14 July 2022

Dear Sirs,

Solvency II Review –PRA DP 2-22 and HMT Review of Solvency II

We write to comment on the Solvency II review, particularly on the use of the regulatory 'Matching Adjustment' (MA), a means of creating artificial capital on the regulatory balance sheet of life insurance companies. Buckner retired from the Bank of England in 2018, where he worked on the valuation of Equity Release Mortgages, and on the Matching Adjustment itself; Dowd is a professor of finance and economics at Durham University. We include as an appendix below a letter we wrote in January 2021 on the Solvency II review.

The papers we have reviewed and are commenting on are:

"Review of Solvency II" (HMT)
"DP2/22 – Potential Reforms to Risk Margin and Matching Adjustment within Solvency II" (PRA)
"Solvency II Review: Matching Adjustment and reforms to the Fundamental Spread" (PRA)

However, our reply is explicitly with reference to the questions posed in the HMT paper.

Reform of risk margin (Questions 2.1- 2.5)

We have no strong views on the Risk Margin except to say that it shouldn't exist. The Risk Margin is perversely sensitive to movements in interest rates, particularly when interest rates are low. Our preference would be for a market consistent valuation methodology that abolishes both the market inconsistent Risk Margin and the Matching Adjustment and replaces them with a single market consistent measure of assets and liabilities.

Reform of Matching Adjustment (Questions 3.1- 3.6)

Our view of Matching Adjustment (MA) has not changed significantly since our letter of January 2021 (see appendix). We strongly disagree (your 3.1) with the claim that the MA "makes prudential sense" for firms that do not need to meet short term liabilities. There remains the risk of default on

assets at any time before maturity. We agree (3.2) that the MA allows insurers to recognise upfront as capital part of as yet unearned (and hence risky) future cashflows. However, we believe that the MA is wrong to do so. We agree that the MA affects the timing at which risky profits may be extracted as profit, but believe that risky profits should not be extracted until after they have been earned, because there is always the risk that they will not be earned at all when the chips come in. There is a natural analogy here with a bet on a horse race: taking as 'profit' the expected winnings on a horse race is also a matter of timing, but what if those profits are extracted before the race ends and the bet does not pay off?

We therefore wholly disagree with the claim that MA is a social 'benefit'. It may benefit those speculative and shadowy vehicles that have acquired life insurance firms in order to 'benefit' from a gamble – for that is what it is – on early anticipated profit taking, but MA will not benefit policyholders if the gamble does not pay off. It is grossly irresponsible of the PRA and HMT to endorse a practice that benefits a few wealthy speculators at the expense of the many pensioners who may end up financing the few after the gamble fails to deliver the returns expected from it.

You note (3.9) that "The Government is considering the merits of a fundamental spread methodology that incorporates market measures of credit risk". We welcome this, provided that the methodology is sound. However, given the uncertainty about the measure of credit risk, i.e. an uncertainty about an uncertainty, the principle of policyholder protection, which is a fundamental and overarching precept of Solvency II, dictates that the *only* appropriate methodology for recognising credit risk is to recognise all of the market perception of that risk. Therefore, the fundamental spread should be equal to the market spread and the MA should be zero, always, everywhere and without exception.

We note your concern (3.3) that "there is not yet consensus on how the fundamental spread should be reformed". We agree, but would add that there *should* be such a consensus around the view that the correct fundamental spread is equal to the market spread. As you note (3.6) "If the fundamental spread is miscalibrated, policyholders may be inappropriately exposed to credit risk and other retained risks". We agree: getting the fundamental spread right is key to policyholder protection.

Moreover, the 'CRP' aka 'index spread' methodology proposed (3.9-3.12) is not only unsound in principle, it is also bizarre and could have perverse, even disastrous consequences.

The approach to setting the CRP is supposed to reflect structural changes to credit risk but avoid 'shorter-term volatility'.

CRP = X * (average spread of reference index over n-years) + Z * (difference between spread of asset and that of a reference index),

Our concern is with the X term, which is intended to iron out the 'short term volatility' by means of the n year averaging mechanism. This averaging mechanism means that an immediate widening in observed spread will not immediately affect the CRP implied spread, but if the widening persists, the CRP will gradually widen in response, until, after n years, the CRP will have *increased* to reflect the raised level of observed credit spread. The MA will correspondingly *decrease*, the balance value of liabilities will *increase*, hence (all other things being equal) the Solvency II value of own funds will *decrease*, and so too will the Solvency Capital Ratio (i.e. the own funds divided by Solvency Capital Requirement).

However, this method suggests an obvious problem. Insurance firms currently publish the ratings and sector of corporate bond assets, and spread widening typically affects whole sectors (for example, aviation after the covid crisis, property firms after recent interest rate hikes). After a spread widening event causing bond prices to fall, speculators will be able to determine which firms are affected, and may even be able to short them in anticipation of a decline in Solvency II value. A further difficulty is that IFRS (statutory) valuation is likely to diverge from the Solvency II own funds value, assuming that the IASB does not object to the IFRS Interpretations Committee proposal to adopt the so-called 'Method 1' of recognising future profits via the Contractual Services Margin. It is generally agreed that Method 1 will have the effect of reducing the IFRS equity of annuity providers, thus further widening the gap between IFRS equity and Solvency II own funds, and increasing the confusion that many analysts experience in interpreting the impact of changes in the different forms of equity.

Unfortunately the IASB is meeting at the end of July, shortly after this consultation closes.

Furthermore, having read the papers cited, we see no academic evidence to support the CRP method, which implies a mechanical and systematic method for trading corporate bonds, effectively trading against the market. If most volatility is truly 'short term', then we could make certain profits by buying the bonds when their price falls, and selling them when their price rises. But we can never know that the bonds' prices will not fall further, and possibly fall to zero. It is true that prices recovered in the aftermath of the covid epidemic, but that was because (i) it was subsequently realised that the covid morbidity was not as severe as originally feared and (ii) the discovery of effective vaccines significantly reduced morbidity. Neither of these outcomes could have been confidently predicted in advance, and the result might have been disastrously different. We also note that the

papers by Feldhütter et al,[1] do not support the proposed method, and also note that the one paper which does provide some support was an unpublished PhD thesis of uncertain quality that happened to be sponsored by a then PRA-regulated life insurer.

Question 3.1: we believe that the current methodology does not sufficiently address the risks associated with assets that have the same credit rating but different market measures of retained risks.

Questions 3.2 to 3.6 are questions about quantitative impact that are addressed to firms, not other potentially affected individuals such as policyholders or their representatives.

Increasing investment flexibility (Questions 4.1- 4.5)

Policyholders' funds should be invested safely to ensure that promises of future pensions are kept. Such safety can be achieved by investing in asset portfolios composed of low risk bonds whose durations match the expected payouts to be made to policyholders. Infrastructure investments are not suitable. These tend to be generally high risk and tend to come out late and over budget. Equity release mortgages are also unsuitable: these are high risk and generate low (and often negative) returns to investors, as a consequence of which the sector itself has the whiff of Ponzi about it.

Yours,

Dean Buckner
Kevin Dowd

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[1] See particularly "The Myth of the Credit Spread Puzzle".

Appendix: Copy of Eumaeus letter of 11 January 2021

[address redacted]

11 January 2021

By email d.e.buckner@eumaeus.org

Solvency II Review SolvencyIIReview@hmtreasury.gov.uk

Dear Sirs,

We write to comment on the Solvency II review, particularly on the use of the regulatory 'Matching Adjustment' (MA), a means of creating artificial capital on the regulatory balance sheet of life insurance companies. Dowd is a professor of finance and economics and Buckner is retired from the Bank of England, where he worked on the valuation of Equity Release Mortgages, and on the Matching Adjustment itself.

As you say, MA applies to business in which an insurance firm sells liabilities with fixed duration and cash flows, for example, annuities, and backs these liabilities by buying 'to hold' assets with predictable cash flows and durations that approximately match those of the liabilities. The MA allows firms to use higher yielding, and hence risk bearing assets, and use the supposedly risk-adjusted yield to discount the liability cash flows. This discounting practice decreases the reported present value of the liabilities, hence creates capital on the regulatory balance sheet[2]. Use of MA has to be approved by the PRA.

HMT seeks views on whether the matching adjustment is operating optimally. This begs the question: 'operating optimally' is based on the unsupported assumption (see above) that MA is a good thing, and that we don't have enough of it because of overly restrictive criteria surrounding it. This claim unwisely presupposes that the MA is beneficial. There are better ways to support the provision of long-term finance than putting pensioner savings at risk, as we argue below.

We do not agree that firms using MA are 'exposed to less risk than other firms.' The MA allows firms to recognise some anticipated risky future profits as if they were certain, thereby allowing them to be distributed before being realised. If the risky future profits are not realised – bear in mind that they are called 'risky' for a reason – then the capital created by MA will vanish, and policyholders will be at risk. For the same reason, we do not agree that 'an insurance firm that meets these conditions is less exposed to the risk of asset price movements, because the short-term volatility of asset prices does not affect its ability to make contractual payments on its liabilities as they fall due.' Market movements are the market perception of increased default risk, as we saw in March 2020 when asset markets collapsed on fears that the coronavirus crisis would cause long term damage to the economy. Default on the affected assets would certainly affect the ability of a firm to make contractual payments on its liabilities as they fell due.

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[2] And hence, because International Financial Reporting Standards has a similar mechanism, increases IFRS equity.

Again, and for the same reason, we do not agree that firms can cover default losses 'with a very high level of confidence' and can cover the uncertainty over the cost of replacing assets that default from their own capital. The problem is that the capital of some firms making excessive use of MA has entirely been created through MA, so these firms have no true capital at all.

You say that 'The matching adjustment has a clearly defined rationale.' Again, we disagree. Standard economic theory says there is no rationale for discounting risk-free liabilities at higher than the risk-free rate. According to the Bank of England's Donald Kohn, "While economists are famous for disagreeing with each other on virtually every other conceivable issue, when it comes to this one there is no professional disagreement: *The only appropriate way to calculate the value of a very low-risk liability is to use a very low-risk discount rate.*"[3]

Use of the matching adjustment does not boost the true affordability of annuities. It makes them *appear* affordable by supporting them with higher yielding, but riskier assets. Note that much of the capital artificially created by MA goes into the pockets of hedge funds and private equity managers and does not support long-term funds to pay for future annuity payments.

Nor does MA support the provision of long-term finance to the economy. On the contrary, the MA allows firms to artificially boost reported profits which can then be distributed before true profits have been earned, thereby depleting funds available for long-term investment. Also, our understanding is that relatively few of the assets that received MA regulatory benefit were used to provide long-term finance.

You say that the Government also seeks views as to whether there are barriers in the current processes in the use of MA. Again, this statement presumes without any underlying justification, why a system of what is essentially false accounting could support long-term financing of projects.

Sincerely,

Dean Buckner (EUMAEUS)

Kevin Dowd (University of Durham)

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[3] Donald L. Kohn, "Statement at the National Conference on Public Employee Retirement Systems Annual Conference," New Orleans, LA, May 20, 2008.