



An Approach to Enterprise Risk Management in China

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Dr Mike Berrell

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INTRODUCTION

Enterprise Risk Management (ERM) strengthens decision-making by increasing the risk detection capabilities of managers and orchestrating coordinated responses to risk scenarios. This approach compels managers to discard silo and checklist mentalities for structured approaches with actionable outcomes (AAI, 2010; Burnaby & Hass, 2009; KPMG, 2001; PWC, 2015). Thus, ERM is also a significant source of competitive advantage (Barton *et al.*, 2002).

Robust approaches to ERM are essential in rapidly developing nations. Despite the upsides of doing business in burgeoning economies, which include competitive wages, investment incentives and political patronage, "hidden risks" still abound. For example, the "impulsive nature of host country politics" creates uncertainty while the "selective lack of regulation" (Henisz & Zelner, 2010) can divert home country profits into the host's pocket (HBR, 2008). Cultural worldviews also shape ideas about politics, economics, business, society and indeed, ERM. Significant gaps in these understandings often occur between groups at opposite ends of the cultural continuum - like Chinese and Western managers, for example. In this light, managers in China should be aware that data concerning risk filter through a socially-constructed environment, where the idiosyncratic nature of the Chinese cultural architecture makes it "perfectly possible" for foreign managers to believe their actions and assessments are appropriately while their Chinese counterparts think the exact opposite (Goodall *et al.*, 2007).

By the mid-2000s, 90% of international companies had incorporated China into their business plans. Yet, from social, political, technological, cultural and economic perspectives, business risk in China is ubiquitous (cf. Adler, 2007; Arnold *et al.*, 2009; Deresky, 2010; EYG, 2007; Deresky, 2010; Haley, 2003; HBR, 2004; 2008; Hall, 1976; Hampden-Turner & Trompenaars, 1997; Harzing & Pinnington, 2011; Hofstede, 1994; Hurn, 2007; Jain & Tucker, 1995; Menzies *et al.*, 2008; OECD, 2010; Morrison, 2012; Ping, 2012; PWC, 2015; Shi *et al.*, 2007; Walsh, 2006; Weber & Hsee, 1998, 1999; World Bank, 2007; World Economic Forum, 2008). This profile makes the country simultaneously dynamic and bewildering. Competition within China is intense and contradictory responses to business questions are common (Fernandez & Underwood, 2006; Morrison, 2012). In this incongruous world, some pundits proffer 'China's coming collapse' (Chang, 2002) while others see 'China ruling the world' (Jacques, 2009).

ERM is essential in countries like China because it allows international business managers to:

1. Allocate capital efficiently through the purposeful direction of financial resources to prevent risk
2. Disseminate current and relevant knowledge about risk to all stakeholders
3. Formulate unambiguous understandings about business risk across an organization
4. Improve corporate governance and regulatory oversight
5. Improve risk awareness at all levels
6. Improve risk-taking strategies (Marsh Australia, 2011)

APPROACHES TO ERM

Standard 31000 (ISO, 2009) augments some 80 approaches to ERM (Kaen, 2005; Lam, 2003; Miccolis, 2002; Olsen & Wu, 2008; Purdey, 2010; cf. *Sarbanes-Oxley Act, 2004*; *Basel II Accord, 2004*). Nevertheless, common elements emerge, including the need for unequivocal communication and accurate risk management protocols (AAI, 2010). Table 1 summarizes three common approaches to ERM.

Table 1. Examples of ERM approaches

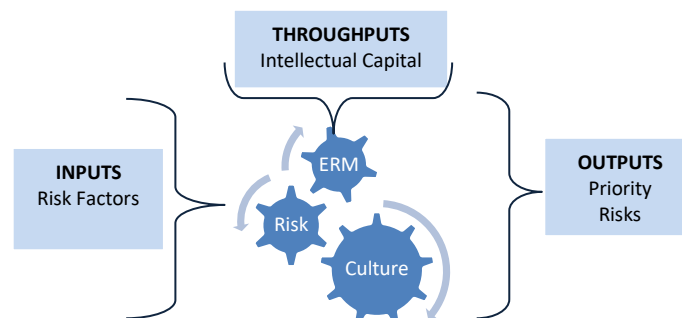
Authority	Title	Description of generic process	Literature
Causality Actuarial Society (USA)	Overview ERM	<ul style="list-style-type: none"> ▪ Process Driven ▪ Establishes context ▪ Identifies risks ▪ Quantifies level of risk ▪ Identifies impact areas ▪ Prioritizes risks and treats accordingly ▪ Reviews actions; risk can be broadly categorized as risks related to: 	CAS, 2003

		<ul style="list-style-type: none"> * Hazards * Financial aspects of the business * Operational side and/or * Strategic decisions 	
Committee of Sponsoring Organizations of the Treadway Commission (USA)	ERM Standard, 2004	<ul style="list-style-type: none"> ▪ Component Driven ▪ Internal environment ▪ Setting objective setting (in areas related to strategy; operations; financial reporting; compliance) ▪ Identifying event ▪ Assessing risk ▪ Responding to risk ▪ Controlling and measurement activities ▪ Information sharing and communication ▪ Monitoring 	AAI, 2010; Moeller, 2007; Olsen & Wu, 2008, 25-38
Project Management Institute (USA)	Practice Standard for Project Risk Management	<ul style="list-style-type: none"> ▪ Plan-Do-Act-Check Cycle ▪ Planning risk management ▪ Identifying risks ▪ Performing qualitative risk analysis ▪ Performing quantitative risk analysis ▪ Planning risk responses ▪ Monitoring and controlling risk 	PMI, 2009

In this study, ERM operates in an Open System with distinct inputs, throughputs and outputs. Thus, decision-making in ERM extends beyond organizational boundaries to consider data from a range of external sources in an approach that bolsters coherent and structured decision-making (*cf.* Boulding, 1956).

Risk scenarios are the principal inputs into ERM where the “mindfulness” of stakeholders in high reliability and high performance settings enhances the process (Ericksen & Dyer, 2004; Fernandez & Underwood, 2006; HRO, 2010; Perrow, 1999; Roberts, 1990; Vogus & Welbourne, 2003; Weick & Sutcliffe, 2001; Wong *et al.*, 2007). Throughputs include the human capital necessary to analyze reliable data feeds. The outputs of this analysis are unique assessments that frame each risk scenario. Figure 1 is an overview of the three stages of ERM in this study (the component of ‘culture’ represents both national and corporate cultures).

Figure 1. Three stages of ERM



THE CHALLENGE OF ERM IN CHINA

In China, veteran and neophyte foreign managers both face steep learning curves when considering business risk. In a "tremendously complex country, rife with contradictions that would take a lifetime to appreciate fully" (Hart, 2012), Western managers with first-hand knowledge of China invariably find the going tough when they first apply the principles of ERM. Managers with second-hand knowledge certainly find the task intimidating. China’s mushrooming economy also creates a euphoric state, which displaces the actual extent of business risk. Poor communication practices and scant regard for formal documentation in China creates havoc for ERM practitioners (EYG, 2007) and in this environment, collaboration and cooperation are essential elements of successful ERM. China is replete with the vestiges of failed solo players (Hoening, 2006) and the principal lesson for ERM in risk-prone settings like China is to cast a wide net.

The PESTLE analysis below (Table 2) is based on the literature on Chinese business risk and includes succinct examples of risk factors and scenarios typically encountered. While these examples appear under one of the generic

components of PESTLE, some cut across two or more areas.

Table 2. PESTLE analysis of potential risk factors in China

Area	Examples of types of risk factors
Political	<ul style="list-style-type: none"> ▪ Influence of one-party communist State ▪ Highly diverse political/social regions (e.g., Ethnic groups) ▪ Regional tensions (e.g., Taiwan, Japan) ▪ Pressure for internal change (e.g., Hong Kong SAR; the 'democracy movement', Tibet) ▪ Government controls on information and mass media ▪ Secrecy
Economic	<ul style="list-style-type: none"> ▪ Emerging market economy creates uncertainty ▪ Fledgling market economy with weak systems and structures ▪ Influences of 'Command economy' thinking still prevails in some areas ▪ Level of human capital assets vary across China ▪ Trade imbalance between China and US/Europe ▪ Manipulated exchange rate for RMB ▪ Many companies under insured for natural disasters ▪ Basic level of integrated logistics infrastructure ▪ Developing supply chains and logistics infrastructure ▪ Suspect banking and financial system ▪ Vast differences between economic regions (e.g., Shanghai and the "Wild West") ▪ Real estate and similar bubbles ▪ Regional unrest
Society & culture	<ul style="list-style-type: none"> ▪ Business networks; unique form of social capital (e.g., business <i>guanxi</i>) ▪ Inside/outside nature of society favours insider knowledge and opinions ▪ Influence of "Sage leadership" shapes administrative processes ▪ Tolerance for entrenched bureaucracy and ensuing corruption ▪ Different workplace behaviours and motivation techniques required for workforce ▪ Dearth of human capital ▪ Power differentials in IJVs
Technology	<ul style="list-style-type: none"> ▪ Violation of IP and IPR ▪ Technological infrastructure varies considerably between regions ▪ Pressure to transfer technology to Chinese partners at little or no cost
Legal	<ul style="list-style-type: none"> ▪ Evolving Western type laws but poor legal administration ▪ Convoluted legal and property ownership systems with little transparency ▪ Some industries highly corrupt with 9,029 cases of "fraud, ▪ Illegal land seizures and other violations in the real estate industry ▪ Policy changes with no communication ▪ Bewildering regulatory environment ▪ Highly regulated environment leads to corrupt practices
Environment & sustainable development	<ul style="list-style-type: none"> ▪ Potential for momentous natural disasters ▪ Wide spread pollution (e.g., 99% of surface water in Shanghai undrinkable) ▪ Food security ▪ Water shortages ▪ Threat of earthquakes: 15 of 7.0 and 4 of 8+ magnitude since 1900

Sources: Allen *et al.*, 2007; BBC, 2011; Barboza & Bradsher, 2012; Berkman, 1996; Burgers & Padgett, 2009; Chang, 2002; Chen, 2008; *China Daily*, 2010; Clegg *et al.*, 2007; DiPiazza & Bremmer, 2006; EYG, 2007; Fernandez & Underwood, 2006; GIC-EAC, 2007; Hoinig, 2006; KPMG, 2009; Konomoto, 2005; Leman *et al.*, 2011; Lim *et al.*, 2010; MacLennan, 2008; Merk, 2006; Mertha, 2007; Morrison, 2012; Morrison & Labonte, 2011; OECD, 2010; RRT, 2008; *The Economist*, 2010; 2011a; 2011b; Walsh, 2006; Wolf *et al.*, 2003; WTO, 2008; Zheng, 2004

METHODOLOGY

Design and sample

This model of ERM below drew on insights from Jaynes (2002), KPMG (2001), NSW (2005) and Olsen and Wu (2008) to capture the thinking of 11 Australian (7 males and 4 females) and three New Zealand (all males) expatriate managers, all with significant experience (10+ years) and expert, first-hand knowledge of Chinese culture and business. All participants were non-nationals who had lived and worked in China for extended periods, with five being from the Chinese diaspora.

Following Saunders *et al.* (2009), a purposive sampling approach identified these managers as having the prerequisite expertise to address in a knowledgeable and credible manner the following research questions that guided this study:

- What are the main areas of business risk “today” in the macro-environment?
- What cultural influences are at work “today” in ERM in China?
- Are some risk factors more likely to occur “today” than others are?

The information contained in their resumes supports the view that the managers constituted an Expert Panel, where the views of approximately eight to 12 individuals with acknowledged expert status in a field of study produce a convergence of opinion (see Saaty, 1990). The heritage of Expert Panels lies with the DELHPI method (Dalkey, 1963), which achieves “a balanced utilization of information and expertise from several viewpoints in decision-making” (Pulkkinen & Simola, 2000).

Initially, the Expert Panel used a Nominal Group Technique (NGT) to identify preliminary risk areas and risk scenarios that might confront a firm, company, organization or industry sector. A simulated case of a manufacturing-based international joint venture (IJV) [Tier-2 Ltd], located in a tier-two Chinese city and operating in both the local and global markets provided an anchor for the participants. Cities with this profile confront macro-level risks daily although firms here tend to be more traditional compared to their counterparts in the Tier-1 cities and/or the Special Economic Zones. The fictional IJV depended on access to a combination of local and offshore resources.

Nominal Group Technique

The NGT captures divergent views in multi-criteria decision-making (Delbecq *et al.*, 1975). An independent facilitator ideally facilitates the NGT (in this study, the author expedited the process). A white board with blank boxes encircling a map of China helped Panel members visualize and label the areas of risk (for example, BANKING) and reflect on these classifications for Tier-2 Ltd (a 20 minute exercises). Boxes can be added as necessary. Subsequently, members ‘filled’ the boxes with envisaged risk scenarios (for example – BANKING – non-performing loans).

In simulations, generic risk factors tend to emerge. However, in real-time settings, especially when using this approach with local Chinese managers, risk factors/scenarios are often framed in highly-specific and personal contexts. For example, a recent consultancy in Guangzhou conducted by the author with mainland managers produced the following detailed and contextual accounts of risk:

- The brother of the manager of our biggest supplier is the 2-I-C of a major competitor (supply chains issues and social capital networks)
- Mr. Z is accustomed to receiving a 'facilitation' payment well before our contract is due for renewal (corruption and social capital)
- The marketing manager of Firm X, which is in competition with us for the contract has significant contacts (*guanxi*) with District Governor Y - difficult for us to compete on our ability (social capital networks)
- I know new regulations are coming that will add additional costs to our business model (the legal and/or regulatory environment, *guanxi*)

The facilitator must always be aware of the National Cultures represented in an Expert Panel and even for the potential for group-think to skew the data produced.

Panel members offered rationales for the inclusion of their nominated risks scenarios. The finalization of this stage resulted in some 30+ risk factors identified being reduced to a manageable 14 factors through consensus. Each member was allocated a limited number of votes to cast across all the factors to produce a priority list. Table 3 is a snapshot of the non-prioritized risk factors (before voting and listed A-N) identified by the members during the process (note that risk factors can be rejiggered at any time in the process to avoid order bias).

Table 3. The macro risk environment for Tier-2 Ltd

A	Insurance costs and under insurance issues
B	Physical environment; vast differences in infrastructure etc. between districts, cities and towns
C	Human resources; difficulty of recruiting, training and retaining skilled staff
D	Political - type B - increasing pockets of severe social unrest and/or disturbances beginning to create problems
E	Difficulty in managing people and social capital networks, including <i>guanxi</i> and workplace relations
F	Constant threat of competitors stealing our IP and ignoring our IPR
G	(Unexpected large natural disasters) floods, earthquakes and landslides always a danger in some areas (unanticipated momentous events)
H	Suspect banking, financial and legal dealings (including currency)
I	Political - type A - CPC losing control of political system
J	Sustainability issues - type A - economic growth rates and fast-track development is unsustainable; growth achieved mostly via large- scale infrastructure projects
K	(Economic uncertainty) likelihood of unexpected and/or sudden downturns and/or bursting of real estate bubble
L	Sustainability issues - type B - ecological pressures from development increasing
M	Managing supply chains and level of integrated logistics available is not keeping pace with needs
N	Costs of dealing with entrenched bureaucracy and corruption (including facilitation payments - bribes)

Linear Rating Scales

LRS quickly and reliably rate the relative importance of several factors that require multi-criteria decision-making (Berrell & Smith, 1996). Participants rate factors affecting their decision on a 10 to 100-point scale, with at least one factor being placed at the 100-point - all other factors are placed at a relative position to the paramount factor(s). Statements like "factors deemed somewhat less important than the paramount factor(s) could be placed in the 60 to 80-point range" and "unimportant might could be placed at the 10-point or excluded" guide the participants. Figure 2 provides a simple example of the placement of four factors on a LRS.

Figure 2. Placement of four factors by person Alpha on a LRS

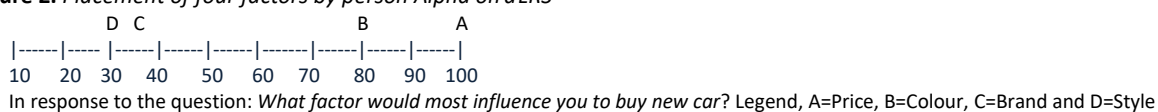


Table 4 contains examples of the numerical values and the priority calculations for placements by four people on a LRS. The value for each factor is calculated thus: for *Price*, 100+100+80+60=340. Dividing the total of the ratings for each individual factor by total of the placements for all factors on the LRS calculates the relative rating for each factor. For example, purchasing following the category of *Price* (340/1040) represents .3269 of total opinion. In this manner, LRS produce a comparative set of weightings for all risk factors generated by a NGT.

Table 4. Priority Rankings of Factors

Person	Price	Colour	Brand	Style	Total of LRS values
Alpha	100	80	35	30	245
Beta	100	70	50	25	245
Gamma	80	100	60	30	270
Delta	60	100	50	70	280
Total	340	350	195	155	Total for all people = 1040

Priority ranking calculation

Criteria	Rating	Total	Rating/Total
Colour	350	1040	.3365
Price	340	1040	.3269
Brand	195	1040	.1875
Style	155	1040	.1490
			sum to unity

Using a method that followed the principles of Cattell's scree test (Cattell, 1966) discriminated further between factors by identifying the point of discontinuity. Items below this point seldom influence the outcomes of multi-criteria decision-making. Nevertheless, the notion of a Black Swan event (an event with tumultuous outcomes that is neither expected nor predicted even though it is possible) suggests such discarding is also a risk (Taleb, 2007).

When required, Q-sort methods can further reduce several viewpoints on an issue to only a few. A series of prioritizing and deleting points of view ultimately produces a smaller number of views that represent a shared way of thinking about risk scenarios in China (see Brown, 1993).

RESULTS

After consolidation, the NGT identified 14 main business risk areas. Risk H (suspect banking, financial and legal systems, and included currency) originally started out as "banking and finance" issues. Following discussion, the stand-alone risk of a "weak administration of the legal system" collapsed into risk H because of the perceived interdependent nature of these areas. Panel members noted that major problems for their organizations in recent times involved aspects of all three elements of risk H. While the coupling of a weak legal system with the other two risk areas drew attention away from purely legal-based business risk, members were sanguine about the combination.

During the final consensus, two members added (with group approval), the category of "insurance" (A) – that is, the 'cost' of insurance versus the cost of not insuring. The category of "other" was added to allow participants to include risks in hindsight - the panel did not exercise this option. Following a review of the risks, the neglected category of "Black Swan" (Taleb, 2007) (G) joined the penultimate list, perhaps in the aftermath of the April 2013 6.6 magnitude earthquake close to the city of Ya'an.

Each member of the panel cast five votes to the areas they considered most important to produce the rank order in Table 5.

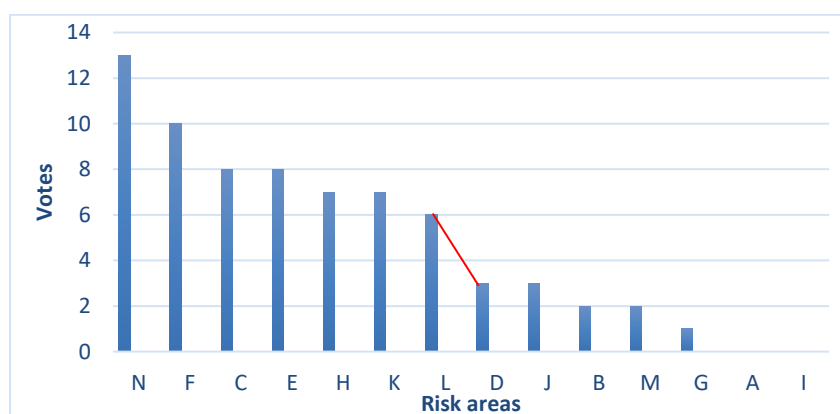
Table 5. Individual responses and priority ranking by LRS

Rank	Risk area with examples	Votes n=70	% of votes
1	N - Costs of dealing with entrenched bureaucracy and corruption (including facilitation payments - bribes)	13	18.57
2	F - Constant threat of appropriation of IP and violations of IPR	10	14.28
3	C - Human resources; difficulty of recruiting, training and retaining skilled staff	8	11.42
4	E - Difficulty in managing people and social capital networks, including <i>guanxi</i> and workplace relations	8	11.42
5	H - Suspect banking, financial and legal systems (including currency)	7	10.00
6	K - Economic uncertainty; likelihood of unexpected and/or sudden downturns and/or bursting of real estate bubbles and the like	7	10.00
7	L - Sustainability issues - B; ecological pressures from development increasing	6	8.57
8	D – Political type B. Increasing pockets of severe social unrest and/or disturbances beginning to create problems	3	4.28
9	J - Sustainability issues type A; economic growth rates and fast-track development is unsustainable; growth achieved mostly via large-scale infrastructure projects	3	4.28
10	B - Physical environment; vast differences in infrastructure etc. between areas	2	2.85

11	M - Managing supply chains and level of integrated logistics available is not keeping pace with needs	2	2.85
12	G - Unexpected large natural disaster and/or Black Swan event	1	1.42
13	A - Insurance costs and under insurance issues	0	0.00
14	I - Political type A: CPC losing control of political system	0	0.00

Risk L appeared as a point of discontinuity among the risk elements (see Figure 3). A crude separation discarded all risks below this point as being either low or negligible for further consideration compared to the other.

Figure 3. Seven priority areas and a point of discontinuity



Members subsequently categorized the risks as being high (constant), medium (often cyclical and/or contextual in nature) or low-level (unlikely to eventuate) (Table 5).

Table 6. Three levels of risk

Level	Generic Type	Perceived as
1	Bureaucracy and corruption (N) Violation of IP/IPR (F)	High and constant
2	Human resources (C) Social capital and workplace relations (E) Banking, financial and legal infrastructure (H) Economic uncertainty (K) Sustainability (ecological) (L)	Medium and often cyclical
3	Political (pockets of social unrest) (D) Sustainability (economic) (J) Physical environment (B) Supply chains and integrated logistics (M) Black Swans (G) Insurance costs (A) Political (CPC losing control) (I)	Low or negligible (although some may be high but unrecognized as such)

LRS rated the priority risk areas (N, F, C, E, H, K and L). The combined LRS data are set out in Table 7. The LRS produced a slight change in priorities with risks C and F swapping places in the table. Risks H, K and L seemed less likely to eventuate among the priority risks.

Table 7. Combined LRS ratings

Participant	Risks (rejjged order)						
	E	L	H	N	K	F	C
1	60	50	30	100	80	70	100
2	40	20	50	100	30	80	90
3	60	30	50	90	30	80	100
4	50	60	40	100	40	80	90
5	50	20	60	100	80	70	100
6	100	70	40	90	50	90	90
7	70	90	50	80	60	80	100
8	60	50	80	100	40	70	100
9	70	30	30	100	40	50	60
10	40	20	70	90	30	100	70
11	80	40	40	100	40	60	90
12	80	50	60	100	40	70	80
13	90	20	20	100	40	70	90
14	70	20	40	100	10	60	100
	920	570	660	1,350	610	1,030	1,260
Weight	14.37	8.90	10.31	21.09	9.53	16.09	19.68

Rank order of priority risk areas

Risk	Weight
Bureaucracy and corruption	21.09
Human resources	19.68
Violation of IP/IPR	16.09
Social capital and workplace relations	14.37
Banking, financial and legal infrastructure	10.31
Economic uncertainty	9.35
Sustainability (ecological)	8.9

DISCUSSION (PRIOTITY RISKS)

This simulated study considered only the macro-risk environment in China in December 2013. The main risks are identified, prioritized and discussed in the light of China’s then economic, social and political environment.

Cultural influences at work

China’s cultural architecture is at work in the Top 4 risks. The LRS data (Table 6) revealed that 70% of the total opinion about business risk resided in the following areas:

1. Bureaucracy and corruption (N)
2. Violation of IP/IPR (F)
3. Human resources (finding, training and retaining suitable staff) (C)
4. Social capital networks and workplace relations (E)

Bureaucracy and corruption

Bureaucratic machinations and corruption are the source of significant risks. Popular opinion supports this view – for example, China rated 79th of 176 countries on the Transparency Index (Transparency International, 2017). However, this view is not universal and the notion of “benevolent bandits”, who ‘look after’ the economy for the wider good, may still hold sway (Ang, 2008). Only one fifth of German companies identified corruption as a major concern in 2007. This figure represented a fall of 10% over 2004 data. On the one hand, the observed trend could indicate that the hardline approach of the Chinese government to corruption (especially the severe sentences handed out to corrupt officials) is reaping dividends. On the other hand, it may suggest that German managers are more skilled at negotiating their way through the ‘corruption’ minefields or that doing business in China is a contextual, even highly personal enterprise.

Nevertheless, in Sino-foreign exchanges, a fine line exists between business practices based on relationship management and those based on corruption per se. Some companies, for example, factor in facilitation payments of one kind or another into negotiations to smooth a contract’s passage. Others refuse to play this game, viewing facilitation payments simply as bribes. The recent trial and conviction of an Australian- Chinese manager in the well-publicized Rio Tinto bribery case in China reveals the complex interplays and relationships involved in considering transactions of this type (*The Economist*, 2010).

Intellectual property rights

The risk associated with IPR varies greatly depending on industry sector and the type of IP in question (Berrell & Wrathall, 2007). Low-tech companies face far less risk compared to companies that derive their competitive advantage from high-tech solution or patents, such as the pharmaceuticals. Nevertheless, in late 2007, 57% of German companies in China still reported violations of IPR (GIC-EAC, 2007). Looking ahead, the work of Dimitrov (2002) and Yu (2001; 2005) on the political, economic and legal foundations of this business risk in Greater China suggests the possibility of a sustainable IPR regime emerging in China as the society progresses and business models mature. One might expect this risk to reduce as the Chinese economy matures along the lines of the other countries that make up Greater China.

Human resources (finding, training and retaining suitable staff) / Social capital networks and workplace relations

The opaqueness of Chinese social capital networks poses problems for managers seeking to cultivate *guanxi* as a path to building strategic alliances and business networks to support ERM (Clegg *et al.*, 2007; Guo, 2001; Hwang, 1987). The profile of the Panel member suggests that managing social capital networks consumed a large component of their managerial duties and consequently, they were highly skilled in this area, perhaps placing additional weight on this risk factor. Nevertheless, the mismanagement or non-detection of relational business risks has serious economic consequences for IJVs particularly. Resolutions often lie with gaining knowledge of China's cultural dynamics and cognizant managers with knowledge of China's cultural architecture reduce the risk of turmoil within IJVs and bolster the prospects for ROI (Berrell, 2007).

New initiatives in China reduce the risk attached to inadequate human resources (HR) and human resource development (HRD). Because of its sheer size, early entrants thought China abounded with human capital. By the mid-2000s, a different view emerged. The supply of skilled workers is limited, where the talent pool reduces significantly as the level of skill and education required increases (Walsh, 2006). Therefore, building leadership capabilities, recruiting and retaining staff and increasing productivity are critical tasks for Chinese organizations today. In 2010 the Chinese government called for “new theories, knowledge, technologies and methods for middle and high-level professionals,” the promotion of HRD in the West and increased technical training for managers across China (*China Daily*, 2010). By 2011, the expanding business education market had over 30,000 students enrolled in 184 state approved MBA programs (*The Economist*, 2011). In addition, IJVs now offer a range of HRD opportunities for their workers following the establishment of pilot programs with Western partners since the late 1990s (Berrell & Gloet, 2005). Such initiatives will eventually meet the demand for educated workers across China.

The remaining three prioritized risk areas identified by the LRS – banking, finance and legal systems (H); economic uncertainty (K); and ecological uncertainty (L) are viewed as less pressing compared to the Top 4, although they remain important in the bigger picture.

Banking, financial and legal systems

Banking and risk from the financial infrastructure seems less threatening in the mid-2010s as China's economy continues to grow and develops. With a high volume of non-performing loans and the pivotal role of banks in financing investment, which was 45% of GDP in 2005, the banking system in the mid-2000s was high risk.

However, by June 2010, Chinese banking reforms improved the financial system and significantly reduced the cases of non-performing loans with investors welcoming additional reforms against losses - the combined provision ratio in this area for state-owned and joint stock commercial banks increased from 20% in December 2003 to over 130% in mid-2009 (OECD, 2010). In June 2011, the ratings agency Moody's indicated that perhaps 8% to 12% of loans Chinese banks could still turn into non-performing loans although this figure is significantly better than the 30% touted in early 2000.

China's exceptional economic performance, achieved with a financial system perceived to be flawed and inefficient, confronts risk managers daily. Researchers recently suggested that "selected inefficiencies of the financial system (actually) provide the adaptive capacity to buffer the (system's) macroeconomic properties" - consequently, "adaptive efficiency" rather than allocative efficiency bolsters the Chinese financial system (Harding, 2007; Maswana, 2008). Nevertheless, the state remains dominant in manipulating banking affairs, motivating risk auditors to maintain a watchful eye on Chinese banks.

Despite such risks, investors continue to pursue FDI opportunities and battle with a currency regime that baffles most analysts. Investors certainly benefit from China's booming economy (albeit cyclical) and hedge against currency fluctuations, although this strategy is highly complex and risk-laden. Morrison and Labonte (2011) emphasize that an undervalued RMB is also an "indirect export subsidy", which benefits global consumers and companies using Chinese components. Whatever the fix is for the RMB, managers should consider the risk of China not rebalancing its economy as possibly more important economically than any appreciation of the currency (Morrison & Labonte, 2011, p. i, 41-2).

Policy changes related to banking, for example, simply appear in the Chinese system with little or no communication (*Legal and Regulatory Updates* in Leman *et al.* 2015; *cf.* Hoenig, 2006). In settings of this type, ERM is missing reliable data for decision-making. This situation prompted foreign managers to rate the regulatory and bureaucratic nature of the environment as second to political risk in 2007 (EYG, 2007) (note that this study placed macro-political as a low risk area).

While the legal regulations concerning property rights are well articulated, the *Xinhua News Agency* reported in January 2008 that 9,029 cases of "fraud, illegal land seizures and other violations in the real estate industry", which involved various local officials, were resolved in the preceding nine months alone. In fact, in 2007, the Ministry of Construction began a clear up of the industry, which had become "hotbed of corruption" (see RRT, 2008). It may also be the case that risk related to legal issues also has a cultural component at its root.

In Black Swan territory, there is always the risk that a foreign company may find that its investment contravenes some new law and suddenly becomes "illegal or worthless" (*The Economist*, 2011). ERM in this setting is an essential proposition.

DISCUSSION (OTHER RISKS)

Economic uncertainty

Business risks associated with the economic uncertainty of doing business in an emerging market economy (K) are widely espoused (PWC, 2015, 2007; HBR, 2008). In the Chinese context, reading the strength and sustainability of the growth phases of the Chinese economy is difficult because views range widely between euphoric and cautionary tales. The rubbery nature of economic data from official Chinese authorities does not help the situation. In this light, views about China's emerging market remain diverse. For example, some investors see limited competition and competitive labour prices as motives to enter the Chinese market. In contrast, others view the same producers chasing after the same consumers in an economy where price and not labour costs determine success.

Since China's entry gained its WTO, non-tariff barriers reduced and internal competition intensified to the extent that internal competition is the major phenomenon faced by all Sino-foreign ventures today (see EYG, 2007). China also pays the same price as its global competitors for many raw materials although distribution costs vary between regions (for example, between sophisticated Shanghai and the cities of the 'Wild West'). Ultimately, the level of economic development determines transport, storage, plant and human capital costs in China and newcomers who build risk models geared to labour costs are doomed to fail (GIC-EAC, 2007; Hoenig, 2006; Merk, 2006; OECD, 2010).

Sustainability (ecological) (L)

In a recent *Guardian* article, Brubaker (2012) acknowledged China's significant challenges in this area (for example, "the country's deteriorating environment and the problems this causes - from air pollution to "cancer villages" near dirty factories, to the devastation caused by partially manmade droughts and floods"). However, on a positive note, Brubaker offered some light ahead against the current conditions. He indicates that much of the damage today resulted from China's "economic hyper-expansion and ignoring the damage that was being done,

China's economic, environmental and social resilience has diminished.’

However, while Western views about ecological sustainability revolve around the carbon debate and energy, most Chinese focus on ‘here and now’ tangible issues that directly affect them. Brubaker suggests that this pragmatism will continue to drive Chinese approaches to ecology over the next 20 years, although in this dynamic setting, China will be required out of sheer necessity to invest large sums of money into providing ecological solutions to the quite pressing problems observed today. These investments will be “social investments” in health, safety and community as a way forward. Ecological risk must eventually reduce in this environment, even if it is the result of pragmatic judgment delivering social wellbeing as opposed to delivering economic value.

Emerging and/or low risk areas

Emerging risk areas include grass roots political unrest and the uneven nature of economic development. The Naked Capitalism website offers current examples from China concerning instances of social unrest across the country – most, however, are concerned with economic and social issues rather than political issues as such. In the immediate future, such unrest seems unlikely to loosen the grip of the CCP.

Regarding the physical environment, concerns about China's supply chains have abated in recent years with investment in a variety of infrastructure projects. In the 1990s, foreign firms certainly faced huge logistical problems and by 2000, poor infrastructure cost the Chinese economy \$10b (Chan, 2002; US Department of Commerce, 1998). However, a decade later, significant improvements in economic infrastructure bolstered the efficiency of supply and distribution chains, even in the economically bereft West. Some 40% of the RMB 4 trillion-stimulus package of December 2008 targeted infrastructure - by 2010, privately owned and IJVs logistics firms competed head on with the state-owned companies. Pundits suggest that the further application of cutting-edge practices to China's supply chains will reduce logistics costs by 14% by 2013 (KPMG, 2009; Lim *et al.*, 2010; OECD, 2010). Nevertheless, risk levels vary considerably depending on one's geographic location.

Possibility that Government loses control

China's tremendous capacity to handle traditional, socialist and evolved forms of politics and economics simultaneously, is striking. Even so, the long-term consequences of blending seemingly capitalist principles with the espoused philosophies of socialist market economics – the ‘Red cat, White cat’ contradiction (Weil, 1996) remains passionate and ongoing within and outside China (*cf.* Morrison, 2012; Tietje & Nowrot, 2011). The Chinese leadership frequently demonstrates its “remarkable resilience” by adapting to inevitable political change (for example, Hong Kong SAR and Macau) and social change (changes to the one-child policy). Such pragmatism suggests that China might eventually transform itself on its own terms and in its own way independent of Western influence (see Chan, 2008; DiPiazza & Bremmer, 2006; EYG, 2007; Fewsmith, 2010; Guthrie, 2009; Huang, 2008; Pei, 2005; 2007; Zheng, 2004).

On a cautionary note, Bremmer (2006) suggests that China is nonetheless “inching toward instability as reforms strain the relationships between national and regional leaders, increasing the probability of an economic shock followed by a political one”. Regional business emerges as a risk in China and resides in the pockets of grass roots unrest festering not over ideology but over land acquisition, unemployment, inflation, working conditions and the disparity in wealth distribution.

Disturbances involving migrant workers are becoming more common in China with ‘protests’ of this type linked to China's economic downturn and workers' demands for “overdue wages from financially struggling companies”. A riot involving 2,000 workers at the troubled Foxconn Technology plant in Taiyuan in September 2012 demonstrates how quickly events unfold in China, with one commentator reporting that Chinese workers are now “more willing to stand up for their rights, to stand up to injustice” (Barboza & Bradsher, 2012). Nevertheless, the level tolerance among the leadership for high levels of continued strife is uncertain, although the outcomes of the Tiananmen Square protests of 1989 point to the types of responses that might eventuate.

Overlooked business risks in China

Black Swans seem omnipresent in the Chinese context, even though most players tend to be blinded by risks of this type. Perhaps the biggest risk for those doing business in China is ignorance of the possibility of a Black Swan event large enough to completely disrupt Chinese and indeed, global business models.

Potential fallout from China's expansion with island construction in the disputed South China Sea, possibilities of catastrophic earthquakes, the erratic nature of its stock market, environmental degradation, political bickering with neighbours like Taiwan, Japan and North Korea all have tremendous downsides. As highlighted by Vitaliy Katsenelson's (2015), China may be the “Mother of all Black Swans”. Practitioners of ERM in China must be constantly vigilant in this regard.

CONCLUSION

The approach to ERM above, applied to the simulated case and the subsequent discussion of the findings capture a time-specific risk environment in China. The approach, nevertheless, demonstrates how an expedient and quick assessment of risk can occur using intellectual capital as a principal throughout. When ERM “experts” also possess proficient knowledge of the Chinese cultural, social and political contexts, such judgements are more likely to be reliable.

ERM is one of the essential management tools in China. In 2010, the then Premier, Wen Jiabao, acknowledged that many risks still lurk within China's complex economy. However, it is likely this assessment will also apply well into the future. With pessimistic and optimistic views continuing to cohabit in most discourses on China's future, ERM will remain a significant source of competitive advantage for those people doing business in China.

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Series Editor

Dr Tim Martin
tim@wad $ematheson$.com



MIKE BERRELL is based in Melbourne and is a founding Director of WAD $Ematheson$ TM. Mike's client work focuses on high performance work organizations, new business venturing, competitive strategy and higher education management. He consults widely on establishing new business ventures in China and implementing management and learning systems in these environments. Mike's clients include the Chinese Hospital Association, Xian Janssen (Johnson&Johnson) China and SINOPEC. Mike also serves on several Business Advisory and Academic Boards and is a non-executive Director of GoVAL Ltd. He possesses experience in both the public and private sectors having held business interests in the hospitality and the motor vehicle industries. Currently, he maintains a teaching role in the MBA capstone subject at the Kaplan Business School in Melbourne.

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CONTACT

WAD $Ematheson$ Pte Ltd (201403579G)
51 Goldhill Plaza, #07-10/11, Singapore, 308900
Phone. + 61 408 504 686
Email. [mike@wad \$ematheson\$.com](mailto:mike@wad$ematheson$.com)
Home. [www.wad \$ematheson\$.com](http://www.wad$ematheson$.com)