Recognising Risk in Financial Decision Making

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Abstract

This paper aims to provide conceptual theory and practical guidance in relation to how risk should be taken into consideration in financial assessments.

The paper discusses the concept of risk and suggests that improved financial decision making will result from ensuring that the value metrics which are used in financial assessments are appropriately risk adjusted. The paper sets out the key steps that should be followed in order to appropriately recognise risk in a financial assessment, namely:

- conducting a risk assessment, consistent with the firm’s risk appetite;
- translating the risk assessment into a financial adjustment; and
- communicating the outcome and comparing the financial decision against the risk/return profile of other alternative options.

For each step, the paper discusses both theoretical considerations and practical issues.

We conclude with a list of key questions that any firm should consider in setting its basis for recognising risk in the financial assessments that guide its decision making.

Key words: risk assessment, risk distribution, risk adjustments, financial assessment, value metrics, risk appetite
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1 INTRODUCTION

1.1 Overview

The purpose of this paper is to provide conceptual theory and practical guidance in relation to how risk should be taken into consideration in financial assessments. We set out an approach that allows risk to be factored into the quantitative financial assessment measure.

In this introductory section, we set out some basic definitions, and introduce a number of concepts which are discussed in further detail in the sections that follow.

Throughout this paper, we use terminology that would apply in the context of a business considering a financial decision to undertake a particular initiative, but note that the principles presented should also apply more broadly to financial decision making in general.

1.2 What is a financial assessment?

Businesses must make decisions. Most significant decisions relate to the expenditure of capital or the allocation of scarce resources, and either involve a “yes/no” choice or the need to select amongst a range of alternatives. While the exact format of information required to enable an informed decision to be reached will vary depending on the specifics of each situation, a financial assessment will be a key input into most, if not all, significant business decisions. There is a broad range of circumstances that may require the preparation of a forward-looking financial assessment prior to a decision being taken. The more common circumstances relate to initiatives such as:

- inorganic investment (e.g. business line acquisition or divestment);
- organic investment (project spend);
- customer product design and pricing; and
- changes to corporate strategy.

We would typically expect to see a variety of different value metrics supporting an assessment of alternative financial decisions. For example, net present values, internal
rates of returns, margin impacts, ROE, cash earnings growth, EPS, TSR, and so on may be of relevance to certain decision types for certain businesses. For the purpose of this paper, we will tend to focus on net present value ("NPV") as generally the most appropriate metric to assess the outcome of financial decisions on business value. In any case, the principles discussed in this paper can be applied regardless of the value metric(s) being used.

1.3 Our definition of risk

Before turning our minds to how risk should be factored into financial decision making, it is necessary to have a clear understanding of what we mean by “risk”.

We prefer to think of risk simply as the possibility that future outcomes will differ from expected. This implies that risk can be understood through assessing the following:

- sources of risk – being the alternative event types that will result in a variation (both upside and downside) from the expected outcome, although the focus will typically be on the downside;
- likelihood of risk – being the probability of such events occurring over a specific time horizon; and
- consequences of risk – being the relevant outcomes (both financial and non-financial) of such events occurring.

Obviously the sources, likelihood and consequences of risk will differ from business to business. Attitudes to risk will also vary from business to business. As such, risk frameworks will naturally be expected to vary substantially from business to business.

A generic risk assessment framework is discussed in Section 2.

1.4 Incorporating risk into a financial assessment

Once a risk assessment has been conducted, there are two distinct aspects to incorporating an allowance for risk into the financial assessment:

- modelling the expected long term financial outcomes; and

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1 Risk events that impact financial outcomes are typically defined as financial risks.
Recognising Risk in Financial Decision Making

- adjusting expected long term financial outcomes for the effects of risk, taking into account the risk appetite of key stakeholders.

The explicit inclusion of a risk allowance in the value measure is critical, and, provided it is applied appropriately and consistently and is accompanied by relevant supporting qualitative analysis, will lead to superior decision making. Our basic premise is that the financial assessment of an initiative involving low downside risk to value should indicate that the initiative is financially better than an alternative with the same expected outcomes but higher downside risk. We discuss this further in Section 3.

In order to effectively communicate the risk profile of an initiative under consideration, it is important to be able to provide supporting qualitative analysis, and to ensure that there is transparency around any risk adjustments made. Without such support, the outcomes of a risk assessment may be buried deep within an initiative’s value measure and not be properly understood by decision makers. For example, two initiatives with identical risk adjusted values may have vastly different risk profiles to which the business may have very different attitudes. We discuss this further in Section 4.

1.5 Opportunity costs and real options

While not the focus of this paper, we note that a financial decision can have various implications, including removing the opportunity to pursue other options, or creating future options. Good financial assessments would recognise these dynamics.

1.6 Acknowledgements

The authors wish to thank Bob Stribling and Dom Giuliano, who both provided useful background on practical approaches to allowing for risk. In particular, we would like to express our appreciation to Annetta Cortez, who peer reviewed this paper.
2 RISK ASSESSMENT

2.1 Overview

Prior to attempting to make risk allowances in the financial assessment, it is essential to have a thorough understanding of the potential risks associated with the decision. Conducting a risk assessment is therefore an essential pre-requisite to conducting a financial assessment.

An organisation should establish a standard approach to conducting risk assessments. This will require a risk framework, setting out such things as a definition of risk, risk benchmarks (e.g. return on capital, profit, value outcomes, etc.) and standard key classes of risk. A key element of this framework will be an articulated risk appetite statement. This should spell out the sources and amounts of risk that a business may or may not be comfortable accepting, and the consequences of exceeding risk limits. We refer to the risk appetite statement regularly through this paper as a critical piece of context to the financial decision making process.

2.2 Generic Risk Assessment Framework

Below, we set out a straw-man generic risk type framework, that distinguishes between the risks that will be introduced after implementation of the initiative (i.e. introduced risk) and the risks which will exist whilst the initiative is in the process of being implemented (i.e. implementation / integration / execution risk).

Introduced risk arises as a result of the implementation of the initiative and becomes part of ongoing operations. Implementation risk typically refers to the operational risks that might threaten successful implementation, but is not restricted to just operational risk exposures. Implementation risks are usually significant, notoriously so for inorganic initiatives. Though typically more difficult to quantify, they should not be ignored.
TABLE 1
Example – A Generic Risk Type Framework

<table>
<thead>
<tr>
<th>Risk Type</th>
<th>As defined by the chance that, over the relevant time horizon, losses result from:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market risk</td>
<td>the business being exposed to adverse market movements</td>
</tr>
<tr>
<td>Credit risk</td>
<td>a payee’s (or borrower's) failure to meet the term of any contract</td>
</tr>
<tr>
<td>Operational risk</td>
<td>inadequate or failed internal processes, people and systems or from external events</td>
</tr>
<tr>
<td>Insurance risk</td>
<td>an unforeseen increase to insurance claims, that cannot be offset by a corresponding timely increase in insurance premiums</td>
</tr>
<tr>
<td>Liquidity risk</td>
<td>an inability to realise assets within a required time horizon</td>
</tr>
<tr>
<td>Funding risk</td>
<td>an inability to raise required business capital, on appropriate terms, within a required time horizon</td>
</tr>
<tr>
<td>Strategic risk</td>
<td>poor strategic choices</td>
</tr>
<tr>
<td>Reputation Risk</td>
<td>reputation / brand damage</td>
</tr>
<tr>
<td>Business risk</td>
<td>any other unexpected reduction in revenue that cannot be offset by a corresponding timely decrease in expenses</td>
</tr>
</tbody>
</table>

2.3 From a Qualitative to a Quantitative Risk Assessment

The risk assessment process will typically begin with a qualitative assessment of the types of risk events that would impact the initiative at various points in the future, followed where possible by a more quantitative assessment. A qualitative risk assessment will enable the communication of identified risk exposures, their potential impacts, and some suggested mitigation strategies. An understanding of the drivers of the different types of risk that have been identified and how the risk might change over time is also critical. Such insight is required to aid in any eventual financial modelling of risk exposures over time. A well constructed risk appetite statement will further act as a reference point on the acceptability, or otherwise, of identified risk exposures.

A quantitative risk assessment is the gateway to the recognition of risk in the financial assessment of an initiative. The “holy grail” for quantitative risk analysis is a set of credible statistical distributions for all possible risk events over the relevant time horizon. For some risk types in some industries, sufficient data can exist to reliably deduce a
potential distribution of risk events and their outcomes (e.g. credit and market risk in banking operations). More often, however, sufficient data will not be available, requiring a heavier reliance on judgement with regards to the most likely form of the distribution.

The findings of the risk assessment need to be communicated, and incorporated into the financial analysis where possible, to support and strengthen the financial decision making process. In our experience, the quality of a risk assessment will be optimised when suitably experienced risk professionals work in close partnership with the finance professionals responsible for eventual financial assessment.
3 RISK ADJUSTMENTS

3.1 Overview

Once a risk assessment has been completed (as discussed in Section 2) and a base “best estimate” projection of cash flows derived (as discussed in Section 3.2), we have identified three generic approaches to adjusting the long term financial outcomes for the effects of risk:

- adjusting the “best estimate” cash flows (as discussed in Section 3.3);
- incorporating an allowance for the capital required in respect of the risk (as discussed in Section 3.4); and
- adjusting the discount rate (as discussed in Section 3.5).

In practice, it is critical that no steps in the financial assessment be conducted in isolation to the others. The basic steps to be undertaken, as discussed below, are shown in Diagram 1.

DIAGRAM 1
Financial Assessment – Key Steps
3.2 Forecasting Best Estimate Cash Flows

A critical first step to performing a financial assessment requires ensuring that forecast cash flow items, both costs and revenues, are representative of the long term mean of all possible future outcomes. The effect of this approach is that all expected “risks” (i.e. expected costs) will be included as explicit cash flows. This not only includes the impact of “high frequency / low impact” events, but also a share of “low frequency / high impact” events. One issue often overlooked is allowing for the expected risk of implementation failure on future cash flows. To the extent that a risk of implementation failure exists, future cash flows should be suitably reduced to recognise this potential risk, as demonstrated in Diagram 2 below.

Typically, assumption setting is done with regard to the financial impact of historical risk events that might be buried within previous operational experience. If the true underlying distribution of outcomes is “long tailed”, deriving a best estimate assumption with reference to the most commonly observed historical observations will tend to produce the mode of the distribution, an assumption that differs from the long term mean. It is therefore important to recognise that a true best estimate assumption can not be set without an understanding of the risk profile of the cash flows.
If a statistical distribution of outcomes for a key risk type has been derived through the risk assessment process, a best estimate assumption will ideally be tested against the mean of this distribution. Almost certainly, such a distribution will not exist and some professional judgement will need to be exercised. Some useful questions to ask might be:

- Where have long term cycles been and where are they heading (e.g. credit or mortality risk)?
- Have any extraordinary risk events impacted on historical averages?
- Do internal risk controls indicate a high possibility of a major short term risk event?
- What might be a plausible, but extreme, worst case scenario for this risk type?
- How will this risk change in the future? What is the natural driver (or “risk carrier”) for this risk type (e.g. for credit risk it might be credit volumes)?
- Do any natural hedges exist between different risk types that might neutralise risk events?
- Are there any insurance arrangements, or product design features, in place that might reduce the impact of unforeseen losses?
3.3 Adjusting Cash Flows For Risk

Once true mean expected cash flows are available, one common method of risk adjustment involves “normalising” the cash flows to remove the impact of risk. This approach is commonly used to deal with market risks, with the technique referred to as “risk neutral” or “certainty-equivalent”.

An understanding of the impact of various risk types on the cash flows is a precondition to considering any adjustment to cash flows for risk. Achieving this understanding can be difficult and can require a large degree of judgement, in particular:

- decomposing revenue and cost cash flows into components that are affected by each individual underlying risk type;
- deriving or assuming a statistical distribution for each risk type; and
- understanding the correlations that might exist between these various risk types.

While this approach does allow market risks to be valued accurately, there is no real consensus as to how (or if) similar adjustments could (or should) be made in respect of other risk types. One approach currently in use for other risks is to calculate a cash flow adjustment as a percentage of the capital required to be held against such other risks. Provided such adjustments are applied consistently across all financial decisions, and some of the challenges discussed above can be addressed, we would recommend this as a robust approach to allowing for risk.

The key advantage of the certainty-equivalent approach is that, if done thoroughly, it eliminates the need to set a risk discount rate (“RDR”). We acknowledge, however, that there is no standard method for making the required cash flow adjustments for certain risk types, and that the required decomposition of cash flows into components can be difficult.

We would strongly caution against making ad-hoc adjustments to best estimate projection assumptions to allow for risk, as such an approach generates inconsistencies and will ultimately lead to poor financial decisions being made.
3.4 Allowing for Required Capital

Ideally, required capital is set to a risk-based capital measure reflecting the investors’ risk appetite (i.e. an economic capital number set to a certain confidence interval across the aggregate risk distribution\(^2\)). For a given risk distribution, a more aggressive investor typically will have a lower economic capital requirement, and will be willing to expose the venture to a larger probability of failure than an otherwise more conservative investor. The trade-off of accepting a lower economic capital requirement is a higher risk of insolvency in the event of a major risk failure. The business’s credit rating is also likely to be lower – highlighting the importance of a well articulated risk appetite statement to ensure these trade-offs are well understood by financial decision makers.

In practice, it may be necessary to apply the two alternative lenses of regulatory capital and economic capital to the forecast required capital in the financial assessment. Other capital lenses may also be relevant (e.g. physical book capital, target capital, liquid capital, etc). Economic and regulatory capital will often differ (although we note that regulators are generally trying to align the two, with Basel II being an example) and can behave in counter intuitive ways. It could be therefore that a pipeline of proposed initiatives will be prioritised in different ways depending on whether a regulatory capital or economic capital lens is used. Whilst we advocate that it is important to consider both regulatory and economic capital in the financial assessment process, our paper deliberately focuses on supporting sound financial decisions by examining the initiative through an economic capital lens.

Reflecting the cost of holding required capital is imperative to ensure that initiatives with a lower risk profile are suitably rewarded. We note that this step is independent of the risk adjustments to cash flows referred to above.

Traditional valuation techniques would generally determine a cost of capital based on the difference between a RDR and the assumed earning rate on that capital. However, we would propose that this cost should be determined as an explicit charge applied to the amount of required capital, to produce a “quasi cash flow”. This avoids any problems with the cost of capital being impacted by assumed asset mix.

\(^2\) This would normally be adjusted for any diversification benefits that might exist between risk types.
3.5 Applying a Risk Adjusted Discount Rate

The present value of base cash flows and a cost of capital adjustment can be determined via the application of an appropriate RDR. If all risks have been fully recognised via cash flow adjustments (as discussed above in Section 3.3), then the appropriate RDR would be a risk free rate. However, to the extent that the best estimate cash flows have not been adjusted to take account of all risks, it will be necessary to incorporate a risk premium into the discount rate. Ideally, the risk premium should be tailored for each financial assessment to reflect the risks specific to that initiative. The net present value (“NPV”) using the appropriate (initiative-specific) RDR can then be used to prioritise alternative initiatives under consideration.

We recognise that it is standard practice in many companies to set rigid hurdle rates that do not reflect the relative risk of various initiatives. In principle, we would caution against this approach, since, unless risks have been fully recognised for via cash flow adjustments, the use of a single RDR in the financial assessment of all initiatives being considered will inevitably lead to a mis-prioritisation of initiatives over time. In practice, similar challenges exist with making an initiative-specific adjustment to the RDR as were discussed in Section 3.2 (in relation to the adjustment of cash flows for risk). Nevertheless, a quality risk assessment together with the process of quantifying the economic capital requirement over time should provide a good basis to inform an appropriate adjustment to the RDR by financial decision makers.

Alternatively, an internal rate of return (“IRR”) measure could be used. If risks have been fully recognised via cash flow and cost of capital adjustments, then the IRRs would be directly comparable across initiatives. However, if risk has not been fully recognised through such adjustments, it may be necessary to assess the IRR against a hurdle rate that is adjusted for the differences in the risk of each specific initiative being considered. Due to the practical difficulties of setting such initiative-specific hurdle rates, we would recommend ensuring all risk adjustments are made via cash flow adjustments and a suitable cost of capital assumption, if an IRR approach were to be used to compare alternatives.
4 COMMUNICATING THE RISK

4.1 The Risk Appetite Statement as a Common Language

In order to better communicate the risk profile of an initiative, some method of quantifying the risk is required. In its purest form, the quantification of risk is based on a statistical distribution of possible financial outcomes. This leads to risk capital being a logical metric for defining risk appetite. This risk capital is typically defined as the difference between a particular point, or confidence level, and the mean of the distribution of financial loss outcomes.

A business may select one or several points on a statistical risk distribution to represent their key overarching measure of risk in a business – either as the basis for ongoing financial decision making or the overall financial management of the business. The framework for assessing risk usage, including key risk classes, capital measures, limits on the overall usage of risk capital and return on capital expectations, are ideally integrated into the ongoing planning and strategy process for a business through the ongoing review of its risk appetite statement.
Tables 2 and 3 below sets out a generic example of an overarching Risk Appetite Statement (including a forward looking capital usage plan) and Risk Capital Framework by risk class.

**TABLE 2**

**Example Risk Appetite Statement – Key Capital Metrics**

<table>
<thead>
<tr>
<th></th>
<th>Total Business</th>
<th>Business Unit A</th>
<th>Business Unit B</th>
<th>Business Unit C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash Earnings</strong></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td><strong>End of Year Book Capital (&quot;E&quot;)</strong></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td><strong>End of Year Regulatory Capital (&quot;RC&quot;)</strong></td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td><strong>End of Year Risk Capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Economic Capital (@ 99.95%*)</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>- Severe Downturn (@ 95%*)</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>- Moderate Downturn (@ 80%*)</td>
<td>$</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td><strong>Return on Average Capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- ROE (Book Capital)</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>- RORC (Regulatory Capital)</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>- ROEC (Economic Capital)</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
</tbody>
</table>

* Risk capital confidence intervals are generally a function of the organisation’s target debt rating.
TABLE 3
Example Risk Appetite Statement – Risk Capital Framework

<table>
<thead>
<tr>
<th>End of Year Plan ($)</th>
<th>Economic Capital (@ 99.95%)</th>
<th>Severe Downturn (@ 95%)</th>
<th>Moderate Downturn (@ 80%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market risk</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Credit risk</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>Operational risk</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>etc ...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Capital</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
</tbody>
</table>

4.2 Communicating the Outcome of the Financial Assessment

As we have mentioned, simply comparing a suitably risk adjusted value measure for an initiative can be a blunt tool for comparative purposes. For example, a very low risk initiative that provides a return on investment below the hurdle rate of return but above a risk free rate of return may be perfectly acceptable to decision makers when considered as part of a pipeline of other initiatives that together will produce an acceptable overall return and risk profile. An infrastructure investment or compliance project may also struggle to demonstrate a positive value contribution in isolation, but represent a compelling business case when the broader upstream or downstream impacts on risk and value are articulated.

Whatever the financial decision, we encourage communicating the outcomes of the supporting financial assessment in a consistent way that provides transparency of the manner in which adjustments for risk have been made. Furthermore, a clear articulation of some of the more subtle risk/return characteristics of an initiative will usually be critical for decision makers to appreciate the true value of an initiative. When presenting an NPV outcome, making clear the explicit allowance for the cost of capital in the financial assessment can be particularly powerful to help demonstrate the impacts of risk relative to alternative financial decisions under consideration (see Table 4 below). Deterministic techniques (e.g. sensitivity testing, hypothetical risk events, best/worse case analysis) are also important in a data-poor environment to enrich the decision assessment.
### TABLE 4
Example – “Base Case” NPV of a Pipeline of Alternative Initiatives

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Initiative A</th>
<th>Initiative B</th>
<th>Initiative C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NPV of Cash Flows</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Implementation Investment Required (if applicable)</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>- Best Estimate (Mean) Cash Flows</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>- Implementation Risk Adjustments to Cash Flows</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>- Introduced Risk Adjustments to Cash Flows</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td><strong>Less NPV of Cost of Economic Capital By Key Type</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Market Risk</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>- Credit Risk</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>- Operational Risk</td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td>- etc …</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total NPV</strong></td>
<td>$</td>
<td>$</td>
<td>$</td>
</tr>
<tr>
<td><strong>Chosen Discount (Hurdle) Rate</strong></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td><strong>IRR (if applicable)</strong></td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
</tbody>
</table>
5 CONCLUSIONS

5.1 Conclusions

Linking financial decision making back to a business’s risk appetite statement is critical.

A consistent and robust approach to risk assessment is critical.

The amount of skill, experience and professional intuition required to recognise risk in a balanced way across the setting of cash flow assumptions, forecasting the cost of capital, and the setting of a suitable discount rate should not be underestimated.

A consistent approach to incorporating the results of the risk assessment in the financial assessment, in particular recognising the cost of any economic capital requirement, is critical.

There are a variety of approaches validly used both across industries and even within an industry – each organisation must understand its own risk appetite and select measures that are consistent with its aims.

To aid decision making within an organisation, comparisons are required, which leads to the need for one basis within a company.

5.2 7 Deadly Sins

Before listing some key questions to consider before undertaking a financial assessment, we list our top 7 traps to avoid: the “7 Deadly Sins of Financial Assessments”:

- rigidly applying a fixed discount rate irrespective of risk to decide on “yes/no” investment decisions;
- undisciplined ad hoc adjustments (e.g. to cash flows or RDRs) to get to the NPV that “feels right”;
- using recent history to define future losses;
- over aggressive revenue forecasts;
- an “ad hoc” risk assessment process;
ignoring implementation risk, its likely impact on future cashflows, and any associated economic capital requirement; and

inconsistent application of time horizon and terminal values to financial assessment.

5.3 Financial Assessment – Some Key Questions

- Is the initiative being assessed material, particularly transformational, or out of the ordinary?

- What financial outcomes are important? Which is most important? Does the value measure adequately reflect this outcome?

- Is “risk” defined? What is the organisation’s risk appetite?

- Have all potential causes of risk been identified?

- Have all material causes been quantified?

- Are the future drivers of risk change understood?

- Have they been allowed for in the value measure (cash flow, capital charge, RDR load)?

- Is the value “risk-adjusted”?

- Is there a risk-profile metric that describes the risk?

- How skilled / experienced are the practitioners responsible for conducting the risk and financial assessment?