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Subject: GAD Response to OBR Discussion Paper on Fiscal Risk

GAD is pleased to offer the following comments in response to the OBR's "Discussion paper No. 2: What should our *Fiscal risks report* cover?". The paper presents some thorough and clear analysis on the background to the report and raises a number of specific questions. Rather than seek to answer each of these questions, we provide some more general thoughts based on our experience and actuarial expertise.

Overall

One conclusion that may be drawn from the historic analysis in the paper is that modelling based purely on past data may be of limited value – in risk management terms it is often appropriate to "expect the unexpected". Furthermore the data that does exist is likely to require careful interpretation given that debt information may not include debt-like liabilities (such as accrued public service pensions) and to a significant extent the total size of public sector debt is a policy choice rather than being driven purely by fiscal risks. This means that the report is likely to require qualitative discussion of both individual risks and overall risk in addition to more quantitative assessments.

It goes without saying that the ultimate objective of increasing the transparency of fiscal risk in this way should be to encourage improvements in risk management. This means it will be worth thinking about how HMT might respond to the report and how information can be presented in a way which is most helpful to both spending departments and HMT departmental spending teams. Risk management in government is unlikely to be effective if it relies purely on a top-down approach. Instead individual policies and programmes need to be designed to be risk-minimising and risk-reducing wherever possible and developed with appropriate regard to government risk appetite (or risk tolerance).

The experience of actuaries working in financial institutions and elsewhere is that an effective financial risk management framework should focus on each of risk identification, risk appetite and risk quantification to help determine appropriate controls and management actions. We consider each of these in more detail below.

Risk identification

The first stage in effective risk management is identifying those risks which could have a positive or negative impact on the expected outcome. A number of the most significant risks are already well-known, and the discussion paper highlights those which have been identified as contingent liabilities, whether explicit or implicit. Of course it is not just risks that can be measured that matter, but experience suggests that what gets measured gets managed, so it is important that all risks should be identified for

measurement purposes where possible. It may be worth considering risks identified in the National Risk Register in this context.

However, experience shows that it is often combinations of events or trends, each of which would be relatively modest in isolation, that can cause the biggest problems. Various techniques exist for helping to identify possible or inherent linkages between risks (for example unanticipated spending on pensions, health and care). Cantle et al (2013) gives a detailed case study of one such technique, involving the science of complex systems, applied to identifying appropriate reverse stress tests at the UK Pension Protection Fund.

Risk appetite

There is a general consensus that risk appetite statements are a useful way of creating a common language and understanding of risks and risk management within an organisation. Indeed the thinking and discussions involved in the process of creating a risk appetite statement can often be particularly helpful in enhancing engagement with meaningful risk management.

Of course there will always be risks that are outside government's control, in terms of both the extent of fiscal exposure and the likelihood of the risk materialising. Nevertheless policymakers may find helpful a risk appetite which states, for example, those risks which government is or is not willing to take on in the pursuit of broader policy objectives in normal times.

Financial institutions often link the risk limits in their risk appetites to the risk of downgrades to their credit ratings. This may also be a useful lens for government to consider. For example, where might the inflection points be in the size of PSND relative to investors' appetite to lend to government, or how much divergence from a pre-agreed projection of debt can be tolerated in different circumstances.

Risk quantification

We believe that risk quantification should be undertaken wherever possible, recognising that modelling uncertainty as well as resource and budget constraints are likely to preclude an overly sophisticated approach in most cases. Techniques used by insurance companies to assess their sustainability are likely to prove helpful here. One such example is reverse stress testing, which in the context of fiscal risk might involve illustrating scenarios or combinations of events that could feasibly take debt to say 100% of GDP.

As discussed earlier the report is likely to prove most useful if it covers both top-down and bottom-up approaches to quantifying and communicating risks. This should facilitate identifying *changes* in risk levels and understanding how resilience is projected to change over time. This will be particularly important for slowly emerging risks, for example climate change, long-term care costs, the productivity puzzle.

In conclusion, we believe that the Fiscal Risks reporting process should prove very valuable in helping the government to improve the resilience of its finances over time and stand ready to offer any assistance that GAD can provide.

Yours faithfully,



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Reference: Cantle et al (2013). *An application of modern social sciences techniques to reverse stress testing at the UK pension protection fund*. Presented at 2013 Enterprise Risk Management Symposium. http://www.ai-cio.com/uploadedFiles/ai5000/channel/RISK_MANAGEMENT/Reverse%20stress%20test%20PPF%20aper%20final.pdf