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# **The Emergence of Risk-Based Regulation in Higher Education Relevance for Entrepreneurial Risk Taking by Business Schools <sup>1</sup>**

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## **Abstract**

**Purpose** – Business schools are increasingly positioning themselves as entrepreneurial risk-takers. In doing so, they are front-runners of a marketization trend affecting the entire higher education sector. In response, governments have begun to subject higher education sectors to systems of risk-based regulation. The purpose of this article is to study the likely impact of regulatory change on business school behaviour.

**Design/methodology/approach** – The article focuses on the financial dimension of institutional performance and draws on the corporate risk management literature to derive general design principles for managing risk-taking in business schools. These are matched with a review of the regulation literature to evaluate regulatory effectiveness.

**Findings** – Business schools are facing a double-hurdle test when managing their risk position. They need to protect their financial solvency with the maintenance of properly functioning risk management systems. At the same time, they will increasingly be subjected to regulatory scrutiny with regulatory shortcomings likely to be mapped into binding but sub-optimal behavioural constraints. The article offers initial reflections how business schools can cope with this double-hurdle.

**Originality/value** – Risk management in higher education, here with a specific reference to business schools, has so far been under-theorized from a financial perspective and, as a consequence, the debate on risk-based regulation lacks a proper foundation. The article addresses this shortcoming.

**Keywords** Business Schools, Risk Management, Risk-Based Regulation, Entrepreneurialism

**Paper type** Research Paper

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## **1. Introduction**

An increasing number of business schools represent entrepreneurial organizations displaying behavioural traits strikingly similar to private for-profit enterprises. They enjoy considerable autonomy from their university parents and fund themselves to a significant extent with proprietary revenue streams. While still maintaining their traditional focus on degree teaching and academic research, they are also engaged in an increasing number of commercially- motivated ventures such as executive training, franchising and validation of degree programs, contract research or business consulting. Entrepreneurialism is often justified on the basis of a revenue-for-growth formula to expand the school's international relevance and competitive strength at home. Additional revenues can however only be earned if the provider commits financial resources for investment and is willing to bear the associated risks. In order to ensure long-term financial viability, entrepreneurial risk-taking therefore requires risk management as a natural counterpart – they are 'two sides of the same coin'.

The idea of risk – its identification, assessment and management – as an object of increased organizational attention is gradually pervading the field of higher education (TEQSA 2012, HEFCE 2005). Although risk mitigation and transfer has a long history in the commercial sector, only comparatively recently have such notions seriously informed the actions of universities and the bodies that regulate them. It is reflective of the increased marketization of higher education institutions (HEIs) and the fields within which they operate. Business schools can be considered front-runners of this general marketization trend. It has been accompanied by the associated strengthening of universities as corporate actors with self-responsibility for their futures, rather than comprising a rather loose collection of academics and administrators, and with reputational preoccupation increasingly corporate-based rather than predominantly focused on the actions of individual researchers. Regulators have already responded by incorporating the risk dimension into their audit and monitoring frameworks and, more recently, by applying risk-based regulation as a means of aligning the intensity of oversight with the degree of risk carried by the HEI.

This article studies the influence of risk-based regulation as the currently dominating form of regulatory intervention in shaping risk-taking behaviour of business schools. We argue that regulatory intervention will not induce the emergence of risk management systems, which adequately deal with the risk-related consequences of entrepreneurialism and marketization. Risk management, will in the context of this article, be analysed from a financial performance perspective with the understanding that reputational risk-taking ultimately impacts financial

outcomes, albeit indirectly and in rather complex ways. The course of analysis sets out in section 2 with a description of the general principles of risk-based regulation as well as the current status of implementation. Section 3 discusses how regulatory shortcomings limit the scalability of regulatory scrutiny with entrepreneurial risk-taking – a central premise of risk-based regulation. Section 4 describes the general features of state-of-the-art risk management in a business school context to demonstrate that the managerial response to entrepreneurial risk-taking must target an over-fulfilment of existing regulatory standards. Regulatory intervention can nevertheless not be assumed to be behaviourally neutral. The concluding section offers a series of reflections on how rising regulatory scrutiny may create an incentive for business schools to pro-actively establish a risk management function modelled around state-of-the-art principles. The concluding section also includes a discussion of the somewhat ambiguous role of university parents as regulatory intermediaries.

## **2. The Emergence of Risk-Based Regulation in Higher Education**

Monitoring and supervision of risk-taking have by now become mainstream regulatory activities in a number of countries. Since 2000, the Higher Education Funding Council for England (HEFCE) for instance requires HEIs to maintain a system of risk controls and risk registers as a condition of qualifying for funding (HEFCE 2001). Periodic updates of the guides of good practice and the issuance of supplementary risk management templates and standards have targeted the establishment of robust internal controls based around risk amelioration (HEFCE 2003, HEFCE 2005, HEFCE 2008). Most notably, HEFCE has derived a so-called risk tree, which offers an exemplary risk categorization, a risk ranking (high to low) as well as contributing factors, mitigating actions and early warning indicators (see Huber 2010 for a detailed discussion). Consistent with the corresponding norms established by the Combined Code of Best Practice targeting listed companies (Financial Reporting Council 2005), HEFCE emphasizes that risk represents a source of value added as well as a potential hazard for HEIs. Moreover, HEFCE regards enterprise risk management as a matter of high-level governance and accountability, not a specialist activity carried out by a small unit some distance removed from everyday operational routines (see also Tufano 2011 for a related discussion of this aspect).

This elevation of risk management to a preoccupation at Board level is also reinforced by a growing concern with reputational risk within universities, such as from downward trajectories in university rankings, or as a consequence of commercial undertakings ventured internationally or domestically

without proper due diligence (Power et al. 2009). Broadly, the activities of academic units within the relatively ‘loosely-coupled’ organizations that still characterize most universities and who conventionally are engaged with the mainly non-prescriptive and uncertain technologies of teaching and research, also offer potential reputational and not easily foreseen hazards for institutions. Universities especially have difficulty in controlling their core functions through the typical and diverse risk management strategies available to other organizations. They tend to use ‘black boxes’, particularly the idea of ‘reputational risk’ as ‘an all-purpose tool of risk management, allowing universities to capture all possible challenges and problems in terms of risk’ (see also Huber 2011). Reputational risk in this context refers to the unexpected variation of quality proxies such as rankings and league tables.

More recently, the notion of the regulation *of* risk has elided into the idea of regulation *by* risk. In 2011, the UK government published reforms for higher education in England that envisioned HEFCE becoming a ‘lead regulator’ for the whole sector, including on such matters as external quality assurance, in which it would come to direct the previously autonomous Quality Assurance Agency (HEFCE 2011). In line with a strong ‘deregulatory’ and marketization rhetoric, risk-based regulation seems to be the order of the day. The articulated intent is to reduce frequency and depth of regulatory inspections for the vast majority of institutions – those deemed to have well-established track records of compliance and quality control. Younger and especially private providers are regarded differently, which is based on the premise that they carry greater risk to the public and the consumer than other providers. They will face fewer restrictions on the capacity to gain independent degree-awarding status and to achieve university designation, but will receive more regular monitoring on quality assurance than their university counterparts. In Australia, too, the creation of the Tertiary Education Quality & Standards Agency (TEQSA) as the new regulator for the higher education system is justified on similar, risk-based grounds, and is seen as helping Australian universities to compete globally without onerous external regulations dampening entrepreneurial zeal (TEQSA 2012).

Regulation *by* risk targets a reduction of the regulatory state. It does so by moving away from more standardized, impersonal, and ‘all-equal-before-the-law’ approaches toward a more targeted and proportionate form of intervention (Raban 2011). The proposal for making higher education regulation more ‘risk-based’ aims at reducing costs for both the regulator and the majority of HEIs, whilst focusing on where risk is believed most likely to crystallize (Huber 2009). The regulator’s risk assessments will lead to a classification ranging from ‘highest risk’ to ‘lowest risk’. When

checking the robustness of the systems of internal controls, most scrutiny will then ultimately be applied to HEIs in the 'highest risk' category.

Risk-based regulation is viewed as operating in a more open and transparent manner than the bureaucratic, rule-compliant assessment methods of conventional 'command-and-control' regulation. Publicly justifying risk evaluations, for example, is regarded as enhancing the rationality and evidence-based nature of regulatory decision-making, and as enabling the marshalling of regulatory resources to achieve increased effectiveness and efficiency. Risk-based regulation also offers incentives for regulatory compliance and contains an explicit development trajectory. While all-inclusive, regular monitoring may be necessary during the early stages of regulatory development, successful implementation holds out the prospect of more selective and targeted regulation as systems mature. Regulatory compliance becomes induced by the prospect of receiving less scrutiny as a reward for 'good' behaviour.

### **3. Regulatory Challenges and Inefficiencies**

Risk-based regulation in higher education throws up a number of difficulties; HEFCE and TEQSA, for example, face critical challenges in becoming risk-based regulators for higher education in their respective countries. First, there is a need to decide which institutions fall into categories ranging from high to low risk, and then to justify such decisions openly and with evidence to both the targets of regulatory control and to the wider public. This challenge promises to easily mire regulators in prolonged controversy (King 2011). Higher education systems are characteristically segmented by reputation and prestige (and to a lesser extent by product), and this increases with marketization. The relationship between prestige and quality (especially for teaching) is not clear and high-prestige HEIs may escape external reviews on non-quality grounds (such as reputational status). These institutions may however maintain state-of-the-art risk management systems and could therefore contribute to the diffusion of good practices to the rest of the sector. After all, quality assurance is not only about accountability but also about development and the spreading of examples of best practice to other organizations. The application of selective scrutiny may therefore hamper the effectiveness of risk control by HEIs.

A second and related point is that proper risk oversight cannot conceivably reduce the regulatory burden for the majority of HEIs in an environment where entrepreneurialism is gaining sector-wide relevance. Regulators need to accept that entrepreneurialism frequently involves well-established non-profit institutions, including those in public ownership. They are in fact the new entrepreneurs

in higher education and should therefore be the main targets of risk-based regulation. In other words, regulatory effectiveness is likely to require that all providers are subjected to regular monitoring for the purposes of ‘detection’ as well as ‘systems review’, but that risk enforcement can be applied more selectively (Black and Baldwin 2012). It should involve the escalation up a pyramid of sanctions culminating in severe punitive penalties in the event of persistent non-compliance.

Third, the commitment to formalized, evidence-based, and highly transparent risk assessments will prematurely over-narrow regulatory options. Specifically, it results in an erroneous prioritization of certain issues and organizations as ‘risk carriers’, leaving regulators prey to rapidly changing and unforeseen circumstances because of an over-commitment to original risk assessments (Baldwin et al. 2012). Regulators may thus become solidified in particular ways of assessing risk. While institutional track records justify a classification as ‘low risk’, reducing external monitoring for a high proportion of institutions may lead to a systematic failure of capturing risk incubation in some entities, for instance as a result of rising competitive pressures, and may even disconnect the regulator from a large part of the higher education sector.

Fourth, regulators are likely to respond to the risk of public criticism with the avoidance of judgemental discretion (Baldwin et al. 2012). The concept of providing university students with differential levels of protection, depending on whether they are enrolled in a ‘high’ or ‘low’ risk institution, is likely to lead to unfavourable reactions from the ‘consumers’. In the context of risk-based regulation, regulators are conceptualized as undertaking a finite and publicized set of tasks within highly transparent procedures and with clearly stated prioritizations. A culture of failure avoidance is likely to lead to protocolization and bureaucratic rule-following, which is the very opposite of what risk-based regulation attempts to accomplish (Hood 2011). As explained by Edwards (2012), lessons from other sectors subjected to risk-based regulation indicate that the benefits of deregulation are in danger of never being realized. In addition, there are a myriad of other regulator-specific issues to be considered as potential sources of regulatory failure (Rothstein and Downer 2012, King et al. 2007, Hood et al. 2001).

Lastly, existing risk-based regulation regimes fail to offer broad coverage of the risk management process. They tend to be very explicit on risk identification (HEFCE n.d.), but are rather vague when it comes to specifying organisational risk appetite, transforming ‘risk appetite’ into early warning indicators on an operational level and quantifying the impact of risk and the effectiveness of risk mitigation. While HEFCE (2005) and TEQSA (2012) for instance mention the need to track

the correlation and clustering of risks, the inherent logic of regulatory oversight still follows the ‘silo approach’ of linking individual risk factors to performance shortfalls, e.g. reflected in the use of likelihood/impact matrices (illustrated by The University of Leeds 2012, The University of New England 2012). It implies that organizations focus on ‘major risks’ and quantify risk as well as risk impact on a stand-alone basis. The problem essentially mimics the situation currently found in the regulation of the corporate risk management function (as for instance illustrated by the proposal of AGB and NACUBO 2007 to adopt a variant of the U.S. COSO framework).

It follows that the basic premise of risk-based regulation, the positive relationship between regulatory scrutiny and perceived institutional risk-taking, may de facto never be achieved. Most importantly, entrepreneurial business schools may escape regulatory oversight on the basis of their own market positioning as well as the failure of universities to translate regulatory standards into internal risk governance principles.

#### **4. Benchmarking with State-of-the-Art Risk Management**

Business schools (and their parents) face a so-called double-hurdle of risk, which consists of, first, the challenge of maintaining financial solvency in the face of increased market risk and, second, the need to cope with rising regulatory scrutiny (most likely by being subjected to some form of risk-based regulation). As entrepreneurial risk-taking is evolving into the *raison d’être* of institutional existence, business schools are forced to move from managing performance risks on an ad hoc basis to a more deliberate approach. At the same time, they will have to comply with potentially detailed and constraining risk management regulations. The double hurdle implies that risk management appears on the agenda of business schools in two distinct ways, either as the outcome of organizational self-reflection that risk exposures need to be managed pro-actively or as a behavioural minimum standard defined by external parties. The former represents a change in the institutional objective, which will determine how and to what extent the organization is gravitating voluntarily toward the implementation of state-of-the-art risk management principles. The latter can shape outcomes if minimum standards translate into binding behavioural constraints.

While the period leading up to the 2008 financial crisis has been characterized by reliable market growth, recent times have been more turbulent (Bienen and Boren 2010). Especially institutions focusing on post-experience education subsequently had to cope with substantial short-term revenue losses leading to faculty and staff layoffs, partial divestments and other forms of institutional restructuring (Bradshaw 2012). It is indicative of the fact that risk management of many business



schools is still in an embryonic state. They often lack formalized processes to ensure that key risks are accounted for in strategic decision-making. Risk exposures are frequently managed ex post when they have already developed into tangible problems (Wylie 2011).

The spread of risk-based regulation will force business schools and their university parents to start investing in risk management capabilities and processes. This should not be misunderstood as a mere back-office activity to record risks and their probable impact or as a compliance function to fulfil regulatory norms. It is above all a cultural challenge to ensure that risk thinking becomes a pervasive organizational feature and that risks are adequately managed and accounted for at their source, the business school operations (Achampong 2010). Depending on the accepted level of entrepreneurialism, business schools will need to move distinctly beyond minimum standards set by external governance bodies. Risk management policies need to shield business schools against risk-related ‘margin squeezes’, which requires analysing the risk dependency of operational returns on the school level and for individual activities. While operational measures will primarily target activity-level performance, adjustments of the business school’s ‘business model’ shape aggregate risk dependency by influencing the correlation structure across different activities.

Risk management is often misunderstood as an activity to protect an organization against adverse developments emanating from a hostile environment. Examples of such exogenous risks are currency rate fluctuations impacting tuition revenues earned abroad or changes in public university funding schemes. Experience however shows that many critical risks are rather of an endogenous nature and emanate from the organization itself (Helsloot and Jong 2006). Endogenous risks can in principle be addressed in the context of designing the internal risk governance system. For that purpose, school-based risk management guidelines need to be mapped into a system defining risk ownership, risk management responsibilities and risk reporting standards. Endogenous risks are frequently reputation-related such as institutional non-compliance with market-wide professional standards or unethical behaviour of members of the school community.

Risks can also be differentiated into so-called ‘white swans’ and ‘black swans’. White swans represent well quantifiable risks, frequently subject to the ‘law of large numbers’ and mean reversion. They lend themselves easily to probabilistic modelling, either based on historical data or by utilizing experience-based knowledge residing within the organization. The impact of a demographic downward trend in Western Europe’s student population on application numbers belongs to this category of risks. In contrast, black swans are by their very nature unpredictable, singular, extreme-volatility events with a potentially game-changing impact (Taleb 2008). The

financial crisis represented such a black swan event. It unfolded unexpectedly, within a short period of time and with an impact scale threatening the financial solvability of schools and universities lacking adequate liquidity reserves. Risk management needs to deal with all swans independent of their colour. Black swans are however particularly challenging since they are impossible to predict and costly to manage *ex ante*.

The management of white swans lends itself easily to a structured process involving risk identification, risk measurement, risk exposure quantification and risk mitigation (see e.g. URMIA 2007). While regulatory regimes still *de facto* advocate a silo approach with each risk considered separately (see e.g. also AGB and UE 2009), state-of-the-art risk management aims to determine the overall performance impact using (Monte Carlo) simulation techniques in combination with scenario analysis, sensitivity analysis and, in an effort to account for management responses to uncertainty resolution, decision tree or real option analysis (Rees 2008). It represents a combination of qualitative procedures to collect relevant information internally (Chapman 2006), utilization of external data sources and quantitative modelling to determine the overall effect on financial performance (Vose 2008, Mun 2006). In the case of not-for-profit higher education institutions, the budget surplus serves as the obvious performance target. Following Froot et al. (1993), risk management should aim at achieving a minimum budget surplus with a certain level of statistical significance in order to ensure that the funding of critical investments does not fall victim to financial rationing. This logic lends itself to the application of an adapted version of the Cash-Flow-at-Risk (CFaR) approach when considering per-period performance and of the Corporate Value-at-Risk (VAR) framework when considering the aggregate net benefits of existing activities or new projects (Hommel 2009, RMG 1999).

Risk mitigation targets the temporary or permanent reduction of risk exposures. Denneen and Dretler (2012) and Jansen (2010) propose rather naïve imitations of what can be seen in the corporate sector to protect the financial health of a HEI (overhead reduction, outsourcing of non-core services, etc.), while D'Cruz and Soberman (2009) favour a more focused approach, for instance, reducing the dependency of non-degree revenues on discretionary corporate spending. Risk mitigation requires a risk-based endowment / capital structure policy (Massy 2008) and may for instance also involve the development of contingency plans for staff layoffs and the wind-down of loss-making activities (Marshall and Massy 2010).

Black swans can in principle be managed within the same general framework, but not with the same methodology. To start with, organizations need to be aware that risk ignorance may give white

swans the appearance of being black (Triana 2009). In this context, stress testing can for instance create an understanding of which factors may move an activity or the organization as a whole into the lower tail of the budget surplus distribution or, more precisely, to the brink of financial failure. True black swans can however not be addressed with risk management systems designed to cope with everyday volatility. Risk models have a tendency of breaking down during periods of extreme volatility, Gaussian distributions become heavily skewed, correlations between different risks lose their validity and the concept of statistical significance turns into an illusion of certainty (Taleb 2008).

Black swans ultimately require a reactive capability approach, i.e. the development of flexibility in terms of resource deployment combined with the readiness to rapidly adjust operations in response to adverse events (Posner 2010). Business schools financing faculty growth with large-scale MBA and M.Sc. student recruitment in narrow geographical areas abroad represents the opposite of such an approach. The quasi-fixed cost nature of faculty salaries exposes the institution to a potential surplus squeeze, which can materialize due to singular events interrupting the inflow of students such as changes in visa regulations. Reactive capability results from the interplay between liquidity reserve policies and the deployment of flexible resources. If the latter implies trade-offs for the faculty time allocation between knowledge creation and the provisions of services for extra pay, then contingency planning will involve opportunity costs in terms of foregone reputation *ex ante*.

In sum, state-of-the-art risk management differs from existing risk-based regulation frameworks in fundamental ways: (1) the classification of risks, (2) the measurement of institutional risk exposure on the basis of a portfolio approach and (3) the application of value-at-risk principles for the derivation of risk management objectives.

## **5. Coping with Regulatory Change: Key Learning Points for Business Schools**

Business schools are not only at the forefront of transforming HEIs into entrepreneurial risk takers, they are also reservoirs of risk management competencies. The spread of risk-based regulation schemes promises either to add another layer of regulatory scrutiny for stand-alone business schools or, as the more typical case, to alter budgeting control policies applied by university parents. Business schools are, in this context, presented with a unique opportunity of advancing state-of-the-art risk management principles as well as of pro-actively shaping their regulatory environment.

University parents will struggle to translate regulatory guidelines into operational systems of control on the school level. Adding additional compliance layers may offer partial compensation, such as requiring schools to go through ISO 31000 (risk management standards of International Organization for Standardization) certification or to create a risk management sub-committee of the School board with experienced corporate risk managers serving as members. Business schools can therefore use voluntary “over-compliance” as a credible signalling device to retain entrepreneurial degrees of freedom in the presence of greater regulatory scrutiny.

As one of the basic design principles of risk-based regulation, oversight scrutiny should vary positively with the perceived ‘riskiness’ of the HEI. In order to secure these admittedly somewhat elusive benefits of quasi-deregulation, university parents must apply the same logic to the monitoring of their semi-independent sub-units, i.e., the tightness of budgetary controls will vary positively with the perceived degree of entrepreneurial risk-taking. In addition, the mapping of risk-based regulation into intra-university risk management guidelines is likely to lead to behavioural guidelines for constituent schools mimicking financial debt contracts. Business schools are therefore expected to deliver a stable surplus contribution and ‘debt covenant’-style arrangements will penalize schools for defaulting on this promise. Such provisions favour risk avoidance over risk optimization, leading to a systematic underutilization of upside potential and are therefore second-best choices to a properly functioning risk management system (see also Hommel 2005). This argument presents a strong reason for business schools to assume an active role in shaping university-level risk management policies.

Existing risk-based regulation schemes focus exclusively on top-line performance at the university level. There are however good reasons to monitor and potentially control the allocation of volatility within university organizations. University parents will utilize risk-based budgeting and performance reviews to manage (semi-independent) sub-units such as business schools, which, in effect, leads to a balancing of centralized risk control and decentralized risk management responsibilities (Christensen 2010). Business schools are traditionally considered cash generators to fund cross-subsidization schemes within wider university structures and are therefore significant net contributors to performance volatility on the university level. The reverse logic may however apply as well. Regulators should therefore be concerned about universities passing on the burden of under-managed volatility unevenly, which may exacerbate the negative impact on the financial and ultimately academic performance for select schools – and, again, business schools are prime candidates. Doing so however represents potentially dangerous territory for universities as it may

weaken the top performers within their organization. Business schools can and should pre-empt such behaviour with the establishment of a state-of-the-art risk management programme.

In conclusion, it cannot be denied that risk-based regulation represents a major change in the way regulatory bodies exercise oversight of HEIs and therefore business schools. It puts risk management firmly on the map for higher education managers. It will however not serve as an adequate reference point for business schools engaged in entrepreneurial activities. Regulatory intervention may lead to binding behavioural constraints due to methodological shortcomings, which can potentially be avoided by pro-actively implementing a state-of-the-art risk management system.

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