

# Understanding

# RISK MANAGEMENT

*as added value*

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**Businesses exist to take risk. Every management decision, whether explicitly identified as such or not, is a decision on how to best take risk. One might wonder, then, why there is no overwhelming enthusiasm from line and middle managers and, to some extent, from senior managers, for 'risk management' to be seen as a value creating activity on a par with increased market share, sales revenue or product innovation.**

In part, this is a problem of definition and in part a reflection of the infancy of communication about risk management in the context of wealth or value creation. Managing risk is identical to creating and managing value and can have a place in standard managerial discussions if that value can be well communicated. Be it capital structuring, business strategy, tactical risk taking or firm longevity, risk management enhances the value of a firm that comes from more traditional managerial areas of focus like those listed above. In a world where information is neither equally available nor equally well put to use, risk management thereby magnifies the competitive advantages that having better people and better ideas bring.

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## THE PROBLEM OF DEFINITION

Define corporate governance to be *decision making predicated on a belief in potential rewards, balanced with*

*the knowledge, understanding and appreciation of the steps taken to pursue those potential rewards.* We may then wonder if there is really any difference between good corporate governance and good business management. In fact, there is very little difference and one might argue that corporate governance, as a term, could be used interchangeably with business management. This may help to explain why corporate governance has quickly found a generally friendly reception in business planning discussions and is thought, *de facto*, to add value.

Now, in the definition above, change the word 'steps' to 'risks'. The meaning has not changed, but the reaction to the definition may reflexively be more negative.

Businesses can only take steps to pursue potential rewards to the extent that those steps are somehow 'funded'. If something requires funding, it must entail risk. So, managing the steps taken to put that funding to use is the management of risk, or risk management. Could we

then define risk management almost identically to corporate governance? If so, is the term 'good risk management' also interchangeable with 'good business management'? It would be helpful for risk managers if such were true as the value proposition of risk management might be clearer.

In reality, risk management, corporate governance and good business management are better seen as being very highly aligned, especially at larger companies, and even more correctly as progressive subsets of each other (risk management as a subset of corporate governance which is a subset of good business management). If the value of the business is determined by good business management, the set, then the value is not as large as it could be if its subsets, corporate governance and risk management, are not maximised. In other words, if the value of risk management is not maximised, the value of the firm has not been maximised.

Most managers welcome discussions about things that can increase the value of their firm. So, for the sake of advancement of a practice that does add value, risk management make be better branded under a more positive sounding name like value management so that an effort to maximise its value seems naturally more attractive.

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### MEASURING VALUE AND RE-BRANDING RISK MANAGEMENT

If we wish to move such a re-branding forward, communication about the management of value requires that value somehow be measured. Let's start with a common measure of value creation and business performance, Return on Equity (ROE). A good business manager knows that a higher ROE will produce a higher value for the firm, all else equal. It will also either draw more funding to the firm or reduce the cost of the firm's current funding, either of which will add future value.

Equity is one form of funding for *the risks (steps) taken to pursue potential rewards*. Equity gives customers,

creditors, distributors, vendors and other stakeholders enough confidence to work with a business. In other words, equity is one form of risk capital.

So, if equity is one form of risk capital, then ROE is akin to ROC, return on (risk) capital. As most business managers understand the linkage between ROE and value creation, the challenge is to help them to understand ROC as an even more highly linked measure of value, or to find some way to translate it into an even more recognisable measure than ROE.

While both ROE and ROC are typically expressed in percentage terms, their derivation is from a simple mathematical ratio where the numerator, Return (profits, for example) is divided by the denominator, Equity or Risk Capital. ROE and ROC go up when returns increase or when equity/ risk capital decrease, or some combination of both. The undervaluation of 'risk management' in many businesses comes when the connection is not made between the process of managing risks and value creation that comes from an impact on either the numerator or denominator of these ratios.

In part, this disconnect comes from the narrow view of risk management as an activity of mitigation or transference (hedging and insurance are simple examples of this). Or, it is viewed simply as the task of reporting how much someone might lose if a bad thing were to happen.

None of these views appeals to the successful business manager who is naturally attracted to 'growth' and positive outcomes. Value management, if defined as a process that leads to growth in the valuation of a firm, has such appeal.

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### HOW RISK MANAGEMENT BECOMES VALUE MANAGEMENT

It would be quite rare indeed to find a successful business manager that didn't understand the concept of diversification in their personal investment portfolio. They know it to be a good idea, if not always fully

understanding why. The key take-away, though, is that it is possible, by altering the set of investments, to yield a higher expected return for the same amount of risk, to reduce risk for the same desired return or to create some combination of lower risk and higher returns, making the portfolio more valuable.

The risk-adjusted returns of a portfolio are no different from the ROC/ROE example above. Higher returns and/or lower risk, all else equal, create a higher ROE/ROC and thus create value.

Relating the similar benefits of risk management can be done by looking at five major components of value management: reporting, tactical management, capital management, capital allocation and persistence.

Reporting helps managers simply by providing more information for better decision making. At its most basic level, it is little different from having knowledge of competitor's sales growth, customer preferences, production line efficiency or the beta of a stock.

As value management develops, we take reporting to the next level: tactical management. With knowledge of the behaviour of a firm's risks, a business manager has the opportunity to decide which risks are acceptable. Such knowledge leads to discussions of how to change the risks that are not desirable. For example, taking a forward position in a foreign currency may reduce the risk of international sales underperformance that arises simply from a translation back into the currency of the financial statements. Entering into the forward position is thus a tactical decision to remove potential opacity from the managerial performance review. This may equate changes in the amount invested in any one stock based on market views within a personal portfolio or a decision to buy a put option on a stock.

Combining reporting and tactical management now provides the opportunity for business managers to view their business units or companies as portfolios that interact with each other in the way that individual portfolios do. These steps of value management further elucidate the way in which business decisions interact

with each other, and give the business manager tools to shape those interactions to a desired level. In effect, value management gives the business manager more freedom to simultaneously address both the expected returns and the equity/capital components of the ROE and ROC measures. The alignment of expected returns with desired risk is the process of capital management.

The tools of capital management alone will likely give the business manager some sense that better information on risk and expected returns from business decisions is a good thing. But, it still may not be enough for risk management to ascend to the strategic level of the business process and to be viewed positively. Without some sense of the price of such decisions, we can't say that risk management has become value management.

Once we are able to put a price on risk and to give a business manager the freedom to decide whether they want to buy or sell it, we have come a long way toward turning risk management into value management. The process of capital allocation achieves this goal.

Consider a business manager that is presented with an input to their business process; say an employee or a machine. He or she is quite likely to have a good sense of what that input will cost them to take on. By translating risk into a line-item cost, a risk manager essentially creates a transparent marketplace for business managers to decide whether they wish to compete for risk in the same way that they would compete for an employee or the best deal on a piece of manufacturing equipment. Business managers can determine if the price of risk is too high or if they can get returns on it beyond its cost to them. Capital allocation is the process of charging a business line or product for the risk that it presents to the firm. It is the price of the funding of the *steps to pursue potential rewards*.

In effect, what these four steps in the building of the value management process have done is to turn ROE and ROC into a measure of value that every business manager understands: profitability. In terms that most risk managers would understand, it helps to turn uncertainty,

which is not measurable, into risk, which is. Value management, thus, is about determining the best combination of businesses activities and strategic risk management, in an environment that allows for business leaders to be free to make business decisions and to make them more confidently. That means it will be welcomed.

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### PERSISTENCE

Value management is not complete, though, without a focus on persistence. Persistence is the result of instilling a culture such that the firm's future profits will be discounted over long expected horizons and for the holding of risk capital to be optimised. In essence, it is the process to ensure that sufficient capital exists at a firm for it to survive failure well, or in other words to break well. In the language of systems architecture, it is about creating businesses that are ductile systems.

Capital allocation is a very complex process and it is not perfect solution. In fact, risk management, capital allocation, value management and business management are all processes done by human beings and as such are subject to failures. As the pricing of any asset, in this case the value of a firm, is dependent to on both the horizon over which its future profits can be discounted and the likelihood those cash-flows will be realised, longer discounting horizons and higher profits will result in a higher current value.

A ductile system can probably be best understood in contrast to a brittle system, or one that breaks badly. Brittle systems often have what are known as single points of failure. Password protection is an ideal example of a single point of failure. Once that protection has been breached, the perpetrator has free reign.

What role do ductile systems play in business? Consider the simple proposition that every problem can realise its full potential negative impact. Unchecked, the full negative impact of some problems will be minor while the full negative impact of other problems may be

catastrophic. Combine this proposition with one that says that in business, nearly all potentially catastrophic problems take time to realise their full negative impact. Exhibit 1 attempts to illustrate this graphically.

The existence of time over which the conditions are developed to a catastrophic loss means that preventing potentially catastrophic problems from reaching their full negative impact is possible. This is how ductile systems create value.

Suppose an organisation has been inculcated with an understanding of the potential full negative impact of all failures, at all levels of the organisation. It would be next to impossible for problems to reach their full potential as someone, somewhere in the firm, would sound an alarm or make a tactical management decision to mitigate the problem. Very simply, the Exhibit 2 attempts to illustrate this.

Ductile systems simply prevent problems from reaching their full potential. If we turn and modify these Exhibits slightly, considering thousands of types of problems or failures, we could get a chart somewhat like Exhibit 3.

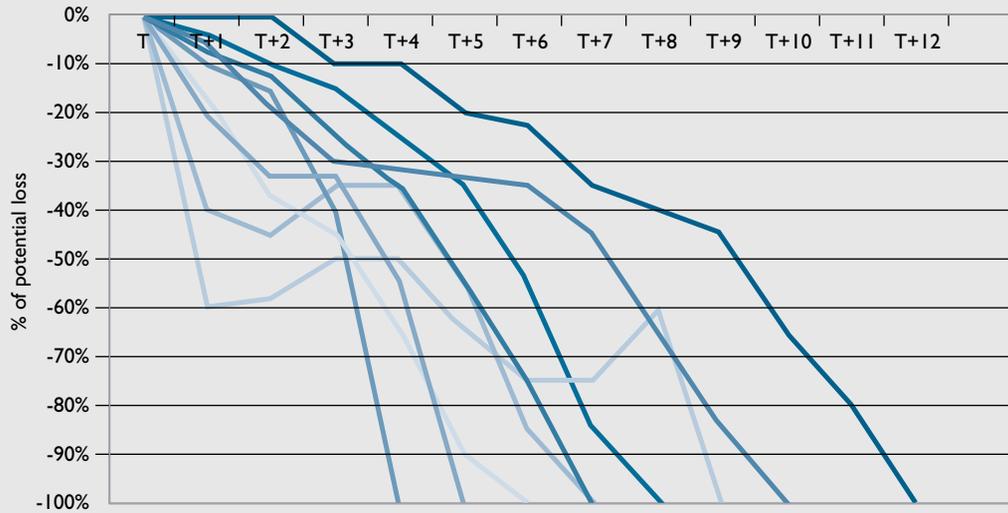
In Exhibit 3, approximately 99.5% of the time, problems don't result in a broken system or collapse of the business. In other words, if the firm wants to be 99.5% certain that it will stay in business (roughly a A+/AA- credit rating), it would hold risk capital at the level indicated by the line at 100%. Now, if we create a ductile system, where these failures are interrupted before they reach their full potential. Our chart could shift to something like Exhibit 4.

Note that this distribution of losses never results in a loss being realised that is in excess of the firm's current risk capital. If this were a certainty, then the firm's future profits would be discounted in perpetuity and the firm, all else equal, would have a higher value than in the case where there was a 0.5% chance that it would fail.

But, we already noted that this firm wanted to have a 0.5% chance of failure. So, in Exhibit 2, its risk capital is not aligned with its desired risk profile. As we noted, when risk capital is translated into a line item cost, the

The path of a problem

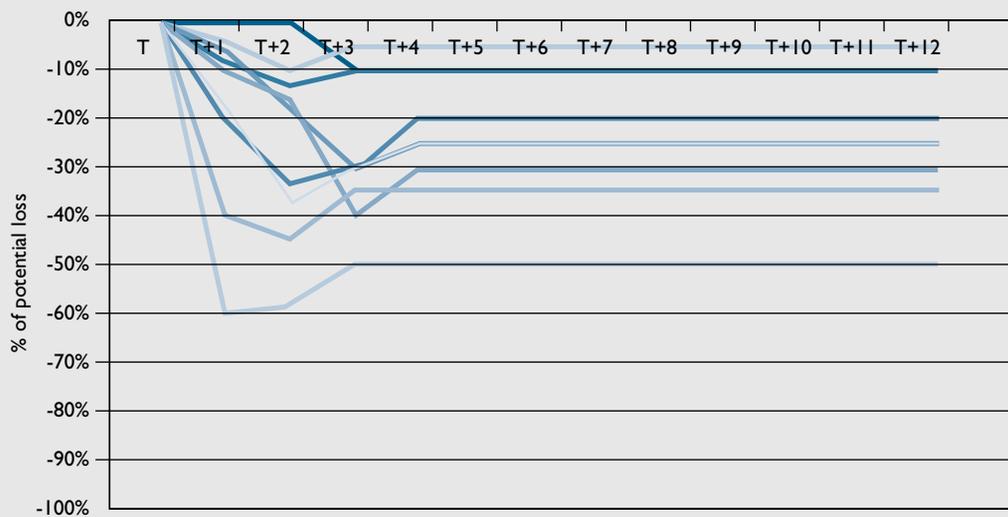
Exhibit 1



Source:

The path of a problem in a ductile system

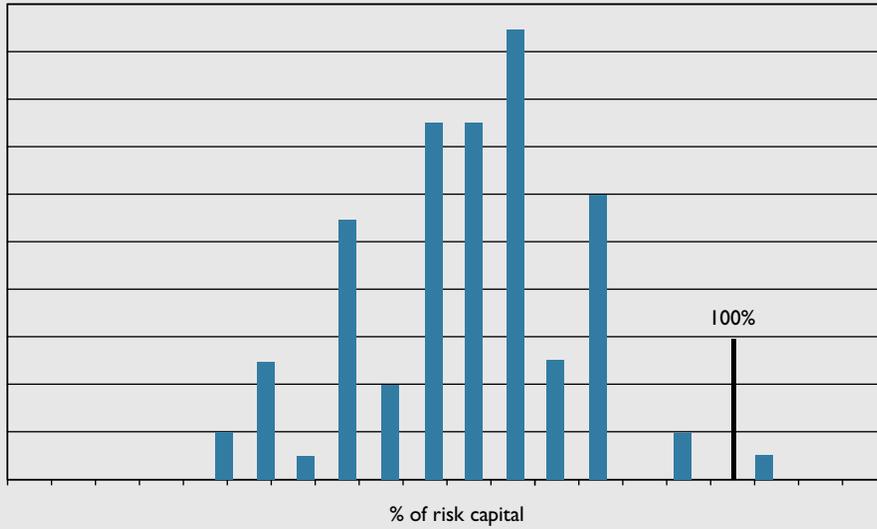
Exhibit 2



Source:

Loss realised from a failure

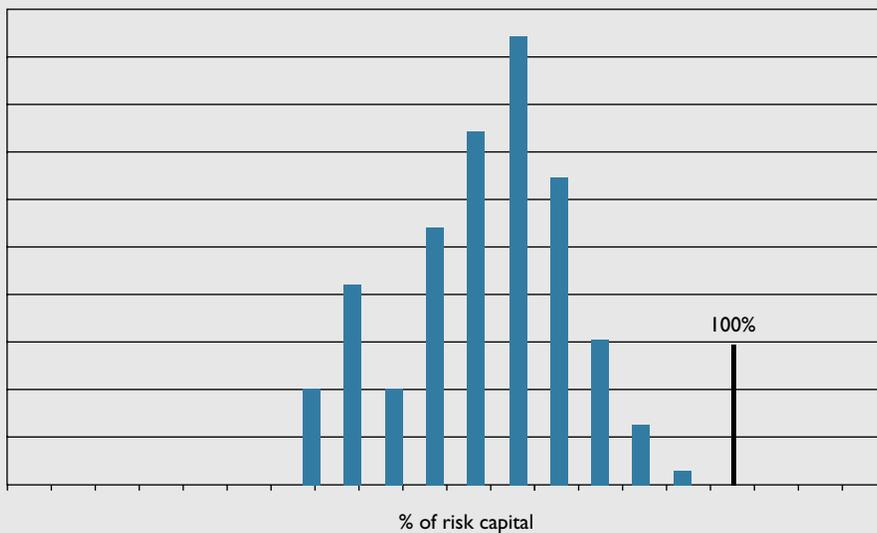
Exhibit 3



Source:

Loss realised from a failure

Exhibit 4



Source:

condition of holding too much risk capital is the same thing as saying that the firm has too many employees or too much production equipment. Every manager is able to easily translate this into the bottom line that profits are not as high as they could be. In other words, the firm is not worth as much as it could be.

The clear decision to be made here is to either reduce the amount of capital the firm has, or to do more business (increase the use of risk capital). Recall that this is capital management. In either case, profits should increase, or if we go back to ROE and ROC, the numerators and/or the denominator can be changed so as to increase both ratios as well. This process can add multiple percentage points to ROE.

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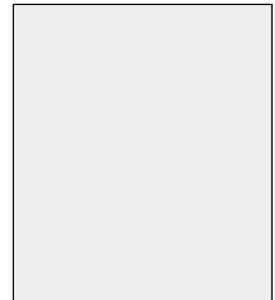
### CONCLUSION

The argument being made is that all of the steps of value management lead a business to a structure in which its risk is best taken. Risk management is no longer perceived as being about saying "no", but is perceived as being about finding ways to say "yes" better.

Every management decision, whether explicitly identified as such or not, is a decision on how to best take

risk. Risk management, or value management, is a subset of good business management. All of which is to say that when the value of risk management is well communicated and well understood, it adds substantial firm value.

Re-branding may not be necessary, but the job of risk management and risk managers is then to ensure that communication about risk and risk management is broad and done in the context of wealth and value creation so that it can realise its full value for the firm, which is potentially substantial.



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