Towards An Understanding of Terrorism Risk in the MNE:

Based on a literature review of terrorism and global business literature, this paper addresses those conditions that may lead to new considerations about risk and its management at policy and the MNE (multinational enterprise) level. How do MNEs adapt to the 09/11 - type risk in strategic management that shapes choices made for internationalization and for international business operations? It is observed that MNEs increasingly enlarge the notion of political risk. We suggest the development of a strategic risk assessment that incorporates terrorism which in its threat, event and aftermath does not remain local or national, but influences investment, location, logistics, supply-chain and other performance- linked decisions of the international value chain through an enlarged risk-return evaluation. Using the OLI- paradigm as a typology, we extend Dunning's work by incorporating the terrorism dimension. We do so mainly through the analysis and distinction of the most vulnerable links in firms' value chain in which adjustments need to be made in the face of terrorism threat, act and aftermath. This paper attempts to improve the understanding of international management in an era of global risk and uncertainty.

SOME DEFINING DIMENSIONS

Terrorism has been with us since time immemorial. It is mentioned in the bible and was a characteristic of the Roman Empire (Morris/Hoe, 1987; Schlagheck, 1988). Bernard Lewis, a Princeton scholar, suggests that already in twelfth century Persia, Hasan ibn-al-Sabbah emerged as a prime terrorist (Vick, 2004). This herbalist led the sect of the hashshashin, which engaged in ritual smoking and battled the crusaders for control of the Holy Land by making fear a weapon in itself (Lewis, 2003).

However, since 09/11, terrorism has become more global (Schneckener, 2002); by coming to U.S. shores, it presents much closer proximity to western civilization and through its more wide spread visualization it demands more of our attention. Contemporary terrorist activities share a number of common features which are inter-related and of a recently resurrected nature: the increasing dominance of religious motivation, modern business-like leadership structures, asymmetric warfare, and the use of victimization as a communication strategy.

Contemporary terrorism emerged in the late 1960s and is a complex, emotionally powerful phenomenon that challenges scholarly efforts aimed at its definition and conceptualization. A range of subjective interpretations has appeared in the literature, often driven by political rather than scientific purposes, but in 1996 Laqueur still notes the lack of a comprehensive, detailed definition. The phenomenon is often subsumed under political risk, guerilla warfare, and criminal activity. Its ends may even be considered legitimate by some audiences around the world.

Most definitions of terrorism converge around the notion that violence, or the threat of violence, is employed to frighten or intimidate people. Fear and threat exerts pressures on governments, populations and organizations that may help terrorists achieve goals that are unrelated to the violence itself. Alexander, Valton and Wilkinson (1979, p. 4) define terrorism as "the systematic threat or use of violence to attain a political goal or communicate a political message through fear, coercion, or intimidation of particular persons or the general public." Witschel (2004) adds a specific focus against non-combatant targets which we expand by excluding attacks on armed forces.

09/11-type terrorism adds a particular dimension to the management of the international value chain, because it exceeds the mere internationalization of previously- known forms of terrorism on a number of counts: The aim is not simply to overthrow a government or an occupying power, "but to destroy a form of society and eliminate a way of life" (Aznar, 2004). The terrorist ideology and membership are transnational per definition. Structures are decentralized, networks rather than hierarchical organizations, with transient groupings of individuals (Intelligence, 1995). Financing and logistics are maintained through worldwide sources, similar to the transfer mechanisms of the transnational corporation.

In this paper, we acknowledge that 09/11-type terrorism represents a new and particularly demanding challenge in terms of internationalization, to the extent that direct physical shocks are typically accounted for by political risk assessment management tools, yet indirect effects lack such analytical representation. An indirect impact has to be taken into account on a global scale, and, using the concepts of the OLI Paradigm, potentially alter foreign direct investment and international production. Dunning's OLI Paradigm has reminded us since 1979 that the three different FDI theories, equalling O + L + I, each of which has a different focus, changing the characteristics of MNE activity and of the global economic scenario, are complementary. O, i.e. ownership advantages, that are firm specific, explain why a company internationalizes. It is suggested that the MNE has one or more core advantages, which allow it to handle the costs of operating in a foreign country.

Location Advantages, 'L', that are country specific, ask where the firm shall locate its operations. If the firm is to exploit its competitive advantage and core competency together with factor advantages, then location factors (e.g. labour, land, low political risk), increase its specific advantages abroad. The T indicating internalization advantages assess how the company goes international, in organizational terms. What are the symmetries of the risk/return evaluation when a firm encounters different levels of direct and, in particular, indirect consequences from terrorism in the different phases of internationalization? The MNE with its various choices of entry mode is ultimately always dependant on a value chain. How vulnerable are these links and linkages that encompass global activity, and where does risk assessment in the post 09/11-era indicate that adjustments must be made in the face of terrorism threat, act and aftermath?

Our paper clearly distinguishes these links and classifies the risk and return evaluations of international firms along the OLI advantages, expanding them to the realities of an era of uncertainty and risk.

ASYMMETRIES

09/11 has been a perfect example for asymmetric warfare. Measured on a governmental scale, the resources behind these attacks were trivial. The assassins were "dispatched by an organization based in one of the poorest, most remote, and least industrialized countries on earth." (Commission Report, 2004). Only 19 suicide attackers and a financial input of only some US $ 500,000 killed more than 3,000 civilians, caused material damage of at least US $ 40 Billion and resulted in a major decline of world economic growth.

Psychological effects instill uncertainty into the economy, and affect the economic, organizational and governmental environment, as well as consumer behavior and corporate risk management. For terrorists, victims themselves are part of a communication strategy proliferated by the media, as conveyors of a triple message:

\* government is not capable of guaranteeing the security of a country

\* corporations, foreign visitors, and investors should avoid the country and are safe nowhere

\* any measure taken against terrorism will not be successful; terrorism is the dark side of globalization and uses the lessons learned from it.

These messages have a powerful impact on many. Corporations exposed to the international or operating across borders have paid a tribute to these phenomena. A survey of the National Association for Business Economics of its members (NABE, 2004) indicated that terrorism was seen as producing the greatest short term risk for the U.S. economy, far outstripping the government deficit or unemployment. Earlier, a Delphi study of policy makers, business executives and academics conducted in Europe, Asia and the Americas in 2003 found that security and terrorism mitigation issues represented the fourth-ranked policy concern on a global level. Specific corporate repercussions anticipated were a reduction in international spending and investment by firms, which was estimated to decline in some locations to a level of 62 percent of pre-09/11 values.

Investment was seen as migrating to less risky countries, with more expensive capital required for investment in riskier nations. A portion of that investment in turn further raises the cost of capital, since its support of anti-terrorism measures increases the transaction costs of international business. These cost increases do not come as a stable upward trend, but rather come in waves which set a higher plateau of costs. Furthermore, there was an anticipation of less expatriate personnel transfers in support of local operations and a reduction of technology transfer. All combined, these changes are likely to trigger a downward spiral of competitiveness in those countries which are already under pressure from terrorist threats (Czinkota and Ronkainen, 2005). Where will corporate strategy lead MNEs in terms of internationalization, location decisions, transaction costs and firm performance, in regard to corporate diversification? Empirical research within European and American MNEs over the past two years appears to indicate that the risk - return evaluation is key to how a corporation will adapt its strategic management decisions to the threat of global incidents of the 09/11 - type.

THE RISK RETURN EVALUATION

While research into the nature of organizational risk-return has accelerated in the field of strategic management since the 1980s (Baird and Thomas, 1986; Bromiley, 1991; Wiseman and Gomez-Mejia, 1998), 09/11- type terrorism risk requires further dissection.

The main statistical findings (e.g., Fiegenbaum and Thomas, 1995, 1988; Fiegenbaum, 1990; Bromiley, 1991) have generally confirmed the existence of a negative association between risk and return. The early literature dealing with risk selection behavior used the framework of expected utility theory (Schoemaker, 1982). The theory argues that within any decision framework a utility value is calculated for each alternative choice, and that a decision maker will choose the alternative that gives maximum utility for the same level of risk. A more sophisticated approach is provided by prospect theory (Kahneman and Tversky, 1979). Here a decision maker first reduces each alternative in a decision problem to a series of prospects, and then evaluates each prospect according to a value function which is hypothesized to be'S' shaped and centered on a reference point. The reference point is a critical element in prospect theory since the theory predicts that most individuals will exhibit either risk-seeking or riskaverse behavior when the outcome is either below or above the chosen reference point respectively.

Bowman (1980) explored 85 US industries and examined the relationship between firms' risk and return levels. Surprisingly, Bowman found that for most industries he studied, a negative relationship existed between risk and return. He named it the 'risk-return paradox' which he explained in several ways. First, he argued that good managers could simultaneously increase return and reduce risk. Decisions such as choosing the right environment, the right strategy and the right implementation procedures are examples of the behavioral mechanisms involved here. Indeed, strategic management research during the 1980s (e.g., Bettis, 1981; Singh, 1986; Jemison 1987) argues that the appropriate choice of organizational strategy explains the negative riskreturn association.

Second, Bowman also argued that managers are not always risk averse as is generally assumed by economists. In fact, in certain contexts they appear to be risk seeking.

Focusing on Bowman's second explanation regarding managers' attitudes toward risk as a frame of reference, Bowman (1982), Fiegenbaum and Thomas (1988), and Fiegenbaum (1990) used the reference point target return concepts from prospect theory to estimate risk-return associations. Ruefli (1990, 1991), criticized these findings, arguing that the paradox was a methodological artifact resulting from the chosen accounting risk measure.

A second stream of research motivated by the negative riskreturn association initiated by Bromiley (1991) and Wiseman and Bromiley (1996) has a rather processoriented theoretical focus. Using principles from behavioral theory (Cyert and March, 1963) and other cognitive models of risk taking, they work on the development of a normative model for the riskreturn association which includes explicit treatment of organizational variables such as targets, aspirationlevels, expectations, slack and firm size as well as cognitive modelling of decision-makers (Mosakowski, 1998). Fiegenbaum and Thomas (1988) reported that for most of the 60 industries studied during the 1960-1979 time period, there was a negative association between risk and return for firms below a target performance ('the so-called troubled firms') level, whereas a positive association was demonstrated for firms above the target. Fishburn and Kochenberger (1979) have estimated the ratio of the tradeoff for utility functions for individuals below and above targets. They also found that the majority of below-target utility functions were risk seeking and the majority of above-target functions were risk averse.

There needs to be yet another approach to the analysis of risk- return evaluations that potentially challenges and widens the international business research agenda. Key questions pertain to the effect of a risk that is as complex as that of 09/11- type terrorism on return considerations. At the same time resource dependency theory needs to be complemented with a nuanced shaping of the organization- environment interface that is influenced by the perception of risk and uncertainty. In an earlier work, Suder argues that the widened dimension of geopolitical risk adds a new element to the theory of internationalization and firm performance. To date, country environment classifications (Wan and Hoskisson, 2003) and political and strategic risk studies (Simon, 1984; Fiegenbaum and Thomas, 2004) have widely neglected the global implications of post- 09/11 risk challenges. Empirical research now demonstrates that MNEs clearly take into account a risk that goes beyond direct physical damage.

The focus on firm differences, on location difference (Ricart et al, 2004) and on risk difference is complex. The evaluation of global terrorism and its impact on the mature MNE go proportionally hand in hand with their multidimensionality: The process of globalization has given rise to increasing volatility, as discussed by Buckley and Casson (1998), and uncertainty, as defined by Mascarenhas (1982) which is underpinned by the spatial dimension (Porter, 1985; Dunning, 1995, 2000; Raines, 2003). The shortening of time and space in international relations hence increases the validity of a riskreturn study about the global impact of modern, asymmetric terrorism - its act, event and aftermath-, in the definition of corporate strategy.

THE PARADIGMS: TERRORISM RISKS AND BUSINESS PROCESSES

While the OLI paradigms recognizes the most crucial analyses and assessments made in international business and strategy research, it is essential to add that the relentless application of technology to networking has increased the vulnerability of corporations. A firm's performance under uncertainty and risk of terrorism will be a function of its ability to reduce its vulnerability to terrorist acts through risk assessment analysis and forecasting, shortened supply lines, and a decreased need for economic redundancy. This awareness leads us to look into further conceptualization, expanding the OLI paradigm. The result may favor local production and procurement or organizational restructuring (Czinkota, 2002), and its systemic uncertainty lead to strategic choices that may be determined through tools such as geopolitical scenario planning. From a macro perspective, firms need to adopt a new distributed architecture for the processes truly critical to their ability to function. A networked operation is far more resilient than a concentrated, standalone operation as the guiding principles developed by Guldimann (2004) have shown.

The modeling of key business processes and linkages indicates that operating the entire company on a fully redundant basis is not necessary and far too expensive. Operational resilience planning identifies which parts of the business need what kind of resilience. Landscaping around corporate headquarters, for example, will typically rank low; customer relationship management will rank high. An understanding of linkages means the screening of third-party service providers and suppliers to determine how important they are to the firm's activities. Equally important is an examination of these parties as to how they see their relationship with the firm. For example, do the parties that the firm depends on most regard it as critical to their business, and have they made arrangements to maintain the relationship in times of crisis?

Backup processes may support certain organizational operational capacities, data and knowledge as well as the people, and third parties upon whom the enterprise depends. A plan and test phase based on digital technology proves the potential of network-related contingencies. Establishing clearly defined responsibilities in the event of an emergency and sharing contingency plans within the enterprise and with critical business partners may help absorb some direct and indirect consequences of terrorism and increase corporate sustainability.

Guldimann (2004) states that recovering after the impact of a disaster (be it an earthquake, a tsunami or a terrorist attack, including cyberterrorism), no longer suffices to ensure organizational performance: To be deemed reliable, enterprises must be able to keep going continuously in the event of a catastrophe. Markets can melt down or freeze (choose your favorite metaphor) with great speed, and that speed will only increase as market participants and their systems become more closely intertwined. We will never be able to make ourselves immune to the human costs of attacks like 09/11 but companies and industry need to be made as immune as possible to the operational risks of such events.

THE ORGANIZATIONAL LEVEL

When examining the new challenges that international corporations are facing, one needs to study the organizational level that is at the forefront of risk management. Risk-return research demonstrates that organizational decisions, risk and performance are strongly related (Wiseman and Bromiley, 1996). According to Subramanian and Lawrence's (1999) clear demonstration, national locations differ by political, economic and geographical characteristics. The environment in which the corporation evolves is composed of components critical to diversification and firm performance. While resources theory focuses considerable international business research energy on location issues, prospect theory has provided a framework to explain why troubled firms may seek high risk when they are below performance targets, while successful firms may pursue high return at relatively low risk. We have found that in the case of tourism, the destinations offered to clients by less known operators will more often contain 'risky' places than those of confirmed operators (Suder and Multon, 2004). Nevertheless, it is not possible to generalize this hypothesis when we turn to the study of corporate strategy in highly funded sectors such as the extraction of oil or diamonds. Again, the risk- return evaluation needs to be applied to the specific sector and corporation. Exposure and resilience are not the same for everyone.

The research of 09/11- type risk and uncertainty, and their perception, requires assessment and analysis that is dynamic enough to reply to diverse organizational models in order to result in a resilience theory at the corporate level that responds to resource and prospect criteria, and that adds uncertainty to risk evaluations. Uncertainty is a characteristic of the business environment defined as "a lack of information about future events so that alternatives and their outcomes are unpredictable" (Friedmann and Kim 1988, p. 64). Terrorism increases the level of uncertainty in the business environment in the following areas:

\* Consumer demand for the firm's goods and services, which tends to modify (but not always decline) due to the fear and panic that ensues in the wake of terrorist acts;

\* Supply of needed inputs, resources, and services;

\* Government policies and laws enacted to deal with terrorism, thereby altering the business environment and modifying (mostly restricting) the ease with which business is conducted;

\* Macroeconomic phenomena, and

\* The nature of relations among countries.

The first components above reflect processes that are critical to international business. Neither O nor L or I can sufficiently counterbalance those variations: Consumer demand for goods and services is affected perhaps most by terrorist events, both directly and indirectly. However, the supply of needed organizational inputs can be altered as well, either directly or in conjunction with other effects, such as new government policies and deteriorating macroeconomic indicators. Governments impose new regulations and policies in order to counteract terrorism or its effects. Macroeconomic variables are affected when, for example, the value of a nation's stock market falls in response to terrorist activities through its mass psychological impact. Particularly in the (rare) case of state-sponsored terrorism or in the case of "suspected locale of seeds of terrorism" the quality of international relations among involved nations suffers. Many of these effects reflect indirect consequences of terrorism, which are often those most pre-eminent in the master terrorist's mindset. The actors, factors, phases, outcomes, and units of analysis involved in terrorism and international business can therefore be modeled along these scenarios.

Research on MNEs documents that host country environments can have a significant and direct impact on subsidiary performance and offshore success (Bartlett and Ghoshal, 1989; Luo and Peng, 1999; Rosenzweig and Singh, 1991). Czinkota, Knight and liesch (2004) link certain concepts on terrorism to the international activities of the firm. They offer an analysis on three levels, primary, micro-and macro-level of impact of terrorism on international business, researched through producers, consumers, and governments.

The factors of risk and uncertainty, that interestingly are both calculable for the insurance and re-insurance industry, and that occur through terrorism sets the difference between traditional political risk analysis and terrorism as a challenge to risk analysis in international business. Through the examination of the most vital components of the international value chain we can identify its needs to be stabilized so as to ensure sufficient revenue in the case of attack, and to be resilient to the direct and indirect global, far-reaching and interlinked impact of violence or threatened violence. Figures 1 to 3 on the next pages visualize the 10 most significant elements of the international value chain, and categorize these into the impact of terrorism's threat, act and aftermath on these elements within planning and time management of the subsequent stages reaching from one to eight. We find that four elements (or stages) of this chain require particular sensitivity and flexibility that corporate management takes into account. As mentioned earlier, we exclude direct impact assessment from this analysis.. These stages are marked on figure 2 within all three circles, and within figure 3 by flashes, and comprise procurement, service provision (both sensitive to the 'image' of the company or its origin), international trade relations (with their impact on trade creation and diversion), and conformity requirements set by governmental agencies, which have to be respected and included into the return calculations as a cost of indirect impacts. But, this covers only part of how strategic choices may seek to adapt MNEs to global terrorism in the search for internationalization \* advantages.

UNITS OF ANALYSIS FOR FURTHER RESEARCH

International business research is generally conducted at the firmlevel and investigates cross-border firm-level activities and their interrelationships with the external environments in which the firm operates, i.e. strategic options and management.

The international activities of individual firms, particularly the decision to export or to go international, is rarely taken on the spur of the moment nor is it an all or nothing proposition. In spite of the vaunted "over the transom" effect of e-commerce, the internationalization of the firm still tends to be a continuous process, with the firm gradually increasing its level of international involvement and commitment. Key features are the recognition of foreign market opportunities, the desire to explore them, the understanding of them, and the willingness to commit resources to international activities. They are time-phased functions for the experiences gathered by the firm and its managers. A key dimension of this internationalization process has been the identification of different stages in this process. Johanson and Vahlne (1977) suggested that a differentiation be based mainly on the types of intensity of involvement, i.e. no permanent exports, exports via agents, exports via sales subsidiaries and production in foreign subsidiary. Khan (1978) proposed a model based on a mixture of degree of planning, type of activity and location. Bilkey and Tesar (1977) introduced a systematic model of management and corporate experience which was expanded by Czinkota (1982) into an eight stages model, consisting of completely uninterested firms, partly interested firms, exploring firms, experimental exporters, disappointed exporters, temporarily declining exporters, experienced small exporters and experienced large exporters.

The differentiation of firms into these stages rests on their varying responses to corporate issues and managerial concerns. For example, as firms move up the scale in internationalization, the issues which affect them most are framed by logistic dimensions such as cross border parts availability and technical advice. On the "internal driver" side, managerial urge takes on a much greater importance for the experienced firms than for beginning internationalists.

This means that terrorist interruptions are likely to affect the experienced firm much more severely than the inexperienced firm. Terrorism will have its key impact precisely on those dimensions which are most crucial for the more advanced firms. Therefore, the effect of terrorism is likely to be felt over-proportionally by those firms that have advanced furthest in the international stages. These experienced firms may be hurt most and will therefore return to the levels of becoming disappointed exporters - while partly interested or exploring firms might well continue to forge ahead, since their expectations or values have not yet been sufficiently affected. Suder (2004b) argues further that the risk exposure - being equal to all categories but resulting in unequal recovery- may oblige a general revisiting of risk assessment and management tools. She suggests that geopolitical scenario planning may be a useful tool in this framework: Geopolitics takes existing power structures as given but not everlasting, and works within these borders but maintains the flexibility to go beyond them. Microsoft's recent massive move into China and India may serve as example (Bill Gates, Paris, 17 November 2004, AJE Conference, CNAM). By nature, geopolitics reflects a transparent and objectified world which is commonly based on truth systems such as ideology, religion or scientific versions of religion. Its dominant narrative is based upon concepts of the global balance of power and actors, which include the MNE, as an important player in a fundamentally anarchic and ephemeral world. They make strategic choices, based on a risk-return evaluation.

GIVING STRUCTURE TO NEBULI

A critical research stage in any field is the establishment of a theoretical, conceptual base on which further research can be built. Requirements for successful research into the link between terrorism and international business include the identification of key variables, their interrelationships and operationalization for future research. This task is complex because terrorism, and its effects and consequences, are relatively nebulous constructs. For example, while terrorism certainly has its consequences, many of these are quite difficult to attribute in their causality. It is difficult to measure to what extent an economic downturn or the decrease in a firm's performance is a function of terrorism, or of other factors, many of which may even be unintended consequences precipitated by the intended victims. It is even more difficult to incorporate into such measurement the cost of foiled terrorist attempts. The assessment grows even more complex if one considers that terrorist activities are the only large-scale disaster which actively seeks to circumvent preventive or precautionary efforts.

Three levels of analysis can be brought to bear upon terrorist incidents. First, there is the primary level, where the most immediate and direct consequences of a terrorist action are investigated. second is the micro-level of analysis where specific regions, industries, or levels in international value chains are scrutinized. The third level is the macro level, where global shifts and adjustments are considered. (Czinkota et al. 2006; Suder, 2006)

For example, at the primary level, the bomb explosion in BaIi affected a nightclub, some surrounding hotels and several hundred visitors. At the micro-level, an analysis would evaluate the effects on tourism in Bali, and in other destinations that were previously considered safe. It would also include tighter transportation security measures and the resulting slowdown in logistical activities. At the macro-level, the attack had severe implications for Indonesia and nearby countries, particularly in terms of their perceived security.

In conjunction with the different levels of analysis, one needs to consider both the direct and the indirect effects of terrorism. The direct effects include the panic and consequent changes in typical activities (such as a decline in spending by consumers and investors), as well as the immediate actions taken by businesses, industries, local government agencies, and nongovernmental organizations and associations. Indirect effects are related to an event through one or more nodes of interaction, and can usefully be separated into both, (a) longer-term actions and new policies enacted by national governments as well as national and supra-national governmental organizations (e.g. Centers for Disease Control, United Nations, World Bank) over the longer term in response to terrorist events, and (b) impact on corporate strategy.

There may be an enactment of new rules and regulations intended to improve security conditions, but which simultaneously introduce new levels of friction into the efficient operations of the firm. These responses alter the business environment. Their externalities might well be the most difficult to identify, analyze, and incorporate into corporate decision-making and strategy formulation.

When conceptualizing the effect of terrorism on international business, it is useful to distinguish the most vulnerable links in firms' value chains. While an attack can destroy an entire firm, such events are relatively rare. From the individual producer's perspective, it is more useful to view terrorism at the micro-levels wherein input sourcing, manufacturing, distribution, and shipping/logistics are likely to be the most vulnerable areas. We believe that the micro level is also the one where effects can be most reasonably distinguished in terms of their causality, while still remaining far reaching and of high impact and reliability.

At the consumer unit of analysis, management and marketing are perhaps the most important organizational functions for dealing with the 'before' and 'after' of terrorist events. To the extent that they affect buyer confidence and spending levels in national and global economies, all terrorist incidents are ultimately "macro" as a result of their negative externality effects. As the 09/11 attacks revealed, these negative externalities can have global implications, regardless of where the act of terrorism occurs.

The effect of terrorism will also affect one's views of established international trade rules. Take the example of export subsidies. Historically, such subsidies have mainly been discussed under two perspectives. One has dealt with the micro issue: Who, among exporters should receive such subsidies? Should it be the large, established firms or the new to export and new to market companies? The second perspective has addressed the macro dimension: which countries should be entitled to subsidize their exports? Should it be the "rich," developed nations (particularly in their agricultural sectors), or should such privileges be reserved for the more "impoverished" countries which need to build market share around the globe?

The traditional additionality argument has held that on the micro level subsidies should be provided to new participants rather than making government expenditures simply another "Boeing or Airbus" subsidy of exports which would have taken place anyway. On the macro level, international trade negotiations have tended to abolish trade subsidies of the rich, and reduce those of the poor.

The introduction of the terrorism dimension, however, changes the picture. On the micro level, help is needed most by the more advanced firms, which see themselves under the heaviest threat from terrorism and with the greatest need to harden targets against attacks. After all, even airplanes have been used as missiles. Similarly, on the macro front, the largest set of expenditures, and therefore subsidies for reorientation have become the burden of the more advanced nations. They are the ones to build and systematically expand the international bubble of security. At the same time, security concerns will increasingly require firms to comply with international protective measures and protocols, if they are to be part of the international supply chain. Doing so will demand the investment of funds both into the national infrastructure, as well as into corporate processes, ranging from port facilities to communications infrastructure and "tagging and tracking" equipment. Since the basic support structures required for such international participation are least likely to exist in developing countries, it may well become a "do or die" proposition for policy makers struggling to provide an internationally competitive platform for their firms. For them to do so in a timely manner without subsidies may well be impossible.

Management's ability to maximize profits in the face of terrorism is a function of its effectiveness in stabilizing risk and ensuring sufficient compensatory revenue for any remaining exposure. Within the international value chain, efficiency derives primarily from the optimal sourcing of inputs (e.g., factors of production) and the minimization of costs associated with distribution and logistics. Terrorism moderates the links between value-chain activities (in which managers seek to optimize effectiveness and efficiency) and firm performance (e.g., profitability). Terrorism's effects will pose a "drag" on these linkages and managers will seek to overcome terrorism's effects via judicious management of resources, strategies, and processes. With this, the paradigm of risk assessment advantages ('R') along the international value chain expands the OLI paradigm to OLIR advantages.

According to ASIS International, general security risk assessment guidelines could be encouraged to follow a process flow chart (ASIS, 2003). This framework model has been adapted by Suder (2004a) to apply both geopolitical scenario planning and political risk assessment. It incorporates the quantitative and qualitative assessment of effects on international value chain activities, three levels of analysis, and distinguishes between terrorist threat, act, and aftermath. The three components are essential units that help assess the direct and indirect impact on competitive advantage and return on investment. This necessitates a clear and objective identification of assets and actors at the start, and of the feasibility of options in correlation to potential loss, disruption and their cost. The frequency of events, although difficult to define due to the apparently 'random' nature of terrorism, can nevertheless be pinned down through empirical data accessible through the police, security or insurance companies. When evaluating the impact of the threat on a company, a big threat that has a small probability of occurrence might be considered as important as a small threat that has a large probability of occurrence. The risk contains probability and impact data, with impact being the return lost, in correlation with the probability of operational resilience. If uncertainty criteria are equal to all forms of internationalization, if the geopolitical impact is small and the probability low, a mitigation of risk will not be considered feasible, because a cost/benefit ratio will not be encountered that would lead to reassessing international operations and strategies even in times of crises. If the risk is high, assets can be redistributed in a manner that ensures operational resilience throughout crisis - an evident advantage for the international firm.

FUTURE DIRECTIONS

Terrorist events are by their nature clandestine and typically occur quite suddenly. As we have seen, not even the world's best intelligence agencies excel at predicting specific terrorist events. Terrorism greatly increases the (perceived) level of uncertainty for international business and therefore raises risk more than political shifts.

The paucity of terrorism research reported in the international business literature may result in part from terrorism being difficult to define and conceptualize. The concept itself and the various ways in which it affects risk management at organizational level and international value chain activities are undoubtedly difficult to investigate and model. While the study of terrorism has been approached using various perspectives, including political science, psychology, and sociology, international business research may use various methods to gauge terrorism's effects, including surveys directed at managers and consumers, along with measures from secondary data of its impact on specific industries, as it becomes increasingly available. The inclusion of geopolitical risk (Suder, 2004a), political geography (Weigert, 1957) and governance (Harvey, 1993) in risk assessment can lead to a sharp reversal of risk exposure strategy. The California Public Employees Retirement System' (CALPERS) decided to divest from four emerging market countries in February of 2003, namely: Indonesia, Malaysia, the Philippines, and Thailand. CALPERS'divestment strategy stems from a revised framework for evaluating emerging market countries, combining country and market factors, with a 50 percent weighting factor, respectively. CALPER's rationale is that "without strong country infrastructures, including social, to support the capital markets, the latter cannot be truly viable".

The internationalization of business continues as part of specific phenomena widely recognised in international business research. Business plans are prepared on a multinational scale, and need to include geopolitical and cultural diversity, tackle foreign competition and trans-national collaborations. What has really changed is that the risk that we are assessing is more diversified, ubiquitous and immediate

It is of big concern to international business, not necessarily directly but mainly indirectly through the consequence of uncertainty, curbed by the inter-linkage of corporate activity within the international business environment. Ownership advantages, that are firm specific, explain why a company internationalizes. Country specific location advantages define where it is best for the firm to locate its operations.They are not global and do not assess global vulnerabilities. If the firm is to exploit its competitive advantage and core competency together with factor advantages, then location factors increase its specific advantages abroad.

Internalization advantages assess how the company goes international in organizational terms. In international business literature, the risk/return evaluation on an international scale seems to typically neglect an assessment of the consequences of direct and, in particular, indirect impacts from terrorism on the firm. Business realities today teach us better.

Our paper studied different essential aspects of the OLI paradigm and of an expansion of it; the main contribution of this paper is to expand Dunning's work to the new realities of uncertainty and risk which are more global, more interconnected, and less symmetric than ever. We believe that the study of geography and risk, of risk and return, and of the strategic implications of 09/11- type terrorism on the organizational level leads to a revival of domains such as economic geography (Buckeley and Ghauri, 2004) and geopolitics. This revival consequently facilitates the operational definition of the risk assessment advantage developed in this paper. When we map the world, we tend to do so mostly on the basis of the political/economic priorities of the region or pattern that we belong to. We are innately subjective, and need to assess and prioritise assets that are useful to examine. Prospect and resource dependency theory engage a prioritizing effort that, we find, is yet insufficient for the understanding of the valence of terrorism risk in the post -09/11 business environment. Scenario development using units of analysis may sharpen the risk assessment process of the corporation, and complement the 'lenses' used for the definition of corporate strategy through varying degrees of diversity.

We are fully aware that the available international data are fraught with all the weaknesses customary to early field data. Also, more empirical research will be needed to promote the mainly conceptual perspectives developed in this article. The complexity of this research is clear, but corporate assets and risk identification are critical to international business management and performance, and to the future evolution of the theory of internationalization. The intention of this paper is to complement the thinking and research in a changed global business environment. We propose conceptual frames that help analyze post- 09/11 risk analysis and assessment, using empirical findings, to demonstrate that options such as internationalization modes, value-chain decisions and other major strategic choices are increasingly taking into account a global risk-return evaluation. The contemporary MNE adapts to the new challenges, and strives to develop from disaster recovery to operational resilience in the uncertainty of the external business environment. It is in this framework that MNEs learn how to adapt strategy in specific ways in the face of threats that target the global economy.