Title:

Transposition of the Solvency II Directive (2009/138/EC)

IA No:

Lead department or agency:

HM Treasury

Other departments or agencies:

Financial Services Authority

Impact Assessment (IA)

Date: 01/01/2011

Stage: Consultation

Source of intervention: EU

RPC Opinion: AMBER

Type of measure: Primary legislation

Contact for enquiries:

frank.carson@hmtreasury.gsi.gov.uk

### Summary: Intervention and Options

Cost of Preferred (or more likely) Option							
Total Net Present Value	Business Net Present Value	Net cost to business per year (EANCB on 2009 prices)	In scope of One-In, One-Out?	Measure qualifies as			
£-61m	£-61m	£-7m	No	NA			

#### What is the problem under consideration? Why is government intervention necessary?

Previous EU insurance directives have aimed to create an effective single market for insurance whilst increasing consumer protection. However, the current EU minimum standards are not risk-sensitive, and do not incentivise pro-active management of risk, which has led many member states to conclude that they are inadequate and to supplement them with their own domestic regimes (e.g. the Individual Capital Adequancy Standards or "ICAS" regime in the UK). This has resulted in a "patchwork" of regulatory requirements for insurers across the EU, hampering the functioning of the single market. The Solvency II Directive aims to build on previous insurance directives to create risk-sensitive, harmonised requirements for EU insurers.

#### What are the policy objectives and the intended effects?

The key policy objective is to develop the single market in insurance services and to increase the level of policyholder protection. Other intended effects are to: ensure the soundness of insurance firms and that they can withstand difficult periods; protect the stability of the financial system; improve firms' risk management processes; increase confidence of policyholders in insurance products; increase competition, particularly in mass retail lines of business, leading to reduced prices; encourage product innovation to increase consumer choice.

# What policy options have been considered, including any alternatives to regulation? Please justify preferred option (further details in Evidence Base)

The Directive is maximum harmonising, and is clear on what must be achieved, so the Government has no effective discretion in terms of policy choices for transposition (in particular, there is no scope for pursuing alternatives to regulation). A copy-out approach will be followed, and the approach will not go beyond the minimum required by the Directive.

As a result there are only two policy options: (1) Transpose the Directive, and (2) Do Nothing, where the second option is not a genuine policy option but is included as the baseline.

Will the policy be reviewed? It will be reviewed. If app Does implementation go beyond minimum EU requiremen		orion date	No		
Are any of these organisations in scope? If Micros not exempted set out reason in Evidence Base.	Micro No	< 20 No	Small Yes	Medium Yes	Large
What is the CO <sub>2</sub> equivalent change in greenhouse gas em (Million tonnes CO <sub>2</sub> equivalent)	issions?		Traded:	Non-	raded:

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

pur in

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## Summary: Analysis & Evidence

#### Description:

#### FULL ECONOMIC ASSESSMENT

Price Base	Year Year 2011 Years 10	Net Benefit (Present Value (PV)) (£m)				
Year 2011		Years 10	Low: Optional	High: Optional	Best Estimate: -£61	

COSTS (£m)	Total Tra (Constant Price)	nsition Years	Average Annual (excl. Transition) (Constant Price)	Total Cost (Present Value	
Low	1,619		-251	-395	
High	2,401	5	818	8,978	
Best Estimate	2,010		198	3,600	

#### Description and scale of key monetised costs by 'main affected groups'

In 2011 present values to nearest £10m for Best Estimate: One-off transition cost to industry £1,900m (NPV over 5yrs), one-off transition cost to FSA £110m (NPV over 5yrs), ongoing cost to industry £1,530m (NPV over 10 yrs), ongoing cost to FSA £60m (NPV over 3 yrs), incremental capital cost to industry £0m (NPV of cost over 10 yrs). NB: most one-off costs to industry are already committed (so would be incurred even in the "Do Nothing" option) but have been included for the sake of clarity.

#### Other key non-monetised costs by 'main affected groups'

M/A

NB: The 'low' cost estimate above is negative because in the low cost scenario, capital is assumed to be released rather than raised, and so the incremental average annual capital 'cost' is a negative amount. Also note that costs to the FSA are passed on to firms via levies so are included in the Equivalent Annual Net Cost to Business on page 1. After 3yrs, there are no incremental ongoing costs to FSA above BAU costs.

BENEFITS (£m)	Total Transitio (Constant Price) Year		Total Benefit (Present Value)
Low	0	240	1,928
High	0	619	4,973
Best Estimate	0	440	3,537

#### Description and scale of key monetised benefits by 'main affected groups'

In 2011 present values to nearest £10m:

Reduced cost of capital for industry £320m (NPV of benefit over 10 vrs)

Efficiency gains to industry £3,200m (NPV of benefit over 10 yrs)

#### Other key non-monetised benefits by 'main affected groups'

Averted loss/reduced probability of insurer default (benefit for industry, policyholders, regulators and investors); Administrative benefits to industry (improved risk modelling, enhanced governance etc.); Level playing field across Europe (benefit to industry, policyholders, regulators, investors); Increased policyholder protection (benefit to consumers and regulators); Product innovation (benefit to consumers).

#### Key assumptions/sensitivities/risks

Discount rate (%)

3.5

Analysis is based on draft implementing measures; the final measures (not yet agreed) will differ and this will substantially affect the actual impact. Sample data has been extrapolated and there may be sample bias or extrapolation error. Results of fifth Quantitative Impact Study have been used but data submitted by firms may be incorrect, may be based on estimates, and only reflect market conditions at end 2009. Results are indicative only and are subject to a high level of uncertainty.

#### BUSINESS ASSESSMENT (Option 1)

Direct impact on business (Equivalent Annual) £m:				In scope of OIOO?	Measure qualifies as		
Costs:	432	Benefits:	425	Net:	-7	No	NA

# Evidence Base (for summary sheets)

#### 1. Problem Under Consideration

Previous European Union (EU) insurance directives have aimed to create an effective single market for insurance services whilst increasing consumer protection. However, many member states have concluded that the existing EU minimum requirements are insufficient and have supplemented them with domestic regimes (such as Individual Capital Adequacy Standards, or "ICAS", in the UK). This has resulted in a "patchwork" of regulatory requirements across the EU, hampering the functioning of the single market.

#### 2. Rationale for Intervention

The current EU-wide solvency regime for insurers is based on the principles of minimum harmonisation and mutual recognition via a single license or "EU passport".

The minimum standards are not risk sensitive and do not consider certain key risks such as credit risk (the risk that third parties cannot pay their debts), market risk (the risk of a decline in the market value of investments) or operational risk (caused by factors such as system breakdowns or maladministration), all of which have been demonstrated to be material threats to insurers' solvency positions. The current rules tend to be backward-looking rather than prospective in nature, and do not incentivise the proactive assessment and management of risk.

The additions that individual member states have made to these minimum standards are heterogeneous and have resulted in an unlevel playing field, affecting cross-border competition, the costs of compliance for cross-border groups, and the extent of supervisory co-operation and convergence across Europe.

The European Commission ("the Commission") established the Solvency II project in the early 2000s to review and reform the rules that govern direct life and non-life insurance firms and reinsurers operating in the EU.

The Solvency II framework Directive (Directive 2009/138/EC<sup>2</sup>, "the Directive"), which was agreed in April 2009, builds on and consolidates the existing EU insurance directives, and lays down rules for:

- The taking-up and pursuit, within the [European] Community, of the self-employed activities of direct insurance and reinsurance.
- The supervision of insurance and reinsurance groups.
- The reorganisation and winding-up of direct insurance undertakings.

HM Treasury, as the UK's Ministry of Finance, is obliged to implement the Directive into UK law by the agreed transposition date in order to fulfil its obligations under the EU Treaty. The transposition and implementation date in the Directive is 31<sup>st</sup> October 2012, but this is subject to ongoing discussion<sup>3</sup>.

### 3. Policy Objective

#### Changes introduced by Solvency II

That is, it sets down minimum standards which individual member states must meet, but does not preclude these from being exceeded.

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:335:0001:0155:en:PDF

The proposed Omnibus II Directive, which will amend the Solvency II Directive, may change the dates for transposition and implementation. Our current understanding, [based on the published versions of the Council's and Parliament's compromise texts], is that the transposition deadline is likely to fall within 2013, with full implementation of the Directive on 1<sup>st</sup> January 2014, but we will only have certainty when Omnibus II is agreed.

Solvency II will introduce economic risk-based solvency requirements for insurers and reinsurers across all EU member states that will be significantly more sophisticated and risk-sensitive than the current minimum standards. The framework will require market-consistent valuation of all assets and liabilities.

The regime is intended to apply to all EU insurance and reinsurance firms, regardless of size. However, the 'principle of proportionality' will apply, meaning that the application of the requirements will be proportionate to the nature and scale of the risks faced by individual firms. The very smallest firms (with premium income less than €5m and technical provisions of less than €25m) will be exempted by de minimis criteria.

There will be a dual system of capital requirements – a Solvency Capital Requirement (or "SCR") and a lower Minimum Capital Requirement (or "MCR"), creating a 'ladder' of supervisory intervention and allowing early action by supervisors when a firm's solvency position begins to deteriorate.

Firms will be able to calculate the amount of regulatory capital they require using a standardised formula or alternatively develop their own internal models, which will require supervisory approval.

The regime takes a 'three pillar' approach. Under Pillar 1 (quantitative requirements), the risks to an insurer's assets will be considered alongside the liability risks, under a so-called 'total balance sheet' approach. For the first time, market, credit and operational risks will be covered by the EU-wide regime for insurers. Pillar 2 will place a new focus on risk management and governance, and Pillar 3 will bring a greater level of market disclosure, which it is hoped will bring increased 'market discipline'.

The supervision of insurance groups will be strengthened, and it is intended that the regime will result in increased convergence between the supervisory regimes and practices of member states.

UK firms will be well-positioned to make these changes because the current ICAS regime was deliberately designed to better align regulatory capital with the risks faced by individual firms (including asset-side risks), and to encourage firms to make their own assessments of their risks and capital needs<sup>4</sup>. Solvency II is therefore consistent with the direction of travel of the UK financial regulator and industry in seeking a more risk sensitive and economic way of determining capital adequacy standards for insurers.

It is expected that between 550 and 600 individual firms will be in the scope of Solvency II in the UK. This figure includes individual Lloyd's syndicates and firms in run-off.

### Policy Aims

The Commission have stated<sup>5</sup> that the rationale for EU insurance legislation is to facilitate the development of a Single Market in insurance services, whilst at the same time securing an adequate level of consumer protection. Further, the aims of a solvency regime are to:

- Ensure the financial soundness of insurance firms, and in particular that they can survive difficult periods;
- Protect policyholders and the stability of the financial system as a whole;
- Stipulate the minimum amounts of financial resources that insurers and reinsurers must have in order to cover the risks to which they are exposed;
- Lay down the principles guiding insurers' overall risk management so that they can better anticipate any adverse events.

<sup>4</sup> More on the ICAS regime can be found in section 4.

See the Commission's publication Solvency II: Frequently Asked Questions at http://ec.europa.eu/internal\_market/insurance/docs/solvency/solvency2/fag\_en.pdf

In replacing the existing regime with more harmonised requirements across the EU, the intention is to:

- Ensure a uniform and enhanced level of policyholder protection across the EU, reducing the likelihood that policyholders lose out if insurers get into difficulties, and giving policyholders greater confidence in the products of insurers;
- Increase competition, especially for mass retail lines of business, such as motor and household insurance, putting downward pressure on prices;
- Encourage product innovation that will give consumers more choice.

Alongside these aims, the Government has an objective to transpose the Directive in such a way that it meets its Treaty obligations, and in doing so, to allow the UK's insurance industry and policyholders to recognise the full extent of the available benefits, whilst not being placed at a disadvantage versus other member states. Any additional regulatory burden will be minimised.

### 4. Description of Options Considered

The Directive is maximum harmonising, and is clear on what must be achieved, so the Government has very little discretion in terms of policy choices for transposition (in particular, there is no scope for pursuing alternatives to regulation). A copy-out approach will be followed. As a result we only have two policy options: (1) Transpose the Directive, and (2) Do Nothing, where the second option is not a genuine policy option but is included as the baseline.

### Option 1 - Transpose the Directive

Transposition will require the Government to amend UK legislation, and the Financial Services Authority (FSA) (and/or the successor body after the regulatory reform, the Prudential Regulatory Authority (PRA)) to amend the Regulatory Handbook. The FSA is consulting separately on Handbook changes.

Most of the requirements of the Directive can already be met using powers provided by the Financial Services and Markets Act 2000 ("FSMA") and the current Handbook, so the number of changes required to primary legislation is relatively small compared to the number of provisions in the Directive.

The required legal changes can be categorised as:

- New conditions for the authorisation and de-authorisation of firms.
- New powers for the PRA, chiefly:
  - Powers of supervisory approval (e.g. for firms' use of internal models, partial internal models, Undertaking-Specific Parameters<sup>7</sup> (USPs) or ancillary own funds<sup>8</sup>);
  - Powers relating to the outsourced activities of insurance firms.
- iii. New mandates for the PRA, chiefly:
  - Requirements to consult, communicate or co-operate with supervisors in other member states in certain specified circumstances;
  - Requirements to review certain regulatory decisions at pre-defined intervals, or to make verifications.
- Alignment of definitions.

The FSA's Regulatory Handbook contains guidance and regulations for UK (re)insurance undertakings (and other parts of the UK financial sector): http://fsahandbook.info/FSA/html/handbook/

As an alternative to a full or partial internal model, firms have the option to use the standard formula but with some of the standard parameters replaced by ones specific to their own risk profiles; these will, however, require supervisory approval.

Ancillary own funds are only eligible to count as regulatory capital if they have received supervisory approval that they meet the relevant criteria.

In keeping with the Government's Guiding Principles for EU Legislation<sup>9</sup>, the proposed legal changes do not go beyond the minimum that is required to implement Solvency II in the UK, i.e. no gold-plating will be introduced. "Copy-out" has been used wherever possible. This will not leave UK firms at a disadvantage versus their European counterparts.

The Government's micro-business moratorium will not apply in this case; however, micro-businesses should automatically be exempted by the *de minimis* criteria that define the scope of the Directive. More information is in the Small Firms Impact Test, annexed.

The proposals are out of scope of 'One-in-one-out' (OIOO) because they relate to the transposition of an EU Directive, and the Government is not proposing to introduce any gold-plating.

There will be a ministerial duty to review after 5 years, and every 5 years thereafter.

### Option 2 - Do Nothing (Baseline)

This is not a genuine policy option, because it would violate the UK's Treaty obligations, but is included as the baseline for assessing the impact of transposition.

### Baseline prudential regime: Individual Capital Adequacy Standards (ICAS)

The ICAS regime was introduced by the FSA in 2004 and supplements the existing minimum EU requirements. Insurers produce an Individual Capital Assessment (ICA)<sup>10</sup> setting out their risks and the capital they believe is needed to support these risks over a one-year timeframe. The FSA then reviews the ICA and gives the firm Individual Capital Guidance (ICG). Neither the ICA nor ICG are publicly disclosed. If a firm's capital falls below the ICG, the FSA may intervene to ensure that the firm takes action to restore its capital position.

The similarities between the ICAS regime and Solvency II should mean that UK insurers are well-placed to make the transition in comparison to insurers operating in member states whose prudential regimes have remained closer to the pre-existing (Solvency I) EU minimum requirements.

### Difficulties in establishing a wider baseline landscape for the UK

If the Directive were not implemented, UK insurers would still face regulatory, accounting, tax and legal changes in the next few years. Examples are the Retail Distribution Review, the Test Achats judgement on gender and pricing, and changes to International Financial Reporting Standards (IFRS).

These changes may drive IT system upgrades, recruitment of additional resource, changes to pricing and product offerings, entry to and exit from markets, and asset allocation shifts. There may be changes to the competitive environment and effects on policyholders.

Because Solvency II is also likely to drive such changes, it is very hard to identify the baseline level of change that would have 'happened anyway'. When estimating the costs of Solvency II, insurers are likely to be including costs that they would have incurred regardless, because Solvency II will act as a catalyst in bringing forward or accelerating planned change programmes. This blurring of boundaries will inevitably be reflected in the overall cost estimates for implementing the regime.

http://www.bis.gov.uk/policies/better-regulation/policy/european-legislation/guiding-principles-eu-legislation

The assessment of a firm's capital adequacy must: reflect the firm's assets, liabilities, intra-group arrangements and future plans; be consistent with the firm's management practice, systems and controls; consider all material risks that may have an impact on the firm's ability to meet its liabilities to policyholders; and use a consistent valuation basis throughout.

#### Other aspects of the baseline

Rather than setting them out here, other aspects of the baseline position for the UK insurance industry (such as level of capital surplus, asset allocation, competitive environment) are mentioned at appropriate junctures in the cost-benefit analysis.

#### 5. Cost Benefit Analysis (CBA)

#### Introduction

Because there is only a single proposed policy option for transposition, the cost benefit analysis looks at the impact of transposing the Directive in the UK versus a baseline of doing nothing. The intention is to consider the cumulative impact of the new measures.

The overall impact of the transposition will be far wider than just the direct impact of the legal changes proposed by the Government in the consultation document. Further, an assessment of the individual effects of each legal change would not be meaningful; the changes are intended to integrate with existing UK law and with the FSA's handbook changes, and would not be introduced individually or outside of this framework. For this cost benefit analysis, the proposed legal changes have been considered as a package, the combined purpose of which is to allow the Solvency II regime to be introduced in the UK; in other words, we have treated the impact of transposing the Directive as synonymous with the impact of introducing Solvency II in the UK.

#### Basis for the CBA

Although the Directive has been agreed, the actual impact of introducing Solvency II will depend heavily on the final shape of the implementing measures and guidance, which have not yet been agreed at the European level. The Omnibus II Directive will also affect the impact because it will set down the implementation date and the length and nature of any 'transitional' arrangements.

Agreement of Omnibus II is not expected until early in 2012, with agreement of the implementing measures to follow thereafter. Delaying the consultation until that point would not have allowed adequate time for the transposition process, and would have left firms uncertain as to the Government's intentions for transposition.

In the absence of these factors, we have had to base the CBA on the latest complete package of proposed implementing measures to have been comprehensively modelled by industry, namely the Technical Specification for the Fifth Quantitative Impact Study<sup>11</sup> (QISS). However, it should be noted that a large number of these measures have since been amended; we discuss this, and other limitations of this approach, in Section 6: Risks and Assumptions.

In preparing the CBA we have worked closely with the FSA, and have also drawn on some extensive research conducted by Ernst & Young on the FSA's behalf.

Wherever discounting has been applied, this has been at 3.5% p.a. in line with HM Treasury's Green Book recommendations. All present values are in 2011 terms.

#### Structure of the CBA

<sup>&</sup>lt;sup>11</sup> QIS exercises have been used to assess the impact of successive iterations of the proposed framework. The fifth and final exercise for Solvency II, QISS, was conducted between July and October 2010.

The costs of Solvency II can be split into two categories: the cost of any additional capital that needs to be raised, and the administrative costs of implementing the new regime. These administrative costs can be subdivided into costs to industry and costs to the regulator on a one-off and ongoing basis.

Not all of the main benefits are quantifiable, so we consider both monetised and non-monetised benefits in the analysis.

We also consider the wider effects of implementation, including the impact on small firms, competition and equality, which are dealt with in separate annexes. The structure is as follows:

#### A. Costs

A1. Capital Impact

A2. Administrative Impact

One-off administrative cost for industry Ongoing administrative cost for industry Direct costs to the FSA(/PRA)

### B. Benefits

B1. Monetised Benefits

Reduced cost of capital Improved efficiency and capital allocation

B2. Non-monetised Benefits

#### C. Wider Impacts

C1. Asset Allocation

C2. Financial Market Impacts

C3. Consumer Impacts: Product Price and Quality

C4. Insurance Market Impacts

Annex: Equality Impact Annex: Small Firms Impact

Annex: Competitive Environment

#### A1. Capital Impacts

In terms of capital, Solvency II is likely to affect:

- · the amount of regulatory capital that individual firms need to hold;
- the size of any 'buffer' of additional capital that firms voluntarily choose to hold above the regulatory minimum; and
- · the cost to firms of raising and holding capital.

The baseline for assessing capital impacts should be the UK's ICAS regime, since for the majority of firms the current 'biting<sup>12</sup>' capital requirement is ICAS Individual Capital Guidance, rather than the statutory Solvency I (EU minimum) requirement. The Solvency I position is shown for completeness.

QIS5 results (which are as at year-end 2009) have been used as the best available indication of firms' capital positions under Solvency II, although the true position may be substantially different, as discussed later.

<sup>12 &#</sup>x27;Biting' in the sense that it results in a lower level of surplus capital, and so will be the dominant requirement that firms manage their capital around.

#### Impact on Capital Surplus

Free capital, or 'capital surplus', is the excess of available capital resources over the regulatory capital requirement.

The data in the table below is from 177 UK solo insurance entities for which Solvency I, ICAS and QISS data is available as at year-end 2009. This subset of firms represents the majority of the UK market, but necessarily excludes those firms that did not complete QISS, and also any firms that completed QISS but on a basis that is not comparable with the way their business is currently supervised (since this would preclude a comparison with ICAS or Solvency I). No scaling-up has been applied.

Table 1 – Available and Required capital for 177 firms under different regimes as at 31/12/2009 Source: FSA

Regime	Solvency I	ICAS	QIS5 (proxy for Solvency II)*	
Available capital resources	104	112	100	
Regulatory capital requirement	44	71	72	
Capital surplus	60	41	28	
Change in capital surplus on moving to QIS5 basis	(33)**	(14)**	N/A	
% Change in capital (54%) surplus on moving to QIS5 basis		(34%)	N/A	

<sup>\*</sup>The QISS figures are based on the standard formula, and so do not take into account internal models, or the effect of transitional arrangements which may be in place when Solvency II comes into force.

#### Solvency I versus QIS5

It can be seen that for these 177 firms there is a large (£33bn, or 54%) reduction in aggregate capital surplus when moving from a Solvency I to a QIS5 basis. However, much of the £60bn surplus shown on a Solvency I basis is not genuinely 'free' capital, because firms will be holding most of this capital in order to meet the (usually much higher) ICG. This makes it difficult to meaningfully compare Solvency I and QIS5 levels of surplus<sup>13</sup>.

Analysis suggests<sup>14</sup> that certain types of firm experienced particular capital pressure when moving from a Solvency I basis to QIS5; annuity writers, P&I Clubs, and firms with a large amount of unrated internal reinsurance.

#### ICAS versus QIS5

The aggregate capital requirement for these 177 firms is broadly similar between ICAS and QIS5, but the amount of available capital reported is substantially lower under QIS5 than ICAS. This is possibly at least in part because of the restrictions that Solvency II will place on capital instruments (capital must be placed into 'tiers' according to its ability to absorb losses, and there are limits on the eligibility of lower tiers of capital), but there will also be changes resulting from the move to a fully market-consistent balance sheet.

<sup>\*\*</sup>Inconsistency with the figures in the row above is introduced by rounding to nearest £m.

More detailed commentary and comparisons can be found in Ernst & Young's Capital Impact Assessment, annexed to the FSA's consultation document.

<sup>&</sup>lt;sup>14</sup> See FSA QIS5 report at http://www.fsa.gov.uk/pubs/international/qis5\_mar11.pdf

In aggregate these 177 firms show a £14bn, or 34% reduction in surplus when moving from an ICAS to a QISS basis.

The table below shows approximately how the reduction can be broken down, firstly by type of firm and secondly by size.

Table 2 – Percentage Change in Surplus from ICAS to QIS5

	Percentage Change in Surplus from ICAS to QIS5 as at 31/12/2009
Size of Firm	
Small	+22%
Medium	-19%
Large	-39%
Type of Firm	
Life	-39%
Non-Life	-14%

Source: FSA (based on the 188 firms15 for which both ICAS and QIS5 data was available as at 31/12/2009)

It can be seen that on average, the larger the size of firm, the greater the reduction in surplus, and that on average, Life firms experienced a greater reduction in surplus than non-Life firms. These general trends at the aggregate level mask a significant amount of variation at the level of individual firms.

These trends concern the standard formula as tested under QIS5, and so do not take into account the effect of internal models. Firms for which the standard formula appears to lead to a significant reduction in surplus may be more likely to use an internal model.

Small firms, who are perhaps more likely to use the Standard Formula for Solvency II because of the development costs of internal models, do not seem to be disproportionately affected on aggregate, in fact seeing an increase in capital surplus versus ICAS. The effect on small firms is considered further in Annex 4.

### How much capital might need to be raised as a result of Solvency II?

It is not possible to determine the amount of new capital that will be raised by the UK insurance industry in response to the Solvency II requirements at this stage, for a number of reasons:

- The QIS5 results only give an estimate of the final Solvency II requirements, at a single point in time, and the final requirements at the implementation date are likely to be very different;
- Internal models and transitional measures will have a significant impact, but there is not enough information to estimate their impact at this stage;
- For firms that are part of larger groups, the first source of additional capital is likely to be from within the group structure, reducing or eliminating the need for external capital raising;
- Groups may decide to restructure to realise capital efficiencies;
- Firms may choose to de-risk and reduce their capital requirement rather than raise additional capital;
- Firms typically hold a 'buffer' above the minimum regulatory capital requirement, for several reasons, and firms may choose not to retain the same 'buffer' under the new regime.

We explore some of these issues further below.

<sup>&</sup>lt;sup>15</sup> Data from this slightly larger sample of 188 firms suggested an aggregate reduction in surplus of around £15bn from ICAS to QISS. 11 of these firms did not submit reliable Solvency I figures and so were excluded from the earlier companison table.

### Capital Buffers

Literature on capital buffers for insurers<sup>16</sup> suggests that rating agency requirements and business planning decisions are usually the dominant factors in determining the size of any buffer held. Regulatory requirements only become a dominant factor when firms are close to breaching the regulatory minimum.

This suggests that firms' behaviour in terms of buffers may be divergent. Firms that find themselves close to the regulatory minimum under Solvency II are likely to want to maintain or increase their existing buffer, to provide protection against a breach, particularly given the greater balance sheet volatility that may arise from a move to a market-consistent framework.

On the other hand, firms with a healthy existing buffer, and who partly hold this buffer because of a belief that they are exposed to risks other than those captured by the ICAS regime, may be content with a smaller buffer once they have moved to a Solvency II framework, if they (and their rating agencies) believe these risks are now adequately captured within the Solvency Capital Requirement.

#### Internal Models

The FSA expects that ultimately around 100 firms will use an internal model under Solvency II, with around a third of these likely to apply for model approval from 'day one' of the new regime. Because of the costs involved in developing an internal model, most firms will only do so if the capital 'saving' that results is in excess of the development cost, suggesting that internal models will tend to reduce the aggregate capital requirement – although there will be some exceptions to this rule.

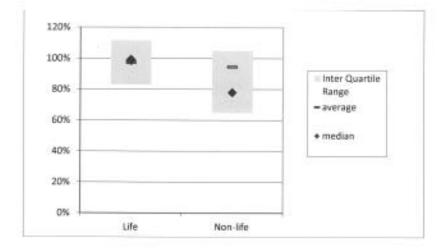
Because firms are still developing their internal models, there is only very limited data available to assess the likely impact on firms' capital requirements.

The QIS5 exercise did ask firms to submit results on an internal model basis where available. However, few firms did so, since even those firms intending to seek 'day one' approval for their internal models will have been at a relatively early stage of model development when the exercise was undertaken. The results that were submitted will be at best only indicative, because firms will continue to change and refine their models before the implementation date, particularly in response to the agreement of the implementing measures. With these caveats, the graph below shows the distribution of the ratio of internal model to standard formula capital requirements, for the subset of firms that did provide internal model results.

Graph 1: Ratio of Internal Model SCR to QIS5 Standard Formula SCR

Source: FSA QIS5 report

<sup>&</sup>lt;sup>16</sup> See for example the DNB Working Paper Are non-risk based capital requirements for insurance companies binding? available at http://www.dnb.nl/binaries/Working%20Paper%20145\_tcm46-159718.pdf



The graph shows considerable variation in these ratios. For non-Life firms, the internal model SCR was generally smaller than the standard formula SCR, whereas for Life firms the distribution is more symmetrical about the 100% mark.

Analysis from the Bank for International Settlements (BIS), undertaken by the Committee on the Global Financial System (CGFS) in their July 2011 paper Fixed Income Strategies of Insurance Companies and Pension Funds, <sup>17</sup> suggests that internal model requirements might be 20% lower than the standard formula on average across the EU, but it is difficult to determine whether this would read across to the UK.

### Transitional Arrangements

Transitional measures, which will be agreed as part of the Omnibus II Directive, will phase in some aspects of the new regime, so any capital impacts may be spread out over time. Any capital-raising activity could be pushed further out into the future, or firms may use the extra time to pursue alternatives to capital-raising (such as de-risking, group restructuring, or seeking to merge with or be taken over by another firm).

### **Conclusions on Capital Raising**

Although on aggregate across the UK industry the QIS5 exercise showed a capital surplus, 20% of solo firms were unable to meet the QIS5 standard formula capital requirement as at year end 2009. The combined reported capital deficit below the SCR for these firms was £12.5bn, breaking down as follows:

Total (£m)	12,455
Split by sect	or:
Life	87%
Non-Life	13%
Split by size:	S
Small	13%
Medium	51%
Large	35%

However, it cannot be concluded that the introduction of the new regime would cause this amount to be raised as new capital:

<sup>17</sup> http://www.bis.org/publ/cgfs44.pdf

Areas where transitional measures are possible include the eligibility of certain Own Funds items, the discount rate for long-term business, and the treatment of branches that operate outside of the geographical scope of the regime.

- Much of the reported deficit related to firms that are part of larger groups (which is not
  unexpected since the closer alignment of capital with risk under Solvency II could reasonably
  lead to a redistribution of capital requirements across group entities). Actions by the group (in
  the form of direct capital injections and/or restructuring activity to achieve greater capital
  fungibility) would be likely to significantly reduce the aggregate shortfall;
- Internal models, de-risking and restructuring would likely be used by some solo firms under capital pressure in order to lower the SCR, reducing any deficit further; and
- The actual requirements and economic conditions at implementation and over the years covered by this mpact Assessment will be different than those tested by QIS5 at year-end 2009.

Bearing in mind the many significant uncertainties already discussed, the wide scope for firms' individual choices in responding to the new regime, and the consequent lack of conclusive evidence at this time, we cannot say with confidence that there will be net capital-raising by UK industry, or that there will be a net release of capital. For the purposes of this Impact Assessment, it has therefore been assumed that there will be zero impact.

### Scenario Analysis

If in fact there is net capital-raising (releasing) by UK insurance firms in aggregate in response to Solvency II, this will represent a cost (saving) to the industry. Because of the many uncertainties outlined above, we have investigated two scenarios to derive a higher and lower estimate of the potential impact. These estimates are necessarily indicative only, and should not be taken as an assessment of the upper and lower bounds.

The following scenarios were considered:

<u>Lower Scenario:</u> Assumes £10bn of capital is released following implementation due to (e.g.) increased capital efficiencies, restructuring, use of internal models, consolidation activity leading to greater diversification benefit arising.

<u>Higher Scenario</u>: Assumes industry capital requirements at implementation are as reported in QIS5 at 31/12/2009, and there is no reallocation of capital within groups, use of internal models, transitional arrangements, de-risking, restructuring, or consolidation activity. Further assumes that there is no capital release by those firms in surplus, but that the 20% of solo firms at a capital deficit raise £12.5bn of new capital in order to meet the SCR.

Any cost would be made up of both the one-off fees for capital raising services and the ongoing cost of servicing the net new capital issued. It is assumed that fees are charged at 5%<sup>19</sup> of the amount raised, and that the cost of capital is 4%<sup>20</sup> per annum.

		A	В	A + B
Scenario	Net capital required (£m)	2011 PV of Fees @ [5%] (£m)	2011 PV of Cost of Capital @ [4%] p.a. for 10yrs (£m)	2011 PV of Total Cost (£m)
Lower	(10,000)	N/A	(3,214)	(3,214)
Higher	12,500	583	4,018	4,601

<sup>&</sup>lt;sup>19</sup> The Institutional Investor Council's Rights Issue Fees Inquiry (published in December 2010 and available at <a href="http://www.iicomm.org/docs/rifireport.pdf">http://www.iicomm.org/docs/rifireport.pdf</a>) suggested that post-2007, the gross underwriting fees for rights issues were between 3 and 4%. 5% has been chosen as a prudent estimate.

This is consistent with the weighted average cost of capital used by the FSA in previous consultations. The figure of 4% is net of the return that firms are assumed to earn from investing the capital in financial assets.

Capital-raising could affect areas such as product pricing and availability; see section C4. The potential impact on the UK capital markets is considered in section C2.

### A2. Administrative Impact

#### Direct costs to the FSA

#### One-off

The FSA have estimated their total one-off or transition cost for implementing Solvency II at £110m. The estimate was arrived at using data from staff timesheets. Staff members were asked to estimate what proportion of the work charged to Solvency II time-codes was likely to be incremental to 'business as usual' (that is, would not have been undertaken otherwise). The number of Full-Time Equivalent (FTE) resources needed from within each division was then multiplied by an average annual salary for that division to arrive at the overall cost estimate.

Table 3 - direct one-off costs to the FSA

		£m	£m	£m	£m	£m 13/14	£m
		09/10	10/11	11/12	12/13		Total
Resource	Insurance Risk Specialist	1.1	4.7	10.2	13.4		29.3
	Supervision	1.1	3.7	4.9	7.0		16.6
	Policy	2.2	3.5	4.2	3.3		13.2
	GCD	0.6	0.7	1.3	1.5		3.9
	International Division	0.0	0.0	0.0	0.0		0.0
	Authorisations	0.1		0.0	0.4		0.5
	Programme Office	0.9	1.6	3.3	3.5		9.4
7,342	Training & Comms	0.1	0.2	0.2	0.2		0.6
	Other	0.2	1.0	0.9	0.3		2.4
	Information Services	0.2	1.6	3.3	2.2		7.4
Non Staff Costs	Professional Fees	0.3	0.8	3.0	1.0		5.0
	Recruitment & Retention	0.3	1.0	1.0	0.8		3.0
	Training	0.0	0.0	0.3	0.2		0.5
	Travel		0.3	1.0	0.1		1.4
	Other			0.4	0.2		0.6
	Contingency			2.9	3.7		6.6
	Information Services	lease senior de		3.2	5.4	1.1	9.8
	Total	7.0	19.0	40.0	43.1	1.1	110.3

This cost includes: supervisory and actuarial resources; project management resources; resource used for the design and implementation of the internal model approval process; consultation with regulated firms (e.g. via Industry Standing Groups); liaising with overseas regulators; supervisory visits to discuss firms' implementation plans; policy development work; and costs associated with participating in European-level negotiations.

This cost is passed on to industry by way of a "special project fee", which is charged to firms within scope of Solvency II as an addition to the usual FSA levy. For this reason the costs to the FSA have been included in all estimates of the net costs to business used in the summary sheets.

### Ongoing

The FSA has estimated ongoing incremental Solvency II costs for the regulator of £22m in 2013/14, £23m in 2014/15 and £23m in 2015/16, which are reflective of the supervisory approach that will be

taken by the PRA (and FCA) in compliance with the parameters of the Directive. After this, Solvency II will become a 'business as usual' cost, and so will not be funded by a special project fee. Beyond 2016 there will be no incremental cost for Solvency II relative to the current cost of the FSA's supervision of the UK insurance industry.

The cost estimates can be broken down as follows:

Table 4 – direct ongoing costs for the FSA

	Estimated	d Resource	Required		Estimated Total Cost			
	FTE	FTE	FTE	£m	£m	£m	£m	
1.6	2013/14	2014/15	2015/16	Estimated cost of 1 FTE per annum	2013/14	2014/15	2015/16	
Insurance Risk Specialist	78	78	78	0.14	10.9	10.9	10.9	
Insurance Division	59	59	59	0.10	5.9	5.9	5.9	
Policy Division	28	28	28	0.10	2.8	2.8	2.8	
General Counsel Division	8	8	8	0.10	0.8	0.8	0.8	
International Division	1	1	1	0.10	0.1	0.1	0.1	
Authorisations	8	8	8	0.10	0.8	0.8	0.8	
Programme Office	3	0	0	0.10	0.3	0	0	
Training & Comms.	1	0	0	0.10	0.1	0	0	
Information Services (IT)	N/A	N/A	N/A	N/A	0	2	2	
Total	186	182	182		21.7	23.3	23.3	

The 2011 present value of these costs is £61m.

It can be seen that around half of this figure represents the projected cost of the incremental actuarial resource needed to assess firms' internal models (included as 'Insurance Risk Specialist' resource), and that there will also be a significant increase in supervisory resource (included as 'Insurance Division' resource). There is a projected £2m of investment in IT in each of 2014/15 and 2015/16, which has not been estimated in terms of FTE resource.

#### Sensitivities

The costs above are based on the FSA's best estimates. To allow for uncertainty we also calculate higher and lower cost estimates by assuming a [+/-10%] variation in these costs respectively.

Scenario	One-off cost (£m)	2011 present value of ongoing cost (£m)		
Low (90% of best estimate)	99	55		
Best Estimate	110	61		
High (110% of best estimate)	121	67		

### Direct Administrative Cost to Industry

This section draws on the results of extensive research conducted by Ernst & Young (EY) on behalf of the FSA in July 2010<sup>21</sup>.

EY asked 26 firms to estimate the administrative impact that they would face as a result of Solvency II. The firms were drawn from a cross-section of the market, were of various sizes, and represented just less than 50% of total UK insurance liabilities.

The firms were asked to estimate:

- total one-off transition costs to deliver Solvency II, during the period from September 2008 to 1
  January 2013 (when Solvency II was assumed to go live);
- ii. incremental costs of maintaining regulatory compliance with Solvency II following implementation; and
- incremental administrative benefits resulting from ongoing regulatory compliance with Solvency
   II.

Firms did not provide enough data on points (ii) and (iii) to enable a quantitative analysis. The FSA conducted some follow-up work in July 2011 which did provide data on point (ii) and which updated the estimates for point (i); we reflect this work in our conclusions.

EY used the following definitions:

Administrative impacts – the additional administrative costs and benefits of complying with the Solvency II regime that are incremental to complying with the UK's current ICAS regime. These include:

- Business and technical resource technical resources (e.g. actuarial, risk and finance); business
  change resources (responsible for defining and implementing the people, process and cultural
  change resulting from Solvency II);
- Technology and data resource those resources responsible for the design, delivery, test and roll-out of the technology and data solution to meet the requirements of Solvency II;
- Programme and governance resource those resources responsible for managing the overall delivery of the Solvency II programme; and
- Non-resource costs costs relating to the purchase of toolsets and license fees, software and hardware, third-party development costs, development of test environments, recruitment and other costs (e.g. training, travel, FSA special project fees<sup>22</sup>).

### Total estimated one-off administrative cost to industry

For each of the three resource areas defined above (business and technical, technology and data, and programme and governance), firms were asked to estimate:

- The person-days of effort required;
- The split of person-days by internal, external contractor and external consultant resource used;
- The average person-day rates that applied for internal, external contractor and external consultant resource;
- The total cost in respect of that area;
- An indicative split of what constituted the total cost in that area.

For full details of the methodology, and the full data request sent to firms, see Ernst & Young's Compliance Impact Assessment, annexed to the FSA's consultation document.

In this analysis we have considered direct costs to the FSA separately, and so have stripped the special project fees out of the total cost to industry to avoid double counting. However, the graphs provided by E&Y will still include the special project fees.

For non-resource costs, firms were asked to provide a cost estimate and an indicative split of the costs making up the total.

The estimates provided by the 26 firms in summer 2010 were grossed up to industry level by EY, using factors for each sub-sector that were agreed with the FSA. This gave a total one-off administrative cost to UK insurers over the period from September 2008 to 1 January 2013 of approximately £1.8bn (some breakdowns of this cost are shown below).

Follow-up work by the FSA in July 2011, based on updated cost estimates received from 12 of the original 26 sample firms, then put this figure at closer to £2bn. When special project fees payable to the FSA are stripped out (to avoid double-counting), this reduces to £1.9bn. Note that although special project fees are presented and estimated separately (in the section on costs to the FSA), since they represent a levy on firms, they have been included in the net cost to business figures used in the summary sheets at the front of this document.

Table 5: Sectoral breakdown of one-off administrative cost estimate

Source: EY compliance impact assessment for FSA, FSA analysis

Sub-sector	EY's original cost estimate (£m)	FSA's revised cost estimate <sup>23</sup> (£m)	Percentage Increase
Reinsurance	150		
Mutuals	24		
Commercial London Market	213		
General insurance	288		
Life and pensions	693		
Health	77		
Run-offs	39		
Composites	293		
Total (inc. Special Project Fee)	1,777	2,044	15%
Special Project Fee	110	110	
Total (exc. Special Project Fee)	1,667	1,934	16%

The revised cost estimate of £1.9bn is significantly higher than some other previously-quoted transition cost estimates, including that contained in a partial impact assessment published by HM Treasury<sup>24</sup> in 2008. However, as was acknowledged by the previous assessment, a significant increase on that figure is not unexpected:

- The previous cost estimate was based on data submitted by firms on a 'best efforts' basis for the QIS3 exercise in mid-2007, and so only related to the cost of fulfilling the Pillar 1 (quantitative) requirements as assessed in the QIS 3 exercise; and
- ii. At the time of the previous estimate, the Directive was yet to be signed, and few firms had started material Solvency II activities or analysed the required changes to their businesses. Conversely, most firms are now well underway with their implementation programmes, and the level of detail and certainty is now a lot greater, allowing firms to make more accurate estimates of their implementation costs.

The revised cost estimate has not been broken down by sector to preserve data confidentiality for the firms that provided updated cost estimates. The 12 firms were representative of a cross-section of the industry.

<sup>24</sup> http://www.hm-treasury.gov.uk/d/solvencyii\_finalia\_090608.pdf

The updated estimate will include some costs that are not genuinely incremental and 'would have been incurred anyway' (see section on sensitivities and limitations, below). Further, there is evidence to suggest that some firms have made a commercial decision to develop internal models that go well beyond the minimum requirements of the regime; in such cases it is arguable that the discretionary element of the associated development cost should be excluded. The estimate also includes sunk costs, which are likely to account for a significant proportion. Sunk costs and discretionary spending have not been stripped out, in order to maintain consistency with our overall approach in providing a comprehensive picture of the costs and benefits.

Depending on future developments, the updated figure could also still prove to be an underestimate.

### Breakdown of total estimated one-off administrative cost to industry

The graphs below give a breakdown of EY's original cost estimate (before FSA revisions and removal of special project fees), firstly by industry sector and then by type of cost.

Figure 1: Total estimated one-off transition costs by sector (in £m)

Source: EY Compliance Impact Assessment for FSA

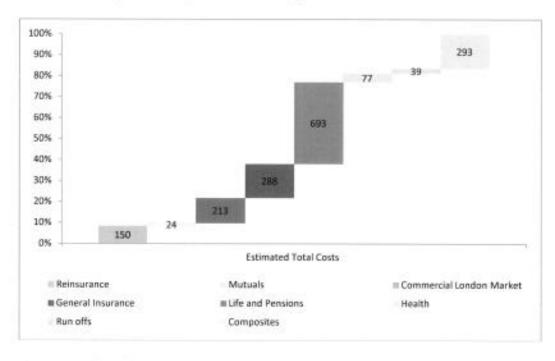
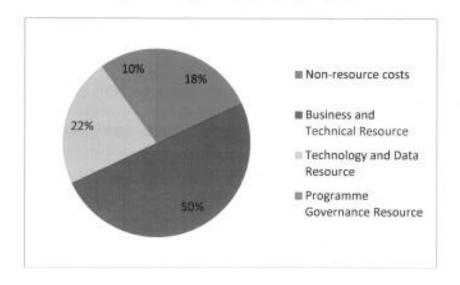


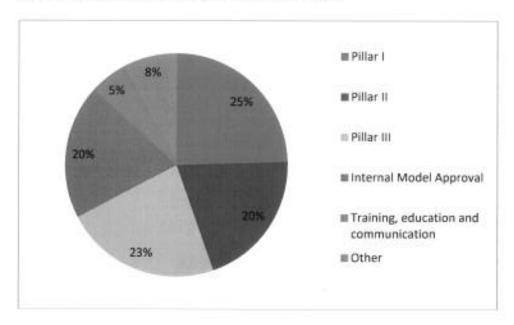
Figure 2: Split of total estimated one-off transition cost by type Source: EY Compliance Impact Assessment for FSA



It can be seen that almost half of the total cost estimate is for business and technical resource, which can be broken down as follows:

Figure 3: Business and technical resource cost breakdown

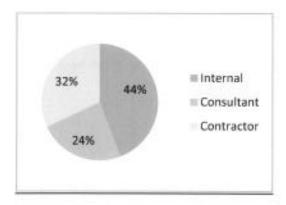
Source: EY compliance impact assessment for FSA



It is also possible to look at the average split between the internal and external resources expected to be employed by firms:

Figure 4: Split of resources employed

Source: EY compliance impact assessment for FSA



### Total estimated ongoing administrative costs to industry

At the time of EY's research, firms were unable to quantify their ongoing incremental administrative costs. However, the FSA's July 2011 follow-up work with 12 of the original 26 sample firms did yield ongoing cost estimates that were then grossed up to industry levels using the same methodology as for the one-off costs.

Firms were asked to include in their ongoing cost estimates:

- Additional business resources e.g. actuarial, risk, reporting, document management resources;
- Additional data and IT resources e.g. data cleansing, data governance and IT support resource;
- Other expenses, including ongoing annual software license fees and reporting costs.

The FSA's estimate based on firms' sample data was for a £193m per annum ongoing incremental cost. At the FSA's request this has not been shown broken down by sector in order to preserve data confidentiality for the contributing firms.

Assuming £190m of additional administrative costs per annum for 10 years from 2013 gives a present value of approximately £1.5bn.

### Sensitivities and limitations of the industry administrative cost estimates

The methodology used to derive the industry cost estimates is subject to several sensitivities:

'Point-in-time'	The Solvency II requirements are not yet finalised and firms will be reviewing their business plans and budgets before implementation, particularly now that the implementation date may change.
Multi-national firms	Some firms were only able to provide an indicative split of costs between UK and non-UK aspects of their programmes.
Overlap	Because of overlaps with other change projects, the disentanglement of pure Solvency II costs was not always possible.
Extrapolation	Industry-level estimates have been extrapolated from samples, which may introduce distortion, particularly where the sample size is small. The analysis is based on the views of individual firms which have not been independently validated.
Sample bias	Only two firms in the research sample intend to use the standard formula, so it has not been possible to take into account the relative cost of using an internal model versus the standard formula in the industry estimate.

Because of these limitations, we have also considered higher and lower estimates around the best estimates discussed above.

One-off administrative cost to industry

Scenario	Estimated Cost (£m)	
Low (80% of Best Estimate)	1,520	
Best Estimate	1,900	
High (120% of Best Estimate)	2,280	

Ongoing administrative cost to industry

Scenario	Estimated 2011 Present Value of Cost (£m)
Low (75% of Best Estimate)	1,145
Best Estimate	1,527
High (125% of Best Estimate)	1,908

The percentage range either side of the best estimate is wider for the ongoing cost than for the one-off cost to reflect the fact that a smaller sample was used to derive the ongoing cost estimate and so there is greater potential for sample bias and extrapolation uncertainties.

#### B. Benefits

There are some key difficulties with assessing the benefits of implementing Solvency II in the UK:

Lack of source data: At the time of Ernst & Young's cost-benefit analysis study for the FSA, firms were unable to assess the monetary value of benefits when asked. To date, analyst reports on Solvency II have tended not to focus on benefits, and most discussion has been qualitative.

**Dependence on insurer behaviour:** The benefits actually experienced will depend on insurer behaviour, for instance whether firms go beyond the minimal amount of effort needed to comply with the new regulation, and whether they choose to compete in new markets.

Nature of benefits: Some types of benefit are difficult to quantify. (For example, a very likely benefit is a general improvement in the resilience of the European insurance sector, and as a result, a reduced probability of a severe market crisis. Models of low probability/high severity occurrences are by nature extremely sensitive to assumptions made and there is very scant data to use for parameterisation. This makes such a benefit difficult, if not impossible, to model with any degree of confidence, and so we have not attempted to do so here.)

Lack of clarity: The details of the regime are not finalised. Based on the current European timetable, details are unlikely to be clarified until at least mid-2012.

Benefits have been assessed on a 'best efforts' basis using a mixture of quantitative and qualitative analysis, and the quantified benefits are indicative only.

#### **B1. Monetised Benefits**

The methodology in this section is based on the Impact Assessment<sup>25</sup> produced by the European Commission to accompany the publication of the Solvency II Directive, with some adjustments to reflect the UK rather than EU-wide position. It echoes the benefits analysis from HM Treasury's 2008 partial impact assessment for Solvency II<sup>26</sup>.

We attempt to monetise:

- A perception by providers of capital that insurers are more robust and better managed than prior to the introduction of Solvency II; and
- · An improvement in the efficiency of firms' risk and capital management.

The former benefit is assumed to arise from the enhanced risk-sensitivity and robustness of the new capital rules, combined with the intensified focus on risk management and good governance, and the increased and more harmonised disclosure of information to investors (which will increase transparency and comparability and reduce information asymmetry). The assumed result is a reduced cost of capital for UK insurers.

The latter benefit is modelled by using improved investment returns as a proxy for the savings arising from improved risk and capital management practices within firms.

The ICAS regime will already have brought a portion of these benefits to UK firms, so the incremental benefit in the UK will be smaller than that available in other EU countries whose current regimes are closer to the Solvency I requirements. We take this into account in the calculations that follow by

<sup>25</sup> http://ec.europa.eu/internal\_market/insurance/docs/solvency/impactassess/final-report\_en.pdf

As referenced earlier.

making prudent assumptions about the reduction in cost of capital and efficiency gains(/improvement in returns) that are likely to emerge.

### Reduction in cost of capital

A potential reduction in UK insurers' cost of capital has been modelled by considering:

- i. how much capital is likely to be held by the industry when the new regime is implemented; and
- the annual savings that would result from a range of plausible reductions in the cost of servicing this capital.

For (i), the amount of available capital resources reported by firms in the QIS5 exercise has been used as a best estimate. A range of +/-10% has been considered to allow for the uncertainty inherent in this estimate<sup>27</sup>.

For (ii), reductions in the range of 0 to 10 basis points<sup>28</sup> per annum have been investigated. This range was chosen to be consistent with the assumptions used in both the Commission's and HM Treasury's previous impact assessments. The annual savings that result have been converted into 2011 present values assuming that savings persist for 10 years after implementation in 2013.

A table summarising the results is below.

Table 6: potential benefit arising from reduction in UK insurers' cost of capital Source: QIS5 data and own calculations

		Assumed reduction in cost of capital per annum (bps				
		0	3.75	5	7.5	10
Capital Scenario	Total available capital (£m)		ent value of sa capital over 10			ned reduction
Lower Estimate: Firms have 90% of QIS5 available capital levels	96,300	0 [lower benefit]	290	387	581	774
Best Estimate: Firms have 100% of QIS5 available capital level	107,100	0	323 [best estimate benefit]	430	645	860
Higher Estimate: Firms have 110% of QIS5 available capital level	117,800	0	355	473 [higher benefit]	710	946

The Commission's impact assessment considered a range of 5 to 10bps to be plausible. To arrive at a best estimate, the HM Treasury 2008 partial impact assessment took the midpoint of this range (7.5bps), then halved it to allow for the ICAS regime already having resulted in some benefit. In line with the partial impact assessment, we have taken 3.75bps as a best estimate.

Using a 3.75bp reduction with the 'best estimate' capital scenario gives a benefit with a 2011 present value of £323m.

To allow for uncertainty, we also consider a lower and higher estimate of the benefit. The lower estimate assumes no reduction in capital cost, giving a benefit of zero, while the higher estimate is

A particular area of uncertainty is the application of transitional measures to capital instruments, which will be decided as part of Omnibus II. There is also some evidence that firms were not always consistent in the reporting of their capital instruments for QISS.

A basis point is one hundredth of 1%, or 0.0001.

derived by combining the higher available capital scenario with a 5bp reduction to give a benefit of £473m.

#### Improved efficiency of risk and capital management

As the Commission noted in their impact assessment, Solvency II has been designed to bring about improvements to firms' risk management processes. By better managing their risk and their capital requirements, firms will be able to manipulate their risk/return profiles (for instance through diversification activity), leading to efficiency gains. The size of insurers' balance sheets means that even very small efficiency savings are likely to be substantial when considered in aggregate. However, since these efficiency gains are very difficult to quantify directly, an alternative approach is to use an improvement in investment returns as a rough proxy.

The UK insurance industry has approximately £1.6 trillion<sup>29</sup> of assets in aggregate. We have investigated the benefit that would result if investment returns on these assets improved by between 1 and 3.5 basis points.

For each of the scenarios modelled below, it is assumed that the additional returns persist for ten years (with the total assets remaining fixed at £1.6 trillion over that period).

Scenario	Assumed improvement in return (bps)	Resulting additional investment income per annum (£m)	Total additional investment income over 10 years (£m)	2011 present value of additional investment income over 10 years from 2013 (£m)
Very Low	1	160	1,600	1,286
Low	1.5	240	2,400	1,928
Low - Moderate	2	320	3,200	2,571
Best Estimate	2.5	400	4,000	3,214
Moderate - High	3	480	4,800	3,857
High	3.5	560	5,600	4,500

In line with HM Treasury's 2008 partial impact assessment, a best estimate of 2.5 basis points per annum of additional investment returns over the next 10 years has been used, giving a benefit with a present value of around £3.2bn. The size of the benefit is very sensitive to the assumption about the basis point increase in achievable returns, so lower and higher estimates have also been calculated as shown in the table above. Given this sensitivity, we would be interested in views on the quantitative estimates made in this respect.

#### **B2. Non-monetised Benefits**

### Administrative benefits to industry

As part of their research for the FSA, EY asked sample firms to try to quantify the administrative benefits of complying with the Solvency II regime. Firms struggled to do so, and not enough data was gathered to undertake a quantitative analysis, but firms did describe the administrative benefits they expected:

improved risk modelling, analysis and management;

<sup>&</sup>lt;sup>29</sup> Source: A8i Key Facts September 2010

- · enhanced governance processes;
- · improvements in management information;
- · a greater definition of risk appetite; and
- improvements to documentation and the internal control framework.

These administrative benefits are mostly attributable to Pillar 2 of the regime (which deals with risk management and governance). EY believe these benefits are likely to materialise, and will also contribute to the better management and avoidance of downside risk (or in other words to 'loss aversion'), which is in itself a significant benefit of the new regime (discussed below).

A harmonised regulatory framework across Europe should reduce ongoing compliance costs for UK firms with operations in other EU countries.

There are also likely to be some administrative synergies between Solvency II and the introduction of International Financial Reporting Standards 4 Phase II (IFRS4)<sup>30</sup>, the new accounting standard for insurance contracts proposed by the International Accounting Standards Board (IASB). IFRS4 is expected to introduce some fundamental changes, requiring significant system and process upgrades.

#### Insurance Market Benefits

Solvency II will create a 'level playing field' across Europe for the provision of insurance and reinsurance services. This will create an increased opportunity for UK insurers to compete within Europe, and will also open up the UK market to increased competition from insurers in other member states. Competitive effects are considered further within the Competition Impact Test, annexed.

The risk-based nature of the new framework should make the insurance market in Europe more efficient, in the sense that if pricing and capital allocation are more closely aligned to the real risks faced, then policyholders are more likely to be charged appropriately according to the risks they choose to insure, and shareholders compensated more appropriately for the risks they assume.

Pillar 3 of the Solvency II regime concerns disclosure; in particular, it is intended to increase the level of transparency in insurers' public and regulatory reporting. This enhanced level of disclosure aims to bring greater 'market discipline' to bear. The amount and range of information that will be publicly disclosed will be greater than at present. It is hoped that this will result in market participants exerting greater supervision over, and greater competition to, other insurers. The Commission have suggested that insurers following best practice might be more likely to be rewarded by a lower cost of financing.

### Internal Model benefits to industry

80% of the 60 firms in Deloitte's 2011 Solvency II survey plan to implement either a full or partial internal model under Solvency II. We have already noted that the aggregate capital impact of internal models cannot be known at this stage. However, there are other benefits to firms of internal model usage<sup>32</sup>:

- Better understanding of the firm's business and capital requirements through identification of the true risk profile of the business;
- Improved evaluation of risk-adjusted returns on capital;

<sup>30</sup> In Deloitte's 2011 Solvency II survey, 43% of the 60 firms surveyed expected to integrate the implementation of IFRS 4 Phase II with Solvency II, with a further 18% of firms still undecided.

<sup>&</sup>lt;sup>31</sup> See the Solvency II FAQ document previously referenced.

<sup>32</sup> See for example Internal Models – A Winning Solution for Solvency II, Guy Carpenter (2007), and Benefits and challenges of using an internal model for Solvency II, Milliman (2008).

- Better understanding of the relative contribution of the major categories of risk to the firm's overall risk profile;
- Improved capability to balance risk with reward, to measure performance, and to identify strengths, weaknesses and opportunities;
- Better assessment of the impact of strategic decisions on capital requirements;
- · Improved quality of documentation; and as a result,
- Better communication of results to supervisors and ratings agencies, as well as for internal communications.

Increased confidence of rating agencies in a firm's risk management is one of the factors that may help to reduce a firm's cost of capital, as discussed and modelled in section B1 above.

### Benefits to Consumers

The main benefit of Solvency II to consumers of insurance products will be the greater level of policyholder protection they will enjoy; that is, the greater likelihood that insurance providers will be able to meet their liabilities as they fall due.

It is very likely that Solvency II will affect the price of insurance, but without the details of the finalised requirements, it is not possible to predict the direction or magnitude of price changes for specific products at this stage.

It seems likely that as firms re-calculate their capital requirements on a Solvency II basis, and re-evaluate their business for profitability and return on capital, some products will become more expensive to provide whilst others will become cheaper. Competitive shifts in the market will also drive price changes. Consumers of products that end up with a lower price will benefit, but this benefit will be at least partially offset by consumers of products that increase in price. Pricing is considered further in section C4.

A 2007 briefing note by the Comité Européen des Assurances (CEA)<sup>33</sup> listed the key consumer benefits of Solvency II as being: greater consumer confidence; enhanced policyholder protection; cost-effective protection; and more innovative and competitive products.

### Benefits to the financial system - averted loss

There have not been many insurer failures to date, although there have been some notable failures that have had a substantial impact on policyholders and investors. Payouts under the Financial Services Compensation Scheme in respect of insurer failure totalled £172m in the 3 years to 2011.

Some of the past causes of insurer failure have been:

- inadequate provision for the guarantees within policies or for policyholders' reasonable expectations;
- poor risk management processes and controls;
- under-pricing of contracts;
- overly-rapid expansion;
- difficulties within other (non-insurance) parts of an insurance group;
- multiple exposures to the same pool of risks, and opaque reinsurance structures.

<sup>33</sup> Solvency II Why it Matters to Consumers, available from www.cea.eu

<sup>34</sup> This figure has been derived from annual reports of the FSCS for 2008/09, 2009/10 and 2010/11, available at www.fscs.org.uk.

In their cost-benefit analysis for the FSA, EY argue that Solvency II will reduce the probability of insurer default via the 'three-pillar' approach: Pillar 1 will align capital requirements more closely with the actual assets and liabilities held; Pillar 2 will lead to more pro-active risk management activity; and Pillar 3 will improve transparency via heightened public disclosure, leading to greater market discipline.

Solvency II also explicitly requires insurers to account for embedded options and guarantees, and to base technical provisions on policyholder expectations rather than only the contractual minimum liabilities.

It therefore seems likely that Solvency II will reduce the probability of a repeat of some of the previous causes of insurer failure, and therefore the probability of a default. However, as there is very limited data on insurer default, this benefit has not been quantified; further, part of the benefit of a reduced probability of default will already be reflected in the reduced cost of capital that has been modelled.

### C. Wider Impacts

According to a July 2011 paper<sup>35</sup> from the Bank for International Settlements' Committee on the Global Financial System (CGFS), insurance firms may adjust their operations in several ways as a result of new regulations:

- Change the size and allocation of investment portfolios;
- · Transfer risk to the financial markets using reinsurance, securitisation or hedging with derivatives;
- Streamline group structures to better capitalise on diversification benefits;
- Redesign products over time.

In this section we consider the wider impacts of Solvency II implementation. In particular we consider the investment, financial market, product/pricing and insurance market implications. Competition effects are considered in the Competition Impact Test, annexed.

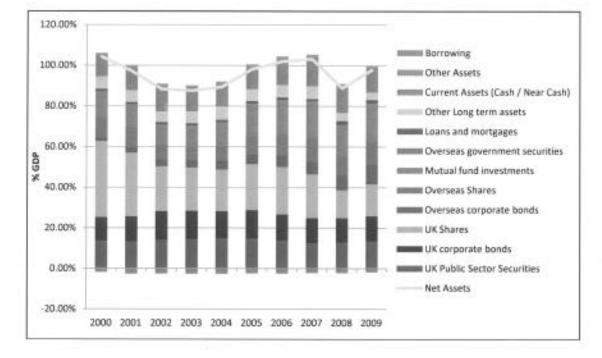
#### C1. Asset Allocation

#### Baseline

The following graph shows trends in asset allocation amongst insurers for the period from 2000 to 2009. Most notable are the shifts away from equities and into mutual funds (also known as collective investments) and overseas corporate bonds. The analysis that follows should be interpreted in the context of this shifting 'baseline', since asset allocation has clearly not been static over the period preceding the introduction of Solvency II, and some of the drivers of the changes seen in past years will still be in evidence.

Figure 5: Assets held by insurers relative to GDP, 2000-2009

Source: Office for National Statistics



#### Implications of Solvency II for asset allocation

Analyst literature<sup>35</sup> on the asset allocation impacts of Solvency II has to date focussed on the implications of the standard formula calibration as tested under QIS5. The broad conclusion has been that this calibration would make it more expensive to hold equity-like instruments, structured products, and long-term or low-rated corporate bonds, whilst government bonds in the issuer's domestic currency and covered bonds would appear more attractive<sup>37</sup>. There have been associated concerns expressed about the potential effects on insurers' provision of financing for the real economy, and possible perverse risk incentives to hold large quantities of periphery sovereign debt, which we discuss further in section C2.

However, these early conclusions must be interpreted with caution:

- the exact treatment of these items within the standard formula is still undecided, and there may
  yet be substantial changes to the calibration;
- the use of internal models means that there will still be heterogeneity in individual firms'
  assessments of market risk. Firms, particularly larger firms, are likely to use bespoke methods to
  accurately reflect their own specific risk profiles rather than rely on the standard formula factors;
- firms will take into account criteria other than capital requirements when making investment decisions, such as any need for cashflow matching;
- transitional arrangements may be in place which would affect the scope and timing of any impact.

There will also be other new drivers influencing insurers' investment decisions in the coming years; for example, IFRS 4 Phase II is likely to introduce additional accounting volatility into insurers' P&L statements, which may lead to some de-risking of asset holdings.

The combined effect of these uncertainties and the presence of other driving factors mean that it is too early to say whether analysts' predictions will be borne out in practice. Further, the current risk-based ICAS regime for UK insurers is likely to make the impact different in the UK than in other member states. However, it is certainly likely that on a Europe-wide basis, the move to fully market-consistent valuation

<sup>35</sup> See for example Fitch Ratings' June 2011 paper Solvency II Set to Reshape Asset Allocation and Capital Markets, the IPMorgan/IIA paper Solvency II: A Briefing for the CIO or the Oliver Wyman/Morgan Stanley paper Solvency 2: Quantitative and Strategic Impact — The Tide is Going Out.

These assessments have tended to use a 'return on capital' approach to evaluate the relative merits of different asset classes. The overall attractiveness is then a function of both the assumed returns available and the amount of capital required to support the investment.

practices, and Solvency II's focus on the risks to the asset side of the balance sheet as well as to the liability side, will cause some significant changes.

The potential impacts of asset allocation changes on individual markets are explored further in the following section<sup>38</sup>.

### C2. Financial Market Impacts

### Capital Markets

### Insurers as providers of capital

Insurance companies are important providers of finance to UK companies, including banks. Life insurers are particularly important providers of stable long-term finance, for example to infrastructure projects and directly to Government, usually in the form of long-term bonds.

### **Equity Markets**

As Figure 5 above shows, over the past decade there has been a general trend amongst UK insurers to move away from equity investments. This is likely to have been driven by a combination of poor equity performance, the market crises of the early 2000s and 2008, and the new regulatory requirements of the ICAS regime putting increased focus on the asset side of the balance sheet. Despite this decline, equity backing ratios do remain high for UK life insurers versus their European counterparts.

The relatively high volatility of the market values of equity investments, combined with a likely 39% capital charge under the standard formula, may mean that the equity holdings of insurers continue to decline. However, trends in equity holdings will depend in part on any trends on product provision, since some insurers may respond to Solvency II by increasing their provision of unit linked products, where investment risk is borne by the policyholder and so capital charges are substantially reduced. Insurers will also be incentivised to hold a wide range of investments in order to achieve a diversification benefit, so equities would still have an attraction for this purpose.

#### Corporate Bond Markets

The calibration of the capital charges for corporate bonds in QIS5 led analysts to speculate<sup>40</sup> that longerterm and lower-rated corporate bonds would become less attractive investments because of the relatively higher charges they would attract (even once the additional returns offered were taken into account). Based on the same criteria, bonds of three to five years' duration have been suggested as insurers' preferred habitat under Solvency II. This has led to comments about possible segmentation of the bond markets, and also a greater use of derivatives such as interest rate swaps to allow firms to match the duration of their assets and liabilities without holding longer-dated bonds.

However, this module of the standard formula is still being calibrated and it is highly likely that the final calibration will be different from that used under QIS5. Further, the desirability of exact cash-flow matching (rather than duration matching) and the limited availability of instruments such as interest rate swaps at the longest durations will retain incentives to hold physical bonds. Demand for corporate bonds will also be linked to the design of the matching premium, which is discussed in the section on Infrastructure, below.

#### Covered Bonds

For reasons of space and proportionality, the commentary here is relatively brief. A more comprehensive assessment of the possible market impacts is provided in the CGFS paper previously referenced.

<sup>&</sup>lt;sup>39</sup> Plus or minus a 'symmetric dampener' component

<sup>&</sup>lt;sup>40</sup> See the papers on asset allocation referenced earlier.

Covered bonds are seen to receive a relatively favourable capital treatment under the standard formula. If the calibration of their capital charges in the final regime is unchanged from QIS5 then this asset class could see continued growth as a result of increased interest from insurers.

### Investment in Infrastructure

Much of UK infrastructure is funded by the issue of long-term debt. As mentioned above, Life insurers have traditionally been well-placed to invest in such debt because the resulting cashflows can be used to match those of long-term contracts such as annuities. The UK's current regulatory regime encourages such matching because the return offered on the matching assets can be used as the basis for the discount rate applied to the annuity liabilities.

As a market consistent regime, Solvency II will require almost all liabilities to be valued using a 'risk free' discount rate. However, the finalised implementing measures are likely to allow an addition to be made to the risk-free rate when discounting annuity liabilities, so long as the liabilities are demonstrably closely matched by appropriate backing assets and are managed separately (or 'ring fenced') from the rest of the firm's business. This addition to the discount rate is referred to as a 'matching premium'. The specifics of its design and application have only recently been proposed by the Commission. This proposal includes restrictions on assets that are rated BBB or lower that could affect the industry's appetite for investment in certain infrastructure products.

The final standard formula treatment of long-term corporate debt and the design of the matching premium are both likely to have an impact on the appetite of insurers to continue to provide investment in infrastructure. If investment by insurers declined significantly, this could raise the cost of financing for infrastructure providers, with a potential knock-on effect on consumers via higher prices.

At this point it is too early to say what the extent of this impact might be, as both of these areas of the regime are still under discussion within Europe.

#### Insurers as issuers of capital

As mentioned in earlier sections of this assessment, there is currently insufficient evidence to draw conclusions about the quantum of any capital-raising activity in response to Solvency II. However, since 80% of firms were able to meet the QIS5 SCR, and firms will have had time in the run up to implementation to anticipate any deficits versus their Solvency II capital positions, any new issuance is likely to be absorbable without causing significant capital market impacts, particularly if transitional measures allow any impact to be spread over time.

#### Government Bond Markets

The standard formula will treat investments in European sovereign debt as effectively risk free, which would seem to incentivise insurers to invest more heavily in this asset class, including in higher-yielding periphery debt. However, insurers using internal models will need to properly allow for spread and default risks on such debt which would moderate this effect. Any significant changes to the composition of insurers' government bond holdings would be likely to have a noticeable market impact given the volume of government bonds that insurers currently hold on their balance sheets.

#### C3. Consumer Impacts: Product Price and Quality

If the marginal costs of providing an insurance product increase as a result of Solvency II, then insurers will have several choices in how they react:

- Withdraw partially or fully from the market for that product type;
- Reduce the quality of cover provided for a given price;
- Retain the quality but increase the price of the product; or
- · Some combination of the above.

These choices are likely to be influenced by:

- The extent of competition in the market, and the actions of competitors;
- Barriers to entry and exit from the market;
- Whether the product is a discretionary purchase or is mandatory (i.e. third party motor cover);
- Consumer preferences in terms of paying more or receiving a lower quality product;
- Whether the product is of strategic importance to the provider;
- The product's contribution to diversification effects.

Any changes to product design will take into account accounting and tax treatment as well as the cost of provision in capital terms.

### Effect on the annuity market

If products which offer guaranteed returns to policyholders (such as annuities) become more expensive to provide, then insurers may react by raising prices to reflect the increased cost of the guarantees. However, price increases would be constrained by competitive effects, and annuity providers might alternatively (or additionally) react by offering more products that are unit- or index-linked, and so transfer some or all of the investment risk to the policyholder.

There are other drivers that would lead to annuity price increases in the absence of Solvency II, such as the general trend of increasing annuitant longevity. Persistent lower returns on the assets that are typically used to back annuity liabilities could also lead to deterioration in annuity rates offered. There may be a general change in sentiment towards providing products of this type, based on a re-evaluation of their true costs and risks. The accounting treatment of such products is another relevant factor. The need to disentangle these effects is a key difficulty of assessing the impact of Solvency II on the annuity market.

The extent of any change in the cost of provision will depend heavily on the discount rate that can be used for annuity liabilities, which has not yet been agreed (see discussion on the matching premium, above)<sup>41</sup>. For all of the above reasons it has not been possible to quantify the likely changes to the annuity market at this stage. However, given the importance of this market to the UK, this has been a key area of focus when engaging with other Member States and with the Commission on the design of the new regulations.

### Volume of products sold

Changes to product pricing and quality are likely to affect the amounts sold (at least for product lines where purchase is not compulsory). Insurers may look to provide a more granular range of policy types within a product line in order to target different market segments and meet differing customer needs.

#### Conclusion

Solvency II may result in certain types of insurance product becoming more expensive to provide. The extent to which this translates into higher prices or lower quality products for consumers will depend on many factors including the level of competition in each market, the nature of the product and insurers' strategic goals.

In the long run, Solvency II should lead to increased cross-border competition, consolidation activity (allowing insurers to benefit from economies of scale and diversification), and product innovation. These changes can be expected to lead to reduced prices for certain product types and a greater variety of products offered.

<sup>&</sup>lt;sup>41</sup> The discount rate that is ultimately included in the implementing measures will certainly differ from that tested under QISS, so an analysis based on QISS data would not yield meaningful results.

#### C4. Insurance Market Impacts

The UK insurance market is the largest in Europe and the third largest in the world, accounting for 8% of worldwide premium income. The industry is also a significant exporter; one fifth of net premiums come from overseas business<sup>42</sup>.

Solvency II is likely to affect the structure of the UK insurance market. As discussed in the previous section, the range, quality and price of products offered may change, and firms may enter and exit certain product lines, changing the composition of market subsectors. The competitive environment is also likely to change, particularly if cross-border competition intensifies and there is consolidation activity. Competition effects are treated separately in the Competition Impact Test, annexed.

#### Consolidation

The UK insurance industry saw an increase in actual and attempted consolidation activity in 2010, driven by the aims of both increasing operating efficiency, and diversifying the underwriting portfolio.

Solvency II is likely to be a driver for increased consolidation activity, for two main reasons; firms will be able to spread their fixed costs (including regulatory compliance costs) over a wider base, receiving an economy of scale, and will also benefit from greater diversification, reducing capital requirements. This should lead to greater profitability for the combined entity. The extent of the diversification benefit would depend on the activities of the consolidating firms; the more differentiated their individual activities, the greater the benefit of consolidation. This would tend to suggest that merger activity would be most likely between firms operating in different markets, that are not currently well-diversified, and that are not already at the size where they cannot benefit further from economies of scale.

Consolidation activity may result in a reduced number of players in the market; however, the need for approval from competition authorities should preclude mergers that are likely to reduce the level of competition.

#### Reinsurance

Any impact on the reinsurance market will depend on the relative changes in cost of providing both insurance and reinsurance. Insurers will only transfer risk to reinsurers if they could not more profitably retain it themselves. If insurers' costs increase by more than reinsurers' prices, it is likely that there will be greater transfer of risk to reinsurers.

Reinsurers' prices will be affected by the same factors as direct insurers' – that is, by capital requirements, costs of compliance, and the extent to which increased costs are passed on via higher prices. Most reinsurers are very well-diversified (geographically as well as by product line), large (and so better able to absorb any increases to fixed costs) and can access capital relatively cheaply. This would tend to suggest that the cost of supplying reinsurance will not increase as much as the cost of supplying direct insurance, which would suggest a greater use of reinsurance, particularly by undiversified or smaller direct insurers for whom reinsurance will be a cheaper substitute for additional capital.

#### 6. Risks and Assumptions

The ultimate impact of the Solvency II Directive will be heavily reliant on the details of the accompanying implementing measures and guidance, which are yet to be finally agreed. The cost benefit analysis presented here therefore does not and cannot fully reflect the final form of the regime.

<sup>&</sup>lt;sup>62</sup> All of these statistics are from ABI Key Facts September 2010.

As stated earlier, the last complete package of proposed implementing measures to be comprehensively tested by the industry was the Technical Specification for QIS5. Firms completed the QIS5 exercise between July and October 2010, and submitted results on the basis of their positions at 31/12/2009.

Since the QIS5 results have been used, in full awareness of their limitations, to inform many of the conclusions in this analysis, we here set out the full list of associated caveats, almost all of which have already been mentioned elsewhere:

- QIS5 indicates the industry position as at year-end 2009 only.
- The results from the exercise are a point-in-time estimate, so cannot illustrate any potential volatility in the industry's solvency position.
- The industry completed the exercise on a "best-efforts" basis. This means that, although it has been subject to sense-checking and basic validation by the FSA, the data that was provided may have been incomplete, or have been based on estimates.
- The results of the exercise do not take into account management actions, such as restructuring, changing product mix, changing investment strategy et cetera, that are highly likely to occur between now and the introduction of the new regime.
- The results do not reflect the use of internal models, which are likely to have a significant effect on the aggregate industry position.
- The results are based on use of an Illiquidity Premium to supplement the risk-free discount rate for long-term liabilities. However, the Commission's latest proposal replaces this with a new Matching Premium to support highly illiquid products (such as UK annuities), and a counter-cyclical premium to increase the discount rate for all other products when markets are stressed.
- The results do not capture transitional arrangements, which may smooth the changeover to the new regime. The effect of transitional arrangements is likely to be very material.
- The results reflect the QIS5 standard formula calibration, which is likely to be significantly changed before the regime is introduced. In particular, the results reflect:
  - The QIS5 approach to discounting technical provisions (including a liquidity premium), which
    is likely to be substantially changed, with material effect, before the regime is introduced.
  - The QIS5 approach to eligibility and tiering of own funds, which may change between now and implementation.
- The aggregate results are for solo firms, many of which will be parts of a larger group. The group solvency position is unlikely to be simply the "sum" of the solo solvency positions, and complex group interactions and structures will not have been adequately captured.

Wherever these caveats have a material bearing on the conclusions that can be drawn in a particular section of the analysis, this has been highlighted.

#### Risks of using sample data

Other conclusions of this analysis have been based on sample data which has been extrapolated to provide an industry-level estimate. There is therefore a risk that the resulting estimates are inappropriate, whether due to sample bias, extrapolation error, or the presence of material errors or estimates in the underlying sample data, which has not been independently validated.

Firms have provided their own individual views and these views may change between the time that the data was provided and the time that the regime comes into force. The views of the sample firms may not be representative of the industry. The sample of firms used to provide the one-off and ongoing administrative cost estimates contained only two firms that planned to use the standard formula. This means that the costs of using the standard formula may not have been accurately reflected.

Wherever sample data has been used to inform a best estimate, a higher and lower estimate either side has been considered to allow for uncertainty and possible error.

#### External Risks

There is a risk of slips to the European timetable for agreeing the remaining components of the Solvency II regime (including a risk of delay to the agreement of the Omnibus II Directive; this amending Directive is needed to make Solvency II compliant with the Lisbon Treaty and will also set the implementation and transposition deadlines and any transitional measures). A delay to Omnibus II, and/or to the subsequent agreement of the implementing measures, could significantly affect the total implementation cost for firms, national supervisors, and EIOPA<sup>43</sup> in its role as the European Supervisory Authority (ESA) for insurance.

### Rationale and evidence for the level of analysis used in the impact assessment (proportionality approach)

The proportionality approach for Government impact assessments requires that the level of analysis undertaken should be in proportion to certain factors. These factors are listed below, together with brief notes on how they apply in this case:

Level of interest and sensitivity surrounding the policy	There is a relatively high level of interest and sensitivity in the content of the Directive and implementing measures. There is less interest and sensitivity around exact method of transposition employed in the UK.
Scale, duration and distribution of expected impact	Solvency II is likely to have a significant, long-lasting and widespread impact on the insurance market in the UK. There may also be spill-over effects on financial markets.
Degree to which the policy is novel, contentious or irreversible	Regulatory policy for insurers is not new in itself, and Solvency II has been several years in development. The content of the Directive and implementing measures has been widely consulted on. There will be a statutory duty to review the policy after 5 years.
Stage of policy development	This is a consultation-stage impact assessment. Further analysis can be undertaken at later stages when there will be greater certainty about the final shape of the regime, and taking on board results of the consultation exercise.
Level of uncertainty around likely impacts	Very high level of uncertainty at this stage: implementing measures are not yet finalised and these will significantly affect impact; internal models not yet fully developed; implementation and transposition dates not yet finalised; transitional arrangements not yet finalised.
Data already available and resources required to gather further data	The QIS5 data used in this assessment only indicates the impact of one version of the implementing measures at a certain point in time, so is of limited use for projecting actual impacts. However, the QIS5 exercise was a major undertaking for UK firms, and

<sup>&</sup>lt;sup>43</sup> European Insurance and Occupational Pensions Authority; see https://eiopa.europa.eu/

	collecting more data on a similar (industry-wide) scale would not be feasible or proportionate whilst the final requirements of the regime remain unknown.  We have also used data gathered for the FSA by Ernst & Young concerning implementation costs. We have not attempted to supplement this data with our own research because the marginal cost would not be justified by the marginal benefit.
Time available for policy development	Delaying the Government's consultation on transposition until final implementing measures are known would be unlikely to leave enough time for the transposition process, risking infraction proceedings against the UK.

Whilst the first two factors would incline towards a highly detailed assessment with full monetisation, the other factors, particularly the level of uncertainty over the impacts, limit the extent to which this would be proportionate or feasible.

Our approach has been to perform a 'best efforts' assessment of the likely costs, benefits and wider impacts, quantifying these as far as is possible or reasonable given the data available at this time.

A full monetisation of the benefits, or of the wider impacts, has not been possible. Those costs and benefits that have been monetised must be seen as indicative only, not least because of the lack of clarity over the implementing measures; section 6 on risks and assumptions sets out the other material uncertainties.

Further cost benefit analysis of Solvency II can be found within the FSA's consultation document and the Ernst & Young reports that are annexed thereto.

The FSA intends to issue a second Solvency II Consultation Paper in 2012, at which point firms will have another opportunity to contribute views on the FSA's approach to modifying the regulatory Handbook and also on the impacts of the new regime.

### Summary and Description of Implementation Plan

#### Summary of Monetised Cost and Benefit Estimates

In the table below, the 'pessimistic' estimate has been derived by combining all of the high estimates of the cost figures with the low estimates of the benefit figures. The 'optimistic' estimate is vice-versa. The best estimate row simply comprises the best or central estimate for each of the component costs and benefits.

	2011 PV of Costs (assuming ongoir (£m)	ng costs spread over	2011 PV of Benefits (assuming ongoing benefits are spread over 10 years from 2013) (Em)					
	One-off administrative cost to industry	Ongoing administrative cost to industry	One- off cost to FSA	Ongoing cost to FSA/PRA	Capital Release/ Raising	Reduced cost of capital	Efficiency Gains	2011 PV of Net Benefit (£m)
Optimistic Estimate	-1,520	-1,145	-99	-55	3,214	473	4,500	5,368
Best Estimate	-1,900	-1,527	-110	-61	0	323	3,214	-61
Pessimistic	-2,280	-1,908	-121	-67	-4,601	0	1,928	-7,050

	Estimate								
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#### Summary of Non-Monetised Impacts

The table above shows a net present value of -£61m on a best estimate basis; however, the figures in the table above only reflect the costs and benefits that have been monetised and so do not capture all of the relevant factors.

Many of the impacts of implementing Solvency II, including some of the benefits, have not been assigned a monetary value.

The non-monetised impacts discussed in this assessment were:

- Administrative benefits to industry (e.g. better risk management and governance, better management information, better defined risk appetite, better documentation and internal controls);
- Internal model benefits to industry (e.g. better understanding of the risk profile, identification of strengths weaknesses and opportunities);
- Insurance market benefits (greater market efficiency, competition, a level playing field, more transparency due to Pillar 3 disclosure requirements);
- Consumer benefits (greater consumer confidence, enhanced consumer protection, greater costeffectiveness of insurance provision, product innovation and competition);
- Averted loss (lower probability of a repeat of past causes of insurer failure);
- Asset allocation impacts;
- Capital market impacts;
- Product price and quality;
- Insurance market impacts;
- Competition impacts;
- · Impacts on smaller and lower-risk firms.

#### Implementation Plan

The implementation date set out in the Solvency II Directive is 31<sup>st</sup> October 2012. However, this date is currently being amended through the Omnibus II Directive. It looks increasingly likely that the Omnibus II Directive will amend the date by which member states are required to transpose Solvency II to 31<sup>st</sup> December 2012, with the Directive coming gradually into force over the subsequent 12 months. Omnibus II is not expected to be agreed until early 2012. The UK Government will set out its implementation plan in more detail once there is some certainty as to what will be required by the EU Directives.

#### Annex 1: Post Implementation Review Plan

The Statutory Instrument for the proposed legal changes will contain a clause that imposes a ministerial duty to review the changes 5 years after they are implemented.

The primary focus of this Post-Implementation Review (PIR) should be whether the legislative changes have had the intended effect. Any unintended consequences that have been observed should also be set out.

Stakeholders will need to be consulted as to the effectiveness of the implementation of the new regime.

As mentioned in the Small Firms Impact Test, it will be particularly important to canvass the views of

smaller firms and to ensure that they have not been disproportionately affected by the introduction of the new regime.

In line with the guidance on conducting post-implementation reviews, the following key questions will need to be considered:

- To what extent have the legislative changes achieved their objectives?
- To what extent have there been unintended consequences?
- What are the costs and benefits, in hindsight and going forward?
- Has the market changed as a result of the policy?
- Is there any scope for simplification, improvement or deregulation?
- Do compliance levels indicate that the enforcement process is appropriate?

Data will need to be gathered to allow the post-implementation review to be performed. It is likely that supervisory data from the FSA, in particular the regulatory reports that firms will produce under Solvency II, will be used for this purpose.

Publicly available data that firms will publish in accordance with the Pillar 3 requirements of the new regime may be useful to consider, and there are also likely to be several analyst reports in the public domain considering the effects of implementation.

### Annex 2: Equality Impact Test

We have assessed the Solvency II proposals against the relevant equality criteria and have concluded that there will be no impact on equality considerations as a result of implementing Solvency II in the UK.

### Annex 3: Competition Impact Test

### Affected markets

Insurance and reinsurance markets in EU Member States will be directly affected.

There will also be indirect effects on insurance and reinsurance markets outside of the EU, alternative risk transfer markets (e.g. catastrophe bonds, longevity swaps, securitisations) and on distributors of insurance and reinsurance products (e.g. wholesale or retail brokers, or Independent Financial Advisors).

For this consultation-stage impact assessment, we focus on the direct effects on competition within the UK markets for insurance and reinsurance.

#### Aim

This competition assessment considers whether the implementation of Solvency II is likely to:

- 8. Directly or indirectly limit the number or range of (re)insurers operating in the UK;
- Limit the ability of UK (re)insurers to compete;
- 10. Reduce UK (re)insurers' incentives to compete vigorously.

However, as there is no scope for the Government to pursue alternatives to regulation in this area, or to exercise discretion when implementing the Directive, we do not investigate any potential actions to modify or mitigate any competitive effects.

Baseline: Current competitive environment

Number and location of suppliers in the affected markets

Insurance markets tend to have a large number of competitors. Research by Ernst & Young undertaken for the FSA<sup>44</sup> suggests that in the UK, each sub-sector<sup>45</sup> has more than 20 competitors. However, in each sub-sector the top 5 firms earned at least 50% of total Net Written Premiums, suggesting that there is some concentration of market power.

### Nature of competition: price-based, or product differentiation?

The nature of competition in each sub-sector will depend on factors such as whether the insurance is a discretionary purchase or is compulsory, the number of market participants, the concentration of market power, the barriers to entry and exit, and the nature of the product offered. Competition in the market for a product such as private motor third party liability insurance is likely to be based almost entirely on price because the products will be homogeneous, whereas for example travel insurance offerings are likely to be more differentiated in order to cater to the needs of different types of consumer, and so higher quality products will be able to command higher prices.

#### Characteristics and prices of products affected

Insurance products range from the highly standardised (e.g. term assurance) to the highly differentiated (e.g. bespoke cover provided by the Lloyd's market). Prices are similarly heterogeneous since they will be commensurate with the size of the risks insured.

### Ease and degree of switching between products

This will depend on several factors, including: the standard length of contract term (e.g. monthly renewal, annual renewal, multi-year contracts for term or whole-of-life assurance); the terms offered for surrender or early termination of contracts, including any penalties imposed; the accrual of any discretionary benefits and the treatment of these if the contract is terminated; embedded options and guarantees and the way these are valued for surrender or termination purposes; the ability of consumers to compare prices and contract terms across providers; the number of alternative providers in a given market; the sales channel used to distribute the product.

### Degree of invention and innovation in recent years

Insurance tends to be a relatively static market in terms of product innovation. Technological advances such as the advent of smart-phones will have seen the creation of a small number of new retail product lines in recent years, but the overall insurance market is slow to evolve and will continue to be constrained by the criteria that make a risk 'insurable'. Although drivers such as increasing annuitant longevity have created incentives for insurers to offer innovative new products for retirement provision, attempts to introduce products such as variable annuities on a large scale have been relatively unsuccessful to date.

One of the main sources of product innovation in the UK is likely to be the London Market because of the highly individual nature of some of the risks that are covered.

There have also been some attempts to create markets for 'quasi-insurance' or alternative risk transfer methods such as catastrophe bonds or weather derivatives but these have been small in number to date.

### Possible effects of Solvency II on the Competitive Environment

### Direct limit on the number or range of (re)insurers

The introduction of Solvency II will not place any direct limits on the number or range of suppliers. It awards no exclusive rights of supply, does not require insurance or reinsurance to be procured from a particular supplier or group of suppliers, does not create any form of licensing scheme, and does not place any fixed limit on the number of suppliers.

#### Indirect limit on the number or range of (re)insurers

<sup>44</sup> See the Ernst & Young Industry Level and Financial and Financial Market Impact Assessment prepared for the FSA and annexed to the FSA's consultation document. This document contains a detailed analysis of the current state of competition in the UK.

<sup>&</sup>lt;sup>45</sup> Private Motor, Commercial Motor, Household (domestic property), Commercial Property, Accident, Health, Liability, Life, Individual Pensions, Occupational Pensions, Protection. Other.

The introduction of the new regime may have an indirect impact on the number or range of (re)insurers writing certain lines of business.

### Costs of new (re)insurers relative to existing (re)insurers

It is unlikely that the costs of new suppliers would generally be higher than the costs of existing suppliers (since e.g. it may actually be cheaper and more efficient to design Solvency II-compliant systems from scratch than to adapt existing systems). The costs to new entrants are therefore unlikely to create additional barriers to entry or to limit innovation and product development.

### Costs of some existing (re)insurers versus other existing (re)insurers

Any increase to the cost of provision may be higher for firms that are less well-diversified (since they will generally face a higher increase in the capital required to support each pound of premium written). This may push undiversified niche providers out of certain markets, but the desire to increase the diversity of business underwritten may also mean that better-diversified players are incentivised to branch out into these niche markets.

Incremental cost increases will also be higher for firms who have to do more work to reach the minimum standards required by Solvency II (for instance firms whose data handling or reporting systems are inadequate and must be redesigned or upgraded). In this sense Solvency II will favour those (re)insurers whose businesses are already run in a way which is compatible with the new regulations (and so may favour UK insurers competing in other Member States because of the existence of the ICAS regime).

The costs associated with implementing Solvency II may make it harder for EU insurers to compete in territories outside of the EU that are not subject to the new regime. However, transitional measures are expected to apply in the years immediately following implementation, and some countries have signalled an intention to develop regulatory regimes that would be deemed 'equivalent' to Solvency II, so the extent to which this effect will materialise in practice is currently uncertain.

#### Costs of entry or exit

If the capital requirements for writing certain classes of business increase (because e.g. the calibration of the standard formula is more onerous than the general status quo), the cost of entering the market for that type of business will increase. However, firms already in the market will also generally experience a cost increase, so if the increased cost can be passed on, this may not translate into a higher barrier to entry than would previously have existed. If capital requirements for certain types of business were to decrease, the opposite conclusions would apply.

#### Limits on the ability of (re)insurers to compete

Solvency II will not place any restrictions on the prices that can be charged for (re)insurance products, or on the characteristics of the products provided (e.g. by introducing minimum quality standards). One of the long-term objectives of the new regime is to foster innovation and to increase the range of products offered.

The sales channels that can be used will be unaffected.

The geographic area in which (re)insurers can supply products will be unchanged, but the harmonisation of requirements across Member States should improve the functioning of the single market, increasing cross-border competition and reducing the costs (e.g. compliance costs) for firms operating in several territories, which would tend to increase competition.

There will be no additional restrictions on the advertising of products or on the organisational forms that can be adopted by market participants.

The rules on counterparty default risk may mean that insurers are strongly incentivised to purchase reinsurance from highly-rated reinsurers. However, there will also be an incentive to purchase from a wide range of providers in order to retain diversification, which would tend to mitigate any concentration of the reinsurance market.

### Limits on the incentives for (re)insurers to compete vigorously

Solvency II will not introduce any exemptions from general competition law.

It will not impose minimum contract periods or notice periods and so will not directly affect the cost to consumers of switching between products (although it is not possible to rule out indirect effects on contract terms resulting from the Solvency II concept of contract boundaries<sup>46</sup> – an area of the regime which is still in development at this stage).

The new regime will require the disclosure of a greater amount of information than previously. This information may give market participants greater insight into the business of their competitors. It is difficult to say whether this would have a pro- or anti-competitive effect since, as discussed above, the markets for individual lines of business within the wider insurance market are highly divergent in terms of their competitive characteristics. Anti-competitive effects could arise as a result of tacit price collusion between market participants, but this would only really be a possibility within markets where competition is focused on price and products are highly similar. Such markets (e.g. retail motor insurance) are generally already highly competitive and price information is readily available via aggregator websites.

#### Annex 4: Small Firms Impact Test

This section considers the potential impact of the Solvency II regime on smaller firms, and in particular, whether this impact is likely to be disproportionate.

### Scope of the regime and effect on micro-businesses

The Solvency II Directive will apply to almost all EU insurance and reinsurance firms regardless of size or complexity. Since it is a maximum harmonising Directive, the Government cannot choose to exempt certain firms from its scope, or reduce the extent to which its provisions apply to certain firms, as this would lead to infraction proceedings. However, the very smallest firms (with premium income less than €5m and technical provisions of less than €25m) will be exempted by the *de minimis* criteria laid down in the Directive. This should mean that any micro-businesses (those with fewer than 10 employees) are out of scope.

The FSA estimates that around 130 small insurance firms (mainly Friendly Societies) and a few other special cases will fall outside the scope of the Directive. For these firms, the current FSA Handbook sourcebooks, and the provisions that apply to Solvency I insurers, will remain in place. Firms that are out of scope because of the *de minimis* criteria can still apply for authorisation under Solvency II.

### Rationale for including smaller firms in the scope of Solvency II

The Commission have stated<sup>47</sup> that "[t]o make the new rules only available to large insurers would put all other insurers at a potential competitive disadvantage. These insurers would not benefit from the possibility of using full or partial internal models and from potentially lower capital requirements and they would be seen by the market as 'second tier insurers' operating under outdated and less sound rules, with matching higher funding costs. This might further advance consolidation of small insurers in the EU rather than protect their present position."

<sup>46</sup> The final rules on contract boundaries will determine the time horizon over which the cashflows arising from contracts should be modelled.

<sup>47</sup> See the Commission's Solvency II Frequently Asked Questions.

### Concerns of smaller firms with respect to Solvency II

The FSA's Smaller Businesses Practitioner Panel<sup>48</sup> (SBPP) represents the views and interests of smaller regulated firms, and provides advice to the FSA on its policies and the strategic development of financial services regulation. The Panel's members are all senior practitioners from smaller regulated firms across the financial services industry.

The SBPP's 2010/11 annual report<sup>49</sup> highlights the Solvency II concerns of smaller firms that have been discussed with the FSA to date. The concerns that relate specifically to the burden of the regime on smaller firms are:

- Proportionality, in particular the regulatory uncertainty surrounding the transition to the FSA's successor bodies and how this will affect the application of the 'proportionality principle';
- The implementation costs for smaller firms;
- The burden of increased technical resource requirements for smaller insurers such as mutual insurers;
- The capacity of smaller firms to choose to use internal model approaches;
- The potential for capital increases at firm level.

For the purpose of this impact test, these concerns have been assumed to be a representative list of the concerns of smaller firms with respect to the burden of Solvency II.

We examine these concerns in turn, consider the available evidence to date for the likely impact on smaller firms, and discuss the provisions within the Directive and the forthcoming implementing measures and guidance that are intended to ensure that the requirements placed on smaller firms are not unduly burdensome.

#### Principle of proportionality

It is a cornerstone of the Solvency II regime that the qualitative and quantitative requirements on firms should be proportionate to the nature, scale and complexity of the risks that are faced. This concept is referred to as the 'proportionality principle', and one of its intentions is to avoid placing an undue burden on lower-risk firms. Firms will not be able to expect less burdensome treatment purely on grounds of their size (e.g. in terms of number of employees), since it is the size of a firm's risks that matter.

National supervisors, including the FSA (and later its successor bodies, the PRA and FCA), will have to ensure that the supervisory processes they develop for Solvency II fully embed this principle. Organisations such as the SBPP are actively engaged with the regulator to ensure that the needs and concerns of smaller firms are taken into account for this purpose.

The practical application of the proportionality principle by supervisors will play a crucial role in ensuring that the full flexibility and judgement allowed under the Directive is utilised to avoid placing unnecessary burdens on lower-risk firms.

#### Implementation costs for smaller firms

<sup>48</sup> See the Smaller Businesses Practitioner Panel's website for more information: http://www.sbpp.org.uk

<sup>49</sup> http://www.sbpp.org.uk/publications/annual\_reports/AR\_2011.pdf

Initial work undertaken by the FSA in this area suggests that the implementation cost per pound of liabilities (or per pound of liabilities plus premiums in the case of non-Life insurers) may be no greater for small firms that for larger firms, although it should be noted that this analysis was based on a very small sample size, and so may not generalise to the entire population of smaller firms.

A possible reason for this is the tendency of larger firms to pursue internal model development (leading to higher costs), partially offsetting any economies of scale they may otherwise enjoy from having a wider base over which to spread their fixed costs.

Application of the proportionality principle will also mean that smaller firms will have less onerous requirements in some areas; for example, a smaller insurer conducting simple business will not have to have the same systems and controls as a larger insurer that has multiple business lines in multiple countries.

Anecdotal evidence from conversation with practitioners at smaller firms suggests that there may also be some pooling of technical and modelling resources amongst smaller firms in order to reduce costs.

#### Technical resource requirements for smaller insurers, and capacity to use internal model approaches

Insurers with relatively straightforward operations will be able to take advantage of certain simplifications to the standard formula and the calculation of technical provisions (e.g. in the areas of counterparty default risk, or the risk margin), which would reduce the technical burden in these instances.

If the standard formula is not appropriate, but a full internal model would be overly complex and expensive to implement, there are other options that firms can pursue:

- Undertaking Specific Parameters (USPs) may present a solution for firms for whom certain standard factors in the formula are inappropriate, providing they have adequate data to set their own parameters, and can satisfy the regulator that their use is justified;
- Partial internal models are likely to be an attractive option for smaller firms, since they will allow
  the idiosyncrasies of a firm's business to be modelled according to the firm's own methods,
  whilst other more generic parts of the business are modelled using the standard fomula.
  However, partial internal models will be subject to supervisory approval, and firms will still have
  to demonstrate their compliance with a subset of the criteria for use of a full internal model.
  Aggregation of the internally-modelled and standard formula-derived parts of the capital model
  will also present a technical challenge.

Use of a full internal model will require significant investment in the technical aspects of model development, and probably also investment in IT and data capability. However, the build of the model is only part of the overall requirement; firms must also demonstrate that the model is used for business decisions, and show extensive documentation and control procedures relating to the use of (and any changes to) the model. These requirements may be a very high hurdle for smaller firms to overcome, and as mentioned above, it seems likely that partial internal models will be a more realistic and cost-effective solution in this case.

To some extent, smaller firms' ability to benefit from internal model usage will depend on the FSA (and subsequently the PRA/FCA) and the regulatory approach taken to the model approval process. 78 firms were accepted into the FSA's 'pre-application' process, which concerns only those firms that are seeking approval to use their internal models from 'day one' of the new regime. In terms of allocating the FSA's resources, a decision was made to prioritise a sub-population of these firms that represent a significant market share and have the highest potential impact on the FSA's objectives. These 'top tier' firms will be

the focus of the majority of the FSA's resources prior to the implementation date, whilst the other firms will receive a reduced level of engagement.

### Capital increases at firm level

The capital impact section of the evidence base showed that *on average*, smaller firms saw a 22% increase in capital surplus versus ICAS when using the standard formula under QIS5, suggesting that the use of the standard formula is not in general unduly burdensome for smaller firms. However, beneath this average there will be variation at the level of individual firms. The intention of Solvency II is not to preserve the status quo, and some smaller firms may see an increased capital requirement if this is more reflective of their real risks. This does not constitute a disproportionate burden on a firm.

### Other effects on smaller firms

Small firms may be particularly likely to be the targets of consolidation activity, since they are generally likely to have the most to gain from any resulting economies of scale and greater diversification. Larger firms may want to acquire smaller insurers writing niche lines of business in order to gain diversification, whilst smaller firms may want or need access to the capital base and modelling expertise contained within larger firms in order to remain viable under the new regime.

### Need for Further Work

Any assessment of the likely impact of Solvency II on smaller firms is subject to the same difficulties as a more general assessment. In particular, there is not sufficient evidence at this stage to say whether implementation and/or ongoing costs will be proportionately greater for smaller firms, whether the application of the proportionality principle will have all of its intended effects, or whether the new regime will disadvantage smaller firms in other ways versus the current regime.

The impact of the regime on smaller firms is an area we would identify for further work and scrutiny. In particular, the impact on smaller firms should be considered explicitly as part of the post-implementation review.