Spiegelhalter, D., De Stavola, B., Davey Smith, G., Tilling K., Goldacre, B., Davies, N., Julious, S., Gilthorpe, M., Martineau, F., Fraser, A., Dorling, D. et al (2017) Letter: Examining the numbers on pension valuations, The Financial Times, September 19th, https://www.ft.com/content/810aa034-9c79-11e7-8cd4-932067fbf946

We are concerned about the transparency of decision making in the USS pension scheme. The USS has announced a substantial deficit, but the data and methods they have published are very limited, making them impossible to judge.

The USS manages £60bn in assets on behalf of its members. The most recent <u>USS accounts and</u> <u>reports</u> indicate the scheme has a large deficit. However, the USS provides insufficient information about the methods used to value its assets and liabilities. They present no confidence intervals around the point estimate of the deficit, indication of estimation error, or any sensitivity analyses. They provide virtually no details of what data or analytic code they used to come to their conclusions. Even the CMI 2014 report underpinning the mortality assumptions is not publicly available.

The USS and Mercer list the assumptions used on page 106 of the most <u>recent report</u>. They also indicate how they have changed the assumptions between 2013 and 2017. In brief, they assume:

- 1. A fall in the expected long-term nominal investment return from 4.7% to 2.8%.
- 2. An increase in general pay growth from CPI (2.6%), to RPI + 1% (4.4%).
- 3. Life expectancy increasing by 1.5% per year.

We find these assumptions curious. First, how can expected investment returns have fallen by 40% in four years? Surely a collapse in returns on this scale would be reflected in the equity or bond markets? Equity markets in high income countries are up 51.7% in the last four years (11% per year). Their assumptions are consistent with a 0.33% per year return on investments after CPI. Is this rate of return possible without a global recession?

Second, in 2014 the USS assumed cumulative pay growth over the following four years of 16%. Yet general pay increases have fallen well short of this, cumulatively increasing by 5.8%. Their estimates of the deficit assume that in future general pay will rise at a rate of RPI +1% (4.4% per year). Is there any evidence that universities will award cost of living increases at this rate? Furthermore, the ONS and the RSS has repeatedly warned that the <u>RPI is a flawed measure</u> of inflation, and should not be used. So why are the USS using it to estimate the deficit?

Third, there has been <u>little increase in life expectancy since 2011</u>. The Institute and Faculty of Actuaries estimates that mortality is around 11% higher in 2016 than would have been expected based on the historical trend. This means life expectancy is lower, which will lower the USS's liabilities. Why does the USS assume that life expectancy will increase (and has increased) at 1.5% per year?

If the USS and Mercer reports were statistical, medical, or economics papers, diligent editors would reject them out of hand. Why do we apply lower standards to an institution entrusted with £60bn of investments to provide for our retirement, than for our academic research? There appears to be a real risk the USS could be wound up because of these analyses. There may be a sizeable deficit, but on the basis of the evidence that the USS has presented, it is impossible to judge.

The USS recently circulated a consultation document for the 2017 valuation to university Finance Directors. However, the USS has not made this document publically available, making it difficult for USS members to assess it. To date, over 1,000 people have signed a <u>petition</u> calling for it to be published.

We urge the USS to publish in full the methods and data used to calculate the deficit in the 2017 valuation, including a rationale for the assumptions made.

Signatories in random order:

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