

No. 71, January 2015

Collegiate Education in Risk Management and Insurance Globally: Past, Present and Future*

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The risk management and insurance industry has a relatively highly stratified workforce, ranging from lower skilled employees to highly skilled professionals. Its businesses, especially in the reinsurance segment, have long been international, making the human capital management need in the industry broader in scale and scope than in many other industries. The industry undoubtedly depends on colleges and universities for a constant supply of new, dedicated employees and should be able to nurture them as future talents.

Have we—academicians, industry leaders and policymakers—done our best to keep this academic field and profession attractive to new employees and incumbent workers? We observe in recent years no meaningful rise in the number of college students studying risk management and insurance globally, except in selected emerging economies. Not surprisingly, population ageing has become a critical risk in global insurance markets. The human capital attraction and retention challenges in the markets intensify due to a combining effect of social, economic and market-specific factors.

We also observe that, while risk management and insurance (RMI) is not well recognised as an academic field or profession by the general public and college students, it is viewed as attractive to students studying the field, and as very attractive to both young and old generations working in the insurance profession. Therefore, we need to find ways of effectively educating people about the value of pursuing risk management and insurance as an education and as a profession. For example, the industry can engage in more public relations activities; work closely with local universities to adopt the field as an academic major; develop better talent recruitment, training and retention programmes; and prepare for impending talent morbidity across financial services sectors and across borders.

This report presents key findings from examination of historical records, results of our 2013 survey and communications with RMI professors worldwide. Also presented are the initiatives that professional associations and institutions have played alone as well as in collaboration with local tertiary institutions. Specifically, this report investigates the birth of collegiate RMI programmes in the 19th century and their development throughout the 20th century. It then examines the status of the programmes based not only on the information available from reliable sources in the public domain but also from findings of our 2013 survey of 116 institutions in 25 countries.

Risk and insurance education: the past. Evidence of academic work in insurance is found even in the late 19th and early 20th centuries. We find records of master's theses and doctoral dissertations by graduates of selected universities in Europe (for example, Université de Paris, Université de Caen Basse-Normandie, Université de Toulouse, Université de Lyon, and Albert-Ludwigs-Universitaet, Freiburg), North America (for example, Boston University, Columbia University, Cornell University, University of Pennsylvania and Yale University) and Asia (for

* This article is based on the author's full report published jointly by the International Insurance Society and St. John's University. The report, in its entirety or executive summary in English, Chinese, Italian, Japanese, Macedonian/Serbo-Croatian, Portuguese, Spanish and Russian, is available at <http://iisonline.org/research-program/critical-issues/>.

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example, Peking University). We also find that structured industry training programmes were introduced likely before the establishment of formal collegiate education in insurance. For example, the Federation of Insurance Institutes of Great Britain and Ireland, the Insurance Library Association in Boston, the Insurance Society of New York and several other organisations made significant contributions to both academia and the industry—by designing and offering *ad hoc* seminars, correspondence courses and examinations for industry employees—during the era when new entrants to the industry were mainly high school graduates.

It seems that European scholars—notably those with the University of Göttingen—conducted *ad hoc* lectures in insurance in or before the 19th century. In North America, the records of seminars in insurance were found at Boston University, Harvard University, the University of Pennsylvania and Washington University. Both the University of Wisconsin and the University of Minnesota claim to be the first to adopt insurance as a course in the regular curriculum. New York University began a gradual development of insurance curricula in life insurance, actuarial practices, life office administration and general insurance (brokerage) from 1905. Secondary and tertiary education in insurance was available in China, Japan and Korea even in the 1900s.

It was not until the 1920s that insurance as an academic field grew in momentum, especially in the U.S. A series of surveys of U.S. colleges and universities (conducted, for example, in 1927, 1932, 1949, 1956–1957, 1969–1970 and 1975–1976) find that the number of insurance courses and programmes was on the rise. The 1975–1976 survey, for example, finds that 677 institutions were offering 2,566 courses in the aggregate. Throughout the decades, insurance principles remained the most popular course offered, followed by life insurance and property/liability insurance. Interestingly, the last known comprehensive survey of North America, for the 1992–1993 academic year, reports that undergraduate RMI courses were offered at 203 institutions and that only 61 of them had an RMI major, minor or concentration at the undergraduate level. It also reports that graduate RMI courses were available at 71 institutions—including 18 institutions with an RMI major or concentration and three institutions with a minor. Doctoral-level majors and minors were available from eight institutions.

The first known global survey of collegiate RMI education was conducted in 1960. It finds that 299 non-U.S. colleges and universities had 689 lecturers for 456 insurance courses and that insurance principles was the most popular course offered, followed by insurance law, social insurance, life insurance, fire insurance and marine insurance. A similar survey conducted in 1977 reports that 332 colleges and universities in 67 countries offered 786 courses in insurance. Risk and insurance foundation courses were the most popular, followed by insurance law courses.

The status of RMI education: the present. In Canada, a number of universities are known to offer one or more RMI courses as part of their business curricula, but only a few provide RMI degree or concentration programmes. In the U.S., we find a relatively large number of colleges and universities with an undergraduate RMI major. Studying RMI as an undergraduate minor is possible at numerous U.S. academic institutions. Only limited information is available about RMI studies at tertiary institutions in North, Central and Latin America.

RMI education is a vital element of undergraduate, graduate and doctoral programmes in a relatively large number of institutions in China, India, Japan, Korea and Taiwan. A 2010 report from China shows that there were 87 undergraduate, 47 graduate and 23 doctoral RMI programmes. According to this report, there were 20,000+ undergraduate, 1,500+ graduate and 240 doctoral students as well as 1,100+ professors in China. India hosts several nationally recognised and regional universities that offer RMI programmes as stand-alone or as part of financial services programmes. RMI programmes in Japan commonly follow a *zemi* [seminar] system. Most universities in Korea now have financial services programmes in lieu of former stand-alone RMI programmes. In Taiwan, we find not only a large number of public and private universities offering RMI education but also a large pool of foreign and locally educated RMI professors. A few public and private universities in Malaysia and Thailand are known to have RMI programmes.

In the U.K., we find several universities with RMI programmes, but they are small in number, in part because of the presence of well-known professional designation programmes as well as the traditional role of industry associations as key players in human resource development for the country. Similar cultures are observed in continental Europe

and in several Commonwealth member countries, including Australia and New Zealand. In these countries, RMI courses—undergraduate and graduate alike—are often not available as a cluster in a major or minor, just as they are not in most other countries across Europe. In contrast, Russia is now home to 40+ universities with RMI programmes. In Turkey, insurance courses are widely available, commonly as part of insurance and banking curricula.

Interest in risk management and insurance—including microinsurance and Islamic principle-based takaful operations—is certainly rising in Africa and the Middle East. Nevertheless, little information is available about RMI education in these regions except in South Africa.

The 2013 survey. The survey, with final valid responses from 37 public and 79 private institutions in 25 countries, examines the characteristics of academic divisions, faculties, degree programmes and student bodies, as well as opportunities and challenges faced by the responding institutions. Key findings are summarised here.

- Academic divisions. There are four schools of insurance, one school of insurance studies and one school of risk management, insurance and actuarial science in addition to departments. The title “Department of Insurance” is found in four institutions, “Department of Risk Management and Insurance” in 12 institutions, and “Department of Finance and Insurance” in eight institutions. In all other 61 institutions, RMI programmes or courses are available from non-insurance-specific departments such as “Department of Finance.”
- Faculties. The 112 institutions in the aggregate employ 495.5 full-time faculty members, of which 422 members (or 85.2 per cent) hold a terminal (doctoral) degree. They also have 287.5 part-time faculty members, including 100.5 (or 35.0 per cent) with a terminal degree. There are on average 4.38 full-time and 2.54 part-time faculty members per institution. There are 12 institutions with 10 or more full-time faculty members. Sixty-eight institutions report that they have faculty members with one or more professional designations.
- Majors and minors. Eighty-three of the 112 institutions (74.1 per cent) offer an undergraduate major in RMI (likely including RMI as part of a hybrid study such as finance and insurance). Forty-one of the 84 institutions (48.8 per cent) additionally offer RMI as a minor (including concentration, track and similar titles). Separately, 10 of the 112 institutions (8.9 per cent) offer RMI as an undergraduate minor. Regarding advance degree programmes, we find 69 out of 113 institutions (61.0 per cent) offering an MBA, MS or postgraduate programme in RMI (including as part of a hybrid programme). Forty-three of the 69 institutions (62.3 per cent) additionally train Ph.D. candidates in RMI. Separately, five universities do not have a master’s degree programme but accept doctoral candidates in RMI.
- Student population (99 observations). We find a total of 14,171 students enrolled in the aggregate of all degree programmes offered. They comprise 10,786 undergraduate students, 1,042 full-time MBA students, 249 part-time MBA students, 1,418 full-time Master of Science/Art candidates, 383 part-time Master of Science/Art candidates and 293 Ph.D. candidates.

Of the 10 institutions with the largest student population, we find five located in China, two in Taiwan and one each in Germany, Korea and the U.S. Of the 10 with the largest undergraduate student population, four are located in China, three in Taiwan and one institution each located in Korea, Russia and the U.S. Of the 10 with an MBA programme—again in terms of population size—we find three in China, one in Taiwan, two in the U.S. and four in India. Of 10 largest with MS/MA programmes—again in terms of population size—we find four in China, three in the U.K. and one institution each in Australia, India and Thailand. Finally, we find six institutions in China educate a relatively large number of RMI Ph.D. candidates. For India, Russia, Taiwan and the U.S., we find one institution each with 10 or more doctoral candidates.

- Undergraduate RMI courses (99 observations). All institutions except one offer Introduction to Risk Management and Insurance as a required (80 institutions) or as an elective course (18). Other popular courses include Life and Health Insurance (45 required and 27 electives), Property and Liability Insurance (45 and 15), Risk Theory/Economics (31 and 20), Commercial Insurance (28 and 18), Insurance Law (21 and

28), Personal Insurance (20 and 20), Insurance Company Operations (16 and 31), Employee Benefits (17 and 27) and Reinsurance (9 and 20). We do not observe any unique patterns with respect to, for example, theory vs practice-oriented courses across countries or regions.

Only a few institutions responded as having an RMI course with an international perspective. Four offer it as a required course while 14 offer it as an elective. One U.S. institution requires an academic internship course and seven other U.S. institutions offer it as an elective. It seems, however, selected institutions in other countries plan to offer it.

- Graduate RMI courses (60 observations). The Principles course is again the most popular (28 required and 17 elective), followed by Risk Theory/Economics (27 and 15), Insurance Law (19 and 13), Property and Liability Insurance (15 and 13), Life and Health Insurance (12 and 22) and Insurance Company Operations (9 and 13). Financial RM is popular and is a required course in 20 institutions and an elective in 21. Finance courses as well as Finance and Insurance courses are also offered by some, albeit not a large number of, institutions.
- Ph.D. RMI courses (27 observations). We find that the programmes seem to place less emphasis on course work. Most of the institutions have zero to two required courses—commonly Insurance Principles, Risk Theory/Economics and financial RM. The survey finding shows that Risk Theory/Economics is the most popular (14 required and 7 elective), followed by Financial RM (6 and 11) and RMI Foundation (7 and 6). Practice or insurance market-oriented courses are either unavailable or offered by only a few institutions.
- Programme success factors. Commonly cited success factors that have allowed RMI programmes to be competitive or very competitive include a university's and A department's reputation, its faculty reputation (e.g., research, innovation in teaching, presence of a research centre, synergy of the programme with other academic divisions), governmental and industry support and the institution's location.
- Challenges. The most commonly noted challenge is difficulty in recruitment, both of faculty members with high research/teaching quality and of students in terms of number and quality.

As alluded to above, the field of insurance is not widely known to the general public or college students. It is, however, viewed as attractive to students studying the subject, and as very attractive to those already working in the industry. Therefore, employers need to increase awareness among younger generations—particularly among college-bound high school students and college students in business schools—about the societal and economic contributions made by the industry and about the level of professionalism their workers are expected to hold. Based on the findings cited earlier in this paper, we offer the following recommendations as solutions to human capital attraction and retention risks.

First, we suggest that tertiary educational institutions and their partner training institutes be more active in creating and fortifying relationships with the insurance industry. Second, we suggest that insurance companies work more closely with qualified, local tertiary educational institutions towards the adoption of RMI as a major field of study and, in the case of those institutions already with a programme, towards coordinating and enhancing the process of students learning. Third, professors must continue to review the effectiveness of existing RMI curricula and update them as and when necessary.

Finally, it is critical that RMI programme-offering academic institutions be clearly aware that the insurance industry does not rely solely on them for the supply of human capital. Insurance companies do need graduates from a wide array of academic fields—from economics, finance, law and accounting to engineering and political science for their daily operations in product design, marketing, underwriting, claims, investment, accounting, information technology and so on. It is, however, the collegiate RMI education that they value for the supply of future professionals who have demonstrated a strong interest in the insurance business and will eventually lead the industry.