Risk Management and Insurance Education at the Millennium

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Abstract: This paper provides one assessment of the current status and future expectations of risk management and insurance (RMI) education. This assessment is based on a survey of academic members of the three major RMI academic organizations (ARIA, SRIA, and WRIA) conducted at the end of the 1999 academic year. Results are presented to help RMI educators identify current practice and potentially fruitful areas of teaching and research activity that may be useful in their strategic planning and decision-making efforts. Key areas explored include course offerings, career opportunity potential, resource availability, the impact of technology and distance learning, and value of professional designation educational programs and internships. Observations offered in this paper should facilitate a better understanding of the changing educational landscape facing various RMI constituencies.

INTRODUCTION

R isk management and insurance (RMI) plays a vital role in the ongoing financial health of individuals, business organizations, and nations. However, the risk and insurance industry and RMI education are experiencing tremendous pressures likely to result in major evolutionary changes for students as well as educators. The purpose of this paper is to help university RMI educators develop useful strategies to better accomplish

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their institutional, student-oriented, and individual goals. This paper presents an assessment of the present state and expectations for the future of RMI education made by those in academe who are most directly affected by and responsible for changes in the discipline. A survey was undertaken at the end the spring semester of 1999 to identify current and anticipated educational offerings, plans, and practices of RMI academics. The survey also revealed academicians' estimates of potential industry changes, particularly as they relate to employment and career opportunities for RMI graduates. While the survey provides interesting details of the status of RMI education and educators, perhaps its main value is its revelation of the expectations of educators for the future.

The focus of RMI education and research centers on an economically vital industry. Total premiums alone, according to SwissRe (sigma, No. 7/ 1999), account for an average 8.8% of the Gross Domestic Product (GDP) in the industrialized countries of the world (range: approximately 2-12%) and 3.0% of GDP in emerging market countries (range: approximately 0–21%). The industry currently is responding to many dynamic environmental pressures. Heightened global competition, mergers, acquisitions, and entry of new competitors (e.g., banks and securities firms) are among many changes that indicate "business as usual" will not suffice for firms anxious to remain competitive (Mayewski et al., 1996). Moreover, the potential for record-breaking natural catastrophes (e.g., hurricanes Andrew, Hugo, and Georges, Typhoon Mireille, the Northridge and Kobe earthquakes) combined with the threat of increasingly large liability losses (e.g., asbestosis, pollution, and, potentially, tobacco) provide significant incentives to explore the restructuring of traditional financial systems. Furthermore, the restructuring of traditional distribution systems and other attempts to alter the underlying industry cost structure (e.g., fee-for-service versus commissions, electronic commerce and other technologies) have brought meticulous scrutiny to virtually every aspect of the insurance transaction. Finally, World Trade Organization efforts to continue development of global financial service markets will likely prove beneficial to U.S. firms in terms of increased international opportunity.

The risk and insurance academic discipline will not be immune to the serious and potentially disruptive effects imparted by such environmental pressures for dramatic industry change. The major "product" of the academic discipline—graduate and undergraduate students with an education centered on risk and insurance topics—must continue to be accepted in this dynamic marketplace. While some potential employers may seek employees with a liberal arts background (Bowers et al., 1998; Launie, 1985), future RMI career paths open to students will likely be less definitive than past or current paths. Furthermore, appropriate skill sets or knowl-

edge transfers needed to be competitive in such a changing workplace also are open to debate. If insurance companies are amalgamated into financial services firms, the possibility exists that the RMI discipline as we know it also may be amalgamated into existing or new academic disciplines.

The very tools and learning environment in the university also are being altered and subjected to significant change. The development and expanded capabilities offered by alternative venues and methods for delivering educational opportunities (e.g., web-based instruction, teleconferencing, and other forms of distance learning) may dramatically affect university-based educational experiences. To exacerbate long-term planning dilemmas further, conservative projections suggest substantial discrepancies in academe between open faculty positions and available, properly credentialed individuals pursuing academic careers (Magner, 1999). Although our robust economy has produced substantial growth in many university endowments and coffers, universities may be conservative in using such funds to satisfy current operational needs. Thus, typical university resource constraints are likely to continue, providing increased pressure for RMI academics to plan a careful response to environmental changes.

Skillful planning and decision-making by academics are necessary to balance the sometimes divergent and competing needs of their students, universities, and states, as well as those of their profession, industry, and personal careers. To facilitate a better understanding of some educational aspects these changes may affect, this paper is organized as follows. First, a brief discussion of RMI dynamics is presented. A discussion of survey results is then presented. Finally, the paper concludes with a discussion of the implications and conclusions drawn from the survey results.

LITERATURE REVIEW

This paper follows a long path of introspection and prediction about RMI education, as many previously published articles have been devoted to the topic (e.g., Stone, 1972, provides an excellent early treatise). We do not provide an extensive review of this literature, but instead focus on the dynamics of change as evidenced by current market pressures and future expectations of RMI educators. For years, observers have noted the need for change in RMI arenas, but the direction and speed of such change has remained arguable.¹

Perhaps the overriding issue that risk and insurance academics must face is the very survival of RMI as a distinct educational discipline. As we explore RMI dynamics, some interesting logic behind potential diminution or disappearance of the discipline is observed, while other evidence supports its continuation. We contend that even if the discipline were to lose its independence, the subject material that forms the core of the discipline—the study of risk and its control, financing, and mitigation—continues to merit research analysis and classroom explication.

DYNAMICS OF CHANGE

Many indicators suggest that the RMI industry, and its constituent parts, may be on a course leading to amalgamation into the larger financial services industry. In particular, mergers, product substitution, demutalization, and regulatory/legislative action that redefines market parameters all have served to remove mobility barriers and "firewalls" between insurers and other financial service firms. Industry reorganization is a powerful environmental dimension affecting the strategic planning process for all insurers.

For instance, several prominent property and liability insurers have participated in major merger/acquisition activities, becoming larger financial conglomerates in recent years (e.g., Travelers and Citicorp, Berkshire Hathaway and General Re, AIG and SunAmerica, all in 1998 alone). Moreover, sophisticated financial products and financial arrangements (e.g., multi-line/multi-year contracts, integrated risk financing, securitization) increasingly are being substituted for traditional commercial insurance transactions. This trend has led to the term "financial risk management" to distinguish it from the historic insurance-oriented use of the term "risk management." Insurance brokerage mergers have followed a similar pattern of consolidation.

The traditional life insurance industry also shows signs of being subsumed into something other than a freestanding, distinct industry. An early harbinger of potentially major industry reorganization became evident several years ago in the wake of the savings and loan debacle, as Congress began to seriously debate federal reform of financial institution legislation, increasing competitive pressure on insurers. The pace quickened with expanded powers granted by federal banking regulators and courts to banks and similar financial entities, enabling those entities to offer mortality-based annuity products (see in particular *Nationsbank v. VALIC*, 513 US 251, 1995). Products formerly restricted to "insurance" were thus redefined to fall within the purview of credit-issuance or "banking" products, further increasing competitive pressure on life insurers.

Most of the former barriers protecting, or hindering, insurers by directly preventing mergers, acquisitions, and other non-industry affiliations were eliminated when President Clinton signed S. 900, the Financial Services Modernization Act of 1999 (Public Law 106:102), into law November 12, 1999. The stated purpose of the law is "to enhance competition in the financial services industry by providing a prudential framework for the affiliation of banks, securities firms, insurance companies, and other financial service providers." Despite affirming that "the McCarran-Ferguson Act [Public Law 75:15] remains the law of the United States" and mandating continued state primacy over the *business of insurance* plus functional and physical separation of insurance and banking activities, the practical effect of the new law undoubtedly will be more and/or larger affiliations.

Intra-industry reorganization also is evident. For instance, Birkmaier and Laster (1999) provide an excellent treatise on the dramatic increase in pace of announced intentions and actual completion of insurer demutualizations (primarily among life insurers) in response to market pressures. The need for increased financial flexibility highlighted by similar competitive pressures has driven many very large insurers to explore and evaluate demutualization. The benefits of demutualization potentially afforded by the stock form under current economic conditions are strongly alluring (e.g., greater access to capital markets, facilitating mergers/acquisitions, non-cash executive incentive plans). What constitutes prudent industry response to these environmental jolts remains to be seen.

With respect to RMI education, all of the above evidence begs the question: if the insurance industry loses its independence, can RMI education fail to follow this path? Such aspects as the intermingling of literatures and critical mass issues may be of chief concern here. For instance, the RMI community faces a potential metamorphosis of its intellectual content into a branch of economics. The investigation of risk (a term subject to multiple definitions frequently defined as uncertainty caused by the potential for loss), especially as a mathematical phenomenon, is a legitimate area of interest for both economics and mathematics. It was the practical treatment of risk by personal and commercial insurers that gave special impetus to the development of RMI education as a distinct discipline. Some commentators have argued in favor of emphasizing the econometric aspects of the treatment of risk and de-emphasizing the institutional or practical impact. Given the current level of industry support for an application-based approach to much RMI education, as well as academic career paths built significantly upon a separate discipline, academia and its supporters may resist total immersion into the economics discipline. Nevertheless, this argument necessarily concludes with the question: if the content of classroom instruction and research fully enters the domain of economics, does a need for an independent RMI discipline continue?

Along these same lines is the contention that RMI may already have lost critical mass. Adelman and Dorfman (forthcoming) suggest this possibility with respect to textbook publication. They note that the consolidation of textbook publishers and increased requirements for minimum potential unit sales creates a serious problem for smaller, specialized disciplines. It must be questioned whether a discipline can exist without a quantity and diversity of textbooks for advanced courses. Adelman and Dorfman hold some hope that computers and the Internet may alleviate aspects of this looming problem, but their optimism has yet to be justified. The critical-mass question also affects the number of terminally qualified instructors graduating each year to become available to assume assignments in extant RMI programs or even to begin new programs. The number of institutions awarding terminal degrees in RMI has diminished over the past few decades, though enrollments have generally satisfied demand (see Gardner and Schmit, 1995).

While some competitive and academic environmental factors may call into question the continuing viability of RMI education as a distinct discipline, others suggest that (1) RMI will retain its distinct characteristics, (2) academic institutions will continue to support its independence, and (3) the instructors trained in this specialization, and the needs of students. industry, and the economy, will mandate its continuation. Perhaps the strongest argument favoring the continuation of RMI as a distinct discipline is the ever-increasing importance of its content (Dorfman, 1990). The first academic texts in property/liability and life insurance, both authored by Professor Solomon S. Huebner, appeared before the United States entered World War I. Recent debates on social security, health insurance, pension plan reform, hurricanes and widespread property catastrophe, liability insurance, and other topics all firmly establish the continuing need to teach and research the underlying subject of loss potential and practical ways to deal with this phenomenon. Presumably, such arguments were sufficiently persuasive to have resulted in the creation and early growth of the discipline. Nevertheless, arguments that were persuasive more than fifty years ago clearly may have lost their force in the academic environment of today.

THE SURVEY

The importance and implications of the preceding arguments suggest a great need to ascertain direction for many of these dimensions. To this end, a traditional mail survey instrument was developed, pre-tested, and revised using several members of the RMI educational community. A cover letter, revised survey, and postage-paid return envelope were then mailed without pre-notification to 315 individuals. Recipients were identified from the combined academic membership listings, purged for duplicates, of the three major national and regional RMI organizations in the United States and Canada: the American Risk & Insurance Association (ARIA), Southern Risk & Insurance Association (SRIA), and Western Risk & Insurance Association (WRIA). The survey was coded only to provide a mechanism for reducing multiple current academic affiliation bias for some question areas; respondent anonymity was assured and maintained.

No reminder mailing or other follow-up communication was undertaken, so the potential for nonresponse bias in the reported results does exist (Roth and BeVier, 1998). Another source of potential bias may result from the offer to respondents in the cover letter of a small premium, a \$3 donation to the Donald W. Hardigree Memorial scholarship endowment at UNLV per usable survey received back within a month of the original mailing. Five surveys were returned with polite notes from respondents indicating they either were retired or were non-practicing academics who did not feel able to comment on the full range of issues queried. Three surveys were returned as undeliverable. Sixty-four usable surveys ultimately were collected (fifty-two within one month of mailing), for an adjusted overall usable response rate of 20.3 percent.² The sixty-four respondents represented forty-eight different institutions. All comparative tests in this study were based on two groups (e.g., tenure versus nontenure), and the statistical power of our sample is such that we can determine all large and medium effects at p < .05, but cannot be sure of small effects (Ferguson and Ketchen, 1999).

To provide an overview, basic information was collected on terminal academic degrees held, current title and tenure status, years of universitylevel teaching experience and remaining years teaching expected before retirement, professional work-load breakdown, numbers of publications and presentations, academic memberships, and professional designations earned. RMI classroom activities are critical to preparation of individuals currently in the job market and those entering it in the future. Therefore, data were solicited regarding issues such as enrollment in courses taught by respondents during the three most recently completed academic years. the type of RMI courses and degrees offered by their institutions, and national accreditation status of their institutions. As a continuation of this logic, data also were obtained regarding various career opportunities now available to RMI graduates and expected in the next decade, the relevance of RMI research to various interest groups, and the value of professional designation and related educational programs. Finally, data were collected regarding respondents' perceptions of the future of RMI as a distinct discipline, course offerings at their universities, student internships, resource availability for program and faculty support, research and student scholarships, and various aspects of distance learning and the impact of technology.

RESULTS AND DISCUSSION

The RMI Educator

Table 1 presents summary statistics and respondent demographics for many areas explored in the survey. Only five respondents reported not holding a terminal degree, but three of those categorized themselves as "ABD." The PhD was the most popular terminal degree held, by a 58–1 margin over the DBA, with one respondent reporting holding the Juris Doctorate (JD) in addition to the PhD. The respondent pool was fairly balanced as to academic rank, with all four primary ranks represented.

Twenty-seven respondents reported holding the rank of professor. Nineteen associates, twelve assistants, and five instructors (including lecturers, adjuncts, and teaching assistants) in permanent positions also returned the instrument. Most respondents (73%) had earned tenure, an additional 20% reported being on a tenure track, and a very few (6%) indicated they were not currently in a tenure-track position. Eighteen respondents (28%) indicated they currently held either an endowed professorship or endowed chair position. The great majority (92%) were teaching at an institution currently accredited by the American Assembly of Collegiate Schools of Business (AACSB), the International Association for Management Education.

Respondents also were queried regarding the number of years they expect to continue teaching at the university level before retirement. Unsolicited commentary for this important dimension may offer an important insight. One respondent, with over 25 years' experience, reported expecting to continue working for another 25 ("or more") years doing what active academics do, stopping only "when you see my name in the obituary column." Given a relatively well paying career that generally offers tenure, no mandatory retirement age, and little heavy lifting, one might reasonably expect the attitude of this respondent to be more prevalent. However, the distribution of the number of years respondents expected to continue teaching before retirement revealed some disconcerting results. More than 11% of respondents expected to retire within three years, and fully 40% on a cumulative basis indicated they will have retired by the year 2010. If this sample is reasonably representative of the discipline, a significant retirement problem may loom ahead for RMI education. Should there continue

		Ν	PhD	DBA	1	"AB	D"	No	one		
Terminal degre	e held:	64	58 (91%) 1 (2%	6)	3 (59	%)	2 (3%)		
		Ν	Professo	r Associ	ate	Assist	ant	Instr	uctor		
Academic rank	: -	64	27 (42%) 19 (30	%)	12 (19	9%)	5 (8%)		
									% Qua	rtil	e
Tenure status:		Ν				Mear	1	25	50		75
Tenured:	47 (73%)	64	Terminal	Earned:		1983		1974	198	4	1992
On track:	14 (20%)		Tenure Ea	arned:		1985		1979	198	7	1995
Not on track:	4 (6%)		Years to 7	enure:		5.79		3	5		7
Reported expen	rience freq	uenc	y chart:								
Range:	0-	-3	4–7	8-11	12	2-15	16	-20	21-25		25+
Years teaching:	6 (9	9%)	7 (11%)	9 (14%)	19	(16%)	7 (1	1%)	6 (9%)	18 (28%
Years until retirement:	7 (1	1%)	7 (11%)	11 (17%)	4	(6%)	7 (1	1%)	12 (19%	6)	14 (22%

Table 1. Summary of Survey Demographics

Professional time allocation (100%):

Ν		Teaching	Research	University service	Community service	Consulting	Other
64	Mean:	.4385	.2664	.1544	.0251	.0689	.0459
	S.D.:	.1637	.1586	.1484	.0443	.1246	.1058
	High:	.80	.70	.85	.20	.65	.40
	Low:	.05	0	0	0	0	0

Reported degree offerings (no duplicate institutions):

	Ν	Major	Major + minor	Minor only	Electives only
Baccalaureate	48	11 (23%)	17 (35%)	9 (19%)	11 (23%)
Masters/MBA	22	7 (32%)	3 (14%)	3 (14%)	9 (41%)
PhD/DBA	10	-	-	-	-

AACSB accreditation status of represented institutions:

Ν	Currently accredited	Seeking accreditation	Not seeking accreditation
48	46 (96%)	1 (2%)	1 (2%)

to be a decline in number of RMI doctoral programs or enrollments, as alluded to by prior researchers (e.g., Gardner and Schmit, 1995), achieving critical mass may prove difficult if not impossible to attain.

The above numbers are comparable to those in a report recently released by the Higher Education Institute of the University of California at Los Angeles and summarized in a recent *Chronicle of Higher Education* article on the "graying" of the professoriate (Magner, 1999). Approximately one-third of nearly 34,000 full-time faculty surveyed at 378 colleges were at least 55 years old, while only one-quarter of such faculty were over 55 only ten years ago. Furthermore, the percentage of those under the age of 45 dropped from 41% in 1989 to around 34% today. AACSB, the premier accrediting agency for colleges of business, reports a four-year decline in number of doctoral degrees awarded (www.aacsb.edu). AACSB links this decline to: an oversupply in the early 1990s that enticed schools to reduce the size of doctoral programs, difficulty in hiring doctoral faculty, a robust economy that makes doctoral education less appealing, given the inherent challenges as well as time and resource commitments.

AACSB reports that this faculty "crunch" has resulted in premiums for new hires, double-digit salary increases, and strong hiring (see www.aacsb.edu/publications/newsline/2000/wnsalsurv_1.html). For example, 1999–2000 salary for new doctorates in finance, banking, real estate, and insurance averaged \$91,900—a 12.8% increase over the previous year and substantially more than the \$80,200 average 1999–2000 assistant professor salary in the same category. Some colleges, hoping to avert more severe future faculty shortages, are reportedly recruiting more heavily now, which likely indicates increased faculty hiring problems in the future. Thus, the trend indicating potential future faculty shortages recognized in the RMI education survey is consistent with those across disciplines.

Professional Time Allocation. Respondents were queried on how they allocated their time in a relatively familiar promotion and tenure category format. The mean reported respondent professional time allocation to teaching activities was 44%, with research activities consuming an average of 27%. Service to the university (15%) and community (3%) as well as consulting (7%) and "other" activities (5%) accounted for the balance of the professional time allocation. Such numbers are consistent with the environment and AACSB standards that apply to most respondents.

Teaching and the RMI Classroom. As expected, the primary professional activity of survey respondents was teaching. This was the only category of activity for which every participant allocated at least some portion of time. Further, the distribution of teaching experience by respon-

	19	96–97	19	97–98	19	98–99
Course	Total	Section weighted	Total	Section weighted	Total	Section weighted
Principles	4,509	46.96	4,662	44.40	4,718	50.19
Risk Management	890	24.72	867	24.08	1,013	21.55
Employee Benefits	534	26.70	490	25.79	529	29.39
Property/Liability	502	20.91	533	22.21	461	20.04
Life/Health	400	22.22	459	19.96	401	8.35
"Big Five" Courses	6,835	35.23	7,011	33.87	7,122	30.97
All Other RMI	313	18.41	471	24.79	448	22.40
Total RMI Courses	7,148	33.87	7,482	33.11	7,570	30.40

Table 2. Self-Reported Respondent Aggregate RMI Course Enrollment by Academic Year

dents was relatively balanced. The mean and median university-level teaching experience reported was in the 12–15 year category, with 20% of respondents having 0–7 years' experience and 28% having over 25 years at the university level. Relative balance also was exhibited in the volume and kinds of courses that respondents were teaching. Table 2 presents a summary of the RMI courses taught by respondents, along with total student contact/enrollment by course and section, over the three academic years preceding the survey (inclusive).

Coursework. The self-reported enrollments in the traditional "big five" course areas (*Principles, Property/Liability, Life/Health, Employee Benefits*, and *Risk Management*) taught by survey respondents clearly indicate substantial student contact with the RMI discipline. The typical respondent taught three different courses ("preps") per year, at least one of which was offered in multiple sections, with about 20–25 students per course section, implying a 3:2 group average teaching load. Not surprisingly, the most common and largest course taught was the *Principles* course, which also was most likely to be offered in multiple sections.

Table 3 presents a summary of respondent opinions regarding their expectations of the availability of future RMI course offerings, both at their current institutions and at others. Most respondents (more than 84%) generally agreed that distinct RMI courses were important to maintain at university-level schools of business. Yet respondents were somewhat evenly divided over the idea that future RMI courses should be focused on integrated education across financial service topics rather than specialized

Availability
Insurance Course
Management/In
Table 3. Risk

													Freque	Frequency of response	ponse	
											(1) Strong) ((2)	(3)	(4)	(5) Strendly
Q											disagree		Disagree	Neutral	Agree	agree
-	"RMI edu	"RMI education as a	distinct a	rrea is imp	ortant to 1	a distinct area is important to maintain at university-level schools of business."	t universit	y-level sc	hools of b	usiness."	I	.063		.094	281	.563
2	"More un	"More universities will offer RMI courses in the next decade than do so today."	vill offer R	tMI cours	es in the n	ext decade	than do s	o today."			.078	.266		.234	313	.109
3	"More undergrad	dergraduat	te-level RN	AI courses	s will be ofi	fered at my	v institutio	n in the n	iext decad€	uate-level RMI courses will be offered at my institution in the next decade than today."	<i>.</i> " .047	.313		.188	.344	.109
4	"More gra	"More graduate-level RMI courses will be offered at my institution in the next decade than today."	el RMI cou	urses will	be offered	at my inst	itution in	the next c	decade tha	m today."	.111	.238		.222	.317	.111
5	"Integrate	ed educatio	n across f	inancial s	ervice topi	ics is more	importan	t than spé	scialized R	"Integrated education across financial service topics is more important than specialized RMI topics."	.125	.203	-	.234	297	.141
		By tenure status	e status		By p.	By professional designations	l designati	ions	By yı	By years teaching experience	ng experien	ce	By exp	By expected years until retirement	rs until ret	tirement
	Non- tenured (N=17)	Tenured (N=47)	ANOVA	AVC	Hold 0 or 1 (N=43)	Hold 2+ (N=20)	ANOVA	AV.	$\frac{< 11 \text{ yrs}}{(N=22)}$	12+yrs (N=41)	ANOVA	A	$\frac{< 11yrs}{(N=25)}$	12+yrs (N=37)		ANOVA
ç	Mean (s.d.)	Mean (s.d.)	ы	Sig.	Mean (s.d.)	Mean (s.d.)	ч	Sig.	Mean (s.d.)	Mean (s.d.)	н	Sig.	Mean (s.d.)	Mean (s.d.)	Щ	Sig.
1	4.53 (0.72)	4.28 (0.95)	.997 ^a	.322	4.26 (1.00)	4.55 (0.60)	1.467	.231	4.55 (0.67)	4.24 (0.99)	1.620	.208	4.52 (0.71)	4.19 (1.00)	2.044 ^b	.158
5	3.29 (1.05)	3.04 (1.20)	.587 ^a	.446	3.05 (1.15)	3.20 (1.20)	.236	.629	3.36 (1.09)	2.95 (1.18)	1.834	.181	2.72 (1.02)	3.30 (1.18)	3.990 ^b	.050
3	3.29 (1.05)	3.11 (1.17)	.341 ^a	.561	3.05 (1.13)	3.40 (1.14)	1.322	.255	3.41 (1.01)	3.00 (1.18)	1.890	.174	2.88 (1.13)	3.30 (1.13)	2.041^{b}	.158
4	3.19 (1.05)	3.04 (1.27)	.169	.682	2.88 (1.21)	3.55 (1.10)	4.365 ^b	.041	3.24 (1.26)	2.98 (1.19)	.647 ^b	.425	2.96 (1.14)	3.14 (1.27)	.308 ^b	.581
5	3.00 (1.41)	3.17 (1.20)	.227 ^a	.635	3.14 (1.28)	3.15 (1.23)	.001	.976	2.95 (1.46)	3.20 (1.14)	.519	474	2.84 (1.14)	3.38 (1.28)	2.881 ^b	.095

Note: all df are (1, 61) except a = (1, 62) and b = (1, 60).

RMI topics (about 44% agreed, 32% disagreed). Thus, it appears the survey respondents are developing two distinct strategies. One is to maintain discrete course offerings; the other is to integrate course material into related areas.

Only about 43% of respondents agreed with the statement that more universities would offer RMI courses in the next decade than today. Sample respondents were somewhat mixed in terms of both positive (45%) and negative (36%) expectations that their own institution would offer more undergraduate-level RMI classes in the future. The notion of more graduate RMI offerings also exhibited mixed results (33% agreed more would be offered, 34% disagreed).

Analysis of variance (ANOVA) was performed to look deeper into these issues to see if other significant relationships might be observed. A number of different respondent attributes (e.g., tenure status, years teaching experience, years expected until retirement, the holding of professional educational designations) were used to analyze each question dimension. Respondents who expected to retire by 2010 clearly disagreed that more institutions would offer RMI courses than today (F = 3.990, p = .050). These soon-to-be-retirees also disagreed more with the idea that focusing on integrated financial service education was more important than on specialized RMI topics (F = 2.881, p = .095). Taken together, the ANOVA results imply that senior faculty see RMI education remaining the same relative to number of classes and distinctness of the discipline. Respondents who reported holding two or more specialized industry professional educational designations were only slightly more optimistic that more future graduate-level RMI offerings would be available at their current institution (F = 4.365, p = .041).

Classification. Respondents indicated that coursework offered by their institutions was equally likely to be catalogued under a "finance" type of primary course designator as under "risk and insurance" (48% each). "Management" and "actuarial science" designators also were identified (2% each). Respondents overwhelmingly indicated that this current primary course designator was unlikely to change in future catalogs (98%). The sole respondent expecting a designator change indicated a likely move from "finance" to "risk and insurance."

Degrees. Of the forty-eight institutions represented that offered RMI coursework, twenty-eight (58%) reported having RMI as a primary baccalaureate major (N = 11) or as a major or minor concentration (N = 17). Nine reported offering only a minor concentration in RMI, while the remaining eleven offered RMI courses to undergraduates only on an elective basis. As may be expected, the availability of RMI coursework at the graduate level was less prevalent. Twenty-two of the forty-eight institutions (46%)

Journal Publications		Presentations	
Title	Score	Venue	Score
Journal of Risk and Insurance	3.16	American Risk & Insurance Association	8.62
CPCU Journal	1.67	Southern Risk & Insurance Association	3.97
Journal of Insurance Issues	1.58	Western Risk & Insurance Association	3.38
Journal of Insurance Regulation	1.09	International Insurance Society	0.69
Journal of Financial Service Professionals	0.81	Financial Management Association	0.66
Best's Review	0.50	Academy of Financial Services	0.53
Risk Management and Insurance Review	0.45	American Economics Association	0.20
Benefits Quarterly	0.45	American Finance Association	0.03
Geneva Papers	0.20		
Journal of Risk and Uncertainty	0.11		

Table 4. Primary Respondent RMI Research Outlets by Group Mean Score (N=64)

were identified as offering masters/MBA-level RMI courses and ten of those offered at least a major concentration. However, nine institutions (41%) offered masters-level electives only. Ten of the forty-eight institutions (21%) reported doctoral RMI coursework offerings, all of which reported offering both undergraduate and masters-level courses as well.

Research. Aside from teaching, research is the other major activity to which most university educators are expected to allocate a significant portion of their professional time. Research productivity of the respondents was very roughly gauged using a number of dimensions. First, the aggregate number of articles authored and published by respondents in each of several common RMI journals was explored. The *Journal of Risk and Insurance* maintained preeminence as the leading RMI journal targeted by respondents, on the basis of aggregate publications for the group (N = 64), with a group mean score of 3.16 publications reported. Table 4 presents the primary outlets for RMI research targeted by respondents as determined on this group mean basis. However, respondents also reported publications in many other journal outlets.

A second area of inquiry explored books, book chapters, and monographs since many professors are more active in these areas than in journals. Authorship of 44 different books (some in multiple editions) were

Statement: "In my view, the		centage of /ant to		search pul	blished toda	y
Constituency	0–10%	10-25%	25-50%	50-75%	75-90%	>90%
Public policy officials and						
regulators is:	.230	.344	.262	.115	.033	.016
Industry practitioners is:	.279	.475	.164	.049	.016	.016
Policyholders and taxpayers is:	.115	.459	.279	.066	.049	.033
Non-RMI academicians is:	.098	.295	.311	.148	.082	.066
RMI promotion and tenure decisions is:	_	.033	.098	.180	.377	.311

Table 5. Frequency of Respondent Assessmer	nt
of RMI Research Relevance	

reported, as were over 80 book chapters and 96 research monographs. A third area of inquiry into academic activity involved career presentations at academic meetings. On the basis of group mean presentations determined as with journal publications above, ARIA was the preeminent target academic presentation venue (group mean score of 8.62). These crude rankings suggest tha respondents place more emphasis on presentations at national rather than regional RMI meetings and report greater focus on RMI versus other academic groups.

In sum, survey respondents were quite active in the second major area of professional time allocation expected of university-level educators as evidenced by RMI journal publications, authorship of books, book chapters, and monographs, and various presentations to their peers at academic meetings. The great diversity in potential subject matter afforded by the RMI discipline has obviously created many opportunities and outlets for scholarly research. However, most respondents were not enthusiastic about the overall relevance of their research.

Table 5 presents the results of respondent opinions of the inherent value of their own and their colleagues' published research to specified stakeholder constituencies. Overall results for this series of questions were not encouraging in that almost 84% of respondents indicated that less than half of all RMI research published today was relevant to public policy officials and regulators. More ominously, over 75% of respondents said that less than 25% of published RMI research was relevant to the industry practitioners, a vitally important constituency. Further, 57% of respondents indicated that policyholder and taxpayers also would find less than a quarter of all RMI research relevant, and 85% felt that policyholders and taxpayers would find less than half of RMI research relevant.

Respondents were much more optimistic about the relevance of RMI research to non-RMI academics. Only 39% indicated that published RMI research was less than 25% in relevance, and 29% felt the minimum relevance for non-RMI academics was at least 50%. Not surprisingly, research relevance for RMI promotion and tenure purposes was rated highest, as 87% of respondents indicated at least 50–75% relevance, with 31% indicating over 90% relevance. These results suggest that potentially fruitful areas for future RMI research relevance might lie where the perceived needs of important constituencies may have been inadequately served. Further limitation of research relevance to tenure/promotion decisions or use by other academicians may be a strategy inappropriate to long-term survival of the discipline.

Resource Availability

Support for Teaching and Research Activities. Respondents were asked to assess the current availability of various important resources useful in supporting their academic activity. Three main areas of financial resource support were explored: faculty and program development, research activities, and student scholarships. Results from these inquiries were somewhat mixed and are presented in Table 6. Approximately 38% of respondents agreed that financial and other resource support was readily available to support faculty and program development, while 37% disagreed. Many respondents (47%) agreed that financial support was readily available to support their research activities, but a substantial portion (34%) did not agree. No significant differences were revealed for either program or research support for any of the previously defined subgroups explored through analysis of variance.

In contrast, a clear majority of respondents (70%) agreed that financial support was readily available to fund student scholarships. Using ANOVA to explore this dimension further, we found that non-tenured respondents were more likely than their tenured counterparts to agree that financial and other resource support was readily available to support students (F = 2.857, p = .096). Both respondents with fewer than 12 years of teaching experience (F = 7.730, p = .007) and respondents who expected to teach for another twelve years or more (F = 3.298, p = .074) also were more likely to agree that student scholarship support was available. These findings imply that younger faculty are more likely to perceive student scholarships as readily available. No significant differences were exhibited across holders of professional designations.

Technology Resources and Distance Learning. Respondents were asked to evaluate some important dimensions of technology and distance learning resources available for faculty members at their own institutions.

						2				<i>(</i>						
													Freque	Frequency of response	onse	
											Str	(1) Strongly	(2)	(3)	(4)	(5) Strongly
ð											dis		Disagree	Neutral	Agree	agree
1	"Financia	"Financial and other resource support is readily available for RMI faculty and program development."	resource :	support i:	s readily a	vailable foi	r RMI facı	ulty and F	orogram d	levelopmer		.094	.281	.250	.219	. 156
2	"Financia	"Financial and other resource support is readily available for my RMI research activities."	resource :	support i:	s readily a	vailable foi	r my RMI	research	activities.'		•	.094	.250	.188	.375	.094
33	"Financial and ot	il and other	resource	support i:	ther resource support is readily available for student scholarships."	vailable fo	r student :	scholarsh	ips."		•	.047	.125	.125	.359	.344
		By tenure status	e status		By pı	By professional designations	l designati	ions	By yı	By years teaching experience	ng experi	ence	By exp	By expected years until retirement	s until reti	rement
	Non- tenured (N=17)	Non- tenured Tenured (N=17) (N=47)	ANOVA	AV	Hold 0 or 1 (N=43)	Hold 2+ (N=20)	ANOVA	NA	$\frac{\leq 11 \text{ yrs}}{(N=22)}$	12+yrs (N=41)	ANOVA	AVG	$\frac{\leq 11yrs}{(N=25)}$	12+yrs (N=37)	ANG	ANOVA
Q	Mean (s.d.)	Mean (s.d.)	ы	Sig.	Mean (s.d.)	Mean (s.d.)	ц	Sig.	Mean (s.d.)	Mean (s.d.)	ы	Sig.	Mean (s.d.)	Mean (s.d.)	Ц	Sig.
1	3.12 (1.22)	3.04 (1.25)	.046 ^a	.832	3.07 (1.16)	3.05 (1.43)	.003	.954	3.05 (1.33)	3.05 (1.20)	000	.992	2.88 (1.20)	3.27 (1.22)	1.550 ^b	.218
5	2.94 (0.66)	3.19 (1.21)	.563 ^a	.456	3.19 (1.16)	3.00 (1.26)	.333	.566	3.09 (1.11)	3.12 (1.23)	.010	.922	3.00 (1.22)	3.24 (1.12)	.655 ^b	.421
3	4.24 (0.90)	3.68 (1.24)	2.857 ^a	960.	3.70 (1.23)	4.20 (0.95)	2.618	111.	4.36 (0.73)	3.54 (1.29)	7.730	.007	3.48 (1.26)	4.03 (1.29)	3.298 ^b	.074

Table 6. Resource Availability

RISK MANAGEMENT AND INSURANCE EDUCATION AT THE MILLENNIUM

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Note: all df are (1, 61) except a = (1, 62) and b = (1, 60).

Table 7 offers a summary of responses to this area of inquiry. Respondents were evenly split on whether they perceived their institution would greatly emphasize distance learning over the next decade (31% agreed, 35% disagreed, 34% were neutral). Most respondents were reluctant to commit to whether or not distance learning would have a positive effect on either the future of RMI education (43% neutral) or career opportunities for students (46% neutral). Those that would commit, however, generally felt that distance learning would more likely than not have a positive effect in both these areas (33% and 31% positive, respectively). In sum, no consensus among RMI faculty regarding the importance of distance learning is evident.

At the national level, Boettcher (2000) estimates total distance learning enrollment across disciplines in 1997-98 at 1.6 million students (i.e., each student in each course counted as one student). Summarizing a recent survey of 5,010 post-secondary institutions by the National Center for Education Statistics (NCES), Boettcher reports that 34% offered distance education, with approximately 1,250 offering degrees entirely via distance channels and business being a common area of concentration. This was double the distance education rate of 1994–95, with most growth coming from those schools that previously offered distance degrees, which seems to indicate a first-mover advantage. Boettcher further reports the most popular mediums of distance education delivery as asynchronous Internet courses (offered by 60% of providers), two-way interactive video (54%), one-way prerecorded video (47%) and synchronous Internet course delivery (19%). RMI has a long history of significant distance learning activities (e.g., the professional education and designation programs offered by the American College, the American Institute for CPCU, and others). Yet given the increasingly widespread nature of distance learning options, future delivery of RMI subject matter may reasonably be affected, though the complete impact cannot be assessed directly. Our survey did not explicitly investigate method of delivery, but we did query respondents on their perception of campus technology resources currently available to them.

Regarding local university resources, most respondents (51%) felt that adequate technology, expertise, and facilities were in place at their institution to support distance learning activities. Yet a large portion (31%) did not think such resources currently existed on their campuses. One significant observation derived from Table 7 suggests that younger RMI faculty (i.e., those with 11 or fewer years of teaching experience) did not feel that adequate technology, expertise, and facilities currently existed at their institutions to support distance learning (F = 3.680, p = .060). Interestingly, only 23% of all respondents felt their institutions could deliver distance learning courses without compromising overall quality. Sadly, *post hoc*

	(5) Stronolv	agree	190	.063	.032	.032	.048	.094	nent	A	Sig.		.343	.796	937	2	.365	000	.830		.109
			7					9	il retiren	ANOVA	ц		913^{b}	.067 ^b	495 ^b	2	$.832^{\mathrm{b}}$	f	.047	-	$2.653^{\rm b}$
sponse	(4)	Agree	.317	.254	.302	.286	.175	.266	ars unt				6	<u>0</u>	4	-	õõ	ć	Ō.		2.6
Frequency of response	(3)	Neutral	.175	.333	.429	.460	.365	.234	By expected years until retirement	12+yrs (N=37)	Mean (s.d.)	3.22	(1.27)	3.03 (1.07)	3.19	3.16	(0.90)	2.70	(1.13)	2.73	(1.33)
Freque	(2)	Disagree	.254	.317	.206	.190	.238	.250	By ex	$\frac{\leq 11yrs}{(N=25)}$	Mean (s.d.)	3.52	(1.16)	2.96 (0.89)	2.92	2.96	(0.79)	2.64	(11.1)	3.24	(1.01)
	(1) Strongly		063	.032	032	032	.175	.156	ence	AV	Sig.		.060	.718	404		.812	020	0/ 7		.211
	Stre	dis		<u>,</u>	<u>.</u>	<u>.</u>	•		ng experi	ANOVA	н		$3.680^{\rm b}$	$.132^{b}$	706 ^b		$.057^{\rm b}$	4 000th	1.20/2		1.597
			nce learnir	ide."			y."	⁄ on-line ba	By years teaching experience	12+yrs (N=41)	Mean (s.d.)	3.53	(1.20)	2.95 (1.01)	3.15	3.10	(0.81)	2.78	(1.14) 2.2.2	3.05	(1.83)
			oort distar	next deca		lents."	erall qualit	on a totally	By ye	≤ 11 yrs (N=22)	Mean (s.d.)	2.91	(1.23)	3.05 (0.95)	2.95	3.05	(0.95)	2.45	(1.0.1)	2.64	(1.33)
			on to supl	a over the	ation."	RMI stue	mising ov	able only c	ons		Sig.		.252	.167	868	200	.369	005	.123		235
			y instituti	e RMI are	3MI educ:	unities for	ut compro	ned∕avail	designati	ANOVA	ц		1.339^{b}	1.959^{b}	09.8 ^b	2	.819 ^b	40.04	.171.		1.436
			exist at m	ill greatly emphasize distance learning in the RMI area over the next decade.	will have a positive effect on the future of RMI education."	will have a positive effect on career opportunities for RMI students."	deliver RMI distance learning courses without compromising overall quality."	ikelihood future RMI research will be published/available only on a totally on-line basis.	By professional designations	Hold 2+ (N=20)	Mean (s.d.)	3.58	(1.26)	3.26 (1.10)	3.05 (0.97)	2.95	(0.91)	2.74	(01.1)	2.60	(131)
			lities now	stance lear	ect on the	ect on care	urning cou	earch will	By pr	Hold 0 or 1 (N=43)	Mean (s.d.)	3.19	(1.22)	2.88 (0.93)	3.09	3.16	(0.84)	2.43	(FU-1)	3.00	(1, 20)
			e, and faci	hasize di	ositive eff	ositive eff	listance lea	re RMI res		VA	Sig.		.584	.776	135	201	.595	100	-084		674
			expertise	eatly emp	have a p	l have a p	ver RMI d	hood futu	status	ANOVA	щ		.303	.082	7 294		.285	10,1	/0T		179 ^a
			"Adequate technology, expertise, and facilities now exist at my institution to support distance learning."	ion will gr	arning will				By tenure status	Tenured (N=47)	Mean (s.d.)	3.37	(1.25)	3.02 (1.09)	3.20 (0.83)	3.13	(0.83)	2.72	(11.11)	2.85	(1, 18)
			dequate te	'My institution wi	"Distance learning	"Distance learning	My institution car	"There is a strong l		Non- tenured 1 (N=17)	Mean (s.d.)	3.18	(1.19)	2.94 (0.66)	2.82 (0.95)	3.00	(0.94)	2.59	(21.1)	3.00	(141)
		ç	1 "A	2 W	3 "D	4 "D	5 "M	IL., 9			ð	1		5	3	4		5	,	9	

Table 7. Distance Learning

Note: all df are (1, 61) except a = (1, 62) and b = (1, 60).

cross-tabulation analysis indicated that only about one-third of those respondents who thought adequate resources currently were in place actually felt their institutions could in fact deliver distance learning without compromising quality.

On an individual institution basis, only ten of the forty-eight schools (21%) were clearly identified by respondents as having both the resources in place and the ability to deliver distance learning without compromising overall quality now. Surprisingly, just three of those ten currently offered terminal RMI degrees or masters-level major/minor concentrations. Another seven institutions (15%) were identified as having the resources, but those respondents would not commit (i.e., were neutral) to being able to deliver distance learning without loss of quality. Although we did not assess the relationship between anticipated quality levels of distance education and faculty ease with technology, a correlation may exist. The Higher Education Research Institute (HERI) found that only half of faculty nationwide under 35 called technology use stressful, while two-thirds of those over 45 did (Magner, 1999). This finding implies that some senior faculty may perceive technology as hindering delivery of quality instruction via distance learning because of their own misgivings about technology use rather than actual difficulties.

Professional Designations and Educational Programs

Many terminally degreed university-level RMI educators also pursue more specialized knowledge or training available through various industry professional designation and related educational programs. Presumably, earning these designations enhances their technical knowledge and fosters closer ties with industry. About 59% of respondents reported holding one or more professional insurance industry designations. Of the thirty-seven respondents holding designations, twenty-four (65%) held the Chartered Property/Casualty Underwriter (CPCU) and twenty-one (57%) held the Chartered Life Underwriter (CLU). A "write-in," the Associate in Risk Management (ARM), was the third most common designation held, with eleven (30%), before a large drop to the Chartered Financial Consultant (ChFC) at three (8%). Eight respondents (22%) held three of the four designations and eleven respondents (30%) held two. The most common combination (held by ten respondents, or 27%) was the CPCU and CLU. Six respondents (16%) held the CPCU, CLU, and ARM. Many other designations also were reported (e.g., Certified Employee Benefits Specialist [CEBS], Fellow in the Society of Actuaries [FCAS], Certified Insurance Counselor [CIC]), reflecting the broad base of potential professional interests available in the RMI discipline. Interestingly, no respondents reported holding the Certified Financial Planner (CFP) designation despite the recent significant increase in marketing of this designation to financial service professionals.

Respondents also were asked to evaluate the utility of these educational programs, and results of this inquiry are presented in Table 8. A majority (61%) of the respondents said that RMI professional designations and related educational programs were useful in their personal intellectual development. Over 81% of respondents encouraged their RMI students to participate in these programs, and almost 59% felt that these programs will be more relevant in the next decade. Overwhelmingly, professional designations were seen as beneficial, both now and in the future, to both faculty and students.

The RMI Student

Internships. Respondents revealed a generally positive perception regarding learning opportunities available to students through internships, with over 60% agreeing that internships were valuable and should be required of all RMI majors. An overwhelming majority, about 80%, also felt that their students actively seek internship opportunities. Students were perceived to more actively seek out internships by untenured over tenured faculty (F = 6.25, p = .015); by students of professors with 11 or fewer years experience (F = 8.989, p = .004); and by students of faculty who hold two or more professional designations (F = 4.019, p = .049). In sum, younger faculty with professional designations seem to value internships and professional designation programs more highly than others, and they were more likely to perceive their students to be actively seeking internship opportunities.

RMI Career Opportunities. Table 9 presents results of respondent estimates of future occupational potential for their students. A paired sample *t*-test was conducted to compare average respondent feelings on opportunities available to RMI students in various functional areas in the next decade ("then") versus the present time ("now"). No significant differences were identified in respondent perceptions of opportunities likely to be available in claims, company administration, actuarial science, regulation, investment advising/securities brokerage, and financial planning. That is not to say that respondents thought these areas themselves would be static, just that career opportunities open to RMI students in the future would likely be fairly similar to those available today. For example, given our seven-point scale, respondents were generally positive about both current and expected future career opportunities in claims. The group mean response for claims (now = 5.61, then = 5.54) in both time horizons was one of the highest of all the fourteen career areas listed. Career

^b rogram and Student Internships
'Educational P
Designation/
8. Professional
Table 8.]

))				•		
													Freque	Frequency of response	ponse	
)	(1)	(2)	(3)	(4)	(2)
Q											disé	strongly disagree]	Disagree	Neutral	Agree	ourongly agree
-	"RMI professional development."	essional de ent."	designations and related educational programs are useful in my intellectual	s and relat	ted educat	ional prog	rams are u	seful in n	ny intellec	otual	0.	.063	.188	.141	.313	.297
2	"I encoura	"I encourage my RMI students to participate in professional designation and related educational programs."	students to	o particip;	ate in profe	essional de	signation a	and relate	d educatic	onal progra		I	.063	.125	.391	.422
3	"RMI professional		designation and related educational programs will be more relevant in the next decade."	and relate	d educatio	nal progra	ums will be	more rel	evant in th	ie next dec	-	.048	620.	.286	.381	.206
4	"My RMI students	students ac	actively seek internship opportunities."	k internsh	ip opportı	unities."					9.	.016	.078	.109	.438	.359
5	"Internshij	"Internships offer potentially valuable learning opportunities and should be required of all RMI majors."	tentially vi	aluable le	arning opl	portunities	and shoul	ld be requ	uired of al	l RMI maje		.063	.063	.266	.250	.359
		By tenui	By tenure status		By p.	rofessiona	By professional designations	suo	By yı	By years teaching experience	ng experic	ence	By ex	By expected years until retirement	urs until re	tirement
	Non- tenured (N=17)	Tenured (N=47)	ANOVA	AV	Hold 0 or 1 (N=43)	Hold 2+ (N=20)	ANOVA	VA	$\frac{< 11 \text{ yrs}}{(N=22)}$	12+yrs (N=41)	ANOVA	NA	$\frac{< 11 \text{ yrs}}{(N=25)}$	s 12+yrs) (N=37)		ANOVA
ð	Mean (s.d.)	Mean (s.d.)	ы	Sig.	Mean (s.d.)	Mean (s.d.)	ы	Sig.	Mean (s.d.)	Mean (s.d.)	н	Sig.	Mean (s.d.)	Mean (s.d.)	ц	Sig.
1	4.12 (0.78)	3.40 (1.36)	4.143^{a}	.046	3.30 (1.28)	4.30 (0.92)	9.720	.003	4.00 (0.82)	3.34 (1.41)	4.063	.048	3.24 (1.48)	3.81 (1.08)	3.095 ^b	.084
2	4.35 (0.86)	4.11 (0.89)	.973 ^a	.328	4.00 (0.95)	4.55 (0.60)	5.604	.021	4.45 (0.74)	4.00 (0.92)	3.970	.051	4.00 (0.91)	4.24 (0.86)	1.131^{b}	.292
33	3.71 (1.16)	3.59 (1.02)	.156	.694	3.33 (1.05)	4.20 (0.83)	10.431^{b}	.002	3.91 (1.02)	3.45 (1.06)	2.731^{b}	.104	3.40 (1.00)	3.75 (1.08)	1.647°	.204
4	4.53 (0.62)	3.87 (1.01)	6.250^{a}	.015	3.88 (1.05)	4.40 (0.68)	4.019	.049	4.50 (0.74)	3.78 (0.99)	8.949	.004	3.80 (0.91)	4.22 (1.00)	2.756 ^b	.102
5	4.06 (1.09)	3.68 (1.22)	1.269^{a}	.264	3.67 (1.27)	3.95 (1.00)	.732	.396	4.09 (1.15)	3.61 (1.20)	2.363	.192	3.64 (1.04)	3.86 (1.29)	.526 ^b	.471
				_												

Note: all df are (1, 61) except a = (1, 62), b = (1, 60), and c = (1, 59).

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Opportunity area	NOW	THEN	t	Sig.
Insurance agencies/brokerage	5.69 (1.21)	5.19 (1.58)	-3.697	.000
Underwriting	5.51(1.28)	5.24 (1.32)	-2.458	.017
Claims administration/adjustment	5.61 (1.35)	5.54 (1.34)	-0.942	.350
Insurance company administration	4.12 (1.39)	4.29 (1.29)	1.427	.159
Actuarial science	5.03 (2.29)	4.88 (2.29)	-1.013	.315
Fraud investigation	3.75 (1.63)	4.27 (1.59)	3.459	.001
Corporate or public entity risk management	4.52 (1.28)	5.00 (1.26)	3.744	.000
Risk management information systems	4.83 (1.75)	5.34 (1.69)	4.176	.000
Loss control specialist	4.20 (1.60)	4.58 (1.63)	2.689	.009
Benefits administration	5.03 (1.29)	5.27 (1.26)	2.427	.018
Insurance regulation	3.17 (1.44)	3.22 (1.45)	0.454	.651
Investment advising/securities brokerage	4.83 (1.71)	4.85 (1.70)	0.119	.905
Healthcare management	4.64 (1.38)	5.03 (1.43)	2.940	.005
Financial planning	5.54 (1.23)	5.62 (1.36)	0.743	.461

 Table 9. Mean RMI Career Opportunity Assessment Summary

 "At Present" versus "In the Next Decade"*

*(Mean with Standard Deviation; Scale: 1 = lowest, 7 = highest)

opportunities for students in financial planning elicited a similar positive, high response for both today and in the future.

In contrast, respondents had equally negative views on potential career opportunities in insurance regulation both today and in the future, giving it the lowest average response for both time horizons (now = 3.17, then = 3.22). Respondents were more neutral in their evaluation of career opportunities in insurance company administration both now and in the future as the average response on both horizons was near the midpoint (4.0) of the scale (now = 4.12, then = 4.29).

Respondents expected that career opportunities available to their students would decline significantly over the next decade in the areas of insurance agency/brokerage (t = 3.697, p < .000) and underwriting (t = 2.458, p < .017). Insurance agency/brokerage suffered the steepest decline of all fourteen areas, though it was still viewed relatively highly in both time horizons, as was underwriting. However, these data represent feelings assessed in the spring of 1999, before the surprisingly rapid passage

of the compromise legislation that ultimately became the Financial Services Modernization Act of 1999 (discussed earlier). On the positive side, respondents expected job opportunities to be significantly better in fraud investigation (t = 3.459, p < .001), risk management (t = .3.744, p < .000), risk information management systems (t = 4.176, p < .000), loss control (t = 2.689, p < .009), employee benefits (t = 2.427, p < .018), and healthcare management (t = 2.940, p < .005).

Given the perceived dynamic nature of employment options for graduating students, a strategic opportunity exists to revisit RMI course offerings, training methods, and related topics. Hitt (1998) points out that business schools in general face three specific attributes of the technological revolution that must be incorporated into instruction and hence student learning. These include the increased importance and diffusion of innovation, a greater emphasis on information, and the importance of knowledge. Thus, RMI educators have a significant opportunity to influence the changing educational landscape by including technology-based knowledge diffusion of relevant RMI topics.

CONCLUSION

Descriptive statistics across key demographic segments has helped reveal important attributes, attitudes, and beliefs of current RMI educators, as well as their perceptions of the future of risk and insurance education. Several distinct sets of interested parties have a stake in the future of RMI education. A relatively small, but specially trained, cadre of classroom teachers and researchers have a significant investment in human capital in the subject area. Many of these academicians already are members of finance, economics, or other departments and would note little difference in their governance if the discipline loses its identity. However, if RMI education were to lose its current status, one outcome would be that the demand for its specialized classes (e.g., property insurance, life insurance, risk management) likely would diminish. Concomitantly, demand for instructors for these classes also would diminish.

Students interested in pursuing a degree or concentration in RMI may find the opportunity precluded. Likewise, businesses seeking employees with the specialized knowledge provided through RMI classes potentially would be unable to fill such positions. Perhaps most important, a substantial portion of economic transactions (e.g., those related to potential loss of property or human life contingencies) would become inadequately explained and increasingly misunderstood. Given the pervasive nature of risk and the associated costs pertaining thereto in the modern global economy, ignorance of this matter could prove costly indeed.

However, given the opinions of RMI educators revealed in the current survey, the potential demise of RMI as a distinct discipline may be greatly exaggerated. Recent self-reported enrollments in primary RMI courses appear relatively stable, even indicating some moderate growth, which suggests that educators have been reasonably successful at initiating significant student contact with the material. Job opportunities in several specialized areas, including fraud investigation, risk management, risk information systems management, loss control, employee benefits, and healthcare management are expected to increase, which may further stabilize, or possibly spur, enrollment. Educational experiences provided through internships and professional designation programs are expected to enhance employment opportunities, and students appear to be seeking these out with the encouragement of RMI educators.

Opinions concerning the ability of universities to support and deliver high-quality RMI distance education appear to differ, at least over the immediate time horizon. This finding suggests that RMI educators have significant opportunities to shape the development of distance education in the field. However, a critical component of delivering quality instruction, distance-based or not, is access to financial and other resource support. Respondents suggest that such support is moderate at best, and is inadequate in many cases. Educators must therefore continue to be adaptive, creative, and vigilant in their strategic response to dynamic changes occurring in the RMI environment.

NOTES

¹Note the content of most of the presidential addresses presented at the annual meeting of the American Risk and Insurance Association for the past two decades as published in the *Journal of Risk and Insurance*.

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