Proposal for MS in Business Research

Submitted to Stephen A. Rittenberg, Vice Provost for Academic Administration

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Prepared by
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Academic Director, Doctoral Program

Proposal for MS program at Columbia Business School

1. Purpose

We are requesting that the Graduate School of Business (GSB) be permitted to grant a professional MS degree in Business Research to graduate students enrolled in the GSB Ph.D. program who satisfy its requirements. First and foremost, the intention of the degree is to offer recognition to those of our Ph.D. students who have completed professional level masters degree work yet who, for a variety of reasons, do not wish to complete the Ph.D. degree. In addition, the ability to offer this degree will facilitate the departure from program of those students who, though talented and able, do not have educational or career interests consistent with the objectives of Doctoral education.

Applications will not be sought for this professional MS program nor will it be independently advertised in any way. The proposed degree will be available solely to matriculated Ph.D. students at the Graduate School of Business who satisfy the requirements. No new courses would be offered on behalf of this program by the Graduate School of Business nor would any new courses be sought University wide. Depending on the Division in which the student resides, certain requirements for the degree could be satisfied by the successful completion of upper level MBA courses at the Graduate School of Business or masters level courses drawn from the departments of Economics, Statistics, Mathematics, Psychology, Sociology and the School of Engineering.

2. Need

The Ph.D. degree is essentially one by which the holder is certified as capable of conceiving and making precise a significant research question and designing a program of study adequate to answer it. It is intended to go beyond simply executing a research program laid out by others.

The Doctoral Committee of the GSB believes that a significant fraction of our students (as in every Ph.D. program) is insufficiently interested in their respective fields of inquiry as to ever satisfy this larger criterion. Typically these students suffer from a lack of motivation. A small percentage is unable to pass the qualifying examination at a full Doctoral level. Others have difficulty conceiving of a research project, or require an unreasonable level of faculty involvement either in thesis definition or execution. Others fail to progress in the writing of their dissertations at a reasonable rate.

This unfortunate state of affairs is rarely due to a lack of academic ability or educational achievement. More often it is attributable to an initial lack

of awareness of what research in certain fields of study actually entails. For others it sometimes reflects family expectations as their chief motivation for graduate study rather than an honest appraisal of their own interests. For some, it reveals a basic preference for more applied research.

Most of these students have excellent technical skills, and all have received an excellent foundation in the basic ideas of their respective disciplines. Some have also completed a first year research project under the direction of a faculty member. These persons we believe will make excellent candidates for employment in a number of research contexts as professional MS degree recipients. (In fact, most withdrawals from the GSB Doctoral Program are undertaken by students who are already employed without any advanced degree certification whatsoever). But as Ph.D. candidates they are very costly, not only in terms of faculty time, but also in terms of financial resources as they normally receive two years of full fellowship aid beyond the final date for passing their qualifying examinations.

As a result the Doctoral Committee recommends that an alternative research degree track be offered leading to a professional masters degree for those students leaving the Ph.D. Program after two years. Currently the M.Phil. degree is granted to withdrawing students, after they have completed all coursework and have passed their field area examinations. This particular degree however, is undervalued in professional circles. Since many of our Ph.D. students are not US citizens, furthermore, their abrupt withdrawal from the Program without a relevant professional degree leaves them little alternative but to return immediately to their home country.

The presence of other related MS degree programs in the University provides a broad range of additional courses available to proposed MS degree students. The key is to obtain a detailed awareness of practical issues at the industry level. Finance and Economics and Decision, Risk and Operations students could avail themselves, for example, of courses in the Mathematical Finance Program offered jointly by the Departments of Mathematics and Statistics. Other GSAS Departmental courses are available to these students as well as to marketing students. Upper level MBA courses provide a source of other alternatives.

Since matriculants in many of these programs regularly sit for various courses in the Graduate School of Business, there is every reason to believe that GSB MS students, properly guided would be competitive with them in the job market. Yet the small number of Business School MS students should not materially affect the placement prospects of students in these related Columbia masters programs. The same comment surely

applies as well to other similar programs offered by schools in the northeastern U.S. more broadly. We foresee, however, that such degree programs will be increasingly offered in the future. The program proposed in this document, in fact, is modeled upon a recently initiated MA Program in Business Research at the Stanford University GSB. MIT Sloan School students may receive a similar MS degree while the University of Pennsylvania Wharton School offers a terminal MS degree in the Operations and Information Management Division. No analogous professional masters degree is offered by Harvard or Chicago, although Chicago students may work towards an MBA degree if they satisfy, independently, the MBA admissions requirements at the University of Chicago GSB.

3. Student Body to Be Served

The student body will consist solely of matriculated Ph.D. students at the Graduate School of Business. As a result, the de facto admissions standards will coincide with those of the Graduate School of Business Ph.D. Program which are very high. The selection procedure for the proposed student body, will, as well, coincide de facto with our current Ph.D. selection procedures. That is, each Division appoints a selection committee to review and select completed application files assembled by the Doctoral Office.

At the moment our the Graduate School of Business Ph.D. selection standards are such as to result in a class of 18-20 students chosen from nearly 750 applicants. An excellent academic record is required as well as GMAT (GRE in the case of the Finance and Economics Division) scores on average in excess of 725. See Table 1 for more detail.

Table 1 Historical Admissions Activity										
Graduate School of Business, Columbia University, Doctoral Program										
	4000	4000	2000	2004	2002	2002				
	<u>1998</u> _	1999	2000	2001	2002	2003				
Completed Applications	480	692	693	653	770	821				
Admitted	37	46	37	42	39	46				
Matriculation	20	24	18	19	16	23				
Average GMAT	702	710	723	724	740	730				
Withdrawals	3	3	1	0	1	0				

We anticipate that a maximum of 3 persons per year will seek the professional MS degree as it will be available only as a terminal degree. Once a student indicates his intention to complete the requirements for the degree, he will be advised by his already-assigned Divisional advisor as to

the best choice of remaining courses given his career goals. Final program approval will be by the Doctoral Program Academic Director, who will simultaneously also be available for advising.

4. Curriculum Requirements

- a. The requirements for the successful completion of the MS program are as follows:
 - i. Successful completion (average grade of B (HP) or better) of twelve Ph.D. level courses at Columbia University. Masters Degree level classes may be substituted for a maximum of two of these courses, subject to the guidance and approval by the Doctoral Program Academic Director, and the Doctoral Committee representative from the student's home Division. Students who seek careers in particularly technical areas with be encouraged to complete additional course work.
 - ii. Successful completion of all required courses specified as part of the normal course of Ph.D. study in the candidate's home Division (i.e. Finance and Economics, Marketing, Management, Accounting, and Decision, Risk and Operations) in preparation for the Field Examination.
 - iii. Passing the candidate's home Division's Field Examination, given to all candidates for the Ph.D. at a Professional Masters level.
 - iv. A MS candidate may elect to complete a directed publishable research paper/ thesis written under the supervision of a Graduate School of Business Faculty. This paper must be read by two members of the candidate's home Division, with each attesting in writing to the Doctoral Program Academic Director as to the acceptability of the paper. Students who complete the Field Examination and the research project will be granted the MS degree with Honors.

b. Financial Aid

Under current rules, some Ph.D. candidates in the Graduate School of Business undertake their qualifying examinations in the late spring or early summer of their second year. However, most Divisions are moving to a schedule in which this exam is given at the end of the summer of a candidate's first year of study. Make up or second-try exams will normally be given one year later. For most students, a decision to move from Ph.D. to MS candidacy will typically be made shortly thereafter.

By the time of their second sitting for the field examination Ph.D. students would typically have received a full 6 semesters and possibly 7 semesters of financial aid. The maximum extent of Ph.D. fellowship support is capped at 12 semesters. The number of semesters of financial aid for professional MS students will be limited to 7. This allows ample time to complete the required course work as well as the research paper.

The savings to the Ph.D. Program of a student's switching to the professional MS degree is thus 5 semesters of fellowship aid or roughly \$30,000 at current funding levels. Tuition remission for all courses taken to fulfill MS program requirements would be the norm.

It must be clear, nevertheless, that the professional MS program will be, de facto, a fully funded degree program. As a consequence, it is recognized that it will be possible for a student to apply to the Ph.D. program who seeks only a masters degree and has no intention from the beginning to engage seriously in Doctoral education. Since there is no plan to advertise the program aggressively, this risk is not viewed as a large one.

c. Added Responsibilities

As currently conceived, the number of students anticipated to seek this degree is insufficient to affect, significantly, course enrollments at the School of Business or anywhere else in the University. No new courses will be offered. Furthermore, the added administrative burden, falling chiefly on the Doctoral Program Academic Director, is minimal.

d. Philosophy

It is the full wish and intention of the Doctoral Committee of the GSB that the School offer a first-class competitive professional MS degree despite the fact that in some sense it will be a 'consolation alternative' for some students. This goal demands the inclusion of a select number of applied courses, the passing of the appropriate field exam and, in the best scenario, the completion of a research paper of substantial merit. We note as well that the professional MS degree will effectively be granted only after a 2.5 year term of full time study (including summers).

5. Resource Utilization

a. Faculty and Staff

The Academic Director of the GSB Doctoral Program shall serve as the Program Director. All other members of the GSB faculty who currently participate in the Ph.D. Program may indirectly participate in the professional MS program. Relative to the current workloads, the additional claim on faculty time will be minimal. No additional administrative personnel will be required, all administrative issues being easily accommodated by the residing Administrative Director of the Doctoral Program. Nearly all faculty teaching in the Ph.D. Program are tenured faculty; the same will be true of the professional MS program de facto.

b. Direct and indirect costs

None are anticipated relative to the current experience.

c. Tuition income to the school None is anticipated.

d. Placement

The Doctoral Program has been assured that the resources of the Graduate School of Business Placement Office would be made available to MS candidates.

6. Quality Control: Internal Evaluation

a. It is the desire of the Doctoral Committee that graduates of the proposed MS program will be highly valued by industry. Accordingly, the Dean of the Graduate School of Business will at regular four-year intervals appoint a Committee to evaluate the program's effectiveness. A summary report of this evaluation shall be presented to the Dean and Executive Committee of the Graduate School of Business as well as to the Dean of the Graduate School of Arts and Sciences.

The Committee on evaluation shall consists of the Senior Vice Dean for Academic Affairs at the GSB, The Academic Director of the Doctoral Program and two additional Doctoral Committee members as chosen by the Dean of the GSB. The Dean of the GSAS will, in addition, be invited to send a voting representative.

- b. The nature of the material to be collected and evaluated as part of such a review is as follows:
 - (i) Teaching ratings for courses completed by program graduates.
 - (ii) Placement dates for terminal degree recipients
 - (iii) Time to placement following graduation. This statistic shall be assembled by the Doctoral Office.
 - (iv) Information regarding a graduate's whereabouts shall be maintained to the extent possible by the Doctoral Office. Prior to a regular evaluation cycle, those students who have graduated since the prior evaluation will be contacted and asked their opinions as to the quality of the program and the extent to which it prepared them for their current job sought.
 - (v) All students are to have an exit interview conducted by the Ph.D. Program Academic Director.

7. Quality Control: external evaluations

The following authorities are recommended to the NYS Education Department as possible external reviews:

Professor Evan L. Porteus Graduate School of Business Stanford University Littlefield 333 Stanford, CA 94305-5015 Office: 1-650-723-1124

Fax: 1-650-725-7979 eporteus@stanford.edu

Professor Milton Harris Graduate School of Business University of Chicago 5807 South Woodlawn Avenue Chicago, IL 60637

Office: 1-773-702-2549
Fax: 1-773-834-8172
fmharris@gsb.uchicago.edu

Attachment #1

Faculty Participating in the Doctoral Program, 2002 and 2003

	raculty Partic			IIC DOC	COTUITI	ogram, z	
			Sponsor	Exam	DI. D	Divisional	Taught PhD Level course in academic
Last	Proposal	Dofones	of Defense	Comm.	Comm.	Advisor	yrs. 02-03 & 03-04
Ang	0	2	0		0	0	7:5: 02-05 4:00 01
Ansari	2	1	0		0	0	
Balachandran	0	1	0	0	0	0	0
Baldenius	0	0	0	· · · · · · · · · · · · · · · · · · ·	0	0	1
Bekaert	0	1	1	0	0	1	
Boivin	1	0	0	0	0	0	2
Branstetter	1	0	0	0	0	0	0
Broadie	4	1	0	0	0	0	2
Brockner	0	0		X	0	0	1
Browne	0	0	0		0	0	
Calomiris	<u>_</u>	<u>*</u>	1	0	0	0	0
Chemov	0	0	0		0	0	1
Donaldson	1	1	1	0	0	2	2
Edwards	1	Ô	0	0	0	0	0
Federgruen	0	0	0	0	0	0	1
Flynn	0	0		х	0	0	1
Glasserman	2	1	I	0	0	0	0
Glosten	0	2	0	х	0	0	2
Green	0	1	0	Х	0	0	2
Gupta	3	1	0	X	0	0	1
Harrigan	0	0	0	0	0	0	0
Haveman	0	0	0	Х	0	1	3
Himmelberg	2	i	0	0	0	0	2
Hodrick, R	2	0	0	0	0	1	2
Hodrick, L	0	1	0	х	0	0	0
Holbrook	1	0	0	0	0	0	0
Huberman	2	1		х	0	2	2
Ingram	2	0		х	0	0	1
lyengar	0	0	0	0	0	0	0
Jean-Baptiste	1	0	0	0	0	0	1
Jedidi	3	1		х	0	0	2
Johannes	0	1		X	0	0	2
Johar	0	0	0		0	0	1
Jones	2	2	1	0	0	0	0
Jorgensen	0	0	0		0	0	<u></u>
Kivetz	1	0	0		0	0	
Lehmann	2	1	******	X	0	2	2
Maglaras	1	2		x	0	1	1
Mishkin	0	0	0	0	0	0	2
Morris	0	0	- 0	x	0	0.5	
Muharremoglu	0	0			0		
Nissim	2	2		x	0		1
Penman	1	1	1	0	0	0	0
Pham	2	1	0		0		
Reagans	0	0		x	0		
Robinson	0	0		X	0	0	1
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