



Mactavish
Expert insurance buyers



High impact risk and insurance governance in uk manufacturing and engineering

Building corporate resilience.



Dear Reader,

It is now over two years since Mactavish published the first part of our analysis into the impact of the recession on UK companies' risks and the urgent need for corporate Britain to recognise serious limitations to the reliability of insurance protection.

This report takes a much closer look at the manufacturing and engineering sector, still so vital to recovery in the UK's economic fortunes and where the pace of change in the current environment observed in this study is remarkable, and is testament to the sector's adaptability and capacity for innovation. However, whether looking at falling lending statistics or a sharp increase in claims disputes and the uncertainty of insurance protection, it is hard not to conclude that the financial sector as a whole is not doing all it should to support this critical part of the economy on the road back to prosperity.

According to these findings, manufacturers and their boards must also stand accused as having been deeply complacent in respect of insurance, its financial significance and the need to manage their arrangements properly. Insurance is now, belatedly, starting to make an appearance on the corporate governance agenda - as a tool whose reliability depends utterly on how it is arranged.

In addition, the Law Commission has judged that corporate insurance law is in need of major structural reform, looking to end the status quo where the insurance industry can abdicate responsibility for understanding emerging risks and protect itself after the fact by relying on 19th Century law. However, accompanying this benefit will also be a requirement for customers to help themselves, through much greater demands to fully identify and communicate risk and directly oversee placement - a benchmark of which most companies would today fall far short.

The twin pressures of legal reform and Board recognition are both driving an increasing need for insurance governance, and it is a challenge worth taking up. Secure protection against high impact losses supports the productive entrepreneurship that the manufacturing sector needs, and enables companies who identify and manage their exposures most professionally to benefit disproportionately.

It is time for British manufacturers to demand the insurance industry support they deserve.

Bruce Hepburn,
CEO Mactavish

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1 EXECUTIVE SUMMARY

This report offers a unique perspective on the British manufacturing and engineering sector, which is undergoing structural change in a difficult trading environment. This makes the companies concerned particularly sensitive to weaknesses in insurance practice that undermine the cover on which they depend. Mactavish decided to conduct this detailed investigation on the back of two previous reports. In January 2010 we published an economy-wide study into the major shift in operational risks being run by British businesses since the onset of the financial crisis. Last year we examined the limitations in protection provided by insurance against high impact events, arising from serious deficiencies in the traditional insurance placement system. Mactavish set out a series of placement reform 'protocols' to help businesses demand a better assessment of risk and achieve reliable insurance protection. It was clear, however, that more detailed analysis was needed of the interaction between sectoral trends and insurance placement practices to support real progress.

The UK manufacturing and engineering sector is a critical case in point. Despite the accepted (and grossly exaggerated) wisdom of relative decline, it remains a major part of the economy, and one where embracing change is essential to its health. Manufacturing is playing a vital role in the attempt to revitalise the UK economy, but if it is to seize technological opportunities and to innovate in service provision, it must secure the financial protection necessary to support investment and calculated risk-taking. Across the sector, we see traditional risk exposures becoming broader and more complex as well as the development of new risks, all against a background of balance sheet vulnerability. Yet the insurance system, which exists to protect businesses from rare but high impact losses, is failing to provide adequate certainty.

This report builds the case to prove the following:

- The manufacturing and engineering sector is undergoing multiple changes which are reshaping high impact risk exposures across traditional lines of insurance, including business interruption (BI), product liability (PL) and professional indemnity (PI).
- Insurance protection against high impact risk in these areas is not reliable, as the insurance industry has failed to keep pace with the sector's evolution. The system continues to rely on unreformed 19th century insurance legislation, which disproportionately passes the cost of this failure back to the customer.
- The risk impacts of these operational developments and the serious financial consequences of insurance failure remain worryingly below the corporate governance radar.

In vital respects, this story aggravates the reality of constrained lending to the manufacturing sector (outside the largest groups with readier access to capital markets). The latest April 2012 Project Merlin data¹ indicate a further year-on-year reduction of 5.2% in loans to the UK manufacturing sector, just when it needs to innovate and take entrepreneurial risks to help fuel recovery. Alongside the banks' tough approach, the insurance industry's failure to keep pace with risk evolution in manufacturing creates additional, hidden weakness on the same constrained balance sheets.

When we first examined the manufacturing sector's response to the financial crisis, in our January 2010 report, we made some broad predictions for the impact on risk, providing the rationale to analyse their effects more deeply here:



- first, given the extreme rate of operational change, many companies would fail to achieve all of their goals, causing a further round of operational adjustment and a sustained period of material risk evolution;
- second, that more insurance claims would be disputed, based on a combination of changed risks and limited insurer understanding, weaknesses in traditional risk placement processes and the worsening financial position of the insurance industry;
- third, that companies would become increasingly concerned about insurance reliability and start asking serious questions of their insurance brokers and insurers.

It is clear that the persistent weakness in the arrangement of insurance protection is something that all parties – buyers, brokers and insurers – have been complicit in. However in respect of high impact risk, where the financial consequences are too large for a ready accommodation to be found, it is the insurance buyer who carries the risk of delayed, reduced or declined claims payment and thus cannot afford to perpetuate such complacency. The current tacit agreement to work to low standards of disclosure clearly passes back an inflated risk of claims dispute to the insured, given the onerous disclosure obligations imposed by UK insurance law.

Further, whilst the middle tranche of corporate Britain is where balance sheet vulnerability has increased the most, larger firms are by no means exempt from these concerns. Despite more sophisticated risk management procedures and infrastructure (risk registers, review committees etc), many of the risk developments flagged in this study actually apply disproportionately to the largest, most complex firms. Respondents report that the operational change being handled by devolved risk owners across diverse business units is often beyond the current reach of traditional risk review mechanisms.

Our conclusion is that companies must address these problems at two levels:

- first, through overall governance checks by Board Risk Committees, with insurance buyers empowered to demand an improved level of service from insurers and brokers;
- second, by considering the specific risk changes taking place across the sector and the firm and assessing their potential impact on the scope, structure and reliability of insurance coverage.

At the first level, the general issues are reasonably simple – companies need to establish how important insurance is to them and ensure commensurate scrutiny of insurance arrangements. It is not that these issues are willfully ignored by boards, but that they have not been considered. We propose a simple list of checks (see box one) that would be sufficient to drive a step-change in the profile of insurance as a board-level issue.

Box one: Governance checks – 7 questions every board should ask

1. Has the company analysed the impact on capital adequacy if an insurer were to question a major claim?
2. Are we certain that the business complies with all the demands that insurance law places on the corporate buyer? Do those responsible for disclosure and compliance understand the consequences of failing to comply?
3. Does the company approve all materials used to place its insurance policies, and have explicit agreement on which documents together constitute the insurance contract?
4. Have specific contractual amendments been agreed with brokers and insurers to reduce the insurers' right to rely on the Marine Insurance Act 1906 in its pure form without any available recourse?
5. What audit takes place of insurance placement procedures (both internal and by the broker)?
6. Have the most foreseeable major loss scenarios been explicitly disclosed to insurers and reflected in policy wordings to ensure they are covered?
7. Are agreed procedures in place for response to large losses to avoid delay?

In respect of the second level, it is clear from this work that the manufacturing and engineering sector is in the throes of significant operational change. Whilst each company's experience of such developments will be unique, we have sought to analyse a small number of recurring themes that affected a significant proportion of respondents' businesses. As will be seen, each can have multiple impacts and the net effect on risk is typically more nuanced – and needs more analysis – than may seem to be the case from an initial look, or in response to an underwriter's first question. This intensifies the challenge around insurance reliability and requires a more sophisticated insurance arrangement model than is today's norm. In this report, four recurring change themes were selected for deeper consideration.

1. Increased supply chain vulnerability:

supply chain disruption has become more commonplace and severe as supply chains themselves have become more complex and leanly engineered, and cut across multiple territories and industries.

2. **Outsourcing in flux:** disruption to companies' sourcing is on the rise as challenging economic conditions have led many to experiment with multiple models and/or to expand the range of functions outsourced more rapidly or aggressively.

3. **The ascent of service:** increased service provision and innovation by manufacturers means the distinction between product and service related exposure is often difficult to identify and manage.

4. **Contractual liability shifts:** contracting practices are becoming more variable and often cutthroat, and there is heightened frequency of change in the way liabilities are being apportioned between counterparties in manufacturing.

These themes clearly have a major impact on the risks faced by companies in a large proportion of cases. For each one, the report will not only analyse the types of change taking place and the effect on risk, but also consider the implications for the main classes of high impact insurance risk (principally BI, PL and PI), and set out checklists to help customers build certainty that insurance policies will respond as needed. These address the following:

- common coverage and policy wording pitfalls, and misunderstandings of what manufacturers' insurance would normally exclude from cover, including supplier failure, products failing to perform as intended, financial loss arising from product failure and damages arising from advice offered;
- areas of necessary risk disclosure that tend not to be included in the placement process, which undermine the likelihood, speed and size of claims payout for major losses;
- the key characteristics demonstrated by 'best practice' industry respondents in managing emerging risks in a changing business environment.

The detail behind these aspects of insurance coverage is set out for each of the four change issues in the main body of the report. The core objective is to give companies in the manufacturing and engineering sector the basis they need to make their insurance more reliable: questions to ask of risk managers, brokers and insurers, and insights into industry best practice in both managing risk and transferring it to insurers. The summary below sets out some of these key questions in relation to each issue.

In combination with the 'Mactavish protocols', which detailed procedural improvements in the way insurance should be arranged, this analysis gives manufacturers the necessary tools to identify and resolve weaknesses in their insurance protection to ensure it responds in the event of major loss, and to ensure those companies that control risk most effectively are appropriately rewarded. Most today remain needlessly exposed by addressable weaknesses in the insurance system, but usually do not find out until it is too late. The current economic climate has exacerbated many of the contributory factors, but also provides impetus to do something about it. If nothing else, the pragmatic elements of this paper aim to demonstrate that large improvements can be made quickly.

FOSTERING RELIABLE INSURANCE		CHANGE ISSUES 1 AND 2: SUPPLY CHAIN COMPLEXITY & OUTSOURCING IN FLUX	
Example coverage & wording pitfalls		• Does BI policy structure reflect current risk as it has evolved (e.g. extended cover to suppliers, wider loss triggers, limit and sub-limit sufficiency)? • Have all policies been analysed for compliance with warranties and conditions that could invalidate coverage?	
Typical absent or weak disclosure		• The <i>basis</i> of BI insured values and how losses would be expected to accrue • Detailed BI drivers (such as areas of dependency, workarounds, operational transferability etc.) and how they relate to specific loss scenarios • Analysis of supply categories, respective risk profiles and mitigations • Resilience implications of operational efficiency measures across supply chain	
Characteristics of best practice risk management		• Prioritisation of suppliers for scrutiny based on risk exposure (vs. size) • Business Continuity Planning function that analyses recovery detail (not just emergency response) and extends to audit of upstream operational resilience • Integrated approach to risk management within supply chain function – continuity, quality assurance, contractual liability controls, with demonstrable oversight over outsourced processes where needed • Pre-emptive consideration of subrogation difficulties and contractual protections	



FOSTERING
RELIABLE
INSURANCE

CHANGE ISSUE 3:
THE ASCENT OF SERVICE

Example coverage
& wording pitfalls

- Is it clear what is included in 'incidental' vs. standalone PI coverage, given the lack of standard legal definitions and limited precedents?
- Are policies fully reviewed for the appropriateness of all exclusions and limitations, given common variance in wording in this area?

Typical absent or
weak disclosure

- Detail of all advice offered (whether paid or not) and related service innovations, explained to insurers/brokers to confirm coverage
- Explicit consideration of professional loss potential, given scenario 'intangibility'
- Contractual protections/monitoring in place and key terms variation

Characteristics of best
practice risk management

- Active monitoring of all advisory/training activities for potential claims against the company, training staff on the boundaries of permissible activities
- Full referral procedures to flag and manage unusual client circumstances
- Periodic risk-led review of the case for standalone PI cover and necessary limits (as opposed to basing buying decision on contractual obligations).

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RELIABLE
INSURANCE

CHANGE ISSUE 4:
CONTRACTUAL LIABILITY SHIFTS

Example coverage
& wording pitfalls

- Is there a rationale for non-standard product liability covers to be included (e.g. efficacy, recall, mix extension etc)?
- Has professional advice been sought on whether coverage innovations (e.g. financial loss extensions) are valid and appropriate?

Typical absent or
weak disclosure

- Explanation of product offering based on end-use and risk profile, as opposed to website/marketing material which can be misleading
- Representative sample of contracts and explanation of exceptions, guidelines and deviations from best case scenarios
- Details of quality control procedures throughout value chain - from 'designing out' to warranties and point of sale documentation

Characteristics of best
practice risk management

- Risk assessment based on drivers of exposure not contract size (often poorly correlated), with a focus on new products, counterparties, geographies etc.
- Extensive collaboration with suppliers to assess and mitigate product risk
- Contractual checks and balances on sales staff and clear lines of responsibility, including firm authority levels and procedure for exception handling



2 RESEARCH OVERVIEW

2.1

INTRODUCTION TO MANUFACTURING AND ENGINEERING SECTOR STUDY

This study was designed as a detailed investigation into risk in the manufacturing and engineering sector, following on from a two-part Mactavish risk research programme published in 2010-2011. That research had two important findings:

- first, the economic crisis had increased the rate of operational change in most companies and, therefore, changed (and on balance increased) the risks they run in ways that are not well understood or communicated;
- second, this problem is exacerbated by an insurance risk placement system that is no longer fit for purpose. This means that companies face an unacceptable level of uncertainty about the insurance on which they would rely if they suffered a major loss, and most are failing to meet their legal duties of disclosure.

Reforms that would improve policy reliability were set out in the 'Mactavish Protocols' and we have been working with businesses to implement components of this new approach. But the challenge needs to be addressed much more widely in corporate Britain. The Law Commission has published proposed changes to insurance contract law, which will cover some of the concerns raised by our research and should prompt a much needed modernisation of the relationship between companies, brokers and insurers.

The objective of this report is to take a close look at the manufacturing and engineering sector and to explore the changes that have taken place in the four years since the financial crisis broke. We focus on four example risk topics that best combine prevalence (having been raised by a significant proportion of respondents) and risk impact (having important consequences for high severity business risks).

The interaction of changes in the operating environment, including recession, with the nuances of different corporate circumstances has created complexity and less obvious risk impacts. This indicates a need to ensure much more detailed risk disclosure and clarity on potential loss impacts, as part of the process of arranging insurance. The central theme of our placement reform report was that the absence of these steps, in the light of business changes, serves to undermine policy reliability when tested by a large claim.

What we find in manufacturing is if anything more concerning than the economy-wide observations. The post-crisis changes have had an impact on businesses with balance sheets that are stretched enough for a delayed insurance claim to be a serious issue. Despite this, standards of both insurance placement and corporate governance around operational risk remain inadequate. Low quality documentation, a dearth of board attention and little active involvement by buyers in placing risk are key observations of the report. Likewise there is growing evidence that, particularly for mid-size firms that lack the clout of multinationals, a more confrontational claims environment is emerging, highlighting the importance of the subject.

Each section pulls these observations together into a set of specific issues that risk managers, finance directors and boards should consider to ensure risk is adequately protected by well understood policies that will respond as planned and when needed.



2.2

WHY THE MANUFACTURING AND ENGINEERING SECTOR MATTERS

It has become received wisdom that the UK manufacturing sector is in decline. While it is true that the sector has been in *relative* decline since 1970 (it now accounts for c. 12% of national output, approximately half its share of 30 years agoⁱⁱ), a number of factors contradict this simple narrative:

- the UK is still the world's 9th biggest manufacturer by outputⁱⁱⁱ;
- the real value of UK manufacturing output has increased in 35 of the past 50 years and is at an all-time high^{iv};
- productivity in the manufacturing sector has increased by 50% in the past 10 years, outstripping productivity gains in the services sector^v.

Indeed, there are several long-term macroeconomic trends that make the case for the growing strategic importance of the manufacturing sector to the UK economy.

1. The UK has a highly negative (and persistent) balance of trade: imports outstripped exports for 19 of the 20 years from 1989 to 2009^{vi}; the 2011 balance of trade deficit was as high as £17.8bn with Germany and £22.2bn with China^{vii}. This is thought by many economists to be unsustainable and it leaves the UK reliant on foreign debt. A stronger manufacturing sector would alleviate the problem.
2. Re-balancing the economy has become an explicit priority of the British government: Prime Minister David Cameron has argued that "the economy has become more and more unbalanced, with our fortunes hitched to a few industries in one corner of the country, while we let other sectors such as manufacturing slide", while Business Secretary Vince Cable

sees Britain's principal economic problem as being "growth over-dependent on the banking sector". Recent initiatives to address this issue have included a Commons debate on the future of manufacturing in November 2011, the 'Make it in Britain' campaign launched in the same month and a £125m fund to boost growth in the manufacturing supply chain.

3. Emerging economies such as China, India and Brazil are experiencing rapid growth whilst developed economies such as the UK remain sluggish. This both threatens the UK's position and provides a large potential market for goods manufactured in this country.

While not the focus of this study, these factors highlight the importance of the manufacturing sector to the UK economy and the opportunity for it to return to growth. When considered in the context of the toughest trading conditions in a generation, it is clear that the sector faces great challenges in seizing this opportunity in an economic environment that is likely to remain uncertain for some time to come.

2.3

METHODOLOGY

The initial two-part study drew on an extensive two-year research programme, including more than 600 consultations with corporate insurance customers and more than 100 consultations with insurers, brokers and other supply-side service providers.

In this more detailed analysis of the manufacturing and engineering sector, we undertook an additional three analytical workstreams over 2011 and the first part of 2012.

1. In-depth consultations (by phone and face to face) with senior risk decision makers and insurance buyers in the UK manufacturing and engineering sector, taking in 140 corporate respondents. Principal roles include insurance/risk manager (more prevalent amongst larger businesses), finance director, company secretary, head of legal etc. Analysis by role and company size is shown in fig. 1.
2. Follow-up consultations with c.40 key management personnel with operational responsibility for areas of the business controlling risk – targeted at each of the main risk issues under investigation. This sub-set of respondent businesses was selected because of the high degree of relevance of the risk-change issues. The aim was to understand granular, working level change and implications for the subsequent risk profile. Key roles include operations director, purchasing, commercial director, contracts manager, supply chain head, business development etc.

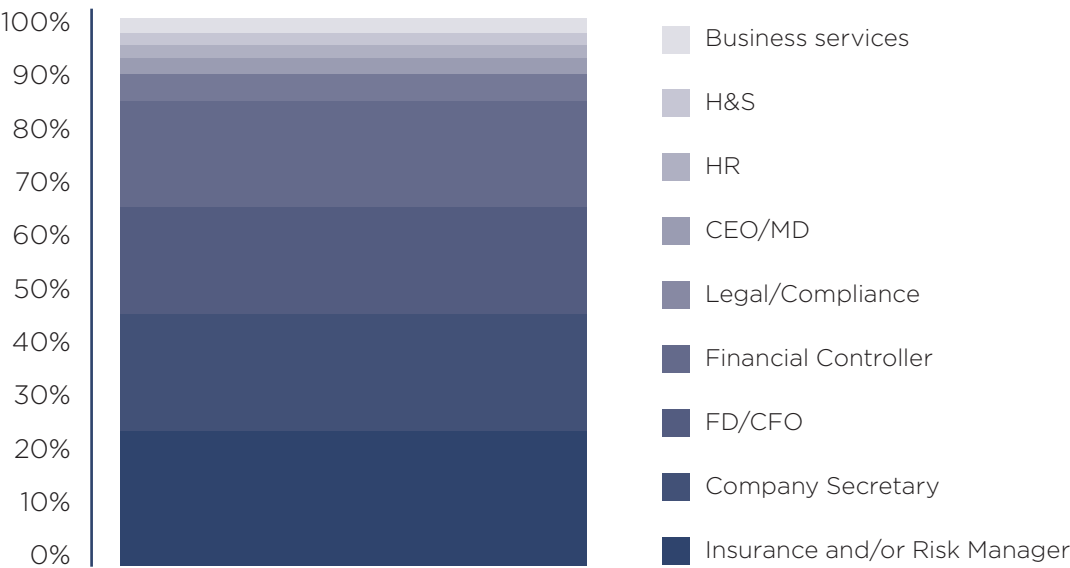
3. Manufacturing sector development work on individual cases following up on the placement reform ‘protocols’ in our 2011 report. This consisted principally of three elements:

- a. review of insurance submission documents, slips and policy wordings for c.20 UK manufacturing/engineering firms;
- b. financial analysis of c.20 respondent firms’ capital structure and insurance programmes;
- c. supply-side consultations (law firms, loss adjusters, insurers and brokers) examining insurance policy wording and potential claims issues.

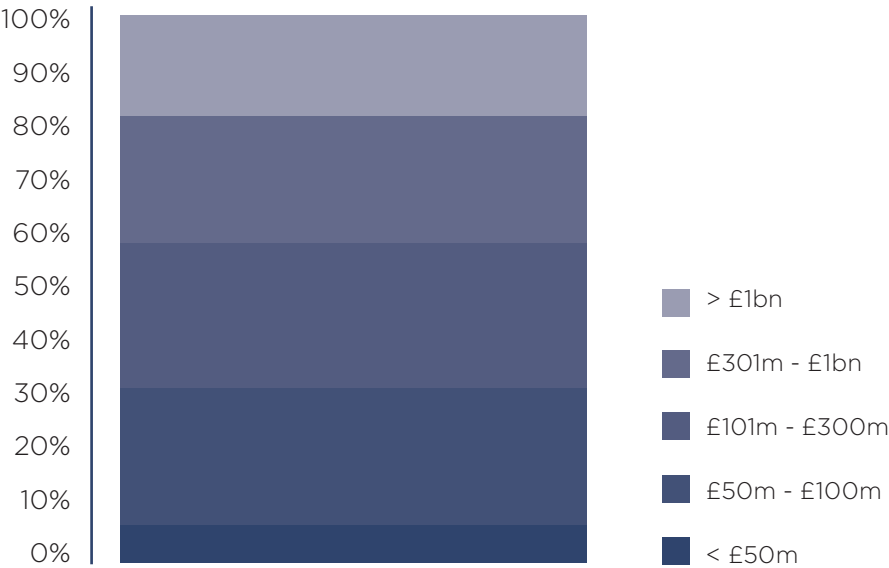
This last workstream has been critical to validate the points raised in interviews with risk and operational managers. Moving beyond anecdotal evidence and quantified opinion, our method seeks to analyse in detail the insurance placement work carried out on individual accounts and to appraise the parties’ understanding of the contract that has been created. The conclusions are worrying since they reflect the dominant mode of current practice.

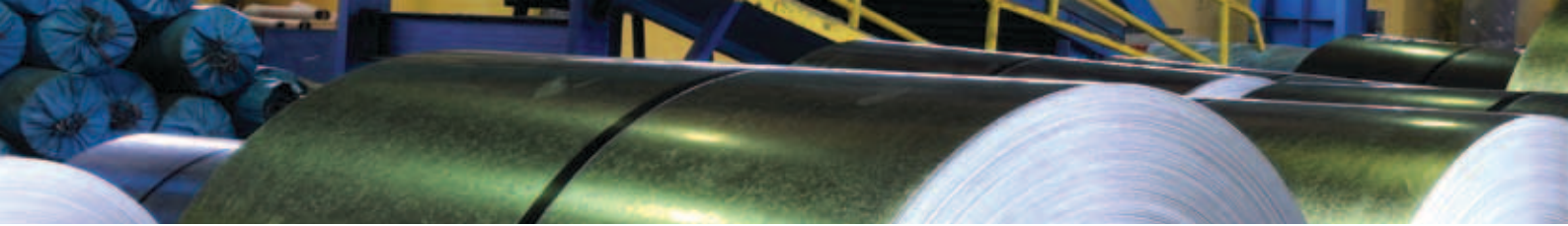
FIGURE 1 - CUSTOMER RESEARCH PROGRAMME BREAKDOWN

CONSULTATIONS BY ROLE



CONSULTATIONS BY TURNOVER





3 CHANGES TO MANUFACTURING & ENGINEERING SECTOR

3.1 INTRODUCTION

The manufacturing and engineering sector has faced a period of upheaval over the past 3-5 years. Some of the changes are secular trends (e.g. the shift to services), which may have accelerated, whereas some have been precipitated by the economic downturn and wider forces of globalisation, forcing companies to adapt their processes and develop new revenue streams.

From our consultations, we have selected for analysis four broad trends that could fundamentally affect the severity of risks faced by UK manufacturing businesses, and their ability to protect themselves from the consequences should something go wrong.

1. Increased supply chain vulnerability: supply chain disruption has become more commonplace and severe as the chains themselves have become more complex and leanly engineered, and cut across multiple territories and industries.
2. Outsourcing in flux: increased incidence of rapid change to outsourced production arrangements, with components and sub-assembled goods being sourced from a wider geographic area and value-added processes increasingly outsourced to emerging markets. There are niches where contrary evidence exists of re-insourcing, but even here the common finding is a high degree of sourcing model disruption arising from sustained economic challenge.
3. The ascent of service: service provision and innovation by manufacturers is on the rise, blurring the distinction between product and service related exposures and making them difficult to manage.

4. Contractual liability shifts: contracting practices are becoming more variable and often cutthroat, and there is heightened frequency of change in the way liabilities are being apportioned between counterparties in manufacturing.

This is not an exhaustive list of all the operational developments in UK manufacturing. Our aim is to highlight important systemic changes, where there is clear impact on risk that may not yet be sufficiently recognised or understood.

Below we consider each issue in turn, detailing the changes observed and the current level of understanding of the impact on risk. We then identify the implications of these changes for specific types of insurance protection, where companies could face a severe threat if protection proved unreliable.

3.2 CHANGE ISSUE ONE - SUPPLY CHAIN VULNERABILITY

Heightened awareness of the complexity of supply chains, and the difficulty many companies face in appraising and managing them, is evident from even a cursory glance at manufacturing news and commentary in the past two years. With supply chains now stretching across the globe, they are vulnerable to a host of risks. The mainstream business media has regularly reported on major disruptions arising from recent events, the most significant being:

- the earthquake and tsunami in Japan, hitting a number of sectors but particularly the micro-electronics, automotive and aerospace industries^{viii};
- volcanic ash cloud and associated transport disruptions affecting multiple sectors, including production lines at Nissan and BMW^{ix};
- recessionary insolvencies disrupting supply



of unique or hard to source components across most manufacturing sub-segments.

These events, and the responses of almost all the purchasing and supply chain managers consulted in the study, suggest widespread recognition that the threat of disruption is becoming more varied and acute. Over 60% of the firms consulted on supply chain issues were either concerned about underlying weaknesses or had directly experienced a material disruption. They identified several underlying business trends that had exacerbated the risks, as explained below. Other research confirms this view, including a recent Marsh/Risk & Insurance Management Society (RIMS) study reporting that around 70% of UK businesses had reviewed business continuity arrangements after the spate of supply chain disruptions caused by natural disasters in 2011.^x

Supply chain disruptions can have serious financial implications for businesses, in addition to reputational concerns. Research looking at the impact of newsworthy supply chain failures for 800 listed companies^{xi} over more than a decade found both an immediate significant (9%) average reduction in share price on announcement, and a significant impact compared with peers in two thirds of cases a year after the event. This helps explain the high level of concern found in our study about weak insight into supply chain risks, in addition to the obvious insurance implications.

Supply chains are increasing in length and complexity, with more interconnections across a global set of supply relationships

A disruption in one industry can have implications far beyond that narrow section of the economy. This often gives rise to unexpected sources of dependency on upstream suppliers, which fall outside traditional efforts to control such risks. This more complex supply picture is compounded by a wider range of possible causes of upstream interruption. In addition to recessionary insolvency and vulnerability to traditional insurable loss events (fires, floods etc), today's business environment sees other loss

triggers becoming more relevant, such as civil unrest, IT failures and regulatory change.

A 2011 study by KPMG found that "the drive for more efficient and interconnected supply chains has exposed network operations to unexpected risks" and that "many supply chains are incapable of keeping up with the pace of change underway in the business world"^{xii}. A number of unexpected problems arising from such complexity are detailed in the case studies below, where traditional supplier analysis has failed to identify and appraise risk within this more challenging environment.

One consequence of this is that more companies are following the lead of giants such as Boeing, Pepsi and Apple in seeking to gain more control over critical parts of the upstream supply chain. Although the extent of vertical integration ebbs and flows, in some segments such as automotive or electronics it can be an effective way to understand and control supply risks in relation to both quality and continuity. However, upstream integration can also constrain supply options and reduce flexibility in the event of disruption.

Several respondents gave informal examples of this, where a small but important supplier is given assistance with support functions and internal processes (e.g. chemicals, automotive), or where the tooling used is owned by the company and not by the supplier (e.g. automotive, electronics). This inevitably causes problems in the event of supplier insolvency, particularly when tooling needs to be reclaimed to send to an alternative supplier.

Supply chain overlap can prove problematic for resilience in more simple ways – for example, it is common for numerous companies to book capacity at business continuity service centres. However, when multiple businesses with exposure to the same potential loss event (as demonstrated by the Japanese automotive industry after the tsunami) are reliant on the same service capacity, booked demand rapidly outstrips supply and for

all but the first affected the intended mitigation fails.

The long-term trend towards lean manufacturing and just in time (JiT) methods has accelerated, alongside more recent consolidation of warehousing and distribution activities

This philosophy trades efficiency (in the form of shorter lead times, smaller batch sizes and lower working capital requirements) for reduced resilience to shocks, whether caused by an external event or unforeseen changes to the drivers of supply and demand. As resilience is removed from the manufacturing system, supply disruptions may become both more likely and more harmful.

Interest in JiT strategies, exemplified by Japanese manufacturing practices, has spread since the 1980s, and exposure to these methods has increased^{xiii}. Respondents to this study remarked that efficiency measures, often accelerated by recessionary pressure on margins, have been adopted at the accepted cost of impaired resilience. In mitigation, however, the drive towards leaner manufacturing is often accompanied by the use of sophisticated enterprise resource planning (ERP) software, improving knowledge and control through every step of the value chain. So the system may be less fundamentally resilient but better controlled, which means that, in some respects, it can adapt to moderate disruptions more readily. Thus the net impact on the risk of interruption is not necessarily negative and may leave a lower risk of minor disruption but a heightened 'catastrophic' supply risk profile. The latter is in itself sufficient to prompt closer inspection by risk professionals.

Tensions between the realities of the market and JiT production have resulted in trade-offs for many respondents, who have adopted off-the-cuff measures to ensure continuity of supply. This need to compromise ostensibly strict JiT strategies on an ad hoc basis undermines in-depth risk analysis. For example, seasonality has

forced one battery manufacturer to keep far higher stock levels than is deemed desirable over the autumn and winter months (e.g. chemicals, £100m-£300m), and a lighting manufacturer confessed to having to buy all the available stock of a part in Europe to avoid potential shortages (e.g. electrical products, £25m-£100m).

Over the past three years, UK manufacturing has seen many examples of these trends, apparently increasing supply chain vulnerability. However, highlighting the headline trend is insufficient to understand this change, as in many cases a more concentrated risk can be effectively managed. For example, we have observed firms with less dual sourcing but improved supplier knowledge and control over upstream activities, and better contingency planning; and similarly a company moving to a single, state-of-the-art distribution centre in place of several disconnected and poorly protected legacy sites. The potential for risk concentration is clearly increased, but more specific questions need to be asked to understand fully the potential risk impact on different companies.

Vulnerability exacerbated in respect of bespoke products

When manufacturers are working with suppliers to develop bespoke products (rather than buying 'off the shelf'), the cost vs. security trade-off inherent in dual sourcing is often intensified, in particular in sub-segments such as electrical products. One electronics firm described how it was now cost-prohibitive to design bespoke products with two suppliers; another only dual sourced the products that had been designed specifically for it; whilst a third said intellectual property (IP) concerns prevented any dual source collaboration during at least the first nine months of the product development cycle. Such concerns demonstrate the fragility of this type of supply chain and the need to oversee upstream activities closely.

3.2.1

DIFFICULTIES IN SUPPLY CHAIN RISK ASSESSMENT

This study demonstrates the tensions caused by macro trends, and the breadth of their applicability across the manufacturing sector. More alarmingly, it has also uncovered substantial evidence that British manufacturers are, by and large, under-prepared and ill-equipped to deal with supply chain disruption, even though they recognise it as an increasingly complex area of risk. Fundamentally, knowledge of supply chain risk exposures remains superficial.

Gaps in supply chain knowledge

Over 60% of firms consulted report an increased perceived exposure to, or actual experience of, material disruption to supply over the past two years. This confirms recent research by the Business Continuity Institute^{xiv}, which found a higher reported incidence of supply disruption in the past year (85%, with 40% of analysed disruptions originating beyond the tier one supplier), albeit including more minor disruptions. Even more worrying within this study, however, was that c.80% of these respondents flagging supply chain concerns also admitted to major limitations and/or flaws in their existing methods of assessing supply chain risk upstream.

There are a number of factors at work here. Large manufacturers are increasingly decentralised and responsibility for supply chain resilience is often shared by different management functions, with limited internal communication as well as geographic separation (e.g. risk management, operations, finance, and head office vs. operating business units). This can impede the collation of a comprehensive view of risk and limit feedback. Knowledge gathering on the supply chain is too often de-prioritised as a 'black swan' issue where a degree of outlier risk (e.g. an unknown tier two or three supplier dependency) can be dismissed as too unlikely to justify further efforts to explore. Although most manufacturers consulted undertake more analysis

Box one: supply risk knowledge limitations

"I'm quite convinced we have a long tail of supply chain exposures and that most are, frankly, currently unknown... I genuinely don't think we've done any analysis at all to quantify."

(Group risk manager, polymers, £300m-£1b)

"My feeling is that if we were to complete a full assessment to identify all critical and potentially vulnerable suppliers across the business it would be a very long list. I know what a number of the key supply risks are and the mitigation that's in place... but there is no consistent approach, and the contingency planning is patchy at best."

(Insurance manager, food, over £1b)

"There is always a concern that there's something you don't know. The knowledge is all within the engineering teams – I do know that there's much less vetting the further upstream you go."

(Financial controller, electrical products, £100m-£300m)

of suppliers than they did five years ago, there remains a predominant focus on a) the largest suppliers by volume or value (not necessarily well correlated with risk) and b) financial/credit exposure. Wider operational assessment of the supplier's resilience is often erratic and diffused across a large organisation, predominantly unsystematic and rarely undertaken for smaller or tier two/three suppliers.

Difficulties in assessment and quantification of exposure

Identifying such a 'long tail' of supplier risk is difficult and quantification of exposure even more so – most businesses consulted readily admit to

limitations in this knowledge and in their ability to gather information on suppliers.

A huge proportion of the supply base is dealt with locally by individual business units, often under the radar of the central risk management team, whose overview can often lack detail and be out of date (see box one) – for example, with varying exposures to rare earth mineral stockpiling. Where complexity is high and operational supplier insight hard to obtain, a common purchasing shortcut (either explicit or implicit) can be to ‘buy blue chip’, utilising larger or better known suppliers (or suppliers with European/US parentage) as a means of gaining more supply security. Whilst this can in some instances be effective (e.g. in preventing subrogation issues, helping to protect IP, ensuring alternative site availability), a number of respondents were keen to point out that relying on this approach can be very uncertain if the upstream operational reality is not properly understood.

Over-estimation of insurance protection

Amongst the most concerning findings was routine overestimation of the protection afforded by traditional Business Interruption (BI) insurance coverage, both in terms of loss type and coverage sub-limits. Bearing in mind the wide range of potential interruption triggers, most obviously in recent times supplier insolvency and political/civil unrest, it is troubling that a significant number of supply chain professionals, and even insurance buyers, erroneously believed such risks to be at least partially insured. Although specialist supply chain policies are becoming available, these triggers clearly fall outside the traditional insurable ‘property damage triggers’ (fire, flood, natural disaster etc.) included under a normal PDBI policy.

Supply Chain case study one

(executive VP, electrical products, £100m-£300m)

- Electronics manufacturer with long-standing policy to dual source all key parts, with exceptionally well developed supplier vetting and auditing procedures
- Critical component sourced from different companies in China and Malaysia proved to be a false mitigation – secondary supplier actually sourced indirectly from the primary supplier without any actual resilience

Supply Chain case study two

(group risk manager, polymers, £300m-£1bn)

- Chemicals manufacturer – again an example of best practice in supplier assessment and supply risk mitigation processes (resilient design, dual sourcing, continuity planning, financial auditing etc.)
- Loss of primary raw material supplier revealed that technical evolution since the prior supply review meant that the identified back-up could not produce the required grade of specified input, causing several months’ additional delay to production

3.2.2

INSURABLE RISK IMPACTS

It is clear that these developments alter risk in several ways, and have implications for insurance coverage and risk management. This can include the need to ensure adequate coverage beyond what is offered as ‘standard’ in a PDBI negotiation, actions to ensure management is aware of limitations to the protection included, and analysis of how one company’s risk may differ materially from that of industry peers.

Business Interruption

- Changes to supply risk should be analysed regularly and BI coverage reappraised, both in terms of traditional BI supplier cover and consideration of additional supply chain cover for a wider range of loss triggers.

Most manufacturers overestimate the protection given by traditional insurance. Further, the analysis requirement has been intensified by both a high rate of upstream change (e.g. insolvency, increased automation) and complexity within the supply chain.

- There is huge variation in standards of upstream risk analysis in UK manufacturing. A divide was observed between those who actively manage upstream exposures, conducting serious risk analysis, and those who freely admit that they cannot do so. In most cases, information collected on suppliers to assess BI risk was limited. For those with better supplier insight, additional risk disclosure (e.g. dependency analysis and granular mitigation plans in the event of the loss of a major supplier) may serve to reduce underwriting concern (and thus insurance cost) and limit insurance coverage to areas of dependency where inadequate operational mitigations exist.
- Business Continuity Planning (BCP) activities are often partial and incomplete. Many policyholders, often from large companies, commented confidentially in this study that their BCPs were not detailed, well developed or up to date. Given increased supply disruption and the recent trend towards greater efficiency with less resilience, this is worrying and suggests a need to revisit such plans in more detail. In particular, from an insurable risk perspective, it is clear that analysis of underlying detail is necessary, moving away from the traditional risk placement practice of simply noting the presence or otherwise of a BCP. Explanation of the scope and detail of what is covered, presentation of key bottlenecks and workarounds, essential steps to recovery, IT/enterprise risk management (ERM) resilience etc. are all vital components, which should receive more attention when customers explain, and underwriters assess, BI risk.

- BI policy wordings and coverage contain pitfalls that manufacturers are often unaware of. As with all areas of insurance, scrutinising wordings and seeking appropriate professional advice (e.g. from insurance lawyers and/or brokers) is obviously necessary. However, BI claim resolution can be notoriously complicated, involving loss adjusters, forensic accountants etc. Much can be done to clarify the approach when policies are first placed. Even things as apparently simple as updating of values data or the methodology by which gross profit is calculated (technical differences between 'insurable' and 'accounting' gross profit) cause routine difficulties and shortfalls between expected and actual claim settlement values.

Box two: key impacts of supply chain disruption on insurance cover

- Companies frequently overestimate the scope of their BI policies and expect events such as non-material damage to suppliers to trigger their policy extensions when this is almost never the case
- Risk analysis and business continuity planning for suppliers are often only partial and this limited knowledge increases the possibility that the policy will have gaps in coverage or result in contested claims
- Quality control and claim subrogation are both made more challenging by long and global supply chains, so problematic and time-consuming PL claims can result

Product Liability

- **Supply chain complexity increases the quality control challenge.** As supply chains become more dispersed, manufacturers need to stay cognisant of the quality control challenge – appraising, auditing and testing inputs from a wider set of suppliers with a greater degree of change. Again, this is an area where significant variation in approach can be observed between manufacturers, but where risk impact is rarely detailed to insurers. In addition, where supply chains become leaner, the impact of a quality problem can be heightened. For instance, supplier consolidation in the interests of efficiency can cause a production issue to have a bigger impact on output and take longer to resolve without alternatives already in place.
- **The process for subrogating claims needs to be considered up front.** As supply chains become more international, the process for subrogating PL claims may become tougher. This area is causing manufacturers concern because of the potential difficulty in securing enforcement from unfamiliar legal systems or tracing overseas parent companies, with the potential to introduce unwelcome complexity and delay into receiving any payment due, or reveal a loss to be unexpectedly uninsured.
- **Product Liability coverage is frequently misunderstood by policyholders.**

o Liability in tort: for there to be a liability in tort a product has to cause damage to property or a third party. There is a significant amount of case law related to what constitutes ‘damage’:

- in *Murphy v Brentwood District Council* [1991] 1 AC 398 Lord Keith^{xv} laid down a damage test for defective product: “...there is no liability in tort upon a manufacturer towards the purchaser from a retailer of an article which turns out to be useless or valueless through defects due to careless manufacture. The loss is [purely] economic.”

o Product efficacy: cover for failure of a product to perform its intended purpose, rather than against unintended damage, is routinely excluded from product liability policies across the market; however, most manufacturers consulted presume it is standard without consulting brokers or policy documentation.

o Mix extension: there is a requirement for specific extensions to cover liability in relation to ‘new’ products created by incorporation of a supplied intermediary product into a downstream final product.

- A number of companies were worried that they might be held responsible if their component caused subsequent damage when PL coverage does not explicitly extend downstream (for background, see *Bacardi Martini Beverages Ltd v Thomas Hardy Packaging Ltd* [2002].)

Supply Chain case study three

(group FD, chemicals, £25m-£100m).

The company had to cover a loss on its own balance sheet, having only been informed of the need for a mix extension following a sizeable claim, despite this being fundamental to the cover as the product manufactured is immediately mixed in almost every case prior to shipping.

- **Financial Loss extensions are not adequately understood.** Financial loss extensions to PL coverage are routinely sold as value-adding, despite being only applicable in very specific circumstances according to current UK law since there must be third party injury or damage to establish liability under tort (there may be value if contractual liabilities are not excluded from the policy, or if the liability is incurred under a foreign law). The confusion stems from a legal high water mark (*Junior Books Ltd v Veitchi Co Ltd [1983] 1 AC 520*) appearing to allow recovery for financial loss not linked to damage, which was then overturned by *Murphy v Brentwood District Council [1991] 1 AC 398* as cited above, but continues to explain in part the inclusion of financial loss extensions of this sort. For example, one insurer interviewed stated that, whilst having to include such extensions to be competitive when required in a tender process, as company policy a letter is sent to the insured outlining that unless there is a significant change in the law then the value of the cover is limited.

Box three: triggers for product liability policies

- A product has to cause damage to third party property or a third party to be covered by a standard PL policy
- Financial loss extensions, commonly sold to enhance coverage, have limited value
- Product efficacy is typically excluded from standard policies
- If the product is mixed with another product, cover will generally require an additional 'mix extension'

Change Issue Best Practice – Summary issue one

Supply chain vulnerability: characteristics of well controlled risk

- Strong awareness of linkages between efficiency measures and resilience
- Risk-based audit of the supply chain looking beyond headline financial information at upstream operational resilience
- Prioritisation of suppliers for scrutiny based on risk rather than pure size
- Data quantified and collated on small-scale disruptions to assess overall impact
- Up-to-date BCP with full business recovery detail (not just emergency response procedures), and BCP approach extended to vet suppliers' resilience plans
- Up-to-date and evidenced rationale for required insurance coverage – and a clear view of necessary extensions (e.g. non-traditional BI, named/unnamed suppliers; efficacy/mix PL extensions etc.)
- Integrated approach to risk management embedded within supply chain function – covering continuity, quality control, contractual controls etc.

3.3

CHANGE ISSUE TWO - OUTSOURCING IN FLUX

Outsourcing is an established trend within supply chain evolution and a high proportion of respondents reported one or more material changes to their outsourcing model in the past two years. This reflects a long-term shift in the UK economy towards more service activity, alongside globalisation, which has led firms to locate different parts of the production process in different countries based on relative cost. More specifically, however, it is a response to the recessionary environment – with more companies electing to outsource higher value-add elements, and/or to experiment with multiple locations and production models in a condensed period as factors such as labour cost, transport cost and quality come into play. Overall, the amount of change within the outsourced production model has gone up.

Over 40% of the firms consulted in this study have either widened the geographic spread of their suppliers in the past two years, or newly outsourced value-add processes to low-cost economies. The picture is far from simple, however: numerous companies have switched outsourced production locations in recent years, and a significant minority of manufacturers informed Mactavish that they are bringing functions back in-house, often for reasons of quality. From a risk and insurance perspective, the important point is that outsourcing is in flux: where the risk has changed, the structure of insurance cover may no longer be appropriate (leaving gaps or inefficiencies), and an inadequate understanding of the changes might undermine a future claim.

Altering complex, outsourced production processes clearly affects risk and should prompt questions as part of the insurance placement process about how well explained or understood (if at all) the alterations are. If carefully managed, such changes to risk can be mitigated both

operationally and contractually, but evidence of the granular risk analysis necessary to achieve this remains worryingly low. We set out below the underlying issues and trends that merit more analysis.

The outsourcing risk equation for many firms has moved on significantly since the start of the economic downturn

Many respondents remarked on a reappraisal over recent years of the cost saving assumptions behind the case for outsourcing. The benefits may seem clear when labour makes up a large proportion of the total cost of production, but increasingly respondents have mentioned counterveiling “intangible” factors, such as greater command of supply chains, quality control and the ability to develop products nimbly and get them to market. In certain cases, these factors outweigh the one “tangible” bonus of up-front cost saving.

Furthermore, the arguments behind the decision to outsource do not remain static: factors such as local labour practice and corporate social responsibility (CSR) concerns, carbon footprint and other environmental issues, shipping costs and distribution time can all push the conclusion either way.

Outsourcing case study one

(financial internal audit manager, electrical products, £100m-£300m). This firm's recent outsourcing experiment was deemed a totally “false economy”. Initially the company had sourced tooling from China, but had to re-configure the product at high cost after it fell short of the required quality, despite strict instructions on the raw materials used.

Outsourcing case study two

(finance director, electrical products, £300m - £1bn). Transport costs undermined this company's attempts at outsourcing. Due to the need to spend an extra £10m this year on marine freight from its production centres in the Far East, and with this figure set to rise

further because of upcoming environmental legislation, other destinations with higher wages but lower shipping costs and shorter shipping times are being considered.

Outsourcing case study three

(special projects director, tooling, £25m-£100m). This manufacturer tried three different outsourcing models in as many years. Its attempt to produce in China was “a disaster” owing to problems with quality. A Taiwan site produced better quality but at higher cost and with a high impact on cash flow from six-week shipping times. The company has recently settled on eastern Europe as a balance between “cost, quality and distance”, but remains prepared to consider alternatives as the drivers shift.

3.3.1

PROBLEMS WITH RISK MANAGEMENT

Quality control remains a key concern for companies where production is outsourced

Unsurprisingly, quality control is repeatedly highlighted as a concern by manufacturing companies that outsource production. This follows a number of high profile cases in recent years, including Mattel’s Chinese-made toys tainted with lead paint and melamine-contaminated pet food. One way to mitigate such risks is in the time taken to outsource production: although there is no set optimal time, a staggered and incremental approach is often cited by respondents with success in implementing outsourcing innovation. Best practice involves phased implementation of each stage and staggering of sub-component, final assembly and testing activities, allowing each change to bed in. Such an approach delays the accrual of cost benefits, but in several cases was felt to have avoided negative effects on quality and product development timescales.

Retaining effective business controls, oversight and technical production standards, whilst reaping the cost benefits, remains an issue once

the outsourced production model has been established. Ways to achieve this are highly case specific: manufacturers need to think through what weight of internal corporate presence is required in local markets and how this is integrated into the global organisation. Many large industrial businesses consulted in this study have been forced to change their models several times to optimise this configuration across overlapping design, purchasing, operational and quality roles. These nuances, however, clearly create a risk disclosure challenge (especially in a diverse, multi-division business) to ensure sufficient communication of relevant changes to maintain insurance policy reliability.

Outsourcing case study four

(operations director, technology, over £1bn). This company ordered several of its Asian partners to use established European components, despite wide local availability of the same parts, making the outsourcing solution highly inefficient in the short term but mitigating the sudden jump in quality risk. This was followed by a second stage of local Asian sourcing focused on businesses with a European parent, which was again thought to ease potential quality and production problems.

Many companies fail to pre-manage subrogation issues associated with changes to outsourcing models

The management and quality control challenge extends to forward-looking risk assessment and planning for potential incidents. Having a key part of the production process on a different continent can clearly make it more difficult to ensure that lines of accountability are well known, and the right policies and procedures are in place to ensure that operational managers can gather the requisite information to respond to potential incidents.

The significance of this step has been highlighted by recent well publicised difficulties in subrogating claims to partners in overseas

locations. Gaining awareness of the full ownership structure of counterparties and auditing insurance arrangements are among the practical steps that can be taken in advance of an issue occurring – it being much harder to unravel responsibility after the event.

Outsourcing case study five

(finance director, electrical products, £25m-£100m). Although this UK parent could prove forensically that a component it sourced from the Far East was responsible for failure of a larger system, on investigation it was discovered that the small component manufacturer had not renewed its product liability insurance, leaving the UK company with no way of subrogating the claim.

The risk of intellectual property theft is widespread

Concern regarding susceptibility to intellectual property theft via outsourcing is prevalent in the manufacturing sector. Over 15,000 lawsuits for IP infringement are active in the Chinese courts, up over 200% since 2003. The recent appointment of the UK's first IP attaché to be stationed in China shows how seriously the government is taking this issue, and many risk managers are anxious about the difficulty of identifying and chasing down offending parties.

“Loss of IP is my biggest concern when it comes to outsourcing.”

(Group financial controller, aerospace, £300m-£1bn)

Concern over IP protection post-outsourcing can also lead to other knock-on operational changes that affect risk. For example, given a long development pipeline and a highly competitive market, reduced supply resilience from concentrating on one supplier is often simply seen as a necessary evil, given the need to protect hard-won IP.

Outsourcing case study six

(company secretary, electrical products, £300m-£1bn). This appliance manufacturer discovered during a full review of tier one and two suppliers that much greater sole source dependency had arisen from the need to work confidentially with a single partner when outsourcing early stage product design and development. This work had previously been kept closely guarded in-house. It was clear that an interruption to operation at that partner could delay a product launch by six to twelve months – yet even that high risk was preferable to increasing the threat of IP theft.

“How long can we be expected to outsource manufacturing to places like China where they’re voracious not just for doing the manufacturing but for acquiring the technology and learning how to do it themselves? What will we have to trade with them in the end? It will be a one-way street.”

(European insurance and risk manager, chemicals, £300m-£1bn)

Outsourcing case study seven

(head of internal audit, ceramics, over £1bn). Building products manufacturer with significant concerns over possible theft of product ‘recipes’ uses joint ventures with local partners to avoid IP theft. This company either builds the entire factory or the critical technical parts of it and manages the plant once it is operational, thereby ensuring that the product is of sufficient quality and mitigating the risk of IP theft by retaining control of the important technology.

3.3.2

INSURABLE RISK IMPACTS

It is obvious that major changes to the outsourcing model have a significant impact on the nature of insurance risk in relation to all the critical lines of business.

Business Interruption

- **Outsourcing is a major contributing factor to supply chain complexity.** The risk of interruption to which a manufacturer is exposed increases the more it outsources, in particular whilst new relationships are established. As the outsourcing model changes, this alters exposure to the outsourced provider's own business resilience, or lack of it. It also tends to reduce OEM (original equipment manufacturer) control over and knowledge of tier one and two suppliers.
- **Increased BI exposure from outsourcing can be mitigated but standards vary hugely.** Substantial mitigation of the outsourced BI exposure is possible, and this study uncovered enormous variation in the vetting and auditing of outsourced suppliers. The most advanced approaches tend to include checking the detail of continuity planning at upstream suppliers and expanding financial audit programmes to incorporate operational requirements (most supplier audits remain limited to assessing basic financial health). Similarly, purchasing practices such as mandatory alternative sourcing and tight control over specification definitions can be agreed with, or imposed upon, outsourced partners.

- **Current insurance placement practices do not entail adequate investigation of BI exposure from outsourced partners.** There is clear evidence of variation in the need for, and effectiveness of, this mitigation – and the extent to which buyers of insurance are close enough to the operational detail to explain its full impact on risk. However, this is generally far beyond the scope of current placement information and dialogue – it is not enough simply to understand that outsourcing is taking place and where. This lack of detail leads to mispricing, lack of credit for good risk management and uncertainty over claims outcome.

Box four: impacts of outsourcing on insurance cover

- The flux in outsourcing alters exposure to the supplier's own business resilience, thereby increasing BI risk at least in the short term
- This exposure is often not investigated thoroughly and so opportunities are missed for risk mitigation and the risk of material non-disclosure goes up
- Outsourcing shifts increase the likelihood of complex claims that prove difficult to subrogate, potentially leaving the customer with an uninsured loss
- Lack of clarity over where design risk sits can lead to inappropriate or unclear PI cover

Product Liability

- **Product Liability claims are becoming increasingly complex.** Given the dispersal of the manufacturing value chain, the consequences of product quality issues can be more acute. Today's manufacturing practices are such that large 'standard' product liability claims are becoming less common. By 'standard' we mean where the insured has simply designed or manufactured an unsafe product which has resulted in bodily injury or property damage to a third party.

- o Anecdotal testimony from both customers and insurers, as well as analysis of a number of recent large claims, reveals the following trends:

- large recall and dismantling/re-installation claims are increasing, i.e. a claim gives rise to extensive further work to remove the defective components and supply and install replacements;
- claims where the defect was in a component or sub-system sourced from a third party are increasing.

- o The reasons for the rise in dismantling and re-installation claims, which affect suppliers rather than OEMs, would seem to be directly related to increased outsourcing of the manufacture of components or sub-systems. Such claims can prove very expensive as the price of removing and re-installing an alleged defective component can be many times the unit cost.

- **Ability to obtain payment for PL issues caused by a supplier is routinely overestimated by manufacturers.** There is a high-profile concern with PL risk given the increased incidence of problems in recovering losses or subrogating insurance claims across more complex supply chains – as raised by a large proportion of respondents with overseas supply exposure. Where work is sub-contracted then there may

be a specific condition precedent to liability on the insured to ascertain that partners have adequate insurance in place: a requirement which is clearly more difficult as geographic spread increases.

- **Quality control infrastructure is key to managing PL risk from outsourced partners.**

When manufacturers outsource production and support functions, the quality control chain becomes more convoluted – spanning design, supplier and contractor vetting, multiple testing stages, traceability, internal and external auditing etc. Getting this infrastructure right is imperative for UK manufacturers, as is explaining the detail of how each stage is controlled to manage risk. It is, however, another area where insurance disclosure is typically absent or limited, relying at best on reference certifications such as ISO without understanding more specific details of the exposure.

Professional Indemnity

- **Outsourcing can complicate the product/service split.** Where the product/service distinction is less clear (see section 3.4), the outsourcing model and how it is managed from a risk mitigation perspective has knock-on effects on the PI risk retained by the manufacturer. Knowledge of risk exposures arising from advice (whether bundled, standalone or abstracted from the 'pure' product technical information traditionally included within PL insurance coverage) is crucial to ensure PI coverage matches the risk and is not undermined by a lack of disclosure. However, outsourcing – in particular where design skills are involved – introduces the additional need to manage the contract and pass back this liability risk where appropriate. This cannot be done unless the PI risk, and supplier contributions to it, are well analysed.

- **Outsourced partners & design risk.**

Policyholders need to clarify exactly what PI exposure from design is retained by outsourced partners, and update this knowledge in light of changes to the outsourcing mix. In particular, contractual mitigations of design risk and consequential losses need to be investigated and matched to insurance protection – again requiring much more detailed analysis than is the norm.

Change Issue Best Practice – Summary issue two

Outsourcing in flux: characteristics of well controlled risk

- Full account taken of risk-based factors beyond pure cost saving for decisions on where to locate operations
- A staggered approach to moving functions to minimise operational or quality problems, with the rationale for this articulated
- Extensive operational oversight of outsourced operations, with demonstrable control over processes, sourcing specification, quality infrastructure etc.
- Pre-emptive approach to managing potential issues with recovering losses arising from defective product from suppliers, through strong contractual controls
- BI exposure to individual suppliers quantified and the position monitored, linking into risk management prioritisation and insurance policy structure

3.4

CHANGE ISSUE THREE – THE ASCENT OF SERVICE

The increased outsourcing of production activity has contributed to the trend for service to take precedence for UK companies even within the manufacturing and engineering sector. When activities such as R&D, design, supply management, distribution and after-sales work are taken into account, it becomes clear that production forms only a small part of what constitutes ‘manufacturing’ today. In recent years businesses in developed economies have made a marked effort to expand along the value chain, undertaking a greater proportion of high margin activities. This has blurred the line between manufacturers and service providers. The aviation sector is the archetypal example of this, with Rolls-Royce, for instance, generating the majority of profits from spares, service and maintenance once it has sold turbines at negligible margins^{xvi}. A similar story has played out across many product groups.

The most common changes reported in this study, in particular those that have become more pronounced since the financial crisis, point to manufacturers bundling products and services together. This raises the possibility that professional advice or product servicing, as an add-on or paid for separately, could cause downstream financial loss. Often the product/service dividing line is difficult to draw, with the service element moving away from traditional guidance related to the product itself and into more significant advice around design and downstream applications, fundamentally changing risk. This study confirms the prevalence of this issue, with 70% of respondents reporting business developments that suggest a new or increased level of professional indemnity risk. Companies report having moved into advisory grey areas in a wide range of product categories as diverse as automotive components, building materials, oil & gas extraction equipment and industrial seals.

The more the UK becomes a 'post-industrial' economy, the more acute this issue becomes. In this context "producer services" (i.e. firms that design products or market them, with manufacture of those goods outsourced to low-cost destinations) will continue to grow as a sector category. The range of service activities (and proportion of divisional revenues derived from them) can quickly move professional indemnity risk beyond the reach of 'incidental' PI coverage (itself often misunderstood) included within product liability policies. This can easily leave businesses without protection for what is potentially a high severity risk.

3.4.1 OPERATIONAL DEVELOPMENTS

Firms interviewed for this study reported several operational developments affecting their risk exposure.

Inadvertent or unofficial advice is frequently given to customers in addition to more explicit advisory or design services undertaken for a fee. This could leave UK manufacturers with a greater PI risk exposure than they realise or protect themselves against; companies can effectively move outside the traditional boundaries of automatic 'incidental' PI coverage without realising it. This tendency often applies particularly to firms with a strong entrepreneurial culture operating in far-flung locations, where central checks and certainty over what advice or support is being offered are more difficult to maintain.

Firms are extending product offerings to include an up-front design/recommendation element specifying product applicability or expected performance. Even where this is not paid for explicitly, it introduces a new class of advisory risk normally excluded from pure product liability. Several respondents across product segments reported bolstering this part of a combined offering to boost sales during an extended period of low demand.

Service case study one

(head of internal audit, building products, over £1bn). This small division of a major manufacturer offers architectural advice via an in-house design team. Given its low turnover contribution, the central risk management team has historically had limited knowledge of this activity or the inherent risk, and provided no explicit consideration in insurance disclosures, thus threatening coverage under general group policies. In this case, addressing the shortfall proved straightforward once the activity was brought to light with a clear explanation of the advice offering, customer segmentation, contract terms, dispute experiences etc. Without this step, the pre-existing insurance programme would not have offered any protection.

Service case study two

(risk manager, industrial components, £100m-£300m). This valve manufacturer launched a specific offering to replace obsolete installed products previously supplied by competitors, which brought in new customers and generated ongoing revenues. However, it has also increased advisory risk given the lack of overall design control (the risk having moved beyond the immediate performance of an in-house product to warranting a third party design). In this case, the additional exposure is felt to be manageable at current levels, but sales staff are pushing the offering and the adequacy of protection has yet to be tested by a major incident.

Contractual practices are far less standardised for service offerings. Service provision terms need to be studied in greater detail, case by case, to ensure that the risk carried is understood by both parties. In particular, established contractual norms of liability division based on traditional product sale may be altered without the change being flagged.

Training activities offer a very different risk exposure. Several firms consulted for this study expressed concern over potential exposure associated with training, an area of high-margin growth as other companies outsource it and some manufacturers/engineers find themselves in possession of sought-after expertise. In a litigious environment (see Section 3.5), the question must be asked as to whether there could be recourse to a training provider, particularly where training activities involve more high-tech and practical processes rather than being purely classroom based. For example, in relation to industrial equipment training can explicitly deal with safety issues where the consequences of any failing could be extreme. Tight control of contracts and sign-off procedures provides most protection here; however, several firms reported difficulties in ensuring this is rigorously applied as training operations grow and diversify “under the radar”.

3.4.2

INSURABLE RISK IMPACT

Among insurance buyers at manufacturing firms interviewed for this study, familiarity with insurance solutions in the services area varied hugely. Several buyers are monitoring growing exposures and taking measures to assess the need for more specialist cover; however, in many more cases the ‘professional risk’ exposure is unfamiliar, leading to a series of difficulties when assessing risk. Moreover, many risk managers have doubts about the ability of insurers’ PI departments, set up to cover lawyers, accountants etc, to respond to the specific needs of an emerging advisory risk at a manufacturing firm. The development of specialist insurance solutions to address services and products exposure for manufacturers in a combined policy, and hence avoid technical differences in triggers/loss types, and also potential disputed liability between two or more insurers, is welcome innovation; however few buyers are aware of these options, and communication of the benefits can prove difficult.

PI is also a specialist insurance market that relies more heavily on provider expertise (with less documented risk information) than most insurance lines, exacerbating the problem of unfamiliarity to manufacturers. Many prospective customers are unsure how such protection can apply to their business – and few appear satisfied with the advice they receive from brokers. Without much loss history in this area, it is important for insurers to take a pro-active approach and quantify exposure to emerging PI risk at businesses that were traditionally product manufacturers. From a customer point of view, a number of insurance sticking points remain.

Envisaging loss scenarios related to services can often be harder than with products. Even where a change in activity is recognised, it can be hard to envisage loss scenarios associated with the less tangible losses arising from service activity (e.g. traceable consequences of inadequate or inaccurate training provision). There is a clear case to be made for explicit loss scenario planning (in line with Mactavish risk placement protocols) within the services arena, involving brokers, insurers and operational and customer-facing personnel, to ensure that appropriate cover is in place.

“The loss potential is actually much higher downstream than upstream, although design exposure is much clearer upstream. Downstream the hand grenade has already gone off and the lawyers appointed are determined to hurt you.”
(Group insurance manager, construction, over £1bn)

Lower risk documentation standards in PI.

There is a general reliance on proposal forms (typically shorter and containing even less contextual information than full submissions) in the PI market, and correspondingly a greater reliance on broker and underwriter expertise – as is also the case in other “specialist” insurance markets including energy and aviation. Although this knowledge, if accessed properly by buyers, can be very helpful in understanding exposures, in the PI arena this dependence could give insurance buyers false assurance about not needing to disclose full details of the type of work undertaken, processes to capture exceptions, and contracting and risk management practices. None of this expertise alters the legal obligation to disclose, which falls on the customer. The fact that a proposal form does not ask a question rarely offers a customer protection in the event of material non-disclosure. Indeed, most PI forms will include an explicit ‘sweeping-up’ clause requesting any and all additional relevant information.

Box five: service changes the demands on PI policies

- Policy suitability: confusion about what is actually covered in policies, particularly through use of ‘incidental PI’
- Gaps in coverage: more difficult to formulate a PI loss scenario
- Policy certainty: documentation and understanding of PI risks often less developed than in other classes of insurance

Incidental PI definitional concerns.

Frequent confusion and uncertainty is reported over the extent of coverage offered by extensions to traditional product liability to cover ‘incidental’ professional indemnity, offered by some insurers. Two damaging misconceptions are prevalent amongst buyers:

- an assumption that incidental PI may be included within a standard PL policy when no such extension exists;
- a lack of clarity on the boundaries of ‘incidental’ coverage.

This latter point is critical, as many businesses purchase cover that offers much less protection than they believe to be the case and, as service offerings evolve, many risks move beyond what is ‘incidental’. Insurer definitions can vary and some liability underwriters privately concede a large degree of leeway in what is considered ‘incidental’ PI and the exposures to which they would refuse cover in the absence of a standalone PI policy.

Key factors are a) the proportion of turnover accounted for by the advisory/service activity; b) the lack of such activity being sold/contracted on a standalone basis; and c) the closeness of the connection between the advice and the product. However, given the blurring of these boundaries through bundling and the service extensions described by respondents, the scope for uncertainty is high and increasing. Firms should seek clear assurance from their brokers and underwriters on this point before deciding on standalone PI or incidental PI extensions to PL policies, both of which of course carry premium cost.

Potential for PI claims with a high degree of complexity leading to difficult resolution.

Due to the lack of ‘minor’ loss history, a number of manufacturers have perceived a more confrontational reaction to claims notifications and a lack of recognised steps towards resolution.

Whilst it is to be expected that insurers may take longer to establish the extent of liability, this puts the claimant at risk unless loss response procedures are discussed prior to the claim occurring. In an extreme example a respondent cited 14 separate personnel at an insurer, along with an external lawyer, being involved upon notification of a potential claim, compared with the more usual experience for PL claims of one or two people.

PI insurance is often bought as a marketing tool or contracting requirement. Given the difficulty of buying reliable cover, several insurance buyers reported that PI insurance is acquired largely as a necessity or marketing tool to show to customers, with the buyer accepting a high deductible, undertaking little or no quantification of the possible exposure, and having very little communication with the insurer. This low level of prioritisation is clearly incompatible with the level of emerging risk observed in this study.

“It’s an unsophisticated model, there’s a relatively large limit that has been in place for many years and we’ve never had a loss near the limit. It’s basically sleep easy cover.”
(Insurance and risk manager, metal products, over £1bn)

3.4.3

PRACTICAL STEPS

The bulk of the manufacturers consulted underestimated the potential risk of being the subject of a negligence claim not related to a defective product. To address this, a number of practical steps can be taken when interacting with the insurance market on PI exposures.

Clear delineations need to be made between standard and more bespoke service offerings.

The line drawn between standard ‘brochure’ products with no advice and more bespoke

offerings has obvious implications for internal risk management, disclosure to insurance partners and decisions on the level of cover needed. Even where marketing approaches entail blurred boundaries, the underlying reality must be separately appraised from a risk perspective and communicated clearly to those arranging insurance cover.

Closer inspection is needed for all contracts that involve a service element. Additional scrutiny of contracts is necessary when a manufacturer is offering ‘paid for’ advisory work, often heightening the PI risk. Referral procedures, insertion of specific clauses limiting exposure from servicing activities, and examination of positions on consequential losses are all important steps in managing this exposure. Although relatively standard in professional service industries, this is a new requirement for many diversifying manufacturing businesses.

Clear guidelines need to be communicated to sales staff. Policies and procedures should be written for sales staff so they can consider liability limitations on a case by case basis, given the type and scale of advice offered beyond the standard ‘within insurance limits’ approach to contracts. This may involve blanket controls or assessment on an individual basis – the critical minimum standard is reporting unusual advisory activities (even on smaller contracts) and being clear when and to whom to do so.

“There are a handful of people who understand the differences in liability and risks – the people at the sharp end don’t have access to that information.”
(Risk manager, components, £100m-£300m)

Service case study three

(company secretary, components, £25m-£100m). This transport equipment manufacturer increasingly provides product-related advice and engineering expertise to large infrastructure projects, yet buys no specialist PI cover beyond extremely limited 'incidental' coverage within the main liability policy relating to equipment/component sales. This was one of many instances where companies are unknowingly self-insuring a major risk category – likely to remain undiscovered until facing a loss.

**Change Issue Best Practice –
Summary issue three**

Service provision: characteristics
of well controlled risk

- All advice and training activities monitored to determine scope for potential loss events for which there could be recourse to the company
- Commercial staff regularly trained on the extent of permissible activities
- Boundaries of advice given and the contractual basis clearly understood, with adequate exceptions handling procedure
- Insurers and brokers informed about the specifics of such activities and confirmation of coverage obtained

3.5
**CHANGE ISSUE FOUR -
CONTRACTUAL LIABILITY SHIFTS**

Greater complexity and the rapid rate of change have increased the operational risks faced by companies. Established divisions of liability risk have also shifted, however, as contracts have been renegotiated, often under difficult commercial conditions. Some 70% of the firms consulted said contracting practices were becoming more adversarial with both suppliers and customers, leading to major changes in the way that liabilities are apportioned between counterparties. The result in many cases has been 'liability creep': manufacturing firms are often taking on more exposure to the consequences of an operational issue. Examples of liabilities being pushed onto manufacturers include consequential losses for consignment stocks (metal products, £300m-£1bn), liabilities from inspections (packaging, £25m-£100m) and increased levels of potential liability far beyond the value of the contract (textiles, £25m-£100m).

**Use of lawyers in negotiating and reviewing
contracts has increased**

A common point raised is that society as a whole has become more litigious, and the increased use of lawyers now extends to business-to-business negotiations over the liability split in contracts. Many respondents commented on the greater deployment of lawyers in negotiating and reviewing their commercial contracts. As a consequence, several reported that established norms for contracting in sub-sectors were no longer followed, with much more case by case negotiation.

“Customers have become much more aggressive in what they’re trying to achieve – in one case now we rarely get a contract without a 40-page addendum attached, full of unnecessary legal clauses.”

(Risk manager, electrical products, £25m-£100m)

“20 years ago the contract was sealed by a handshake; today there are more big contracts and during the tender process the lawyers on the other side are nastier and try to slip more risks in.”

(Group insurance manager, construction, over £1bn)

Contracting case study one

(risk manager, electrical products, £25m-£100m). A particular development has been the abandonment of standardised Form MF/1 by customers in a sector that previously used it heavily. This risk manager has increasingly seen buildings contracts used as templates, which means starting from a position more in favour of the counterparty and leaving less room for negotiation. Given the commercial pressures, there is little the smaller firm can do to resist.

Legal work is increasingly outsourced

Several firms pointed out that counterparties are increasingly outsourcing legal work, resulting in a lower level of appreciation of industry norms.

Contracting case study two

(insurance manager, aerospace, £100m-£300m). This insurance manager formerly dealt primarily with in-house legal staff at counterparty firms. Increasingly, however, these counterparties are outsourcing the work to law firms. As a result the firm is dealing with relatively junior staff, less experienced both in general but particularly in the sector, which means they need to be brought up to speed on the specifics of a sector with a complex contracting environment. He recognises that this increases the likelihood of an anomalous term slipping through his review net.

Control of decentralised, entrepreneurial business units is increasingly difficult

Operational changes within manufacturers have also complicated the contracting environment. A knock-on effect of more outsourcing and greater decentralisation is that it is harder to control diverse sections of the organisation. Several risk managers cited decentralised business units not adhering to central contracting philosophy as a growing risk as their companies expand into new areas. Sales teams incentivised to bring in top-line growth did not always utilise intended review resource to examine the contractual liability position.

Contracting case study three

(insurance manager, aerospace, £100m-£300m). This risk manager was concerned that, having taken the time to review a contract prior to inception, the work done had expanded far beyond the contracted agreement, introducing the possibility of the company doing work for which it is not contracted, and which its insurances would not cover in the event of a loss.

Diversification often results in entering a new contractual environment

As well as moving into new territories, many manufacturing firms have been innovating their way out of recession, entering new market

segments often with totally different contracting environments. The challenge for risk managers is to stay alert to different contracting practices in new product areas, or changes in the risk environment driven by a different end-use (rather than the product itself).

Contracting case study four

(risk manager, components, £100m-£300m). From mainly working with large oil & gas companies, this company is now supplying more packaging to the food industry. Where counterparties “don’t think of themselves as chemical companies: it’s difficult to speak to them in the language of process engineering”.

Contracting case study five

(risk manager, aerospace, over £1bn). When disposing of residual land, which had been used for heavy industrial processing, this large UK manufacturer used to be able to give a warranty that the land had been cleaned up, but leave new developers with any environmental liabilities. Now all developers simply refuse to accept the exposure and the risk sits with the manufacturer (which lacked – and had no experience of procuring – appropriate insurance coverage).

Working with new counterparties across the value chain can also have an impact on contracting practices.

Contracting case study six

(group assurance manager, technology, £100m-£300m). This mid-size manufacturer was forced to adapt risk management and insurance practices markedly on acquiring a second business division with a totally different liability profile and contract framework. It moved from making an intermediate appliance component (to specification), as part of a much longer value chain, to providing the end product (alongside multiple third party products). This brought it into contact with a far more diverse and legally aggressive base of corporate end-users and the obligation to

warrant performance efficacy. This adaptation process took significant time to bed into sales and legal functions across the business, to achieve consistency in risk taken on, as well as beginning to align insurance coverage and necessary risk disclosure.

Contracting case study seven

(group risk manager, electrical products, £300m-£1bn). This large electronics manufacturer has taken a more active approach to contract auditing and training employees after appointing a new head of contracts. Examples of issues uncovered during the subsequent audit process included: a low-value contract for which the company returned the fee after the work was done based on an unfavourable liability position; early recognition of a highly unfavourable liability position in an overseas contract signed by a rogue salesman (successfully managed to completion but at higher cost due to increased oversight); and a potentially problematic contract uncovered during an ultimately unsuccessful bid, resulting in retraining of the sales staff. These examples show that remedial steps can be taken, but the vigilance required to flag all such issues is extreme in large, multi-division companies. Even in this example, management accepts that recent acquisitions and diversification have stretched resources in this area beyond the point of comfort.

3.5.1

INSURABLE RISK IMPACT

Examining, controlling and communicating developments in contract risk to insurance partners represents a huge challenge for risk managers. Changes to the contracting environment are of paramount importance when considering the high severity liability risks retained by a manufacturing business, whether they be product or service related. In almost every case in this study, more work was needed to communicate fully what drives liability risk and the potential for that risk to have materially changed.

It is also clear that there is a remarkable degree of variance in the way contract risk is managed across the sector, beyond what can be explained by the severity of underlying risk. While some have tight, established links between risk management/legal teams and the contracting/sales process, a great many others are reliant on issues being raised centrally but without a high level of confidence in general awareness of potential problems or that the right contracts are raised for review.

The fundamental problem in assessing where risk lies is that size of contract is not a reliable proxy for level of risk. The larger commercial contracts usually get the most attention from risk managers or lawyers, but liabilities are often hidden in smaller, more 'risk-rich' contracts, which are simply not referred for exhaustive review. A tiny area of the business that is 'rogue' can have serious consequences, with the whole insurance limit exposed. Determining where to concentrate the efforts of the central referral and review resource is a major challenge for larger (or high growth), diversified or international manufacturers.

Whilst applicability will vary between companies, respondents mentioned several key areas that limit risk, including:

- setting clear ground rules and escalation requirements on contract agreement for sales staff, with education programmes on what not to accept in terms of liabilities;
- a clear process for handling exceptions, with specific expertise governing contractual risk and appropriate cover (e.g. consequential loss exclusions, indemnity limits etc.);
- definition of contract risk auditing as a key function of the risk management department with relevant legal resource available and clear escalation procedures;
- a mature understanding of where potential

anomalous contract risks might reside within smaller contracts.

Statements in disclosure documents typically fail to deal with such contracting philosophies in any detail and routinely contain high level claims that are misleading or false. A number of companies make explicit statements within insurance submissions about risk positions in contracts that do not stand up to scrutiny. They may reflect the contracting ideal rather than a significant part or even the majority of business conducted. This creates a big risk of insurance failing to perform as expected: at best, such misunderstanding leads to assumptions based on an underwriter or broker notion of 'standard practices'; at worst, it creates a real risk of material non-disclosure or misrepresentation that could invalidate an entire policy.

Change Issue Best Practice – Summary issue four

Contractual liability shifts: characteristics of well controlled risk

- Deviations from normal contracting practice examined from a risk perspective to determine changes in liability positions assumed
- Risk review priority based on assessed risk potential not just contract size, with suitable procedures in place to ensure compliance
- Levels of authority and exception handling procedures are clear to all staff arranging contracts
- Liability implications of business changes communicated, including dealing with a different counterparty, working in a new sector or selling a different product
- A representative sample of contracts is disclosed to insurers with proper discussion of exceptions, guidelines and deviations from 'best case scenario'



4 CONSEQUENCES FOR DISCLOSURE AND CLAIMS

Section 3 set out four areas of significant change that have a material impact on risk in the manufacturing and engineering sector, and apply to a cross-section of respondents. Our contention is that in each case questions must be asked to re-appraise both disclosure requirements and/or policy wordings to ensure reliable insurance coverage.

Placement standards remain ‘unfit for purpose’

However, as Mactavish has already argued in ‘Corporate Risk & Insurance: the case for placement reform’, the necessary level of operational risk detail is simply beyond the normal scope of insurance disclosure, and outside the information set given to insurers so that they can assess risk. Furthermore, the risk of any deficiency in placement under UK insurance law sits with the customer. The onus is on it to determine the boundaries of necessary disclosure and it faces the extreme remedies available to insurers to avoid paying claims.

This study has confirmed a number of the observations of our previous cross-sector analysis of placement standards and disclosure. The headline statistics of that study were that most buyers (65%) did not possess and review a copy of their insurance submission (i.e. part of the de facto contract driving claims settlement) and even fewer (c.2%) had an explicit discussion of loss scenario coverage and major loss response as part of the placement process. A year later, and this follow-up study in manufacturing found that both these metrics remained broadly unchanged.

What’s more, the picture from underwriters also remains resigned – with respondents to this study re-iterating a strong message about a lack of granular risk information, poorly structured data dumps and a lack of opportunity to ask probing questions to understand risk (see box 6).

Box six: updated underwriter views on disclosure (UK underwriters specialising in manufacturing risk across key risk classes)

“It’s the same old problem – when we ask even the first of several questions about the risk, the response is always ‘no other markets need that – do you want to bid or not?’. It gives us nowhere to go if we want to understand the risk better.”

“We always get told that buyers don’t want to answer questions about their risk, and meetings focus on the deal. It’s a shame, as in the few cases where we do get the opportunity it seems companies do see a lot of value and are happy to build that understanding. It helps us to help them.”

“The whole risk insight agenda is a necessary part of our strategy to build business and sector-specific coverage – something like manufacturers’ errors & omissions as part of PL – we think these can offer customers a lot more if we understand them.”

Insurance law, and ignorance of its demands on buyers, remains concerning

Whilst frustrating, underwriter concern is mitigated by their favoured position under insurance law and the remedies available to avoid and/or delay claims during resolution post-incident. The most concerning fact – in light of risk complexity – remains the burden the law places on buyers to ensure policy reliability and the tiny proportion of buyers that recognise the legal reality. Based on the Marine Insurance Act 1906, this legal framework was established to codify 19th century insurance practices for marine trade, which bear little resemblance to the corporate risks of today’s highly complex and globally spread manufacturers. Yet the substance of the law remains unchanged.



The insurance buyer's responsibility remains to disclose material circumstances, being any facts that would influence a prudent underwriter in deciding whether to accept the risk and on what terms. A failure to do so – material non-disclosure – entitles the insurer to avoid the policy so that the claim is not payable (and prior claims on that policy are re-paid), even if the non-disclosure was wholly unconnected with the claim. Whilst the Law Commission's review is broad, the focus of lobby efforts has been on reform to limit the insurer's remedies in respect of non-disclosure and warranties, rather than to limit the fundamental burden of disclosure itself. Unless it also fosters a transformation in placement standards, legal change alone cannot solve the underlying problem – as the Law Commission recognises. At best it can reallocate the costs of uncertainty between the parties – perhaps punishing even more those who do a diligent job of disclosure today despite the flaws in the system. An interesting legal possibility is the proposed introduction of a required reasonable standard of disclosure with which companies must comply to feel the benefit of insurer remedy limitation, analogous to the adequate procedures defence to the new corporate offence of failing to prevent bribery under the Bribery Act. Given the degree of inadequacy in current risk disclosure, it is necessary that this reasonable standard also goes further than the Bribery Act's adequate procedures alone, specifying an actual level of disclosure in terms of details and reasonably knowable material facts. Should this proposal be introduced, this research suggests that most companies would have a great deal of work to do.

Major gaps in disclosure

In this light, the current shortfall in typical disclosure standards remains extraordinary – both across the manufacturing sector and in relation to the change issues discussed in section 3. More granular understanding of the evolution of operational risk may exist in isolated cases, particularly where long-term relationships are in place; however, this understanding will probably be undocumented (and so will not

legally protect the customer) and may well be patchy and inaccurate. In almost every insurance submission by a manufacturing and engineering firm reviewed for this study, serious questions have been raised about material areas of non-disclosure and/or material uncertainty as to whether the scope of cover provided is appropriate to the actual risk.

In effect, this tacit agreement to work to low standards of disclosure inhibits price discrimination, causes companies with good risk management standards to overpay, and passes back risk of misunderstanding post-claim to the insured, given the onerous disclosure obligations imposed by UK insurance law.

Many of these issues are systemic in manufacturing, with almost every submission sharing similar points of concern about omissions, including:

- detailed analysis of business changes and an assessment of their impact on the risk profile (e.g. operational changes, acquisitions or new product/service offerings);
- business-wide operational analysis to consider the key drivers of resilience to interruption, rather than the limited site by site observations in traditional risk site surveys;
- product/service detail sufficient to appraise end-user profile and areas of anticipated risk exposure/mitigation (as opposed to cut and pasted website product descriptions);
- detail of the contractual protection in place, liability distribution and relevant changes and/or exceptions as they occur.

This list of examples could go on, but it is up to the insured to make sure that additional material details about operational risks are disclosed, and to do so in a proportionate manner. If taken to its extreme, the current legal burden would certainly imply a close to impossible task for insurance



buyers in a large, complex, multi-divisional organisation. However, the gap between that responsibility and current standards in practice is far too wide for any coming legal reform to rapidly bridge on its own. Buyers must do more to protect themselves, and this research suggests that this would be particularly effective in manufacturing – a sector that is perceived as ‘high risk’ (e.g. often involving heavy machinery) and where relevant operational controls are internally well understood. A number of questions should be asked to ensure that more information is collected in shareable form, and that placement documents shared externally with brokers and insurers reflect this information to underpin more secure coverage.

This applies not just in relation to mitigating the risk of material non-disclosure, but also in establishing underwriter understanding of relevant operational risks and analysing policy wording to make clear what is being bought and setting out the type of losses that would in theory be covered. It would also aid purchase of the right protection at a fair price.

Increased claims uncertainty emerging especially in the mid market

However, the core concern here is not inaccurate or excessive pricing, it remains the threat of claims delay or repudiation. Major claims in areas such as BI or PI are already complex: the task of unpicking presumed reductions in profit or the full consequences of alleged negligence requires expertise and time. When the loss is large and further complicated by the number of interested parties, settlements based on commercial pragmatism or a good relationship (with the broker or insurer) can no longer be so readily expected. This is exacerbated at the end of a long soft market with eroded insurer financial reserves, unquestionably where the market remains today.

In ‘The Case for Placement Reform’ we set out evidence of a growing propensity for claims to be disputed, despite the difficulty of conducting definitive quantitative analysis because few

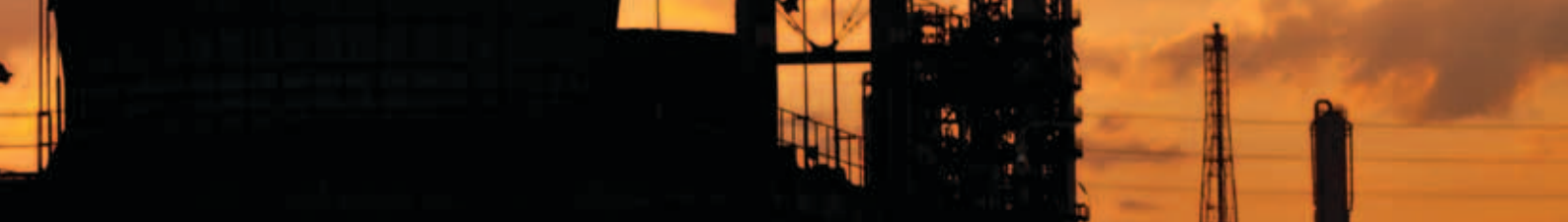
disputes make it to the public domain. Anecdotal evidence from loss adjusters and brokers of a more difficult climate for claims negotiation is compelling, and in this study we have examined the way this climate has evolved over the past year. Two primary observations can be made. First, there is evidence of claims being questioned for reasons that seasoned market participants find surprising. Anecdotal broker and loss adjuster testimony as well as the latest data from the buyer body, AIRMIC, suggest that over 11% of buyers have reported a claims challenge on non-disclosure grounds alone in the past two years^{ix}. Second, feedback from brokers in 2011 and early 2012 indicates that a two-tier market is emerging, with less rapid deterioration for the largest customers (operating in the City of London), but with more concern on behalf of mid-size and regional manufacturers. For the majority, this makes the wider observations of this study more worrying, and consideration of the steps set out even more important.

Box seven: loss adjustors on manufacturing claims

“Evaluating losses in a manufacturing environment is just a lot more complicated than say a retail operation – that adds uncertainty.”

“The frequency of ‘ex gratia’ payments is definitely in decline – I don’t see anything like as many as I used to.”

“I think there is definitely a hard claims market – there is not wilful generosity out there in claims departments at the moment. The climate has changed.”



5 CONCLUSION

This report above all establishes that high impact risk in manufacturing is subject to serious changes in the current environment. Given the degree of risk change and low standards of disclosure and placement, it is clear that far more questions need to be asked by both buyers in the manufacturing sector and those responsible for risk at board level. The current assumption that insurance will simply respond when needed is inconsistent with the legal reality of high impact loss events, and is further undermined by the risk change issues highlighted. The default low information model serves well-run risks most poorly and leaves companies carrying the risk of policy failure – an issue that has yet to make it onto the corporate governance agenda.

However, the fact remains that most buyers of insurance, particularly in mid-size businesses that have no dedicated insurance role, do not consider themselves enough of an expert to know the right questions to ask to achieve more reliable coverage. Thus our intention is for the checklists included in this report to provide a user friendly starting point for buyers to consider the issues affecting policy reliability, either indirectly (e.g. through non-disclosure of material risk detail) or directly (through inappropriate or unknown policy wordings), and how to go about resolving them – through better disclosure and more scrutiny of the policies put in place by brokers and insurers.

Of course, only a selection of the points raised will be relevant to any individual company at one time, although the responses do suggest that a high proportion have a wide application. If commentators on this report add to these points, so much the better as this will further arm customers to appraise their coverage and achieve more certainty.

The findings of our prior cross-sector work on risk change and placement uncertainty were deeply concerning, as reflected by the industry and press interest in that report in 2011. We believe the evidence remains overwhelming

that UK businesses are needlessly being put at serious financial risk because of some glaring, and inherently addressable, limitations in the system of insurance protection. In many respects, turning the spotlight on manufacturing and engineering shows an even more worrying picture. The current climate in the sector ups the ante in several respects: a high rate of change complicating and broadening traditional risk exposures; heightened financial vulnerability of both companies and the insurers expected to respond to major loss incidents; a key market of mid-size companies that are most sensitive to weaknesses in the insurance system.

Remedial progress from the insurance industry to assist better risk placement is slow, and board recognition of the problem even more so. Nevertheless, this report suggests that huge strides can be taken by companies with a fairly small investment of time and effort.

Mactavish is continuing its programme of risk research with updates on progress to implement the suggested reform programme and an exploration of the issues in other business sectors.

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