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**SHAREHOLDER VALUE MEASURES IN
GENERAL INSURANCE WORKING PARTY**

SHAREHOLDER VALUE MEASURES IN GENERAL INSURANCE

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SUMMARY

Investors' primary interest in a company is its ability to produce value to them in the future. Therefore, investors want information about a company's potential for creating shareholder value. Value is created by enhancing a company's prospects and this, to a large degree, stems from a company's competitive advantage together with the ability of management to choose and implement a strategy that exploits that advantage.

Many managers believe that a gap exists between the internal perception of a company's value and that of the stock market. The Shareholder Value framework seeks to provide an environment where management can effectively bridge this gap by linking internal and external perspectives by making key aspects of a company's capabilities and performance more transparent to investors.

This paper provides a brief introduction to Shareholder value and illustrates current practice in a number of industries, in particular the measures and commentaries given in Report and Accounts. Overall, it was found that there was no market agreement as to the most appropriate Shareholder Value measures to use, however, organisations continue to report traditional ones such as Dividend per share, Earnings per share, Book Value or Net Asset Value per share, Return on Equity or Capital etc.

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1 INTRODUCTION

This paper gives a brief introduction to the subject of Shareholder Value and some of the possible measures a general insurance company and other industries may use to monitor it from one year to the next. Different measures capture different aspects of performance and there is no single “correct” measure of Shareholder Value created.

Shareholder Value is becoming more commonly used by organisations as management seeks to improve communication and links between their objectives and those of their investors.

1.1 OBJECTIVE

The objective of the working party is to provide an insight into Shareholder Value Measures in a general insurance company.

1.2 TERMS OF REFERENCE

The working party planned to cover:

- An explanation of Shareholder Value
- Possible measures for monitoring Shareholder Value, both internal and external to a general insurer
- A comparison of Shareholder Value Measures in use between insurers, banks and other organisations

1.3 STRUCTURE OF THE PAPER

Section 2 introduces Shareholder Value and some of the issues surrounding its implementation. Section 3 covers some possible external measures for monitoring Shareholder Value and includes the calculation of a number of these for the Independent Insurance Company. Section 4 considers some possible internal measures a company may use and Section 5 looks at Shareholder Value in a broader context than just insurance by providing examples of Shareholder Value Measures across many industries.

2 SHAREHOLDER VALUE

We shall define Shareholder Value as the wealth a company generates for its shareholders and the broader framework in which a company operates, including culture, to achieve it. Therefore, the introduction of this framework impacts a significant number of parties both internally and externally to an organisation and may take a number of years to fully implement.

Principally, management can create Shareholder Value by growth; investing in projects which are expected to generate a return in excess of the cost of capital, or by improving the efficiency of existing operations e.g. reducing expenses or selling more profitable business with all other things remaining equal. Hence, the objective of the framework is to allow directors to focus on strategies that create maximum Shareholder Value, allowing for risk, and promote the efficient use of capital. Its introduction may change the decision making process to one that identifies competitive advantage and links it to the creation of Shareholder Value.

The Shareholder Value theory works on the premise that the value created by a business is best represented by the change in its economic value that is, the change in the net present value of its expected future cash flows to shareholders. The different Shareholder Value measures that are used are the medium for communicating consistent messages both internally and externally to an organisation and also the means for monitoring performance and remunerating employees.

The value an organisation gives to its shareholders will depend on profit versus risk, its growth potential and that of the environment it operates within, the use of IT such as the Internet, and Intangibles. There are organisations whose Shareholder Value is significant compared to their profit, for example "Amazon.com", mainly as a consequence of growth prospects and use of the Internet. There is also "egg" which has performed well without the Prudential brand (although there must be some influence), is perceived to have good growth prospects, is perceived to make good use of IT, but is making losses.

2.1 SO WHY SHAREHOLDER VALUE?

The Shareholder Value approach has been increasing in popularity as a result of a number of factors e.g.

- Many managers believe that a gap exists between the internal perception of a company's potential and that of the stock market. One of the roles of effective management is to act as a bridge between the external world and the company, ensuring that the external perception of a business reflects the way in which the company operates.
- Primarily investors' are interested in a company's ability to produce value to them in the future. Therefore, investors want information about a company's potential for creating shareholder value.
- Annual reports give a retrospective analysis of a company and provide limited information on the future value of the company. Hence, existing accounting measures of value based on the accounts do not reflect true company value.

Shareholder Value Measures on the other hand are based on projected cash flows and are therefore in theory less influenced by accounting rules. Further, the cash flows are discounted allowing for the cost of capital.

- The globalisation of organisations has created a situation where standard measures of performance are not readily available due to differences in accounting conventions by territory.
- Information Technology has increased the information expectations of investors and hence increased the demand for more consistent and clear measures of performance.

2.2 PRINCIPLES OF SHAREHOLDER VALUE

Alignment of Strategies

The process an organisation might go through is to first articulate a global vision (specific to that organisation given the current operations, the current market place, the position in the market, the future of the market and the length of time a strategy will give a competitive advantage) and then put a strategy in place to achieve it. The global strategy is then disseminated to individual business units through their strategies, objectives and business plans. The key ingredient required to ensure the success of implementing Shareholder Value Measures lies in an organisation's ability to integrate their strategy with external communications and operational management.

Remuneration alignment

To ensure that the objectives of those in control of an organisation, directors and managers, are aligned with those of shareholders one often finds that remuneration is heavily influenced by the global Shareholder Value Measures in place. Further, to ensure that individual business units within an organisation are aligned to the global strategy the measures by which they are monitored, and perhaps remunerated, are aligned to those at a global level as well. These same measures by which the Directors monitor the business and perhaps are remunerated are also the ones communicated to investors. The intention of this integrated framework is to encourage organisations to invest in high return activities and control the cost of capital so that Shareholder Value is maximised.

Measures

Shareholder Value Measures are the mechanism by which value can be monitored by investors and those managing the organisation. The appropriateness of Shareholder Value Measures, consistency and transparency in communication, and the achieving of planned targets are paramount to investor confidence and hence Shareholder Value.

Shareholder value is impacted by both financial and non-financial measures. Take the example of a company's brand; this may contribute a significant part to the overall Shareholder Value of a company although it may not be possible to directly measure its contribution. Other non-financial measures that may impact the value are research and development, patents, customer loyalty and quality of management and personnel.

Financial measures can be broadly categorised as either cash flow or growth based. Cash flow measures tend to be used by mature companies wanting to demonstrate the quality of their earnings whereas growth based ones may be used by organisations that are rapidly expanding. The measures used can change over time to reflect the director's aspirations or shareholder concerns. For example, an organisation may move towards cash flow measures as the business matures. It is interesting to note that for internet stocks (just like direct telesales insurers a couple of years ago), investment analysts/shareholders have changed their measures from growth to cash flow - there is a feeling that the market is getting saturated and only the select ones will survive. Survival measures are increasingly in use; for example 'burn rate' of capital, which measures when the company must start turning a profit before it runs out of money.

The most frequently used Shareholder Value Measure seems to be Economic Profit. Economic profit is the net operating profit after tax less the cost of capital (net of tax weighted average cost of capital multiplied by the average capital over the year). This is theoretically the same as looking at the shareholder's return over the forecast period less the investment costs, or at least the opportunity cost of investing funds elsewhere. This Shareholder Value Measure typically covers a forecast period of one year, therefore to calculate the market value of company one needs to add on the residual value of an organisation at the end of the year. The residual value is an assessment at the end of the forecast period of the value of the company at that time.

One might consider the true measure of Shareholder Value to be the Share price multiplied by the number of shares in issue. This is a suitable forward looking measure as the share price is deemed to include an allowance for the company's characteristics and the market it operates in as well as their interaction. If the stock market prices shares efficiently, movements in the share price will reflect the value created by management in a period. If this value falls then Shareholder Value has been destroyed, if it increases then Shareholder Value has been created. Alternatively, one could encompass all future year cash flows into the Shareholder Value Measure and calculate the present value of future cash flows discounted at the weighted average cost of capital, less the value of the debt.

Investment analysts are not the only stakeholders an organisation has who may use the Shareholder Value Measures publicised. In particular, Regulators and Rating agencies may also use the Shareholder Value Measures that are made available as indicators of an organisation's performance and strength. Therefore, ensuring a clear and consistent message of performance with some form of historic analysis may be necessary from their perspective as well. In terms of stakeholders however, if it is assumed that shareholders carry the greatest risk then the level of information they require should satisfy other stakeholders when considering value (this assumes that shareholders are as sophisticated at analysing data as say investment analysts!).

Communication

In a recent paper entitled "Inside Out: Reporting on Shareholder Value" by The Institute of Chartered Accountants in England and Wales, it was recommended that organisations should include the following in their external communications:

- the company's vision and strategy for achieving that vision

- a description of the performance management process
- the preferred measures used internally to monitor economic performance.

In addition to the above, for each significant business activity as identified for management purposes a description of the key drivers of value in the business, derived from, inter alia:

- a description of the market in which the business operates, using both qualitative terms and quantitative data
- why management believes it is the right market to be in
- the business's competitive position within the market
- future trends anticipated in the market
- how management intends to maintain or alter the business's position within the market measures of performance appropriate to the business, including non-financial ones derived from the key drivers of value, that are used internally to monitor potential in that business.

Comparisons with previous year's measures should be included in the Report and Accounts and other communications with investors so that progress over time can be understood and monitored easily by them. Investment analysts will value more highly those companies that achieve planned targets on a consistent basis. Also, they favour those who can demonstrate where value is created and destroyed, with the latter having some sort of strategic plan attached to turn it around or to cease trading in that area.

3 INSURANCE COMPANY EXTERNAL SHAREHOLDER VALUE MEASURES

Shareholder Value is influenced by non-financial and financial measures. In this section we look at some possible measures, a number of criteria by which to judge the measures and finally we finish by calculating some of the measures listed on the Independent Insurance Company. For simplicity, we have only considered Shareholder Value Measures for a pure general insurer, although many of the comments are relevant for composite ones as well.

3.1 POSSIBLE FINANCIAL AND NON-FINANCIAL SHAREHOLDER VALUE MEASURES

A list of possible Shareholder Value Measures, both qualitative and quantitative are shown below.

Non Financial Measures

- Quality of Strategy and its execution
- Innovation / New products
- Management Credibility and M&A Activity
- Brand Image/ Product Differentiation (unique selling points)
- Management Experience
- Customer Satisfaction and retention
- Market Positioning / Share
- Distribution Channel
- Marketing Strategy
- The ability to attract talented people
- Track record of achieving planned Shareholder Value Measures and other targets
- Perceived growth of the market

Financial Measures

Name	Definition	Advantages (+)/ Disadvantages (-)
Earnings Per Share	Shareholder Profit after tax/ No of shares in issue	<ul style="list-style-type: none"> + Simple/ easy to calculate + Frequently used - Focuses on the P&L only - Impacted by accounting practices - Ignores the capital investment necessary to generate the profit - Ignores risk, both business and financial - Ignores the time value of money
Return on Capital Employed	Profit/ Capital Employed	<ul style="list-style-type: none"> + Simple to calculate and well understood + Combines both P&L and Balance Sheet - Short term emphasis of typically 1 year - Impacted by accounting practices - Can be distorted by old assets which have a low capital employed figure - Anti-growth bias as ROCE increases with a reduction in investment in capital employed. - Ignores risk, both business and financial - Ignores the time value of money - Unadjusted for inflation induced biases

Name	Definition	Advantages (+)/ Disadvantages (-)
Embedded Value	<p>Embedded Value = Net Worth plus Value of in-force business.</p> <p>Net worth is the shareholders net assets as per the solvency returns (written down, if appropriate, to allow for cost of holding solvency capital).</p>	<ul style="list-style-type: none"> + Well recognised by the UK Life insurance industry + Captures the value of the business based on multiple time periods + Enables a strong discipline to be put around new business + Puts a realistic value on the business - Does not allow for new business or brand value - Not easy to calculate and not readily understand by employees - Pattern in which after tax profits arise is driven by predetermined formulas - Risks of variation in input assumptions - 'risk margins' may only be captured in the discount rate - May recognise too much profit upfront, if actual expectations are worse than initial expectations
Cash Flow Return on Investment	<p>The internal rate of return on an organisation's cash flows (For each point in time it uses the value of the firms current investment in assets, the stream of cash flows expected and a final value)</p>	<ul style="list-style-type: none"> + Based on cash flow not accounting profits + It adjusts for the distortions arising from inflation and asset lives - Complex measure to calculate. - Difficult to cascade as not easily understood by employees - Difficult to determine future cash flows and asset values.

Name	Definition	Advantages (+)/ Disadvantages (-)
Economic Value Added	<p>[net operating profit less adjusted taxes]</p> <p>Less</p> <p>[capital base x cost of capital].</p>	<p>+ Simple, easy to calculate and easy to understand</p> <p>+ One measure that combines both the P&L and the Balance Sheet.</p> <p>- Numerous adjustments may be required to get an accounting measure into a value based one.</p> <p>- EVA is particularly sensitive to the figure used for the accounting capital base and cost of capital.</p> <p>- EVA has an anti-growth bias in that the quickest way to improve EVA is to cut investment and thereby reduce the capital base.</p> <p>- As a relative measure EVA is dependent on the size of the business /project</p> <p>- Short term emphasis of typically 1 year.</p>
Economic Profit (Very similar to Economic Value Added)	<p>[net operating profit less adjusted taxes]</p> <p>less</p> <p>[book value of capital employed x cost of capital]</p>	<p>+ A simpler version of Economic Value Added without the possible numerous value based adjustments</p> <p>- EP is particularly sensitive to the figure used for the accounting capital base and cost of capital.</p> <p>- Capital charge is based on book value rather than market value.</p> <p>- EP has an anti-growth bias in that the quickest way to improve EP is to cut investment and thereby reduce the capital base.</p> <p>- Short term emphasis of typically 1 year.</p>

Name	Definition	Advantages (+)/ Disadvantages (-)
Refined EVA	<p>Actual cash Return less Expected cash Return</p> <p>Actual cash return = Net Operating Income add back items included as capital in the capital base of the business]</p> <p>Expected cash Return = [capital base (market Value) x Cost of capital]</p>	<p>+ Fairly easy to calculate.</p> <p>+ Management understand that market value is more relevant to calculating economic returns than book value in that non financial factors influencing value are included.</p> <p>- Volatility from market values</p> <p>- Short term emphasis of typically 1 year.</p>
Market Value Added	<p>Market Value of debt and equity</p> <p>less</p> <p>Invested Capital (Invested capital is typically the economic book value of the business)</p>	<p>+ External market perspective of the total value created by a business on its invested capital.</p> <p>+ Includes current market expectations</p> <p>- Like EVA there can be a number of value based adjustments made to arrive at economic book value</p> <p>- Volatility from market values</p>
Total Shareholder Return	<p>[Closing Share Price + Dividends – Opening Share Price] / Opening Share Price</p>	<p>+ Relatively easy to calculate.</p> <p>+ Mirrors the actual return that investors receive.</p> <p>+ Includes current market expectations</p> <p>- Difficult to estimate prospectively- Difficult to cascade down the organisation</p> <p>- In the short term it is influenced by factors beyond management control i.e. interest rates, Economic growth rates etc.</p>

Other financial measures that may be considered internally and externally to an organisation are Price/Earnings Ratios, Solvency Margins, Expense Ratios, Dividend Yields, Dividend Cover, Claim Ratios and Operating Profits.

3.2 POSSIBLE CRITERIA FOR FINANCIAL SHAREHOLDER VALUE MEASURES

Having determined the sort of measure that one may use to monitor Shareholder Value, the next step was to consider a list of general criteria by which to judge each of the measures. Possible criteria are;

Criteria	
Alignment with strategic plans	The Shareholder Value measure must reflect the strategy of the organisation. For example, the emphasis could be on improving returns from existing assets (efficiency), investing to generate returns above the cost of capital (growth) etc.
Relevance of the measure to the running of the business	It should be feasible to cascade the Shareholder Value measure down in some way to each part of the business so that consistency is maintained throughout the process.
An organisation's culture	Introducing Shareholder Value Measures may mean change for an organisation and the ease and time scales over which the change can take place are important. For example, introducing a measure too quickly or only introducing the measure to a part of the business may cause credibility issues later on.
Ease of integration of the measure into the running of the business	Ease of integration of measure into key management processes such as business planning, budgeting, investment appraisal, reporting and remuneration.
Management Information Systems	It is important that an organisation's management information systems can produce accurate and timely data on which the Shareholder Value Measures are based.
Communication and transparency	How well can the Shareholder Value measure be explained to and understood by each part of the business and the outside world
Industry practice	There may be standard Shareholder Value Measures for an industry or particular ones used by competitors.
Link between Shareholder Value measure and compensation schemes	Alignment of the Shareholder Value Measures to remuneration is critical to ensure that the objectives of those running the organisation are the same as those of the Shareholders.

3.3 CAPITAL ALLOCATED

Some of the financial measures covered above require capital and cost of capital figures and so for completeness these are mentioned below.

Global level

In determining the level of capital required by an insurance organisation one could use a number of approaches e.g. Risk Based Capital, Asset Liability modelling. However, the aggregate capital requirements are impacted by Rating Agencies, Policyholders, Legislation, growth potential, risk aversion etc. Therefore, once the method of calculation has been decided upon, the level of capital will depend on the objective required e.g. to maintain the current Standard and Poor's rating, to maintain the level of dividend flows etc.

For those external to an organisation, e.g. investment analysts, a 'public domain' Risk Based Capital formula could be adapted. We have used such an approach to cross check the illustration of the Independent Insurance Company (see Section 3.5 below).

Business Unit

Capital is allocated to an organisation's business units in an attempt to measure and monitor the true value to shareholders that they generate over time. However, the level of capital borne by each business unit may be more than they themselves perceive is needed. For example, the level of capital a business unit may be required to hold could be based on a multiple of the Statutory Minimum Solvency Margin even though they are not required to hold this much as a separate entity. As shareholders will demand a certain level of return on all their capital each business unit may be required to produce a satisfactory return on what they perceive to be excess capital held thus reducing the value added.

A business unit refers to that part of an organisation where Shareholder Value is measured and monitored for example, it could be at a country, territory, branch or function within an organisation.

The approach for quantifying the level of capital for each business unit may depend on the function of that unit. Hence, more than one method may be used for coming up with the necessary level of business unit capital. For example, a different approach may be used for a territory writing all classes of insurance business versus a function within the company such as the claims department.

Depending on how the capital required is calculated, the sum of the capital allocated to each business unit may exceed capital at the global level due to the effects of diversification. Whilst some diversification credit could be allocated back to a business unit, it may be more practical to make a positive adjustment at the global level.

3.4 COST OF CAPITAL

Global level

The cost of capital is the return a shareholder would expect as a minimum for investing funds in a company and hence represents the hurdle rate by which Shareholder Value may be measured.

Typically, the cost of capital is a weighted average that encapsulates the cost of equity and debt capital, the latter allowing for tax relief on interest payments. Both the cost of debt and equity capital can be based on the Capital Asset Pricing Model, although the market risk premium may differ between them. The cost of equity may have a market risk premium based upon the company's equity capital return over some market benchmark risk free rate, or it may be derived from the rate of return required to equate the value of future dividends to the share price return over some market benchmark risk free rate. The cost of debt may have a market risk premium based on the "credit rating" of the company (which is dependent on the market price of equivalent debt as well as the sector the company operates in). Therefore, the formula

$$r_i = r_f + \beta r_m$$

is used where r_i is the cost of equity or debt capital, r_f is the risk free rate of interest, β represents the systemic risk of investing in the security and r_m is the market risk premium or "credit rating" of the company.

Business Unit

The Cost of Capital for each business unit may be derived in a similar way to that at a global level. However, a business unit's Cost of Capital may exceed the one used at a global level if the results at a global level are less volatile from one time period to the next than those at the business unit level. Further, for the sake of simplicity, it may be desirable to have only equity capital at a business unit level, although doing this will increase their cost of capital.

The cost of capital should include some allowance for the function of each business unit. For example, if we are dealing with an underwriting function then the characteristics of each class of business written should be taken into account e.g. class volatility, length of tail, impact from the underwriting cycle, exposure to catastrophes, potential impact from legislation etc.

3.5 SHAREHOLDER VALUE MEASURES ON THE INDEPENDENT INSURANCE COMPANY

To illustrate how these measures can be calculated from publicly available information (in particular for general insurers) we have used the Independent Insurance Company.

The simplest approach is to calculate basic ratios from two sources available on all public listed companies, namely the Report & Accounts and the share price history.

Two traditional measures of shareholder value, Fully Diluted Earnings Per Share and Dividends Per Share, can normally be read straight from the accounts.

In addition, the Report & Accounts contain Net Asset Value and Number of Shares, which can be combined with the dividends and share price to calculate Total Shareholder Return and Increase in Market Value Added [Change over year of (Market value less net asset value)].

In addition, with historic information on the cost of capital (which depends on knowledge of the historic risk free rate and equity risk premium as well as an assessment of historic beta for the company) Excess Shareholder Return (Total Shareholder Return less cost of capital) and Economic Profit can be determined.

For these purposes shareholder return should be calculated based on the actual net assets of the company, plus, in addition cumulative goodwill written off to date. Profit should be measured before any write-off of goodwill. These adjustments were not material for Independent Insurance Company.

Note that these returns take account of the risk in the returns to the extent that it is included in the cost of capital calculation.

Alternatively, for a general insurer more complex calculations are possible allowing for a calculation of the capital actually at risk. This involves some form of Risk Based Capital assessment.

For the purposes of the illustration we have used a Risk Based Capital of 55% of the Net Written Premium. This figure has been cross checked for reasonableness against the American NAIC RBC formula with UK parameters. Full details of the calculations used would be too detailed for this paper, but, in outline, the NAIC formula yields a notional capital standard for the 'capital employed' of "1.33 times the Company Control Limit". The UK parameters required have been derived using UK statutory solvency returns (FSA returns) and some simplifying assumptions regarding lines of business written.

Some investment analysts produce their own measures of risk based capital based on published ratios.

Allowing for the cost of capital and excess capital produces a risk adjusted measure of return, so allowing for comparison between companies. In particular, we calculate profit less cost of excess capital divided by risk based capital.

Of course, the accuracy of these comparisons depends on the appropriateness of the risk based capital calculations, and finding an answer to the question :

"What is the true cost of the excess capital held?"

Possible answers to this question are:

(a) Excess capital should be costed at the overall "Cost of Capital".

Reasoning: Let us take the cost of a company's capital from Section 3.4 where the β is derived from the historic share price performance of the company. If the company is to achieve its target return of at least its cost of capital and the market believes the company's β and risk premium is fixed - in the absence of updated information, the market view of the risk premium is unlikely to be updated - then cost of capital is 'fixed'. Therefore, to achieve the return of capital overall the lost opportunity cost of excess capital must be paid for by higher returns on employed capital. That is, the loss of opportunity cost of excess capital is the company's overall cost of capital.

(b) Excess capital should be costed at the risk free rate of return

Reasoning: Let us take the cost of a company's capital from Section 3.4 as the weighted average of the cost of capital 100% employed in insurance operations ("pure" insurance risk) and the excess capital at the risk free rate i.e. independent of the company's share price performance. On this basis, the perception is that excess capital is not at 'risk' (except for risks of ruin and insolvency!). Therefore the cost of the excess capital is the risk free rate. Also, the greater the excess capital a company has, the lower the risk premium, hence the lower the overall cost of capital for the company.

(c) Intermediate position

The true cost of excess capital will lie between these two extremes. In particular, there must be a risk premium because there is a risk of (i) the company finding an insurance project to invest in mid-year; and/or (ii) company ruin (and loss of all capital). Also, the historic share price cost of capital is a mixture of at-risk capital allocated to capital, plus a historic average amount of excess capital. So perhaps the true cost of excess capital relates only to the extra amount over (or under) the average excess capital amount.

The table below shows the results of our analysis on the Independent Insurance Company. For simplicity we will cost the capital as the unweighted average of the risk free rate of return and the cost of capital. The calculations in the table are for illustration purposes only. We do not draw any conclusion from the table, because it is not the absolute values which are important, rather, it is the benchmarking of these values and trends against competing companies in the sector or investment universe.

Shareholder Value Measures for the Independent Insurance Company					
Values at (or amounts in year to) 31/12	1995	1996	1997	1998	1999
Share price (approximately)	72.2	117.7	229.5	254.5	265.0
Market Capitalisation £M	163.9	268.5	531.6	597.4	633.0
Number of shares (m)	227	228	232	235	239
Profit after tax (exceptional item in 1996)	36.8	51.1	58.6	66.9	46.3
Net asset value / shareholders equity	143.5	169.7	215.9	275.8	309.8
NAV per share	63.2	74.4	93.2	117.5	129.7
Dividends	5.1	6.0	7.6	9.5	11.0
Dividend per share	2.25	2.65	3.3	4.0	4.8
(Fully diluted) Earnings Per Share after tax	17.6	15.9	24.6	28.0	19.5
Cost of capital (illustrative only)					
Risk free rate	6.0%	4.5%	6.0%	4.0%	3.5%
TOTAL	11.0%	9.5%	11.0%	9.0%	8.5%
Shareholder Value Measures					
Total Shareholder Return		67%	98%	13%	6%
Excess Shareholder Return		56%	88%	2%	-3%
Market Value Added		78.3	217.0	5.8	1.6
Economic Profit (EVA)		33.9	40.3	39.9	19.9
Return on capital employed (non risk adjusted)		33%	30%	27%	16%
Risk Based Capital Calculations					
Net Written Premium £M			443.5	410	435.5
Capital Required as % of Premium (from RBC method)			55.0%	55.0%	55.0%
=> Capital Required			243.9	225.5	239.5
Adjusted Capital Calculation (illustrative only)					
Net Asset Value £M			215.9	275.8	309.8
Plus adjustment 1 - add back Claims Equalisation Reserve			8.3	7.0	12.2
Plus adjustment 2 - Reserve margin if discounted reserves used			37.7	36.2	32.0
Total Adjusted Capital £M			261.9	319.0	354.0
Excess Capital (to minimum of 0)			18.0	93.5	114.5
Profit after tax			58.6	66.9	46.3
Cost of Excess Capital = 0.5*(cost of capital plus risk free rate)			1.5	6.1	6.9
Profit less cost of Excess Capital			57.1	60.8	39.4
Return on risk based capital			23%	27%	16%

4 INSURANCE COMPANY INTERNAL SHAREHOLDER VALUE MEASURES

Each business unit within an organisation could be monitored by the same Shareholder Value Measures as those at a global level. However, the measures may not have any direct link to the day to day activities of the business unit. Therefore, a business unit may also measure and monitor Key Performance Indicators (KPI's). The KPI's should be those that management can influence and that have the greatest impact on Shareholder Value i.e they should be the drivers of value.

In determining the KPI's that should be used for each business unit, it is first necessary to establish what the Shareholder Value Measures are measuring. The measures featured in this paper are concerned with the generation of profit, after allowing for the cost of producing that profit. Therefore, the financial targets that are set for each business unit should also focus on the generation of profit and its cost. For a general insurer the KPI's would in some way involve premiums, claims, expenses, investment return, growth prospects and the cost of maintaining capital.

The desire is to integrate Shareholder Value concepts into the planning, decision making, performance evaluation and incentive compensation of an organisation. Therefore, from the chosen strategy for each business unit, planned targets for Shareholder Value Added and KPI's may be agreed and set. To then encourage each business unit to perform to its potential there may be a remuneration structure in place that depends on the divergence from the planned targets. On a regular basis the contribution by each business unit to Shareholder Value should be measured and decisions made regarding the future for the business unit based upon its contribution.

Should targets set not be achieved then the anticipated Shareholder Value Added will not have been met. In fact it could be the case that Shareholder Value is destroyed rather than created. For example, an underwriting function may have to process a certain number of new policies to cover fixed costs and generate sufficient profit. If it should fail to generate the numbers of policies expected then it may incur greater cost than profit for the organisation.

As part of the planning phase a rough check on the targets set could be done by comparing the company's expectations with those of its investors by considering the business plans in place against the Share price, as the latter is perceived to contain all the expectations of the company's investors. Also, the target KPI's that are chosen for each business unit could be compared to those of ones peer groups, benchmarks and historical experience to ensure they are reasonable.

4.1 EXAMPLE WITH ECONOMIC VALUE ADDED

This example gives one possible approach for implementing a Shareholder Value measure at a business unit level.

For simplicity assume a general insurer has a number of business units, one of which is the investment department and the remainder are underwriting functions. Also, assume that the organisation monitors Economic Value Added.

At a global level the Economic Value Added is derived on a Report Year basis from the Report and Accounts and other information available to investors. Similarly, for each underwriting function Economic Value Added can be measured as:

Underwriting Result plus investment income less tax less net cost of capital

For the underwriting function it maybe preferable for Economic Value Added to be measured on an Accident Year basis, so that movements from previous years e.g. claim reserves, do not distort profitability. To reconcile this with the global Report Year calculation the Economic Value Added could be summed across business units and Accident Years. However, there may also be some global adjustment required if the adjustments are made at the business unit level. Examples of adjustments for an underwriting function are below;

- Best estimate reserves maybe used in measuring profitability. However, at a global level it maybe necessary to use the actual reserves reported. There may need to be a further adjustment if reserves are discounted. Also, an adjustment may be required due to Equalisation reserves as these are not assumed to impact Economic Profit. Further considerations maybe made on run-off business and latent claims (non-recurring).
- The allowance for expenses may not include one off costs, particularly if they are outside the unit's control, although it may include overheads such as Human Resources, IT etc. Any expenses not included at the business unit level need to be factored in at the global one.
- Investment income, after costs, maybe based on benchmark returns (income and capital gains) of the assets underlying the capital allocated as investment performance maybe outside the unit's control. Any divergence from the benchmark return could then be treated as a positive or negative movement in the Investment function's profit figure.
- The cost of capital or capital allocated may need adjusting for excess capital e.g. a territory may not be able to release capital to shareholders for legal reasons and hence any cost of capital estimate may be seen as punitive. Further, the capital allocated to a unit may depend on its perceived risk.
- For simplicity the capital allocated to a business unit maybe assumed to be all Equity. However, this maybe seen as punitive by a business unit unless the cost of capital is adjusted accordingly.

- The cost of capital will be derived from some risk free rate of interest and some measure of the units risk over and above this, for example, the risk would depend on the characteristics of the classes of business written, where the risks are written and any political or legislative risk.
- One off costs e.g. capital investment, may need to be spread over a number of years as the profit from them may not be realised for some time.
- The treatment of reinsurance and tax may be more appropriate at a global level, but some allowance may be made in the business units.

The business unit's capital and cost of capital may differ from that at the group level as the groups performance will include some diversification across business units and hence smoothing of results.

Whilst the underwriting function may be monitored using Economic Value Added it may well monitor its own activities by the sources of this value, in particular, volume and profitability KPI's such as;

- New business levels
- Conversion rates
- Lapse / retention rates
- Claim frequency
- Average cost per claim
- Gross and net ultimate loss ratios
- Reinsurance effectiveness

5 SHAREHOLDER VALUE COMPARISONS BY INDUSTRY

For each industry, a company has been chosen in order to give an example of the Shareholder Value Measures employed within that industry. The companies have been chosen at random and so the stated measures may or may not be indicative of those employed within the respective industries. The picture is complicated by the fact that a lot of the companies are multinationals offering a wide range of services in a large number of territories. The industry is the one that is typically most associated with the company, and the territory is the one where historically the company has its roots.

Ten companies have been looked at and grouped according to common descriptive characteristics. Within each company the following analysis has taken place:

1. Report & Accounts - Quoted examples of Shareholder value considerations in the various statements.
2. Shareholder Value Measures – Explicit reference in the report and accounts to shareholder value type measures, for example earnings per share growth or return on capital employed. Often these are mentioned in the remuneration policies of senior management.
3. Financial Performance Measures – Key financial performance statistics that are described in the main text of the report & accounts that indicate what measures are of most important to the company and industry.
4. Shareholder Ratios – Similar in nature to the Financial Performance Measures but highlighting the ratios that are most relevant for potential investors and shareholders.

INDUSTRY	COMPANY
Financial	
Banking and Financial Services	HSBC Holdings plc
Insurance	Royal & Sun Alliance
Insurance	Legal & General
Food / Drinks	
Food Retailing	McDonald's
Drinks	Coca-Cola
Hotels and Brewing	Bass
Technology	
Mobile Telecommunications	Ericsson
Aerospace	Honeywell
Other	
Paper Packaging	Jefferson Smurfit Group
Pharmaceuticals	SmithKline Beecham

5.1 SUMMARY OF MEASURES AND RATIOS HIGHLIGHTED BY SECTOR

Measure / Group	Bank	Insure.	Food	Drinks	Hotels	TeleC	Aero	Paper	Pharm
Economic Profit	x			x			x		
Total Shareholder Return		x			x		x	x	x
Return on Capital		x		x		x			
Return on Equity	x			x			x		
Return on Assets			x						
Return on Embedded Value		x							
Pre-Tax Profit	x	x	x		x	x		x	x
Net Profit	x	x		x			x		
Earnings per share	x	x	x		x	x	x	x	x
Net Asset Value per share	x	x						x	
Dividends per share	x	x			x	x	x	x	x
Free Cashflow			x				x	x	
Operating Margin						x	x		
Sales		x	x		x	x	x		x
Remuneration	x	x	x	x	x		x	x	x

5.2 FINANCIAL

Banking & Financial Services

Company: HSBC Holdings plc
Industry: Banking & Financial Services
Source: Report & Accounts 1999
Head Office: Hong Kong

Report and Accounts - Examples of Shareholder Value considerations

Shareholder Value Strategy: "Managing for Value"

"The success of the Managing for Value strategy is ultimately dependent on our greatest resource – our staff. The principles of the strategy are now integrated into all our staff training programmes. The message is reinforced continually: to improve customer service and to maximise shareholder value"

"Key measures of success include achievement of financial goals, concerning both revenue generation and expense control; maintenance of customer relationships; full utilisation of professional skills; and adherence to the Group's ethical standards. The Group has a long history of paying close attention to its customers in order to provide value for its shareholders. This has been achieved by ensuring that the interests of the Group and its staff are aligned with those of its shareholders. Closer alignment with the interests of shareholders is being achieved by extending employee participation in the existing share schemes."

Shareholder Value Measure

Measure: $\text{Economic Profit} = \text{Return on Capital} - \text{Cost of Capital}$

Return on Capital: Profit after tax adjusted for non-equity minority interests, goodwill amortisation and other non-cash items.

Cost of Capital: 12.5% (current estimate) x Average invested capital.

The management believes that the trend in the economic profit over time is more important than the absolute economic profit reported for a single period. Economic profit is used by management to decide where to allocate resources, so that they will be most productive.

Financial Performance Measures

Financial performance measures that are mentioned in the main review are:

Profit before tax

Profit for shareholders

Net interest

Other operating income

Cost:Income ratio

Operating Expenses

Bad and doubtful debts charge

Gains on disposal of Investments

Taxation Charge and effective Taxation Rate

Total Assets and Asset breakdown

Shareholder Ratios

Shareholder ratios that are mentioned in the main review are:

Basic Earnings per Share

Diluted Earnings per Share

Headline Earnings per Share

Shareholder's Funds

Return on average Shareholder's Funds

Dividend per Share

Dividend Cover

Headline Earnings per Share excludes the gains on the sale of fixed assets (other than investment securities) and included the add-back of amortised goodwill.

Insurance

Company: Royal & SunAlliance
Industry: Insurance
Source: Report & Accounts 1999
Head Office: UK

Report and Accounts - Examples of Shareholder Value considerations

“ Risk weighted return on capital is the primary measure of performance within the Group. It has been incorporated into the performance related incentive schemes throughout the Group, ensuring there is no divergence between shareholder interests and employee incentive rewards.”

“ The Group continued with its policy of managing the business on shareholder value principles, using and developing the risk based capital techniques that were introduced last year. The Group’s prime financial objective remains to maximise the return to shareholders by ensuring that the return on capital (ROC) is significantly greater than its cost. “

“ Such debt, being both long term and restricted as to the circumstances in which it can be repaid, can be regarded as a form of capital. As a result, the Group’s weighted average cost of capital has been reduced and there has been a continuing improvement in shareholder value added. “

“ The resulting efficient organisation and operations focused on maximising return on their properly allocated capital, is a firm base from which to deliver superior returns for shareholders. ”

Shareholder Value Measures

No explicit formula, e.g. economic profit, is defined. The organisation is focused on maximising the return on risk based capital, which in itself will lead to an increase in shareholder value. The remuneration policy for executive directors is linked to Shareholder Value Measures.

Remuneration Policy of Group Chief Executive –Long term incentive plan:

“ Receives a grant of shares equal to annual basic salary multiplied by 1.6. For 75% to 100% of the shares to vest, all of the following conditions must be met in any given 3-year period:

- Growth in the Group’s TSR must be in the top quartile of a defined group of 12 leading UK, US and Continental European insurers.
- Growth in the Group’s TSR must exceed the RPI plus 2% p.a. compound.
- The Group’s share price must grow by between 5% and 20%, with 20% growth required if 100% of the shares are to be vested.”

Financial Performance Measures

Financial performance measures that are mentioned in the main review are:

Net Written Premium (General and Life)

Underwriting result

Net Assets

General Business Result

Life Business Result

Shareholder Ratios

Shareholder ratios that are mentioned in the main review are:

Dividend per Share

NAV per Share

Return on Capital Employed

Return on Net Assets

Risk Based Capital breakdown by country

Shareholder's Funds breakdown by country

Capital breakdown by type (shareholder's equity, non-equity shareholders etc.)

Insurance

Company: Legal and General
Industry: Insurance
Source: Report & Accounts 1999
Head Office: UK

Report and Accounts - Examples of Shareholder Value considerations

Remuneration Report:

“The board believes that a significant element of managers’ remuneration should be linked to the delivery of above average long term returns for shareholders.”

“Under the performance share plan, the number of performance shares transferred to the individual is dependent upon the Legal and General total shareholder return (TSR) compared with the FTSE 100, measured over a three year period. The minimum numbers of performance shares are transferred if the performance is above median. The number increases proportionately to a maximum of four times the performance shares for performance at or above the twentieth position.”

Financial Performance Measures

Financial performance measures that are mentioned in the main review are:

Shareholders’ Retained Capital

Achieved Profits

Operating Profit

Return on Embedded Value


Shareholder Ratios

Shareholder ratios that are mentioned in the main review are:

Earnings per Share

5.3 FOOD / DRINKS

Food Retailing

Company: McDonald's
Industry: Food Retailing
Source: Report & Accounts 1999
Head Office:  US

Report and Accounts - Examples of Shareholder Value considerations

CFO Review

“ We are well positioned to add shareholder value over the long term through continued earnings growth and high returns on capital. We have an objective to grow earnings per share between 10% and 15% - excluding the effect of foreign currency translation – in each of the subsequent five years.”

“ Our growing free cash flow gives us the flexibility to repurchase stock whilst maintaining a strong balance sheet. Through share repurchase, we positively impact earnings per share growth over time; shareholders should receive a rate of return of at least our cost of capital; and we improve return on equity.”

“ We believe that McDonald's is well positioned to continue to report solid growth in earnings, increase returns through strong operations and capital efficiency, and grow cash flow, all of which will continue to add shareholder value over the long term.”

Financial Performance Measures

Financial performance measures that are mentioned in the main review are:

Return on Average Assets

Sales

Operating Income

Free Cash flow

Shareholder Ratios

Shareholder ratios that are mentioned in the main review are:

Diluted Earnings per Share

Drinks

Company:	Coca Cola
Industry:	Drinks
Source:	Report & Accounts 1999
Head Office:	US

Report and Accounts - Examples of Shareholder Value considerations

“ Economic Profit provides a framework by which we measure the value of our actions. We define economic profit as income from continuing operations, after tax and excluding interest, in excess of a computed capital charge for average operating capital employed.”

“ We use value-based management (VBM) as a tool to help improve our performance in planning and execution. VBM principles assist us in managing economic profit by clarifying our understanding of what creates value and what destroys it and encouraging us to manage for increased value. With VBM we determine how best to create value in every area of our business. We believe that by using VBM as a planning and execution tool, we greatly enhance our ability to build shareholder value over time.”

“ We seek to maximise economic profit by strategically investing in the high return beverage business and by optimising our cost of capital through appropriate financial policies.”

Financial Performance Measures

Financial performance measures that are mentioned in the main review are:

Net Income

Shareholder Ratios

Shareholder ratios that are mentioned in the main review are:

Return on Equity

Return on Capital

5.4 HOTELS AND BREWING

Company: Bass
Industry: Hotels and Brewing
Source: Report & Accounts 1999
Head Office: UK

Report and Accounts - Examples of Shareholder Value considerations

“Share ownership by executive directors and senior executives strengthens the links between the individual’s personal interest and that of shareholders (share price)”

“Performance conditions are set, for current cycles, on the Bass total shareholder return (share value growth assuming reinvestment of gross dividends) measured against those of ten competitor companies.”

Financial Performance Measures

Financial performance measures that are mentioned in the main review are:

Turnover

Operating Profit

Profit before tax and exceptional items

Increase in Property Values

Shareholder Ratios

Shareholder ratios that are mentioned in the main review are:

Adjusted Earnings per Share

Dividends per Share

5.5 TECHNOLOGY

Telecommunications

Company:	Ericsson
Industry:	Mobile Telecommunications
Source:	Report & Accounts 1999
Head Office:	Sweden

Report and Accounts - Examples of Shareholder Value considerations

“Ericsson’s mission is to understand its customer’s opportunities and needs, and to provide communication solutions better than any competitor. In doing so, Ericsson shall generate a competitive economic return for its shareholders.”

“One of Ericsson’s most important overall objectives is to create strong, competitive, value growth for its shareholders. “

Shareholder Value Measures

No explicit formula, e.g. economic profit, is defined. Each unit within the organisation is not only responsible for profit, but is also responsible for its share of capital employed.

“The objective is that the company will grow faster than the market, which involves long-term growth of at least 20% p.a. This growth objective should be viewed over a 5-year period. This requires a return on capital employed of between 20% and 25%. To reach this objective Ericsson must maintain an average operating margin of at least 10% and a capital turnover rate of two or better.”

Financial Performance Measures

Financial performance measures that are mentioned in the main review are:

Orders booked

Net Sales

Income before tax

Gross Operating margin

Net Operating margin

Operating Expenses

Shareholder Ratios

Shareholder ratios that are mentioned in the main review are:

Dividend per Share

Earnings per Share

Earnings per Share (according to US GAAP)

Return on Capital Employed

Price Earnings Ratio

Net Liquidity

Aerospace

Company: Honeywell
Industry: Aerospace
Source: Report & Accounts 1999
Head Office: US

Report and Accounts - Examples of Shareholder Value considerations

“ Sharing the best of both companies (*), we will continue to create value through productivity – for customers, shareowners and communities.”

(*) *After the merger with AlliedSignals*

“ The Group continued with its policy of managing the business on shareholder value principles, using and developing the risk based capital techniques that were introduced last year. The Group’s prime financial objective remains to maximise the return to shareholders by ensuring that the return on capital (ROC) is significantly greater than its cost. ”

“ Such debt, being both long term and restricted as to the circumstances in which it can be repaid, can be regarded as a form of capital. As a result, the Group’s weighted average cost of capital has been reduced and there has been a continuing improvement in shareholder value added. ”

“ The resulting efficient organisation and operations focused on maximising return on their properly allocated capital, is a firm base from which to deliver superior returns for shareholders. ”

Shareholder Value Measures

No explicit formula, e.g. economic profit, is defined. The remuneration policy for senior leaders is linked to Shareholder Value Measures.

Remuneration Policy:

“ We have set aggressive 3-year performance targets and have tied incentive compensation for our senior leaders to making these numbers:

Achieving annual sales growth of 8% to 10%

Expanding operating margin by at least one point per year

Growth earnings per share at a compounded annual growth rate of at least 18%

Achieving at least 7% productivity improvement per year

Increasing free cash flow before dividends to \$ 3 billion by 2002.”

“ A strong belief in aligning shareowner and employee interests has been key to achieving world-class results. The company’s industry-leading stock savings plan has been made available to hourly and union employees and stock purchase plans have been made available outside the US to create a worldwide culture of ownership.”

Financial Performance Measures

Financial performance measures that are mentioned in the main review are:

Net Sales

Net Income

Net Operating margin

Shareholder Ratios

Shareholder ratios that are mentioned in the main review are:

Earnings per Share

Diluted Earnings per Share

Dividend per Share

Book Value per Share

Return on Equity

Return on Investment

Return on Net Sales

Total return to shareholders

Debt as a percentage of Capital

5.6 OTHER

Paper Packaging Organisation

Company: Jefferson Smurfit Group plc

Industry: Paper Packaging

Source: Report & Accounts 1996

Head Office: Ireland

Report and Accounts - Examples of Shareholder Value considerations

“ We have been proponents of shareholder value long before that concept received the scrutiny it is getting today. With a significant equity stake held by the broader management group, the interests of management and shareholders are aligned giving Jefferson Smurfit Group a strong incentive for continuing to focus on strategies that deliver value.”

Shareholder Value Measures

No explicit formula, e.g. example economic profit, is defined but the remuneration policy for executive directors is linked to Shareholder Value Measures:

Remuneration Policy of Directors - Share Option Plans:

“ Share options granted to executive directors are made 50% under Section A, which requires EPS growth in excess of the Irish Consumer Price Index (“CPI”) over a period of at least 3 years. Also they are granted at 50% under Section B which requires EPS growth over a period of 5 years in the upper quartile of the FT-SE 100 ranked by EPS growth over the same period. ”

“ Under long term incentive plans no payment will be made unless total shareholder return “ TSR ” for the 4 years from 1st January 1996 is at least 11.5% p.a. compounded annually, and for the maximum payment to be earned the TSR for the same period must be at least 18% p.a. compounded annually. “

“ The Committee has the right to reduce the amount payable under the plans if the Company’s EPS performance compares unfavourably with that of its industry peers. Payment under the Chief Operating Officer’s plan requires the achievement of 2 out of 3 targets relating to share performance, retained earnings and cost take out over the 4 years from 1st July 1996. “

Financial Performance Measures

Financial performance measures that are mentioned in the main review are:

Profit before tax

Cash flow

Net Borrowing

Net Debt to Equity ratio

Shareholder Ratios

Shareholder ratios that are mentioned in the main review are:

Dividend per Share

Earnings per Share

Net Assets per Share

Shareholder's Funds

(%): Percentage change over the previous year is stated. A comparison is always made with the previous year.

Pharmaceuticals

Company: SmithKline Beecham
Industry: Pharmaceuticals
Source: Report & Accounts 1999
Head Office: UK

Report and Accounts - Examples of Shareholder Value considerations

Remuneration Report:

"The company's Total Shareholder Return is reviewed relative to other companies in the FT-SE 100 Index and make a final (share) award depending on the company's performance."

"If the company is at or above the 80th percentile of the FT-SE 100 Index in terms of Total Shareholder Return the remuneration committee will ordinarily award 100% of the target number of shares. If the company is below the 40th percentile it will ordinarily award none of the target number of shares."

Financial Performance Measures

Financial performance measures that are mentioned in the main review are:

Sales

Trading Profit

Pre-Tax Profit

Shareholder Ratios

Shareholder ratios that are mentioned in the main review are:

Earnings per Share

Dividends per Share