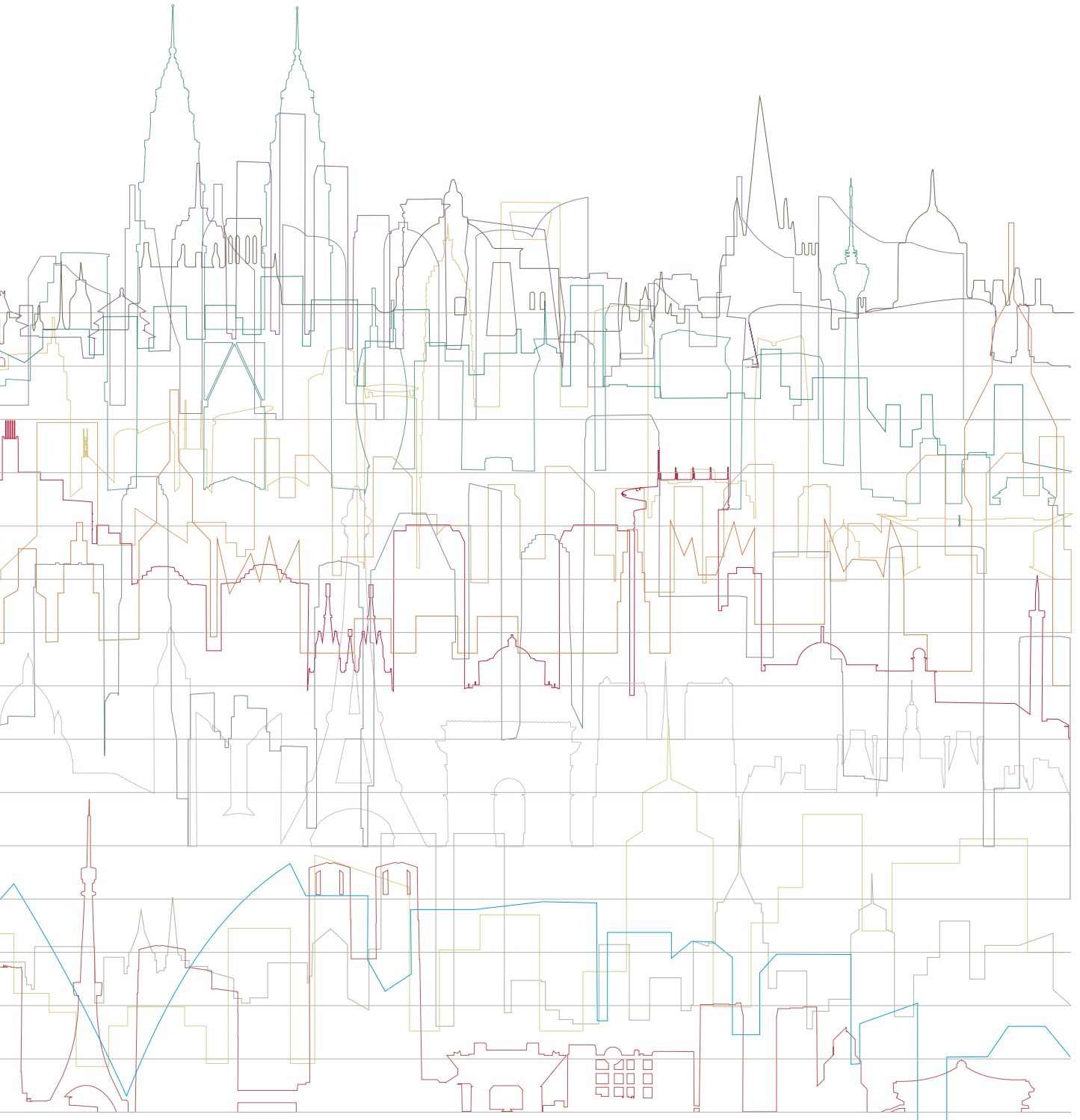


# THE UNIVERSITIES SUPERANNUATION SCHEME (USS): ASSET OR LIABILITY?



Currently, UK universities are reeling in the face of a trio of threats - all of them Covid-related.

1. Firstly, the precipitous decline in foreign student fees will adversely affect cash flows as universities enjoy the highest profit margins from this set of students.
2. Secondly, the move to on-line course delivery is creating a not unreasonable demand for lower fees.
3. Thirdly, students are calling for reimbursement of rentals for vacated accommodation.

The Universities Superannuation Scheme's (USS) 2020 *Annual Report* provides another hammer blow to the sector's finances in the form of a funding deficit of over £12 billion which reflects an increase of close to 240% over last year, chiefly due to the lockdown's impact on the economy. The USS warned in a memorandum of 7 September that the deficit may be as much as £17.9 billion. In the absence of a radical policy change the lockdown-induced USS funding deficit will have a long-lasting negative impact on the participating universities and contributing members to the scheme.

Moreover, changes in the composition of USS membership do not appear to auger well for the scheme. Figure 1 shows the changes in various member categories between March 2010 and March 2020. The aggregate membership has grown from 277,000 to 459,713 - an increase of 66% for the decade. However, it will be noticed that more than 50% of the additional 182,713 members are deferred pension members

which now number 180,352 and constitute 39% of the membership up from 30% in 2010. These are members that have left the scheme who neither contribute nor withdraw funds currently but who are entitled to a pension in the future.

During the decade the scheme in pursuit of managing the deficit has placed considerable burdens on the contributors in the form of cash and reduced benefits which has had an inter-generational wealth shift from young to old. Not surprisingly there has been some resistance manifesting in a strike action by university lecturers during the decade. It has been a £3 billion struggle a number which will be a recurring theme.

**The spectre of university bankruptcy**

The Institute of Fiscal Studies (IFS) recently published a paper (*Will universities need a bail out to survive the Covid-19 crisis*) which provides a detailed study on the impact of the crisis on university finances. The main conclusion is that as many as thirteen UK universities are at risk of bankruptcy. Although all universities are expected to be adversely affected, the impact is unlikely to be uniform. The collective long run losses are estimated to be anywhere between £3 billion and £19 billion. It should be pointed out that there are significant consequences of thirteen bankruptcies for the surviving universities which will be required to absorb the pension liabilities of the fallen. The USS is a pooled scheme with a collective liability on a "last man standing" principle, which means the increasing deficit will be shared among fewer institutions. The IFS paper makes the case for a government intervention with a bailout as one of the policy options,

FIGURE 1. Changes in USS membership

SOURCE: USS Annual reports

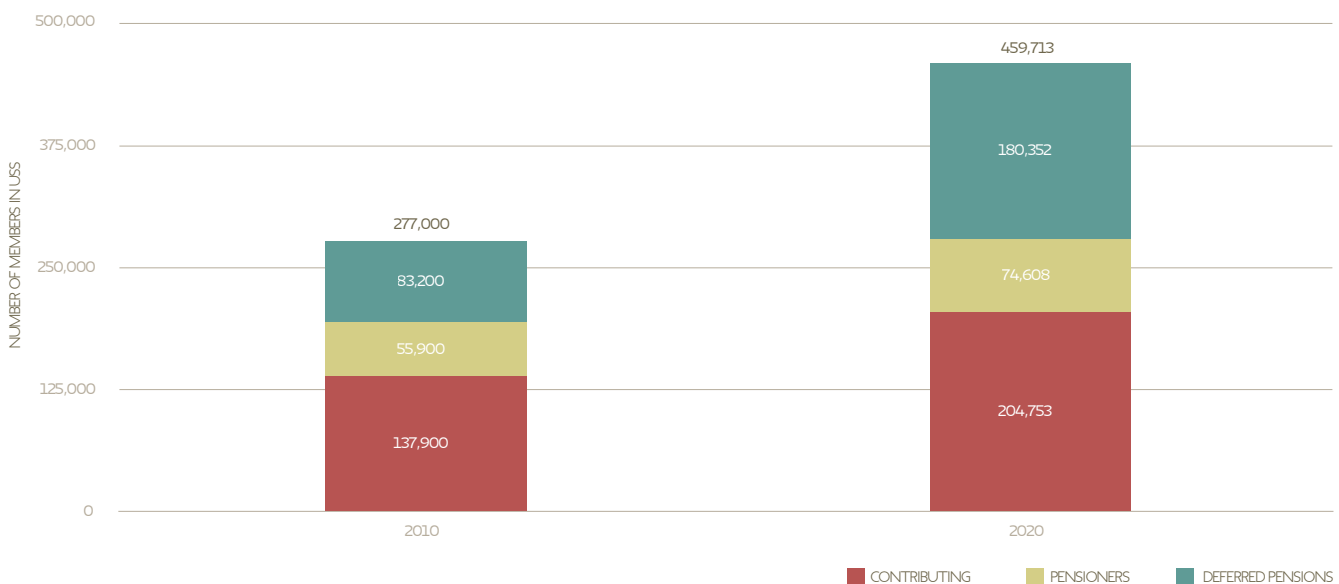


FIGURE 2. USS investment performance

SOURCE: Oxford Metrica



and Universities UK is seeking a bailout package of close to £3 billion (in fees and research) which to date has been resisted by government.

**But is the USS balance sheet really so unhealthy?**

In fact a ten-year view reveals the USS is actually in rude financial health. The scheme has enjoyed a *per capita* asset value increase of around 50% over the decade. The USS annual accounts report that the balance sheet asset values have grown from approximately £30 billion in 2010 to over £67 billion at 31 March 2020, which implies an increase in *per capita* asset value from £109,000 to £150,000. An indication that the average pension value grew at an average rate of 3.2% per annum.

Most of the growth has come from investment returns. However a staggering £3 billion (including investment returns thereon) of this amount has been extracted from contributing institutions and members during the last ten years. The scheme comfortably finances funds paid to pensioned members with funds received from contributing members and institutions. Clearly the scheme is able to be self-funding without drawing on reserves. However the nature of a defined benefit scheme under the 2004 Pensions Act requires full funding - a gold-plated approach which will be discussed later.

**An alternative to bailout**

Bailouts are problematic because those not enjoying the direct benefits of education are effectively taxed (although the case for the indirect benefits is strong). Another intrac-

table problem associated with a bailout is moral hazard, whereby universities would be inclined to behave in the same way we observe with bank bailouts - taking excessive financial risk in the expectation that failure will be resolved by government.

The USS may provide the perfect vehicle to manage a long-term financial relief package for the university sector. It is uniquely the institution where all universities have an aligned interest that would avoid the moral hazard trap. Conveniently, the USS has the required £3 billion on its balance sheet, which is the excess cash flows over the last ten years, which could be reinvested in the universities. A financial instrument, disciplined but long-term in nature might provide the critical relief currently required. Currently the USS has £4.5 billion invested in nominal government bonds which could be redirected to universities. Ensuring the survival of thirteen universities at a time of national crisis is surely worth rethinking the regulation of the USS.

**USS AS VEHICLE FOR A CRISIS RELIEF PACKAGE FOR UNIVERSITIES?**

**A new investment policy also needed?**

In the same way that the spectre of the deficit has influenced the management of the flow of funds between the scheme and members it has also influenced investment policy and performance. The performance is reported in table 1 and contrasted with two other internationally accepted benchmarks in figure 2. Overall, returns have been healthy and average 8% for the decade which compares favourably with the performance of world equity markets for

the same interval. Bearing in mind that the annual data are measured at the end of March the performance reflects the negative impact of the first quarter of 2020 which was the worst quarter in the decade due to the global lockdown. USS performance of 8% falls between that of the S&P500 (large US companies) with an 11% p.a. average and the MSCI ACWI (global equity index) with a 6% p.a. average return. USS performance is especially good as it exhibits a lower volatility than the two other benchmarks. This is not surprising since more than 40% of the portfolio is invested in lower risk fixed income securities.

As shown in figure 3, there have been three major changes in investment policy over the last decade.

1. The allocation to equities has fallen dramatically from 70% at the start of the decade to 38% currently. It has been a very good decade for equity markets as reflected in the S&P index and there may well have been opportunities missed in hindsight. Furthermore, there has been a significant reduction in UK equities specifically, which are now only 10% of the portfolio. The reduction in foreign equities means that the benefits of investing outside the pound during a decade when the currency lost 23% of its value against the dollar will have weighed down returns further. The scheme does continue to have significant investment exposure internationally in other asset classes.
2. As equities have been reduced, the allocation to fixed income securities has risen from a mere 10% at the start to

42% currently. The effect of this has been to reduce the risk of the portfolio and dampen the variance in returns despite constraining the return potential.

3. The scheme continues to invest in private equity to offset the lower returns in fixed income. It should be noted that there appears to be a zero cash holding after 2016 in figure 2, this is because there has been a net negative allocation to cash since 2016 not reflected in the chart. The extent of this leverage or shorting of the portfolio is now at a 12%, this reveals that a certain degree of risk hedging is being undertaken.

In summary, the scheme appears to be managing a well-balanced portfolio which it reports costs around 39 basis points per annum. While this seems reasonable in aggregate it is likely that the passive components are cross-subsidising the more expensive active private equity components. Furthermore, the costs do not reflect the carried interest expense common with private equity investments. Finally, it is worth mentioning that the private equity investments are likely to be much less liquid than listed investments.

**New investment philosophies**

This approach considerably restricts opportunities. Whilst the scheme appears to be well managed it reflects a particular investment philosophy which is being challenged by many. The alternative would be to invest passively at almost no cost. For example, investing in well diversified funds would obviate the need for any investment overhead

FIGURE 3. USS asset allocation

SOURCE: USS Annual reports

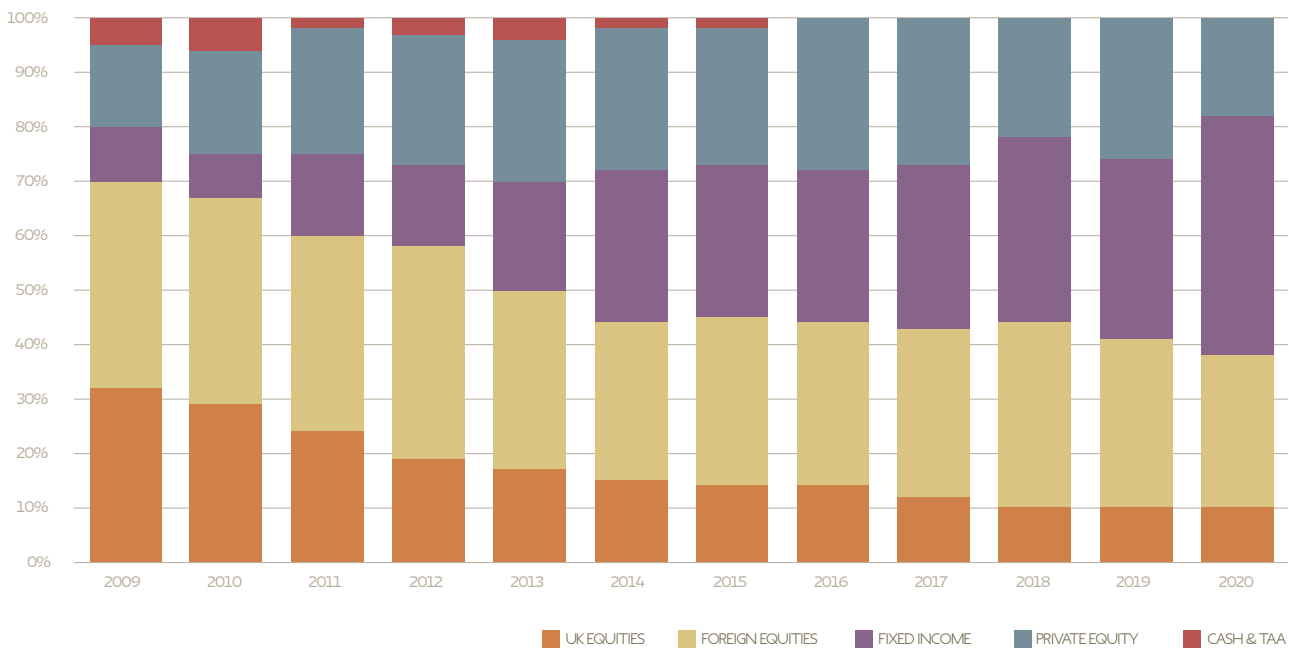
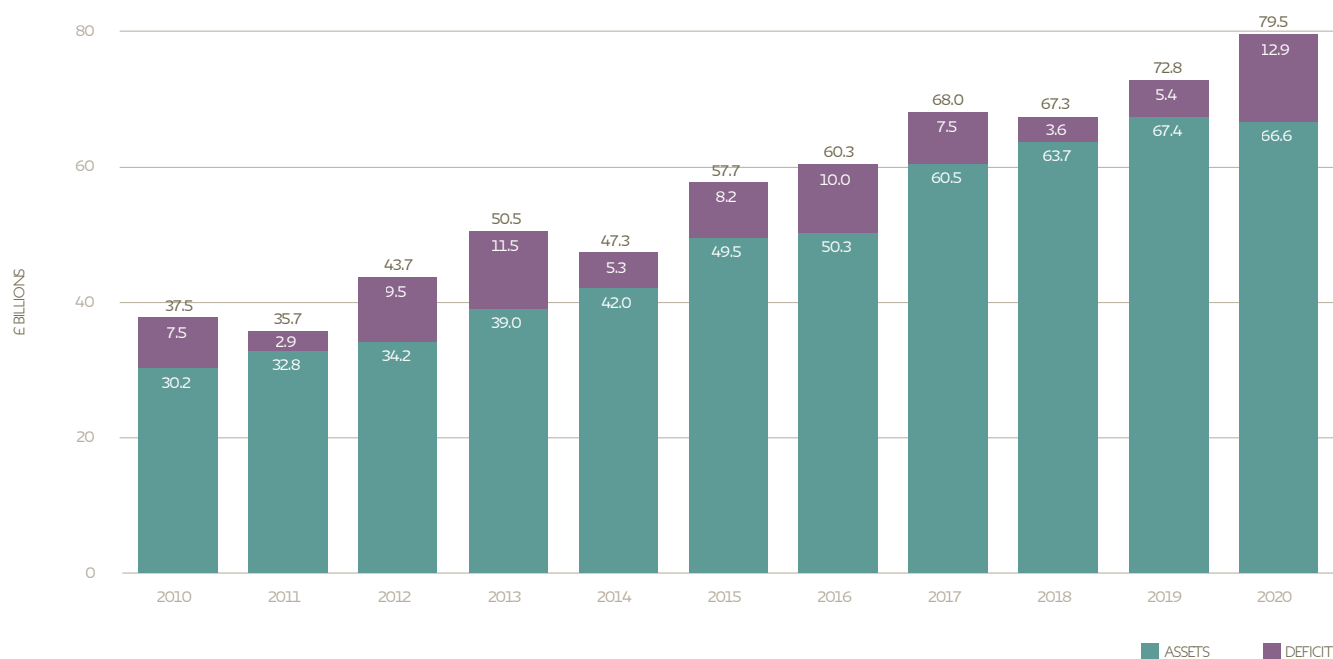


FIGURE 4. The evolution of the USS actuarial liability

SOURCE: USS actuarial & annual reports



costs and allow the scheme to follow a more focussed approach to responsible investing.

There is no doubt that USS takes responsible investing seriously and their *Responsible Investing Report* of 2018 reflects the policies and actions they are taking. A forthcoming report to be published by Oxford Metrica (*Responsible Investing by US Foundations: Perspectives, Policies and Practices*) on the responsible investing practices of US foundations suggests that the USS is very much in line with institutional practice in this area. In June 2020 the scheme announced plans to avoid investments in tobacco, thermal coal mining and certain munitions manufacturers. It expects to be able to implement this policy within two years. A passive investment strategy might allow a more flexible and tailored responsible investing policy. Environmental Social & Governance (ESG) funds offer a possible and appropriate alternative.

### The fallacy of gold-plating

Figure 4 shows the evolution of the scheme since March 2010 broken down into assets and deficits. Although the scale of the deficit is at its highest level at close to £13 billion, is

#### WELL-INTENTIONED BUT INEPT FINANCIAL REGULATION

an example of well-intentioned but inept financial regulation”. It demands that any scheme should be ready to close down at any moment while meeting its obligations with certainty. This hypothetical construct has led to defined benefit schemes becoming almost extinct in the UK having the

this figure very meaningful? Kay and King (2018) (*USS crisis: can the pension system be resolved*) eloquently point out “ the 2004 Pensions Act is

exact opposite effect than intended. The regulation imposes an extreme level of risk aversion. The purpose was to protect pension fund members from any risk that that they would not receive their defined benefits. Such an onerous requirement on trustees is almost impossible to achieve, and has proven so costly in most cases that the new generation can no longer enjoy a defined benefits pension.

Alternatively, if the scheme were to be unshackled from the technical requirements a more reasonable approach based on careful cash flow forecasting over a reasonable horizon could be deployed. This would be far less costly and still provide a reasonable likelihood of meeting future obligations. The price of certainty may be too high. During the last decade the scheme has demonstrated an ability to meet comfortably its liabilities and deliver an acceptable return on adequate reserves to meet its obligation with a reasonable likelihood.

The cost of the present structure has contributed to the financial crisis at UK universities. It would be ironic if the quest for gold-plated, risk-free pensions undermined the livelihood of the membership.

This analysis suggests that the funding deficit is affecting the terms on which the scheme contracts with participating parties and how it approaches investment. Instead of the well-intentioned regulation of the scheme the finances might be managed quite differently and arguably with better outcomes. If the current lockdown induced crisis is not a significant enough event to reconsider the current arrangements, it is hard to envisage another set of circumstances under which the regulation of the USS could be so constructively challenged.

TABLE 1. Summary data

SOURCE: USS Reports

<b>Summary data</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	
<b>Financial statement based</b>											
Net inflows from contributors (£m)	157	129	182	198	99	28	284	251	217	613	
Net ROI (£m)	2,424	1,327	4,583	2,818	7,434	702	9,985	3,660	3,782	-1,385	
ROI %	8.0%	4.0%	13.4%	7.2%	17.7%	1.4%	19.9%	6.0%	5.9%	-2.0%	
<b>Actuarial report based</b>											
	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>
Liabilities (£bn)	37.7	35.7	43.7	50.5	47.3	57.7	60.3	68	67.3	72.8	79.5
Assets (£bn)	30.2	32.8	34.2	39	42	49.5	50.3	60.5	63.7	67.4	66.6
Deficit (£bn)	7.5	2.9	9.5	11.5	5.3	8.2	10	7.5	3.6	5.4	12.9
Funding %	80.1%	91.9%	78.3%	77.2%	88.8%	85.8%	83.4%	89.0%	94.7%	92.6%	83.8%

# NOTES

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**Dr Rory Knight** is Chairman of Oxford Metrica and he chairs the investment committee at the John Templeton Foundation. He was formerly Dean of Templeton College (now Green Templeton), Oxford. Prior to that Dr Knight was the vize-direktor at the Schweizerische Nationalbank (SNB) the Swiss central bank.

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