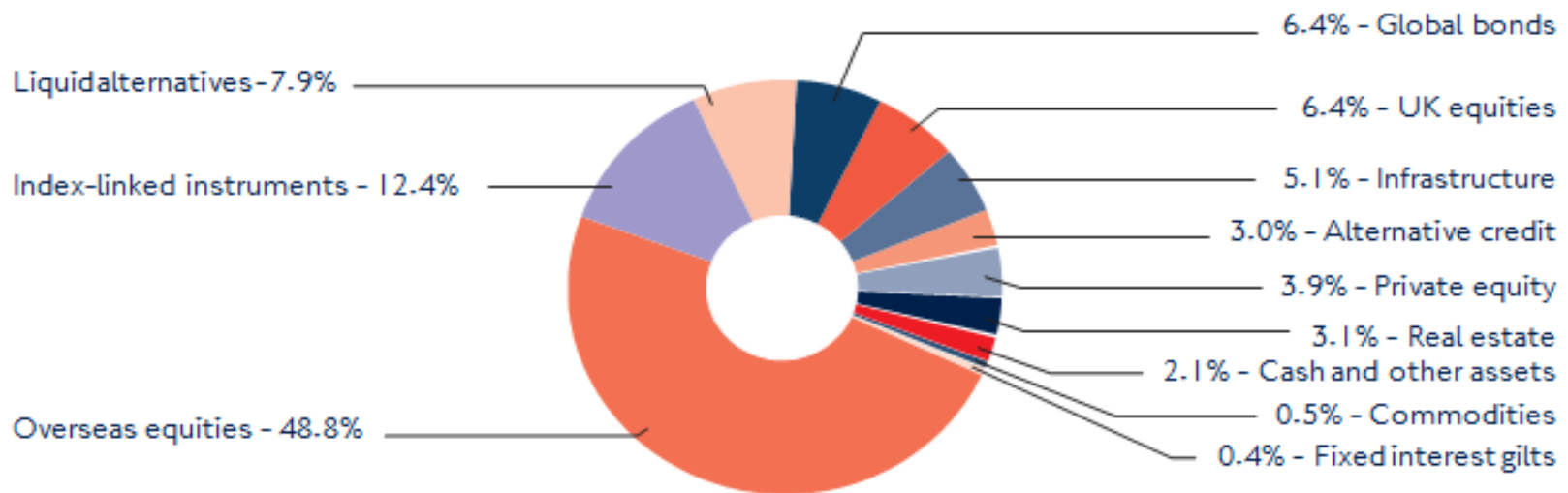
- Funds assets invested through **27** Managers with **37** Portfolio's
- Value of the Fund:
  - £9.9bn (31 March 2017)
  - £8.2bn (31 March 2016)
  - £8.3bn (31 March 2015)
  - £7.3bn (31 March 2014)



# Investment Diversity

Investments spread over a number of asset classes

The Fund is held in a range of different investments (assets) in the UK and overseas.

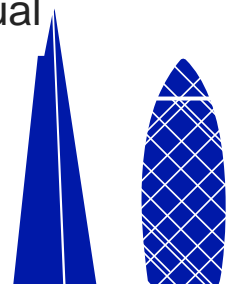


# Investment Manager Costs

Topic	2016/17 £m	2015/16 £m	2014/15 £m
Direct investment management expenses (shown in accounts)	15.9	12.8	13.2
Indirect investment management expenses (shown in change in market value)	26.1	20.1	34.4
<b>Total investment management expenses</b>	<b>42.0</b>	<b>32.9</b>	<b>47.6</b>

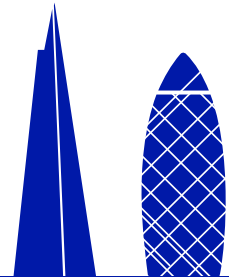
Total investment management expenses incurred during the year were **£42.0m (last year £32.9m)**.

This covers both the basic fee and where applicable performance fees. These are either invoiced directly by the managers to the Fund or deducted from the individual asset portfolios.



# Responsible Investment

- Trustee has a fiduciary duty to earn financial returns to ensure it can meet its pension obligations.
- Supports and encourages good corporate governance in the companies in which it invests.
- Takes account of environmental, social and governance (“ESG”) factors e.g.:
  - Voting on actively managed equities: 578 AGMs at which votes cast against management total 205 in 2016/17.
  - Implementing new tool to monitor ESG features of equity/bond portfolio, including carbon footprint.
  - Collective action: signatory to UN Principles of Responsible Investment since December 2016.
  - “Green” investing where financially justified: £100m in a renewables fund invested in 24 UK wind and 15 solar projects powering over 174,000 houses, over 255,000 tons of greenhouse gases and 600,000 cubic meters of water (240 Olympic swimming pools) saved, and provided over £10m of lifetime community benefits. £100m in Europe infrastructure includes world’s largest battery powered ferry and wind power projects in Portugal.
  - Investment in “basic” infrastructure projects in emerging markets: \$100 million committed to IFC Infrastructure fund investing in critical water, clean energy and telecommunication assets in Asia, Africa and Latin America.

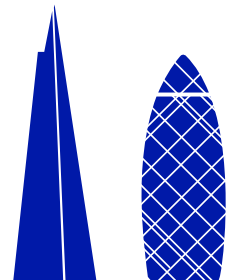


# Investment

## Investment Fund Value

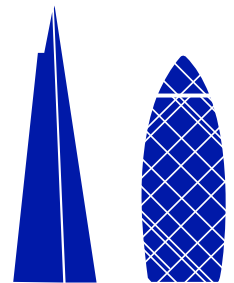
- At 31 March 2017 Fund value stood at £9.9bn versus £8.2bn at previous year end
- Up £1.7bn
- The change in value over the year:

Income	£394m
Plus Return on Investment net of expenses	£104m
Plus Increase in value of Investments	£1,550m
	<b><u>£2,048m</u></b>
Less Expenditure	<b><u>£391m</u></b>
<b>Change in value</b>	<b>£1,657m</b>



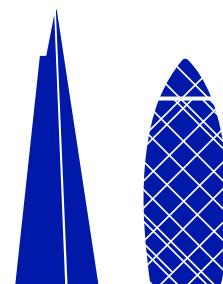
# Money into the Fund

Topic	2016/17 £m	2015/16 £m
Employers' contributions	324.8	317.2
Members' contributions	63.5	59.1
Investment income net of expenses	104.0	92.0
Transfers in from other schemes	5.6	1.4
<b>Total Income</b>	<b>497.9</b>	<b>469.7</b>



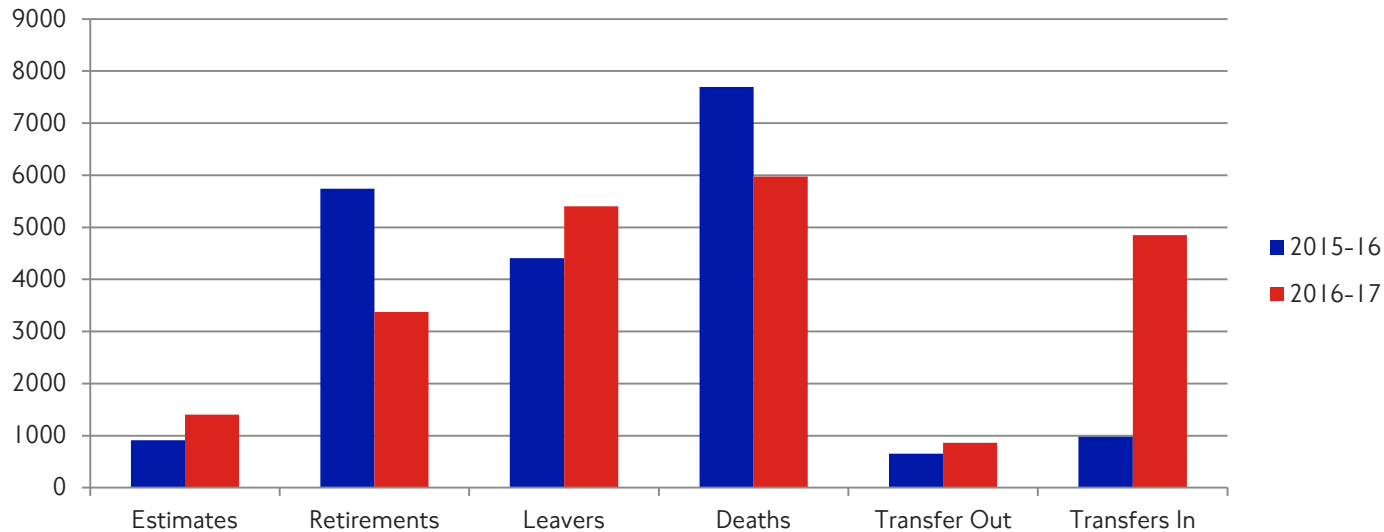
# Money out of the Fund

Topic	2016/17 £m	2015/16 £m
Benefits payable	368.5	328.0
Payments to & on account of leavers	5.9	3.3
Other payments	4.1	4.5
Administrative expenses	4.1	4.2
Pension levies	8.8	7.1
<b>Total</b>	<b>391.4</b>	<b>347.1</b>

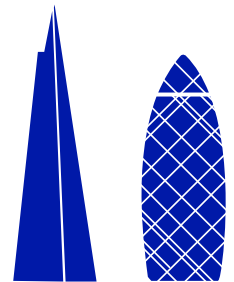


# Workload

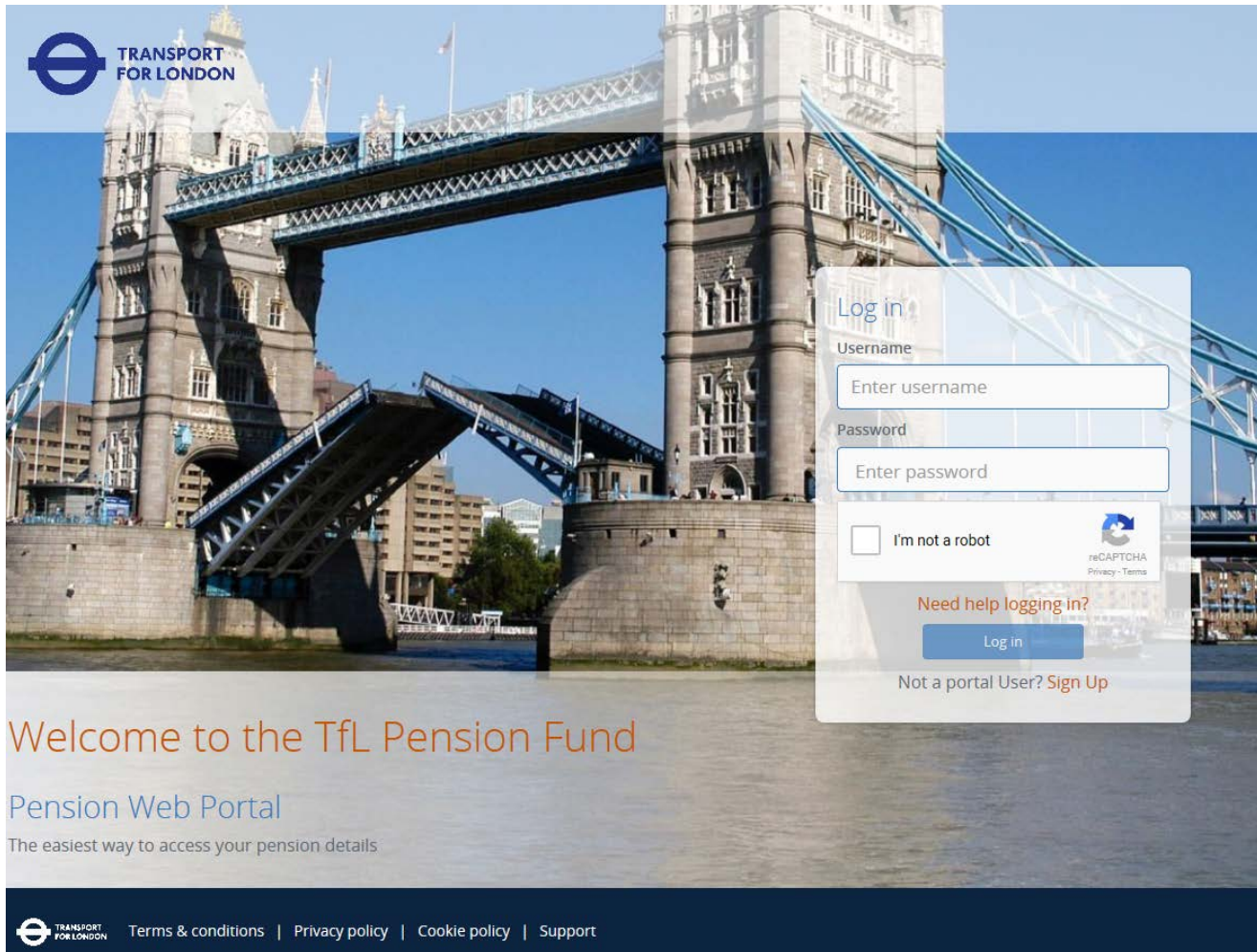
This has been another busy year for the Fund Office with workload over the year to 30 June 2017:




- In addition to the graph above, 18,774 pieces of general correspondence completed
- A new pensions administration system has been implemented
- Significant work supporting TfL transformation activities



# New Web Portal




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FOR LONDON**

**Log in**

Username

Password

☐ I'm not a robot  reCAPTCHA  
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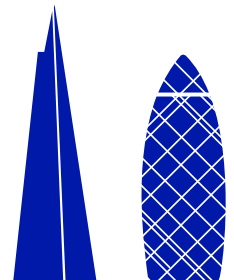
Not a portal User? [Sign Up](#)

**Welcome to the TfL Pension Fund**

**Pension Web Portal**

The easiest way to access your pension details

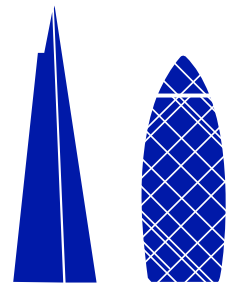
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# New Web Portal

In the first 4 months:

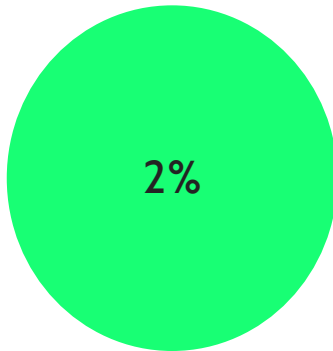
- 3,773 members registered
- Over 15,000 quotations run online
- Over 200 general enquiries
- Over 200 address and email updates



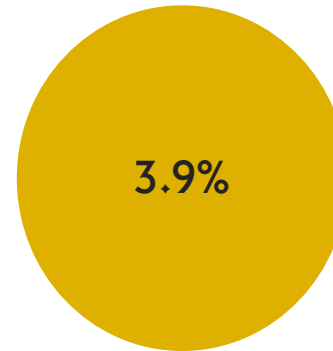
# 2018 Pension Increase

Under the Rules of the Fund the April pension increase is calculated by reference to the change in the Retail Prices Index (RPI) over the period September to September.

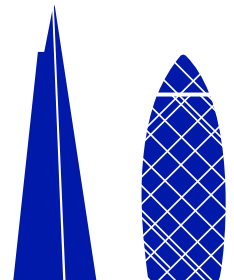
**The increase for 2017 was:**



**The increase for 2018 will be:**

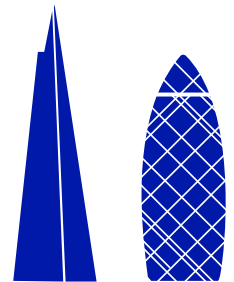


Details will as usual be published on Pension Fund website and in OTM (Pensioner edition).



# Organisations Exhibiting in the Great Hall

- TfL Pension Fund Office
- The Pensions Consultative Council (PCC)
- LT Museum Friends
- Tax Help for Older People
- Transport Friendly Society Ltd
- Action on Hearing Loss



## TfL Pension Fund

### What do your trustees actually do?

Annual Members' Meeting  
27 October 2017

Ian Pittaway



85,000  
members

Over 32  
investment  
managers

c.10bn  
assets

How does the Fund work in practice?

## Trustee Board

X X X X X X X X X X X X X X X X X

18 members including the chair

## Committees

Investment

Alternatives  
and Liability  
Hedging

Operations

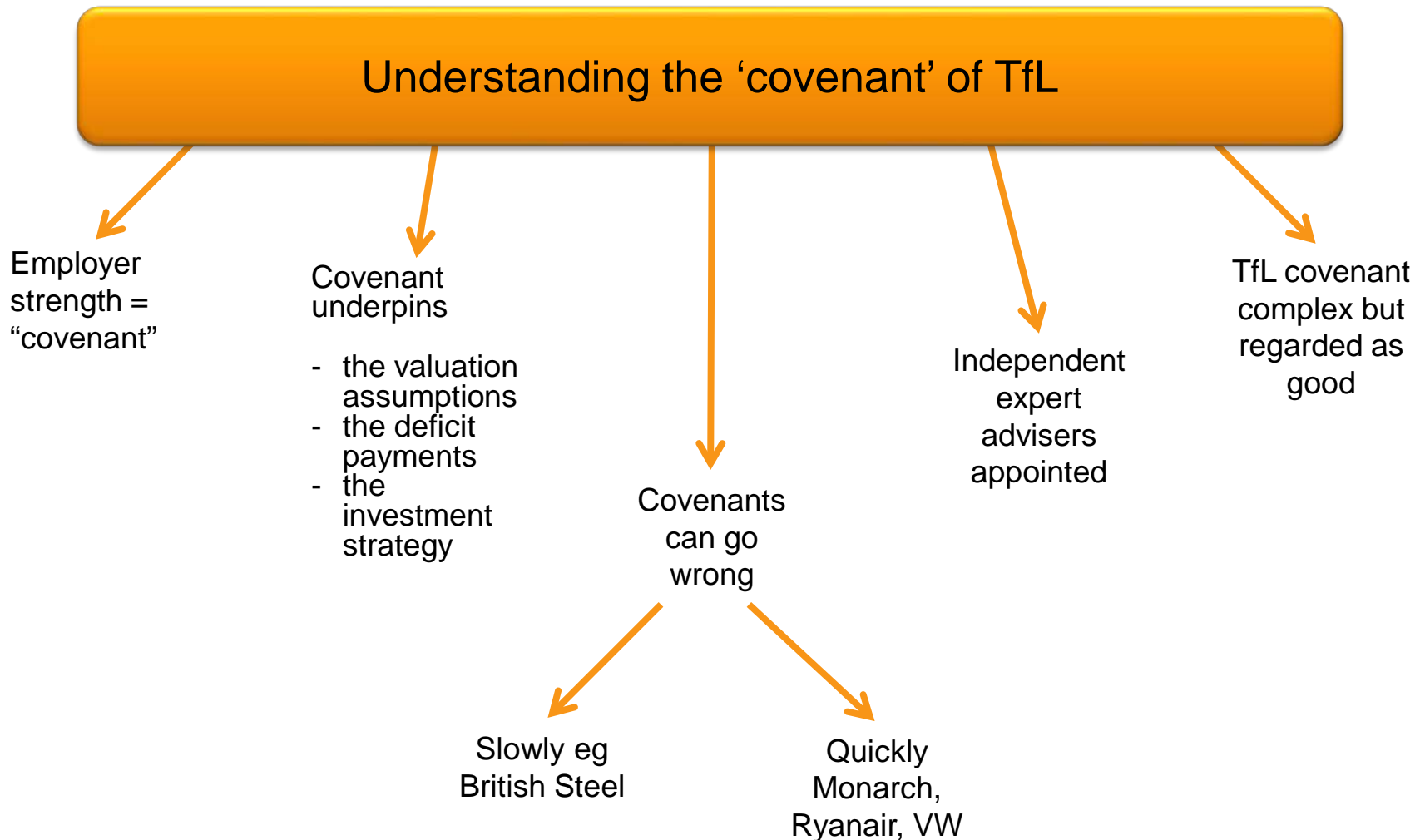
Audit

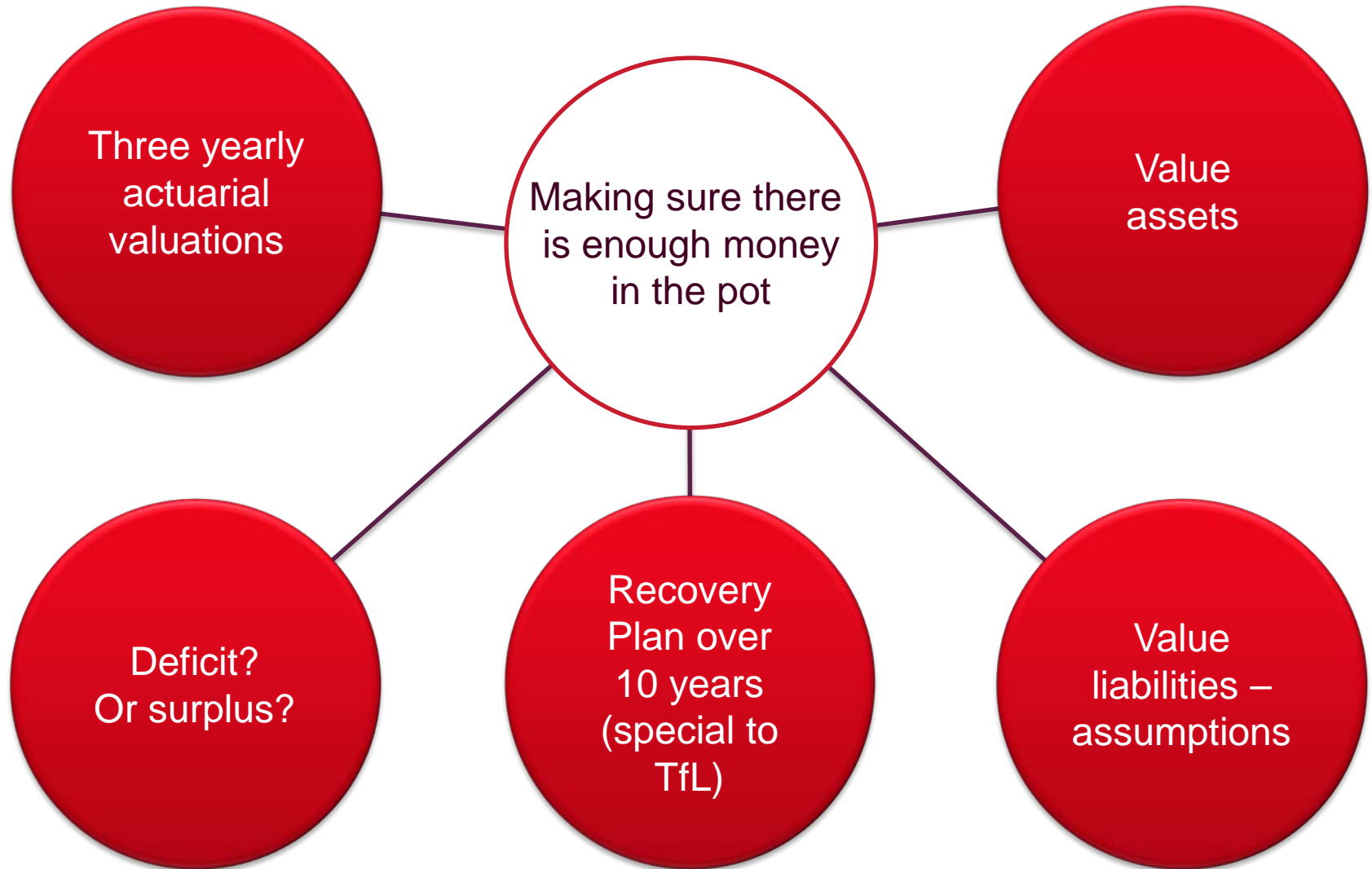
Appeals

Actuarial  
valuation

Dealing with  
individual  
member  
cases  
eg death  
in service

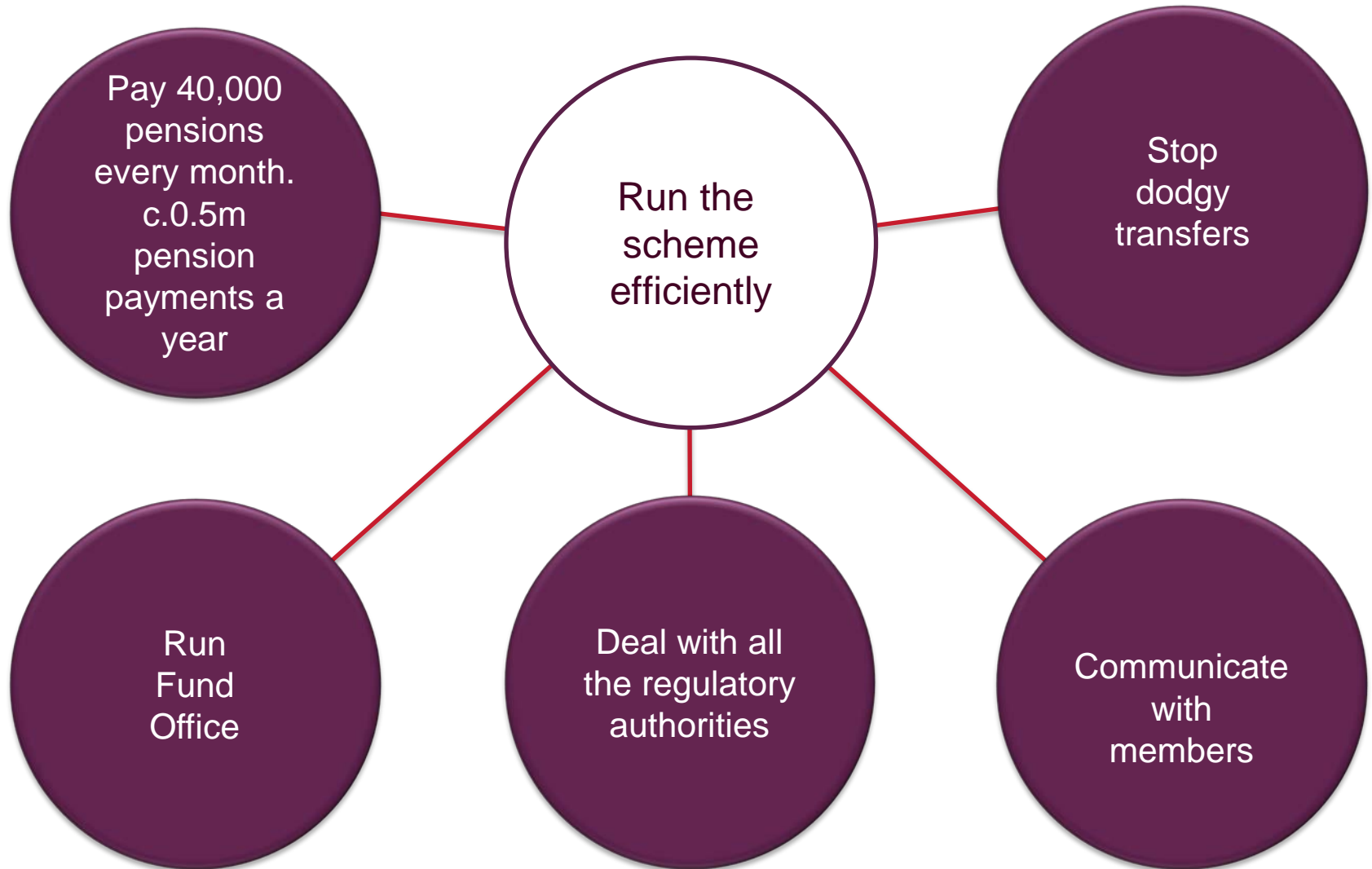
- ➡ 23 employees died in service this year
- ➡ Nomination forms. Many complete – but many do not
- ➡ Object is to get inside mind of member. What would they have wanted?
- ➡ Nomination form. Will. Enquiries
- ➡ But cases can be complex. Multiple relationships. Multiple children. Unusual living arrangements
- ➡ Operations Committee spend a lot of time on such cases to get fair result

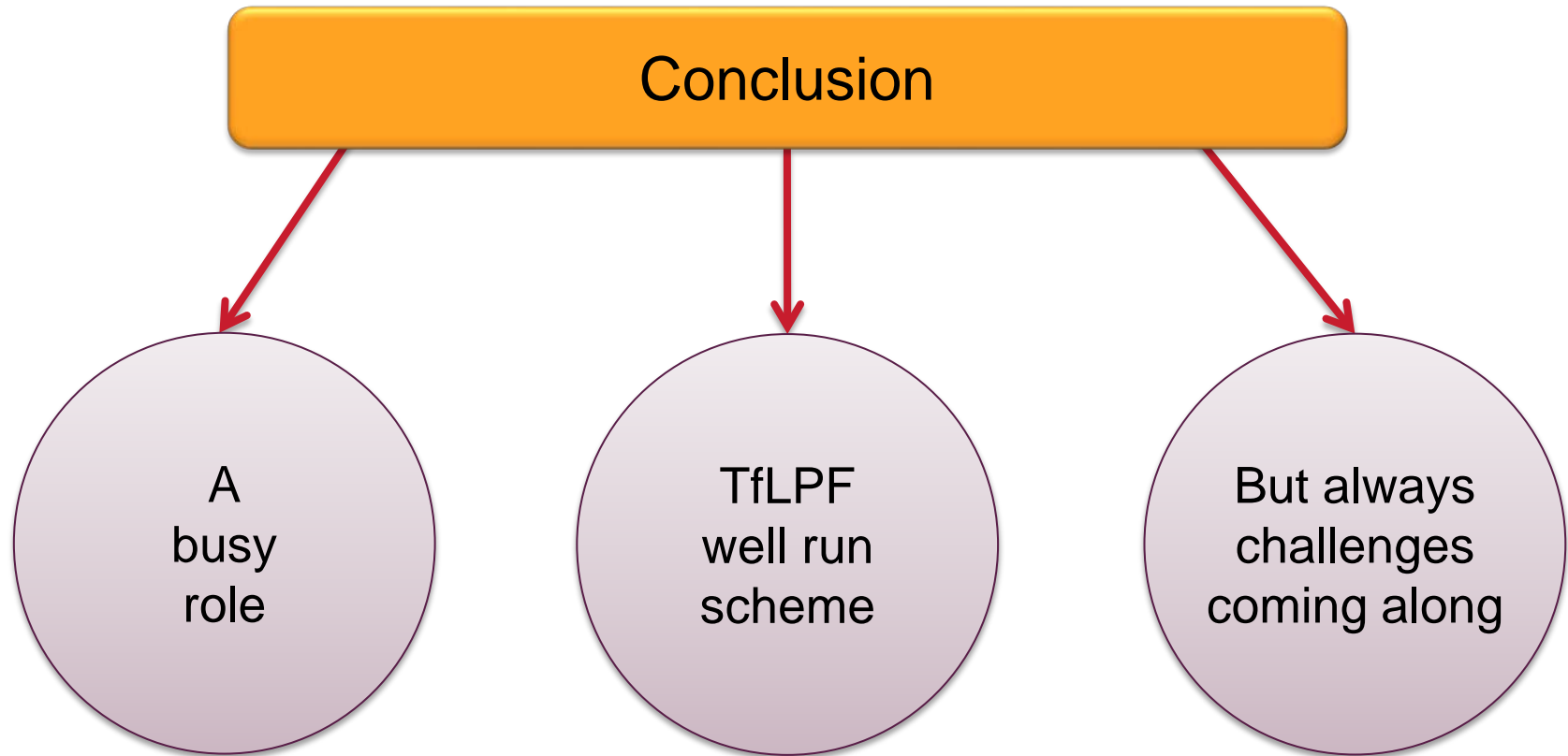




Invest  
the  
assets

- ➡ Desired level of return and risk
- ➡ Decide on the right mix of asset classes
- ➡ Choose specialist managers to invest the monies (over 30 in TfLPPF)
- ➡ Monitor very actively
- ➡ Review asset classes / managers. Sack if necessary





Not for someone who likes a quiet life!

Ian Pittaway

ian.pittaway@sackers.com

# TfL Pension Fund

## Annual Members' Meeting Scheme Actuary presentation

Gareth Oxtoby

27 October 2017

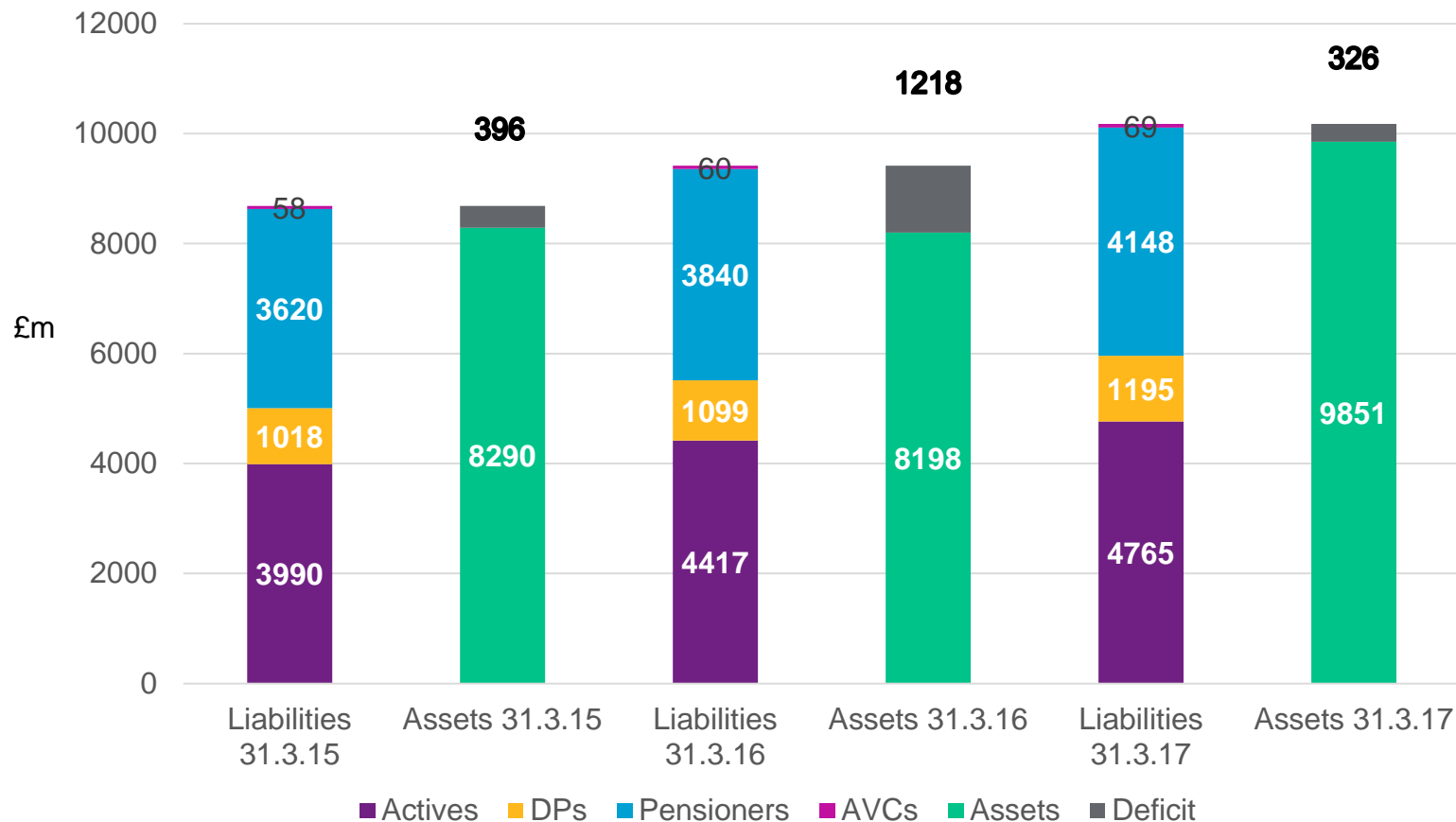


# Introduction

- Today I will cover two things
  - An update on the progression of the financial position of the Public Sector Section ('the PSS') of the Fund since the triennial valuation as at 31 March 2015, and
  - An update on developments in UK life expectancy since 2015, which will help inform the choice of assumptions we make for the 2018 valuation of the Fund regarding how long Fund members are expected to live.
- Important caveats at the start
  - Figures shown for values of the PSS liabilities as at dates after 31 March 2015 are **estimates**
    - we do not obtain full details of individual Fund members outside of the three-yearly valuation exercise, so we do not know exactly what has happened to the PSS since that date. (For the purposes of providing estimated interim updates, we assume that matters affecting members - eg rates of retirement, rates of pensioners dying - have been in line with our assumptions.)
  - Remember that we assume that TfL is able to support the Fund in the long term – in which case the main purpose of funding valuations is to set a rate of contributions to finance the Fund over the following three years, based upon the available evidence at that time.
  - If there was a fundamental change to the environment in which TfL and the Fund are operating, the approach taken to our valuation calculations may need to be amended in future.

# PSS – development of financial position 31.3.15 to 31.3.17

## Public Sector Section – assets and liabilities



So overall, a bit better than we were at the 2015 valuation date – but having gone through a dip in the interim. What has been happening?

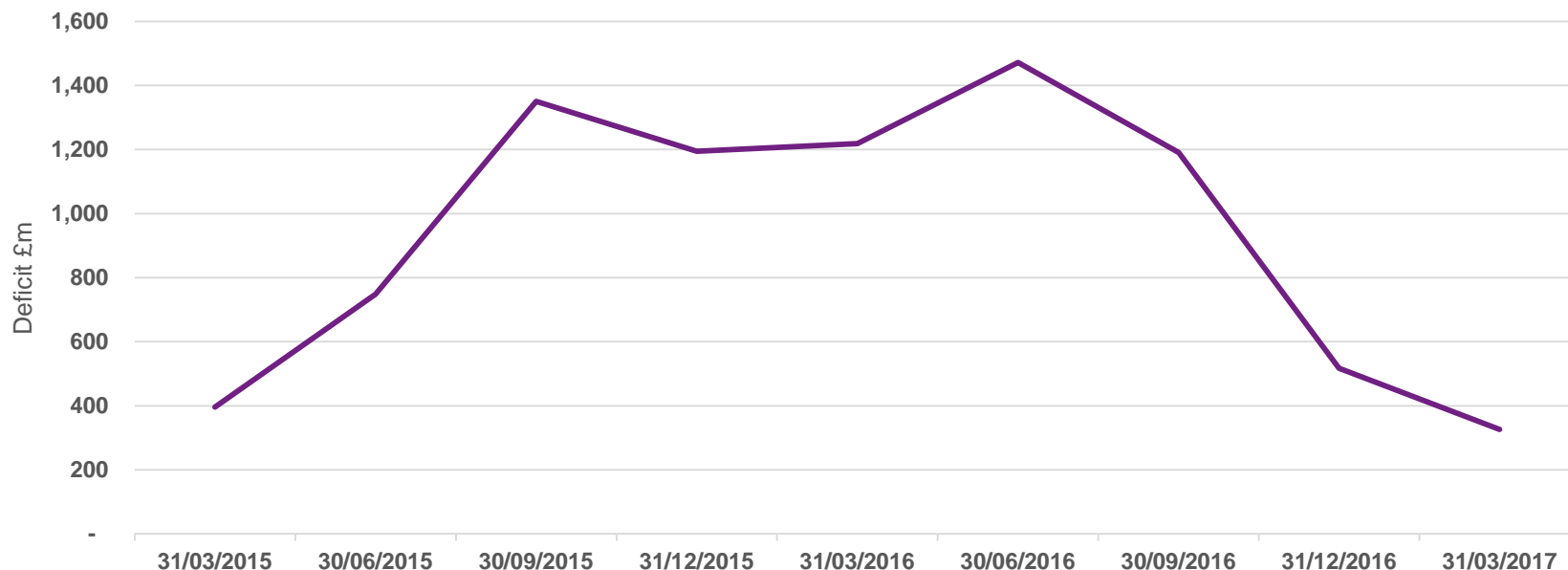
## What are the main reasons for the change in deficit since 2015?

	Year to 31 March 2016 £m	Year to 31 March 2017 £m
Start-year deficit	396	1,218
Expected interest on deficit	+ 21	+ 61
Deficit contributions from TfL	- 54	- 41
Actual returns on Fund assets compared with assumed rate	<b>+ 562</b>	<b>- 1,250</b>
Actual Fund pension increases compared with assumed rate	- 98	- 62
Impact of changes in market conditions on Fund liability assessment	<b>+ 391</b>	<b>+ 400</b>
<b>End-year deficit</b>	<b>1,218</b>	<b>326</b>

### Notes:

1. Figures shown are relative to assumptions adopted at start of respective Fund year
2. Analysis is approximate: figures are shown to nearest £1m but should not be considered as 'accurate' to that extent
3. Individual figures depend upon the order in which this analysis is carried out

## But looking at the position once a year can mask significant volatility...



### Why is the position so volatile?

- The Fund invests in assets, such as equities, whose market values are typically quite volatile – significant short-term movements up and down are not atypical, but not necessarily of concern if we do not have to sell assets to pay benefits
- The value placed on the liabilities depends on expected **future** returns on Fund assets (which we use to discount expected future benefit payments payable to a present value). I do adjust the expected rate of future returns in the light of changes in market conditions, but this is not typically precisely correlated to changes in **current** market values of Fund assets.

## Progress of the funding position – some conclusions

- Assessed on terms consistent with those agreed for the purposes of the 2015 valuation, as at 31 March 2017 the financial position of the PSS is **pretty much where we would have expected it to be, but the position remains volatile.**
- In addition, there are also **changes in the external environment** which will need to be taken into account for the 2018 funding valuation, for example
  1. TfL's December 2016 business plan and any subsequent updates
  2. The Pensions Regulator's recent public pronouncements
- Therefore, it would be **unwise to assume that the position agreed at the time of the next (March 2018) formal funding assessment will be similar to that estimated as at 31 March 2017.**

## Life expectancy – the headlines



# Workers 'must wait until they are 75 to retire'

Warning as former CBI chief investigates pensions age

Our future in his hands: John Cridland will report on whether people need to work longer

YOUNG workers may have to wait until they are 75 to retire after ministers launched a review of the state pension age yesterday. Former CBI chief John Cridland has been brought in to find out whether changes will be required to keep the system 'sustainable and affordable'. His investigation is highly likely to result in a rise in

by DANIEL BINNS

the starting age, financial services company Hargreaves Lansdown predicted. It said Britons in their 20s – who already face waiting until they are 68 to claim their pension – could find the threshold rises to the mid-70s. Workers who want to give themselves the level of retirement incomes enjoyed by many

of their parents' generation may have to work until 81, a separate report by pensions giant Royal London said. Tom McPhail, of Hargreaves Lansdown, said: 'We fully expect state pension ages to go up faster than currently planned. This is simply a function of the big jumps

Continued on Page 2



INDEPENDENT

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## UK life expectancy among pensioners drops for first time in decades

There has been an 'unprecedented' rise in mortality rate, according to ONS data

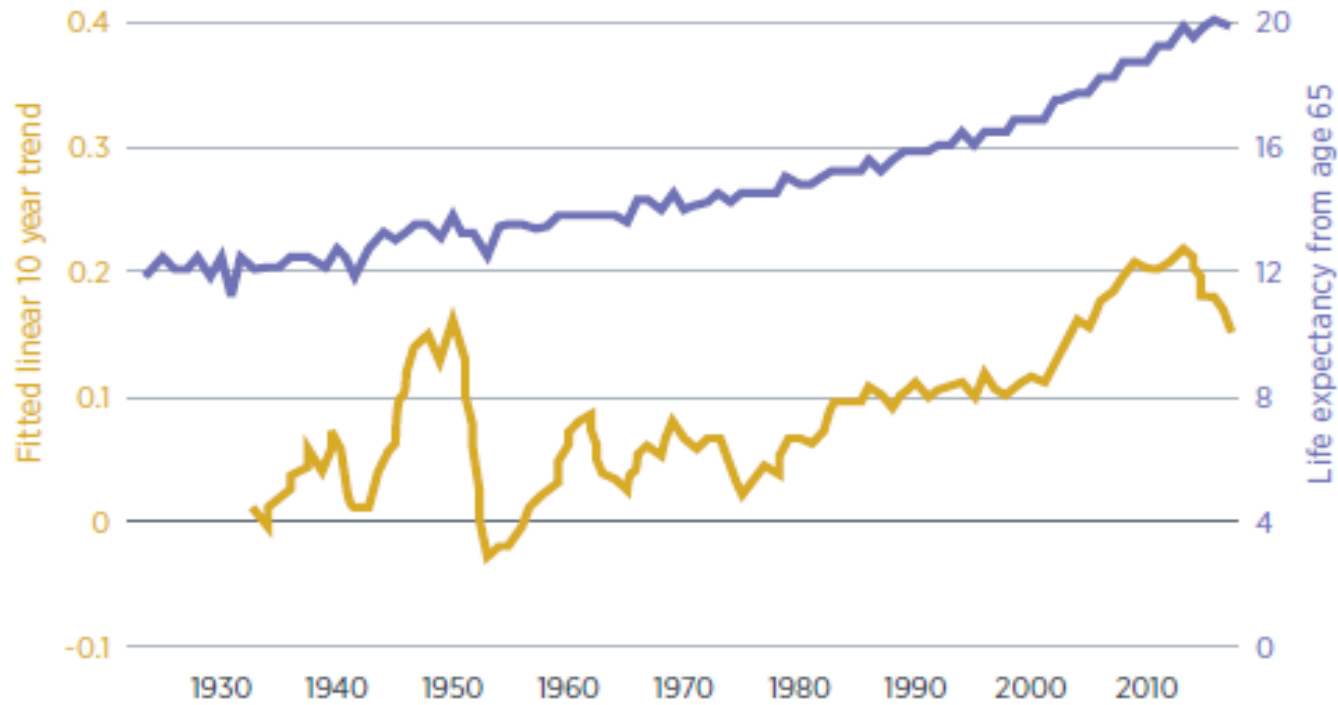
Chloe Farand | 2 days ago |



Click to follow  
The Independent Online

So what is actually happening, and does it matter for the Fund?

# UK life expectancy has increased significantly over the last 100 years

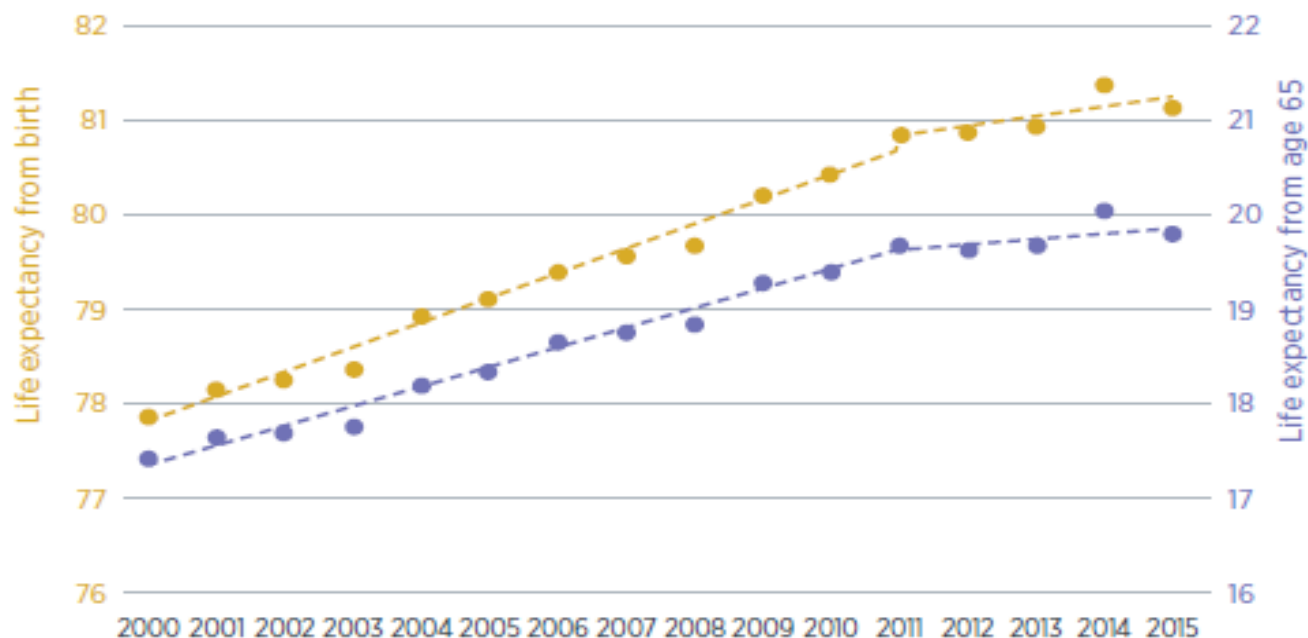


England and Wales life expectancy at age 65, males and females combined, 1922 to 2015  
Source: Longevity Bulletin Issue 10 (July 2017) issued by the Institute and Faculty of Actuaries

- In the period from 1920 to 2010, average life expectancy for someone aged 65 increased from around 12 years to around 20 years (purple line).

Good news for individuals, not such good news for the finances of pension schemes established to pay a pension from age 65

## BUT improvements in life expectancy appear to have been slowing down

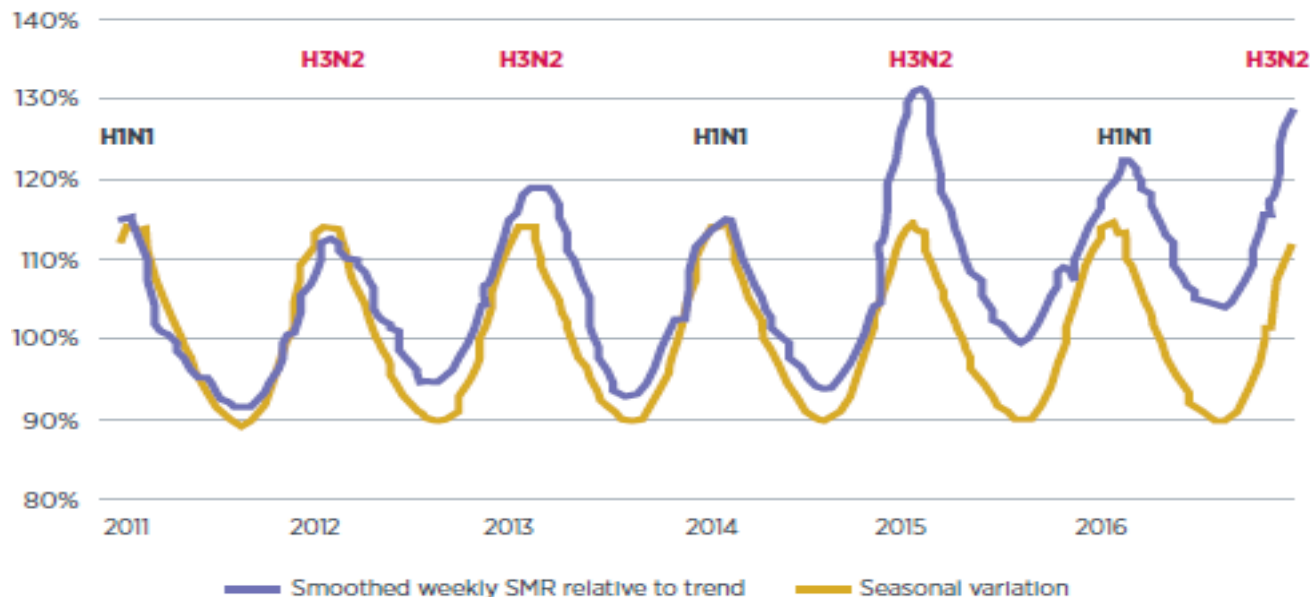


England and Wales life expectancy at age 65, males and females combined, 2000 to 2015  
Source: Longevity Bulletin Issue 10 (July 2017) issued by the Institute and Faculty of Actuaries

- The chart shows life expectancy at birth (orange dots) and from age 65 (purple dots)
- The gradient of the line shows how quickly life expectancy has been improving – and it has started to flatten off since 2010.

Why is this? Has anything changed in this decade?

## Looking more closely at population experience since 2010

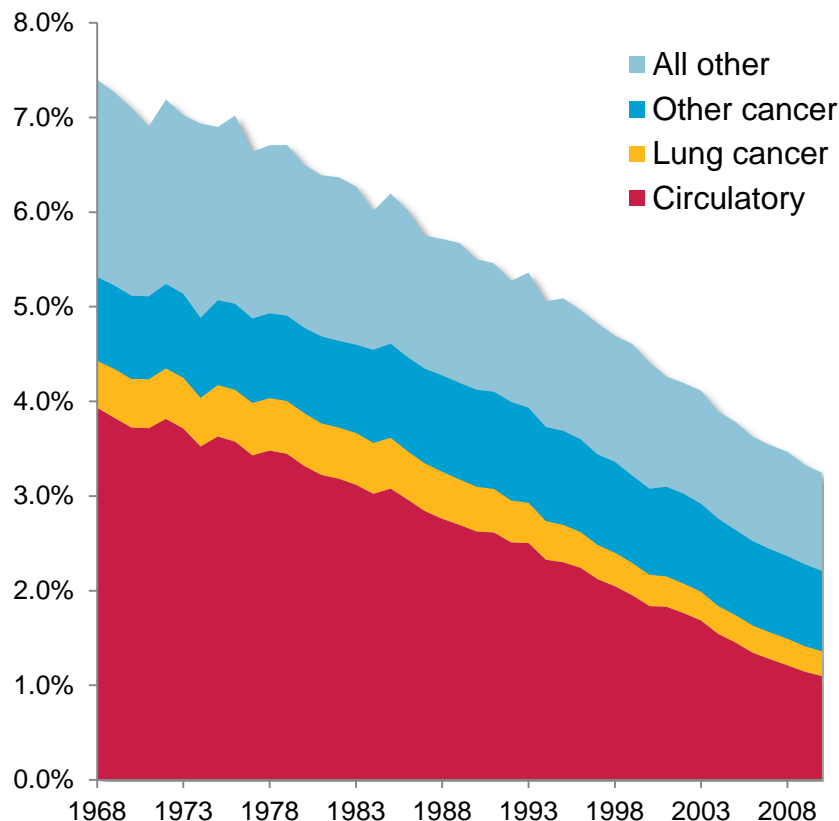


England and Wales smoothed standardised mortality ratios relative to 2005-2011 seasonal trend  
Source: Longevity Bulletin Issue 10 (July 2017) issued by the Institute and Faculty of Actuaries

- The chart shows the seasonality of death rates – year-in-year out, there have been more deaths in the winter than in the summer
- This effect was exacerbated in the winter of 2014/15 in particular – which is thought to be due in part to the low effectiveness of that season's flu vaccine
- The same flu strain circulated in the winter of 2016/17 and early indications are that experienced mortality rates may once again have been relatively high

But is this evidence of a long-term trend, or just a short-term anomaly?

## Can we look in more detail at the underlying causes of death?



Age-standardized mortality rate for ages 60-89, males in England & Wales, by cause of death group, 1968 to 2010

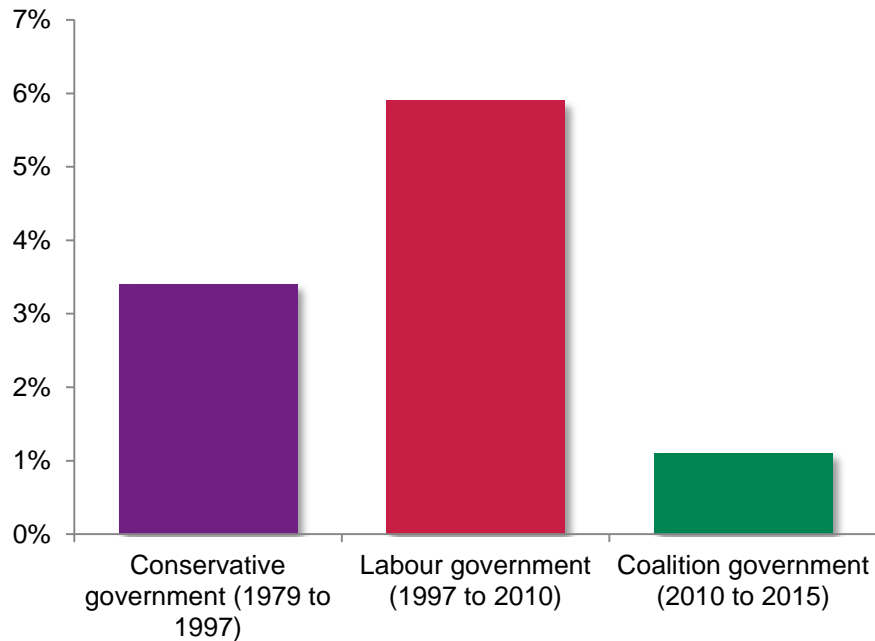
Source: CMI presentation by Richard Willets, April 2017

- In the period up to 2010 death rates from circulatory causes fell by up to 75%. The change in deaths from other causes was far less marked.
- Around 70% of the total improvement in life expectancy was due to this.
- The improvement was driven by a range of different factors, the most significant of which was reduced smoking.
- The potential for **future** improvement in circulatory causes is more limited.

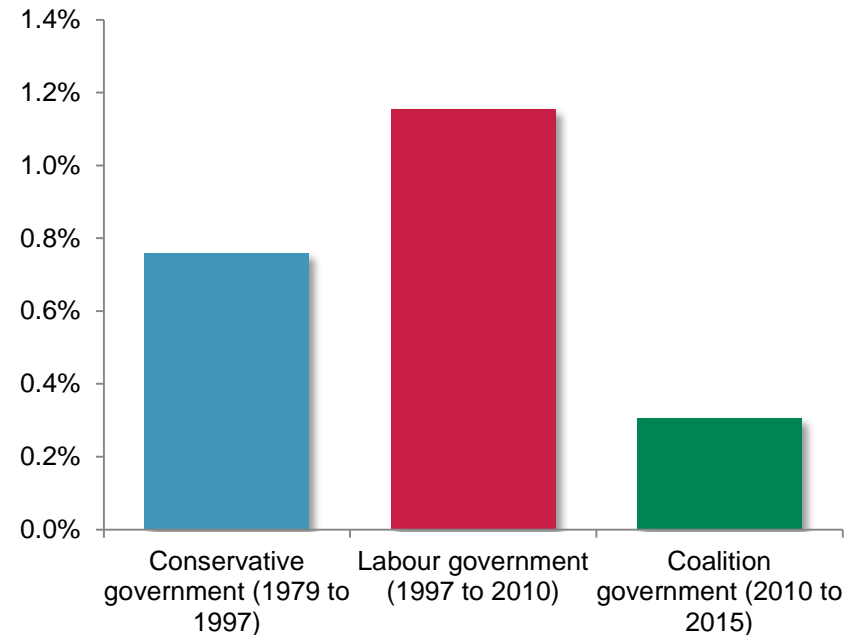
Conclusion: there are arguments why, by 2010, we should have expected a slow down in the rate of improvements in life expectancy

## Or maybe macroeconomic factors are the cause?

**Average annual increase in NHS expenditure (source: IFS)**



**Average annual increase in life expectancy at age 65, England & Wales**



Source: CMI presentation by Richard Willets, April 2017

- Since 2010, NHS expenditure has increased at a slower rate than in the preceding decade
- Common sense would seem to suggest that this would be likely to have some impact on death rates

In practice, a variety of factors will influence future life expectancy

## Life expectancy – some (tentative) conclusions

- There does seem to be credible evidence that – for a variety of reasons - improvements in life expectancy witnessed over the decades leading up to 2010 are not being repeated and may not be repeated going forwards.
- This does **not** mean people are dying earlier than they were prior to 2010 – it means that the rate of **future** improvements may not be as great as that prior to 2010.
- It is therefore possible that when we look at this for the 2018 valuation of the Fund, our previous (prudent) assumptions about future improvements in life expectancy may be amended.
- However, what is important to the Fund is the life expectancy of Fund members, not that of the general population of England and Wales – the two could be different.
- Recent analysis by the actuarial profession indicates that improvements in life expectancy since 2010 have been markedly higher amongst members of occupational pension schemes than for the population as a whole.
- In any event, over the long future lifetime of the Fund, the experience of the last few years may not turn out to be hugely significant.
- And finally, they are only assumptions...

# Limitations

- Willis Towers Watson has prepared this presentation for the Trustee of the TfL Pension Fund as an update from the Actuary to be presented at the Annual Members' Meeting on 27 October 2017.
- It was not prepared for any other use or for use by any other party and may well not address their needs, concerns, or objectives. It is not intended to form a basis for any decisions to do or omit to do anything.
- This presentation is provided to the Trustee solely for its use, for the specific purpose indicated. This presentation is based on information available to Willis Towers Watson at the date of the presentation and takes no account of subsequent developments after that date. It may not be modified or provided to any other party without Willis Towers Watson's prior written permission. It may also not be disclosed to any other party without Willis Towers Watson's prior written permission except as may be required by law. In the absence of our express written permission to the contrary, Willis Towers Watson accepts no responsibility for any consequences arising from any third party relying on this presentation or the opinions we have expressed. This presentation is not intended by Willis Towers Watson to form a basis for any decision by a third party to do or omit to do anything.
- In particular, they should not be used by any member as a basis for taking action or not taking action in connection with any benefit entitlement from the Fund.



# TfL Pension Fund

## Annual Members Meeting – Investment Update

Ed Francis

October 2017

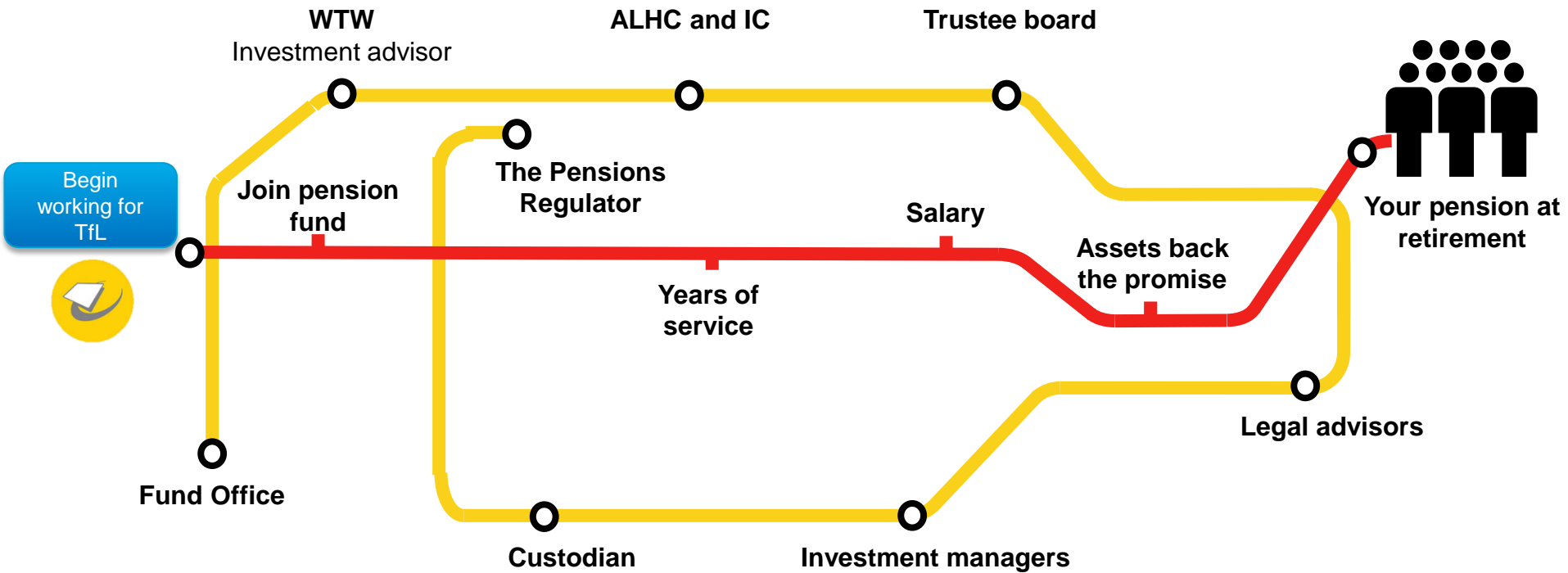
## Why hold assets?

**TfL and assets stand behind the pension promise.**



- Benefit promise is backed by a Trust holding assets
- Assets deliver investment returns in addition to TfL and employee contributions to build the size of the Fund (now around £10billion)
- Fund provides security
- Different approach compared to public sector 'pay as you go' schemes where younger members' contributions pay the pensions of the current retirees rather than being invested

# The investment process ...



... with a circle of professional third parties

# Diversification

Managing the risk of economic uncertainty

- Global and domestic uncertainty from recent events
- Diversifying across asset class, investment manager and geographical location

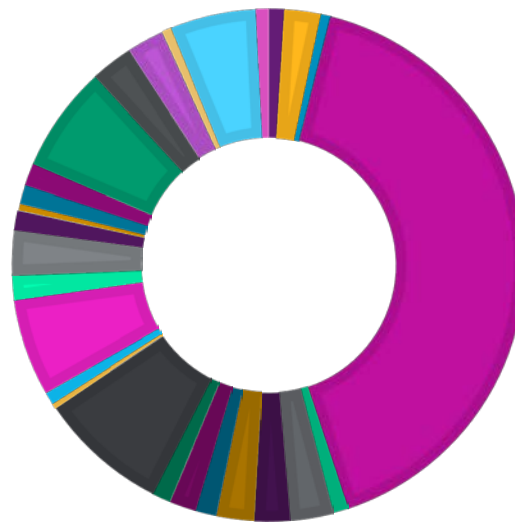
**16**

asset classes



**27**

managers



**Investment risks are spread as widely as practicable**

# Sustainable Investing

Investing to meet present and future needs through management of long-term risks and opportunities, which involves considering environmental, social and governance (ESG) issues as well as the wider impacts on society.



Sustainable investment is important to create a profitable investment plan which generates long term returns and is socially beneficial

## What is the Fund already doing?

The Trustee recently agreed to sign up to the United Nations Principles of Responsible Investing (UNPRI)

- 1700+ signatories
- Representing \$68 trillion in assets under management
- Integrate environmental, social and governance criteria into decision making practices

*Signatory of:*



## 2017 Sustainable Investment Review

WTW sustainability investment assessed the approach to the three sustainability factors for the Fund's equity managers.



The results were positive. 5/8 managers scored a 'strong' rating for environmental, social and governance factors and only one manager received a 'weak' rating for voting. All ratings for engagement were either 'neutral' or 'strong'.



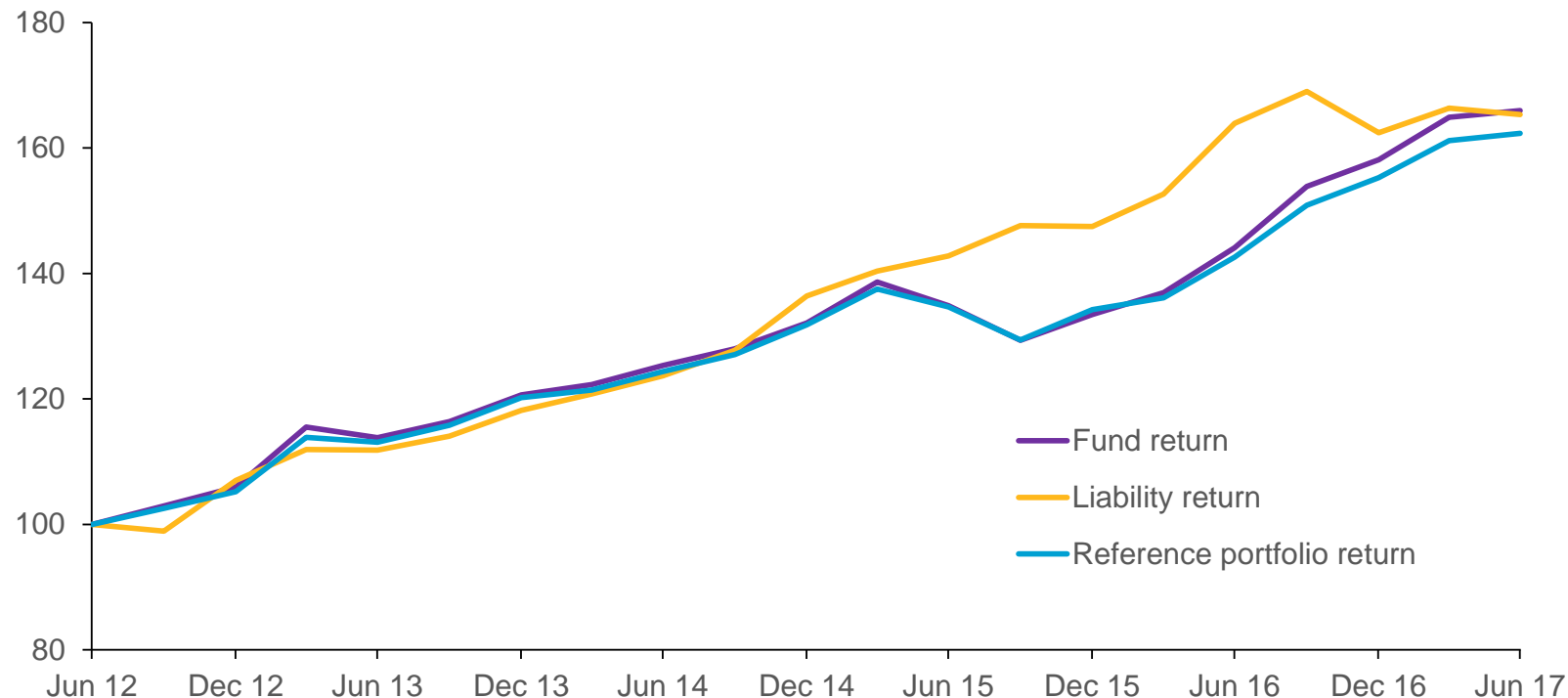
The outcome of this high level review is being discussed by the Investment Committee.



# Relative performance

- The Fund's strategy has outperformed a simple equity and bond strategy
- The Fund has kept pace with its liabilities over the last 5 years
- Performance has been strong over the last 12 months

## Cumulative performance over 5 years to 30 June 2017



Source: JP Morgan, Willis Towers Watson, FTSE International Limited, ICE Benchmark Administration Limited

## Manager changes

The Trustee continues to manage the Fund's investment managers actively



- BlackRock – UK property with long term leases
- CBRE – Increased existing global property investment
- IFM – Enhanced infrastructure debt mandate with existing manager
- Anchorage – New hedge fund
- Blue Mountain – New hedge fund
- Oak Hill – Enhanced version of existing credit investment
- Goldman Sachs – Mezzanine debt



- Arrowgrass – Trustee agreed to terminate and awaiting proceeds
- Och Ziff – Trustee agreed to terminate and awaiting proceeds
- Bridgewater Major Markets – Investment was rolled into larger holding in manager's main fund

**The Trustee continues to diversify assets and seek out best in class managers**

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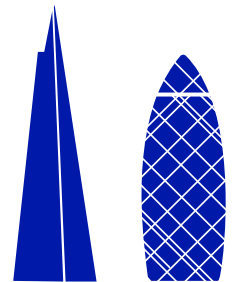
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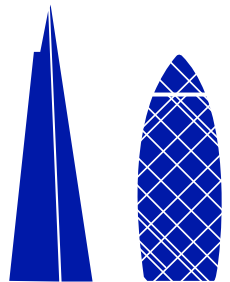
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# Open Forum and Q&A



# Refreshments and Informal Discussions



Thank You  
and  
see you next year  
on  
12 October 2018

